

## ARTICLE 5

### IMPROVEMENT PLANS

#### Section 501

##### Filing

All necessary improvement plans for proposed roads, storm sewers, sanitary sewers, water lines, sewage treatment plants and other proposed public facilities shall be filed with the County Engineer and/or Sanitary Engineer and shall be approved by the County Engineer and/or County Sanitary Engineer prior to approval of the plat. Improvement Plans shall include Storm Water Pollution Prevention Plans (See Section 601 - 3D) when five (5) acres or more of the development will be disturbed (Unless the EPA lowers the disturbed acreage requirements). Determination of potential acreage to be disturbed will be made by the Portage SWCD. For platted subdivisions less than five (5) acres, a topographic map (Per Section 317.3) and a final grading plan shall be submitted.

#### Section 502

##### Format for Improvement Plans

1. All drawings shall be India ink on linen or mylar or approved equal.
2. Drawing sheet size shall be 23" X 36". Marginal lines shall be drawn around the entire sheet leaving a margin of 1-1/2 inches on the binding edge and 1/2 inch margin on the other edges.

Plan and profile, Plate 4; and cross section sheets, Plate 3, shall be standard federal aid sheets. Sewage treatment plant plans may be drawn on 18" X 24" sheets using the above described margins.

3. All construction drawings shall include both plan and profile and cross sections.
4. Scale to be used:

- |                     |                                       |
|---------------------|---------------------------------------|
| a. General Plans    | 1" = 100'                             |
| b. Plan and Profile | 1" = 50' Horizontal, 1" = 5' Vertical |

or

- |                   |                                       |
|-------------------|---------------------------------------|
| c. Cross Sections | 1" = 20' Horizontal, 1" = 2' Vertical |
|                   | 1" = 5' Horizontal, 1" = 5' Vertical  |

5. Each plan shall have a title sheet (23" X 36") with the following:
  - a) General plan or key map
  - b) Title (project and location)
  - c) Place for necessary approvals
  - d) Index of sheets
6. Each plan shall include a general summary showing all the quantities necessary to construct the improvement. (This may be placed on the title sheet if room is available) A detailed

estimate of cost based on the quantities shown in the General Summary shall be presented with the improvement plans.

7. An appropriate title block, indication of scale, north arrow, and sheet number shall be placed on each drawing.
8. Show all street center line data, right-of-way, and pavement widths. Label each type of pavement. Stationing shall begin at south or west end of the improvement.
9. All existing and proposed underground structures located in the street or easement shall be shown on the construction (plan and profile) drawings. Such underground structures are gas lines, electric and telephone conduits, sanitary and storm sewers, water mains, culverts, etc.
10. All above ground structures, which are located in such proximity to the proposed work as may be a factor affecting the construction, shall be shown on the plan. These will include trees, fences, buildings, poles, hydrants, bridges, driveways, drive culverts, etc.
11. Draw to scale all sub-lots or acreage abutting the streets where improvements are to be located. Include the front foot dimensions, property owners' names, sub-lot numbers (if area is subdivided) or total acreage owned by each acreage owner for property abutting on the streets.
12. Profile plan shall show existing center line, ground elevations and proposed finished center line grade elevations. Vertical curves (finished grade) shall be stationed at 25 foot intervals.
13. Include the location, description, and the exact elevation of a sufficient number of bench marks on the drawings. These bench marks shall be used for construction and inspection purposes. Each plan and profile sheet shall show at least one bench mark.
14. All elevations used on drawings shall be based on sea level datum as determined by the United States Coast and Geodetic Survey.
15. Show corporation lines, subdivision names, plat volume and pages when subdivision plat is recorded, and original lot lines and numbers on the drawings.
16. Show all easements including exact location and width.
17. All pipe, aggregates, and other materials shall be noted or described as to weight, class, pressure rating, gauge; or other notation to clearly define the intention of the designer.
18. All plans shall bear the seal of a registered engineer.

### Section 503

#### Modifications

Approval of final plans shall not prevent the County Engineer and/or Sanitary Engineer from ordering needed changes that are due to unforeseen circumstances and that the Engineer and/or Sanitary Engineer deems necessary in the field as work progresses.

This extra work shall be at the developer's expense, but will be limited to the intent of these regulations and the project scope as originally approved by the County Engineer and/or Sanitary Engineer. (See section 505)

#### Section 504

##### Design Data

All design data involving drainage, profile, etc., will be submitted with the design drawings bound in a neat and orderly manner on standard size paper.

#### Section 505

##### Intent of Regulations, Project Scope, and Plans

The intent of these regulations, project scope and the improvement plans is to prescribe a complete workable improvement at no cost to Portage County, which the subdivider undertakes to do, in full compliance with the approved plans, standard drawings and specifications of the Portage County Engineer and/or Portage County Sanitary Engineer. They are to be cooperative and what is called for by either is as binding as if called for by both. Should any misunderstanding arise as to the intent or meaning of said plans, specifications or standard drawings or any discrepancy appear in either, the decision of the Portage County Engineer and/or Portage County Sanitary Engineer in such case shall be final and conclusive.

#### Section 506

##### Change Orders

If during the prosecution of the work, it becomes necessary to modify the approved plans or specifications due to unforeseen circumstances, the subdivider's engineer shall revise the plans, specifications and estimate of cost and recommend approval of the required change to the Portage County Engineer and/or Sanitary Engineer. If the County Engineer and/or Sanitary Engineer approves such a revision, a written change order shall be prepared by the subdivider's engineer and signed by the appropriate county authority.

