

Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 4I – The Lock-Up Storage Facility – Golden Valley
BCWMC May 15, 2014 Meeting Agenda
Date: May 7, 2014
Project: 23270051 2014 2009

4I The Lock-Up Storage Facility: Golden Valley

Summary:

Proposed Work: Construction of a self-storage facility

Basis for Commission Review: Alternative Treatment Proposed

Change in Impervious Surface: Increase 1,300 square feet

Recommendation: Conditional Approval

General Background & Comments

The proposed Lock-Up self-storage facility will be located on the northeast corner of the Highway 55 and Douglas Drive intersection. The proposed redevelopment includes demolition of existing pavement (previously a restaurant site) and construction of the self-storage facility and associated parking. Approximately 1.22 acres will be graded as part of this project and there will be an increase in impervious surface by approximately 1,300 square feet. Proposed BMPs include one underground infiltration system. The site is in the Sweeney Lake Subwatershed.

Floodplain

N.A.

Wetlands

The City of Golden Valley is the Local Government Unit (LGU) responsible for review of the project for conformance to the MN Wetland Conservation Act.

Stormwater Management

Under existing and proposed conditions, the site discharges to the northeast to storm sewer under the Highway 55 frontage road. There is currently no rate control on the site. Under proposed conditions, some rate control will be provided by the proposed underground infiltration system.

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Water Quality Management

Currently, there is no water quality treatment onsite. Proposed permanent BMPs include construction of one underground infiltration system, consisting of 182-feet of 48-inch perforated PVC pipe. A total of 0.81 acres of the site's 0.93 acres of impervious surface will discharge through the underground unit. The remaining 0.12 acres of impervious area will discharge offsite untreated.

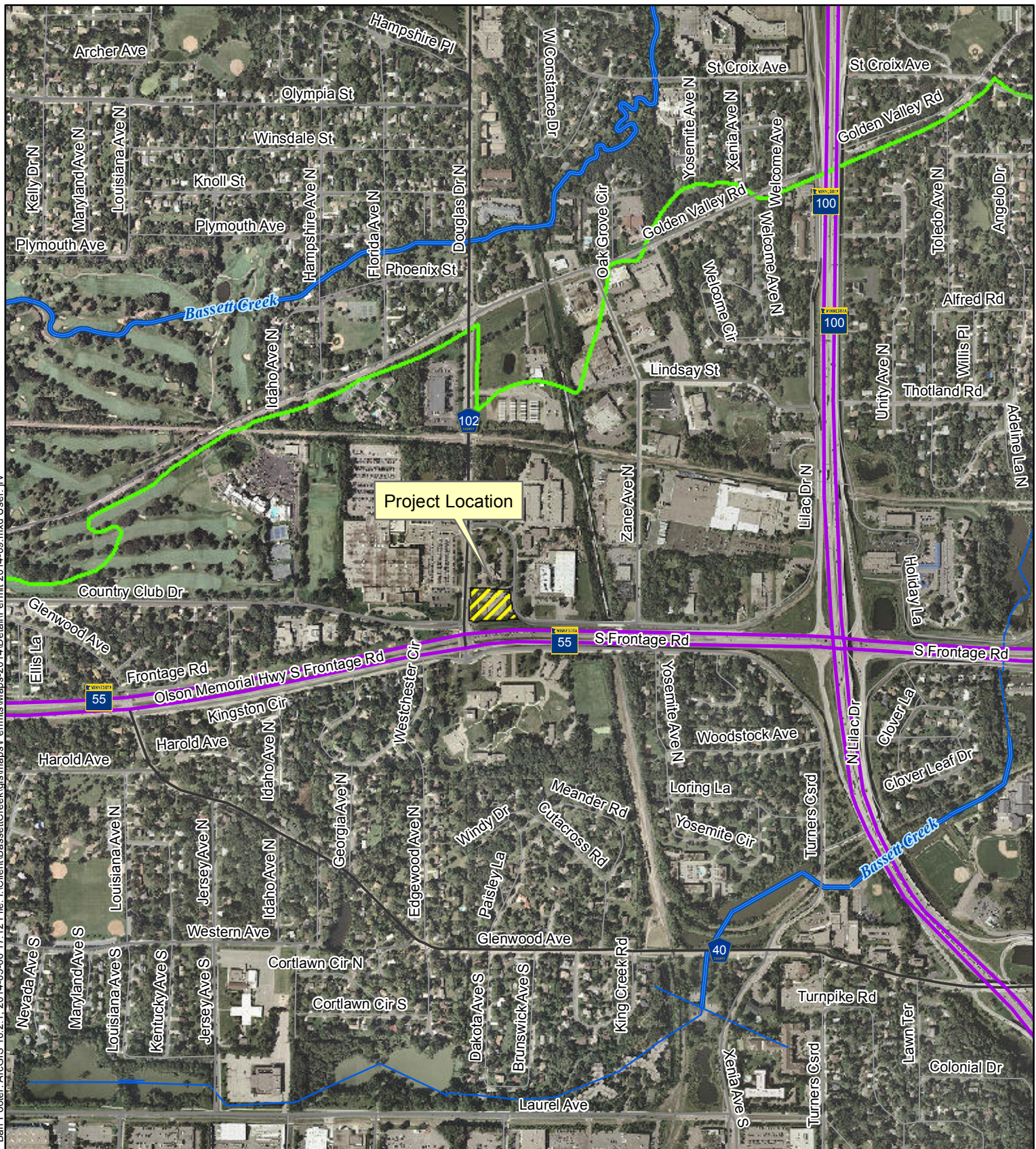
Erosion and Sediment Control

Temporary erosion control features include silt fence, inlet protection around all storm sewer inlets, and rock construction entrances.

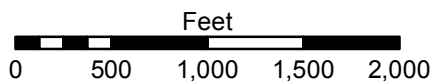
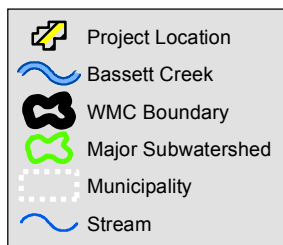
Recommendation

Conditional approval based on the following comments:

1. Details of the underground infiltration system must be included on the plans.
2. Pretreatment is important for infiltration and filtration BMPs to help reduce clogging of the filter beds. Pretreatment devices such as four-foot sumps, grit chambers, grass swales, filter strips or sediment forebays/traps should be incorporated into the design. If sumps are used for pretreatment, we recommend installing SAFL baffles or other environmental manholes to increase removal efficiency.
3. A four-foot sump with SAFL baffle (or other environmental manhole) is recommended at CBMH08 to provide some water quality treatment for the portion of the impervious surface that leaves the site untreated.
4. The following erosion control comments must be added to the plans:
 - Temporary or permanent mulch must be uniformly applied by mechanical or hydraulic means and stabilized by disc-anchoring or use of hydraulic soil stabilizers.
 - Temporary vegetative cover must be spread at 1.5 times the usual rate per acre. If temporary cover is to remain in place beyond the present growing season, two-thirds of the seed mix shall be composed of perennial grasses.
5. A maintenance agreement for the underground infiltration system should be established between the applicant and the City of Golden Valley.
6. Revised plans must be submitted to the BCWMC Engineer for review and approval.



Imagery Source: Aerial Express (2009)



**LOCATION MAP
APPLICATION 2014-09
The Lock-Up Storage Facility
Golden Valley, MN**