COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: September 14, 2015
AGENDA NUMBER: 16
FILE NUMBER: 15 - 111
ITEM: North Force Dance Studio

RECOMMENDATION: Table with 8 Stipulations

APPLICANT: North Force Dance Studio
12303 Aberdeen St NE
Blaine MN 55434

PURPOSE: Building additions and new parking lot

LOCATION: 12303 Aberdeen St NE, Blaine
APPLICABILITY:
1. High infiltration soils.
2. Highly erodible soils

EXHIBITS:
1. Site Drainage Narrative, Calculations and HydroCAD model by Plowe Engineering; dated 8/31/2015, received 9/1/2015.
2. Grading, Drainage and EC and Details construction sheet by Plowe Engineering; dated 8/25/2015, received 9/1/2015.
3. Geotechnical Report by Braun Intertec; dated 8/18/2015, received 9/1/2015.

HISTORY & CONSIDERATIONS:
This project has not been before the CCWD Board.

FINDINGS:
Ditches and Drainage: There is not a public ditch on the property. The project site is tributary to County Ditch 60. The trend in land use for this drainage area is toward open space and residential. There are no flooding concerns downstream. Alternatives to additional drainage considered and reviewed include storage, retention.

Floodplain: There is no floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 901.2 feet. The total floodplain impact is 0 acre-feet, within the floodplain. Compensatory storage is not needed.

Groundwater: Surficial ground water is present at approximately 894 feet. The site does not include groundwater sensitive areas. Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Blaine (2 ft above mottled soil elevation, 2 ft above 100-year).

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.

Maintenance: The proposed project does not include a ditch maintenance easement or utility line crossings. A drainage and utility easement and operating and maintenance agreement is not provided for the storm water/infiltration pond shown on the drainage plan. It is unknown if property owners affected by changes in drainage have been notified and have acknowledged the changes proposed.

Soils & Erosion Control: Soil affected by the proposal is Zimmerman. 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 not greater than 1 acre; an NPDES permit is not required.

**Stormwater & Hydraulics:** The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. Stormwater leaving the site is not 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 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. All discharges into wetlands are not pretreated by a sediment basin/water quality pond and are not designed correctly. The proposal will detrimentally affect the existing water quality of the receiving water. The proposal will 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 or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

**Performance Escrow:** $2,240.00

**ISSUES/CONCERNS:**

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<tr>
<th>Maintenance: It is unknown if property owners affected by changes in drainage have been notified and have acknowledged the changes proposed.</th>
<th>1. Provide confirmation that affected property owners are aware of and have acknowledged changes in drainage.</th>
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<tbody>
<tr>
<td>A drainage and utility easement is not provided for the infiltration pond shown on the drainage plan.</td>
<td>2. Provide drainage easement and operating and maintenance agreement for infiltration basin.</td>
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<td><strong>Stormwater &amp; Hydraulics:</strong></td>
<td>3. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation.</td>
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<td>• The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. The applicant is not meeting the rate control requirements. All projects in the Coon Creek Watershed District must meet these requirements.</td>
<td>4. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation.</td>
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requirements. If applicants cannot meet these requirements due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.

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<th>5. Update HydroCAD model to:</th>
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<td>a. include entire site, not just area that is draining to proposed infiltration basin</td>
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- Include the entire site, not just the area being directed into the infiltration basin, in the HydroCAD model to accurately represent drainage in its entirety.

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<th>6. Provide additional information regarding how drainage to the south will be directed into public storm system and not affect the adjacent property owners.</th>
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- Aerial photos indicate that property to the west of the current building and parking lot is used for parking and will have compacted soils. The HydroCAD model should reflect these existing conditions and use a soil type of C instead of B.

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<th>b. Reflect current site conditions with respect to soil type (C not B)</th>
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- The current design has the stormwater being directed into the property owners land south of the construction site. It is unclear how this water will eventually be directed into a public drainage system and not affect the adjacent property owners given existing LiDAR data.

**Soils & Erosion Control:** 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 clogging.

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<th>7. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</th>
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**Escrows:** $2,000 + (.48 ac * $500) = $2,240.00

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<th>8. Receipt of escrows.</th>
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**RECOMMENDATION**: Table with 8 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide drainage easement and operating and maintenance agreement for infiltration basin.
3. Provide confirmation that affected property owners are aware of and have acknowledged changes in drainage.
4. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
5. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation.
6. Provide stormwater runoff calculations that show the site is meeting rate control requirements.
7. Update HydroCAD model to:
   i. include entire site, not just area that is draining to proposed infiltration basin
   ii. Reflect current site conditions with respect to soil type (C not B)
8. Provide additional information regarding how drainage to the south will be directed into public storm system and not affected adjacent property owners.