COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE:       June 27, 2016
AGENDA NUMBER:     17
FILE NUMBER:      16-092
ITEM:               Mercy Hospital Stormwater Management Plan

RECOMMENDATION:  Table with 7 Stipulations

APPLICANT:         Mercy Hospital
                   4050 Coon Rapids Blvd
                   Coon Rapids, MN

PURPOSE:           Building addition, parking ramp and building entrance

LOCATION:          Southwest of Coon Rapids Blvd and Blackfoot St in Coon Rapids, Minnesota
APPLICABILITY:
   1) Construction of 1 acre or greater of impervious surface
   2) Any land alteration within 1 mile of an impaired water

EXHIBITS:
PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:

Pre-application Meeting: The project as submitted has received a general review during a pre-application meeting.

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

Ditch Hydraulics: A crossing of the ditch is not proposed.

Erosion and Sediment Control: Soils affected by the proposal are Hubbard.
- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss.
- Adjacent properties and stormwater ponds are protected from sediment deposition.
- Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have not been provided.
• Stormwater runoff does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
• Stabilization adequate to prevent erosion has been provided at the outlets of all storm sewer pipes.
• All storm sewer inlets are protected from sediment-laden water during construction.
• All work adjacent to water or related resource has taken precautions to contain sediment, and stabilize the work area during construction.
• Provisions have been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
• Provisions have been made for cleaning road surfaces where sediment is transported by the end of the day.
• Construction entrance points are clearly located on the erosion and sediment control plan.
• The erosion and sediment control plan does provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.

**Dewatering:**  
Shallow ground water does not exist on site. The project does not require dewatering

**Floodplain:**  
There is no floodplain on the property according to the District model and FEMA.

**High Water Flooding:**  
Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Coon Rapids; 3 ft above highest anticipated water table, 1 ft over 100 yr.

**Groundwater:**  
Geotechnical information has been submitted. Geotechnical information collected in April 2016 indicates long term groundwater elevation is present at 30 feet below the surface.

The site is not within a Municipal Drinking Water Supply Area (DWSMA).

The project site is not within the Emergency Response Area/ 10 Year Well Head Protection Area/Drinking Water Supply Management Area.

The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA). Uses include:

• Storage, production, disposal or treatment of hazardous materials
• Dry cleaning, dyeing, printing, photo processing or any other uses of hazardous materials
• Disposal of septage or septic sludge
• Vehicle or equipment maintenance/fueling area
• Underground storage tanks
- Storage and use of petroleum products
- Chemical/pesticide/herbicide storage
- Storage and use of petroleum products exceeding fifty-five (55) gallons

**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 an approved local water plan.

Property owners affected by changes in drainage have been notified and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices is Allina Health. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground Storage System</td>
<td>1</td>
</tr>
<tr>
<td>Infiltration Basin</td>
<td>1</td>
</tr>
<tr>
<td>Sedimentation Basin</td>
<td>1</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of Allina Health. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

**Easements:**
The proposed project does not include ditch maintenance easement. A maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes sedimentation basin, infiltration and underground chambers. 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. Properties and waterways downstream from the project are protected from erosion due to increases in the volume, velocity and peak water flow rates of stormwater runoff. Concentrated storm water leaving a site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. No on-site constructed storm water conveyance channels are proposed.

**Water Quality:** The proposed project does not cause an exceedance of State water quality standards. The project does not contribute to the adverse impact of wetlands
through inundation or volume of flow. All discharges into wetlands are not pretreated by a sediment basin/water quality pond, and are not designed correctly. All work adjacent to wetlands, waterbodies and water conveyance systems are not protected from erosion. 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.

Impairments: This project is within one (1) mile and drains to an Impaired Water. The Impaired Water is the Mississippi River. The Mississippi River is impaired for Aquatic Life Macro-invertebrates. The major stressors are Mercury and PCB. There is an EPA approved Total Maximum Daily Load (TMDL) for the Mercury Impairment but not for PCB.

There are no new impervious surfaces proposed as part of this project.

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

Wetland Replacement Plan:
A wetland replacement plan has not been submitted and is not needed.

Wildlife:
The proposed project does not include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors

Performance Escrow: $4,065.00
Wetland Escrow: N/A
There are not ditch liens on the property.

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (4.13 ac * $500/ac) = $4,065.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained.</td>
<td>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.</td>
</tr>
<tr>
<td>The underground storage chamber and infiltration drain to an existing 18-inch</td>
<td>3. Explicitly model the existing 18-inch outlet pipe to ensure pipe...</td>
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<tr>
<td>pipe. The model currently has these features draining to a reach and does not incorporate the culvert capacity.</td>
<td>capacity is accounted for.</td>
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<td>Subcatchments 2E and NS are directed to the underground chambers in the model but it is unclear how the areas will be directed to it based on the grading and utility plan.</td>
<td>4. Provide details on the grading plan or utility plan that shows how Subcatchments 2E and NS are directed to the underground chambers.</td>
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<td>Soils &amp; Erosion Control: District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
<td>5. Add note to construction plans that stabilizing vegetation is required within 7 days of rough grading or inactivity.</td>
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<td>Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have not been provided.</td>
<td>6. Provide construction schedule detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases.</td>
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<td>Maintenance: The owner has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>7. An O&amp;M agreement needs to be provided consistent with District rules for the stormwater basins on site.</td>
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</table>

**RECOMMENDATION:** Table with 7 Stipulations

**Stipulations:**

1. Receipt of 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. Explicitly model the existing 18-inch outlet pipe to ensure pipe capacity is accounted for.
4. Provide details on the grading plan or utility plan that shows how Subcatchments 2E and NS are directed to the underground chambers.
5. Add note to construction plans that stabilizing vegetation is required within 7 days of rough grading or inactivity.
6. Provide construction schedule detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases.
7. An O&M agreement needs to be provided consistent with District rules for the stormwater basins on site.