

METROPOLITAN COUNCIL
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DATE: June 19, 2007

TO: Metropolitan Parks and Open Space Commission

FROM: Jan Youngquist, Senior Planner-Parks (651) 602-1029

SUBJECT: Dakota Rail Regional Trail Master Plan, Carver County (Referral No. 20027-1)
Metropolitan Parks and Open Space Commission District B, Lars Erdahl

INTRODUCTION

Carver County has submitted a master plan for the Dakota Rail Regional Trail for Metropolitan Council review and approval.

The *2030 Regional Parks Policy Plan* (Chapter 2 – Policies and Strategies, Section D – Planning, Strategy 4A- Master Plans), describes the role of the master plan in the regional park system. The policy requires that any project proposed for funding in the Metropolitan Regional Parks Capital Improvement Plan (CIP) be consistent with a Metropolitan Council approved regional park master plan.

This memorandum contains a review of the Dakota Rail Regional Trail Master Plan based on its consistency with the *2030 Parks Policy Plan*.

AUTHORITY TO REVIEW

Minnesota Statute 473.313, Subdivision 1 requires Regional Park Implementing Agencies to “prepare, after consultation with all affected municipalities, and submit to the Metropolitan Council, and from time to time revise and resubmit to the council, a master plan and annual budget for the acquisition and development of regional recreation open space located within the district or county, consistent with the council’s policy plan.” (i.e., the *2030 Regional Parks Policy Plan*)

Minnesota Statute 473.313, Subdivision 2 authorizes the Metropolitan Council to review, with the advice of the Metropolitan Parks and Open Space Commission, master plans for the regional park system. Plans are reviewed for their consistency with the *2030 Regional Parks Policy Plan* and other Council policy plans. If a master plan is not consistent with Council policy, the Council should return the plan to the implementing agency with its comments for revision and resubmittal.

BACKGROUND

The Dakota Rail corridor is 44 miles in length and runs from Wayzata around the northern bays of Lake Minnetonka, past Lake Waconia in Carver County and terminates at Hutchinson in McLeod County, as depicted in **Figure 1**. Carver, Hennepin and McLeod County Regional Rail Authorities acquired their respective portions of the railroad corridor in 2001 to preserve the corridor for future transit operations. The segment of the corridor in Carver County is 12.4 miles long and extends through the northern portion of the County. Carver County is leasing the Dakota Rail corridor from the Carver County Regional

Railroad Authority, which will allow development of a regional trail. The leases will continue to be honored until such time as circumstances change.

The Metropolitan Council approved the master plan for Three River Park District's 13.5 mile portion of the planned regional trail at its March 8, 2006 meeting. Approval of Carver County's master plan would complete the planning for the 25.9 mile segment of the corridor that lies within the Metropolitan Council's regional parks system area.

Figure 1—Location of Dakota Rail Corridor

ANALYSIS

1. Boundaries and Acquisition Costs

The boundaries for the Dakota Rail Regional Trail within Carver County extend from the Carver-Hennepin County line, just south of St. Bonafacius to the vicinity of the Carver-McLeod county line, as depicted in **Figure 2**. Carver County will explore the following three alternatives for the western terminus of its segment of the trail:

1. The trail could end at the Carver-McLeod County line;

2. The trail could connect to County Road 30, allowing users to continue into Lester Prairie on the roadside shoulder; or,
3. The trail could extend into Lester Prairie on the existing railroad grade.

Carver County will coordinate with McLeod County and the City of Lester Prairie to determine the best alternative for the western terminus of the trail segment. The north and south boundaries of the corridor will primarily correspond with the existing railroad right-of-way.

Figure 2—Location of Carver County segment of Dakota Rail Corridor & Primary Service Area



The Dakota Rail corridor within Carver County typically has a 100 foot right-of-way (ROW), although the width varies in certain locations. Near the south fork of the Crow River, the ROW is approximately 80 feet. The ROW widens to 250 feet in New Germany and 300 feet in Mayer. The corridor width will allow for development of a multi-use trail on the existing railroad bed. Carver County will be responsible for maintaining a 16-foot wide corridor, generally located on the existing rail bed of the former railroad corridor. The middle ten feet of the trail corridor will consist of a paved or crushed rock trail. Three foot wide grass shoulders on each side of the trail will be maintained.

Additional land acquisition may be needed in some areas for trail amenities or trail connections. Due to the significant grade change between the existing rail bed and County Road 10 in Waconia Township, one

acre of land may need to be purchased to create a trail connection. The acquisition cost of this land is estimated at \$7,000 per acre.

2. Stewardship Plan

The railroad rails and ties were removed from the corridor in 2004 and 2005. Currently, the rail bed is undeveloped, uneven and overgrown, with trestle structures that lack railings or solid decking. Therefore, Carver County has posted the corridor as closed to public use. The County performs minimal maintenance in the corridor and has a modest budget for weed control, brush and diseased tree removal, and maintenance of drainage structures. Future stewardship plans are described in the Natural Resources section of this staff report.

3. Needs Analysis

Regional parks and trails in the greater metropolitan area are very popular; therefore, the demand for regional trails is anticipated to increase as the population grows. Estimated annual visits to regional parks in Carver County increased by 54 percent from 1996 to 2004. Looking toward the future, Carver County's population is projected to grow by 120,000 people from 2000 to 2030. The demand for regional parks and trails is anticipated to increase correspondingly.

4. Development

Trail Elements: The trail will generally utilize the existing rail bed. The trail may divert from the ROW centerline where realignment would provide additional buffering to adjacent properties. Site preparation will require standard construction preparation, tree trimming, minor excavation, sub-grade preparation and miscellaneous removals. Minimal grading will be necessary along the rail bed centerline to accommodate the typical trail section. The trail will be designed in accordance with applicable guidelines from the American Association of State Highway Transportation Officials' *Guide for the Development of Bicycle Facilities*, 1999, and Minnesota Department of Transportation's *Minnesota Bicycle Transportation and Planning Guidelines*, 1996.

The trail will have a bituminous or crushed rock surface. A bituminous trail surface is preferable due to the cost effectiveness over its lifecycle. A crushed rock surface may be used as an interim improvement in the event of funding constraints that would hinder the ability to pave the entire trail.

There are twelve at grade road crossings along the trail corridor. Two will require Type I crossings and ten will require Type II crossings. The Type I crossings are for intersections with high volume state highways or county roads and include signage, striping and roadway pavement markings. Type II crossings are for intersections with county roads and high volume local roads and include signage and striping.

In places where the trail crosses a gravel road, a paved trail crossing will be constructed with pavement extending 50 feet down the roadway from the trail centerline on both sides. This will minimize the amount of gravel deposited on the trail crossing, which can be hazardous to trail users.

The Dakota Rail corridor has five trestles that connect the rail bed across wetlands, creeks and rivers as it crosses Carver County. The County intends to repair damaged trestles at the time of construction as needed for structural integrity. The necessary trestle retrofits to accommodate a trail include adding safety fencing and rub rails to the sides and timber planking or bituminous overlay on the tread surface.

Supporting Trail Elements: The following supporting elements were addressed in the master plan:

- **Access**—Trailhead facilities will be constructed in New Germany and Mayer; these areas would include parking areas and informational signage. Waste receptacles and portable latrine facilities may also be provided.
- **Signature Features**—Each community will be responsible for installing and maintaining any signature features on the Dakota Rail Regional Trail within their community. These features may include landscaping, benches or tables, bicycle racks, restroom facilities and trash receptacles. Carver County will coordinate with communities who would like to construct trail elements within the railway corridor.
- **Overlooks**—The railway corridor passes through wetlands and scenic rural settings, including the Crow River and the Crane Creek wildlife area. The County will explore trail designs that allow for scenic overlook stops.
- **Signage**—Traffic control signs, including stop signs at road crossing and street name signs at bridges and intersections will be installed.
- **Rest Stops**—Rest stops including benches, trash receptacles and bicycle racks will be developed.
- **Vegetation**—The overgrown vegetation along the corridor will be trimmed to provide clearance for the trail. Vegetative screening will be used to provide visual protection to and from the trail in appropriate areas.

Connections: The master plan discussed potential trail connections. This segment of the Dakota Rail Regional Trail has the potential for access to trails in Hennepin and McLeod Counties, on the east and west ends of the trail corridor. Other potential trail connections include a link to Lake Waconia Regional Park, which may be made along County Road 155 and County Road 30 along the east side of the lake. A connection to the Luce Line State Trail could be made via County Road 33, State Highway 25 or County Road 10. Additionally, the *2030 Regional Parks Policy Plan* has identified a regional trail search area near the Crow River, extending north from Norwood Young America to the Cities of Mayer and Watertown, and continuing up to the north County border. The Dakota Rail Regional Trail would connect to this future trail.

Development Costs: The estimated development costs of the Dakota Rail Regional Trail are \$2,302,807 in 2006 dollars. **Figure 3** shows the elements of the cost estimate.

Figure 3—Estimated Development Costs

Item Description	Estimated Costs
Grading and removals	\$333,500
Paving	\$955,400
Trestle Modifications	\$165,340
Drainage	\$27,900
Signage & Striping/Landscaping	\$390,061
TOTAL	\$1,872,201
5% Contingency	\$93,610
Design and Engineering (8%)	\$149,776
Construction Administration (10%)	\$187,220
TOTAL PROJECT COST	\$2,302,807

5. Conflicts

A number of concerns and perceived conflicts were identified during the public process for development of the master plan. The following list addresses these concerns and identifies ways they can be minimized:

- **Safety and Security**—Concern was voiced regarding the safety and security of residents adjacent to the trail as well as of trail users. The master plan states that Three Rivers Park District reported an average of one incident per 31,429 visits on the Southwest LRT (North Branch) Regional Trail (since renamed Lake Minnetonka LRT Regional Trail). The Carver County Sheriff’s Office patrols all County parks and trails. The 911 First Responder system will answer emergency calls made from the trail. The trail and trestle structures will allow access for emergency vehicles.
- **Privacy**—Carver County will work with local communities and residents to minimize impacts. Trail design will address specific situations using a variety of methods. For example, a trail segment may be shifted from the center of the corridor if residents live on only one side of the trail. Vegetative screening or fencing may be installed to protect privacy.
- **Property values**—Several studies that have been done throughout the United States have shown that trails have no negative impact on property values or marketability of property. There is a belief among some that proximity to trails creates a positive impact on marketability and property value.
- **Aesthetic design**—The trail design may incorporate a paved asphalt or unpaved aggregate surfaced with three foot wide mowed grass shoulders on both sides of the trail. Specific plantings, fencing, trestle design and other amenities will be identified during the trail design phase.
- **Parking**—Carver County will work with the communities of New Germany and Mayer to identify parking locations for trail users. Carver County does not plan to construct additional trailheads in other locations along the corridor. On-street parking will be monitored by the Carver County Sheriff’s Department.
- **Appropriate Use of the Trail**—Carver County allows activities such as walking, running, bicycling, and in-line skating on regional trails. With the exception of seasonal snowmobile use, motorized vehicles such as motorized scooters, golf carts, motorcycles and automobiles will not be allowed on the trail.
- **Trail Surface**—The master plan recommends that the entire length of the trail be paved. An aggregate surface may be considered as an interim solution if there is inadequate funding to pave the entire trail.
- **Snowmobiles**—Carver County may permit snowmobile use on the trail between December 1 and March 31 when there are adequate levels of snow. Lake Waconia is a significant snowmobile destination and this trail could provide an important connection to the lake and other trail routes. The trail may be open to snowmobile use if the governing agencies, including cities, townships and the County, permit the activity. In addition, Carver County and a qualified snowmobile association would need an agreement that defines maintenance, usage and insurance responsibilities for the operation of a snowmobile trail.
- **Equestrian Use**—Due to the proximity to the Luce Line horse trail, equestrian use will not be allowed on the Dakota Rail Regional Trail.
- **Dog Walking**—Dogs are allowed on all Carver County trails. Dog walkers are required to keep their dogs on leashes no longer than six feet and must clean up after their pets.

- **Encroachments**—Except by permit or lease, encroachments within the corridor are not allowed by the Carver County Regional Rail Authority.

6. Public Services

The Dakota Rail Regional Trail would not need electricity, sewer or additional roads to function. Some of these services may be necessary if neighboring communities would like to construct special community features. Carver County may partner with these communities to develop such amenities by providing space, financial contribution or support.

7. Operations

Routine maintenance along the Dakota Rail Regional Trail corridor will include:

- **Mowing:** County maintenance staff will routinely mow the 3 foot grass shoulders along both sides of the trail corridor.
- **Sign maintenance:** Signs will be inspected annually to ensure that none are missing or damaged.
- **Clearing the trail surface:** Sweeping and blowing the trail surface will be done in the spring and fall. County staff will monitor areas where the trail crosses gravel roads to maintain a debris-free trail.
- **Noxious weed management:** Noxious weeds will be pulled, mowed or sprayed.
- **Solid waste collection:** Solid waste will be collected from trash receptacles at trailheads, rest areas and overlooks. Litter will be collected during routine trail maintenance activities.

Carver County will use existing equipment and personnel to maintain the Dakota Rail Regional Trail. Part time staff will be hired if needed. The County will require additional materials for maintenance of the trail, described as follows:

Figure 4—Estimated Annual Cost of Maintenance Materials

Annual Maintenance Materials	Cost Estimate
Sign replacement	\$500
Aggregate for shoulders	\$2,000
Material for minor bituminous repair	\$1,500
Total (2006 dollars)	\$4,000

Carver County has identified two sources of funding for on-going operations and maintenance costs for the trail. The County will continue to receive corridor preservation funding from the Carver County Regional Railroad Authority to preserve railroad land, repair and replace structures, construct drainage facilities, maintain vegetation, issue leases and permits and address other issues related to preservation of the corridor. The County will also receive funds from the Metropolitan Council to fund a portion of operations and maintenance costs.

8. Citizen Participation

Several methods of public involvement were used to encourage participation in the master plan process:

- **Survey of Adjacent Landowners:** Surveys were sent to adjacent landowners asking questions regarding appropriate uses of the trail, how the respondent may use the corridor if a trail was constructed, and their general interests and concerns.
- **Public Open House Meetings:** Two open houses were held in February and May of 2006.
- **Meetings with Local Government and Recreation Groups:** County staff met with officials from adjacent communities to explain the master planning process, answer questions and discuss partnership ideas. Staff and consultants also met with the Carver County Snowrunners, a local snowmobile club, to discuss issues related to seasonal snowmobile use of the corridor.

9. Public Awareness

A grand opening celebration will be planned to officially open the trail to public use. The trail will also be identified on all Carver County Park system maps and on the County's website.

10. Special Needs

Carver County's park facilities are designed to meet or exceed guidelines established by the Americans with Disabilities Act. The Dakota Rail Regional Trail will be designed with slopes less than 5 percent along the trail and at entry points so that strollers, wheelchairs and bicycle trailers will be able to operate.

11. Natural Resources

The existing rail bed has a compaction rate similar to that of a typical bituminous roadway. Paving the rail bed to construct the trail should not increase the rainfall runoff volume, discharge rate or pollutant loading to the land adjacent to the ROW. Consequently, the project will have a negligible impact on adjacent water resources. Carver County will plant native grasses on the shoulders of the trail which will enhance the infiltration of runoff from the trail surface.

The grass that will be planted on the shoulders of the trail corridor will consist of a native mix of deep rooted grasses that are capable of withstanding frequent mowing. Overhead vegetation within the trail corridor will be trimmed to sufficient height to provide unobstructed use of the trail. The areas outside of the 16-foot trail corridor are considered low maintenance areas. Native and noninvasive plant species are encouraged for visual screening, wildlife and shade purposes.

REVIEW BY OTHER COUNCIL DIVISIONS:

Community Development – Environment, Surface Water Management (Jim Larsen) –No comments.

Environmental Services – Sewers (Roger Janzig) – The master plan does not impact the Metropolitan Disposal System.

Transportation (James Andrew) –

1. It would be helpful to include Average Daily Traffic for the roadway crossings on page 9. (State, County and local roadway crossings)
2. Because the trail is likely to be an attractor of bicycle travel from intersecting roadways, the County and local partners should consider designating intersecting roadways bike routes where feasible. This can be done through roadside signage along with painting five foot or wider shoulders or bike lanes on the roadways that intersect and connect with the trail. These treatments

would be particularly useful for roadways that connect to population centers a few miles off of the trail corridor.

3. The usefulness of the trail will be significantly improved if a connection to the trail from County Road 10 in Waconia Township is incorporated into the project since it provides access to the largest population concentration near the trail corridor.
4. In preparing the maintenance plan, the County should continue to anticipate use of the trail during the winter season by bicyclists and pedestrians in the absence of snow and ice.

CONCLUSIONS:

1. The *2030 Regional Parks Policy Plan* requires that master plans include information on eleven items reviewed in the “analysis section” above. It also requires that sufficient information be included on the estimated cost of the acquisition and development proposed in the master plan. This review concludes that the Dakota Rail Regional Trail Master Plan (Referral No. 20027-1) contains sufficient information to meet the requirements of the *2030 Regional Parks Policy Plan* and that it is generally consistent with the requirements of the plan.
2. The estimated cost to implement the master plan is \$2,302,807 in 2006 dollars.
3. Approval of this master plan does not commit the Council to any funding at this time. Future development funding based on this master plan would be done through the Regional Parks Capital Improvement Program (CIP). Council action is required to approve the CIP and to approve specific grants to Carver County.

RECOMMENDATIONS:

That the Metropolitan Council approve the Dakota Rail Regional Trail Master Plan (Referral No. 20027-1).