

**ORDINANCE NO. 2495**

**AN ORDINANCE REGULATING THE STORMWATER DRAINAGE AND  
DETENTION OF STORMWATER DISCHARGES TO THE CITY STORM  
DRAINAGE SYSTEM AND WITHIN THE CITY LIMITS**

**BE IT ORDAINED BY THE CITY OF MITCHELL, SD:**

Section 1: There is hereby enacted a new Article to be included within Title 8 in the Mitchell SD Code of Ordinances as follows:

**ARTICLE C. REGULATION OF STORM DRAINAGE AND DETENTION POND DISCHARGES  
TO THE CITY STORM DRAINAGE SYSTEM**

**SECTION:**

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**8-9C-1: PURPOSE/INTENT:**

The purpose of this Ordinance is to diminish threats to the health, safety, and general welfare of the citizens of the City caused by runoff of excessive stormwater from new development and redevelopment. This excessive stormwater could result in the inundation of damageable properties, the erosion and destabilization of downstream channels, and the pollution of valuable stream and lake resources. The cause of increases in stormwater runoff quantity and rate and

improvement of land and as such this Ordinance regulates these activities to prevent adverse impacts.

The objectives of this ordinance are:

- (a) To assure that new development does not increase the drainage or flood hazards to others, or create unstable conditions susceptible to erosion;
- (b) To protect new buildings and major improvements to buildings from flood damage due to increased stormwater runoff;
- (c) To protect human life and health from the hazards of increased flooding on a watershed basis;
- (d) To lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities, correction of channel erosion problems, and flood rescue and relief operations caused by increased stormwater runoff quantities from new development;
- (e) To protect, conserve, and promote the orderly development of land and water resources;
- (f) To preserve the natural hydrologic and hydraulic functions of watercourses and floodplains of watercourses and floodplains and to protect water quality and aquatic habitats; and
- (g) To preserve the natural characteristics of stream corridors in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

### **8-9C-2: DEFINITIONS:**

Adverse Impacts: Any deleterious impact on water resources or wetlands affecting their beneficial uses including recreation, aesthetics, aquatic habitat, quality, and quantity.

Applicant: Any person, firm, or governmental agency who executes the necessary forms to procure official approval of a development or permit to carry out construction of a development from the City of Mitchell.

Authorized Enforcement Agency: The Public Works department of the City, its director or employees designated to enforce this ordinance.

Base Flood Elevation: The elevation at all locations delineating the level of flooding resulting from the 100-year frequency flood event.

Bypass Flows: Stormwater runoff from upstream properties tributary to a property's drainage system but not under its control.

Channel: Any river, stream, creek, brook, branch, natural or artificial depression, ponded area, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainage way, which has a definite bed and bank or shoreline, in or into which surface or groundwater flows, either perennially or intermittently.

City: The City of Mitchell, South Dakota.

Channel Modification: Alteration of a channel by changing the physical dimensions or materials of its bed or banks. Channel modification includes damming, riprapping (or other armoring), widening, deepening, straightening, relocating, lining, and significant removal of bottom or woody rooted vegetation. Channel modification does not include the clearing of debris or removal of trash.

Compensatory Storage: An artificially excavated, hydraulically equivalent volume of storage within the floodplain used to balance the loss of natural flood storage capacity when fill or structures are placed within the floodplain.

Conduit: Any channel, pipe, sewer, or culvert used for the conveyance or movement of water, whether open or closed.

Detention Basin: A facility constructed or modified to provide for the temporary storage of stormwater runoff and the controlled release by gravity of this runoff at a prescribed rate during and after a flood or storm.

Detention Time: The mean residence time of stormwater in a detention basin.

Development: Any man-made change to real estate, including:

- (a) Construction, reconstruction or placement of a building or any addition to a building;
- (b) Installation of a manufactured home on a site preparing a site for a manufactured home, or installing a travel trailer on a site for more than 180 days;
- (c) Construction of roads, driveways, bridges, or similar projects;
- (d) Redevelopment of a site;
- (e) Filling, dredging, grading, clearing, excavating, paving or other non-agricultural alterations of the ground surface;
- (f) Storage of materials or deposit of solid or liquid waste;
- (g) Any other activity that might alter the magnitude, frequency, deviation, direction or velocity of stormwater flows from a property.

Drainage Plan: A plan, including engineering drawings and supporting calculations, which describes the existing stormwater drainage system and environmental features, as well as the drainage system and environmental features which are proposed after development of a property.

Drainageway: Any channel that conveys surface runoff throughout the site.

Dry Basin: A detention basin designed to drain completely after temporary storage of stormwater flows and to normally be dry over the majority of its bottom area.

Erosion: The general process whereby earth is removed by flowing water or wave action.

Excess Stormwater Runoff: The volume and rate of flow of stormwater discharged from an urbanized drainage area which is or will be in excess of that volume and rate which pertained before urbanization.

Floodplain: That land adjacent to a body of water with ground surface elevations at or below the base flood or the 100-year frequency flood elevation. The floodplain is also known as the Special Flood Hazard Area (SFHA).

Fill: Any act by which, earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by man to a new location and shall include the conditions resulting therefrom.

Flood Fringe: That portion of the floodplain outside of the regulatory floodway.

Floodway: The channel and that portion of the floodplain adjacent to a stream or watercourse which is needed to store and convey the anticipated existing and future 100-year frequency flood discharge with no more than a 0.1-foot increase in stage due to any loss of flood conveyance or storage and no more than a ten (10) percent increase in velocities.

Grading: Excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

Hydrograph: A graph showing for a given location on a stream or conduit, the flow-rate with respect to time.

Infiltration: The passage or movement of water into the soil surfaces.

Major Drainage System: That portion of a drainage system needed to store and convey flows beyond the capacity of the minor drainage system.

Minor Drainage System: That portion of a drainage system designed for the convenience of the public. It consists of street gutters, storm sewers, small open channels, and swales and, where manmade, is usually designed to handle the 10-year runoff event or less.

Mitigation: Mitigation includes those measures necessary to minimize the negative effects which stormwater drainage and development activities might have on the public health, safety and welfare. Examples of mitigation include compensatory storage, soil erosion and sedimentation control, and channel restoration

MS4: Municipal Separate Storm Sewer System.

Natural: Conditions resulting from physical, chemical, and biological processes without intervention by man.

One Hundred-Year Event: A rainfall, runoff, or flood event having a one (1) percent chance of occurring in any given year.

Positive Drainage: Provision for overland paths for all areas of a property including depressional areas that may also be drained by storm sewer.

Peak Flow: The maximum rate of flow of water at a given point in a channel or conduit.

Property: A parcel of real estate.

Retention Basin: A facility designed to completely retain a specified amount of stormwater runoff without release except by means of evaporation, infiltration, emergency bypass or pumping.

Sedimentation: The process that deposits soils, debris, and other materials either on other ground surfaces or in bodies of water or stormwater drainage systems.

Stormwater Drainage System: All means, natural or manmade, used for conducting stormwater to, through or from a drainage area to the point of final outlet from a property. The stormwater drainage system includes but is not limited to any of the following: conduits and appurtenances features, canals, channels, ditches, streams, culverts, streets, storm sewers, detention basins, swales and pumping stations.

Stormwater Runoff: The waters derived from melting snow or rain falling within a tributary drainage basin which are in excess of the infiltration capacity of the soils of that basin, which flow over the surface of the ground or are collected in channels or conduits.

Storm Sewer: A closed conduit for conveying collected stormwater.

Time of Concentration: The elapsed time for stormwater to flow from the most hydraulically remote point in a drainage basin to a particular point of interest in that watershed.

Tributary Watershed: All of the land surface area that contributes runoff to a given point.

Two-year Event: A runoff, rainfall, or flood event having a fifty percent chance of occurring in any given year.

Wet Basin: A detention basin designed to maintain a permanent pool of water after the temporary storage of stormwater runoff.

**8-9C-3: APPLICABILITY:**

This ordinance shall apply to all development in the City unless explicitly exempted by an Authorized Enforcement Agency.

**8-9C-4: RESPONSIBILITY FOR ADMINISTRATION:**

The Authorized Enforcement Agency 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 employment of the agency.

**8-9C-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.

**8-9C-6: DRAINAGE PLAN SUBMITTAL REQUIREMENTS:**

Each applicant shall submit the following information, for developments 1 acre and greater, to ensure that the provisions of this Ordinance are met. Water quality provisions for public roadway projects will be provided to the extent practical. The submittal shall include sufficient information to evaluate the environmental characteristic of the property, the potential adverse impacts on the development on water resources, both on-site and down-stream, and the effectiveness of the proposed drainage plan in managing storm-water runoff. The applicant shall certify on the drawings that all clearing, grading, drainage and construction shall be accomplished in strict conformance with the drainage plan. The following information shall be submitted for both existing and proposed property conditions. Property smaller than ten (10) acres shall submit only the Basic Drainage Plan called for in Section 8-9C-6A. Properties larger than ten (10) acres shall comply with the submittal requirements of both the Basic Drainage Plan and the Advanced Drainage Plan of Section 8-9C-6b.

(a) Basic Drainage Plan

(1) Topographic Map: A topographic survey of the property at 1-foot contours based on existing conditions, and areas upstream and downstream, necessary to determine off-site impacts to the proposed drainage plan (at a minimum the topography should be extended at least 100 feet beyond the site's boundaries). Also, all proposed contours (grading plan) should be drawn in at 1-foot intervals. If required by the Authorized Enforcement Agency, the map should be keyed to a FEMA datum. The Authorized Enforcement Agency should be consulted prior to plan submittal.

- (1) Drainage System: Mapping and descriptions, where relevant, of existing and proposed drainage system features of the property and immediate vicinity including:
- a) the banks and centerline of streams and channels;
  - b) shoreline of lakes, ponds, and detention basins;
  - c) farm drains and tiles;
  - d) sub-watershed boundaries within the property;
  - e) watershed soils classifications;
  - f) the property's location within the larger watershed;
  - g) location, size and slope of stormwater conduits and drainage swales;
  - h) sanitary or combined sewers;
  - i) depressional storage areas;
  - j) delineation of upstream and downstream drainage features and watersheds which might be affected by the development;
  - k) detention facilities;
  - l) roads and streets and associated stormwater inlets;
  - m) base flood elevation, and regulatory floodway where identified for the property; and

- n) basis of design for the final drainage network components.
- (2) Environmental Features: A depiction of environmental features of the property and immediate vicinity including the following:
  - a) the limits of wetland areas;
  - b) any designated natural areas; and
  - c) any proposed environmental mitigation features.
- (a) Advanced Drainage Plan: The same information as required in Section 8-9C-6a is required for properties larger than 10 acres along with the following additional information for the minor drainage system's design runoff event and the 100-year runoff event of critical duration:
  - (1) elevations and maps of 100-year flooding;
  - (2) cross-section data for open channel flow paths and designated overland flow paths;
  - (3) direction of storm flows (both low flows and flood [100-year] flows);
  - (4) flow rates and velocities at representative points in the drainage system; and
  - (5) a statement by the design engineer of the drainage system's provisions for handling events greater than the 100-year runoff.

**8-9C-7: MINIMIZATION OF INCREASES IN RUNOFF VOLUMES AND RATES:**

In the selection of a drainage plan for a development, the applicant shall evaluate and implement, where practicable, site design features that minimize the increase in runoff volumes and rates from the site. The applicant's drainage plan submittal shall include evaluations of site design features which are consistent with the following hierarchy:

- (a) Minimize impervious surfaces on the property consistent with the needs of the project;
- (b) Attenuate flows by use of open vegetated swales and natural depressions and preserve existing natural stream channels;
- (c) Infiltrate runoff on-site;
- (d) Provide stormwater retention structures;
- (e) Provide stormwater detention structures; and
- (f) Construct storm sewers.

**8-9C-8: WATER QUALITY AND MULTIPLE USES:**

The drainage system should be designed to minimize adverse water quality impacts downstream and on the property itself. Detention basins shall incorporate design features to capture stormwater runoff pollutants. Retention and infiltration of stormwater shall be promoted throughout the property's drainage system to reduce the volume of stormwater runoff and to reduce the quantity of runoff pollutants. The drainage system should incorporate multiple uses where practicable. Uses considered compatible with stormwater management include open space, aesthetics, aquatic habitat, recreation (boating, trails, playing fields), wetlands and water quality mitigation. The applicant should avoid using portions of the property exclusively for stormwater management.

**8-9C-9: DESIGN CRITERIA, STANDARDS AND METHODS:**

- (a) Release Rates: The drainage system for a property shall be designed to control the peak rate of discharge from the property for the 100-year, 24-hour storm event to level which

will not cause an increase in flooding or channel instability downstream when considered in aggregate with other developed properties and downstream drainage capacities. The peak 100-year discharge shall not be greater than 5-year predevelopment discharge for the site. In no cases should the proposed release rate be greater than the existing release rate.

- (b) Detention Basin Outlet Design: Backwater on the outlet structure from the downstream drainage system shall be evaluated when designing the outlet.
- (c) Detention Storage Requirements: The design maximum storage to be provided in a detention basin shall be based on the runoff from the 100-year, 24-hour event and reservoir (also called modified pulse or level pool) routing or equal. Detention storage shall be computed using hydrograph methods as described in this section.
- (d) Drainage System Design and Evaluation: The following criteria should be used in evaluating and designing the drainage system. The underlying objective is to provide capacity to pass the 10-year peak flow in the minor drainage system and an overland flow path for flows in excess of the minor system design capacity (major system).
  - (1) Design Methodologies: Major and minor conveyance systems for areas up to 50 acres may be designed using the rational formula. The rational formula may also be used in sizing the minor drainage system for larger sites. Runoff hydrograph methods as described in Section 8-9C-9e must be used for major drainage system design for all systems with greater than 50 acres of drainage area and for the design of all detention basins.
  - (2) Positive Drainage: Whenever practicable, all areas of the property must be provided an overland flow path that will pass the 100-year flow at a stage at least 1-foot below the lowest foundation grade in the vicinity of the flow path. Overland flow paths designed to handle flows in excess of the minor drainage system capacity shall be provided drainage easements. Street ponding and flow depths shall not exceed curb heights by more than one inch.
- (e) Methods for Generating Runoff Hydrographs: Runoff hydrographs shall be developed incorporating the following assumptions of rainfall amounts and antecedent moisture.
  - (1) Rainfall: Design rainfall events shall be based on the design rainfall data from the National Weather Bureau – NOAA Atlas 14. A Type II intensity-duration relationship, as defined by the Soil Conservation Service (SCS) should be used for rainfall distribution.
  - (2) Antecedent Moisture: Computations of runoff hydrographs which do not rely on a continuous accounting of antecedent moisture conditions shall assume a conservative wet antecedent moisture condition as a minimum.
- (f) Wet Detention Basin Design: Wet detention basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing, and as much as feasible to be available for recreational use.
  - (1) Wet Basin Depths: Wet basins shall be at least 3-feet deep, excluding near-shore banks and safety ledges. If fish habitat is to be provided, they shall be at least 10-feet deep over 25 percent of the bottom area to prevent winter freeze-out.
  - (2) Wet Basin Shoreline Slopes: The side slopes of wet basins at the normal pool elevation shall not be steeper than 5H:1V (horizontal to vertical).
  - (3) Permanent Pool Volume: The permanent pool volume in a wet basin at normal depth shall be equal to the runoff volume from its watershed for the 2-year event.



- (4) Inlet and Outlet Orientation: To the extent feasible, the distance between detention inlets and outlets shall be maximized. If possible, they should be at opposite ends of the basin.
- (g) Wetland and Dry Detention Basin Design: In addition to the other requirements of this Ordinance, wetland and dry basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing and as much as feasible to be available for multiple uses.
- (1) Wetland and Dry Basin Drainage: Wetland and dry basins shall be designed so that the portion of their bottom area which is intended to be dry shall have standing water no longer than 48 hours for all runoff events less than the 100-year event. Underdrains directed to the outlet may be used to accomplish this requirement. Grading plans shall clearly distinguish the wet/wetland portion of the basin bottom from the dry portion.
  - (2) Velocity Dissipation: Velocity dissipation measures shall be incorporated into dry basin designs to minimize erosion at inlets and outlets and to minimize the resuspension of pollutants.
  - (3) Inlet and Outlet Orientation: To the extent feasible, the distance between detention inlets and outlets shall be maximized. If possible, they should be at opposite ends of the basin. There should be no low flow bypass between the inlet and outlet and paved low flow channels shall be avoided.
  - (4) Stilling/Sedimentation Basins: A stilling/sedimentation basin should be constructed at each major inlet to a wetland or dry basin. The volume of the basins should be at least 500 cubic feet per acre of impervious surface in the drainage area. Side slopes of the basins shall be no steeper than 3H:1V and basin depths should be at least 3-feet to minimize re-suspension of accumulated sediment.
- (h) Minimum Detention Restrictor Size: Where a single pipe outlet or orifice plate is to be used to control discharge, it shall have a minimum diameter of 4-inches. The outlet pipe from the restrictor structure should have a minimum diameter of 12-inches and should always have a capacity greater than the restrictor under design head.
- (i) Detention in Floodplains: The placement of detention basins within the floodplain is strongly discouraged because of questions about their reliable operation during flood events. However, the stormwater detention requirements of this Ordinance may be fulfilled by providing detention storage within flood fringe areas on the project site provided the following provisions are met:
- (1) Detention in Flood Fringe Areas: The placement of detention basin in a flood fringe area shall require compensatory storage for 1.0 times the volume below the base flood elevation occupied by the detention basin including any berms. The release from the detention storage provided shall still be controlled consistent with the requirements of this section. The applicant shall demonstrate its operation for all stream flow and floodplain backwater conditions. Excavations for compensatory storage along watercourses shall be opposite or adjacent to the area occupied by detention. All floodplain storage lost below the 10-year flood elevation shall be replaced below the 10-year flood elevation. All floodplain storage lost above the existing 10-year flood elevation shall be replaced above the

proposed 10-year flood elevation. All compensatory storage excavations shall be constructed to drain freely and openly to the watercourse.

- (2) On-stream Detention: On-stream detention basins are discouraged but allowable if they provide regional public benefits and if they meet the other provisions of this Ordinance with respect to water quality and control of the 100-year event from the property. Further criteria are presented in Section 8-9C-10 of this Ordinance. If on-stream detention is used for watersheds larger than one square mile, it is recommended that the applicant use dynamic modeling to demonstrate that the design will not increase stage for any properties upstream or downstream of the property. Also, impoundment of the stream as part of on-stream detention:
  - a) shall not prevent the migration of indigenous fish species, which require access to upstream areas as part of their life cycle, such as for spawning;
  - b) shall not cause or contribute to the degradation of water quality or stream aquatic habitat;
  - c) shall include a design calling for gradual bank slopes, appropriate bank stabilization measures, and a pre-sedimentation basin;
  - d) shall not involve any stream channelization or the filling of wetlands;
  - e) shall require the implementation of an effective non-point source management program throughout the upstream watershed which shall include at a minimum: runoff reduction BMPs consistent with Section 8-9C-7 of this Ordinance; 2-year detention/sedimentation basins for all development consistent with Section 8-9C-9j4; and a program to control non-point sources at the source for prior developments constructed without appropriate stormwater BMPs;
  - g) shall not occur downstream of a wastewater discharge; and
  - h) shall comply with all state and federal laws.
- (j) Protection of Wetlands and Depressional Storage Areas: Wetlands and other depressional storage areas shall be protected from damaging modifications and adverse changes in runoff quality and quantity associated with land developments. In addition to the other requirements of this Ordinance, the following requirements shall be met for all developments whose drainage flows into wetlands and depressional storage areas (as appropriate):
  - (1) Detention in Wetlands and Depressional Storage Areas: Existing wetlands shall not be modified for the purposes of stormwater detention unless it is demonstrated that the existing wetland is low in quality and the proposed modifications will maintain or improve its habitat and ability to perform beneficial functions. Existing storage and release rate characteristics of wetlands and other depressional storage areas shall be maintained without offsite release and the volume of detention storage provided to meet the requirements of this section shall be in addition to this existing storage.
  - (2) Sediment Control: The existing wetland shall be protected during construction by appropriate soil erosion and sediment control measures and shall not be filled.
  - (3) Alteration of Drainage Patterns: Site drainage patterns shall not be altered to substantially decrease or increase the existing area tributary to the wetland and the volume of flow to the wetland.

- (4) Detention/Sedimentation: All runoff from the development shall be routed through a preliminary detention/sedimentation basin designed to capture the 2-year, 24-hour event and hold it for at least 24 hours, before being discharged to the wetland. This basin shall be constructed before property grading begins.
  - (5) Vegetated Buffer Strip: A buffer strip of at least 25-feet in width, preferably vegetated with native plant species, shall be maintained or restored around the periphery of the wetland.
- (k) Street, Parking Lot, and Culvert Drainage
- (1) Streets: If streets are to be used as part of the minor or major drainage system, ponding depths shall not exceed curb heights by more than one inch and shall not remain flooded for more than 8 hours for any event less than or equal to the 100-year event.
  - (2) Parking Lots: The maximum stormwater ponding depth in any parking area shall not exceed 6-inches for more than 4 hours.
  - (3) Culvert Road and Driveway Crossings: Sizing of culvert crossings shall consider entrance and exit losses as well as tailwater conditions on the culvert. The hydraulic design of culverts should be based on the 10-year storm event for minor drainage systems and 100-year storm event for major drainage systems.
- (l) Infiltration Practices: To effectively reduce runoff volumes, infiltration practices including basins, trenches, and porous pavement should be located on soils in hydrologic soil groups “A” or “B” as designated by the U.S. Soil Conservation Service. Infiltration basins and trenches designed to recharge groundwater shall not be located within 75-feet of a water supply well or a building foundation. A sediment-settling basin shall be provided to remove coarse sediment from stormwater flows before they reach infiltration basins or trenches. Stormwater shall not be allowed to stand more than 48 hours over 80 percent of a dry basin's bottom area for the maximum design event to be ex-filtrated. The bottom of infiltration facilities shall be a minimum of 4-feet above seasonably high groundwater and bedrock.
- (1) Vegetated Filter Strips and Swales: To effectively filter stormwater pollutants and promote infiltration of runoff, sites should be designed to maximize the use of vegetated filter strips and swales. Wherever practicable, runoff from impervious surfaces should be directed onto filter strips and swales before being routed to a storm sewer or detention basin.
- (m) Safety Considerations: The drainage system components, especially all detention basins, shall be designed to protect the safety of any children or adults coming in contact with the system during runoff events.
- (1) Side Slopes: The side slopes of all detention basins at 100-year capacity shall be as level as practicable to prevent accidental falls into the basin and for stability and ease of maintenance. Side slopes of detention basins and open channels shall not be steeper than 3H:1V.

- (2) Safety Ledge: All wet detention basins shall have a level safety ledge at least 8-feet in width, approximately 2.5-feet to 3.0-feet below the normal water depth. The safety shelf should be backpitched towards the shore (i.e. 3-feet deep at the shore and 2-feet deep, 8-feet from the shore.)
  - (3) Velocity: Velocities throughout the surface drainage system shall be controlled to safe levels taking into consideration rates and depths of flow.
  - (4) Overflow Structures: All stormwater detention basins shall be provided with an overflow structure capable of safely passing excess flows at a stage at least 1-foot below the lowest foundation grade in the vicinity of the detention basin. The design flow rate of the overflow structure shall be equivalent to the critical duration 100-year inflow rate. The overflow elevation and maximum depth should be indicated on the plans. The minimum top of berm elevation shall be at least 6-inches above the elevation at maximum overflow depth (100-year) and the top of berm shall be at least 1-foot above the invert of the overflow structure.
- (n) Maintenance Considerations: The stormwater drainage system shall be designed to minimize and facilitate maintenance. Turfed sideslopes shall be designed to allow lawn-mowing equipment to easily negotiate them. Wet basins shall be provided with alternate outflows that can be used to completely drain the pool for sediment removal. (Pumping may be considered if drainage by gravity is not feasible). Pre-sedimentation basins shall be included, where feasible, for localizing sediment deposition and removal. Access for heavy equipment shall be provided (for basins not adjacent to any roads, this should be provided in the form of an access easement 15-feet wide from the road to the basin). A 25-foot easement (minimum) around the basin should be provided from the normal water surface elevation of a wet basin or the 100-year water surface elevation of a dry basin.

**8-9C-10: ACCOMMODATING FLOWS FROM UPSTREAM TRIBUTARY AREAS:**

Stormwater runoff from areas tributary to the property shall be considered in the design of the property's drainage system. Whenever practicable, flows from upstream areas that are not to be detained should be routed around the basin being provided for the site being developed. The applicant's engineer shall discuss the design implications (in regards to adhering to this section of the Ordinance) with the Authorized Enforcement Agency during preliminary engineering to determine a course of action.

- (a) Upstream Areas Not Meeting Ordinance Requirements: When there are areas not meeting the storage and release rates of this Ordinance, tributary to the applicant's property, the following steps shall be followed:
  - (1) The applicant shall compute the storage volume needed for the property using the release rates of Section 8-9C-9, the applicant's property area, and the procedures described in Section 8-9C-9.
  - (2) Allowable release rates shall be computed using the combined property areas.
  - (3) The applicant shall bypass all tributary area flows around the applicant's basin whenever practicable. If the applicant routes the offsite area through the basin, the allowable release rate for the on-site and off-site tributary area should be used.

- (4) If the applicant must route upstream flows through the basin and the upstream areas exceed one-square mile in size, the applicant must meet the provisions of Section 8-9C-9i2 for on-stream basins.
- (b) **Upstream Areas Meeting Ordinance Requirements:** When there are areas which meet the storage and release rate requirements of this Ordinance, tributary to the applicant's property, the upstream flows shall be bypassed around the applicant's detention basin, or be routed through the applicant's detention basin if this is the only practicable alternative. Storage needed for the applicant's property shall be computed as described in Section 8-9C-10a(1). However, if the City decides to route tributary area flows through an applicant's basin, the final design stormwater releases shall be based on the combined total of the applicant's property plus tributary areas. It must be shown that at no time will the runoff rate from the applicant's property exceed the allowable release rate for the property alone.

**8-9C-11: EARLY COMPLETION OF DETENTION FACILITIES:**

Where detention, retention or depressional storage areas are to be used as part of the drainage system for a property, they shall be constructed as the first element of the initial earthwork program. Any eroded sediment captured in these facilities shall be removed by the applicant prior to project completion in order to maintain the design volume of the facilities.

**8-9C-12: MAINTENANCE RESPONSIBILITY:**

Maintenance of stormwater drainage facilities located on private property shall be the responsibility of the owner of that property (homeowner's association-HOA). Before a permit is obtained from the City, or other authorized enforcement agency the applicant shall execute a maintenance agreement with the City, or other authorized enforcement agency guaranteeing that the applicant and all future owners of the property HOA will maintain its stormwater drainage system. As part of the maintenance agreement, a maintenance plan for the site will be required for the ongoing maintenance of all stormwater management system components including wetlands and buffer areas prior to plan approval. The plan shall include:

- (a) Maintenance tasks.
- (b) The party responsible for performing the maintenance tasks.
- (c) A description of all permanent public or private access maintenance easements and overland flow paths, and compensatory storage areas.
- (d) A description of dedicated sources of funding for the required maintenance. An example would be a dormant special service area that can be implemented if the maintenance of the basin is not being completed by the HOA.

The development shall meet the requirements of this Ordinance and shall be certified and sealed by a registered professional engineer. The maintenance agreement shall also specifically authorize representatives of the City to enter onto the property for the purpose of inspections and maintenance of the drainage system. Such agreement shall be recorded with county Register of Deeds. The maintenance agreement shall include a schedule for regular maintenance of each aspect of the property's stormwater drainage system and shall provide for access to the system for inspection by authorized personnel of the City or other authorized enforcement agency. The

maintenance agreement shall also stipulate that if the Authorized Enforcement Agency of the City or other authorized enforcement agency notifies the property owner in writing of maintenance problems that require correction, the property owner shall make such corrections within thirty (30) calendar days of such notification. If the corrections are not made within this time period, the City of Mitchell, South Dakota, or other authorized enforcement agency may have the necessary work completed and assess the cost to the property owner HOA.

#### **8-9C-13: INSPECTIONS:**

- (a) Inspections During Construction: General site grading shall not begin until the Mitchell's Authorized Enforcement Agency has certified in writing to the applicant that any necessary detention facilities are in place and operational. The Authorized Enforcement Agency, will also conduct periodic inspections of the work in progress to be certain that the drainage system is being built as designed. If any violations of the provisions or requirements of this Ordinance are noted during such inspections, the Authorized Enforcement Agency shall notify the property owner in writing of the items needed correction. The property owner shall have ten (10) calendar days to make such corrections unless given a specific extension of time in writing by the Authorized Enforcement Agency. Failure to complete such corrections within the specified time period shall constitute a violation of this Ordinance.
- (b) Final Inspection: Upon notification by the applicant that the drainage system is completed, the Authorized Enforcement Agency, shall conduct a final inspection. If the drainage system is found to contain deficiencies that require correction, the Authorized Enforcement Agency, shall notify the property owner of the necessary corrections. The property owner shall correct such deficiencies within ten (10) calendar days unless given a specific extension of time in writing by the Authorized Enforcement Agency. Failure to make necessary corrections within the specified time period shall constitute a violation of this Ordinance. Upon finding that the drainage system meets the provisions and requirements of this Ordinance, the Authorized Enforcement Agency shall issue, in writing, a notice of drainage system completion to the property owner.
- (c) Routine Inspections: All privately owned drainage systems shall be inspected by the Authorized Enforcement Agency not less often than once per year. A written report shall be filed of the results of any inspection and a copy sent to the property owner detailing any problems that need correction.

#### **8-9C-14: ENFORCEMENT:**

##### **Notice of Violation:**

Whenever the City of Mitchell, South Dakota, or other authorized enforcement agency 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:

- a) The performance of monitoring, analyses, and reporting;
- b) A plan for the correction of deficiencies;
- c) The correction of deficiencies;
- d) That violating discharges, practices, or operations shall cease and desist;
- e) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;

- f) Payment of a fine to cover administrative and remediation costs; and
- g) 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.

**8-9C-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 seven (7) 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 twenty-five (25) days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

**8-9C-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 seven (7) 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.

**8-9C-17: COST OF ABATEMENT OF THE VIOLATION:**

Within seven (7) 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 seven (7) 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 plus any legal fees to process the lien. 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 current market value (percentage per annum) shall be assessed on the balance beginning on the 30th day following discovery of the violation.

**8-9C-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.

**8-9C-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 detention basin maintenance, storm drain stenciling, attendance at compliance workshops, creek clean-up, etc.

**8-9C-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.

**8-9C-21: CRIMINAL PROSECUTION:**

Any person that has violated or continues to violate this ordinance shall be liable to prosecution to the fullest extent of the law, and shall be subject to a fine of \$1000.00 per violation per day.

**8-9C-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.

Section 2: All ordinances and parts of ordinance in conflict herewith are hereby repealed.

Section 3: The City Finance Officer shall cause notice of the adoption of this ordinance to be published in the official newspaper; and if no referendum shall be invoked, then this ordinance shall become effective 20 days after the completed publication.

Adopted this 19th day of January, 2015

\_\_\_\_\_  
Ken Tracy - Mayor

Attest:

\_\_\_\_\_  
City Finance Officer (seal)

First Reading: January 5<sup>th</sup>, 2015

Second Reading: January 19<sup>th</sup>, 2015

Adoption: January 19<sup>th</sup>, 2015

Publication: \_\_\_\_\_