Project No. 3745, Rezoning Case No. 3746; Conditional Use Permit Case No. 4756 DiMucci Property Planned Unit Development Appendix "B" - Conditions for PUD Preliminary Plan

FINAL DEVELOPMENT PLAN CONTENT AND DESIGN

Development Standards

- 1. The Final Development Plan shall be submitted substantially in conformance with the approved Preliminary Development Plan and conditions identified on the plan in Tab 5 in the petitioner's application dated January 23, 2012 and the provisions of this Appendix [Appendix "B"]. Modifications to the Preliminary Development Plan shall be evaluated based on Article 3, Section 3.7.4 Modification of Approved PUD Preliminary Plans/Plats in the Unified Development Ordinance.
- 2. Proposed modifications to increase the overall site release rate or decrease the quantity or quality of water treatment shall be considered Major PUD Modifications.
- 3. Final Development Plan acceptance and approval shall be governed by the conditions listed in this Appendix [Appendix "B"], as modified during the review of the Final Development Plan.
- 4. The engineering for the DiMucci Family Property hereafter referred to as "The Property" shall be prepared in accordance with the Engineering conditions of this Appendix [Appendix "B"] and current ordinances of Lake County or applicable permitting agencies at the time of application for the Final Development Plan review. The Final Development Plan shall not be approved until the applicant has demonstrated to the County and other permitting agencies that all permit requirements have been met. The Director of the Department of Planning, Building and Development shall determine when this condition has been satisfied.
- 5. The final development plan shall not be approved until sanitary sewer is available and a public water system is available to service the proposed development.
- 6. The Development Area shall not exceed 53 acres of the Net Site Area. The use of the development area shall contain all buildings, parking areas, ingress and egress roads and entrance features (i.e. sign monuments).
- 7. The Conditional Use for the Planned Unit Development of the DiMucci property shall be subject to developer's strict compliance with the standards identified in the "DiMucci Development Pattern Book." Where the language of the Pattern Book identifies standards that "should" be utilized or "encouraged," the Planning Director shall analyze and make a recommendation that the architectural, sign, site layout, parking, and landscaping

conditions of the "Pattern Book" are sufficiently met. The Planning, Building and Zoning Committee shall review and approve all recommendations to determine compliance during the public informational meeting.

- 8. Covenants, Conditions and Restrictions shall meet the minimum requirements of Section 10.9.4.5 of the Unified Development Ordinance and include provisions for the permanent protection and maintenance of all open space areas and associated improvements (stormwater detention areas/facilities and improvements, landscape areas, natural resource protection areas, recreational areas, native plantings, landscaping and best management practice improvements) to assure that these improvements will be permanently protected and maintained in the future.
- 9. The Final Development and Final Engineering Plans shall be prepared in accordance with the provisions of Article 4 Site Capacity, Site Plan Review and Natural Resource Protection, Article 8 –Site Development Regulations, Article 10 Subdivisions, the Lake County Highway Access Regulation Ordinance, and the Standard Specifications for Water and Sewer Construction in Illinois.
- 10. A Site Development Permit shall not be issued for any onsite construction activity related to the development until the final engineering plans for transportation, stormwater management, site capacity and natural resource protection and sanitary sewer and water systems have been substantially approved by all permitting agencies and transportation agencies have agreed to issue permits to begin onsite improvements.
- 11. Following staff's initial review and comment period of the Final Development Plan, the developer shall hold an informational meeting in a neighboring facility to receive public input on the proposed Final Development Plan. Following this meeting, staff will present the Final Development Plan and staff's report to the Planning, Building and Zoning Committee for the required public informational meeting before the Committee.

Development Support Documents

- 1. The development support documents shall be based on and reflect all standards of the "Pattern Book".
- 2. Prior to acceptance of the Final PUD Plan for review, the developer shall have substantially completed all reports, studies and plans necessary to support the proposed development plan including the submission of the following listed plans. This will be verified by a check-in with staff, the developer and their consultants'.
 - a. <u>Site Plan:</u> A detailed site plan shall be required that meets the application submittal requirements of Article 4 of the Unified Development Ordinance.

- b. <u>Engineering Improvement Plans</u>: <u>Detailed engineering plans that include</u> provisions for:
 - 1. Stormwater Management, Erosion and Sedimentation Control
 - 2. Transportation engineering for both onsite and offsite transportation improvements.
 - 3. Sanitary Sewer and Water Main Engineering and utility placement provisions.
 - 4. Natural Resource Inventory and Plan that identifies all natural resources on the property and demonstrates how the resources will be protected in development of the property. All support information (i.e. calculations, studies, reports etc.) shall be submitted prior to processing the application for the Final Development Plan.
- c. <u>Landscape Plan</u>: A landscape plan shall be provided with the submittal of the Final PUD Plan. The landscape plan shall comply with the Landscape standards of the Unified Development Ordinance Article 9 for perimeter street landscaping, transition yards and parking lots and the provisions of the Pattern Book. The plan shall also provide information on the installation, maintenance and monitoring of plant materials.
- d. Parking and Circulation Plan: The Final PUD Plan shall satisfy the parking standards of Article 9 of the Unified Development Ordinance for the proposed use mix. The parking plan shall include time of use statistics for uses that would be active at different parts of the day and/or of the week to determine if shared parking would be possible to reduce the overall parking within the development. The parking plan should also include a circulation plan and provisions for loading of supplies.
- e. <u>Sign Plan:</u> A sign plan will need to be provided for all proposed signs for the project. The plan should identify the type (i.e. ground, informational), size and location of each sign and must comply with the "Pattern Book".
- f. <u>Photometric Plan</u> shall be provided that complies with the lighting standards specified in the Preliminary PUD Plan and the provisions of the Pattern Book.
- g. <u>Architectural Plans</u> showing the building details, elevations, height, color palette, windows, signage and lighting standards for all buildings proposed for the development shall be provided along with a narrative from a registered architect explaining how the proposed building plans and details comply with the provisions of the "Pattern Book".

Identification and Conveyances

 Stormwater detention areas, landscape areas, natural resource protection areas, water features, recreational areas and similar open space uses will need to be identified on the Final Development Plan in accordance with Article 4 of the UDO.

- 2. A plat of easement will need to be provided for all utility elements and easements required for the project.
- 3. A Plat of Dedication shall be prepared in accordance with the provisions of the Illinois Department of Transportation and/or the Lake County Division of Transportation for all land conveyed to the public for public roadway purposes.
- 4. All sanitary sewer and water supply facilities owned and operated by a public utility provider and shall be dedicated to that provider as part of the Final Development Plan.

Open Space Development and Use

- 1. The portion of the property to be dedicated as "Open Space" on the Preliminary Development Plan (approximately 51 acres) shall be restricted to permanent open space through legal encumbrance. The open space shall be limited to such uses and improvements as: natural resources, stormwater detention facilities, open water features, recreational improvements, utilities and landscape improvements. The open space area shall be restored and established in part with native vegetation indigenous to Lake County.
- 2. Sustainable features such as: rain gardens, bio-swales, and native landscaping will be considered part of the open space provided such spaces are integrated into the overall open space for the development.
- 3. Site disturbance by heavy machinery shall extend no more than 100 feet beyond the developable area. All areas to be disturbed within the open space shall utilize low ground pressure (LGP) machinery and equipment, except where structural soil compaction is required.
- 4. The project site shall be designed to maintain or reduce natural stormwater flows by promoting infiltration. Sustainable design strategies shall be utilized to integrate natural treatment systems such as constructed wetlands, vegetated filters, and open channels to treat and dissipate stormwater runoff, as well as to promote infiltration.

Assurance of Public Improvements:

1. Prior to the onset of construction activities, a performance assurance in the amount of 130% of the cost of construction for the public improvements included in the approved final engineering and/or other improvement plans provided by the project's consulting engineer, landscape architect and/or architect, shall be provided in the form of a bond or other form of security that has been approved by the States Attorney's Office. The initial term of the performance assurance shall be for 2 years and may be extended for a term of 7 years with approval by the Director, of the Department of Planning, Building and Development. Assurance extensions beyond the 7 year period shall be approved by the Planning, Building and Zoning Committee. If the Final Development Plan is to be implemented in phases, each phase shall have its own assurance and will be subject to these terms.

- 2. The costs included in the estimate shall be consistent with Article 10, Section 10.9.5.5.a.1 of the Unified Development Ordinance and shall include the costs associated with installation, maintenance and monitoring of landscaping, native planting and natural area enhancement, stormwater management and water quality best management practice improvements.
- 3. An escrow account shall be established prior to the issuance of a Site Development Permit for ongoing site inspections and/or reinspections associated with reducing or releasing the development assurances. The amount of the escrow account shall be established at the time of engineering review as part of the Final Development Plan review process.
- 4. The performance assurance may be reduced during the performance period upon submittal of: 1.) a formal request from the developer or their representative (i.e consulting engineer or project manager), 2.) all support information necessary to enable the County to assess the feasibility of the reduction; this includes a cost estimate that reflects the original cost of construction and the amount and value of the remaining improvement costs.
- 5. A maintenance assurance shall be provided to assure that the structure, function and integrity of the improvements that were included in the performance assurance are maintained in accordance with the standards and specifications approved with the Final Development Plan. The amount of the overall maintenance assurance shall not be less than 15% of the cost of the performance assurance and shall be held for a term not less than 2 years. Improvements associated with landscaping, native planting and natural area enhancement, stormwater management and water quality best management practice improvements and recreational improvements, if any, shall have a maintenance period not less than 5 years unless the County Determines said improvements are properly established and have a long-term maintenance plan in place to insure their long-term viability.

ENGINEERING DESIGN

- 1. A soils report shall be prepared by an Illinois licensed Professional Engineer and shall include a boring log and development recommendations for the structural design.
- 2. Ingress and egress roads shall be designed in accordance with the Public Street standards of Article 10, Section 10.10 of the Unified Development Ordinance.

Site Capacity

- 1. Site Capacity Calculations shall be updated at the time of Final Development Plan submittal to reflect current delineations of all natural resources present on the property at the time of application.
- 2. A natural resource inventory and plan for the protection of natural resources shall be updated to substantiate the protection of natural resources as defined by Article 4 of the Unified Development Ordinance.

Stormwater Detention Conditions:

- The stormwater management system for the development shall be designed to meet the
 more restrictive Squaw Creek Watershed release rates of 0.02 cubic feet per second, per
 acre for the 2-year 24-hour storm event; 0.09 cubic feet per second, per acre for the 100year 24-hour storm event in lieu of the standard Unified Development Ordinance release
 rates.
- 2. A minimum 30' vegetative buffer shall be placed directly downstream of all stormwater discharge points within the overall drainage system.
- 3. The boundary of all detention basins shall be irregular and shall mimic naturally formed water/wetland features; a riparian buffer of native vegetation shall be provided to benefit water quality and habitat.
- 4. No underground, pavement surface ponding, permeable pavement storage, or roof detention will be allowed to meet the stormwater management detention credit requirements.

Water Quality Requirements:

- 1. Prior to discharging to any wetlands or adjoining property, the development must divert and detain the "first flush" of a storm event, defined as 0.01 inches of runoff for every 1 percent of impervious surface for the development, with a minimum volume equal to 0.2 inches of runoff.
- 2. Where practical, stormwater shall discharge into the buffer area of a wetland or water body rather than directly into such a feature. Such discharges shall enter the buffer as unconcentrated flow with appropriate energy dissipation measures to prevent erosion.
- 3. Where stormwater management facilities are designed to meet water quality treatment requirements, native plantings shall be established between the design normal and high water levels.
- 4. In addition to the requirements above, hydrocarbon (e.g. oil and grease) removal technology shall be required using a volume of 0.5 inches of runoff for the impervious surface tributary area to each treatment device meeting a minimum of 70 percent removal rate for parking lots with more than 25 stalls and vehicle fueling and servicing facilities.
- 5. All best management practices and water quality devices shall be designed by an Illinois licensed Professional Engineer.

- 6. Water quality treatment device installation shall occur concurrently with installation of all stormwater management devices onsite, with the exception of devices which are integrated into impervious areas, such as parking lot bioswales or landscaped rain garden features. No occupancy shall be granted prior to installation of all water quality treatment devices integral to the development phase.
- 7. The south property line drainage way is within the jurisdiction of the United States Army Corps of Engineers, and grading or impacts to the channel will require a permit from that office. This drainage way shall be enhanced and improved to provide adequate water conveyance, improved water quality, and to minimize soil erosion and sedimentation. Enhancement activities include regrading side slopes, removing invasive plant species, and re-vegetating the area with native plants.
- 8. All stormwater runoff from the development area and all impervious surfaces shall discharge to vegetative buffer areas prior to entering any stormwater management devices, wetland areas, or leaving the property.
- 9. On-site stormwater and water quality best management practices shall be implemented, where practicable. These are site-specific practices that can minimize onsite and offsite hydrologic and water quality impacts by replicating natural hydrologic processes and incorporating these designs into the development site. Examples of stormwater best management practices include:

a. Native Landscaping:

- i. Suitability: Native landscaping may be installed throughout the site to meet and complement existing landscaping standards; native vegetation may be installed internal to the development area and throughout the open space area.
- ii. Benefits: Native landscaping benefits biodiversity, aesthetics, habitat, cooling of ambient air, and stormwater management. Native landscapes, including native prairies and wetlands, can improve water quality through infiltration and cleansing of stormwater runoff. Properly designed landscapes that incorporate native plants and hydrologically and ecologically appropriate vegetation can not only facilitate effectiveness of stormwater management but also provide wildlife habitat and quality open space. Native vegetation is recommended as either a large site ecological enhancement in the open space or smaller, interior "garden" projects within the developed area. Native vegetation uses plants that are endemic to northeastern Illinois prior to European settlement that are adapted to the local climate and are not considered invasive species or noxious weeds. Native landscapes can serve a variety of purposes, stormwater infiltration, filtering of pollutants, evapotranspiration of stormwater, and wildlife habitat. Native plants require minimal or no irrigation following establishment, do not require active

maintenance such as mowing or chemical inputs such as fertilizers, pesticides or herbicides, and promote biodiversity through avoidance of monoculture plantings.

b. Bioswales:

- i. *Suitability*: Bioswales may be installed throughout the site as filtration and infiltration systems planted with native grasses and forbs, and designed to filter, retain and evapotranspirate stormwater.
- ii. *Benefits*: Vegetation enhances filtration, cooling, and cleansing of water to improve water quality and prevent sealing of subsoils. The bioswales typically include an infiltration trench below the vegetated swale to provide temporary storage to increase the volume of runoff water infiltrated.

c. Filter Strips/Level Spreaders:

- Suitability: Filter strips and level spreaders are typically installed at the outfall of stormwater management devices within the system and at the ultimate outfall point.
- ii. Benefits: Filter strips are areas of dense, native, vegetative cover used to filter and absorb runoff. Level spreaders are often used in conjunction with filter strips and are laid on the contour to distribute runoff over filter strip areas. Filter strips/level spreaders can be used within stream and wetland buffers to diffuse stormwater prior to discharge to streams and wetlands.

d. Green Roofs:

- i. *Suitability*: Green roofs may be incorporated into the architectural design of any building.
- ii. *Benefits*: Vegetated roof systems are designed to capture, temporarily store, and evapotranspirate rainwater on the top of roofs. Typically, green roofs are planted with drought and wind tolerant vegetation. Green roofs can be designed as simple, lightweight systems that provide stormwater benefits, or as more elaborate rooftop gardens that also provide outdoor space.

e. Naturalized Detention:

- i. *Suitability*: Designed detention basins, used to store and filter runoff, may incorporate a naturalized design, benefiting water quality.
- ii. *Benefits*: Native wetland and prairie vegetation improves water quality and provides habitat benefits. Naturalized detention basins can be designed as either shallow marsh or hemi-marsh systems with little or no open water, or as open water ponds with a wetland fringe and prairie side slopes.

f. Porous Pavement:

- i. *Suitability*: Permeable or perforated paving materials may be incorporated into parking areas, internal drives, and paths and walkways within the development.
- ii. *Benefits*: Permeable or perforated paving materials with spaces that allow for the infiltration of rainwater and the transmission of water to aggregate base and subsoils. Runoff is temporarily stored in the base for infiltration into the subsoils and/or slow release to a bioswale or stormwater system.

g. Rain gardens:

- Suitability: Rain gardens are landscaped gardens designed to retain, detain, infiltrate, and evapotranspirate stormwater runoff may be installed throughout the site as landscaped planting areas, within parking lots, or on rooftops.
- ii. *Benefits*: Rain gardens reduce stormwater runoff and improve water quality, while providing an aesthetic benefit to the site and incorporating natural areas throughout the site, linking interior spaces to the greater open space.

h. Vegetated Swales:

- Suitability: Vegetated stormwater features convey, retain, infiltrate, and cleanse stormwater. Such features may be installed downstream of impervious surface areas to provide pre-treatment before stormwater enters a detention facility.
- ii. *Benefits*: Native vegetation enhances filtration and retention of stormwater. Additionally, directing stormwater runoff through an overland swale may reduce the resources devoted to storm sewer piping and installation, while improving stormwater runoff quality.
- i. Additional information on best management practices can be obtained from:
 - i. BMP Toolbox: The Dead River Watershed-Based Plan (SMC Website)
 - http://www.lakecountyil.gov/Stormwater/Documents/Planning/Dead %20River/DR 4 ShedBMPToolbox 0908.pdf
 - Watershed BMP Handbook First Edition, Village of North Barrington, Illinois, August 2010
 - 1. http://www.lakecountyil.gov/Stormwater/Publications/BMPs/Vil%200 f%20North%20Barrington%20Watershed%20BMP%20Handbook.pdf

Monitoring and Maintenance Conditions:

 A short-term and long-term maintenance, monitoring, and management plan shall be developed for all stormwater management features, native vegetation, landscaping, and deicing activities. The plan shall be created by an appropriate professional and shall include a narrative describing the regular short-term and long-term inspection schedule and maintenance practices to be implemented for the following items, at a minimum:

- a. Maintenance of pipes, drainage swales, stormwater detention basins, water quality treatment devices, and best management practices, in addition to other necessary procedures to ensure maintenance of the facilities in accordance with the approved final engineering plans.
- b. A Certified Wetland Specialist (CWS) shall define the short-term and long-term native plant establishment and maintenance conditions for each of the natural areas, buffers, stormwater drainage facilities, water quality treatment areas, and other best management practices facilities utilizing native plans. The plan shall include:
 - i. A narrative describing the inspection schedule, management, and maintenance practices for each area and the respective responsible party.
 - ii. A complete plant list shall be provided for each best management practices area, along with performance standards to be achieved within a specified time period.
 - iii. The performance period shall consist of a minimum five years at which time the vegetation performance standards are met, unless the vegetation performance standards can be met earlier for two consecutive growing seasons, at which time the performance period shall be considered complete.
 - iv. Conversely, if the vegetation performance measures are not met within the standard five year timeframe, the performance period may be required to be extended
- c. Monitoring and maintenance plan specifications shall be developed for landscaped areas and shall include watering schedules, mulching requirements, pruning schedules and instructions, vegetation replacement requirements, landscape debris management, and turf management. Turf management shall include the following:
 - i. Phosphorous fertilizers shall not be applied unless new lawn is being established or if a soil test indicates a soil phosphorous deficiency.
 - ii. Lawn fertilizer applications shall not occur on frozen ground or ground saturated with water.
- d. We recommend that a De-icing Program be adopted to promote the understanding of the tools, best practices, and limitations for snow and ice control. The program should be designed to encourage progressive changes in snow and ice control practices that will reduce salt/sand use and environmental impacts while meeting the safety and mobility needs of road and parking lot users.
- e. All responsible parties shall be identified in the plan.
- 2. For additional information on preparing the maintenance plan, the following references shall be considered:

- Stormwater Wet Pond and Wetland Management Guidebook, based on material originally produced by: Center for Watershed Protection, 8390 Main Street, Second Floor, Ellicott City, MD 21043,
 - i. www.cwp.org, www.stormwatercenter.net
- b. A Citizen's Guide to Maintaining Stormwater Best Management Practices, Lake County Stormwater Management Commission
 - i. http://www.lakecountyil.gov/Stormwater/Publications/BMPs/Citizens%20G uide%20to%20Maintaining%20Stormwater%20Best%20Management%20Practices.pdf
- c. Native Plant Guide for Streams and Stormwater Facilities in Northeastern Illinois, NRCS, et al., (as amended) as a minimum standard. [Revised 05.09.06]
 - http://www.il.nrcs.usda.gov/technical/plants/npg/
- d. Minnesota Snow and Ice Control Field Handbook for Snowplow Operators, August 2005
 - i. http://www.mnltap.umn.edu/publications/handbooks/documents/snowice.
 pdf
- e. Winter Parking Lot and Sidewalk Maintenance Manual, Revised for Lake County, IL, September 2011
 - i. Available from the Lake County Health Department or at:
 - ii. http://www.pca.state.mn.us/index.php/component/option,com/docman/t/ask,doc/view/gid,5491
 - f. Additional and updated references shall be provided at the time of final design.
- The maintenance plan shall be recorded and incorporated in the final development plan and referenced on all engineering plans to ensure all current and future owners are aware of the required maintenance activities.
- 4. The developer shall provide annual monitoring reports to be prepared by a Certified Wetland Specialist on the status of all constructed best management practices and natural areas established or enhanced. These include all natural areas to be provided for the purpose of stormwater management, water quality, preserved wetlands, enhanced drainage ways, all areas enhanced with native planting, etc. The maintenance and monitoring report shall identify the legally responsible parties for short and long-term operation and maintenance, and dedicated funding sources.
- 5. The annual report shall summarize the results of the previous year's monitoring data shall be submitted to PB&D by January 31st of the following year. The annual reports shall contain, at a minimum:

- a. A narrative summary of the vegetation monitoring data.
- b. A discussion of the progress of native vegetation establishment relative to the approved performance standards.
- c. An appendix containing the monitoring data.
- d. Representative photographs.
- e. A narrative summary of the management practices employed during the previous year and photographs documenting these activities.
- f. Recommendations for proposed management practices to be employed during the following year(s), based on the monitoring results to date.
- g. The proposed schedule for management practices in the following year(s).
- The developer shall undertake all necessary remedial action to bring each area into compliance with the performance standards approved under the approved management plan.

Soil Erosion and Sediment Control Conditions;

- 1. The site shall be developed in construction phases or sequences in accordance with Lake County Stormwater Management Commission Typical Construction Sequencing:
 - a. Installation of soil erosion and sediment control SE/SC measures
 - i. Selective vegetation removal for silt fence installation
 - ii. Silt fence installation
 - iii. Construction fencing around areas not to be disturbed
 - iv. Stabilized construction entrance
 - b. Tree removal where necessary (clear & grub)
 - c. Construct sediment trapping devices (sediment traps, basins...)
 - d. Construct detention facilities and outlet control structure with restrictor & temporary perforated riser
 - e. Strip topsoil, stockpile topsoil and grade site
 - f. Temporarily stabilize topsoil stockpiles (seed and silt fence around toe of slope)
 - g. Install storm sewer, sanitary sewer, water and associated inlet & outlet protection
 - h. Permanently stabilize detention basins with seed and erosion control blanket
 - i. Temporarily stabilize all areas including lots that have reached temporary grade
 - j. Install roadways
 - k. Permanently stabilize all outlot areas
 - I. Install structures and grade disturbed areas
 - m. Permanently stabilize disturbed areas
 - n. Remove all temporary SE/SC measures after the site is stabilized with vegetation

Phasing shall include the expected start date of clearing, the estimated duration of exposed areas, and the sequence of installation of temporary sediment control measures, clearing and grading, installation of temporary soil stabilization measures, installation of storm

- drainage, paving streets and parking areas, final grading and the establishment of permanent vegetative cover, and the removal of temporary measures.
- 2. A detailed soil erosion and sediment control plan or stormwater pollution prevent plan (SWPPP) is required. The EPA's "Developing Your Stormwater Pollution Prevention Plan" guide shall be utilized for the development of the SWPPP and guidance on SE/SC conditions throughout the project.
- The SE/SC plan shall include seasonal preparation. The plan shall discuss specific SE/SC measures to be installed prior to spring/summer/fall/winter months. Dates shall be provided for temporary and permanent vegetation establishment.
- 4. A detailed soil erosion and sediment control report shall be prepared and shall include the following:
 - a. Statement which names the responsible party (name, address, telephone number) for maintenance of the SE/SC measures during and after construction.
 - b. Narrative description of the construction sequencing.
 - c. Construction schedule
 - d. Contingency Plan
- 5. A construction schedule shall be submitted for each phase. A meeting with the engineer/designer, contractor, owner/applicant, and DECI shall be required prior to the commencement of each phase to discuss the construction sequencing and selection of the appropriate SE/SC measures.
- 6. A pre-construction meeting with the contractor, owner/applicant, and DECI shall be required prior to start of any work to verify all SE/SC measures have been installed properly and in the appropriate locations.
- 7. A weekly or "as-needed" meeting shall be held onsite with the owner/applicant, contractor, engineer/designer, and DECI to discuss the construction status, condition of the existing SE/SC measures, corrective actions, and potential issues.
- 8. A spill prevention and response plan shall be submitted to reduce the chance of hazardous spills. The plan shall include where to contain and how to clean up spills, how to properly dispose of contaminated materials, and which agencies should be contacted. The plan shall include training of personnel on spill prevention and response.
- 9. The site shall be watered during dry or arid conditions to avoid any wind erosion or transport of sedimentation.
- 10. Energy dissipation devices shall be installed at the discharge locations of all stormwater management facilities to prevent erosion.

- 11. Properly sized sediment basins shall be installed prior to site grading to prevent any sediment from leaving the site.
- 12. Any disturbed areas that remain unchanged or dormant for 7 days shall be temporarily or permanently stabilized.
- 13. Temporary soil stockpiles shall not be located within any natural resource protection areas (regulatory floodplain, wetland, wetland buffers, drainage ways, etc.). The temporary soil stockpiles shall conform to the existing site conditions in the event that the stockpile remains onsite long term.
- 14. Temporary soil stockpiles shall be temporarily or permanently stabilized within 7 days following the end of disturbance or re-disturbance.
- 15. A Designated Erosion Control Inspector (DECI) is required to inspect the site for compliance of the soil erosion and sediment control plan or SWPPP. The DECI shall be selected from the Lake County Stormwater Management Commission's approved DECI list and shall keep a written report of all inspections including the conditions of the soil erosion and sediment control measures and corrective actions that need to be taken. The DECI must complete a SE/SC inspection every 7 calendar days and after every ½ inch or greater rainfall event. The DECI must submit a copy of the reports directly to the Lake County Planning, Building and Development Department.
- 16. A National Pollutant Discharge Elimination System (NPDES) permit from the Illinois Environmental Protection Agency (IEPA) is required. The applicant shall submit a Notice of Intent (NOI) to the IEPA to comply with the NPDES Storm Water Permit.

TRANSPORTATION AND ACCESS

Lake County Division of Transportation

- 1. The Lake County Highway Access Regulation Ordinance and the Lake County Highway Temporary Closure and Utility and Facility Placement Ordinance shall govern any proposed work within the right-of-way of Old McHenry Road.
- 2. A traffic study, prepared in accordance with the Lake County Highway Access Regulation Ordinance, shall be provided to accurately assess the impact to Old McHenry Road for any development. Assumptions can be made by the Engineer for different types of development. The traffic study shall include an evaluation of the need for a signal at the proposed access point and any improvements needed at the intersection of Old McHenry and U.S. Route 12.
- 3. A sight distance study shall be completed at any potential access point on Old McHenry Road to know that intersection sight distance can be obtained.

- 4. Right-of-way shall be dedicated along the frontage of Old McHenry Road to provide at a minimum of 60 feet of half right-of-way. In addition to this required dedication, the engineer shall determine if additional right-of-way will be required to allow the construction of the required improvements.
- 5. The engineer shall determine what is required for pedestrian connectivity to this site if warranted, and make provisions for connectivity as part of the Final PUD Plan.
- 6. A geometric plan of the improvements warranted per the traffic study shall be provided to determine if the access location suggested by the plan is feasible with the existing access locations and the location of the signalized intersection.
- 7. Widened pavement along Old McHenry Road shall be accommodated in the detention calculations for the site.
- 8. Provisions shall be made in the engineering plans for utility and facility connections.

Illinois Department of Transportation

- 1. The developer's initial submittal shall include a complete Traffic Impact Study including the Traffic Signal Warrant study for any proposed signalized access and preliminary roadway and access geometry.
- 2. A proposal to provide a signalized access to this property opposite the median opening on US 12 at Timberlake Drive will be considered. The modification of the Timberlake Dr. geometry at US 12 to properly align with the new full access to US 12 shall be done by widening to the south to make sure the 1/4 mile minimum spacing from the existing traffic signal at US 12 and Old McHenry Rd requirement is met.
- 3. Assuming that the minimum ¼ mile spacing requirement can be met, any proposed signal shall meet an SRA traffic signal warrant prior to approval. The engineer shall adhere to IDOT guidelines for performing such a warrant study which would need to be performed by an IDOT qualified Traffic Engineer.
- 4. If an SRA Traffic Signal Warrant is met and a new traffic signal is approved, the design of the new signalized access shall include interconnection to the existing traffic signal at US 12 and Old McHenry Road.
- 5. A restricted "Right-in/Right-out" only access to US 12 could be considered but would require dedicated Right Turn lane construction of adequate storage and taper lengths to meet design speeds and projected traffic volumes.
- 6. The existing high south bound US 12 to Southeast bound Old McHenry Road left turn movement volumes at the existing traffic signal would likely require that any increase to this left turn movement generated by the development be mitigated by the developer.

Transportation improvements specified will be based on the development plan proposed at the time of Final Development Plan submittal and the results of associated reports including an intersection design study. The proximity of the W. Milton Rd. intersection with Old McHenry Rd. just south of US 12 will be coordinated by the developer with IDOT and LCDOT as part of the permitting process.

7. Any release of storm water to or modification of drainage patterns immediately upstream or downstream of the US 12 right of way shall require the submittal of a "Drainage Connection Checklist" (see attached) Report along with all related support documentation to the Department for review and approval as part of the Permitting process.

SANITARY SEWER AND WATER INFRASTRUCTURE

- 1. The applicant shall comply with the terms and conditions of the agreement with Lake Zurich to provide water and sewer services to the subject development; minimum design standards are noted in the comments for the Final Development Plan.
- 2. A public water supply shall be available (final engineering plans approved, improvements bonded and an IEPA permit secured) prior to approval of the Final Development Plan; if a public water supply is not available or cannot be provided to the subject property, an onsite water system may be used for the development under the following conditions:
 - i. The on-site water system shall be designed in a manner that will enable connection into an available public water system when said system becomes available.
 - ii. Water well support facilities (i.e. treatment, storage, pump equipment, shelters etc.) shall either be dedicated to a public utility provider or a contract shall be prepared and recorded with a utility maintenance company to assure long-term maintenance of the system.
 - iii. A Water System serving the development shall comply with Title 35 Environmental Protection Subtitle F Public Water supplies Chapter II Environmental Protection Agency Part 653 Design, Operation and Maintenance Criteria.
- 3. Water well support equipment shall comply with the provisions of the design guidelines for the Planned Unit Development.
- 4. All onsite potable water supply, storage, and treatment facilities shall be located within a dedicated easement with paved access suitable for operation and maintenance.
- 5. A Submersible sewage pumping station complete with an onsite standby generator within a dedicated easement shall be installed with permanent paved access on site.

6.	Environmental Prote Water System Improv	Permits	shall	be	obtained	for	Sanitary	Sewer	and