

# CITY OF SUPERIOR



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**SUPERIOR**

W I S C O N S I N

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## EROSION AND SEDIMENT CONTROL (ESC) PERMITTING PROGRAM FOR SMALL SITES

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## **SECTION 1 - PURPOSE AND OBJECTIVES**

### **1.1 PURPOSE**

- 1.1.1** The following policies and procedures have been compiled to assist homeowners, developers, builders and engineers in the development of plans and specifications in the City of Superior.
- 1.1.2** Design and construction work shall conform to the most recent editions of the following
  - A.** City of Superior Standard Specifications
  - B.** City of Superior Ordinances
  - C.** Standard Specifications for Sewer and Water Construction in Wisconsin
  - D.** Universal Dwelling Code
  - E.** WISDOT Standard Specifications for Construction
- 1.1.3** Prior to beginning of construction, all regulatory agency permits and approvals shall be obtained including but not limited to:
  - A.** City of Superior
  - B.** Army Corps of Engineers
  - C.** Wisconsin Department of Natural Resources
  - D.** Wisconsin Department of Transportation
  - E.** Douglas County Zoning
- 1.1.4** This document does not take the place of or supersede the code requirements. It is the responsibility of the property owner and/or applicant to provide accurate and reliable information concerning the project in accordance with all applicable codes.

### **1.2 OBJECTIVES**

- 1.2.1** To clarify when the City of Superior's Erosion and Sediment Control Program and related permitting is required.
- 1.2.2** To describe the required submittals for permit application.
- 1.2.3** To explain what is needed on a site plan.
- 1.2.4** To specify the requirements for complying with the Site Erosion Control Ordinance.

## **SECTION 2 - SITE EROSION AND SEDIMENT CONTROL (ESC)**

### **2.1 DEFINITIONS.**

**2.1.1** With the exception of the following defined terms, all definitions found in NR 216, NR 151, and SPS 360 are applicable to this document and referenced documents:

- A.** *Business day* means a day the City of Superior offices are open for business.
- B.** *Impervious surface* means a surface as measured on a horizontal plane which has been compacted or covered with a layer of material so that it is highly resistant to infiltration by rainwater. It includes, but is not limited to, all areas covered by structures, roofs, patios, decks, porches, driveways, loading docks, parking lots, sidewalks, and compacted clay and gravel which are used as driveways or parking lots. Graded areas which have not achieved 70 percent or more vegetative cover in good condition shall be considered impervious. Impervious Area is deemed to generate excess runoff in direct proportion to the amount of Impervious Area on the Parcel as compared to property in its undeveloped state.
- C.** *Redevelopment* means areas where development is replacing older existing development or where development has existed in the previous 25 years. ▬

### **2.2 APPLICABILITY.**

**2.2.1** This program applies to construction sites with land disturbing activity totaling less than one acre and that add less than 20,000 square feet of impervious area to the site. Sites with one or more acres of land disturbing activity, or the addition of 20,000 or more square feet of impervious area, are regulated under the City of Superior's Stormwater Management Permitting Program.

### **2.3 ADMINISTRATION.**

#### **2.3.1 ADMINISTRATIVE DUTIES**

- A.** Keep an accurate record of all plan data received, plans approved, permits issued, inspections made and other official actions.
- B.** Review all plans and permit applications received when accompanied with the necessary information and the appropriate fee and issue the permits.
- C.** Investigate all complaints made related to erosion control.
- D.** Maintain a database of all properties responsible for annual reports. This database shall track annual reports sent in and shall flag delinquent or deficient reports. Staff shall take appropriate action on flagged reports to bring those properties into compliance.
- E.** Revoke any permit granted under this document if the holder of the permit has misrepresented any material fact in the permit application or plan; or has failed to comply with the plan as originally approved or as modified in

writing; or has violated any of the other conditions of the permit as issued to the applicant.

### **2.3.2 Permit Transfers**

- A.** When a permittee and landowner act to transfer an interest in property subject to an approved plan prior to completion of the proposed steps to attain soil stabilization, the permittee must secure approval from the City of Superior.
- B.** When a permittee and landowner transfer ownership, possession or control of real estate subject to an uncompleted erosion control plan, the successor in interest to any portion of the real estate shall be responsible to control soil erosion and runoff and shall comply with the minimum standards provided in this document.
- C.** When ownership, possession or control of property subject to an uncompleted erosion control plan is transferred, the former owner (seller) shall notify the new owner (buyer) as to the current status of compliance with notice to the City of Superior, and provide a copy of the erosion control plan or stormwater management plan, or both.
- D.** Transfers of interest in real estate subject to an approved, uncompleted plan may be conducted consistent with this document under any or the following arrangements:
  - 1.** The transferee shall file a new, approved erosion control or stormwater management plan, or both, with the City of Superior;
  - 2.** The transferee shall obtain an approved assignment from the City of Superior as sub-permittee to complete that portion of the approved plan regulating soil erosion and runoff on the transferee's property;
  - 3.** The permittee shall provide the City of Superior with a duly completed and executed continuing surety bond or certified check in an amount sufficient to complete the work proposed in the approved plan; at the time of transfer the permittee may seek to reduce the surety bond or certified check to the appropriate amount to complete remaining work. If the transferor enters into escrow agreements with the transferees to complete an approved plan, these funds shall be available to the City of Superior to attain plan compliance. When an approved erosion control plan and, if required, a stormwater management plan is or are not completed as proposed, the City of Superior may use the surety bond to complete remaining work to achieve plan compliance.

## **2.4 PERMITTING REQUIREMENTS, PROCEDURES AND FEES.**

### **2.4.1 Review and Approval of Permit Application.** The following approval procedure shall be used:

- A.** Within 10 business days of the receipt of a complete permit application, as required, the Public Works Department shall inform the applicant whether

the application and plan are approved or disapproved based on the requirements of this ordinance.

- B.** If the permit application and plan are approved, the Public Works Department shall issue the permit.
- C.** If the permit application or plan is disapproved, the Public Works Department shall state in writing the reasons for disapproval.
- D.** The Public Works Department may request additional information from the applicant. If additional information is submitted, the Public Works Department shall have 10 business days from the date the additional information is received to inform the applicant that the plan is either approved or disapproved.
- E.** Failure by the Public Works Department to inform the permit applicant of a decision within 10 business days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.

#### **2.4.2 PERMIT REQUIREMENTS:**

- A.** Notify the Public Works Department within 48 hours of commencing any land disturbing construction activity.
- B.** Notify the Public Works Department within 48 hours of the completion of any BMPs.
- C.** Obtain permission in writing from the Public Works Department prior to any modification of the erosion and sediment control plan.
- D.** Install all BMPs as identified in the approved erosion and sediment control plan.
- E.** Maintain all road drainage systems, stormwater drainage systems, BMPs and other facilities identified in the erosion and sediment control plan.
- F.** Repair any erosion damage to adjoining surfaces and drainage ways resulting from land disturbing construction activities.
- G.** Inspect the BMPs within 24 hours after each rain of 0.5 inches or more which results in runoff during active construction periods and at least once each week. Make any necessary repairs.
- H.** Allow the Public Works Department to enter the site for the purpose of inspecting compliance with the erosion and sediment control plan or for performing any work necessary to bring the site into compliance with the control plan. Keep a copy of the erosion and sediment control plan at the construction site.

- 2.4.3 PERMIT CONDITIONS.** Permits issued under this section may include conditions established by Public Works Department.
- 2.4.4 DURATION.** The duration of permits issued under this section shall be valid for a period appropriate to the type of work and the permit issued (varies). The Public Works Department may allow permit extensions as determined appropriate. The Public Works Department may require additional BMPs as a condition of the extension if they are necessary to meet the requirements of this ordinance.

## **2.5 ESC PLAN AND AMENDMENTS.**

### **2.5.1 Erosion and Sediment Control Plan**

- A.** The erosion and sediment control plan shall be designed to meet the performance standards of SPS 360.20.
- B.** The plan requirements of this subsection must meet the erosion control plan submittal requirements of s. NR 216.46 (4) and (5), and SPS 360.13 (1), Wis. Adm. Code, and be prepared in accordance with good engineering practices and design criteria, standards and specifications approved by the WDNR.
- C.** Any land disturbing activity regardless of size that, in the opinion of the City of Superior Public Works Department, has the potential to result in runoff that exceeds the safe capacity of the existing drainage facilities or receiving body of water, that causes undue channel erosion, that increases water pollution by scouring or the transportation of particulate matter or that endangers property or public safety, shall be required to submit a full erosion and sediment control plan.
- D.** Any land disturbing activity regardless of size that requires the stabilization of slopes in excess of 12% shall be required to submit a full erosion and sediment control plan.

### **2.5.2 SIMPLIFIED EROSION AND SEDIMENT CONTROL PLAN**

- A.** For each construction site with land disturbing construction activities of less than 10,000 square feet, a simplified erosion and sediment control plan shall be prepared as described below. This simplified plan shall be submitted to the Building Inspection Division of Public Works Department.
- B.** The simplified erosion and sediment control plan shall be designed to meet the performance standards of SPS 360.20.
- C.** The simplified erosion and sediment control plan must consist of the following at a minimum:
  - 1.** A brief narrative description of the construction site.
  - 2.** Limits of disturbed area.
  - 3.** Limits of existing and proposed impervious area.
  - 4.** Location of all erosion control measures to be installed, including a dewatering plan as needed.

5. Existing and proposed culvert sizes.
6. Topographical features and the existing and proposed direction of flow of runoff.
7. Time schedules for stabilization of ditches and slopes.
8. Existing and proposed stormwater discharge point locations.

D. The use of the form in Appendix A is intended to help ensure these requirements are met.

### **2.5.3 AMENDMENTS.**

A. Any proposed modifications to approved plans, construction schedules or alterations to accepted sequencing of land disturbing site activities shall be approved by the City of Superior prior to implementation of said changes.

## **2.6 VARIANCES.**

**2.6.1** No variance shall be granted unless applicant demonstrates and the City of Superior finds that all of the following conditions are present:

**2.6.2** Enforcement of the standard set for in this document will result in unnecessary hardship to the landowner;

**2.6.3** The hardship is due to exceptional physical conditions unique to the property;

**2.6.4** Granting the variance will not adversely affect the public health, safety or welfare, nor be contrary to the spirit, purpose and intent of this document;

**2.6.5** The project will have no adverse impact upon any of the stated purposes of this document.

**2.6.6** The applicant has proposed an alternative to the requirement from which the variance is sought that will provide protection of the public health, safety and welfare of the environment and public and private property to the maximum extent practicable;

**2.6.7** The net cumulative effect of the variance will not impact downstream conditions.

**2.6.8** A variance may only be granted to the minimum extent necessary to afford relief from the unnecessary hardship with primary consideration to water quality.



**APPENDIX A: Standard Erosion Control Plan for 1 & 2 Family  
Dwelling Construction Sites**

# Standard Erosion Control Plan for 1- & 2-Family Dwelling Construction Sites

According to Chapters SPS 320 & 321 of the Wisconsin Uniform Dwelling Code, soil erosion control information needs to be included on the plot plan which is submitted and approved prior to the issuance of building permits for 1- & 2-family dwelling units in those jurisdictions where the soil erosion control provisions of the Uniform Dwelling Code are enforced. This Standard Erosion Control Plan is provided to assist in meeting this requirement.

**Instructions:**

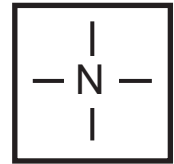
1. Complete this plan by filling in requested information, completing the site diagram and marking appropriate boxes on the inside of this form.
2. In completing the site diagram, give consideration to potential erosion that may occur before, during, and after grading. Water runoff patterns can change significantly as a site is reshaped.
3. Submit this plan at the time of building permit application.

PROJECT LOCATION \_\_\_\_\_

BUILDER \_\_\_\_\_ OWNER \_\_\_\_\_

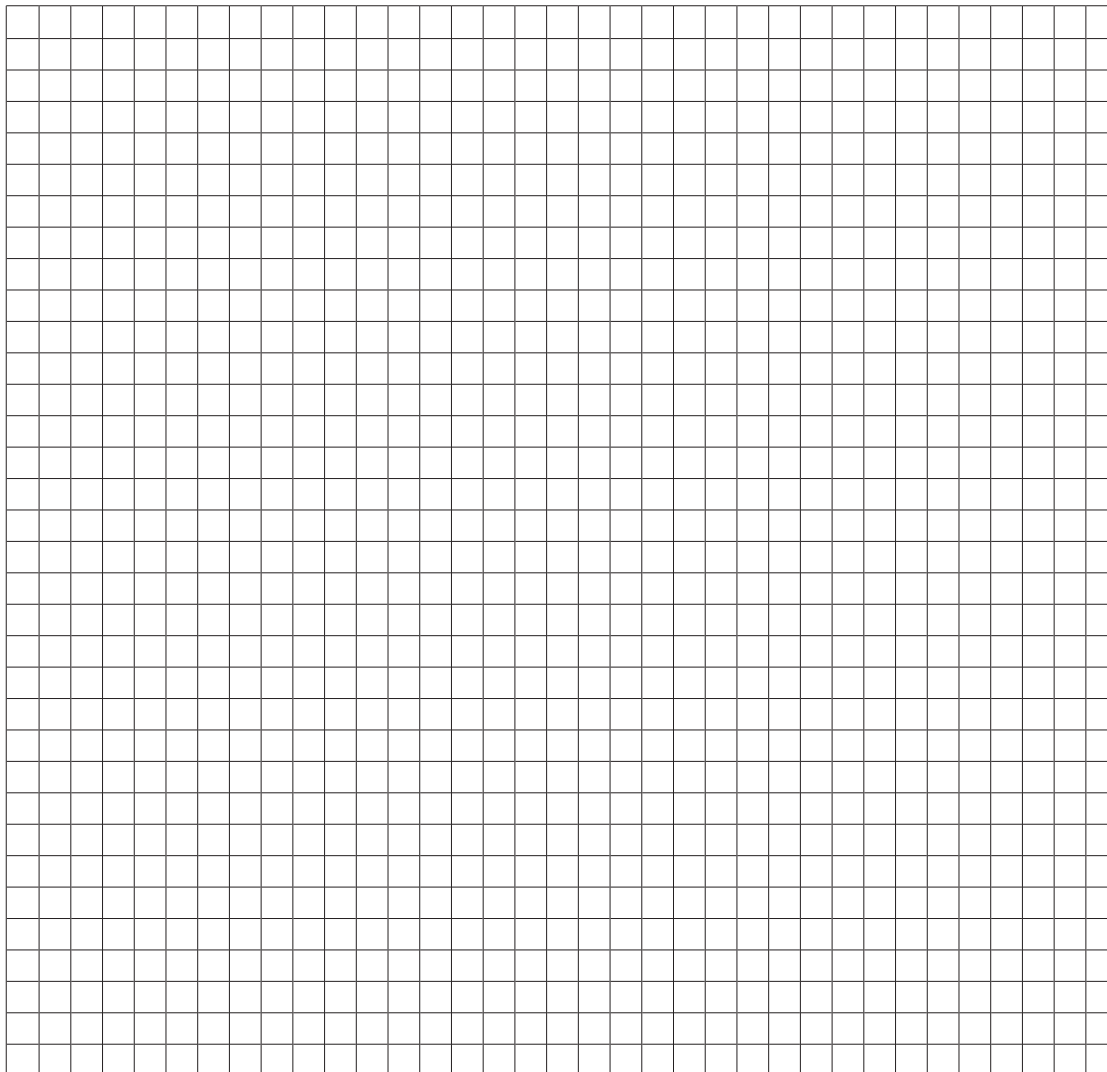
WORKSHEET COMPLETED BY \_\_\_\_\_ DATE \_\_\_\_\_

Please indicate north by completing the arrow.



**SITE DIAGRAM**

Scale: 1 inch = \_\_\_\_ feet



**EROSION CONTROL PLAN LEGEND**

--- PROPERTY LINE

—▶ EXISTING DRAINAGE

—▶ TD TEMPORARY DIVERSION

—▶ FINISHED DRAINAGE

--- LIMITS OF GRADING

—■ SILT FENCE

—● STRAW BALES

GRAVEL

VEGETATION SPECIFICATION

TREE PRESERVATION

STOCKPILED SOIL

COMPLETED

NOT APPLICABLE

# EROSION CONTROL PLAN CHECKLIST

Check (✓) appropriate boxes below, and complete the site diagram with necessary information.

## Site Characteristics

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | North arrow, scale, and site boundary. Indicate and name adjacent streets or roadways. |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of existing drainageways, streams, rivers, lakes, wetlands or wells.          |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of storm sewer inlets.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of existing and proposed buildings and paved areas.                           |
| <input type="checkbox"/> | <input type="checkbox"/> | The disturbed area on the lot.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Approximate gradient and direction of slopes before grading operations.                |
| <input type="checkbox"/> | <input type="checkbox"/> | Approximate gradient and direction of slopes after grading operations.                 |
| <input type="checkbox"/> | <input type="checkbox"/> | Overland runoff (sheet flow) coming onto the site from adjacent areas.                 |

## Erosion Control Practices

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Location of temporary soil storage piles.<br>Note: Soil storage piles should be placed behind a sediment fence, a 10 foot wide vegetative strip, or should be covered with a tarp or more than 25 feet from any downslope road or drainageway.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of access drive(s).<br>Note: Access drive should have 2 to 3 inch aggregate stone laid at least 7 feet wide and 6 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).   |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of sediment controls (filter fabric fence, straw bale fence or 10-foot-wide vegetative strip) that will prevent eroded soil from leaving the site.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of sediment barriers around on-site storm sewer inlets.   |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of diversions.<br>Note: Although not specifically required by code, it is recommended that concentrated flow (drainageways) be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. should also be diverted around disturbed areas.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of practices that will be applied to control erosion on steep slopes (greater than 12% grade).<br>Note: Such practices include maintaining existing vegetation, placement of additional sediment fences, diversions, and re-vegetation by sodding or seeding with use of erosion control mats.  |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of practices that will control erosion on areas of concentrated runoff flow.<br>Note: Unstabilized drainageways, ditches, diversions, and inlets should be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock rip-rap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year round flow). |
| <input type="checkbox"/> | <input type="checkbox"/> | Location of other planned practices not already noted.   |

COMPLETED

NOT APPLICABLE

Indicate management strategy by checking (✓) the appropriate box.

## Management Strategies

Temporary stabilization of disturbed areas.

Note: It is recommended that disturbed areas and soil piles left inactive for extended periods of time be stabilized by seeding (between April 1 and September 15), or by other cover, such as tarping or mulching.

Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment).

- Indicate re-vegetation method:  Seed  Sod  Other \_\_\_\_\_
- Expected date of permanent re-vegetation: \_\_\_\_\_
- Re-vegetation responsibility of:  Builder  Owner/Buyer
- Is temporary seeding or mulching planned if site is not seeded by Sept. 15 or sodded by Nov. 15?  Yes  No

Use of downspout and/or sump pump outlet extensions.

Note: It is recommended that flow from downspouts and sump pump outlets be routed through plastic drainage pipe to stable areas such as established sod or pavement.

Trapping sediment during de-watering operations.

Note: Sediment-laden discharge water from pumping operations should be ponded behind a sediment barrier until most of the sediment settles out.

Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.

Maintenance of erosion control practices.

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the height of the barrier.
- Breaks and gaps in sediment fences and barriers will be repaired immediately. Decomposing straw bales will be replaced (typical bale life is three months).
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

# EROSION CONTROL REGULATIONS

Erosion control and stormwater regulations can be complex. Local, state and, in some cases, federal regulations may apply. Before construction make sure you have the appropriate permits.

## LOCAL ORDINANCES

Check with your county, city, village, or town for any local erosion control ordinances including shoreland zoning requirements. Except for new 1- & 2-family dwellings, local ordinances may be more strict than state regulations. They may also require erosion control on construction projects not affected by state or federal regulations.

## UNIFORM DWELLING CODE (DEPT. OF COMMERCE)

### CONTROLS REQUIRED

- Silt fences, straw bales, or other approved perimeter measures along downslope sides and side slopes.
- Access drive.
- Straw bales, filter fabric fences or other barriers to protect on-site sewer inlets.
- Additional controls if needed for steep slopes or other special conditions.

### FOR MORE INFORMATION, CONTACT:

- Local building inspector
- Department of Commerce, Safety and Buildings Division, P.O. Box 7970, Madison, Wis. 53707-7970, (608) 267-5113.

## STORMWATER PERMIT (DEPT. OF NATURAL RESOURCES)

### CONTROLS REQUIRED

- Erosion control measures specified in the *Wisconsin Construction Site Best Management Practice Handbook*.
- Measures to control storm water after construction.

### FOR MORE INFORMATION, CONTACT

- Department of Natural Resources, Storm Water Permits, P.O. 7921, Madison, WI 53707-7921, (608) 267-7694.

For more assistance on plan preparation, refer to the Wisconsin Uniform Dwelling Code, the DNR *Wisconsin Construction Site Best Management Handbook*, and UW-Extension publication *Erosion Control for Home Builders*. The *Wisconsin Uniform Dwelling Code* and the *Wisconsin Construction Site Best Management Handbook* are available through the State of Wisconsin Document Sales, (608) 266-3358.

*Erosion Control for Home Builders* (GWQ001) can be ordered through Extension Publications, (608) 262-3346 or the Department of Commerce, (608) 267-4405. A PDF version of *Erosion Control for Home Builders* (GWQ001) and *Standard Erosion Control Plan* are also available at <http://clean-water.uwex.edu/pubs/sheets>

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**GWQ001A Standard Erosion Control Plan for 1 & 2 Family Dwelling Construction Sites**

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