NOWTHEN

GRADING & LANDSCAPING ESCROW

8188 199TH AVENUE NW, NOWTHEN, MN 55330 (763) 441-1347

RETURN TO: <u>PERMITS@NOWTHENMN.NET</u>

Property Address:		
PID or Legal Description	n:	
Fee Amount Paid:	[] \$200 (Residential Projects Only)	
Escrow Amount Paid:	[\$1.000	CC/Check#:

APPLICATION FEES & ESCROW AMOUNTS

Escrow amounts will be in accordance with the City's fee schedule contained in Section 1-2-2 of the City Code and outlined as follows:

- <u>Single Family New Construction</u>: NPDES Inspection Escrow for new homes (\$200 fee/\$2,000 escrow per lot)
- <u>Single Family Alterations</u>: NPDES Inspection Escrow for separate grading permits, building additions, or any other land disturbing activities which, in whole or in part, disturb 10,000 SF or more but do not exceed one (1) acre (43,560 SF). (\$200 fee/\$1,000 escrow per project)
- <u>All Other Uses:</u> NPDES Inspection Escrow for all new principal or accessory buildings, building additions, platted subdivisions, grading permits, mining permits and all land disturbing activities. (\$2,000/lot minimum or as required by the City Engineer)

TERMS

The City of Nowthen requires an NPDES escrow account be created for the purpose of protecting the land, water, air and other natural resources through effective compliance with the requirements of the approved permit plans and/or other measures as specified by City, County and/or State regulations. The escrow serves as performance security as required under Sections 9-4-3 and 11-4-20 of the Nowthen City Code for all land disturbing projects involving building, grading or landscaping for which compliance with the MPCA NPDES (National Pollutant Discharge Elimination System) is required.

- Any one of a number of City employees or consultants will regularly inspect the property to verify compliance with approved site, grading, drainage and erosion control plans and will notify the property owner or contractor when work fails to comply and when site corrections are needed.
- A series of three (3) inspections will be required, unless non-compliance with grading, drainage, erosion
 control or site stabilization/landscaping requirements necessitates additional inspections. Any reinspections or required inspections exceeding thee (3) shall be deducted from the escrow.
- Per Section 9-4-6.A of the City Code, the permittee shall notify the City of Nowthen at least two (2) working days BEFORE the following:
 - 1. Start of construction, erosion control measures are in place
 - 2. Mid-Construction
 - 3. Final grading and final landscaping is completed

Note: Any work not completed due to seasonal or weather-related constraints by the end of the construction season, shall be stabilized using a heavy mulch layer or another method that does not require germination to control erosion (Section 9-4-5.B).

NPDES EXCEPTIONS

- The NPDES Escrow can be waived for deck permits, above-ground pools, driveway grading, small accessory buildings or other projects with minimal land disturbance of less than 10,000 SF.
- A NPDES escrow is not required for ISTS (Individual Sewage Treatment System) permits.

USE OF NPDES/GRADING/LANDSCAPING ESCROW ACCOUNT

- The escrow account shall be billed to cover the costs incurred by the City that are directly related to the
 administration, site inspections and enforcement of the issued permit. Costs include, but are not limited to,
 staff time charged by City employees or hired consultants. If the initial escrow is determined to have
 insufficient funds to cover costs incurred by the City, the applicant shall pay, and will be responsible for
 any additional costs incurred by the City above and beyond the initial escrow amount.
- A statement of escrow account billings shall be made available upon written request. The City of Nowthen shall make every attempt to minimize applicant costs.
- <u>The escrow account shall remain in effect until permanent site stabilization is achieved</u> regardless of a transfer of property ownership, the issuance of a Certificate of Occupancy, or any other circumstances where site stabilization has been delayed.
- Upon request by the applicant and subsequent review and approval by the City or its designee, the
 remaining escrow balance shall be released when permanent site stabilization has been achieved by
 completing all soil disturbing activities and establishing a uniform perennial vegetation with a density of
 70% on all exposed soils.
- The applicant must request the return of the escrow funds within one (1) year of final stabilization or from
 the date that construction activity ceases. If the applicant does not request the escrow funds within one (1)
 year the funds will be forfeited.
- This escrow is for the implementation of the Erosion and Sediment Control (ESC), Grading and Landscaping
 requirements for individual lots and does not include any provisions for ornamental tree planting, screening
 or other site amenities as may be required by any Homeowner Associations, Developers Agreements,
 Anoka County or others.
- Following written notice of its intent to do so, this agreement grants the City and its agents the right to enter upon the subject property and to construct such measures or do such other workas may be necessary to protect public health, safety or welfare and to prevent damages and/or to remedy any NPDES compliance violations. These actions may be taken by City personnel or the City may elect to hire an independent contractor to bring the property into compliance. All costs incurred, including reinspections and legal actions, will be deducted from the NPDES escrow account.

AGREEMENT

I have read and understand the above statements and terms. I understand the City may use the escrow funds for site inspections, on-site or off-site clean-up and repair of damages and/or at its option topursue legal actions to enforce all applicable regulations. I accept full responsibility to provide effective Erosion and Sediment Control (ESC) measures and further agree the escrow shall not be deemed to create or assign any liability to the City for any failure, lack of installation or damages alleged to result from or be caused by lack of ESC measures or failure of ESC measures, or by erosion or sedimentation associated with the construction activity authorized by the permit.

Signature of Property Owner:	Date:		
Signature of Property Owner:	Date:		
Signature of Applicant/Contractor:	Date:		

NOWTHEN

CONSTRUCTION SITE CHECKLIST

(SINGLE FAMILY RESIDENTIAL & LOW PRIORITY PROJECTS)

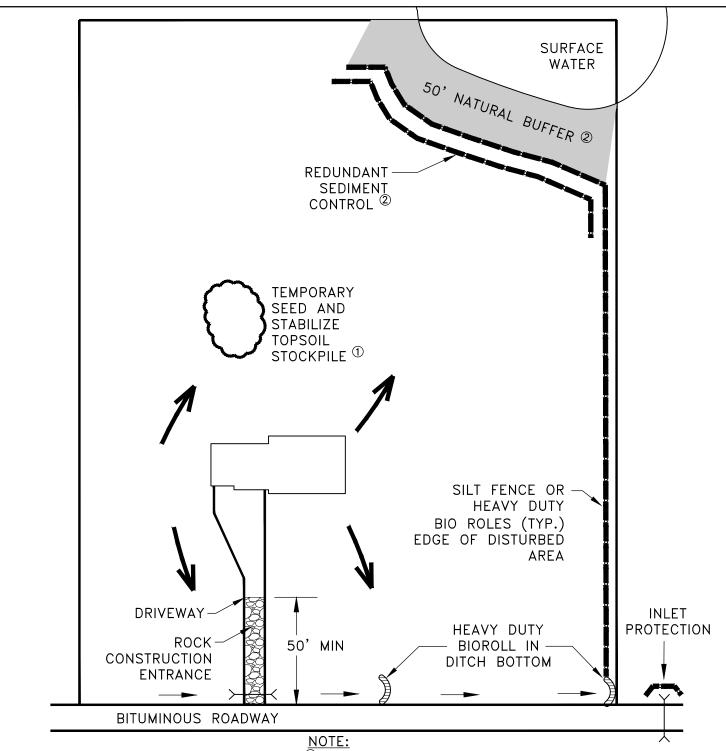
Construction site inspections are required for compliance with the National Pollutant Discharge Elimination System (NPDES), the City's MS4 Stormwater Permit (Best Mgmt. Practices) and Stormwater Management Plan

5			
Project Name/			
Property Owner Property Address			
Date of Inspection			
Inspector's Nam	ie		
Phase: □ Pre	e-Cons	truction \square Active Construction \square Reinspection \square Fin	nal Inspection
		ISTRUCTION AND ACTIVE CONSTRUCTION INSPEC	
(2 i	nspe	ctions, unless non-compliance requires additional	staff visits)
Implemented?	Grad	ling & Erosion Control Activity	Corrective Actions Needed/Notes:
☐ Yes ☐ No	work stock temp	I slopes and disturbed areas not actively being ked shall be properly stabilized; this includes soil kpiles and any area of the site where work has porarily or permanently ceased for a period fourteen days (Section 9-4-5.B).	-
☐ Yes ☐ No	shall mair proje area	be adequately installed (keyed into substrate) and nationed around the downgradient perimeter of the ect site and all disturbed areas, including upgradient s of all wetlands (see attached graphics from the s Engineering Manual).	
☐ Yes ☐ No	cont	tches, swale bottoms, culverts and all stormwater rol channels, ponds and devices are protected with ence or silt rolls.	
☐ Yes ☐ No	pond cont whe	retlands, lakes, rivers, streams and all stormwater ds are protected with double rows of sediment rols if a natural, vegetated buffer area is not present re stormwater flows to surface waters within 50 feet sturbed areas.	
☐ Yes ☐ No	prev road	rock construction entrance/exit is in place and is enting sediment from being tracked onto adjacent ways (see attached graphics from the City's neering Manual).	
☐ Yes ☐ No	oper is co	I liquid and solid wastes generated by washout rations (concrete, paint, stucco, form release oils, etc.) ntained on site, with no potential for runoff into cent ponds or onto the public street.	

FINAL SITE STABILIZATION & LANDSCAPING INSPECTION (1 inspection, unless non-compliance requires additional staff visits)

Complete?	Final Grade, Soil Stabilization & Landscaping (after final stabilization to verify compliance with Grading Plan as required under Section 9-4-6.D)	Corrective Actions Needed/Notes:
□ Yes □ No	1) The site must be final-graded and soils stabilized with hard- scapes, turf, planting areas which are mulched or other erosion control methods prior to releasing the grading permit security/escrow.	
☐ Yes ☐ No	2) All erosion control shall remain in place until the site is sodded or seeded/mulched and the turf is actively growing (uniform perennial vegetation with a density of 70% on all exposed soils). Sloped areas may not exceed a 3:1 slope (Section 9-4-5.A). Slopes which are seeded must include a layer of protection such as straw, erosion control matting or shall be hydroseeded.	
☐ Yes	3) The site is graded according to the approved site plan.	
☐ Yes ☐ No	4) A minimum of 15-25 feet is maintained around all wetlands per Section 11-4-20.D.10 as a buffer of <u>unmowed</u> natural vegetation. Sites which contain ditches shall maintain a 16.5 foot vegetated buffer per MN Statute 103.E.021 Subd. 6. Sites which contain public waters (as shown on the attached map) shall maintain a fifty (50) foot vegetated buffer per Section 2.5 of the City's Stormwater Mgmt. Plan.	
☐ Yes ☐ No	5) All areas around the foundation perimeter and any walkout openings must have positive drainage (2% slope) away from the structure per the MN State Building Code.	
☐ Yes ☐ No	6) Retaining wall(s) are installed according to plans and a building permit was obtained for walls higher than four (4) feet.	
☐ Yes ☐ No	7) Any required tree plantings have been installed at the proper size/height and appear healthy (RRT District).	
☐ Yes ☐ No	8) The driveway is surfaced with gravel, asphalt or concrete and may not exceed 30 feet in width at the street (City Code Section 11-6-2.F.1 and K.1).	
□ Yes □ No	9) The driveway culvert (if required) is installed in the location shown on plans and at the correct length, diameter and type as approved by the City Maintenance Supervisor (see driveway permit), MNDOT or Anoka County (a copy of the access permit shall be provided to the City).	
☐ Yes ☐ No	10) The street(s) are free of any sediment/debris.	ha and afab a

Any work not completed due to seasonal or weather-related constraints by the end of the construction season, shall be stabilized using a heavy mulch layer or another method that does not require germination to control erosion (Section 9-4-5.B).



1 TEMPORARY TOPSOIL STOCKPILES SHALL NOT BE LOCATED IN DRAINAGE SWALES.

² IF 50' NATURAL BUFFER IS NOT PRACTICAL, REDUNDANT SEDIMENT CONTROLS ARE REQUIRED.

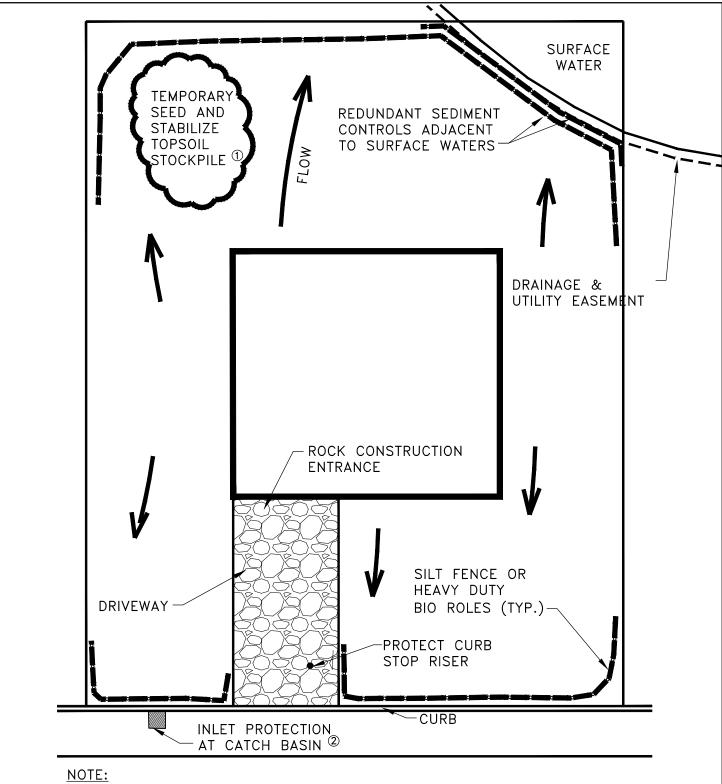
TYPICAL LOT SEDIMENT CONTROL - RURAL

NO SCALE

APPROVED

City of Nowthen

STANDARD PLATE NO. 504



1 TEMPORARY TOPSOIL STOCKPILES SHALL NOT BE LOCATED IN CURB AND GUTTER OR DRAINAGE SWALES. ² INLET PROTECTION SHALL BE REMOVED PRIOR TO WINTER FREEZE.

TYPICAL LOT SEDIMENT CONTROL - URBAN

NO SCALE

APPROVED

City of Nowthen

STANDARD PLATE NO. 505

OPTIONS FOR CONCRETE WASHOUT SITES (ALSO SEE ATTACHED MPCA INFORMATION)







Concrete, patio, stucco and other washout guidance

National Pollutant Discharge Elimination System/State Disposal System Construction Stormwater Permit requirements

Use this guidance for managing all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds, and other construction materials) related to construction activity on National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) construction stormwater permitted sites. To protect water quality, the NPDES Construction Stormwater Permit requires best management practices (BMPs) for concrete and other washout wastes on construction sites.

Background

The chutes of concrete mixers and hoppers of concrete pumps are typically rinsed out after delivery of concrete. Tools, hand mixers and wheel barrows are also washed to prevent hardening. Hardened concrete is relatively benign. However, liquid concrete wash water is a caustic material due to a high pH and it contains hazardous metals such as chromium. These materials can leach into the ground and contaminate groundwater. The high pH can inhibit plant growth and harm aquatic life if the runoff migrates to a lake or stream. Solids from liquid waste that are improperly disposed of can clog storm drainpipes and cause flooding. In order to comply with the prohibition of discharging any materials other than treated stormwater, there must be a means to prevent the discharge of washout water from the cleanup of stucco, paint, form release oils, curing compounds, and other construction materials.

The Minnesota Pollution Control Agency (MPCA) believes that groundwater and surface water can be protected from liquid concrete and other washout wastes through proper use of BMPs at NPDES/SDS construction stormwater permitted sites. Installing washout facilities not only prevents pollution but also is a matter of good housekeeping at a construction site.

Washout at construction sites

Washout facilities are used to contain all concrete and liquid wash water generated by the construction activity.

Liquid and solid washout wastes must be contained in a leakproof container and cannot contact the ground. The washout containers should be covered to prevent exposure to rainfall and potential overflow.

Washout facilities should also be used for cleaning other cementitious (cement-like) construction materials from tools and equipment such as stucco, mortar, plaster and grout. Depositing the wash water into a container allows evaporation and hardening to occur for easier disposal and to prevent runoff of liquids.

While the Construction Stormwater Permit does not allow concrete chute rinse water to come into contact with the ground, the permit does allow the wasting, the end of the load of plastic structural concrete to come into contact with the ground. After drying,

Recover and recycle wash water back into the truck



the remaining solids may be used as a fill material, a component in recycled aggregate or any other commercially useful application. Up to 0.5 cubic yards of concrete solids may be managed/buried on-site. If concrete solids are buried on-site, they should be at least two feet below the surface and must not be buried within three feet of the groundwater table. Quantities larger than 0.5 cubic yards of concrete solids must either be managed with the rest of the site's solid wastes or obtain an approval from the MPCA's solid waste program. for other beneficial use options.

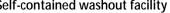
There are circumstances where concrete washout may be allowed onto a prepared compacted roadbed. This allowance is intended for slip form paving type machines that cannot be readily moved off the paving area to a washout station. The area where wash water will flow onto must be compacted and will be paved over the next day. There must be a barrier of some type to keep the wash water on the compacted roadbed until it dries. This allowance is not intended for truck washouts.

A concrete washout sign must be installed at each temporary washout facility to inform the site personnel to use the designated facilities. The facility should be located close to the concrete pouring or mixing operation and be easily accessible by concrete mix trucks. It is also important to locate the facility so that spills or overflows will be directed away from storm drain inlets, curb and gutters, water conveyances or surface waters. The facility will need to be inspected regularly for leaks, damage, or potential overflow and receive regular maintenance.

Washing of applicators and containers used for paint, concrete, or other materials

The permittee must comply with the prohibition of discharges other than stormwater (Item 2.3) that includes the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. The permittee must provide effective containment for all liquid and solid wastes generated by washout operations and provide an effective means to eliminate the discharge of these wastes to the site or receiving waters. To comply, the permittee should evaluate and incorporate methods in the Stormwater Pollution Prevention Plan to prevent these discharges such as: Self-contained washout facility

- 1. Direct all wash water into a leak-proof container or leakproof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation
- 2. Handle washout or cleanout wastes as follows:
 - Do not dump liquid wastes in storm sewers
 - Dispose of liquid wastes properly
 - · Remove and dispose of hardened concrete waste consistent with the handling of other construction wastes
- 3. Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.





Best management practices

There are many BMP options for disposal of liquid and solid wastes from washout activities. Many ready mix trucks are now equipped with the ability to collect chute wash water and solids and return them to the concrete plant for recycling or re-use.

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Services are also available for hire that deliver a prefabricated washout container to collect concrete chute rinse water as well as wash water from tools and equipment generated on-site. Some services provide the containers

Concrete washout service



alone without providing maintenance and disposal of materials, while other companies offer complete service that includes delivery of containers and regular pickups of solid and liquid waste materials. If these options are not available, the site owner and contractor can install a washout containment facility. A leak-proof container can be purchased or constructed onsite using an impermeable plastic or vinyl liner. The operators at the site will need to ensure no rips or tears develop in the liners or the liner will need to be replaced.

Washout facilities should be designed to promote evaporation where feasible to harden the concrete or other washout wastes for disposal as a solid waste. Hardened concrete can also be crushed for reuse as a construction material. However, if stored liquids have not evaporated and the washout is nearing capacity, vacuum and dispose of the waste in an approved manner. The local municipal wastewater treatment plant may be contacted to determine if there are special disposal requirements for concrete or other washout waters at their facility.

If the waste is stored onsite, remove the liquids or cover the washout facility before predicted rainstorms to prevent overflows. Companies that offer prefabricated and watertight washout containers generally offer a vacuum service to remove the liquid material. In case of a spill, immediately contain the spread of the spill, recover spilled materials, clean up the area and properly dispose of materials.

Hardened concrete solids can be removed whole or broken up first depending on the type of equipment available on-site. In accordance with Minn. R. 7035.2860, subp. 4, item I; the hardened concrete can be used as a substitute for conventional aggregate. If the material is not utilized in accordance with the standing beneficial use determination referenced above, up to 0.5 cubic yards of concrete washout solids may be managed on-site. If concrete washout solids are buried on-site, they should be at least two feet below the surface and must not be buried in the groundwater table. Quantities larger than 0.5 cubic yards of concrete washout solids must either be managed with the rest of the sites solid wastes or obtain an approval from the MPCA's Solid Waste program for other beneficial use options.

Road construction concrete cutting or grinding slurry

Other operations on-site such as saw cutting, coring, grinding and grooving or construction of exposed-aggregate concrete surfaces may generate a similar liquid wastewater. Process wastewater generated by these operations cannot be discharged into any of the nation's waterways. The MPCA recommends that liquid and solid wastes generated by these operations be handled in accordance with the fact sheet *Road Construction Concrete Slurry Guidance* found at http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/construction-stormwater/road-construction-concrete-slurry-quidance.html.

Local requirements

In addition to state requirements, please note that there may be city, county or watershed management organization requirements that may be more stringent than those found in the NPDES/SDS Construction Stormwater Permit.

Definitions

Concrete-chute rinse-off water: Liquid wastes generated when a ready mix truck operator washes non-structural concrete materials off the chutes used to deliver concrete to a project.

Concrete equipment and tools rinse-off water: Liquid wastes generated when a concrete contractor or finisher washes non-structural concrete materials off tools or equipment used to place or finish concrete.

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Plastic concrete is that freshly mixed structural concrete which is pliable and capable of being molded or shaped like a lump of modeling clay.

Hardened structural concrete is a strong, non-combustible, durable, abrasion-resistant and practically impermeable material.

Additional information

United States Environmental Protection Agency Concrete Washout Guidelines: http://www.epa.gov/npdes/pubs/concretewashout.pdf.

Minnesota Department of Transportation Concrete Guidance (except for reference to ground contact with low infiltration soils) http://www.dot.state.mn.us/environment/erosion/construction.html.

For more information, call the MPCA Stormwater Hotline at 651-757-2119 or 800-657-3804.

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