

Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Company
Subject: Items on the BCWMC June 16, 2005 Meeting Agenda
Date: June 8, 2005
Project: 23/27 051 2005 001

New Business

1. Luther 394 Auto Mall

Summary

Proposed Work: Commercial Redevelopment

Basis for Commission Review: Offsite Treatment, Work in floodplain

Change in Impervious Surface: No change

Recommendation: Conditional Approval

A request was received by city of Golden Valley for review of a preliminary grading, drainage and erosion control plan for the above-referenced redevelopment. The project is generally located southeast of Highway 169 and I-394, along the west side of General Mills Boulevard and north of Miller Street. The project is in the Main Stem watershed and subject to Level I treatment standards. The proposed project consists of redevelopment of the existing 13.4 acre Rudy Luther Toyota site and construction of two new automobile sales/service buildings. Approximately 11.5 acres of the site will remain impervious. Grading will occur on the 14.0 acres which includes most of the proposed site and the adjacent ponding area. Construction is anticipated during 2005.

Water Quality Ponding

Stormwater runoff from the existing site currently discharges to municipal storm sewer and to an existing Mn/DOT pond located east of General Mills Boulevard. This pond receives runoff from approximately 40.3 acres. The pond is only 12 to 18 inches deep and does not provide adequate water quality treatment.

The applicant has reviewed requirements for an on-site pond to treat runoff to Level 1 standards. An onsite pond would require 2.48 acre feet of dead storage to adequately treat runoff from the 13.4-acre site. As an alternative, it was determined that by excavating the existing Mn/DOT pond

to the maximum BCWMC design depth of 10 feet, greater phosphorus removal were possible than by onsite treatment. Although the proposed excavation will not meet Level 1 standards for its entire watershed, the overall phosphorus removal exceeds that of an onsite pond. Note the following scenarios:

- Existing conditions: runoff from 40.3 acre watershed discharges through existing 12 to 18 inch deep Mn/DOT pond results in 26.7 lbs/yr phosphorus removed (17% total removal).
- Option 1: onsite 2.48 acre-feet pond treats 13.1 acres of proposed Luther site; remaining 27.2 acres discharges through existing 12 to 18 inch deep Mn/DOT pond results in 81.2 lbs/yr phosphorus removed (34% total removal).
- Option 2: runoff from 40.3 acre watershed discharges through proposed 2.71 acre-feet, 10 feet deep Mn/DOT pond results in 89.3 lbs/yr phosphorus removed (56% total removal).

Option 2 including excavation of the Mn/DOT pond will provide water quality ponding for the Luther site and the remaining subwatershed. Due to the offsite pond, it will allow the Luther site to utilize additional area for inventory parking. Although the Option 2 pond will not be designed to Level 1 standards, it will remove an additional 8 lbs/yr of phosphorus from discharging to Bassett Creek. Storm water from the pond eventually discharges to the Bassett Creek in the vicinity of its crossing of General Mills Boulevard. Expanding the pond to meet Level 1 standards is not feasible due to site conditions and Mn/DOT requirements. Mn/DOT has provided approval for excavation of the pond.

Floodplain Issues

The Bassett Creek floodplain is 888.3 feet. The proposed site is located above the floodplain elevation. The Mn/DOT pond is located in the floodplain. However, the proposed work at the Mn/DOT pond consists of excavation and does not involve filling or adjustments its normal water elevation.

Recommendation: Approval contingent on following comments:

- a. A portion of the stormwater discharging to the proposed Mn/DOT pond identified as “Option 2” is treated by an existing pond as part of the Porsche/Audi facility located west of the site. Applicant must review effect of this treated water and demonstrate the “Option 2” regional pond provides greater phosphorus removal than the on-site pond scenario identified as “Option 1.”
- b. Sheet C105: the outlet of the 36-inch storm sewer must be relocated to maximize its distance between the 60-inch outlet pipe to prevent short circuiting.
- c. Sheet C105: the outlet of the 12-inch storm sewer must be relocated to maximize its distance between the 60-inch outlet pipe to prevent short circuiting.

- d. Sheet C-501: Stabilized rock construction entrance must be modified to include a 2-foot berm with maximum side slopes of 4 to 1 to intercept runoff leaving the site.
- e. A maintenance agreement should be established between the city, owner and Mn/DOT to ensure the pond is properly inspected and maintained. Access should be provided for future maintenance.

2. Wessin Transport

Summary

Proposed Work: Commercial Redevelopment

Basis for Commission Review: Alternative Treatment

Change in Impervious Surface: No change

Recommendation: Conditional Approval

A request was received by city of Golden Valley for review of a grading, drainage, and erosion control plan for the above-referenced project. The project is located at 8125 Lewis Road, along the Main Stem of Bassett Creek between Wisconsin Avenue and Winnetka Avenue. The proposed project includes the construction of new loading docks and replacement of existing parking areas and utilities. The floodplain elevation along the project is approximately 884.5 feet. Grading will occur on the 0.7 acres of the 1.56 acres parcel. Stormwater runoff from 0.9 acres of the site will be directed to an underground proprietary storm water system called the Stormtech Chamber System. The Stormtech system stores water underground to promote infiltration and rate control. This project provides a nice example of an alternative treatment system to treat and minimize runoff and promote infiltration. Since the redevelopment is less than 5-acres, formal BCWMC review is not necessary, however, staff wanted to show the Commissioner's this concept. Key to the success of this system is the presence of sandy soils that allow infiltration. A site plan and manufacturers information is attached to further illustrate this treatment system.

Recommendation: Approval contingent on following comments:

- a. Outlet pipe must be extended to discharge near the bottom of the creek channel to minimize erosion potential. Adequate erosion protection must be provided.
- b. The location of the pretreatment sump/skimmer shown on Sheet C8-1 must be clarified on the utility plan (Sheet C4-1).
- c. Silt fence or other erosion protection must be extended along the east side of the site after removal of pavement to intercept runoff discharging to the creek.
- d. The BCWMC recommends a maintenance agreement be established between the city and owner to ensure the Stormtech System will be properly maintained.

Old Business

3. Status: 2005 Tunnel Repairs

Contracting has been completed between the BCWMC and city of Minneapolis. The BCWMC engineer and City of Minneapolis staff have discussed the proposed schedule for completing repairs. Minneapolis crew is available to perform repairs during July if creek flows subside. Since the work is not considered urgent, repairs may be delayed until later this year when low flows typically occur in Bassett Creek to minimize BCWMC repair costs.

4. Status: Westwood Lake: Flag Avenue Pond

As part of the investigation to determine the feasibility of constructing the Flag Avenue pond on the west side of Westwood Lake, BCWMC staff, conducted a wetland delineation to determine the location and type of the existing wetland. Results of the wetland delineation show that the majority of the area, where the proposed water quality pond can be created, is wetland (see figure, actual pond area will be reduced from pond shown). Wetlands are protected by state and federal jurisdiction:

- The Wetland Conservation Act (WCA) regulates filling and draining wetlands and excavating with Type 3, 4, and 5 wetlands. The WCA is administered by local government units (LGU), which include: cities, counties, watershed management organizations, soil and water conservation districts, and townships. The BCWMC is the LGU for St. Louis Park, the location of the proposed pond. The Minnesota Board of Water and Soil Resources (BWSR) oversees administration of the WCA statewide.
- The Minnesota Department of Natural Resources (MnDNR) — regulates projects constructed below the [ordinary high water](#) level of public waters or public waters wetlands; which alter the course, current, or cross section of the water body. Public waters regulated by the MnDNR are identified on published Public Waters Inventory (PWI) maps.
- The Army Corps of Engineers (Corps): Corps regulates the placement of fill into wetlands, if the wetlands are hydraulically linked to a water of the United States, under Section 404 of the Clean Water Act.
- Both the WCA and Section 404 require that proposed wetland impacts conduct a “sequencing analysis” which consists of three general steps:
 1. Avoid disturbing wetlands;
 2. Minimize impacts to wetlands; and
 3. Replace any lost wetland functions and values.

- When planning for wetland replacement, attempts must be made to replace wetland credits on-site before considering other options. Certain wetland activities are exempt from the WCA, allowing projects with minimal impact (impacts less than 400 sq. ft.) or projects located on land where certain pre-established land uses are present to proceed without regulation.

It was initially assumed that creation of the Flag Avenue pond, would involve both filling and excavation within wetlands that may require mitigation. Based on the wetland delineation and initial pond design, it appears that the construction activities would affect Type 1 and 2 wetlands. The WCA does not regulate excavation in Type 1 and 2 wetlands, assuming the volume of stormwater entering the wetland is not increased and the quality of the stormwater is not further degraded. The Corps typically does not regulate wetland excavation, but does occasionally consider it as an indirect impact.

Review of 1956 topographical data provided by the City indicates that a pond may be constructed without significant filling. A new survey will be performed as part of the final planning to ensure changes during the last 50 years are accurately mapped.

Since it appears the project can be completed without mitigation, BCWMC staff will complete the wetland delineation report and have Hennepin Conservation District (HCD) review the delineation. Following HCD concurrence a no loss determination can be submitted to the agencies.

5. Lakeview Park Pond

See discussion in the attached December 16, 2004 meeting minutes.

6. Information Only

- a. Plymouth Ponds Apartments
A maintenance plan was reviewed for removal of accumulated sediment and modifying an outlet structure to reduce plugging.
- b. Crystal 2005 Phase 7 Street Reconstruction
A revised street reconstruction plan was reviewed. A letter of approval was sent to the city of Crystal.

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c. St. Barnabas Church Addition

A revised grading, drainage, and erosion control plan was reviewed for the proposed development. Revised rain garden details were reviewed. A letter of approval was sent to the city of Plymouth.

d. 2004 Annual Report

The 2004 Annual Report was completed and submitted to the Minnesota Board of Water and Soil Resources. This report was prepared in accordance with the Annual Reporting Requirements set forth in the Minnesota Rules, Chapter 8410.0150. The report has been posted on the BCWMC website. Copies were distributed to Commissioner's specifically requesting a paper copy.

e. Erosion Control Inspection Report

A copy of the May 2005 inspection report is included.