COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 28, 2013
AGENDA NUMBER: 7
FILE NUMBER: 13 - 122
ITEM: Unity Hospital Storm Sewer Relocation

RECOMMENDATION: Approve with 5 Stipulations

APPLICANT: Unity Hospital
Sue Martin
550 Osborne Road
Fridley MN 55432

PURPOSE: Addition of new storm sewer line and infiltration basin

LOCATION: Lyric Lane and 75th Ave. NE, Fridley MN
APPLICABILITY:
1. One or more cumulative acres of land disturbance.
2. High infiltration soils.
3. Highly erodible soils

EXHIBITS:
1. Plan set by Paramount Engineering & Design; dated 10-16-2013; received 10-18-2013
3. Drainage map figure by Paramount Engineering & Design; dated 10-16-2013; received 10-18-2013
4. HydroCAD report by MSA professional Services; dated 10-15-2013; received 10-18-2013

HISTORY & CONSIDERATIONS: This application was initially submitted on October 16, 2013. The hospital has expanded over the years which has increased stormwater runoff. The City’s storm sewer system in Lyric Lane is not large enough to handle the stormwater from the hospital’s increase in impervious surface and has caused backups into the hospital.

FINDINGS:
Ditches and Drainage: There is not a public ditch on the property.

Floodplain: There is no floodplain on the property according to FEMA. This area is not included in the District model. Compensatory storage is not needed.

The applicant is required to run the 100-year elevation for interior ponds using the NOAA Atlas 14 information as shown in the following web link.
http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mn

Groundwater: Ground water is present at 867.2 feet. The site does not include groundwater sensitive areas.

Historic Sites: The proposed project does not include sites of historic or archeological significance.

Local Planning & Zoning: The proposed project is consistent with local planning and zoning. There is not an approved local water plan.

Maintenance: The proposed project does not include a ditch maintenance easement or utility line crossings. A drainage and utility easement is not provided for the storm water/infiltration ponds shown on the drainage plan. Property owners affected by changes in drainage have not been notified and have not acknowledged the changes proposed.
**Soils & Erosion Control:** Soils affected by the proposal are Zimmerman. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. Not all ponds/infiltration basins are protected from erosion and sedimentation. Project site is greater than 1 acre; an NPDES permit is required.

**Stormwater & Hydraulics:** The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. Stormwater leaving the site is discharged into a well-defined receiving channel or pipe and routed to a public drainage system. Drainage sensitive uses do not exist downstream from the proposed site. The rate of post development runoff from the site does not exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses.

**Water Quality:** Project does not include new impervious drainage areas greater than 1 acre. The proposed infiltration basin does not have sedimentation protection from the incoming stormwater. The proposal will not detrimentally affect the existing water quality of the receiving water. The proposal will not cause extreme fluctuations of water levels or temperature changes.

**Wetlands:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

**Wildlife:** The proposed project does not include endangered, threatened, special concern species or rare natural communities.

**Escrow:** Performance = $3,000.00

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<tr>
<th>ISSUES/CONCERNS:</th>
<th>NEED</th>
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<td><strong>Stormwater &amp; Hydraulics:</strong> A post</td>
<td>It is required by the district to use Atlas 14 rainfall depths as the basis of all modeling. Atlas 14 information as shown in the following web link. <a href="http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mn">http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mn</a></td>
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<td>construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.</td>
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<td><strong>Maintenance:</strong> A utility easement needs to be provided for the infiltration basin.</td>
<td>The last catch basin in the system (MH 100) should include a water quality unit and sump</td>
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for pretreatment; or, the designer could include a sedimentation fore bay in the infiltration basin design.

**RECOMMENDATION:** Approve with 5 Stipulations

**Stipulations:**
1. Receipt of $3,000.00 escrows.
2. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. Atlas 14 is the new district standard for rainfall depths used for modeling. Run the model using Atlas 14 rainfall depths.
4. A water quality unit and sump needs to be added to manhole 100 or a sediment fore bay needs to be added to provide pretreatment.
5. A utility easement for the infiltration basin needs to be provided and shown on plans.