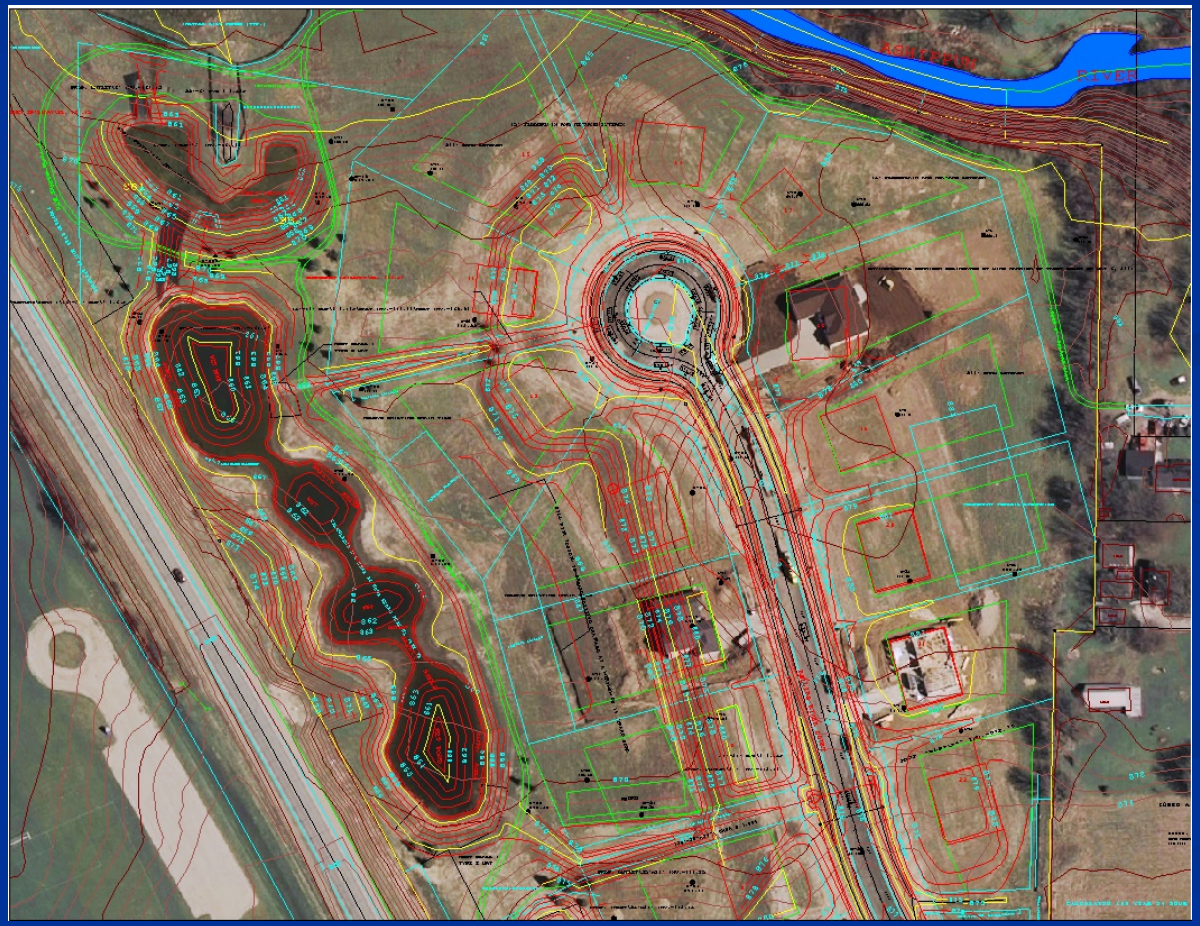
Storm Water Permit
Plan Review Process



Alan Barrows
Waukesha County
Land Resources Division

2 Types of Plan Reviews:

- Preliminary Review
  - Resolve spatial/soils issues early in site planning
    - 10 working day response time
    - Aimed at ensuring enough space has been allocated for storm water management
    - Preliminary approval required for approval of preliminary plat
- Final Plan Review
  - 10/20 working day response
  - Requires much more investment of time/$
  - Makes changes much more painful

Same fee - covers permit too

Needed for Preliminary Review Letter:

- Site plan
- Preliminary erosion control plan
- Preliminary storm water mgt. plan
- Preliminary BMP maintenance plan

- Not needed
  - Contact information
  - Inspection plan
  - Financial assurance
  - Specific dates for construction sequence

Needed for final plan approval:

- Site plan
- Erosion control plan
- Storm water management plan
- Maintenance agreement
- Inspection plan
- Financial assurance
- Contact information for contractors/inspectors
- Construction dates
- General requirements agreement

Site Plan—Checklist 1

- All permit applications, regardless of size/scope, must include a site map drawn to scale

- Use the site plan as the base for other maps included in the erosion control and storm water plans

Checklist #1
Site Plan Map Requirements

The following existing and proposed site features must be provided for all permit applications. Items listed below must be shown on the site and within 50 feet in each direction of the site boundaries. The county storm water ordinance requires a **Preliminary Review Letter** from the Land Resources Division (LRD) for projects that: a) Disturb a total land surface area of 1 acre or more; b) Involve the construction of a new public or private road of any length; c) Ultimately result in the addition of 0.5 acres or greater of impervious surfaces or; d) Other projects that may have significant negative impacts on adjacent properties or water resources due to soil erosion or storm water runoff.

All items on this list are required for the Preliminary Review Letter. Additional items must be shown on erosion control plans (see checklist #2) and storm water management plans (see checklist #3). A site plan map and supporting data of site conditions at a scale of 1 inch equals no more than 100 feet (unless otherwise noted) shall delineate or display the following applicable items:

Note: In addition to a paper copy, provide site map items in a digital format georeferenced to the State Plane Coordinate System, Wisconsin South Zone, NAD 27, NGVD-29.

____ 1. Development title, graphic scale and north arrow;
____ 2. Property location description by public land survey system (1/4 section, section, township, range, county);
____ 3. Location map (smaller scale) showing the site location within a public land survey section or subdivision, oriented the same as par. 4 below;
____ 4. Ownership boundaries, bearings, lengths and other survey references that will accurately identify the site location, in accordance with s. 236 Wisconsin Statutes and county mapping standards for all land divisions;
____ 5. Lot numbers and dimensions, including outlots for all land divisions;
____ 6. Name and complete **contact information** for the applicant, landowner, developer and project engineer or planner;
____ 7. Surveyor's certificate, signed, dated and sealed for all land divisions;
____ 8. Sheet numbers and **revision date**s on every page;
____ 9. Existing **site topography** at a contour interval not to exceed 2 feet, including **spot elevation**s for physical features such as culvert (invert elevations), retaining walls, road and ditch centerlines and topographic high and low points;
____ 10. Location and name, if applicable, of all lakes, streams, channels, ditches, and other **water bodie**s or areas of **channelized flow** on or adjacent to the site;
____ 11. Location and name, if applicable, of all **wetland**s and identification of source of delineation. For final land divisions, these boundaries shall be field verified;
____ 12. Boundaries of **shoreland zones** and the ordinary high water mark (OHWM) for any navigable water body as defined by the Waukesha County Shoreland and Floodland Protection ordinance. For final land divisions, the OHWM boundaries shall be field verified;
____ 13. Boundaries and elevation of the **100-year floodplains, flood fringes and floodways**, as defined by the Waukesha County Shoreland and Floodland Protection ordinance. For final land divisions, these boundaries and elevations shall be field verified;
____ 14. Boundaries and soil symbol for each **soil mapping unit** and the identification of all **hydric soil**s as defined by the USDA-Natural Resources Conservation Service;

____ 15. Locations of all soil borings and **soil profile evaluations** with unique references to supplemental data report forms;

____ 16. Location of **primary and secondary environmental corridors**, as defined by the Southeastern Wisconsin Regional Planning Commission. For final land divisions, these boundaries shall be field verified;

____ 17. Location and description of **isolated natural area** boundaries as defined by the Southeastern Wisconsin Regional Planning Commission, **woodland areas**, as defined in the storm water ordinance and other **vegetative cover types**;

____ 18. Location and descriptive notes for **existing and proposed structures** within 50 feet of the property boundaries and their proposed use, including, but not limited to buildings and foundations, roads, parking areas, fence lines, access lanes, culverts (include size and type), above ground utilities and retaining walls;

____ 19. Location and descriptive notes for other known **existing site features** including, but not limited to, rock outcrops or other karst features, tile drains, buried utilities, dumps, landfills, manure or other waste storage facilities;

____ 20. Boundaries and descriptive notes for all applicable setbacks and for **"protective areas"** (see ordinance or checklist #3 for more information);

____ 21. Location and descriptive notes for any **existing or proposed easements**, right-of-ways, vision corners or other known site restrictions. Road right-of ways and building setbacks shall be in compliance with all applicable administrative codes, adopted plans and ordinances;

____ 22. Location and descriptive notes for **existing and proposed public dedications** of parcels or right-of-ways;

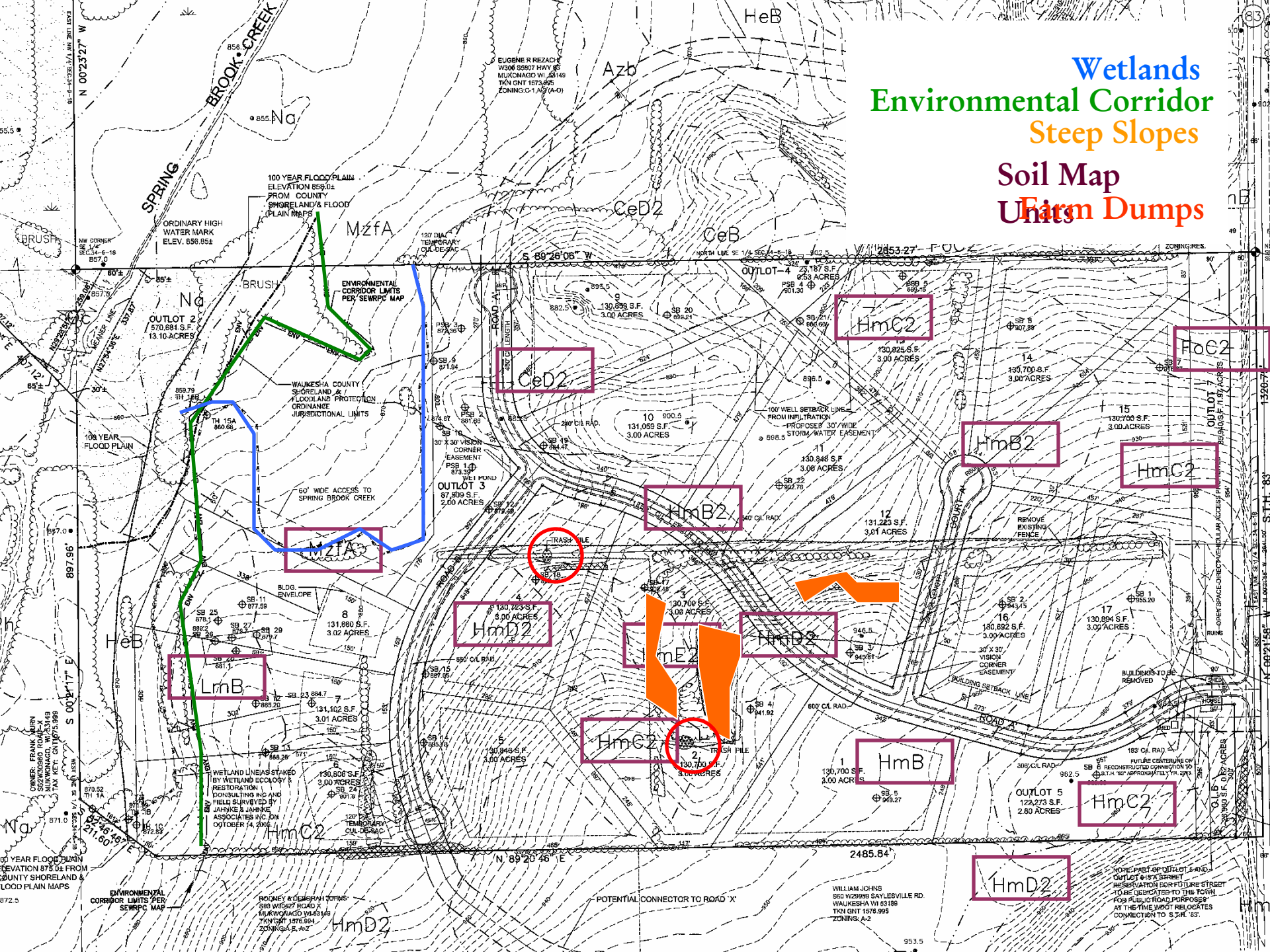
____ 23. Location and descriptive notes for **preplanned building or waste disposal sites**, when limited by site features;

____ 24. Location and documentation of any **existing well** and delineation of any applicable **regulatory setbacks**, in accordance with ch. NR 811 and 812 Wis. Admin. Code (i.e. 100 foot from infiltration basins, etc.);

____ 25. Notes describing **source documents, date and measure of accuracy** for all applicable mapping features noted above;

____ 26. Other site information that the LRD determines is necessary to administer this ordinance.

Note: ***If necessary items should be displayed on more than one map to ensure clarity. Each map must include proposed structures, setbacks, easements, right-of-ways, etc.***


Wetlands
Environmental Corridor
Steep Slopes
Soil Map Units
Farm Dumps
HeB
Azb
Na
CeD2
CeB
MzfA
HmC2
FoC2
HmB2
HmD2
HmB
LmB
mE2
TRASH PILE
SPRING BROOK CREEK
ENVIRONMENTAL CORRIDOR LIMITS PER SEWRPC MAP
100 YEAR FLOOD PLAIN ELEVATION 858.0± FROM COUNTY SHORELAND & FLOOD PLAIN MAPS
ORDINARY HIGH WATER MARK ELEV. 856.85±
WAUKESHA COUNTY SHORELAND & FLOODLAND PROTECTION ORDINANCE JURISDICTIONAL LIMITS
100 YEAR FLOOD PLAIN
60' WIDE ACCESS TO SPRING BROOK CREEK
WETLAND LINE AS STAKED BY WETLAND ECOLOGY & RESTORATION CONSULTING INC AND FIELD SURVEYED BY JAHNKE & JAHNKE ASSOCIATES INC. ON OCTOBER 14, 2005
OUTLOT 2 570,681 S.F. 13.10 ACRES
OUTLOT 3 87,509 S.F. 2.00 ACRES
OUTLOT 4 23,187 S.F. .053 ACRES
OUTLOT 5 122,273 S.F. 2.80 ACRES
OUTLOT 7 1.97 ACRES
100' WELL SETBACK LINES FROM INFILTRATION
PROPOSED 30' WIDE STORM WATER EASEMENT
30' X 30' VISION CORNER EASEMENT
BUILDING SETBACK LINE
REMOVE EXISTING FENCE
BUILDINGS TO BE REMOVED
FUTURE CENTERLINE OF S.T.H. "83" RECONSTRUCTED CONNECTION TO S.T.H. "83" APPROXIMATELY YR. 2043
POTENTIAL CONNECTOR TO ROAD 'X'
ROAD 'A'
COURT 'A'
N 89°26'06" W
2653.27'
N 89°26'06" E
2485.84'
EUGENE R REZACH W306 S5807 HWY 83 MUKONAGO WI 53149 TKN GNT 1575.995 ZONING:C-1,A2(A-O)
RODNEY & DEBORAH JOHNS S83 W30527 ROAD X MUKWONAGO WI 53149 TKN GNT 1576.994 ZONING:A-E, A-2
WILLIAM JOHNS S50 W29999 SAYLESVILLE RD. WAUKESHA WI 53189 TKN GNT 1576.995 ZONING: A-2
OWNER: FRANK KRUHN S52W30980 ROAD X MUKWONAGO, WI 53149 TAX KEY NO. GNT 1575.999
NOTE: PART OF OUTLOT 5 AND OUTLOT 6 IS A STREET RESERVATION FOR FUTURE STREET TO BE DEDICATED TO THE TOWN FOR PUBLIC ROAD PURPOSES AT THE TIME WHOT RELOCATES CONNECTION TO S.T.H. '83'.

Erosion Control Plan—Checklist 2

- Preliminary erosion control plan
  - On the site map:
    - Area to be disturbed
    - Woodlands and wetlands to be lost
    - Current vegetation types
    - General locations of BMPs

Erosion Control Plan—Checklist 2

- Final erosion control plan
  - On the site map:
    - Individual trees 8” or larger within 20 feet of grading boundaries
    - Sediment controlling BMPs
    - Erosion controlling BMPs
    - Utility locations
    - Detailed construction notes
    - Plan must be stamped by a PE if it includes any structural BMPs that require calculations

Erosion Control Plan—Checklist 2

- Final erosion control plan
  - Temporary site stabilization
  - Final site stabilization
  - Protection of infiltration BMPs
  - Measures to keep public roads clean
  - Accounting for periods of inactivity
  - Transition from sediment control to erosion control
  - Establishment of perennial vegetation
    - Right of ways
    - Access lanes

Checklist #2
Erosion Control Plan Requirements (>1 Acre)

Under county ordinance, significant grading activity may trigger the need for a storm water permit for construction site erosion control. An erosion control plan is designed to protect downstream water resources and property owners from water pollution and other damage caused by sediment runoff from construction sites. Erosion control plans designed to meet the requirements of the county ordinance shall, to the maximum extent practicable, adhere to the following guiding principles:

1) Propose grading that best fits the terrain of the site, avoiding steep slopes, wetlands, floodplains and environmental corridors;
2) Minimize, through project phasing and construction sequencing, the time the disturbed soil surface is exposed to erosive forces;
3) Minimize soil compaction, the loss of trees and other natural vegetation and the size of the disturbed area at any one time;
4) Locate erosion control BMPs upstream from where runoff leaves the site or enters waters of the state and outside of wetlands, floodplains, primary or secondary environmental corridors or isolated natural areas;
5) Emphasize the use of BMPs that prevent soil detachment and transport over those aimed to reduce soil deposition (sedimentation) or repair erosion damage.

Preliminary Erosion Control Plans must include (for Preliminary Review Letter):

____ 1. A **site map** in accordance with Checklist #1. Digital submittal required.
____ 2. A **brief narrative** describing the proposed land disturbing activity, **construction timeline** and sequencing, and a general review of the **major erosion and sediment control BMPs** proposed to be used to minimize off-site impacts during the construction phase and to stabilize the site following construction.
____ 3. Delineation of the following on the site map under #1 above: a) the area and size (in acres) of the proposed land disturbance; b) the woodland and wetland areas, and the size (in acres) of each that is proposed to be lost during construction and a general description of the current vegetation types and tree sizes; c) the general **location of major BMPs**.

Final Erosion Control Plans must include (for Permit):

____ 1. A **site map** in accordance with Checklist #1. Digital submittal required. All other map elements listed below shall be delineated and labeled at a scale of 1 inch equals no more than 100 feet, unless otherwise noted.
____ 2. North arrow, graphic scale, draft date, name and **contact information** for project engineer or planner and designation of source documents for all map features;
____ 3. Proposed site topography at contour intervals not to exceed two feet, proposed percent slope for all open channels and side slopes and all runoff **discharge point**s from the site;
____ 4. Proposed building envelopes and other land area to be disturbed and size in acres;
____ 5. All **woodland area**s, those proposed to be lost or transplanted during construction and acres or numbers of each. For woodlands proposed to be lost, show individual trees larger than eight (8) inches in diameter that are located within twenty (20) feet of proposed grading boundaries;
____ 6. Temporary **access drive** and specified surface material (3 to 6 inch clear or washed stone), minimum depth (minimum 12 inches) and minimum 50 feet long;
____ 7. Temporary **flow diversion** devices for upslope or roof runoff until site is stabilized;
____ 8. Temporary **sediment trapping devices** for site perimeter and inlets to culverts and storm drains;
____ 9. Temporary settling basin or other BMP to be used for **site dewatering** during utility or other subsurface work;
____ 10. Temporary **soil stockpile sites** indicating setbacks (minimum 25 feet) from channelized flow, nearby water resources or environmental corridors and the proposed erosion protection methods;
____ 11. **Detailed drawing**s and **cross section**s for any sediment traps, basins or other major cut or fill areas showing side slopes and elevations;

____ 12. Final **stabilization measures** for open channels and erosion protection for pipe and channel inlets, outlets and emergency spillways;

____ 13. Location of **proposed utilities**, including standard cross–section for buried utilities, associated easements, labeling the type of utility and notes on erosion control and restoration plans;

____ 14. Final **site stabilization** instructions for all other disturbed areas, showing areas to be stabilized in acres, depth of applied topsoil (minimum 4 inches), seed types, rates and methodology, fertilizer, sod or erosion matting specifications, maintenance requirements until plants are well established, and other BMPs used to stabilize the site;

____ 15. Detailed **construction notes** clearly explaining all necessary procedures to be followed to properly implement the plan including estimated starting date of grading, timing and sequence of construction or demolition, any construction stages or phases, utility installation, dewatering plans, refuse disposal, inspection requirements, and the installation, use and maintenance of BMPs in the plan;

____ 16. Location of soil borings and **soil profile evaluations** with surface elevations and unique references to supplemental soil evaluations report forms. Also show estimated seasonal water table depths, which may be shown on a separate map, with sufficient references to the proposed site plan;

____ 17. Other items specified by the Land Resources Division as necessary to ensure compliance with the ordinance.

Provide Supporting Information:

____ 1. A **narrative summary** of the erosion control plan, briefly explaining the overall plan and, any unique information that led to the selection of BMPs and how the plan meets the guiding principles above.

____ 2. **Summary of design data** for any structural BMP such as sediment basins or sediment traps. A professional engineer, licensed in the State of Wisconsin, shall stamp and sign a statement approving all designs and certifying that they have read the requirements of this ordinance and that, to the best of their knowledge, the submitted plans comply with the requirements.

____ 3. Open channel design and stabilization data to support the selected BMPs for stabilization.

____ 4. **Soil profile evaluation reports** with unique references and elevations that match the map above.

____ 5. Estimated time soil stockpiles will exist to support the selected BMPs for erosion control.

____ 6. Documentation that proposed utility locations and installation scheduling has been coordinated with the affected utility companies.

____ 7. Documentation of any other calculations used to demonstrate compliance with the performance standards in this section.

____ 8. Identification of the **primary contacts** for:

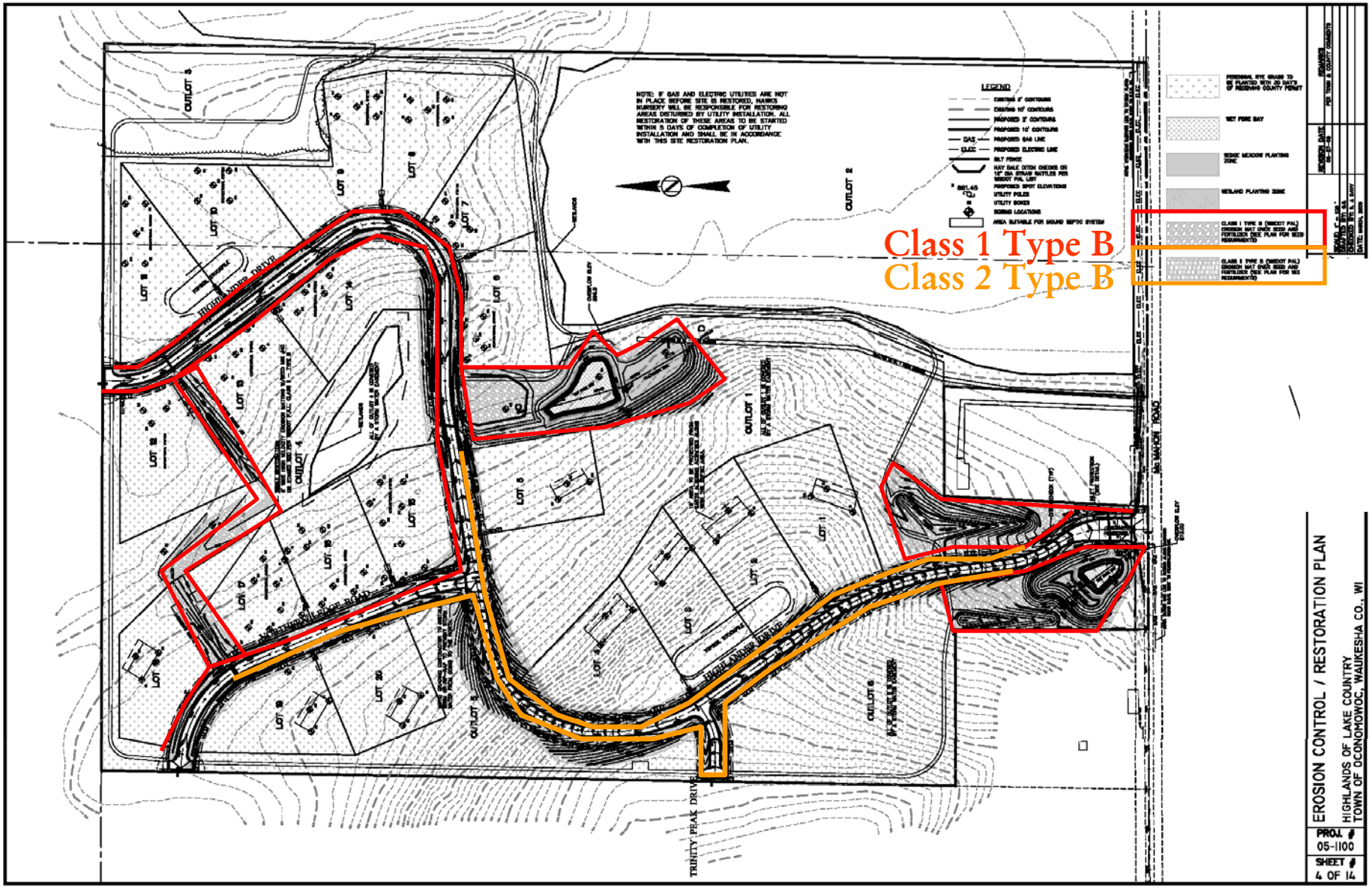
- ____ a. Conducting erosion control **inspections** and how they will make the **inspection logs** available to the Land Resources Division.
- ____ b. Completing site grading and temporary **erosion control practices**.
- ____ c. Completing final **site restoration and stabilization**.

Note: The LRD may identify other items necessary to ensure compliance with the ordinance. A similar form may be sent to you by the plan reviewer to indicate missing items.

Summary of Erosion Control Plan Technical Requirements (Ordinance Excerpts)

1. Access Drives and Tracking. Provide access drive(s) for construction vehicles that minimize tracking of soil off site using BMPs such as stone tracking pads, tire washing or grates. Minimize runoff and sediment from adjacent areas from flowing down or eroding access drive.
2. Diversion of Upslope Runoff. Divert excess runoff from upslope land, rooftops or other surfaces, if practicable, using BMPs such as earthen diversion berms, silt fence and downspout extenders. Prevent erosion of the flow path and the outlet.
3. Inlet Protection. Protect inlets to storm drains, culverts and other storm water conveyance systems from siltation until the site is stabilized.
4. Soil Stockpiles. Locate soil stockpiles away from channelized flow and no closer than 25 feet from roads, ditches, lakes, streams, ponds, wetlands or environmental corridors, unless otherwise approved by the LRD. Control sediment from soil stockpiles. Any soil stockpile that remains for more than 30 days shall be stabilized.
5. Cut and Fill Slopes. Minimize the length and steepness of proposed cut and fill slopes and stabilize them as soon as practicable.
6. Channel Flow. Trap sediment in channelized flow before discharge from the site using BMPS such as sediment traps and sediment basins. Stabilize open channels in accordance with LRD standards as soon as practicable.
7. Outlet Protection. Protect outlets from erosion during site dewatering and storm water conveyance, including velocity dissipation at pipe outfalls or open channels entering or leaving a storm water management facility.
8. Overland Flow. Trap sediment in overland flow before discharge from the site using BMPs such as silt fence and vegetative filter strips.
9. Site Dewatering. Treat pumped water to remove sediment prior to discharge from the site, using BMPs such as sediment basins and portable sediment tanks.
10. Dust Control. Prevent excessive dust from leaving the construction site though construction phasing and timely stabilization or the use of BMPs such as site watering and mulch – especially with very dry or fine sandy soils.
11. Topsoil Application. Save existing topsoil and reapply a minimum of 4 inches to all disturbed areas for final stabilization, unless otherwise approved by the LRD, such as for temporary seeding or storm water infiltration BMPs. If adequate topsoil does not exist on the site to meet this requirement, it shall be imported or a topsoil substitute such as compost may be used, upon approval by the LRD.
12. Waste Material. Recycle or properly dispose all waste and unused building materials in a timely manner. Control runoff from waste materials until they are removed or reused.
13. Sediment Cleanup. By the end of each workday, clean up all off-site sediment deposits or tracked soil that originated from the permitted site. Flushing shall not be allowed unless runoff is treated before discharge from the site.
14. Final Site Stabilization. All previous cropland areas where land-disturbing activities will not be occurring under the proposed grading plans, shall be stabilized within 30 days of permit issuance. Stabilize all other disturbed areas within 7 days of final grading and topsoil application. Large sites shall be treated in stages as final grading is completed in each stage. Any soil erosion that occurs after final grading or the application of stabilization measures must be repaired and the stabilization work redone.
15. Temporary Site Stabilization. Any disturbed site that remains inactive for greater than 7 days shall be stabilized with temporary stabilization measures such as soil treatment, temporary seeding or mulching. For purposes of this subsection, "inactive" means that no site grading, landscaping or utility work is occurring on the site and that precipitation events are not limiting these activities. Frozen soils do not exclude the site from this requirement.
16. Removal of Practices. Remove all temporary BMPs such as silt fences, ditch checks and sediment traps as soon as all disturbed areas have been stabilized.
17. Site Drainage. Site drainage plans shall comply with Checklist #3.

Site Restoration Plan



Storm Water Management Plan—Checklist 3

- Preliminary storm water management plan
  - On the site map:
    - Proposed impervious surfaces.
    - Plan views of proposed storm water BMPs
    - Access and drainage easements
    - Conveyance systems
    - Detailed construction notes

Storm Water Management Plan—Checklist 3

- Preliminary storm water management plan
  - Peak flows for 2-yr, 10-yr and 100-yr / 24-hr design storms (existing vs. proposed)
    - TR-55
  - Target infiltration volume
    - post-developed condition, from the site only
    - 25% of 2-yr storm (residential) or 90% predevelopment
    - 10% of 2-yr storm (commercial) or 60% predevelopment
    - FIRST ½" OF RUNOFF
    - NO WinSLAMM for rural subdivisions

Storm Water Management Plan—Checklist 3

- Preliminary storm water management plan
  - Water quality
    - 80% total suspended solid removal
      - Wet detention
      - Infiltration
      - WinSLAMM (settling or infiltration)
  - Thermal mitigation (if necessary)
    - Reduce impact on sensitive resources
      - Infiltration basin
      - Bioretention device

Storm Water Management Plan—Checklist 3

- Final storm water management plan
  - On the site map:
    - Proposed impervious surfaces.
    - Plan views of proposed storm water BMPs
    - Access and drainage easements
    - Conveyance systems
    - Detailed construction notes
    - Stamped by a PE licensed in Wisconsin

Storm Water Management Plan—Checklist 3

- Final storm water management plan
  - Watershed maps
    - Existing site condition
    - Proposed site condition
    - Contributing off-site areas
  - Delineate contributing off-site areas separately
    - Infiltration and water quality requirement is for “site” only

Storm Water Management Plan—Checklist 3

- Plan narrative
- Watershed summary table
- BMP summary table(s)
- Required calculations
- Summary of modeling results
  - WinSLAMM .dat files
- Cover sheet with PE stamp and statement

Storm Water Management Plan—Checklist 3

- A cross-section and profile drawn to scale for each proposed BMP
  - Superimpose the soil investigation results on the cross-sections
- A detail drawing of proposed outlet structures
- Include construction inspections into construction sequence

Checklist #3
Storm Water Management Plan Requirements

Under county ordinance, additional impervious surfaces in a proposed development may trigger the need for a storm water management plan and permit. A storm water management plan is designed to protect downstream water resources and property owners from water pollution, flooding and other damage caused by urban runoff after a development is complete. Storm water management plans designed to meet the requirements of the county ordinance shall, to the maximum extent practicable, adhere to the following guiding principles:

1) Preserve natural watershed boundaries and drainage patterns;
2) Reserve adequately sized areas for storm water infiltration, detention and treatment early in the planning process;
3) Locate storm water BMPs upstream from where runoff leaves the site or enters waters of the state and outside of wetlands, floodplains, primary or secondary environmental corridors or isolated natural areas;
4) Minimize soil compaction and maintain pre-development groundwater recharge areas;
5) Minimize impervious surfaces and have them drain to vegetated areas for pollutant filtering and infiltration;
6) Emphasize vegetated swales, warm season and wetland plantings and low flow velocities for storm water conveyance, treatment and infiltration, especially for transportation related projects;
7) Allow for different storm water management strategies for cleaner runoff (i.e. roofs) versus more polluted runoff (i.e. streets and parking lots);
8) Provide for emergency overflow in all storm water BMP designs (100-year flows);
9) Distribute storm water bioretention and infiltration BMPs throughout the site plan for large developments.

Preliminary Storm Water Management Plans must include (for Preliminary Review Letter):

____ 1. A **site map** in accordance with Checklist #1. Digital submittal required.
____ 2. **Drafting date** and **contact information** for the project engineer with all other mapping elements and scale consistent with the site plan map.
____ 3. Delineation of existing and proposed **watersheds**, subwatersheds and major flow paths within the site and draining into the site from adjacent properties.
____ 4. Location, type and **preliminary design** of proposed storm water BMPs needed to comply with the ordinance.
____ 5. Location and type of major storm water **conveyance systems** proposed for the site.
____ 6. Existing and proposed storm water **discharge points**.
____ 7. Locations and preliminary dimensions of proposed **drainage easements**.
____ 8. Location of soil borings and **soil profile evaluations** with surface elevations and unique references to supplemental data sheets, as needed to determine feasibility of any proposed storm water BMP and to comply with applicable BMP technical standards.
____ 9. Preliminary location of **access lanes** for maintenance of storm water BMPs.
____ 10. Support documentation including:
  ____ a. Preliminary **plan narrative** describing site drainage, ultimate receiving water body for off-site discharges, major site restrictions, and how the preliminary storm water management plan will meet the requirements of the ordinance and other project objectives;
  ____ b. Summary of watershed, subwatershed and land use **data** in acres and the preliminary results of any hydrology calculations, following approved LRD format;
  ____ c. **Soil profile evaluation data** submitted on COMM form SBD-10793 in accordance with BMP technical standards and county basement/groundwater separation requirements.
  ____ d. Proposed ownership and **maintenance** responsibilities for all proposed storm water BMPs

Final Storm Water Management Plans must include (for Permit):

____ 1. A **site map** in accordance with Checklist #1. Digital submittal required.
____ 2. **Drafting date** and **contact information** for the project engineer, with the engineer's stamp and date. All other mapping elements and scale consistent with the site plan map;
____ 3. Location of existing and proposed storm water **discharge points**;

____ 4. Delineation and labeling of all proposed **impervious areas** and accompanying area computations.

____ 5. Final **design drawings** of all proposed storm water BMPs with unique references to support documentation, prepared in accordance with minimum Land Resources Division standards and of sufficient clarity for those responsible for site grading, including:

- ____ a. Plan views showing the **location of proposed BMPs** in combination with the site plan map at a scale of 1 inch equals no more than 100 feet;
- ____ b. Additional **detail plan view** drawings at a scale of 1 inch equals no more than 40 lineal feet, showing proposed 2 foot contours and all critical design features and elevations;
- ____ c. One detailed **cross-section** and one profile of each BMP, drawn to scale, with locations shown on the plan view, and showing all critical design features, side slopes, structures, soil profiles and elevations, including seasonal high water table and existing grade;
- ____ d. Detailed drawings or **material specifications** for inlets or outlets.

____ 6. Type, size, location and cross-sections of all pipes, open channels, grade stabilization structures and other proposed storm water **conveyance systems**, with unique references to support documentation.

____ 7. Location and dimensions of proposed **drainage easements**.

____ 8. Location, dimensions and surfacing materials or soils data of proposed **access lanes** and delineations of easements needed to allow future maintenance of storm water BMPs. Minimum width of any access easement shall be 15 feet.

____ 9. Location of soil borings and **soil profile evaluations** with surface elevations and unique references to supplemental data sheets, as needed to determine feasibility of any proposed storm water BMP and to comply with applicable technical standards such as basement/groundwater separation requirements.

____ 10. Detailed **construction notes** explaining all necessary procedures to be followed to properly implement the plan, including planting and landscaping specifications, timing and sequencing of construction and any temporary measures needed to protect BMPs during the construction phase.

____ 11. Detailed **construction inspection plan**, outlining the critical elements in the plan that need to be surveyed or inspected by a representative of the project engineer, the LRD or the municipality, and the timing and notification requirements involved (Identify who is responsible).

____ 12. A final **maintenance agreement** in accordance with ordinance requirements.

____ 13. Support documentation (submitted to the LRD only) summarized in accordance with LRD standards, must include at least the following:

- ____ a. A **narrative** summary of the storm water plan. (May combine with erosion control plan).
- ____ b. **Maps** of existing and proposed **watersheds**, subwatersheds, Tc/Tt flow paths, soil types, hydrologic soil groups, land uses/cover type and runoff curve numbers within the site and draining into the site from adjacent properties, with unique references to hydrology data summaries and the ultimate receiving water body(s) for off-site discharges.
- ____ c. Pre-development and post-development **hydrology** and pollutant loading (if applicable) **data** for each watershed, such as peak flows and runoff volumes, as needed to meet the requirements of the ordinance. All major assumptions used in developing the input parameters shall be clearly stated and cross-referenced to the maps.
- ____ d. **Impervious** surface maps and calculations of runoff volumes and effective infiltration areas.
- ____ e. Hydraulic & **hydrologic data summaries** for all existing and proposed pipes, channels, grade stabilization structures and other runoff conveyance systems, and the necessary documentation to demonstrate compliance with the site drainage requirements (see pg. 4).
- ____ f. **BMP design data** for each proposed BMP, showing how it complies with applicable technical standards and the requirements of the ordinance, following approved LRD format.
- ____ g. **Soil evaluation reports** with matching references to map features, location and elevations.
- ____ h. A cover sheet **stamped and signed by a professional engineer** registered in the State of Wisconsin indicating that all plans and supporting documentation have been reviewed and approved by the engineer and certifying that, to the best of their knowledge, the submitted plans comply with the requirements of the ordinance.
- ____ i. For sites where changes are proposed in storm water flow paths or where proposed storm water discharges may otherwise have a significant negative impact on downstream property owner(s), the LRD may require the applicant to submit written authorization or complete other legal arrangements with the affected property owner(s).

Templates and sample materials on the Waukesha County website

- Erosion Control
  - Sample erosion control narrative
  - Channel stabilization charts
  - Slope stabilization charts
  - Erosion matting installation drawing
  - Utility placement cross-section
- Storm Water Mgt.
  - Storm water plan narrative
  - Watershed table
  - BMP tables
  - Construction inspection schedules
  - Construction verification letter
  - Planting verification process & letter

Watershed Summary Table

Example Data Summary Sheet for Stormwater Management Plan

Project Name: Rolling Acres **Project Size:** 110 Acres **Project type:** Residential Subdivision **No. of Lots:** 180
Number of Runoff Discharge Points: 3 **Watershed (ultimate discharge):** Pewaukee Lake (via unnamed tributary)
Watershed Area (including off-site runoff traveling through project area): 140 acres (30 acres off-site)
Public Land Survey Location: SE1/4, Section 32, T8N R19E (Pewaukee Township)

Summary Data Elements	Subwatershed A		Subwatershed B		Subwatershed C	
	Pre-develop	Post-develop	Pre-develop	Post-develop	Pre-develop	Post-develop
Watershed Areas *(in acres) (see attached map)*	100 acres	120 acres	20	10	20	10
Average Watershed Slopes (%)	2-8%	2-8%	3-6%	3-6%	6-8%	6-8%
Land Uses *(% of each) (see attached map)*	75 ac. cropland 15 ac. brush 10 ac. woodland	110 ac. ½ ac. lots 5ac. brush 5 ac. woodlands	100% cropland	100% ½ ac. lots	100% Woodland	100% ½ acre lots
Runoff Curve Numbers	68 x 75ac.= 5100 30 x 25ac.= 750 Net 5850/100 ac. RCN = 59	70 x 110 ac.= 7700 10 x 10 ac.= 100 Net 7800/120ac RCN = 65	RCN = 68 (state standard)	RCN = 70	RCN = 30	RCN = 70
Conveyance Systems Types	Grass waterway	50% grass swale 50% storm sewer	100% bare channel	100% grass swale	100% natural channel	100% storm sewer
Summary of Average Conveyance System Data	8' bottom/4:1 ss 2' depth/3% grade	2' depth swale/3% 30" r/c sewer/2% (see calcs.)	15' (w) top 1' (d) parabolic 2% grade	2' deep standard road ditch 2% grade	15' top (w) 1' (d) parabolic 4% grade	2' deep standard road ditch 4% grade
Time of Concentration *(Tc) (see attached map & worksheets)*	1.1 hrs.	.97 hrs.	.74 hrs.	.65 hrs.	.45 hrs.	.35 hrs.
25% of 2-yr 24-hr post-dev runoff volume	N/A	2.29 ac. ft.	N/A	.19 ac. ft.	N/A	.19 ac. ft.
1-year/24 hour Runoff Volume	N/A	(.2" x 120 ac.) 2.0 ac. ft.	N/A	(.34" x 10 ac.) .28 ac. ft.	N/A	(.34" x 10 ac.) .28 ac. ft.
2-yr./24 hour Peak Flow *(see attached hydrographs)*	18.2 cfs	24.3 cfs	5.1 cfs	3.2 cfs	2.7 cfs	6.3 cfs
10-yr./24 hour Peak Flow	41 cfs	72 cfs	18.4 cfs	11.3 cfs	12.6 cfs	13.2 cfs
100-yr./24 hour Peak Flow	118 cfs	171 cfs	53 cfs	21 cfs	22 cfs	24 cfs

3/24/05 Waukesha Co. PLU

Before runoff enters the BMP

BMP Summary Tables

Wet Detention Basin

Example Data Summary Sheet for Wet Detention Basin Design

(Note: Example only – see minimum design criteria in DNR technical standard 1001)

Design Element	Design Data
Site assessment data: (see attached maps)	
Contributing drainage area to basin (subwatershed A)	120 acres
Distance to nearest private well (including off-site wells)	> 100 feet
Distance to municipal well (including off-site wells)	> 1200 feet
Wellhead protection area involved?	No
Ground slope at site of proposed basin	average 3%
Any buried or overhead utilities in the area?	No
Proposed outfall conveyance system/discharge (w/ distances)	35 ft. to CTH "U" Road ditch 1000 ft. to wetland
Any downstream roads or other structures? (describe)	Yes – 36" cmp road culvert
Floodplain, shoreland or wetlands?	No
Soil investigation data (see attached map & soil logs):	
Number of soil investigations completed	3 (in basin area)
Do elevations of test holes extend 3 ft. below proposed bottom?	Yes (see map)
Average soil texture at pond bottom elevation (USDA)	Clay loam
Distance from pond bottom to bedrock	> 5 feet
Distance from pond bottom to seasonal water table	Pond bottom 2 below mottling No water observed in test holes
General basin design data (see attached detailed drawings):	
Permanent pool surface area	1.5 acres
Design permanent pool water surface elevation	elev. 900.0
Top of berm elevation (after settling) and width	elev. 905.0 / 10 feet wide
Length/width (dimensions/ratio)	445 ft. (L) x 145 ft. (W) = 3:1
Safety shelf design (length, grade, max. depth)	10 ft. @ 10% slope/1.5' deepest
Ave. water depth (minus safety shelf/sediment)	5 ft. (in center)
Sediment forebay size & depth	.16 acres (13% pool size)/5 feet
Sediment storage depth & design maintenance	2 ft. depth for forebay & pool 15 year maintenance schedule

Design Basin Inflow, Outflow & Storage Data

(see attached hydrographs and detail drawings)

Inflow Peak/Volume	Maximum Outflow Rate	Max. Water Elevation	Storage Volume at Max. Elev. (above perm. pool)	Outflow Control Structures*
1-yr./24 hr. (volume)	.7 cfs (34 hr. drawdown)	901.3 ft.	2 acre feet	#1
24.3 cfs (Post 2-yr./24 hr. peak)	11 cfs	902.0 ft.	3.1 acre feet	#1 and #2
72 cfs (Post 10-yr./24 hr. peak)	35 cfs	903.0 ft.	4.5 acre feet	#3
171 cfs (Post 100-yr./24 hr. peak)	143 cfs	904.0 ft.	6.0 acre feet	#3 and #4

*** The controlling elements are summarized below (See attached detail drawing of outlet structure):**

#1 = 6 inch orifice in water level control weir plate – flow line elev. @ 900.0 (1.3 ft. max. head)

#2 = 2 foot wide rectangular weir – flow line elev. @ 901.3 (.7 ft. hydraulic head)

#3 = 30 inch diameter smooth wall pvc pipe – flow line elev. @ 900.0 (3.0 ft. max. hydraulic head)

#4 = 30 foot wide earthen/grass emergency spillway – flow line elev. @ 903.0 (1.0 ft. max. depth)

12/1/00 Waukesha Co. PLU

BMP Summary Tables

Infiltration Basin

Bioretention Device

Example Data Summary Sheet for Infiltration Basin Design

Design Element	Design Data
Site assessment data: (see attached maps)	
Contributing drainage area to basin (subwatershed A)	120 acres
Distance to nearest private well (including off-site wells)	> 100 feet
Distance to municipal well (including off-site wells)	> 1200 feet
Wellhead protection area involved?	No
Ground slope at site of proposed basin	average 3%
Any buried or overhead utilities in the area?	No
Proposed outfall conveyance system/discharge (w/ distances)	35 ft. to CTH "U" Road ditch 1000 ft. to wetland
Any downstream roads or other structures? (describe)	Yes – 36" cmp road culvert
Floodplain, shoreland or wetlands?	No
Soil investigation data (see attached map & soil logs):	
Number of soil investigations completed	3 (in basin area)
Do elevations of test holes extend 4 ft. below proposed bottom?	Yes (see map)
Average soil texture at pond bottom elevation (USDA)	Sandy loam
Infiltration rate at basin bottom and method of analysis	2 in/hr, double-ring infiltrometer
Distance from pond bottom to bedrock	> 5 feet
Distance from pond bottom to seasonal water table	Pond bottom 2 below mottling No water observed in test holes
General basin design data (see attached detailed drawings):	
Basin bottom area	1.5 acres
Effective infiltration area	1.0 acres
1% of development area (120 acres)	1.2 acres
Basin bottom elevation	elev. 900.0
Top of berm elevation (after settling) and width	elev. 904.0 / 10 feet wide
Basin storage below outlet	3.1 ac-ft
25% of 2-yr 24-hr post-development runoff volume	3.0 ac-ft
Time to completely infiltrate stored water	68 hrs
Sediment forebay size & depth	.16 acres (13% pool size)/5 feet
Additional design features	3' x 3' x 50' rock trench

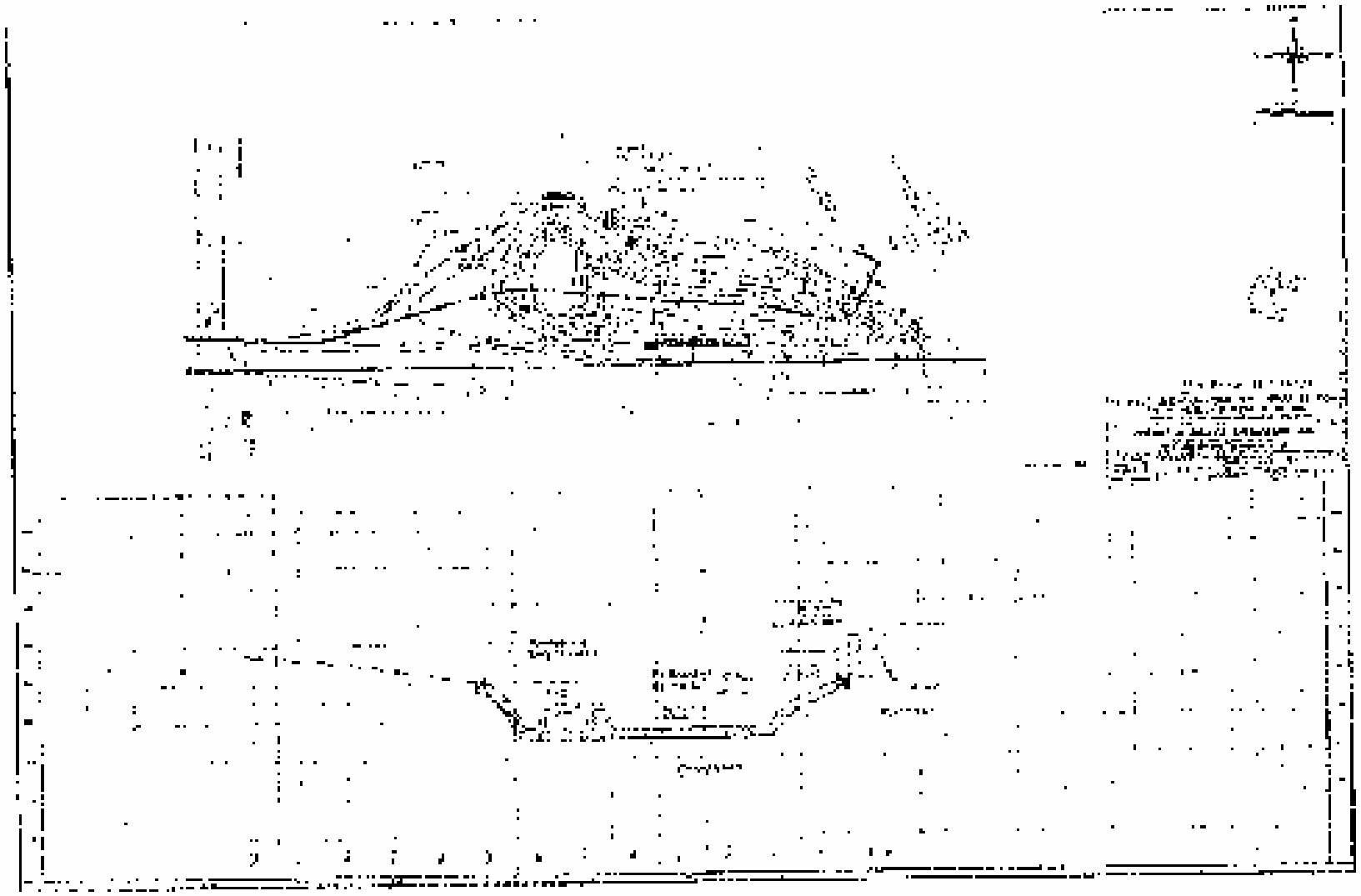
Design Basin Inflow, Outflow & Storage Data
(see attached hydrographs and detail drawings)

Inflow Peak/Volume	Maximum Outflow Rate	Max. Water Elevation	Storage Volume at Max. Elev.	Outflow Control Structures*
24.3 cfs (Post 2-yr./24 hr. peak)	11 cfs	901.0 ft.	3.1 acre feet	#1 and #3
72 cfs (Post 10-yr./24 hr. peak)	35 cfs	902.0 ft.	4.5 acre feet	#1, 2, and 3
171 cfs (Post 100-yr./24 hr. peak)	143 cfs	903.0 ft.	6.0 acre feet	#1, 2, 3 and 4

*** The controlling elements are summarized below (See attached detail drawing of outlet structure):**
#1 = 3 inch orifice in outlet riser– flow line elev. @ 900.0 (1.3 ft. max. head)
#2 = 12 in wide 2 foot high outlet riser – flow line elev. @ 901.3 (.7 ft. max. hydraulic head)
#3 = 12 inch diameter smooth wall pvc pipe – flow line elev. @ 900.0 (3.0 ft. max. hydraulic head)
#4 = 30 foot wide earthen/grass emergency spillway – flow line elev. @ 902.0 (1.0 ft. max. depth)

7-1-05 Waukesha Co. PLU

Exhibit E - Continued
As-built surveys for Wet Detention Basin



Summary Tables

- Watershed table shows how storm water runoff changes between the existing and proposed conditions
- BMP summary table shows how each function to meet the performance goals

Detailed Construction Notes

- Removal of temporary outfall structures
- Taking infiltration practices “off-line”
- Dewatering for construction sediment removal
- Establishment of warm season or wetland plants
- Phasing of construction activities
- Material specifications
  - Anti-seep collars
  - Berm materials
  - Pond liner materials

Detailed Construction Notes

- Installation and removal of BMPs
  - Ditch checks
  - Silt fence
  - Diversions
  - Temporary sediment traps and basins
  - Temporary seeding
  - Polyacrylamide
  - Tackified mulch

Standards and Policies

- First ½” of runoff policy:
  - Infiltrating the first half-inch of runoff from your “site” LRD assumes that you meet the post-construction water quality requirement and the infiltration requirement.
  - Pre-treatment prior to infiltration must be considered.
  - The target infiltration volume is the area of the site multiplied by ½ inch.

Standards and Policies

- A soil investigation for the purpose of determining the basement floor elevation must be conducted for any home proposed in specific soil map units (Exhibit X)
- Internally drained areas are subject to additional horizontal and vertical building setbacks.

How long does it take to get a permit?

- The LRD will respond to a permit application or revised plan submittal within:
  - 10 working days for a preliminary storm water review or;
  - 10 working days for an erosion control plan for sites less than one acre and require no storm water plan and;
  - 20 working days for final storm water management and erosion control plans.

How long does it take to get a permit?

- Average time it takes to get a plan reviewed by LRD:
  - 6 working days for preliminary or sites less than 1 acre
  - 13 working days for final storm water management plans and erosion control plans for sites 1 acre or larger
  - Review clock re-starts with each submittal

Based upon 547 reviews from March 2005 through December 2007

Water Resource Classification

- To determine the classification of the receiving water body, use the Waukesha County Land and Water Resource Management Plan (2006 – 2010)
- Tributaries to cold water streams are also considered cold, unless proven otherwise, and require thermal mitigation.

Land and Water Plan

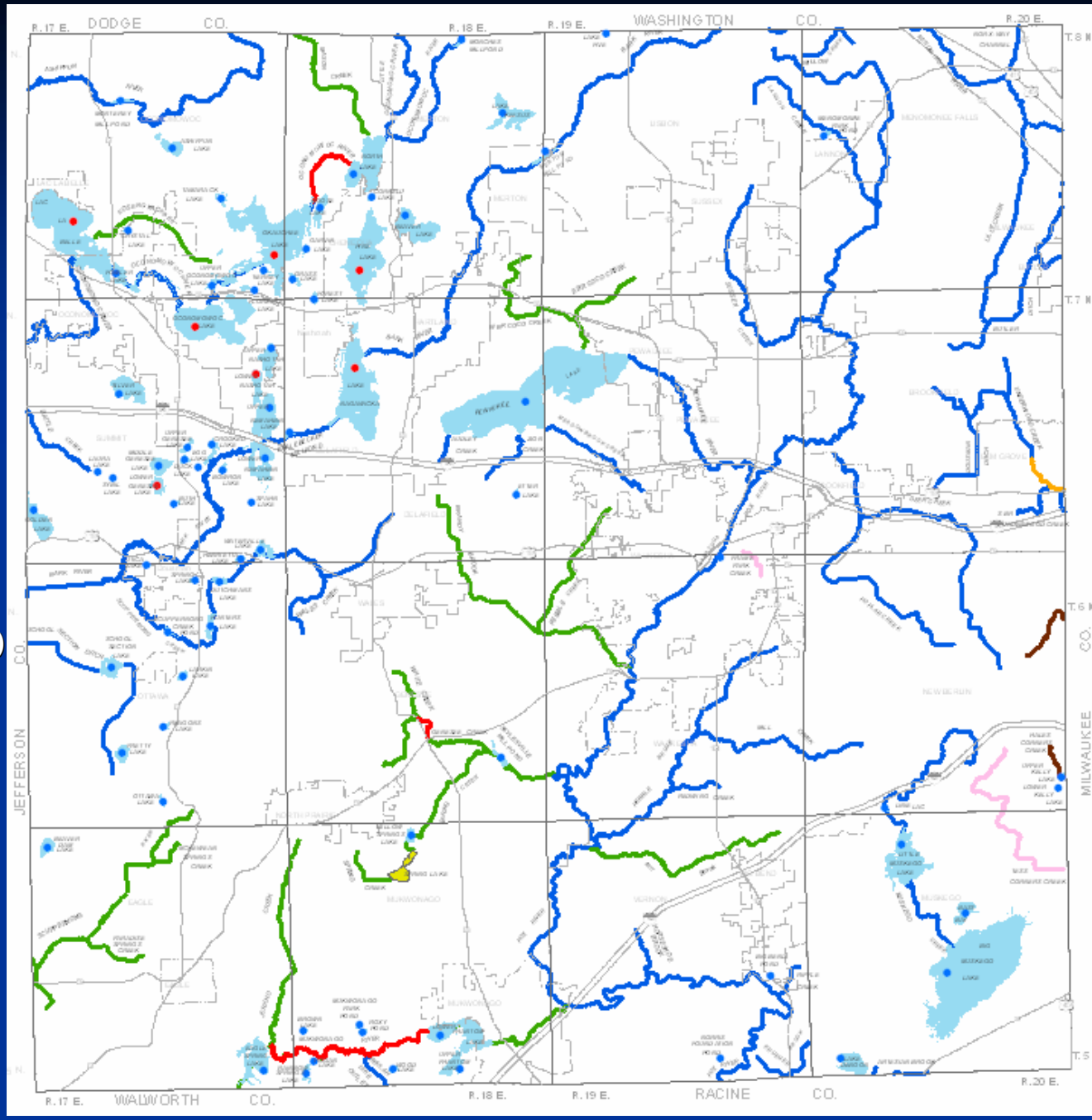
- Waukesha County website (www.waukeshacounty.gov)
- Under Departments “parks and land use”
- Under Business Units “land and water conservation”
- Under Quick Links “land and water management plan”
- Download Chapter 2 (a 44 MB .pdf)
- Review pages 29 – 36 chapter 2 (Pages 42 – 49 of the entire document)

Water Resource Classifications

Waukesha County

Legend

- Lake Supports Cold Water Species (7)
- Lake Supports Fish and Aquatic Life (73)
- Outstanding Resource Water (1-Spring Lake)
- Warm Water Streams (40)
- Cold Water Streams (10)
- Exceptional Resource Waters (3)
- Limited Forage Fish (1)
- Limited Aquatic Life (2)
- Special Variance Waters (1)



Conservation Practice Standards

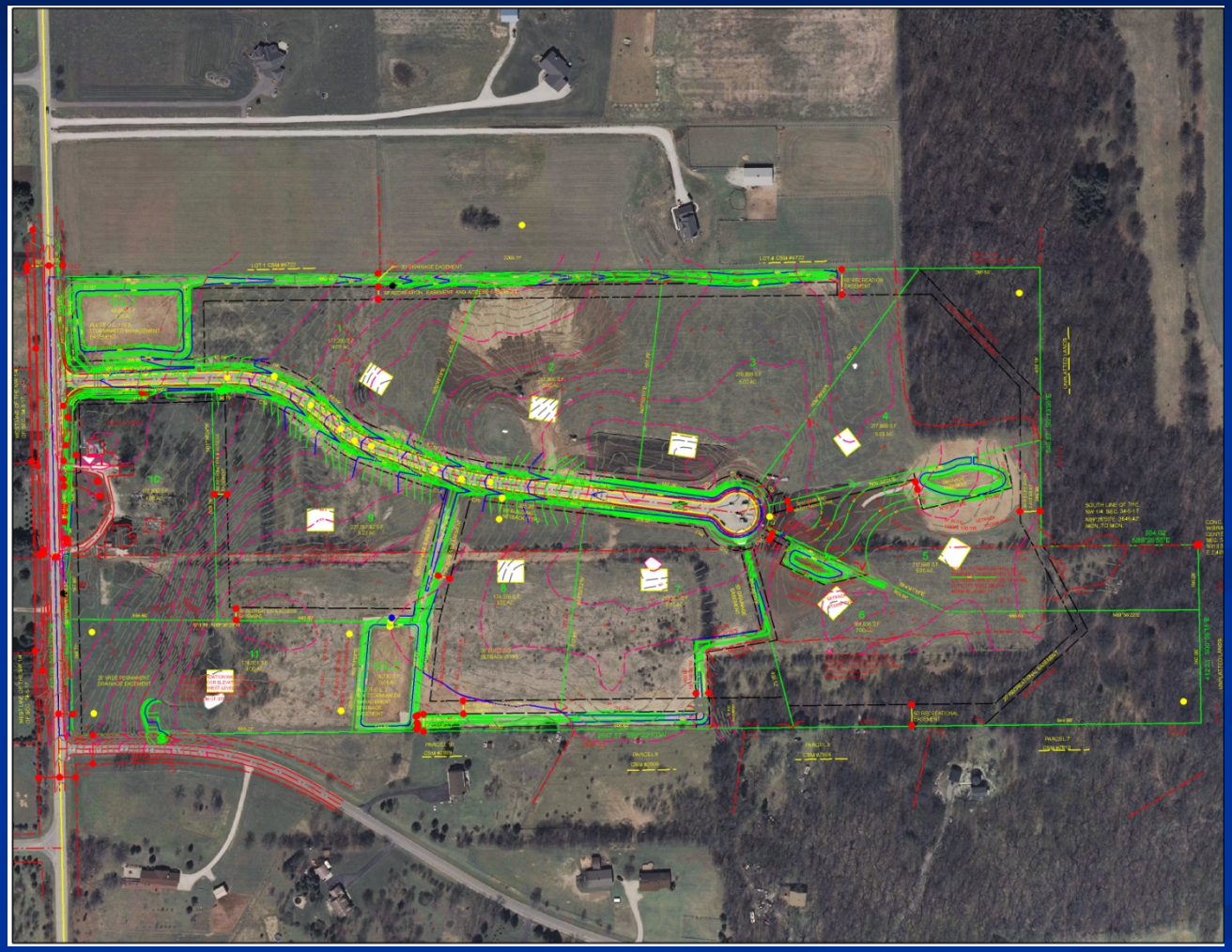
- The design, installation and maintenance of all BMPs used to meet the requirements of the ordinance shall comply with the technical standards identified, developed or disseminated by the WDNR under subchapter V of ch. NR 151, Wis. Adm. Code

- Where BMP standards have not been identified or developed under sub 1 above, the LRD may approve the use of other available standards, such as those from other states or the USDA-NRCS.
  - Examples: wetland restoration or filter strip

Drawing Requirements

- Cross-section and profile drawings included in plans should be drawn to scale
- Consider using a site stabilization plan to graphically illustrate stabilization methods
- Provide plan views of BMPs at 1” = 40’

Digital Submittals



- The LRD may require map items to be submitted in a digital form.
- State Plane Coordinate System, Wisconsin South Zone, NAD 27, NGVD 29

Maintenance Agreements

- A maintenance agreement shall be required for all permanent storm water BMPs installed to comply with the requirements of this ordinance.
  - Ownership shall be the same as those assigned maintenance responsibility.

Maintenance Agreements

- Storm water management plans for CSMs and subdivision plats
  - maintenance agreement must be recorded with the Register of Deeds office immediately following recording of the land division and prior to the sale of any lots
- An addendum with as-built BMP data and closure documents can be recorded at a later date.

Maintenance Agreements

- After construction verification has been accepted by Waukesha County for all planned storm water management practices, an addendum(s) to the agreement shall be recorded by the Owner showing design and construction details. The addendum(s) may contain several additional exhibits, including certification by Waukesha County of Storm Water Permit termination, as described in the agreement.

Description of Exhibits

Allows for recording of addenda with as-built data.

Permit holder responsible for BMP maintenance until permit is terminated by LRD. Titleholders are responsible thereafter.

Allows municipality to order an inspection.

Allows municipality to enter property to inspect, repair and special charge for the costs.

Document Number

(Sample) Storm Water Management Practice Maintenance Agreement

Name and Return Address

[Owners Name], as "Owner" of the property described below, in accordance with Chapter 14 Waukesha County Code of Ordinances [or other applicable code], agrees to install and maintain storm water management practice(s) on the subject property in accordance with approved plans and Storm Water Permit conditions. The owner further agrees to the terms stated in this document to ensure that the storm water management practice(s) continues serving the intended functions in perpetuity. This Agreement includes the following exhibits:

Exhibit A: Legal Description of the real estate for which this Agreement applies ("Property").
Exhibit B: Location Map(s) – shows an accurate location of each storm water management practice affected by this Agreement.
Exhibit C: Maintenance Plan – prescribes those activities that must be carried out to maintain compliance with this Agreement.

Note: After construction verification has been accepted by [Municipality Name], herein referred to as [abbreviated term for Municipality Name] for all planned storm water management practices, an addendum(s) to this agreement shall be recorded by the Owner showing design and construction details. The addendum(s) may contain several additional exhibits, including certification by [Municipality Name] of Storm Water Permit termination, as described below.

Through this Agreement, the Owner hereby subjects the Property to the following covenants, conditions and restrictions:

1. The Owner shall be responsible for the routine and extraordinary maintenance and repair of the storm water management practice(s) and drainage easements identified in Exhibit B until Storm Water Permit termination by Waukesha County in accordance with Chapter 14 of the County Code of Ordinances.
2. After Storm Water Permit termination under 1., the current Titleholder(s) shall be solely responsible for maintenance and repair of the storm water management practices and drainage easements in accordance with the maintenance plan contained in Exhibit C.
3. Upon written notification by [Municipality Name] or their designee, the Titleholder(s) shall, at their own cost and within a reasonable time period determined by the [Municipality Name], have an inspection of the storm water management practice conducted by a qualified professional, file a report with the [Municipality Name] and complete any maintenance or repair work recommended in the report. The Titleholder(s) shall be liable for the failure to undertake any maintenance or repairs.
4. In addition, and independent of the requirements under paragraph 3 above, the [Municipality Name], or its designee, is authorized to access the property as necessary to conduct inspections of the storm water management practices or drainage easements to ascertain compliance with the intent of this Agreement and the activities prescribed in Exhibit C. The [Municipality Name] may require work to be done which differs from the report described in paragraph 3 above, if the [Municipality Name] reasonably concludes that such work is necessary and consistent with the intent of this agreement. Upon notification by the [Municipality Name] of required maintenance or repairs, the Titleholder(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the [Municipality Name].
5. If the Titleholder(s) do not complete an inspection under 3. above or required maintenance or repairs under 4. above within the specified time period, the [Municipality Name] is authorized, but not required, to perform the specified inspections, maintenance or repairs. In the case of an emergency situation, as determined by the [Municipality Name], no notice shall be required prior to the [Municipality Name] performing emergency maintenance or repairs. The [Municipality Name] may levy the costs and expenses of such inspections, maintenance or repair related actions as a special charge against the Property and collected as such in accordance with the procedures under s. 66.0627 Wis. Stats. or subch. VII of ch. 66 Wis. Stats.
6. This Agreement shall run with the Property and be binding upon all heirs, successors and assigns. After the Owner records the addendum noted above, the [Municipality Name] shall have the sole authority to modify this agreement upon a 30-day notice to the current Titleholder(s).

(Sample)

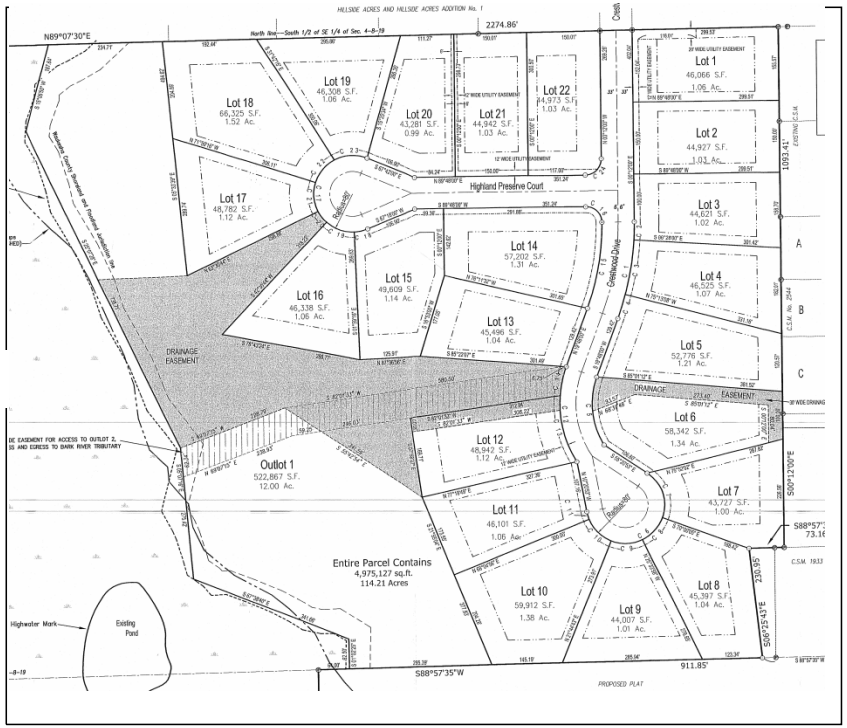
Exhibit A – Legal Description

he following description and reduced copy map identifies the land parcel(s) affected by this Agreement. For a larger :ale view of the referenced document, contact the Waukesha County Register of Deeds office.

[Note: An example legal description is shown below. This exhibit must be customized for each site, including the minimum elements shown. It must include a reference to a Subdivision Plat, Certified Survey number, or Condominium Plat, and a map to illustrate the affected parcel(s).]

Project Identifier: **Highland Preserve Subdivision** Acres**: 40**
Date of Recording: **October 22, 2002**
Map Produced By: **Baudhuin, Inc., P.O. Box 105, Sturgeon Bay, WI**
Legal Description: **Lots 1 through 22 of Highland Preserve Subdivision, located in all that part of the Southwest Quarter (SW ¼) of Section 4, Township 8N, Range 19E (Town of Lisbon) Waukesha County, Wisconsin.**

Highland Preserve Subdivision



Drainage Easement Restrictions: Shaded area on map indicates a drainage easement for storm water collection, conveyance and treatment. No buildings or other structures are allowed in these areas. No grading or filling is allowed that may interrupt storm water flows in any way. See Exhibit C for specific maintenance requirements for storm water management practices within this area. See subdivision plat for details on location.

(Sample)

Exhibit B - Location Map

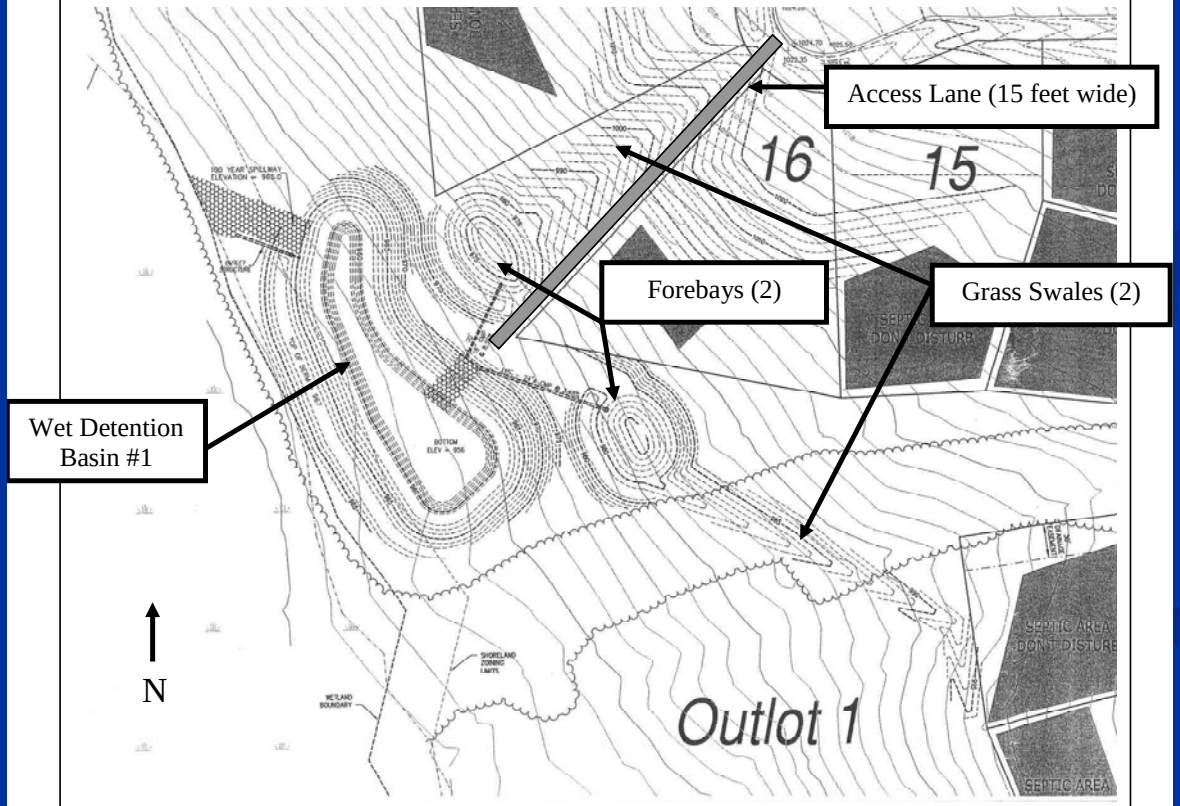
Storm Water Management Practices Covered by this Agreement

[An example location map and the minimum elements that must accompany the map are shown below. This exhibit must be customized for each site. Map scale must be sufficiently large enough to show necessary details.]

The storm water management practices covered by this Agreement are depicted in the reduced copy of a portion of the construction plans, as shown below. The practices include one wet detention basin, two forebays, two grass swales (conveying storm water to the forebays) and all associated pipes, earthen berms, rock chutes and other components of these practices. All of the noted storm water management practices are located within a drainage easement in Outlot 1 of the subdivision plat, as noted in Exhibit A.

Subdivision Name: **Highland Preserve**
Storm water Practices: **Wet Detention Basin #1, Forebays (2), Grass swales (2)**
Location of Practices: **All of Outlot 1 of Highland Preserve Subdivision:**
Titleholders of Outlot 1: **Each owner of Lots 1 through 22 shall have equal (1/22) undividable interest in Outlot 1**

Figure 1
Plan View of Storm Water Practices



Minimum Storm Water Related Language for New Land Divisions (3/06)

Certain minimum language must be recorded on the face of new subdivision plats or certified survey maps to comply with the Waukesha County Storm Water Management and Erosion Control Ordinance. The purpose of this language is to provide notice that a separate document has been recorded on the title describing the maintenance requirements for the storm water management practices located on the property.

Sample language is provided below to demonstrate what type of information needs to be included. This sample is based on a subdivision that has one outlot with one storm water basin that collects runoff from 22 lots in the subdivision. For a sample copy of a complete Storm Water Practice Maintenance Agreement, contact the Waukesha County Department of Parks and Land Use – Land Resources Division at 262-896-8300 or visit their web page at www.waukeshacounty.gov/landandparks .

(Sample)
Storm Water Management Practice Maintenance

The titleholders of lots 1 through 22 of the Highland Preserve Subdivision each shall each hold 1/22 undividable interest in Outlot 1, where the storm water management practices are located. There are one or more separate documents recorded on the property title through the Waukesha County Register of Deeds entitled "Storm Water Management Practice Maintenance Agreement" ("Maintenance Agreement") that apply to Outlot 1. The maintenance agreement subjects this subdivision plat, and all lot owners therein, to covenants, conditions and restrictions necessary to ensure the long-term maintenance of the storm water management practice. The agreement also outlines a process by which the [municipality name] may levy and collect special assessments or charges for any services the community might provide relating to enforcement of the Maintenance Agreement.

In accordance with Chapter 14 - Article VIII of the Waukesha County Code of Ordinances ("Storm Water Ordinance"), the Storm Water Permit Holder is responsible for constructing the storm water management practices following plans approved by Waukesha County [or municipality name] and is responsible for maintaining the storm water practices until permit termination by Waukesha County [or municipality name]. Upon termination of the Storm Water Permit, the owners of lots 1-22 shall be responsible for maintenance of the storm water management practices in accordance with the Maintenance Agreement.

Easements

All lands within areas labeled "drainage easement" are reserved for storm water collection, conveyance, treatment or infiltration. No buildings or other structures are allowed in these areas. No grading or filling is allowed in these areas that may interrupt storm water flows in any way. The Maintenance Agreement may contain specific maintenance requirements for these areas. The [municipality name], Waukesha County or their designee are authorized access in these areas for purposes of inspecting the storm water management practices or enforcing the terms of Maintenance Agreement.

All lands within areas labeled "access easement" shall remain clear of trees, shrubs and any structures that may interfere with the free movement of vehicles that may be needed to enter the area for maintenance purposes. The [municipality name], Waukesha County or their designee are authorized access to these areas for purposes of inspecting the storm water management practices or enforcing the terms of the Maintenance Agreement.

All lands within areas labeled "well setback" are restricted from the placement of any well due to potential risk of contamination in accordance with the Storm Water Ordinance and Wisconsin Administrative Codes.


Thank you. Questions?