



February 9, 2018

Honorable Mayor and City Council
City of Dellwood
111 Wildwood Road
PO Box 775
Willernie, MN 55090

Re: Lake Links Trail – Schematic Design Recommendations within Dellwood
WSB Project No. 010955

Dear Honorable Mayor and City Council:

The following provides a summary of the schematic design process, recommendations, and probable cost to construct the improvements for the Lake Links Trail through the City of Dellwood.

DESIGN RECOMMENDATIONS SUMMARY:

The main intent of this study is to recommend a consistent, safe, and constructible multi-use trail alignment for the general public to use now and for generations in the future. The 1.55 +/- miles of this trail route will provide key connections to the greater network of regional trails in the area. The majority of the alignment is within or adjacent to the Hwy 244 ROW, however, some of the recommended segments are proposed to be built within former railroad property that has been turned back to adjacent property owners, subject to successful negotiation with the private landowners.

Attached to this letter, you will find plan illustrations and graphics that further convey the main trail alignment recommendation and options for consideration related to this study area. The provided plan comprehensively includes trail segments in both Dellwood and Mahtomedi, but the summaries below pertain solely to the main segments of trail within the City of Dellwood as studied through this project.

Dwinnell Ave. to Peninsula Road Segment

Recommendation: Construct trail on former railroad bed. This will provide trail users a pleasant experience with further separation from the highway.

Potential Option:

Narrow Hwy 244 lanes to 11' wide with 2' shoulders. Construct trail with curb & gutter along the east side of Hwy 244.

Peninsula Road to southern end of Yacht Club

Recommendation: Narrow Hwy 244 lanes to 11' wide with 2' shoulders. Construct trail with curb & gutter along the east side of Hwy 244.

Potential Option: negotiate with adjacent landowners to obtain additional ROW or easement to construct trail along former railroad bed corridor, or with 10' min. separation between Hwy 244 and edge of trail.

Yacht Club Area:

Recommendation: Realign Hwy 244 to the west. Reconstruct highway with 11' lanes, 2' shoulder with curb & gutter on east side. Reconstruct a wider median (10' min.) to allow a 6' sidewalk with appropriate clear zones on both sides. Parking lot would not be affected. Include a new pedestrian crossing with activated flasher for golf course users / golf carts to cross Hwy 244 north of the golf club parking lot. The realignment / reconstruction of the

highway extends north and south of the Yacht Club & Golf Course parking area as illustrated on the schematic design plan. North of the golf club parking area, construct parallel trails (1 @ 12' for golf cart connection to driving range, 1 @ 8'-10' wide for the Lake Links trail). Parallel trails must be clearly defined via pavement markings and/or change of paving material. Install a screen fence to compensate for the loss of an existing hedge.

700' South of Meadow Lane to Meadow Lane:

Recommendation: Construct trail east of Hwy 244 with greenspace separation on land expected to be donated for the project. Install a pedestrian crossing at Meadow Lane.

Meadow Lane to Ordway Property:

Recommendation: Install a pedestrian crossing with activated flasher at Hwy 244. Narrow Hwy 244 lanes to 11' wide with 2' shoulders. Construct trail with curb & gutter along the west side of Hwy 244. Construct retaining walls to minimize grading impacts to adjacent properties.

Potential Alternate Route Option:

Narrow Hwy 244 lanes to 11' wide with 2' shoulders. Construct trail with curb & gutter along the east side of Hwy 244. Relocate/bury powerlines and construct retaining walls. The slopes, topography, historic boulder armoring, and the powerlines on the east side of the highway in this area will be more impactful than the west side. As such, this route is suggested as an alternate.

Ordway Property to East County Line Road North:

Recommendation: Construct trail on former railroad bed.

MnDOT IMPROVEMENTS

It is our understanding that MnDOT plans to resurface Hwy 244 and that narrowing of lanes and widening shoulders has been considered as part of the resurfacing. The cost projections included in this letter for the trail project include costs for areas of roadway segments suggested to be realigned but do not include costs associated with narrowing lanes, resurfacing road, or widening shoulders throughout the highway corridor.

The coordination of the trail project and any highway improvement projects, regardless of whether they are combined as a single project, will be critical to the overall success of future projects.

STORMWATER MANAGEMENT

Stormwater management is required to accommodate the increased impervious surfaces associated with trail development. While there may be some compensation gained in reducing lane widths and shoulders of highway, we estimate the need for 0.10 acre/feet of new storage. Our plans highlight potential areas to consider for stormwater management and locations where there may be potential to work with private property owners. It is our opinion that treating the stormwater management above ground will be most efficient, however, if this is not fully attainable, the following alternate solutions may be considered.

Alternate methods to reduce the need for surface storage volume include:

Incorporate infrastructure for underground storage chambers. This could be constructed beneath pavement or open areas to increase storage capacity. Depending on extent of this solution, the costs could vary drastically.

Incorporate ‘pervious pavement’ for the proposed trails. Note that this pavement type is becoming more frequent, however, the cost to construct are considerably higher than traditional trail construction methods. While there are some examples of this in regional systems, the long-term maintenance requirements and associated costs for pervious trails in this climate are not fully known at this time. We recommend considering this as a last resort option at this time.

PUBLIC OPEN HOUSE MEETING

Approximately 75 to 100 people attended the public open house meeting held on January 10, 2018. The community feedback was supportive of the trail connection with a focus on safety and separation of the road where possible to allow an improved trail experience. Some attendees filled out comment cards in addition to the verbal conversations held at the meeting. Generally, the feedback received conveyed subtle preferences for, and against, some of the options available. Keep in mind that the alternates defined on the plan will provide some flexibility during final design.

The sign-in sheet and public comment cards are included as an attachment to this letter for reference.

ROW ACQUISITION AND TEMPORARY EASEMENTS

The need for additional ROW varies through the corridor. Based on the recommended alignment, we estimate the following property and temporary easements will be required. Estimated costs have been factored into the following section using average property values along the corridor. It is our understanding that some areas of land donation are being negotiated and that this will decrease the estimated costs of land acquisition.

Temporary Easement	Permanent ROW Acquisition
2.2 Acres	2.6 Acres

PROBABLE COSTS TO CONSTRUCT

The estimated probable cost to construct this project is \$3,350,786 as summarized in the table below. The estimated costs are based on 2018 values for the recommended alignment which is ‘schematic’ in level of design. A 20% contingency is recommended at this early stage of the design process. More detailed engineering and coordination will be required to complete final design and establish refined estimated costs.

Construction	\$1,535,322
Mobilization @ 5%	\$76,766
R/W & Esmt Cost	\$302,369
Wetland Mitigation	\$49,000
Storm Sewer & Bmps	\$260,400
Wayfinding Signs / Kiosks - Budget	\$10,000
Construction Subtotal	\$2,233,857
20% Contingency	\$446,771
Estimated Construction Total	\$2,680,629
Administration / Consulting (25%)	\$670,157
Estimated Project Total	\$3,350,786

Potential Add-Ons If Alternate Alignments Are Selected:

* Powerline Bury Meadow & Ordway	\$500,000
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PROJECT TIMELINE / PROCESS:

- Sep. 25, 2017 Meeting at with MnDOT, Mahtomedi, and Dellwood to review MnDOT provided mapping and known ROW limitations

Review opportunities and constraints

Draft alignment
- Oct. 26, 2017 Meeting with Lake Links Trails representatives Mike Brooks and Steve Wolgamot to discuss potential land donations within search area
- Oct. 31, 2017 Tour entire corridor with draft alignment plan and make notes on specific challenges and opportunities

Refine alignment
- Nov. 21, 2017 Mahtomedi City Council Meeting - Provide overview of draft alignment and collected feedback
- Nov. 29, 2017 Meeting with Dellwood Mayor and council members - Provide overview of draft alignment and collected feedback

Refine alignment and add potential alternate routes for consideration / flexibility
- Dec. 11, 2017 Tour entire corridor with refined alignment plan and alternate routes

Prepare presentation boards / illustrations / begin cost estimation
- Jan. 10, 2018 Public Open House Meeting - Copies of the sign-in sheet and public comment cards are provided as reference
- Feb. 5, 2018 Meeting with members of Dellwood and White Bear Yacht Club
- Feb. 5, 2018 Mahtomedi City Council Meeting – provide overview of recommended alignment and potential alternate routes
- Mar. 13, 2018 Dellwood City Council Meeting – provide overview of recommended alignment and potential alternate routes

Our team has truly enjoyed working with you and the local community on this exciting project. Thank you again for this opportunity and let me know if we can be of further assistance as the project progresses. Please contact me at 763-231-4841 if you have any questions.

Sincerely,

WSB & Associates, Inc.



Jason L. Amberg, PLA, ASLA
Principal / Landscape Architecture Group Manager

Attachments:

- Schematic Design Plan Sheets
- Comments / feedback from public open house meeting