COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 28, 2016
AGENDA NUMBER: 11
FILE NUMBER: 16 – 037
ITEM: Jam Hop Dance Studio

RECOMMENDATION: Table with 9 Stipulations

APPLICANT: Robert and Fern Drayna
9416 281st Ave NW
Zimmerman MN 55398

PURPOSE: Construction of new commercial building and parking lot

LOCATION: 133rd Lane NE and Aberdeen Street NE in Ham Lake, MN 55304
APPLICABILITY:
1. Any work in or adjacent to wetlands, lakes or water courses.
2. One or more cumulative acres of land disturbance.
3. High infiltration soils.
4. Highly erodible soils
5. Endangered, Threatened or Special concern species, elements of communities.

EXHIBITS:
1. Construction Plan set (5 sheets) by Plowe Engineering, Inc., dated 3/02/16, received 3/02/16.

HISTORY & CONSIDERATIONS:
Directly north of existing stormwater pond at Carrara West Park. Site discharges to pond at Carrara West Park.

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 outside of The District Atlas 14. The total floodplain impact is 0 acre-feet. Compensatory storage is not needed.

Groundwater: Surficial ground water is present at 898 feet, referring to the pond at Carrara West Park. However, groundwater report findings show the average
groundwater elevation to be at 892 feet. The site does not include groundwater sensitive areas. Information has not been provided to substantiate low floor elevations.

**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 pond 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 Lino. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, waterbodies, ponds, infiltration basins and water conveyance systems are not protected from erosion and sedimentation. Project site is greater than 1 acre; a 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 discharging into a well-defined receiving channel or pipe and routed to a public drainage system. 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 include new impervious drainage areas greater than 1 acre. All discharge entering the infiltration basin needs to be pretreated.

The project site does not lie within 1 mile of Impaired Waters.

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

**Wildlife:** The proposed project has the state-threatened Black Huckleberry (*Gaylussacia baccata*). The applicant must submit to the MN DNR a Natural Heritage Information System (NHIS) Data Request Form.

**Performance Escrow:** $4,500.00

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>Maintenance: O&amp;M Agreement and drainage easement needs to be provided for infiltration basin.</th>
<th>1. Provide utility easement on plan and O &amp; M Agreement.</th>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> 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</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</td>
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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.

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<tr>
<th>Performance of the existing stormwater pond at Carrara West Park needs to be evaluated under proposed conditions to evaluate the impacts of the project. The District requires that the high water elevation of the existing stormwater pond at Carrara West Park does not exceed the City of Ham Lake’s 1 ft. freeboard requirement under post project conditions.</th>
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<tbody>
<tr>
<td>3. Provide post project high water elevation on the existing stormwater pond at Carrara West Park and determine that adjacent homes meet the City of Ham Lake’s 1 ft. freeboard requirement.</td>
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<th>Pretreatment for the infiltration basin has been included but there is no sizes indicated on the detail plan or the grading plan. The District requires pretreatment to infiltration basins and it is important to their function to be sized correctly.</th>
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<td>4. Provide pretreatment basin sizes on plan set as well as sizing methodology/calculations.</td>
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<th><strong>Soils &amp; Erosion Control:</strong> Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from compaction or clogging.</th>
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<td>5. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
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<th>Reinforcement is needed on the emergency overflow with a detail showing elevations and materials for construction. Acceptable materials include riprap, reinforcement matting, etc.</th>
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<td>6. Provide reinforcement of EOF.</td>
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</table>
Stormwater inlets are not protected from erosion and sedimentation during construction. After initial grading the District requires that stormwater catch basins and inlets be protected until site meets final stabilization requirements.

7. After initial grading show that stormwater catch basins and inlets will be protected with appropriate BMPs.

**Wildlife:** Threatened and/or Endangered Species exist on site. A MN DNR NHIS Data Request is required to verify or deny the existence that Threatened and/or Endangered Species exist on site.

8. Submit results from MN DNR NHIS Data Request.

**Escrow:** $2,000 + (5.00 acres * $500/ac) = $4,500.00

9. Receipt of escrows.

**RECOMMENDATION:** Table with 9 stipulations

**Stipulations:**
1. Receipt of escrows.
2. Provide O&M Agreement and utility easement on plan.
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. Provide post project high water elevation on the existing stormwater pond at Carrara West Park and determine that adjacent homes meet the City of Ham Lake’s 1 ft. freeboard requirement.
5. Provide pretreatment sizing and methodology.
6. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
7. Provide reinforcement of EOF.
8. After initial grading show that stormwater catch basins and inlets will be protected with appropriate BMPs.
9. Submit results from MN DNR NHIS Data Request.