

THE CITY COUNCIL OF NORTH ROYALTON, OHIO

ORDINANCE NO. 11-101

INTRODUCED BY: Antoskiewicz, Nickell, Willey

AN ORDINANCE AMENDING THE CODIFIED ORDINANCES OF THE CITY OF NORTH ROYALTON, PART 14 BUILDING AND HOUSING CODE, CHAPTER 1488 CONTROLLING CONSTRUCTION SITE SOIL EROSION, SEDIMENT, AND OTHER WASTES AND STORM WATER RUNOFF, SECTION 1488.08 CONSTRUCTION SITE CONSERVATION PLAN, SECTION 1488.11 MINIMUM STANDARDS, AND SECTION 1488.18 DEFINITIONS, AND DECLARING AN EMERGENCY

WHEREAS: Recent changes in Ohio EPA's permit conditions require that communities update their storm water ordinance base to incorporate changes that Ohio EPA mandates to the permits that control activities on construction sites; and

WHEREAS: Council recognizes its duty to meet the city's obligations to maintain its permit status; and

WHEREAS: Council desires to provide for these amendments.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, COUNTY OF CUYAHOGA AND STATE OF OHIO, THAT:

Section 1. The Codified Ordinances of the City of North Royalton, Part 14 Building and Housing Code, Chapter 1488 Controlling Construction Site Soil Erosion, Sediment, and Other Wastes and Storm Water Runoff, Section 1488.08 Construction Site Conservation Plan is hereby amended to hereinafter read as follows:

In order to control storm water damage and sediment pollution of water resources, wetlands, riparian areas, other natural areas, and public and private lands, the owner of each development area shall be responsible for developing a comprehensive Construction Site Conservation Plan. This plan will address storm water management (volume and peak rate of runoff), soil erosion, sediment and other wastes control. This plan must contain a description of controls appropriate for each construction operation covered by these regulations, and the operator must implement the planned controls in a timely manner. The plans and BMPs used to satisfy the conditions of these regulations shall meet the standards and specifications in the current edition of the Ohio Rain Water and Land Development manual. The plans must make use of the practices that preserve the existing natural condition to the maximum extent practicable. ***The plan shall identify the subcontractors engaged in activities that could impact storm water runoff. The Construction Site Conservation Plan shall contain signatures from all of the identified subcontractors indicating that they have been informed and understand their roles and responsibilities in complying with the Construction Site Conservation Plan.***

Section 2. The Codified Ordinances of the City of North Royalton, Part 14 Building and Housing Code, Chapter 1488 Controlling Construction Site Soil Erosion, Sediment, and Other Wastes and Storm Water Runoff, Section 1488.11 Minimum Standards, Paragraph (c) (1) is hereby amended to hereinafter read as follows:

(c) Sediment Barriers.

(1) Sheet flow runoff from denuded areas shall be intercepted by silt fence or diversions to protect adjacent properties and water resources from sediment. Where intended to provide sediment control, silt fence shall be placed on a level contour. The relationship between the maximum drainage areas to silt fence for a particular slope is shown in the table below (***placing silt fence in a parallel series does not extend the size of the drainage area***).

Section 3. The Codified Ordinances of the City of North Royalton, Part 14 Building and Housing Code, Chapter 1488 Controlling Construction Site Soil Erosion, Sediment, and Other Wastes and Storm Water Runoff, Section 1488.11 Minimum Standards, Paragraphs (i), (j), (p), and (t) are hereby amended to hereinafter read as follows:

(i) Sediment Settling Ponds. ~~Storm water runoff that exceeds the design capacity of sediment barriers and concentrated storm water flows shall pass through a sediment settling facility. A sediment settling pond is required for any of the following conditions:~~

- ***Concentrated storm water runoff (e.g., storm sewer or ditch);***
- ***Runoff from drainage areas, which exceed the design capacity of silt fence or other sediment barriers;***
- ***Runoff from drainage areas that exceed the design capacity of inlet protection; or***
- ***Runoff from common drainage locations with 10 or more acres of disturbed land.***

Alternative controls can be used if the owner can show, in writing, that the Ohio EPA approved the use of alternatives that the owner demonstrated to be equivalent in effectiveness to a settlement settling pond.

(1) Where storm sewer drainage areas include ten or more acres disturbed at one time, a temporary (or permanent) sediment settling pond must be provided until final stabilization of the site. In single-family residential construction, final stabilization is after the houses are built and permanent landscaping is done.

~~A. Alternative equivalent controls may be used if the owner can show, in writing, that the Ohio EPA approved the use the alternatives in the (Ohio EPA NPDES permit for Construction Activity) Storm Water Pollution Prevention Plan (SWP3) for the site.~~

~~B. A.~~ It is recommended that for drainage locations of less than ten acres, smaller sediment settling basins and/or sediment traps be used.

(2) Each facility's storage capacity shall be no less than ~~67 cubic yards~~ ***1800 cubic feet of dewatering zone area*** per acre of total contributing drainage area ***and 1000 cubic feet per disturbed acre of sediment storage zone area.*** The storage volume will be measured from the bottom of the basin to the top of the primary (principal) spillway.

(3) Permanent storm water management ponds that are designed to trap sediment during construction shall be designed to provide for a slow release of sediment-laden water. The draw-down time must be at least ~~72~~ ***48*** hours, or meet the criteria in the Ohio Rainwater and Land Development manual, whichever is most stringent.

(4) The design configuration between inlet(s) and the outlet of settling ponds must provide at least two units of length for each one unit of width (> 2:1 length to width ratio); ***a length to width ratio of 4:1 is recommended.***

(5) The depth of the ***dewatering zone of the*** sediment settling pond must be less than or equal to five feet.

(6) Sediment must be removed from the sediment settling ponds when the design capacity has been reduced by 40%.

(7) Public safety, especially as it relates to children, must be considered in the design. Alternative sediment controls must be used where site limitations would preclude a safe design.

(8) Temporary sediment settling ponds will not be constructed in any stream channel.

(9) Temporary sediment settling pond will not be constructed in any future pavement or building foundation area.

(j) Storm Sewer Inlet Protection.

(1) All storm sewer inlets that accept water runoff from the development area shall be protected so that sediment-laden water will not enter the storm sewer, unless the storm drain system drains to a sediment settling pond and is exempted in writing by the City Engineer. In areas where construction will be ongoing, such as subdivisions, the storm sewer protection shall be maintained until all up-slope areas reach final stabilization, as determined by the City Engineer.

(2) ***All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond.***

~~(2)~~ (3) At the end of this period the site owner shall hydraulically clean the storm sewers to the satisfaction of the City Engineer. All sediments shall be removed from the system and shall not be flushed downstream.

(p) Stabilization of Outfalls and Channels. Outfalls and constructed or modified channels shall be designed and constructed to withstand the expected velocity of flow from the planned post-development frequency storm without eroding. The planned post-construction velocity and flow shall include the entire contributing watershed. ***Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.***

(t) Inspections.

(1) If inspections or other information indicates a control has been used inappropriately or incorrectly or it has failed, it must be replaced or modified for the site conditions.

(2) The owner of the development area shall have the site inspected for soil erosion, sediment control and other environmental concerns every seven calendar days, and within 24 hours of a 0.5 inch or greater rainfall event until the City Engineer certifies the site as being stable. The City Engineer certification does not relieve the permittee from meeting the Ohio EPA NPDES inspection requirements.

~~(3) The owner, or his or her designated representative, shall keep a written log of each inspection and any subsequent improvements to the soil erosion, sediment control or other environmental controls. The inspections shall include the date of the inspection, the name of the inspector, weather conditions, and the actions needed to correct the identified problems.~~

(3) The inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized or runoff is unlikely due to weather conditions (e.g., the site is covered with snow, ice, or the ground is frozen.) A waiver of inspection requirements is available until one month before thawing conditions are expected to result in a discharge if all of the following conditions are met: the project is located in an area where frozen conditions are anticipated to continue for extended periods of time (i.e., more than one month); land disturbance activities have been suspended; and the beginning and ending dates of the waiver period are documented. Once a definable area has been fully stabilized, you may mark this on your plans and no further inspection requirements apply to that portion of the site.

(4) Following each inspection, a checklist must be completed and signed by the qualified inspection personnel representative. At a minimum, the inspection report must include: i) the inspection date; ii) names, titles, and qualifications of personnel making the inspection; iii) weather information for the period since the last inspection including the timing, duration, and depth of any storms; iv) weather information and a description of any discharges occurring at the time of the inspection; v) location(s) of discharges of sediment or other pollutants from the site; vi) location(s) of BMPs that need to be maintained; vii) location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; viii) location(s) where additional BMPs are needed that did not exist at the time of the inspection; and, ix) corrective action required including any necessary changes to the Comprehensive Storm Water Management Plan and implementation dates.

~~(4) (5) The inspection log will include the date and actions taken to correct problems noted in past inspection logs.~~

~~(5) (6) If the construction site is subject to Ohio EPA's National Pollutant Discharge Elimination System (NPDES) permit for construction activity, a copy of all of the required inspection sheets will be submitted to the City Engineer within three working days of the date that the inspection was conducted.~~

~~(6) (7) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.~~

~~(7) (8) Erosion and sediment controls identified in the Storm Water Pollution Prevention Plan shall be observed to ensure that they are operating correctly.~~

~~(8) (9) Discharge locations shall be inspected to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to the receiving waters.~~

~~(9) (10) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.~~

(11) Sensitive areas including riparian and wetland setbacks shall be observed to ensure that they remain well marked and undisturbed.

~~(10) (12) If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of sediment settling ponds, it must be repaired or maintained within three days of the inspection. Sediment settling ponds must be repaired or maintained within ten days of the inspection.~~

~~(11) (13) If any inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Construction Site Conservation Plan must be amended and the new control practice must be installed within ten days of the inspection.~~

~~(12) (14) If the inspection reveals that a control practice has not been implemented in the time required by this chapter it must be installed within ten days from the date of inspection.~~

~~(13) (15) If the inspection reveals that a planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.~~

Section 4. The Codified Ordinances of the City of North Royalton, Part 14 Building and Housing Code, Chapter 1488 Controlling Construction Site Soil Erosion, Sediment, and Other Wastes and Storm Water Runoff, Section 1488.18 Definitions, by adding a new Paragraph (ee) entitled "Qualified inspection personnel" and renumbering the remaining paragraphs in Section 1488.18 to hereinafter read as follows:

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

- (a) "Approving authority" The official responsible for administering the applicable program(s).
- (b) "Best management practice (BMP)." Any practice or combination of practices that is determined to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources of pollution to a level compatible with water quality goals. "BMPs" may include structural practices, conservation practices and operation and maintenance procedures.
- (c) "Certified Professional in Erosion and Sediment Control (CPESC)." A person that has subscribed to the code of ethics and have met the requirements established by the CPESC Council of Certified Professional In Erosion and Sediment Control, Inc. to be a Certified Professional in Erosion and Sediment Control.
- (d) "Channel." A natural stream that conveys water, or a ditch or channel excavated for the natural flow of water.
- (e) "City." Throughout this regulation the city shall mean the City of North Royalton, State of Ohio, and its designated agents and representatives.
- (f) "Concentrated storm water runoff." Surface water runoff which converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels or storm sewers, and which exceeds the maximum specified flow rates of filters or perimeter controls intended to control sheet flow.
- (g) "Conservation." The wise use and management of natural resources.
- (h) "Cut and fill slopes." A portion of land surface or area from which soil material is excavated and/or filled.
- (i) "Denuded area." A portion of land surface on which the vegetation or other soil stabilization features have been removed, destroyed or covered, and which may result in or contribute to erosion and sedimentation.
- (j) "Detention basin." A storm water management pond that remains dry between storm events. Storm water management ponds include a properly engineered/designed volume which is dedicated to the temporary storage and slow release of runoff waters.
- (k) "Development area." Any tract, lot, or parcel of land, or combination of tracts, lots or parcels of land, which are in one ownership, or are contiguous and in diverse ownership, where earth-disturbing activity is to be performed.
- (l) "Ditch." An excavation, either dug or natural, for the purpose of drainage or irrigation, and having intermittent flow.
- (m) "Dumping." The grading, pushing, piling, throwing, unloading or placing of soil or other material.
- (n) "Earth-disturbing activity" Any grading, excavating, filling or other alteration of the earth's surface where natural or man-made ground cover is destroyed.
- (o) "Earth material." Soil, sediment, rock, sand, gravel, and organic material or residue associated with or attached to the soil.
- (p) "Erosion." The process by which the land surface is worn away by the action of water, wind, ice or gravity.
- (q) "Existing." In existence at the time of the passage of these regulations.
- (r) "Frequency storm." A rainfall event of a magnitude having a specified average recurrence interval and is calculated with Natural Resources Conservation Service, USDA Type II 24-hour curves or depth-duration frequency curves.

- (s) "Grading." Earth-disturbing activity such as excavation, stripping, cutting, filling, stockpiling or any combination thereof.
- (t) "Grubbing." Removing, clearing or scalping material such as roots, stumps or sod.
- (u) "Landslide." The rapid mass movement of soil and rock material downhill under the influence of gravity in which the movement of the soil mass occurs along an interior surface of sliding.
- (v) "Larger common plan of development or sale." A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
- (w) "Local County SWCD." The local County Soil and Water Conservation District.
- (x) "Natural Resources Conservation Service (NRCS)." An agency of the United States Department of Agriculture, formerly known as the Soil Conservation Service (SCS).
- (y) "NPDES permit." A National Pollutant Discharge Elimination System Permit issued by Ohio EPA under the authority of the USEPA, and derived from the Federal Clean Water Act.
- (z) "Ohio EPA." The Ohio Environmental Protection Agency.
- (aa) "Ordinary high water mark." The point of the bank or shore to which the presence and action of surface water is so continuous as to leave a district marked by erosion, destruction or prevention of woody terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.
- (bb) "Outfall." An area where water flows from a structure such as a conduit, storm sewer, improved channel or drain, and the area immediately beyond the structure which is impacted by the velocity of flow in the structure.
- (cc) "Person." Any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, township, County, State agency, the Federal government, or any combination thereof.
- (dd) "Professional engineer." A person registered in the State of Ohio as a professional engineer, with specific education and experience in water resources engineering, acting in strict conformance with the Code of Ethics of the Ohio Board of Registration for Engineers and Surveyors.
- (ee) "Qualified inspection personnel." A person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess all conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.*
- ~~(ee)~~ (ff) "Redevelopment." The demolition or removal of existing structures or land uses and construction of new ones.
- ~~(ff)~~ (gg) "Retention basin." A storm water management pond that maintains a permanent pool of water. These storm water management ponds include a properly engineered/designed volume dedicated to the temporary storage and slow release of runoff waters.
- ~~(gg)~~ (hh) "Riparian area." Naturally vegetated land adjacent to watercourses which, if appropriately sized, helps to stabilize streambanks, limit erosion, reduce flood flows, and/or filter and settle out runoff pollutants, or which performs other functions consistent with the purposes of these regulations.
- ~~(hh)~~ (ii) "Riparian setback." Those lands within the city which are alongside streams where earth-disturbing activities will not take place and natural vegetation will not be removed.
- ~~(ii)~~ (jj) "Sediment." Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, gravity or ice, and has come to rest on the earth's surface, either on dry land or in a body of water.
- ~~(jj)~~ (kk) "Sediment barrier." A sediment control device such as a geotextile silt fence or a grass filter strip, usually capable of controlling only small flow rates. Straw bale barriers are not acceptable.
- ~~(kk)~~ (ll) "Sediment control." The limiting of sediment being transported by controlling erosion or detaining sediment-laden water and, allowing the sediment to settle out.

~~(ll)~~ **(mm)** "Sediment pollution." A failure to use management or conservation practices to control wind or water erosion of the soil and to minimize the degradation of water resources by soil sediment in conjunction with land grading, excavating, filling, or other soil-disturbing activities on land used or being developed for commercial, industrial, residential or other purposes.

~~(mm)~~ **(nn)** "Sediment settling pond." A temporary sediment pond that releases runoff at a controlled rate. It is designed to slowly release runoff, detaining it long enough to allow most of the sediment to settle out of the water. The outlet structure is usually a designed pipe riser and barrel. The entire structure is removed after construction. Permanent storm water detention structures can be modified to function as temporary sediment basins.

~~(nn)~~ **(oo)** "Sensitive area." An area or water resource that requires special management because of its susceptibility to sediment pollution, or because of its importance to the well-being of the surrounding communities, region, or the state and includes, but is not limited to, the following:

- (1) Ponds, wetlands or small lakes with less than five acres of surface area;
- (2) Small streams with gradients less than ten feet per mile with average annual flows of less than 3.5 feet per second containing sand or gravel bottoms.
- (3) Drainage areas of a locally or Ohio-designated scenic river.
- (4) Riparian and wetland areas.

~~(oo)~~ **(pp)** "Settling pond." A runoff detention structure, such as a sediment basin or sediment trap, which detains sediment-laden runoff, allowing sediment to settle out.

~~(pp)~~ **(qq)** "Sheet flow." Water runoff in a thin uniform layer or rills and which is of small enough quantity to be treated by sediment barriers.

~~(qq)~~ **(rr)** "Slip." A landslide as defined under "Landslides."

~~(rr)~~ **(ss)** "Sloughing." A slip or downward movement of an extended layer of soil resulting from the undermining action of water or the earth disturbing activity of man.

~~(ss)~~ **(tt)** "Soil." Unconsolidated erodible earth material consisting of minerals and/or organics.

~~(tt)~~ **(uu)** "Soil Conservation Service, USDA." The federal agency now titled the "Natural Resources Conservation Service," which is an agency of the United States Department of Agriculture.

~~(uu)~~ **(vv)** "Soil Erosion and Sediment Control Plan." A written and/or drawn soil erosion and sediment pollution control plan to minimize erosion and prevent off-site sedimentation throughout all earth disturbing activities on a development area.

~~(vv)~~ **(ww)** "Soil erosion and sediment control practices." Conservation measures used to control sediment pollution and including structural practices, vegetative practices and management techniques.

~~(ww)~~ **(xx)** "Soil stabilization." Vegetative or structural soil cover that controls erosion, and includes permanent and temporary seeding, mulch, sod, pavement, etc.

~~(xx)~~ **(yy)** "Soil survey." The official soil survey produced by the Natural Resources Conservation Service, USDA in cooperation with the Division of Soil and Water Conservation, ODNR and the local Board of County Commissioners.

~~(yy)~~ **(zz)** "Storm water control structure." Practice used to control accelerated storm water runoff from development areas.

~~(zz)~~ **(aaa)** "Storm water conveyance." All storm sewers, channels, streams, ponds, lakes, etc. used for conveying concentrated storm water runoff, or for storing storm water runoff.

~~(aaa)~~ **(bbb)** "Storm Water Pollution Prevention Plan (SWP3)." The plan required by Ohio EPA to meet the requirements of its National Pollutant Discharge Elimination System (NPDES) permit program for construction activities.

~~(bbb)~~ **(ccc)** "Stream." A body of water running or flowing on the earth's surface, or a channel with a defined bed and banks in which such flow occurs. Flow may be seasonally intermittent.

~~(eee)~~ **(ddd)** "Unstable soil." A portion of land surface or area which is prone to slipping, sloughing or landslides, or is identified by Natural Resources Conservation Service methodology as having a low soil strength.

~~(ddd)~~ **(eee)** "USEPA." The United States Environmental Protection Agency.

~~(eee)~~ **(fff)** "Wastewater." Any water that is contaminated with gasoline, fuel oil, hydrocarbon-based chemicals, paint, paint washing liquids or other paint wastes, sanitary wastes, or any other Ohio EPA regulated contaminants.

~~(fff)~~ **(ggg)** "Water resources." All streams, lakes, ponds, wetlands, watercourses, waterways, drainage systems and all other bodies or accumulations of surface water, either natural or artificial, which are situated wholly or partly within, or border upon this State or are within its jurisdiction, except those private waters which do not combine or affect a junction with natural surface waters.

~~(ggg)~~ **(hhh)** "Watercourse." Any natural, perennial, or intermittent channel with a defined bed and banks, stream, river or brook.

~~(hhh)~~ **(iii)** "Wetland." Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas (40 C.F.R. 232, as amended). Wetlands shall be delineated by a site survey approved by the city using delineation protocols accepted by the U.S. Army Corps of Engineers and the Ohio EPA at the time of application of this regulation. If a conflict exists between the delineation protocols of these two agencies, the delineation protocol that results in the most inclusive area of wetlands shall apply.

~~(iii)~~ **(jjj)** "Wetland setback." Those lands adjacent to wetlands where earth-disturbing activities will not take place and natural vegetation will not be removed.

~~(jjj)~~ **(kkk)** "Winter." October 1 to April 1 of each year

Section 5. Part 14 Building and Housing Code of the Codified Ordinances of the City of North Royalton is hereby amended as provided for herein and all other provisions of Part 14 Building and Housing Code shall remain in full force and effect.

Section 6. This Ordinance shall supersede all previously adopted Ordinances in direct conflict herewith.

Section 7. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 8. This Ordinance is hereby declared to be an emergency measure immediately necessary for the preservation of the public peace, health, safety and welfare of the city, and for the further reason that it is immediately necessary to amend certain sections of the Codified Ordinances of the City of North Royalton to update the storm water ordinance and to conform the ordinance to the newly mandated modifications issued by the Ohio EPA.

THEREFORE, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

/s/ Don Willey
Pro Tem PRESIDENT OF COUNCIL

APPROVED: /s/ Robert A. Stefanik
MAYOR

DATE PASSED: September 20, 2011

DATE APPROVED: September 23, 2011

ATTEST: /s/ Laura J. Haller
DIRECTOR OF LEGISLATIVE SERVICES

First reading suspended
Second reading suspended
Third reading September 20, 2011

YEAS: Nickell, Petrusky, Willey
Marnecheck, Antoskiewicz, Kasaris

NAYS: none

ABSENT: Gentile