

North Sioux City, South Dakota Stormwater Ordinance

Ordinance No. _____

<u>SECTION</u>	<u>PAGES</u>
I. Erosion and Sediment Control	1 - 6
II. Illicit Discharges and Connections	7 - 15
III. Post Construction Stormwater Runoff Control	16 - 33
IV. Groundwater Protection Overlay District	34 - 39
V. Stormwater Control Operation and Maintenance	40 - 41

APPENDIX

Groundwater Protection Overlay District Map
Erosion & Sediment Control Guidance Manual for Small Sites
Notice of Intent (NOI)
Notice of Termination (NOT)

Approved by: _____

Date: _____

I. Erosion and Sediment Control

Table of Contents:

- Section 1. Introduction/Purpose
- Section 2. Definitions
- Section 3. Permits
- Section 4. Review and Approval
- Section 5. Erosion and Sediment Control Plan
- Section 6. Design Requirements
- Section 7. Inspection
- Section 8. Enforcement
- Section 9. Separability

Section 1. Introduction/Purpose

The purpose of this local regulation is to safeguard persons, protect property, and prevent damage to the environment in North Sioux City. This ordinance will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity that disturbs or breaks the topsoil or results in the movement of earth on land in North Sioux City.

During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers and ditches and the dredging of lakes. In addition, clearing and grading during construction causes the loss of native vegetation necessary for terrestrial and aquatic habitat.

Section 2. Definitions

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| Contractor | The person who will be responsible to inspect and maintain erosion and sediment control practices. |
| Clearing | Any activity that removes the vegetative surface cover. |
| Drainage Way | Any channel that conveys surface runoff throughout the site. |
| Erosion Control | A measure that prevents erosion. |
| Erosion and Sediment Control Plan | A set of plans prepared by or under the direction of a licensed professional engineer indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction. |
| Grading | Excavation or fill of material, including the resulting conditions thereof. |
| Perimeter Control | A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin. |

Phasing	Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.
Sediment Control	Measures that prevent eroded sediment from leaving the site.
Site	A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.
Site Development Permit	A permit issued by the municipality for the construction or alteration of ground improvements and structures for the control of erosion, runoff, and grading.
Pollution Prevention Plan	A written plan to provide measures to be implemented to control pollution that may result from an activity.
Stabilization	The use of practices that prevent exposed soil from eroding.
Start of Construction	The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.
Watercourse	Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water within North Sioux City.
Waterway	A channel that directs surface runoff to a watercourse or to the public storm drain.

Section 3. Permits

- A) No person shall be granted a site development permit for a land-disturbing activity that would require the uncovering of *2,000 or more square feet* without the approval of an Erosion and Sediment Control Plan by North Sioux City. Activities that disturb over 1 acre shall also provide a Notice of Intent, Erosion and Sediment Control Plan, and Pollution Prevention Plan to the South Dakota Department of Environment and Natural Resources.
- B) No site development permit is required for the following activities:
 - 1) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
 - 2) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
- C) Each application shall bear the name(s) and address(es) of the owner or developer of the site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm and shall be accompanied by an application for a building permit.
- D) Each application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with the Erosion and Sediment Control Plan and that a contractor shall be on site on all days when construction or grading activity takes place.

- E) The applicant will be required to file with North Sioux City a faithful performance bond, letter of credit, or other improvement security in an amount deemed sufficient by North Sioux City to cover all costs of improvements, landscaping, maintenance of improvements for such period as specified by North Sioux City, and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site.

Section 4. Review and Approval

- A) North Sioux City will review each application for a site development permit to determine its conformance with the provisions of this regulation. After receiving an application, North Sioux City will either:
 - 1) Approve the permit application;
 - 2) Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
- B) Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.
- C) If North Sioux City fails to act on an original or revised application within 30 days the applicant may appeal to the Planning and Zoning Commission.

Section 5. Erosion and Sediment Control Plan

- A) The Erosion and Sediment Control Plan shall include the following:
 - 1) A natural resources map identifying soils, forest cover, and resources protected under other chapters of this code. This map should be at a scale no smaller than 1"=200'.
 - 2) A sequence of construction of the development site, including stripping and clearing; rough grading; construction of utilities, infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation.
 - 3) All erosion and sediment control measures necessary to meet the objectives of this local regulation throughout all phases of construction and after completion of development of the site. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.
 - 4) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching for both temporary and permanent vegetative control measures.
 - 5) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
- B) Modifications to the plan shall be processed and approved or disapproved in the same manner as Section 4 of this regulation, may be authorized by North Sioux City by written authorization to the permittee, and shall include
 - 1) Major amendments of the erosion and sediment control plan submitted to North Sioux City
 - 2) Field modifications of a minor nature

Section 6. Design Requirements

- A) Grading, erosion control practices, sediment control practices, and waterway crossings shall meet the design criteria set forth in the most recent version of the EPA guidelines, and shall be adequate to prevent transportation of sediment from the site to the satisfaction of North Sioux City. Cut and fill slopes shall be *no greater than 2:1*, except as approved by North Sioux City to meet other community or environmental objectives.
- B) Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other chapters of this Code. Clearing techniques that retain natural vegetation and drainage patterns, as described in the EPA guidelines, shall be used to the satisfaction of North Sioux City.
- C) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
- D) Phasing may be required on all sites disturbing greater than 30 acres, with the size of each phase to be established at plan review and as approved by North Sioux City.
- E) Erosion control requirements shall include the following:
 - 1) Soil stabilization shall be completed within *five days* of clearing or inactivity in construction.
 - 2) If seeding or another vegetative erosion control method is used, it shall become established within *two weeks* or North Sioux City may require the site to be reseeded or a nonvegetative option employed.
 - 3) Special techniques that meet the design criteria outlined in the EPA guidelines on steep slopes or in drainage ways shall be used to ensure stabilization.
 - 4) Soil stockpiles must be stabilized, perimeter controlled or covered at the end of each workday.
 - 5) The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction season.
 - 6) Techniques shall be employed to prevent the blowing of dust or sediment from the site.
 - 7) Techniques that divert upland runoff past disturbed slopes shall be employed.
- F) Sediment controls requirements shall include:
 - 1) Settling basins, sediment traps, or tanks and perimeter controls.
 - 2) Settling basins that are designed in a manner that allows adaptation to provide long term stormwater management, if required by North Sioux City.
 - 3) Protection for adjacent properties by the use of a vegetated buffer strip in combination with perimeter controls.
- G) Waterway and watercourse protection requirements shall include:
 - 1) A temporary stream crossing installed and approved by North Sioux City if a wet watercourse will be crossed regularly during construction.
 - 2) Stabilization of the watercourse channel before, during, and after any in-channel work.
 - 3) All on-site stormwater conveyance channels designed according to the criteria outlined in the EPA guidelines.
 - 4) Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.
- H) Construction site access requirements shall include:
 - 1) a temporary access road provided at all sites.
 - 2) other measures required by North Sioux City in order to ensure that sediment is not tracked onto public streets by construction vehicles or washed into storm drains.

Section 7. Inspection

- A) North Sioux City or a designated agent is authorized at its discretion to make inspections as hereinafter required and either may approve that portion of the work completed or notify the permittee wherein the work fails to comply with the Erosion and Sediment Control Plan as approved. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of North Sioux City shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify North Sioux City at least two working days before the following:
- 1) Start of construction
 - 2) Installation of sediment and erosion measures
 - 3) Completion of site clearing
 - 4) Completion of rough grading
 - 5) Completion of final grading
 - 6) Close of the construction season
 - 7) Completion of final landscaping
- B) The permittee or his/her agent shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved Erosion and Sediment Control Plan(s). The purpose of such inspections will be to determine the overall effectiveness of the control plan and the need for additional control measures. All inspections shall be documented in written form and submitted to North Sioux City at the time interval specified in the approved permit.
- C) North Sioux City or its designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed under Paragraph B.

Section 8. Enforcement

- A) Stop-Work Order; Revocation of Permit:
In the event that any person holding a site development permit pursuant to this ordinance violates the terms of the permit or implements site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, North Sioux City may suspend or revoke the site development permit.
- B) Violation and Penalties:
No person shall construct, enlarge, alter, repair, or maintain any grading, excavation, or fill, or cause the same to be done, contrary to or in violation of any terms of this ordinance. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punished by a fine of not more than \$200 per day for each offense and/or imprisonment for a period of time not to exceed 10 days. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this ordinance shall be required to bear the expense of such restoration.

Section 9. Separability

The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

References

Claytor, R. 1997. Practical Tips for Construction Site Phasing. *Watershed Protection Techniques* 2(3): 413-417.

II. Illicit Discharges and Connections

Table of Contents:

Section 1.	Purpose/Intent
Section 2.	Definitions
Section 3.	Applicability
Section 4.	Responsibility for Administration
Section 5.	Severability
Section 6.	Ultimate Responsibility
Section 7.	Discharge Prohibitions
Section 8.	Suspension of MS4 Access
Section 9.	Industrial or Construction Activity Discharges
Section 10.	Monitoring of Discharges
Section 11.	Requirement to Prevent, Control, and Reduce Storm Water Pollutants by the Use of Best Management Practices.
Section 12.	Watercourse Protection
Section 13.	Notification of Spills
Section 14.	Enforcement
Section 15.	Appeal of Notice of Violation
Section 16.	Enforcement Measures After Appeal
Section 17.	Cost of Abatement of the Violation
Section 18.	Injunctive Relief
Section 19.	Compensatory Action
Section 20.	Violations Deemed A Public Nuisance
Section 21.	Criminal Prosecution
Section 22.	Remedies Not Exclusive

SECTION 1. PURPOSE / INTENT.

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of North Sioux City through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process.

The objectives of this ordinance are:

- (1) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
- (2) To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system.
- (3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

SECTION 2. DEFINITIONS.

For the purposes of this ordinance, the following shall mean:

Authorized Enforcement Agency: employees or designees of the City of North Sioux City designated to enforce this ordinance.

Best Management Practices (BMPs): schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act. The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

Construction Activity. Activities subject to NPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

Hazardous Materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Illegal Discharge. Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section X of this ordinance.

Illicit Connections. An illicit connection is defined as either of the following:

Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or,

Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

Industrial Activity. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit. Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-Storm Water Discharge. Any discharge to the storm drain system that is not composed entirely of storm water.

Person. Means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

Pollutant. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Premises. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

Storm Drainage System. Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

Storm Water. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater Pollution Prevention Plan. A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Stormwater, Stormwater Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

Wastewater means any water or other liquid, other than uncontaminated storm water, discharged from a facility.

SECTION 3. APPLICABILITY.

This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

SECTION 4. RESPONSIBILITY FOR ADMINISTRATION.

North Sioux City shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Director of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

SECTION 5. SEVERABILITY.

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Ordinance.

SECTION 6. ULTIMATE RESPONSIBILITY.

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

SECTION 7. DISCHARGE PROHIBITIONS.

Prohibition of Illegal Discharges.

No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

- (a) The following discharges are exempt from discharge prohibitions established by this ordinance: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated - typically less than one PPM chlorine), fire fighting activities, and any other water source not containing Pollutants.
- (b) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.
- (c) Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.
- (d) The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

Prohibition of Illicit Connections.

- (a) The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.
- (b) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (c) A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

SECTION 8. SUSPENSION OF MS4 ACCESS.

A. Suspension due to Illicit Discharges in Emergency Situations

North Sioux City may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

B. Suspension due to the Detection of Illicit Discharge

Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing.

A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the authorized enforcement agency.

SECTION 9. INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to North Sioux City prior to the allowing of discharges to the MS4.

SECTION 10. MONITORING OF DISCHARGES.

A. Applicability.

This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity.

B. Access to Facilities.

- (1) North Sioux City shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.
- (2) Facility operators shall allow the North Sioux City ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.
- (3) North Sioux City shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's storm water discharge.

- (4) North Sioux City has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- (5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of North Sioux City and shall not be replaced. The costs of clearing such access shall be borne by the operator.
- (6) Unreasonable delays in allowing North Sioux City access to a permitted facility is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.
- (7) If North Sioux City has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

SECTION 11. REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

North Sioux City will adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPP) as necessary for compliance with requirements of the NPDES permit.

SECTION 12. WATERCOURSE PROTECTION.

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse.

In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

SECTION 13. NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the City of North Sioux City Building Inspector and the Storm Water Coordinator for the South Dakota Department of Environment and Natural Resources in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to North Sioux City within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

SECTION 14. ENFORCEMENT.

A. Notice of Violation.

Whenever North Sioux City finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The performance of monitoring, analyses, and reporting;
- (2) The elimination of illicit connections or discharges;
- (3) That violating discharges, practices, or operations shall cease and desist;
- (4) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- (5) Payment of a fine to cover administrative and remediation costs; and
- (6) The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

SECTION 15. APPEAL OF NOTICE OF VIOLATION.

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within 5 days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

SECTION 16. ENFORCEMENT MEASURES AFTER APPEAL.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 10 days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

SECTION 17. COST OF ABATEMENT OF THE VIOLATION.

Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 10 days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this article shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of 12 percent per annum shall be assessed on the balance beginning on the 1st day following discovery of the violation.

SECTION 18. INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. If a person has violated or continues to violate the provisions of this ordinance, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

SECTION 19. COMPENSATORY ACTION.

In lieu of enforcement proceedings, penalties, and remedies authorized by this Ordinance, the authorized enforcement agency may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

SECTION 20. VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

SECTION 21. CRIMINAL PROSECUTION.

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of 200 dollars per violation per day and/or imprisonment for a period of time not to exceed 10 days.

The authorized enforcement agency may recover all attorney's fees court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.

SECTION 22. REMEDIES NOT EXCLUSIVE.

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

III. Post-Construction Stormwater Runoff Control

Table of Contents:

- Section 1. General Provisions
- Section 2. Definitions
- Section 3. Permit Procedures and Requirements
- Section 4. Waivers
- Section 5. General Performance Criteria for Stormwater Management
- Section 6. Specific Performance Criteria for Stormwater Treatment Practices
- Section 7. Requirements for Stormwater Management Plan Approval
- Section 8. Construction Inspection Provisions
- Section 9. Maintenance and Repair Requirements
- Section 10. Enforcement and Violations

Section 1. General Provisions

1.1. Findings of Fact

It is hereby determined that:

Land development projects and associated increases in impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition;

This stormwater runoff contributes to increased quantities of water-borne pollutants, and;

Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from development sites.

Therefore, North Sioux City establishes this set of water quality and quantity policies applicable to all surface waters to provide reasonable guidance for the regulation of stormwater runoff for the purpose of protecting local water resources from degradation. It is determined that the regulation of stormwater runoff discharges from land development projects and other construction activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will prevent threats to public health and safety.

1.2. Purpose

The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This ordinance seeks to meet that purpose through the following objectives:

- (1). minimize increases in stormwater runoff from any development in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
- (2). minimize increases in nonpoint source pollution caused by stormwater runoff from development which would otherwise degrade local water quality

- (3). minimize the total annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable.
- (4). reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

1.3. Applicability

This ordinance shall be applicable to all subdivision or site plan applications, unless eligible for an exemption or granted a waiver by North Sioux City under the specifications of Section 4 of this ordinance. The ordinance also applies to land development activities that are smaller than the minimum applicability criteria if such activities are part of a larger common plan of development that meets the following applicability criteria, even though multiple separate and distinct land development activities may take place at different times on different schedules. In addition, all plans must also be reviewed by local environmental protection officials to ensure that established water quality standards will be maintained during and after development of the site and that post construction runoff levels are consistent with any local and regional watershed plans.

To prevent the adverse impacts of stormwater runoff, North Sioux City has developed a set of performance standards that must be met at new development sites. These standards apply to any construction activity disturbing 2,000 or more square feet of land. The following activities may be exempt from these stormwater performance criteria:

1. Any logging and agricultural activity which is consistent with an approved soil conservation plan or a timber management plan prepared or approved by North Sioux City, as applicable.
2. Additions or modifications to existing single family structures
3. Developments that do not disturb more than 2,000 square feet of land, provided they are not part of a larger common development plan;
4. Repairs to any stormwater treatment practice deemed necessary by North Sioux City.

When a site development plan is submitted that qualifies as a redevelopment project as defined in Section 2 of this ordinance, decisions on permitting and on-site stormwater requirements shall be governed by special stormwater sizing criteria as provided by the City of North Sioux City. This criteria is dependent on the amount of impervious area created by the redevelopment and its impact on water quality. Final authorization of all redevelopment projects will be determined after a review by North Sioux City.

1.4. Compatibility with Other Permit and Ordinance Requirements

This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

1.5. Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this ordinance shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this ordinance.

1.6. Development of a Erosion & Sediment Control Guidance Manual

North Sioux City will furnish additional policy, criteria and information for the proper implementation of the requirements of this ordinance.

This manual will include a list of acceptable stormwater treatment practices, including the operation and maintenance requirements. The manual may be updated and expanded from time to time, at the discretion of the local review authority, based on improvements in engineering, science, monitoring and local maintenance experience. Stormwater treatment practices that are constructed in accordance with these criteria will be presumed to meet the minimum water quality performance standards.

Section 2. Definitions

“Accelerated Erosion” means erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away by the action of water, wind, or chemical action.

“Applicant” means a property owner or agent of a property owner who has filed an application for a stormwater management permit.

“Building” means any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.

“Channel” means a natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

“Dedication” means the deliberate appropriation of property by its owner for general public use.

“Detention” means the temporary storage of storm runoff in a stormwater management practice with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

“Detention Facility” means a detention basin or alternative structure designed for the purpose of temporary storage of stream flow or surface runoff and gradual release of stored water at controlled rates.

“Developer” means a person who undertakes land disturbance activities.

“Drainage Easement” means a legal right granted by a landowner to a grantee allowing the use of private land for stormwater management purposes.

“Erosion and Sediment Control Plan” means a plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

“Fee in Lieu” means a payment of money in place of meeting all or part of the storm water performance standards required by this ordinance.

“Hotspot” means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

“Hydrologic Soil Group (HSG)” means a Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from A soils, with high permeability and little runoff production, to D soils, which have low permeability rates and produce much more runoff.

“Impervious Cover” means those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc).

“Industrial Stormwater Permit” means an National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

“Infiltration” means the process of percolating stormwater into the subsoil.

“Infiltration Facility” means any structure or device designed to infiltrate retained water to the subsurface. These facilities may be above grade or below grade.

“Jurisdictional Wetland” means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

“Land Disturbance Activity” means any activity which changes the volume or peak flow discharge rate of rainfall runoff from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation,, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

“Landowner” means the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

“Maintenance Agreement” means a legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of storm water management practices.

“Nonpoint Source Pollution” means pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

“Offset Fee” means a monetary compensation paid to a local government for failure to meet pollutant load reduction targets.

“Off-Site Facility” means a stormwater management measure located outside the subject property boundary described in the permit application for land development activity.

“On-Site Facility” means a stormwater management measure located within the subject property boundary described in the permit application for land development activity.

“Recharge” means the replenishment of underground water reserves.

“Redevelopment” means any construction, alteration or improvement exceeding 2,000 square feet in areas where existing land use is high density commercial, industrial, institutional or multi-family residential.

“Stop Work Order” means an order issued which requires that all construction activity on a site be stopped.

“Storm Water Management” means the use of structural or non-structural practices that are designed to reduce storm water runoff pollutant loads, discharge volumes, peak flow discharge rates and detrimental changes in stream temperature that affect water quality and habitat.

“Storm Water Retrofit” means a stormwater management practice designed for an existing development site that previously had either no stormwater management practice in place or a practice inadequate to meet the stormwater management requirements of the site.

“Stormwater Runoff” means flow on the surface of the ground, resulting from precipitation.

“Stormwater Treatment Practices (STPs)” means measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

“Water Quality Volume (WQ_v)” means the storage needed to capture and treat 90% of the average annual stormwater runoff volume. Numerically (WQ_v) will vary as a function of long term rainfall statistical data.

“Watercourse” means a permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

Section 3. Permit Procedures and Requirements

3.1. Permit Required.

No land owner or land operator shall receive any of the building, grading or other land development permits required for land disturbance activities without first meeting the requirements of this ordinance prior to commencing the proposed activity.

3.2. Application Requirements

Unless specifically excluded by this ordinance, any land owner or operator desiring a permit for a land disturbance activity shall submit to North Sioux City a permit application on a form provided for that purpose.

Unless otherwise accepted by this ordinance, a permit application must be accompanied by the following in order that the permit application be considered: a stormwater management concept plan; a maintenance agreement; and a non-refundable permit review fee.

The stormwater management plan shall be prepared to meet the requirements of Sec. 5 of this ordinance, the maintenance agreement shall be prepared to meet the requirements of Sec. 9 of this ordinance, and fees shall be those established by North Sioux City.

3.3. Application Review Fees

The fee for review of any land development application shall be based on the amount of land to be disturbed at the site, and the fee structure shall be established by North Sioux City. All of the monetary contributions shall be credited to a local budgetary category to support local plan review, inspection and program administration, and shall be made prior to the issuance of any building permit for the development.

3.4. Application Procedure

- 1) Applications for land disturbance activity permits must be filed with North Sioux City on any regular business day.
- 2) A copy of this permit application shall be forwarded to North Sioux City for review.
- 3) Permit applications shall include the following: two copies of the stormwater management concept plan, two copies of the maintenance agreement, and any required review fees.
- 4) North Sioux City shall inform the applicant whether the application, plan and maintenance agreement are approved or disapproved.
- 5) If the permit application, stormwater management plan or maintenance agreement are disapproved, the applicant may revise the stormwater management plan or agreement.
- 6) If the permit application, final stormwater management plan and maintenance agreement are approved by North Sioux City, all appropriate land disturbance activity permits shall be issued.

3.5. Permit Duration

Permits issued under this section shall be valid from the date of issuance through the date North Sioux City notifies the permit holder that all stormwater management practices have passed the final inspection required under permit condition.

Section 4. Waivers to Stormwater Management Requirements

4.1. Waivers for Providing Stormwater Management

Every applicant shall provide for stormwater management as required by this ordinance, unless a written request is filed to waive this requirement. Requests to waive the stormwater management plan requirements shall be submitted to North Sioux City for approval.

The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions applies:

1. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this ordinance.
2. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by North Sioux City and the implementation of the plan is required by local ordinance.
3. Provisions are made to manage stormwater by an off-site facility. The off-site facility is required to be in place, to be designed and adequately sized to provide a level of stormwater control that is equal to or greater than that which would be afforded by on-site practices and there is a legally obligated entity responsible for long-term operation and maintenance of the stormwater practice.
4. North Sioux City finds that meeting the minimum on-site management requirements is not feasible due to the natural or existing physical characteristics of a site.
5. Non-structural practices will be used on the site that reduce: a) the generation of stormwater from the site, b) the size and cost of stormwater storage and c) the pollutants generated at the site. These non-structural practices are explained in detail in the current design manual and the amount of credit available for using such practices shall be determined by North Sioux City.

In instances where one of the conditions above applies, North Sioux City may grant a waiver from strict compliance with these stormwater management provisions, as long as acceptable mitigation measures are provided. However, to be eligible for a variance, the applicant must demonstrate to the satisfaction of North Sioux City that the variance will not result in the following impacts to downstream waterways:

- Deterioration of existing culverts, bridges, dams, and other structures;
- Degradation of biological functions or habitat;
- Accelerated streambank or streambed erosion or siltation;
- Increased threat of flood damage to public health, life, property.

Furthermore, where compliance with minimum requirements for stormwater management is waived, the applicant will satisfy the minimum requirements by meeting one of the mitigation measures selected by the jurisdictional stormwater authority. Mitigation measures may include, but are not limited to, the following:

- The purchase and donation of privately owned lands, or the grant of an easement to be dedicated for preservation and/or reforestation. These lands should be located adjacent to the stream corridor in order to provide permanent buffer areas to protect water quality and aquatic habitat,
- The creation of a stormwater management facility or other drainage improvements on previously developed properties, public or private, that currently lack stormwater management facilities designed and constructed in accordance with the purposes and standards of this ordinance,
- Monetary contributions (Fee-in-Lieu) to fund stormwater management activities such as research and studies (e.g., regional wetland delineation studies, stream monitoring studies for water quality and macroinvertebrates, stream flow monitoring, threatened and endangered species studies, hydrologic studies, and monitoring of stormwater management practices.

4.2. Fee in Lieu of Stormwater Management Practices.

Where North Sioux City waives all or part of the minimum stormwater management requirements, or where the waiver is based on the provision of adequate stormwater facilities provided downstream of the proposed development, the applicant shall be required to pay a fee in an amount as determined by North Sioux City.

When an applicant obtains a waiver of the required stormwater management, the monetary contribution required shall be in accordance with a fee schedule (unless the developer and the stormwater authority agree on a greater alternate contribution) established by North Sioux City, and based on the cubic feet of storage required for stormwater management of the development in question. All of the monetary contributions shall be credited to an appropriate capital improvements program project, and shall be made by the developer prior to the issuance of any building permit for the development.

4.3. Dedication of land

In lieu of a monetary contribution, an applicant may obtain a waiver of the required stormwater management by entering into an agreement with North Sioux City for the granting of an easement or the dedication of land by the applicant, to be used for the construction of an off-site stormwater management facility. The agreement shall be entered into by the applicant and North Sioux City prior to the recording of plats or, if no record plat is required, prior to the issuance of the building permit.

Section 5. General Performance Criteria for Stormwater Management

Unless judged by North Sioux City to be exempt or granted a waiver, the following performance criteria shall be addressed for stormwater management at all sites:

- (A). All site designs shall establish stormwater management practices to control the peak flow rates of stormwater discharge associated with specified design storms and reduce the generation of stormwater. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
- (B). All stormwater runoff generated from new development shall not discharge untreated stormwater directly into a jurisdictional wetland or local water body without adequate treatment. Where such

discharges are proposed, the impact of the proposal on wetland functional values shall be assessed using a method acceptable to North Sioux City. In no case shall the impact on functional values be any less than allowed by the Army Corp of Engineers (ACE) or the South Dakota Department of Environment and Natural Resources (DENR) responsible for natural resources.

- (C). Annual groundwater recharge rates shall be maintained, by promoting infiltration through the use of structural and non-structural methods. At a minimum, annual recharge from the post development site shall mimic the annual recharge from pre-development site conditions.
- (D). For new development, structural stormwater treatment practices shall be designed to remove 90 % of the average annual post development total suspended solids load (TSS). It is presumed that a STP complies with this performance standard if it is:
 - sized to capture the prescribed water quality volume (WQ_v).
 - designed according to the best available criteria provided in the literature,
 - constructed properly, and
 - maintained regularly.
- (E). To protect stream channels from degradation, a specific channel protection criteria shall be provided as prescribed in the current stormwater manual.
- (F). Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
- (G). Certain industrial sites are required to prepare and implement a stormwater pollution prevention plan, and shall file a notice of intent (NOI) under the provisions of the National Pollutant Discharge Elimination System (NPDES) general permit. The stormwater pollution prevention plan requirement applies to both existing and new industrial sites.
- (H). Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as “hotspots”, may require the use of specific structural STPs and pollution prevention practices.
- (I). Prior to design, applicants are required to consult with North Sioux City to determine if they are subject to additional stormwater design requirements.
- (J). The calculations for determining peak flows by the SCS TR55 shall be used for sizing all stormwater management practices.

Section 6. Basic Stormwater Management Design Criteria

6.1. Minimum Control Requirements

All stormwater management practices will be designed so that the specific storm frequency storage volumes (100 year) are met, unless North Sioux City grants the applicant a waiver or the applicant is exempt from such requirements.

In addition, if hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, North Sioux City reserves the right to impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.

6.2 Site Design Feasibility

Stormwater management practices for a site shall be chosen based on the physical conditions of the site. Among the factors that should be considered:

1. Topography
2. Maximum Drainage Area
3. Depth to Water Table
4. Soils
5. Slopes
6. Terrain
7. Head
8. Location in relation to environmentally sensitive features or ultra-urban areas.

(Applicants shall consult the Erosion & Sediment Control Guidance Manual for guidance on the factors that determine feasibility when selecting a stormwater management practice for small sites. Other information is available in the literature for larger sites).

6.3 Conveyance Issues

All stormwater management practices shall be designed to convey stormwater to allow for the maximum removal of pollutants and reduction in flow velocities. This shall include, but not be limited to:

1. Maximizing of flowpaths from inflow points to outflow points
 2. Protection of inlet and outfall structures
 3. Elimination of erosive flow velocities
- Providing of underdrain systems, where applicable.

6.4 Pretreatment Requirements

Every stormwater treatment practice shall have an acceptable form of water quality pretreatment. Certain stormwater treatment practices are prohibited even with pretreatment in the following circumstances:

1. Stormwater is generated from highly contaminated source areas known as “hotspots”
2. Stormwater is carried in a conveyance system that also carries contaminated, non- stormwater discharges
3. Stormwater is being managed in a designated groundwater recharge area.
4. Certain geologic conditions exist (e.g., karst) that prohibit the proper pretreatment of stormwater.

6.5 Treatment/Geometry Conditions

All stormwater management practices shall be designed to capture and treat stormwater runoff. These specifications will designate the water quantity and quality treatment criteria that apply to an approved stormwater management practice.

6.6 Landscaping Plans Required

All stormwater management practices must have a landscaping plan detailing both the vegetation to be in the practice and how and who will manage and maintain this vegetation. This plan must be prepared by a registered landscape architect or soil conservation district.

6.7. Maintenance Agreements

All stormwater treatment practices shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement will include any and all maintenance easements required to access and inspect the stormwater treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater treatment practice. In addition, a legally binding covenant specifying the parties responsible for the proper maintenance of all stormwater treatment practices shall be secured prior to issuance of any permits for land disturbance activities.

6.8. Non-Structural Stormwater Practices

The use of non-structural stormwater treatment practices is encouraged in order to minimize the reliance on structural practices. Credit in the form of reductions in the amount of stormwater that must be managed can be earned through the use of non-structural practices that reduce the generation of stormwater from the site. These non-structural practices are explained in detail in the current design manual and applicants wishing to obtain credit for use of non-structural practices must ensure that these practices are documented and remain unaltered by subsequent property owners.

Section 7. Requirements for Stormwater Management Plan Approval

7.1. Stormwater Management Plan Required for All Developments.

No application for development will be approved unless it includes a stormwater management plan detailing in concept how runoff and associated water quality impacts resulting from the development will be controlled or managed. This plan must be prepared by an individual responsible to North Sioux City and must indicate whether stormwater will be managed on-site or off-site and, if on-site, the general location and type of practices.

The stormwater management plan(s) shall be referred for comment to all other interested agencies, and any comments must be addressed in a final stormwater management plan. This final plan must be signed by a licensed professional engineer (PE), who will verify that the design of all stormwater management practices meet the submittal requirements outlined in the Checklist found in Section 7.3 Final Stormwater Management Plan Requirements. No building, grading, or sediment control permit shall be issued until a satisfactory final stormwater management plan, or a waiver thereof, shall have undergone a review and been approved by North Sioux City after determining that the plan or waiver is consistent with the requirements of this ordinance.

7.2. Stormwater Management Concept Plan Requirements

A stormwater management concept plan shall be required with all permit applications and will include sufficient information (e.g., maps, hydrologic calculations, etc) to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. The intent of this conceptual planning process is to determine the type of stormwater management measures necessary for the proposed project, and ensure adequate planning for management of stormwater runoff from future development. To accomplish this goal the following information shall be included in the concept plan:

1. A map (or maps) indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural stormwater management and sediment control facilities. The map(s) will also clearly show proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading; A written description of the site plan and justification of proposed changes in natural conditions may also be required.
2. Sufficient engineering analysis to show that the proposed stormwater management measures are capable of controlling runoff from the site in compliance with this ordinance.
3. A written or graphic inventory of the natural resources at the site and surrounding area as it exists prior to the commencement of the project and a description of the watershed and its relation to the project site. This description should include a discussion of soil conditions, forest cover, topography, wetlands, and other native vegetative areas on the site. Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.
4. A written description of the required maintenance burden for any proposed stormwater management facility.
5. North Sioux City may also require a concept plan to consider the maximum development potential of a site under existing zoning, regardless of whether the applicant presently intends to develop the site to its maximum potential.

For development or redevelopment occurring on a previously developed site, an applicant shall be required to include within the stormwater concept plan measures for controlling existing stormwater runoff discharges from the site in accordance with the standards of this Ordinance to the maximum extent practicable

7.3. Final Stormwater Management Plan Requirements

After review of the stormwater management concept plan, and modifications to that plan as deemed necessary by North Sioux City, a final stormwater management plan must be submitted for approval. The final stormwater management plan, in addition to the information from the concept plan, shall include all of the information required in the Final Stormwater Management Plan Checklist. This includes:

1. Contact Information
The name, address, and telephone number of all persons having a legal interest in the property and the tax reference number and parcel number of the property or properties affected.
2. Topographic Base Map
A 1" = 200' topographic base map of the site which extends a minimum of 1,000 feet beyond the limits of the proposed development and indicates existing surface water drainage including streams, ponds, culverts, ditches, and wetlands; current land use including all existing structures; locations of utilities, roads, and easements; and significant natural and manmade features not otherwise shown.
3. Calculations
Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in this ordinance. Such calculations shall include
 - a. description of the design storm frequency, intensity and duration,
 - b. time of concentration,
 - c. Soil Curve Numbers or runoff coefficients,
 - d. peak runoff rates and total runoff volumes for each watershed area,

- e. infiltration rates, where applicable,
- f. culvert capacities,
- g. low velocities,
- h. data on the increase in rate and volume of runoff for the design storms, and
- i. documentation of sources for all computation methods and field test results.

4. **Soils Information**

If a stormwater management control measure depends on the hydrologic properties of soils (e.g., infiltration basins), then a soils report shall be submitted. The soils report shall be based on on-site boring logs or soil pit profiles. The number and location of required soil borings or soil sites shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure.

5. **Maintenance and Repair Plan**

The design and planning of all stormwater management facilities shall include detailed maintenance and repair procedures to ensure their continued function. These plans will identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.

a. **Landscaping plan**

The applicant must present a detailed plan for management of vegetation at the site after construction is finished, including who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved. This plan must be prepared by a registered landscape architect, registered engineer or by the soil conservation district.

b. **Maintenance Easements**

The applicant must ensure access to all stormwater treatment practices at the site for the purpose of inspection and repair by securing all the maintenance easements needed on a permanent basis. These easements will be recorded with the plan and will remain in effect even with transfer of title to the property.

c. **Maintenance Agreement**

The applicant must execute an easement and an inspection and maintenance agreement binding on all subsequent owners of land served by an on-site stormwater management measure in accordance with the specifications of this ordinance.

d. **Erosion and Sediment Control Plans for Construction of Stormwater Management Measures.**

The applicant must prepare an erosion and sediment control plan for all construction activities related to implementing any on-site stormwater management practices.

e. **Other Environmental Permits**

The applicant shall assure that all other applicable environmental permits have been acquired for the site prior to approval of the final stormwater design plan.

7.4. Performance Bond/Security

North Sioux City may, at its discretion, require the submittal of a performance security or bond prior to issuance of a permit in order to insure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance security shall be the total estimated construction cost of the stormwater management practices approved under the

permit, plus 25%. The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan.

The installation performance security shall be released in full only upon submission of "as built plans" and written certification by a registered professional engineer that the stormwater practice has been installed in accordance with the approved plan and other applicable provisions of this ordinance. North Sioux City will make a final inspection of the stormwater practice to ensure that it is in compliance with the approved plan and the provisions of this ordinance. Provisions for a partial pro-rata release of the performance security based on the completion of various development stages can be done at the discretion of North Sioux City.

Section 8. Construction Inspection

8.1. Notice of Construction Commencement

The applicant must notify North Sioux City in advance before the commencement of construction. Regular inspections of the stormwater management system construction shall be conducted by the staff of North Sioux City or certified by a professional engineer or their designee who has been approved by the jurisdictional stormwater authority. All inspections shall be documented and written reports prepared that contain the following information:

1. The date and location of the inspection;
2. Whether construction is in compliance with the approved stormwater management plan
3. Variations from the approved construction specifications
4. Any violations that exist

If any violations are found, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. No added work shall proceed until any violations are corrected and all work previously completed has received approval by North Sioux City.

8.2. As Built Plans

All applicants are required to submit actual "as built" plans for any stormwater management practices located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer. A final inspection by North Sioux City is required before the release of any performance securities can occur.

8.3. Landscaping and Stabilization Requirements

Any area of land from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be revegetated within ten (10) days from the substantial completion of such clearing and construction. The following criteria shall apply to revegetation efforts:

Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.

Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.

Any area of revegetation must exhibit survival of a minimum of seventy-five percent (75%) of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five percent (75%) survival for one (1) year is achieved.

In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved. This plan must be prepared by a registered landscape architect or by the soil conservation district, and must be approved prior to receiving a permit.

Section 9. Maintenance and Repair of Stormwater Facilities

9.1. Maintenance Easement

Prior to the issuance of any permit that has an stormwater management facility as one of the requirements of the permit, the applicant or owner of the site must execute a maintenance easement agreement that shall be binding on all subsequent owners of land served by the stormwater management facility. The agreement shall provide for access to the facility at reasonable times for periodic inspection by North Sioux City, or their contractor or agent, and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this ordinance. The easement agreement shall be recorded by North Sioux City in the land records.

9.2. Maintenance Covenants

Maintenance of all stormwater management facilities shall be ensured through the creation of a formal maintenance covenant that must be approved by North Sioux City and recorded into the land record prior to final plan approval. As part of the covenant, a schedule shall be developed for when and how often maintenance will occur to ensure proper function of the stormwater management facility. The covenant shall also include plans for periodic inspections to ensure proper performance of the facility between scheduled cleanouts.

North Sioux City, in lieu of an maintenance covenant, may accept dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this chapter and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

9.3. Requirements for Maintenance Covenants

All stormwater management facilities must undergo, at the minimum, an annual inspection to document maintenance and repair needs and ensure compliance with the requirements of this ordinance and accomplishment of its purposes. These needs may include; removal of silt, litter and other debris from all catch basins, inlets and drainage pipes, grass cutting and vegetation removal, and necessary replacement of landscape vegetation. Any maintenance needs found must be addressed in a timely manner, as determined by North Sioux City, and the inspection and maintenance requirement may be increased as deemed necessary to ensure proper functioning of the stormwater management facility.

9.4. Inspection of Stormwater Facilities

Inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater treatment practices.

9.5. Right-of-Entry for Inspection

When any new drainage control facility is installed on private property, or when any new connection is made between private property and a public drainage control system, sanitary sewer or combined sewer, the property owner shall grant to North Sioux City the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. This includes the right to enter a property when it has a reasonable basis to believe that a violation of this ordinance is occurring or has occurred, and to enter when necessary for abatement of a public nuisance or correction of a violation of this ordinance.

9.6. Records of Installation and Maintenance Activities.

Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation and of all maintenance and repairs, and shall retain the records for at least 5 years. These records shall be made available to North Sioux City during inspection of the facility and at other reasonable times upon request.

9.7 Failure to Maintain Practices

If a responsible party fails or refuses to meet the requirements of the maintenance covenant, North Sioux City, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, North Sioux City shall notify the party responsible for maintenance of the stormwater management facility in writing. Upon receipt of that notice, the responsible person shall have 5 days to effect maintenance and repair of the facility in an approved manner. After proper notice, North Sioux City may assess the owner(s) of the facility for the cost of repair work and any penalties; and the cost of the work shall be a lien on the property, or prorated against the beneficial users of the property, and may be placed on the tax bill and collected as ordinary taxes by the county.

Section 10. Enforcement and Penalties.

10.1. Violations

Any development activity that is commenced or is conducted contrary to this Ordinance, may be restrained by injunction or otherwise abated in a manner provided by law.

10.2. Notice of Violation.

When North Sioux City determines that an activity is not being carried out in accordance with the requirements of this Ordinance, it shall issue a written notice of violation to the owner of the property. The notice of violation shall contain:

- (1) the name and address of the owner or applicant;
- (2) the address when available or a description of the building, structure or land upon which the violation is occurring;
- (3) a statement specifying the nature of the violation;
- (4) a description of the remedial measures necessary to bring the development activity into compliance with this Ordinance and a time schedule for the completion of such remedial action;
- (5) a statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;
- (6) a statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within fifteen (15) days of service of notice of violation.

10.3. Stop Work Orders

Persons receiving a notice of violation will be required to halt all construction activities. This “stop work order” will be in effect until North Sioux City confirms that the development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a notice of violation in a timely manner can result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this ordinance.

10.4. Civil and Criminal Penalties

In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this Ordinance shall be punished by a fine of not less than _____ \$200.00 per day per violation and/or imprisonment for a period not to exceed ten (10) days, or both such fine and imprisonment. Such person shall be guilty of a separate offense for each day during which the violation occurs or continues.

10.5. Restoration of lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, North Sioux City may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

10.6. Holds on Occupation Permits

Occupation permits will not be granted until corrections to all stormwater practices have been made and accepted by North Sioux City.

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IV. GROUNDWATER PROTECTION OVERLAY DISTRICT

Table of Contents:

Section 1.	Purpose and Intent
Section 2.	Definitions
Section 3.	Zones within the Groundwater Protection Overlay District
Section 4.	Liability
Section 5.	District Boundary Disputes
Section 6.	Enforcement
Section 7.	Saving Clause

1. PURPOSE AND INTENT

The jurisdiction of North Sioux City recognizes that many residents rely on groundwater for their safe drinking water supply, and that certain land uses can contaminate groundwater particularly in shallow/surficial aquifers. To ensure the protection of these drinking water supplies, this ordinance establishes a zoning overlay district to be known as the Groundwater Protection Overlay District.

The purpose of the Groundwater Protection Overlay District is to protect public health and safety by minimizing contamination of shallow/surficial aquifers and preserving and protecting existing and potential sources of drinking water supplies. It is the intent to accomplish this through both public education and public cooperation, as well as by creating appropriate land use regulations that may be imposed in addition to those currently imposed by existing zoning districts or other county regulations.

The Groundwater Protection Overlay District is superimposed on current zoning districts and shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses. Applicable activities/uses allowed in a portion of one of the underlying zoning districts which fall within the Groundwater Protection Overlay District must additionally comply with the requirements of this district. Uses prohibited in the underlying zoning districts shall not be permitted in the Groundwater Protection Overlay District.

2. DEFINITIONS

For the purposes of this section, the following terms are defined below:

1. **AQUIFER.** A geological formation, group of formations or part of a formation composed of rock, sand or gravel capable of storing and yielding groundwater to wells and springs.
2. **CONTAMINATION.** An impairment of water quality by chemicals, radionuclides, biologic organisms, or other extraneous matter whether or not it affects the potential or intended beneficial use of water.
3. **DEVELOPMENT.** The carrying out of any construction, reconstruction, alteration of surface or structure or change of land use or intensity of use.
4. **FACILITY.** Something that is built, installed, or established for a particular purpose.

5. GREY WATER. All domestic wastewater except toilet discharge water.
6. GROUNDWATER PROTECTION OVERLAY DISTRICT: The zoning district defined to overlay other zoning districts in North Sioux City. This district may include specifically designated recharge areas that collect precipitation or surface water and carry it to aquifers.
7. HAZARDOUS MATERIAL. A material which is defined in one or more of the following categories:

Ignitable: A gas, liquid or solid which may cause fires through friction, absorption of moisture, or which has low flash points. Examples: white phosphorous and gasoline.

Carcinogenic: A gas, liquid, or solid which is normally considered to be cancer causing or mutagenic. Examples: PCB's in some waste oils.

Explosive: A reactive gas, liquid or solid which will vigorously and energetically react uncontrollably if exposed to heat, shock, pressure or combinations thereof. Examples: dynamite, organic peroxides and ammonium nitrate.

Highly Toxic: A gas, liquid, or solid so dangerous to man as to afford an unusual hazard to life. Example: chlorine gas.

Moderately Toxic: A gas, liquid or solid which through repeated exposure or in a single large dose can be hazardous to man.

Corrosive: Any material, whether acid or alkaline, which will cause severe damage to human tissue, or in case of leakage might damage or destroy other containers of hazardous materials and cause the release of their contents. Examples: battery acid and phosphoric acid.

8. PRIMARY CONTAINMENT FACILITY. A tank, pit, container, pipe or vessel of first containment of a liquid or chemical.
9. RELEASE. Any unplanned or improper discharge, leak or spill of a potential contaminant including a hazardous material.
10. SECONDARY CONTAINMENT FACILITY. A second tank, catchment pit, pipe, or vessel that limits and contains liquid or chemical leaking or leaching from a primary containment area; monitoring and recovery are required,
11. SHALLOW/SURFICIAL AQUIFER. An aquifer in which the permeable medial (sand and gravel) starts at the land surface or immediately below the soil profile.
12. SPILL RESPONSE PLANS. Detailed plans for control, recontainment, recovery, and clean up of hazardous material releases, such as during fires or equipment failures.
13. STORMWATER TREATMENT PRACTICES (STPs). Measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.
14. TIME-OF-TRAVEL DISTANCE. The distance that groundwater will travel in a specified time. This distance is generally a function of the permeability and slope of the aquifer.

3. ZONES WITHIN THE GROUNDWATER PROTECTION OVERLAY DISTRICT

3.1 ZONE 1 - DRINKING WATER CRITICAL IMPACT ZONE.

Zone 1 is defined as the area within the 6-month time-of-travel distance mapped around all the public water supply wells. This zone shall constitute the area within a minimum of 1,000 feet of a public water supply well.

a. **Encouraged Uses.** The following uses are encouraged within Zone 1 provided they meet the appropriate performance standards outlined in 3.1.c below and are designed so as to prevent any groundwater contamination.

Parks, greenways, or publicly-owned recreational areas such as foot, bicycle and/or horse paths, and bridges.

Necessary public utilities/facilities including the construction, maintenance, repair, and enlargement of drinking water supply related facilities such as, but not limited to, wells, pipelines, aqueducts, and tunnels.

Conservation efforts for soil, water, plants, and wildlife;

b. **Special Exceptions.** The following uses are permitted only under the terms of a special exception and must conform to provisions of the underlying zoning district and meet the performance standards outlined in 3.2.(c) below.

Expansion of existing nonconforming uses to the extent allowed by the underlying district. The applicant should consult the local zoning plan to confirm nonconforming uses. North Sioux City reserves the right to review all applications and shall not grant approval unless it finds such expansion does not pose greater potential contamination of groundwater than the existing use.

c. **Prohibited Uses.** The following uses, unless granted a special exception, are prohibited within Zone 1, the 6- month time-of-travel zone or within a minimum of 1,000 feet of a public water supply well.

Automobile body/repair shop;

Gas station;

Fleet/trucking/bus terminal;

Dry cleaner;

Electrical/electronic manufacturing facility;

Machine shop;

Metal plating/finishing/fabricating facility;

Chemical processing/storage facility;

Wood preserving/treating facility;

Junk/scrap/salvage yard;

Mines/gravel pit;

Irrigated nursery/greenhouse stock;

Confined animal feeding operations;

Land divisions resulting in high density (>1 unit/acre) septic systems;

Equipment maintenance/fueling areas;

Injection wells/dry wells/sumps, except for single-family residences directing gutter downspouts to a drywell;

Underground storage tanks, (except those with spill, overflow, and corrosion protection requirements in place);

All other facilities involving the collection, handling, manufacture, use, storage, transfer or disposal of any solid or liquid material or waste having potentially harmful impact on groundwater quality;

All uses not permitted in the underlying zone district.

3.2 ZONE 2 - DRINKING WATER POTENTIAL IMPACT ZONE.

Zone 2 is established as the remainder of the Groundwater Protection Overlay District not included in Zone 1, but deemed necessary to ensure adequate protection of public drinking water supplies.

a. **Permitted Uses:** All uses permitted in the underlying zoning districts provided that they can meet the Performance Standards as outlined for the Groundwater Protection Overlay District.

b. **Special Exceptions:** All special exceptions allowed in underlying districts may be approved by North Sioux City provided they can meet performance standards outlined for the Groundwater Protection Overlay District.

c. **Performance Standards:** The following standards shall apply to uses in Zones 1 and 2 of the Groundwater Protection Overlay District:

Any facility involving the collection, handling, manufacture, use, storage, transfer or disposal of any solid or liquid material or wastes, unless granted a special exception either through permit or another ordinance, must have a secondary containment system which is easily inspected and whose purpose is to intercept any leak or release from the primary containment vessel or structure. Underground tanks or buried pipes carrying such materials must have double walls and inspectable sumps.

Open liquid waste ponds containing materials referred to above will not be permitted without a secondary containment system.

Storage of petroleum products in quantities exceeding 25 gallons at one locality in one tank or series of tanks must be in elevated tanks; such tanks must have a secondary containment system noted above.

All permitted facilities must adhere to appropriate federal and state standards for storage, handling and disposal of any hazardous waste materials.

An acceptable contingency plan for all permitted facilities must be prepared for preventing hazardous materials from contaminating the shallow/surficial aquifer should floods, fire, or other natural catastrophes, equipment failure, or releases occur:

(a) For flood control, all underground facilities shall include but not be limited to a monitoring system and secondary standpipe above the 100 year flood control level, for monitoring and recovery. For above ground facilities, an impervious dike, above the 100 year flood level and

capable of containing 100 percent of the largest volume of storage, will be provided with an overflow recovery catchment area (sump).

(b) For fire control, plans shall include but not be limited to a safe fire fighting procedure, a fire retarding system, effective containment of any liquid runoff, and provide for dealing safely with any other health and technical hazards that may be encountered by disaster control personnel in combating fire. Hazards to be considered are pipes, liquids, chemicals, or open flames in the immediate vicinity.

(c) For equipment failures, plans shall include but not be limited to:

Below ground level, removal and replacement of leaking parts, a leak detection system with monitoring, and an overflow protection system.

Above ground level, liquid and leaching monitoring of primary containment systems, the replacement or repair and cleanup and/or repair of the impervious surface.

(d) For any other release occurring, the owner and/or operator shall report all incidents involving liquid or chemical material to the groundwater protection coordinator designated by North Sioux City.

Since it is known that improperly abandoned wells can become a direct conduit for contamination of groundwater by surface water, all abandoned wells should be properly plugged according to local and state regulations.

4. LIABILITY

Nothing in this ordinance shall be construed to imply that North Sioux City has accepted any of an owner/developer's liability if a permitted facility or use contaminates groundwater in any aquifer.

5. DISTRICT BOUNDARY DISPUTES

If the location of the Groundwater Protection Overlay District boundary in relation to a particular parcel is in doubt, resolution of boundary disputes shall be through a Special Permit application. The burden of proof shall be upon the owner(s) of the land to demonstrate where the boundaries of the district with respect to their individual parcel(s) of land should be located. If the owner(s) request that the local government agency determine more accurately the boundaries of the district with respect to individual parcels of land, the agency may engage a professional engineer, hydrologist, geologist, or soil scientist and charge the owner(s) for the cost of the investigation.

6.0. ENFORCEMENT

6.1. CIVIL ENFORCEMENT:

a. Any person may submit a verbal or written complaint alleging a violation of this ordinance.

b. Upon receipt of a complaint, the jurisdiction shall conduct a brief investigation of the substances of the complaint, including a meeting with the landowner involved.

c. Based upon the determination that there is a violation of this ordinance, the jurisdiction shall conduct an informal reconciliation with the violator. As part of such informal reconciliation, the jurisdiction shall:

(1) Notify the violator by mail of the violation of this ordinance and a desire of the jurisdiction to correct the violation through informal reconciliation. The statement shall also indicate that should the violator refuse to allow the recommended corrective actions within the time set forth by the jurisdiction, action may be taken to correct the violation and the violator will be billed for the cost of taking the corrective action.

(2) Make a good faith effort to meet the violator and resolve/correct the violation.

d. If after taking the steps above and after a period of 5 days following the mailing of the notice of the violation, the jurisdiction in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the jurisdiction shall notify the violator by mail of the termination of the informal reconciliation.

e. The jurisdiction may take corrective actions deemed necessary following 5 days after notifying violator by mail of the notice of termination of the informal reconciliation, and bill the violator for the reasonable cost of such action.

6.2. CRIMINAL ENFORCEMENT:

In lieu of civil enforcement proceeding, a person who is alleged to have violated this ordinance may be prosecuted for the commission of a crime. Violation of this ordinance is a misdemeanor and may be punished by imprisonment of not more than 10 days or imposition of a fine of not more than \$200.00 per violation per day or both.

7.0. SAVING CLAUSE

Should any section or provision of this ordinance be declared invalid, such decision shall not affect the validity of the ordinance as a whole or any other part thereof. A determination that any portion or provision of this overlay protection district is invalid shall not invalidate any special permit previously issued thereunder.

V. Stormwater Operation and Maintenance

Table of Contents:

- Section 1. Definitions
- Section 2. Design
- Section 3. Routine Maintenance
- Section 4. Nonroutine Maintenance
- Section 5. Inspections

Section 1. Definitions

Best Management

Practice (BMP) Structural device, measure, facility, or activity that helps to achieve stormwater management control objectives at a designated site.

Plan

A document approved at the site design phase that outlines the measures and practices used to control stormwater runoff at a site.

Section 2. Design

- A) All stormwater BMPs shall be designed in a manner to minimize the need for maintenance and reduce the chances of failure. Design guidelines are outlined in the most recent versions of the EPA, State of South Dakota and this Ordinance.
- B) Stormwater easements and covenants shall be provided by the property owner for access for facility inspections and maintenance. Easements and covenants shall be recorded with North Sioux City prior to the issuance of a permit.
- C) Final design shall be approved by North Sioux City.

Section 3. Routine Maintenance

- A) All stormwater BMPs shall be maintained according to the measures outlined in the most recent version of the EPA guidelines, and as approved in the permit.
- B) The person(s) or organization(s) responsible for maintenance shall be designated in the plan. Options include
 - 1) Property owner
 - 2) Homeowner's association, provided that provisions for financing necessary maintenance are included in deed restrictions or other contractual agreements
 - 3) North Sioux City
- C) Maintenance agreements shall specify responsibilities for financing maintenance.

Section 4. Nonroutine Maintenance

Nonroutine maintenance includes maintenance activities that are expensive but infrequent, such as pond dredging or major repairs to stormwater structures.

- A) Nonroutine maintenance shall be performed on an as-needed basis based on information gathered during regular inspections.
- B) If nonroutine maintenance activities are not completed in a timely manner or as specified in the approved plan, North Sioux City may complete the necessary maintenance at the owner's/operator's expense.

Section 5. Inspections

- A) The person(s) or organization(s) responsible for maintenance shall inspect stormwater BMPs on a regular basis as outlined in the plan.
- B) Authorized representatives of North Sioux City may enter at reasonable times to conduct on-site inspections or routine maintenance.
- C) For BMPs maintained by the property owner or homeowner's association, inspection and maintenance reports shall be filed with North Sioux City as provided for in the plan.
- D) Authorized representatives of North Sioux City may conduct inspections to confirm the information in the reports filed under Paragraph C.

APPENDIX

- **Groundwater Protection Overlay District Map**
- **Erosion & Sediment Control Guidance Manual for Small Sites**
- **Notice of Intent (NOI)**
- **Notice of Termination (NOT)**

*EROSION & SEDIMENT CONTROL GUIDANCE
MANUAL FOR SMALL SITES*

City of North Sioux City, South Dakota

Erosion Control for Construction Sites

Soil erosion and resulting sedimentation are a leading cause of water quality problems. Although erosion has long been associated with farming activities, it is also a major concern at construction sites, if the disturbed land is left unprotected. Every phase of a construction project has the potential of contributing significant quantities of sediment-laden runoff. Therefore, as a site is developed, all who are associated with the project must do their part to control erosion.

This guidance offers assistance for erosion/sediment control on an individual building lot. First it looks at some consequences of construction site erosion and presents four principles important for control. Next it addresses the issue of proper lot drainage. Then it presents the seven steps within a construction sequence that should result in effective erosion control. Also included are installation instructions for five commonly used building site control practices as well as suggested references materials and sources of further assistance.

PRIMARY CONCERNS RELATED TO EROSION AND SEDIMENTATION

- **Water quality.** Sediment is the number one pollutant, by volume, of surface water. It impacts water quality by degrading the habitat of aquatic organisms and fish, by decreasing recreational value, and by promoting the growth of nuisance weeds and algae.
- **Local taxes.** Sediment that finds its way into streets, storm sewers, and ditches results in additional maintenance costs for local government.
- **Flooding.** Sediment accumulation in streams, lakes, and rivers reduces their capacity, which can result in increased flooding.
- **Property values.** Sediment deposits not only impair water quality but also damage property, thus reducing its use and value.

PRINCIPLES FOR CONTROLLING BUILDING SITE EROSION AND SEDIMENTATION

Erosion control is important on any building site regardless of its size. Usually, the principles and methods for controlling erosion and reducing off-site sedimentation are relatively simple and inexpensive. Here are four basics to be followed when developing a building site.

- **Evaluate the site.** Inventory and evaluate the resources on the lot before building. Location of structures should be based, in large part, on the lot's natural features. Identify trees that you want to save and vegetation that will remain during construction. Also identify areas where you want to limit construction traffic. Wherever possible, preserve existing vegetation to help control erosion and off-site sedimentation.
- **Select and install erosion/sediment control practices.** Determine the specific ones needed, and install them before clearing the site. Among the more commonly used practices are vegetative filter strips, silt fence, gravel drives, and runoff inlet protection.
- **Develop a practice maintenance program.** Maintenance of all practices is essential for them to function properly. They should be inspected twice a week and after each rainfall event. When a problem is identified, repair the practice immediately. Also, any sediment that is tracked onto the street should be scraped and deposited in a stable area. *Do not flush sediment from the street with water.*
- **Revegetate the site.** Do so as soon as possible. A well-maintained lot has a higher sale potential.

BUILDING LOT DRAINAGE

The best time to provide for adequate lot drainage is before construction begins. With proper planning, most drainage problems can be avoided. And that's important because correcting a problem after it occurs is usually much more difficult and costly. Here's what it takes to ensure good lot surface and subsurface drainage.

Surface Drainage

- Position the structure a minimum of 18 inches above street level.
- Divert stormwater runoff away from the structure by grading the lawn to provide at least 6 inches of vertical fall in the first 10 feet of horizontal distance.
- Construct side and rear yard swales to take surface water away from the structure.
- Avoid filling in existing drainage channels and roadside ditches, since that could result in wetness problems on someone else's property and/or damage to adjacent road surfaces.

Subsurface Drainage

- Provide an outlet for foundation or footer drains and for general lot drainage by using storm sewers (where allowed), OR obtain drainage easements if you must cross adjoining properties.
- If you accidentally cut through an existing field tile, assume that it carries water even if currently dry; therefore, re-route it (using the same size tile) around the structure or septic field; then reconnect it.

STEP 1. EVALUATE THE SITE.

Before construction, evaluate the entire site, marking for protection any important trees and associated rooting zones, unique areas to be preserved, on-site septic system absorption fields, and vegetation suitable for filter strips, especially in perimeter areas.

Identify Vegetation To Be Saved.

- Select and identify the trees, shrubs, and other vegetation that you want to save (*see "Vegetative Filter Strips" under Step 2 below*).

Protect Trees and Sensitive Areas.

- To prevent root damage, do not grade, burn, place soil piles, or park vehicles near trees or in areas marked for preservation.
- Place plastic mesh or snow fence barriers around the tree's dripline to protect the area below their branches.
- Place a physical barrier, such as plastic fencing, around the area designated for a septic system absorption field (if applicable).

STEP 2. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS.

Identify the areas where sediment-laden runoff could leave the construction site, and install perimeter controls to minimize the potential for off-site sedimentation. It's important that perimeter controls are in place before any other earth-moving activities begin.

Protect Down-Slope Areas.

With Vegetative Filter Strips

- On slopes of less than 6 percent, preserve a 20- to 30-foot wide vegetative buffer strip around the perimeter of the property, and use it as a filter strip for trapping sediment
- Do not mow filter strip vegetation shorter than 4 inches.

With Silt Fence

- Use silt fencing along the perimeter of the lot's downslope side(s) to trap sediment

Install Gravel Drive.

- Restrict all lot access to this drive to prevent vehicles from tracking mud onto roadways

Protect Storm Sewer Inlets.

- Protect nearby storm sewer curb inlets with stone-filled or gravel-filled geotextile bags or equivalent measures before disturbing soil.
- Protect on-site storm sewer drop inlets with silt fence, straw bales, or equivalent measures before disturbing soil.

Construction Sequence for Building Site Erosion Control Practices

STEP 3. PREPARE THE SITE FOR CONSTRUCTION.

Prepare the site for construction and for installation of utilities. Make sure all contractors (especially the excavating contractor) are aware of areas to be protected.

Salvage and Stockpile the Topsoil/subsoil.

- Remove topsoil (typically the upper 4 to 6 inches of soil material) and stockpile.
- Remove subsoil and stockpile separately from the topsoil.
- Locate the stockpiles away from any downslope street, driveway, stream, lake, wetland, ditch, or drainageway.
- Immediately after stockpiling, temporarily seed the stockpiles with annual rye or winter wheat and/or place sediment barriers around the perimeter of the piles.

STEP 4. BUILD THE STRUCTURE(S) AND INSTALL THE UTILITIES.

Construct the home and install the utilities; also install the sewage disposal system and drill the water well (if applicable); then consider the following.

Install Downspout Extenders.

- Although not required, downspout extenders are highly recommended as a means of preventing lot erosion from roof runoff.
- Add the extenders as soon as the gutters and downspouts are installed.
- Be sure the extenders have a stable outlet, such as the street, sidewalk, or a well vegetated area.

STEP 5. MAINTAIN THE CONTROL PRACTICES.

Maintain all erosion and sediment control practices until construction is completed and the lot is stabilized.

- Inspect the control practices a minimum of twice a week and after each storm event, making any needed repairs immediately.

- Toward the end of each work day, sweep or scrape up any soil tracked onto roadways. *Do not flush area with water.*

By the end of the next work day after a storm event, clean up any soil washed off-site.

STEP 6. REVEGETATE THE BUILDING SITE.

Immediately after all outside construction activities are completed, stabilize the lot with sod, seed, and/or mulch.

Redistribute the Stockpiled Subsoil and Topsoil.

- Spread the stockpiled subsoil to rough grade.
- Spread the stockpiled topsoil to a depth of 4 to 6 inches over rough-graded areas.
- Fertilize and lime according to soil test results or recommendations of a seed supplier or a professional landscaping contractor.

Mulch Newly Seeded Areas.

- Spread straw mulch on newly seeded areas, using 1 to 2 bales of straw per 1,000 square feet.
- On flat or gently sloping land, anchor the mulch by crimping it 2 to 4 inches into the soil. On steep slopes, anchor the mulch with netting or tackifiers. An alternative to anchored mulch would be the use of erosion control blankets.

STEP 7. REMOVE REMAINING TEMPORARY CONTROL MEASURES.

Once the sod and/or vegetation has been established, remove any remaining temporary erosion and sediment control practices, such as:

- Downspout extenders. (Or shorten to outlet onto the vegetated areas, allowing for maximum infiltration).
- Storm sewer inlet protection measures.

REFERENCES

Every building site is unique and poses its own restraints and potential erosion hazards. In many instances, additional or alternative methods are necessary if your lot is:

- Adjacent to a creek, lake, or wetland.
- Slopes in excess of 6 percent.
- Receives runoff from adjacent areas.
- Has more than one acre of disturbed ground.

This pamphlet provides installation instruction on five of the more commonly used building site erosion and sediment control practices. For information on other related practices, contact the South Dakota Department of Environment and Natural Resources at 1-800-SDSTORM (737-8676).

Another valuable reference when building a home is the Union County soil survey report, which contains information about soil hazards and limitations (such as wetness) that may need to be addressed at the time of construction. Single copies of the soil survey are available from the local Natural Resource Conservation Services Department at 605-356-2112. This division of the US Department of Agriculture may also provide free technical assistance regarding the management of soil and water resources.

LOCAL EROSION CONTROL ORDINANCES

It is the responsibility of property owners and contractors to see that they are in compliance with state laws and local and county ordinances regarding construction site erosion and sediment control. These ordinances are available at City Hall.