COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: August 22, 2016
AGENDA NUMBER: 6
FILE NUMBER: 16-130
ITEM: Blaine University Ave Townhomes

RECOMMENDATION: Table with 11 Stipulations

APPLICANT: ACCAP-BUATH, LLLP
1201 89th Ave NE Suite 345
Blaine, MN 55434

PURPOSE: Townhome Development

LOCATION: NE corner of 109th Ave and University Ave, Blaine MN
APPLICABILITY:
1. One or more cumulative acres of land disturbance

EXHIBITS:
1) Geotechnical Report by Haugo Services; dated 10/14/14, received 8/10/16.
2) Stormwater Management Plan by Hakanson Anderson; dated 8/9/16, received 8/10/16.
3) Construction Plan set by Hakanson Anderson; dated 8/9/16, received 8/10/16.

PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted has not received a general review during a pre-application meeting.

Ditches: There is not a public ditch on the property. The project drains to County Ditch 39.

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

Erosion and Sediment Control: Soil affected by the proposal is Sartell.
- 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 not protected from sediment deposition. Silt fence schedule and details provided but not location.
• 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 not 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 not taken precautions to contain sediment, and stabilize the work area during construction.
• Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
• Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day.
• Construction entrance points are not clearly located on the erosion and sediment control plan.
• The erosion and sediment control plan does not 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. It is unknown if dewatering is required.

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 not meet the criteria for the City of Blaine; 1 ft above mottled, 2 ft above 100 yr for Buildings B1 and A3.

Groundwater: Geotechnical information collected in July 2014 indicates long term groundwater elevation is present at 15-19 feet below the surface.

The site is 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).

Underground storage tanks are not proposed.
Storage and use of petroleum products exceeding fifty-five (55) gallons are not proposed.

**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 unknown. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Infiltration Basins</td>
<td>3</td>
</tr>
<tr>
<td>Infiltration Trench</td>
<td>1</td>
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</table>

It is unknown who is responsible for the inspection and maintenance of stormwater facilities. 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 ditch maintenance easement is not required. A maintenance access to all storm water management features is not provided.

**Stormwater & Hydrology:** Infiltration is allowed from the driveway/roads within the project area with prior filtration. The 1-inch infiltration is achieved. The stormwater management system utilizes infiltration basins and trenches. 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. All on-site constructed storm water conveyance channels are constructed to withstand the expected velocity from a 2-year frequency storm without erosion.

**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 infiltration basins are not
pretreated. 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 Impaired Waters. The Impaired Waters are Sand Creek and Pleasure Creek. Sand Creek is impaired for (Aquatic Life (Macro-invertebrates)). The major stressors are Total Suspended Solids (TSS) / Total Phosphorus (TP). There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water. Pleasure Creek is impaired for (Aquatic Life (Macro-invertebrates) and E.Coli). The major stressors are Total Suspended Solids (TSS) / Total Phosphorus (TP)/E.Coli. There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

There are 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:** $3,300.00

**Wetland Escrow:** N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (2.6 ac * $500/ac) = $3,300.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> The current design allows for infiltration from runoff from driveways/access roads. The project is within a DWSMA and therefore, filtration must be provided prior to infiltration from these areas. Infiltration without filtration is allowed when runoff is from rooftops only.</td>
<td>2. Project is located within a DWSMA. Design will require filtration prior to infiltration from runoff from roads/driveways. Infiltration from roof runoff is acceptable. Provide soil media for infiltration basins and vegetation details.</td>
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<tr>
<td>A post construction test on the infiltration/filtration basins will be</td>
<td>3. The applicant must acknowledge that they will conduct a post construction</td>
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</table>
required to verify the assumed infiltration rates are obtained. Geotechnical Report indicates that soils are SP-SM which has a lower infiltration rate than the assumed 0.8 in/hr.

<table>
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<tr>
<th>Location is not shown for note #3 on plan sheets and current statement does not specify storm structure.</th>
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<tbody>
<tr>
<td>HWLs are not provided on plan sheet.</td>
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| Model:  
  a. Outlets for 2I and 3I are not shown on plan sheets.  
  b. Unclear what Volume #3 is in II.  
  c. Compaction during construction should be taken into account for proposed conditions. Soil borings are SP-SM so a soil type of “B” should be used for proposed conditions. |
| Soils & Erosion Control: No SWPPP provided and erosion control plan sheets do not meet District requirements listed in Erosion Control Section above. |
| It is unclear if dewatering is needed during the construction of the proposed project. |
| Floodplain: Low floor elevations do not meet the criteria for the City of Blaine; 1 ft above mottled, 2 ft above 100 yr for Buildings B1 and A3. |
| Water Quality: All discharges into infiltration systems (basins and trench) are not pretreated to ensure long term filtration capabilities. Two possible pretreatment options are sumps and RainGuardians. |
| Maintenance: It is unknown who is responsible for the maintenance of the stormwater treatment practices is. No O&M agreement was provided. |

<table>
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<tr>
<th>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.</th>
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<tr>
<td>4. Shown location of note #3 on plan sheets and specify which storm structure note is referring to.</td>
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<tr>
<td>5. Show HWLs for basins on plan sheets.</td>
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</tbody>
</table>
| 6. Model:  
  a. Show overflow weirs for 2I and 3I on plan sheets. Clarify if weirs are HWL or EOFs.  
  b. Provide statement explaining volumes used for 1I.  
  c. Update proposed conditions soils to a type “B” to account for compaction during construction. |
| 7. Provide SWPPP and erosion control plan that meets all of District requirements noted in the Erosion Control Section above. |
| 8. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities. |
| 9. LFEs must meet the 2 foot separation from HWL for adjacent basins. Basin 2I has a HWL of 911.3’ and B1 LFEs is 911.9. Basin 3I has a HWL of 909.4’ and A3 LFEs is 910.7. |
| 10. Provide pretreatment into stormwater features. If using sumps, provide calculations (SHASM can be used) to indicate sumps are appropriately sized to meet district removal rates of 80% TSS. A minimum of 4 foot depth is required to prevent resuspension regardless of SHASM results. |
| 11. Provide O&M agreement for each stormwater treatment practice proposed in project that meets District standards. |
**RECOMMENDATION:** Table with 11 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Project is located within a DWSMA. Design will require filtration prior to infiltration from runoff from roads/driveways. Infiltration from roof runoff is acceptable. Provide soil media for infiltration basins and vegetation details.
3. 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.
4. Shown location of note #3 on plan sheets and specify which storm structure note is referring to.
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