

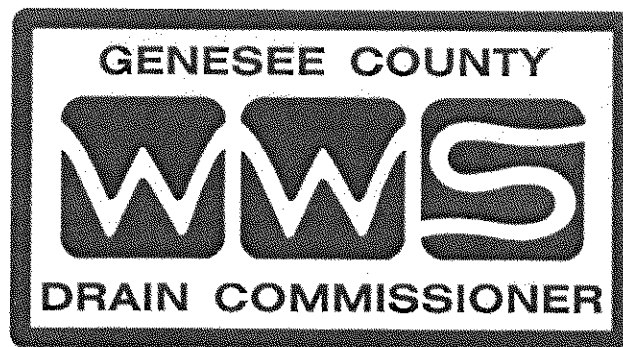
**MINIMUM SITE PLAN & PRELIMINARY PLAT STANDARDS**

**FOR**

**DESIGN OF PUBLIC SANITARY SEWER & WATER SUPPLY**

**FOR**

**GENESEE COUNTY, MICHIGAN**



**5<sup>th</sup> EDITION**

## **FORWARD**

In an effort to expedite the processing of site plans and preliminary plats, the following minimum standards have been formulated by the Genesee County Drain Commissioner Division of Water and Waste Services (GCDC-WWS). Please read and follow these carefully, as there have been significant changes in the standards. PLEASE NOTE: GCDC-WWS approvals are valid for one year. After one year, the project will be subject to start the review process from the beginning.

### **A. PLAN SUBMISSION**

The submission to GCDC-WWS shall include the following items:

- a. Completed Site Plan/Preliminary Plat Checklist.
- b. One 24" x 36" Site Plan or Preliminary Plat, signed and sealed by a professional engineer, surveyor, or architect, as applicable, licensed in the State of Michigan.
- c. All easements properly signed and recorded at the Genesee County Register of Deeds. The easement should be returned to this office once it has been recorded at the Register of Deeds. These easements and any conditions on shall appear on the plans.
- d. Project specifications (if differing from GCDC-WWS 5<sup>th</sup> Edition).
- e. Detailed shop drawings shall be supplied for any special structure, pump station, etc.
- f. Copies of any other permit applications necessary for the project (wetlands, floodplain, etc.)
- g. Letter from a licensed professional engineer certifying the capacity (for sanitary sewer only).
- h. A Letter of Authorization to construct from the local municipality.

### **B. GENERAL**

The basic format for site plan/preliminary plat must include:

1. Cover Sheet.
  2. Note Sheet(s).
  3. Site Plan/Preliminary Plat Sheet(s).
  4. Sanitary Sewer and/or Watermain Standard Details.
  5. General Notes Sheet.
  6. Soil Erosion/ Sedimentation Control Details.
- Please make sure ALL UTILITIES are shown in the plan view.
  - Plans shall be submitted on a standard 24" x 36" format. The minimum scale for the detailed construction drawings shall be 1"=50' horizontal.
  - All plans shall be submitted to all utility companies, any affected municipality, etc.

### **C. COVER SHEET**

A cover sheet shall be supplied for all public utility projects. The cover sheet shall, at a minimum, contain the following basic information:

- a. Project Name along with the Municipality, County name, and section number clearly shown.
- b. Location map with layout sketch of project. (Larger projects may require a separate layout sheet).
- c. Properly signed, sealed, and dated by a professional engineer, surveyor, or architect, as applicable.
- d. Developer's name, address, and phone number.
- e. Sheet index.
- f. Legal property description.
- g. Legend.
- h. Listing of Plan Distribution with contact person and date plans submitted to utility
- i. Total Disturbed Area and statement whether NPDES storm water permit is or is not required.
- j. Miss Dig Alert
- k. (Place **BOLDLY** on the cover sheet). **Note: This project has been designed implementing the latest GCDC-WWS Design Specifications. Carefully review the notes, details, and design prior to submitting a bid. Full compliance with the new standards will be required.**
- l. A statement clarifying whether or not existing utilities were exposed for verification of location and elevations.

**D. MINIMUM ITEMS TO BE INCLUDED ON THE PLANS:**

In general, all sanitary sewer and watermains shall be designed in accordance with the Recommended Standards For Water Works (10 State Standards) and the GCDC-WWS Standard Specifications and Details. The following items should be found on the plans:

- a. Title of project, legend, location map, scale, and north arrow.
- b. Legal description of property and acreage to be developed.
- c. Developer's name, address, and phone number.
- d. Project benchmark referenced to a USGS or NVG datum.
- e. Plan view of proposed development or plat, including existing and future phases.
- f. The location of the 100-year flood plain elevation and wetlands.
- g. Properly signed, sealed, and dated by a professional engineer, surveyor, or architect, as applicable.
- h. The plan size shall be 24" x 36".
- i. The minimum scale shall be 1"= 50'.
- j. Tax map showing surrounding area, including both sides of the road.
- k. Roadways, ROW size, lot numbers, future building numbers, parcel ID numbers, street address for site, street address for surrounding buildings, and lot configuration.
- l. The location, size and elevation of all existing utilities, structures, etc.

- m. For public watermain, the plan view shall depict the size of the main, the type of construction material and indicate if service leads are to be installed as a part of the project.
- n. The minimum width for easements shall be as follows: sanitary sewer 20' and watermain 15'.
- o. The utility shall be centered within the easement.
- p. Where fire sprinkling is to be incorporated, the standard GCDC-WWS standard detail for check valve and bypass meter shall be shown on the plan.

#### **E. STANDARD NOTES FOR PRELIMINARY PLATS & SITE PLANS**

To obtain preliminary plat or site plan approval from GCDC-WWS, the following 10 Standard Notes must be shown. All site plans and preliminary plats shall have written approval of GCDC-WWS regarding sanitary sewers and water supply prior to review by the local municipalities planning board. NOTE: A listing of these notes will not meet the GCDC-WWS conditions for approval; the application of each note must be explained on the site plan.

- a. **EXTENSION OF PUBLIC UTILITIES:** All public sanitary sewer and/or watermain **SHALL** be extended to the furthest limits of the property, including corner lots, with the pipe size and material approved by GCDC-WWS. This is necessary for plan approval. For water service of 1" or less or a building on a corner lot, the requirements to extend the public watermain and/or sanitary sewer along both property lines will be reviewed. Final determination shall be made by GCDC-WWS.
- b. **WATERMAIN LOOPING:** All public watermains shall be looped whenever possible. The pipe size requirements shall be approved by GCDC-WWS.
- c. **INDUSTRIAL PRETREATMENT PROGRAM (IPP):** This permit is required for all commercial (non-residential) and industrial discharges. The OWNER shall obtain an Industrial Pretreatment Discharge Permit prior to the issuance of a Sewer Connection Permit. Industrial Discharge Permits are non-transferable. Changes in facility use will require a new Industrial Discharge Permit. For more information call the Anthony Ragnone Treatment Plant at (810) 232-7662.
- d. **SOIL EROSION:** The DEVELOPER shall submit a detailed Soil Erosion and Sedimentation Control plan and obtain an Act 451 Part 91, Soil Erosion and Sedimentation Control permit. This includes the payment of fees and the providing of necessary bonds. **No earth changes or excavation shall be started prior to the issuance of this permit.** The DEVELOPER shall protect all existing and proposed storm sewer facilities on and adjacent to the site during excavation and construction. All sediment shall be contained on site. Any silt in county drains, storm sewer, culverts, etc. as a result of this project, shall be removed by the DEVELOPER at the cost of the DEVELOPER.
- e. **FLOOD PLAIN OR WETLAND CONSTRUCTION:** The DEVELOPER shall apply to the Michigan Department of Environmental Quality for a permit

for the alteration and/or occupation of a flood plain or floodway, as required under PA 451. Evidence of this permit may be required prior to plan approval by GCDC-WWS.

- f. **NPDES STORM WATER DISCHARGE PERMIT:** The owner of the property shall obtain a NPDES Storm Water Discharge permit for construction activities from MDEQ as required under Public Act 451. The notice of coverage form shall be submitted through GCDC-WWS with the Soil Erosion Control permit application. All MDEQ fees shall accompany the Notice of Coverage. Evidence of this permit may be required prior to plan approval by GCDC-WWS.
- g. **GENESEE COUNTY PERMIT TO CONSTRUCT A PUBLIC UTILITY:** After the approval of this preliminary plat or site plan, the DEVELOPER shall submit a detailed plan for construction of all public sanitary sewer and watermain. The plans must have GCDC-WWS approval, a S-permit issued, and approval from the MDEQ prior to beginning construction.
- h. **GENESEE COUNTY ROAD COMMISSION PERMIT:** The DEVELOPER shall obtain a permit from the Genesee County Road Commission to perform work within the Genesee County Road Commission Right-of-Way. All fees for the permit, bonds and insurances are the responsibility of the developer.
- i. **MUNICIPALITY SANITARY SEWER AND WATER PERMIT:** Prior to the issuance of a building permit by the local municipality, the developer shall be required to obtain a sanitary sewer and/or water tap-in permit from the local municipality, if authorized, or GCDC-WWS.
- j. **STATE CONSTRUCTION PERMITS:** The sanitary sewer and watermain construction permits from the Michigan Department of Environmental Quality shall be submitted to the MDEQ after approval of GCDC-WWS. Construction shall not begin until these state permits are issued.

#### **F. NOTES FOR SITE PLAN WITHOUT PUBLIC SANITARY SEWER AND/OR WATERMAIN**

The following notes are to be used as applicable when submitting plans for review by GCDC-WWS. Use only those applicable and adapt them for the specific project.

- a. Sanitary sewer saddle taps shall be made by GCDC-WWS personnel. The developer shall obtain the required municipality sanitary sewer permit or the S construction permit and pay GCDC-WWS the required fee for a saddle tap.
- b. The CONTRACTOR shall verify the sanitary sewer depth and be responsible for providing adequate slope of sewer toward the mainline sewer in strict accordance with GCDC-WWS standard details and specifications.
- c. Sanitary service leads shall be encased in 6AA crushed limestone (A1) in accordance with GCDC-WWS standard details and specifications.
- d. Water service connection and curb box shall be installed in accordance with GCDC-WWS standard details and specifications.

- e. All water service leads shall be “K” copper. The minimum size shall be ¾”.
- f. All watermain pressure taps and cut in valves 4” and larger shall be constructed with cast iron tapping sleeves and within a manhole structure per GCDC-WWS standard details and specifications.
- g. Sand fill under any floor slab, walks, paved areas, etc. shall be minimum MDOT Class II sand backfill (A5). Fill sand shall not have moisture content greater than 15%. The sand shall be compacted to 95% of material the unit weight by modified proctor.
- h. All existing utilities serving the property shall be properly terminated in compliance with local and/or county regulations. Remove all trees, including root structures, except those specifically noted to remain and those on property lines. Do not clear site prior to coordinating with the OWNER and the landscaping plan to determine all trees to remain.
- i. For any demolition work, please see demolition notes attached herewith.
- j. Verify exact location of underground utilities prior to beginning construction.
- k. CONTRACTOR is to adjust any utility element meant to be flush with grade (clean out, valve boxes, manholes, catch basins, inlets, etc.) that is affected by site work or grade changes, whether specifically noted on plans or not. The CONTRACTOR shall obtain any necessary permits for adjustment at the CONTRACTOR’s expense.
- l. The water supply for all commercial and industrial buildings shall be equipped with a backflow prevention device in accordance with building codes. An approval of methods must be acquired from GCDC-WWS.
- m. All on site water service shall meet the requirements of GCDC-WWS Standard Details and Specifications.
- n. The CONTRACTOR shall notify MISS DIG (1-800-482-7171) three (3) working days prior to starting any excavation with power equipment.
- o. The CONTRACTOR shall comply with all local, county, state, and local regulations for all work that takes place on the site.
- p. The CONTRACTOR/DEVELOPER shall pay for and obtain all permits required by federal, state, local, or private agencies and pay all charges for inspection and testing.
- q. The CONTRACTOR shall provide all construction lines and grade for their work.
- r. The CONTRACTOR shall control noise, carry out a program of dust control and shall allow no on-site burning without proper permits.
- s. The CONTRACTOR shall be responsible for cleaning up the premises, and upon completion of the project, leave the site in an acceptable condition as determined by the ENGINEER or OWNER.
- t. Commercial buildings shall use a 6” sanitary riser from the main to the structure. The service riser shall connect to the mainline and not at a manhole.
- u. For commercial establishments that generate grit or grease, an external grease trap shall be provided. Show the detail on the plans with appropriate notes. The domestic sewage shall be designed to bypass the grease/grit trap.

- v. The minimum slope for a commercial lead is 1' of fall per 100 feet of pipe. Show the invert at the structure and the slope to the property line.
- w. All sanitary sewer risers shall be SDR-26 PVC.
- x. Each parcel of land shall have an individual riser.

## **G. DEMOLITION**

- a. Prior to beginning any of this work the contractor shall notify GCDC-WWS at (810) 732-7870 and fill out the necessary forms or permits. The contractor shall cut and seal the existing sanitary lead at the property line and shall disconnect the existing water service lead at the curb box shut-off valve on the house side of the valve.
- b. All demolition work shall conform to all local codes and ordinances. All demolition operations shall comply with MIOSHA regulations insofar as they apply to the required work. A Soil Erosion and Sedimentation Control Permit will be required prior to demolition.
- c. The contractor shall remove and clear all trees, brush, fences, buildings, curb, and asphalt as shown on the plans or as directed by the Engineer.
- d. All demolition material shall be properly removed from the site and disposed of in a legally designated disposal area. No on-site burning will be allowed without proper permission. Permits and fees for disposal of demolition material shall be obtained and paid for by the contractor.
- e. The contractor shall demolish and remove any items remaining from the existing building, in its entirety, including walls, foundations and footings. All building drains and utility leads shall be located and properly plugged. Utility lead work shall be coordinated with the appropriate utility company.
- f. Backfill excavated areas with clean granular fill compacted to 95% of the material unit weight by modified proctor.
- g. At the conclusion of the demolition operations, the entire work area shall be left in a clean condition. All protective devices and barriers shall be removed.

GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE  
DIVISION OF WATER AND WASTE SERVICES  
PRELIMINARY PLAT/SITE PLAN SUBMITTAL CHECK LIST 5TH EDITION

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THE FOLLOWING INFORMATION SHALL BE INCLUDED WITH OR APPEAR ON ALL SITE PLANS  
SUBMITTED TO THIS OFFICE:

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*Please note that if any of the following information is not applicable to the development being submitted so state with reason*

GENERAL

- \$250 site plan review fee. Checks shall be payable to "The Genesee County Drain Commissioner".
- A copy of this Site Plan/Preliminary Plat Checklist, signed and dated.
- Transmittal sheet indicating if this is a first time submission or if the plans are being resubmitted
- Letter signed and sealed from a professional engineer stating there is adequate sanitary sewer capacity for this development which shall include all calculations and flow maps.
- Authorization to Construct letter from the local municipality.
- Tax map of area with appropriate property highlighted. Tax map shall also show the surrounding area, including both sides of the road and can be obtained from the Genesee Co. Dept. of Equalization
- Sheet size of 24" x 36" (If a different sheet size is proposed, this office must be contacted prior to submitting plans.)
- Legend
- Minimum scale shall be 1" = 50'
- GCDC-WWS 10 standard notes
- GCDC-WWS demolition notes
- Soil Erosion & Sedimentation Control Plan (SESC) or copy of SESC permit.
- All existing (water, sanitary sewer and storm water) utilities shown on the plans and labeled with their size (rims, inverts), elevation and material. Please also label any utilities in other areas where conflicts may arise.
- Recorded easements. Minimum width for easements shall be Sanitary Sewer = 20' and Watermain = 15'. The utility shall be centered in the easement.
- Benchmarks shall be shown and labeled in either USGS or NGV datum



- Architectural floor plan sheet to be reviewed for calculation of all applicable tap-in and/or CCIF fees
- Plan view of the proposed development or plat, including existing and future phases
- Location of the 100-year flood plain elevations and wetlands
- Roadways, ROW size, lot numbers, future building numbers, parcel ID numbers, street address for site, street address for surrounding buildings, and lot configuration.
- Plans have been submitted to GCDC-SWM (Surface Water Management) for Storm and/or Surface Water review (if applicable).

COVER SHEET

**The cover sheet shall, at a minimum contain the following basic information:**

- Project name, address, scale and north arrow
- Location map with layout sketch of project
- County, municipality, and section number
- Plans signed and sealed by a professional engineer, surveyor, or an architect
- Developer's name, address, and phone number
- Sheet Index
- Legal description
- Plan distribution list including contact names and dates submitted to utility
- Total disturbed area and a statement clarifying whether an NPDES permit is or is not required.
- MISS DIG Alert
- Contractor Alert Statement (**in bold**) see Section C item k of the site plan standards.
- A statement clarifying whether or not existing utilities were exposed for verification of location and elevations.

APPLICATIONS

**The following applications shall be submitted with the site plan:**

- IPP permit application for all non-residential buildings (Includes churches, schools, etc.)

Applications can be downloaded from [www.gcdcwws.com](http://www.gcdcwws.com).

SESC permit application, plans and appropriate fees.

I hereby certify that the aforementioned items have been provided with the submitted plans.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Note: It is necessary to submit only one set of site plans for review & approval of sanitary sewer and watermain and only one set of plans for SESC review and permitting.**