

# Engineering and Construction Services Division Standard Specifications for Sewers and Watermains

**TS 518** 

**April 2013** 

# Amendment to OPSS 518 (Nov 2011) – Construction Specification for Control of Water from Dewatering Operations

OPSS 518.07 CONSTRUCTION

OPSS 518.07.01 Disposal of Water

Subsection 518.07.01 of OPSS 518 is amended by the addition of the following sentence:

The disposal or discharge of water shall be according to the requirements of Toronto Municipal Code, Chapter 681, Sewers.



# CONSTRUCTION SPECIFICATION FOR CONTROL OF WATER FROM DEWATERING OPERATIONS

# **TABLE OF CONTENTS**

518.01	SCOPE
518.02	REFERENCES
518.03	DEFINITIONS
518.04	DESIGN AND SUBMISSION REQUIREMENTS - Not Used
518.05	MATERIALS - Not Used
518.06	EQUIPMENT - Not Used
518.07	CONSTRUCTION
518.08	QUALITY ASSURANCE - Not Used
518.09	MEASUREMENT FOR PAYMENT - Not Used
518.10	BASIS OF PAYMENT

# **APPENDICES**

518-A Commentary

#### 518.01 SCOPE

This specification covers the requirements for the control of uncontaminated water from dewatering operations to ensure that the water quality meets acceptable limits prior to discharge.

# 518.01.01 Specification Significance and Use

This specification has been developed for use in provincial- and municipal-oriented Contracts. The administration, testing, and payment policies, procedures, and practices reflected in this specification correspond to those used by many municipalities and the Ontario Ministry of Transportation.

Use of this specification or any other specification shall be according to the Contract Documents.

Page 1 Rev. Date: 11/2011 OPSS 518

# 518.01.02 Appendices Significance and Use

Appendices are not for use in provincial contracts as they are developed for municipal use, and then, only when invoked by the Owner.

Appendices are developed for the Owner's use only.

Inclusion of an appendix as part of the Contract Documents is solely at the discretion of the Owner. Appendices are not a mandatory part of this specification and only become part of the Contract Documents as the Owner invokes them.

Invoking a particular appendix does not obligate an Owner to use all available appendices. Only invoked appendices form part of the Contract Documents.

The decision to use any appendix is determined by an Owner after considering their contract requirements and their administrative, payment, and testing procedures, policies, and practices. Depending on these considerations, an Owner may not wish to invoke some or any of the available appendices.

#### 518.02 REFERENCES

When the Contract Documents indicate that provincial-oriented specifications are to be used and there is a provincial-oriented specification of the same number as those listed below, references within this specification to an OPSS shall be deemed to mean OPSS.PROV, unless use of a municipal-oriented specification is specified in the Contract Documents. When there is not a corresponding provincial-oriented specification, the references below shall be considered to be to the OPSS listed, unless use of a municipal-oriented specification is specified in the Contract Documents.

When the Contract Documents indicate that municipal-oriented specifications are to be used and there is a municipal-oriented specification of the same number as those listed below, references within this specification to an OPSS shall be deemed to mean OPSS.MUNI, unless use of a provincial-oriented specification is specified in the Contract Documents. When there is not a corresponding municipal-oriented specification, the references below shall be considered to be the OPSS listed, unless use of a provincial-oriented specification is specified in the Contract Documents.

This specification refers to the following standards, specifications, or publications:

#### **Ontario Provincial Standard Specifications, Construction**

OPSS 805 Temporary Erosion and Sediment Control Measures

# **Federal Government Publication**

Fisheries Act, R.S., 1985 c. F-14

#### 518.03 DEFINITIONS

For the purpose of this specification, the following definitions apply:

**Dewatering Operation** means pumping, baling, temporary ditching, or vacuum removal of uncontaminated groundwater, rain water, melt water, surface run-off, water pipe leakage from excavations and trenches or within sheeted cofferdams to improve the soil stability or for other construction purposes.

Page 2 Rev. Date: 11/2011 OPSS 518

Natural Attenuation Area means a dry flat-grassed meadow or open area with existing vegetation that is not subject to erosion.

**Sediment** means solid material, both mineral and organic, that is in suspension; is being transported; or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth surface.

**Sediment Control Device** means a settling pond, excavated sediment trap or basin, dewatering trap, or temporary sediment control measure according to OPSS 805.

**Uncontaminated Water** means any water that does not contain any deleterious substances or class of substances as defined under Section 34(1) of the Fisheries Act, and will not degrade the quality of the receiving water.

#### 518.07 CONSTRUCTION

#### 518.07.01 Disposal of Water

Water shall be disposed of so as not to be injurious to public health or safety, property, the environment, fisheries, or any part of the work completed or under construction. Dewatering operations shall be directed to a sediment control device or natural attenuation area prior to discharge to watercourses. If a natural attenuation area is used, a minimum 15 m setback shall be maintained from the receiving watercourse. When water is discharged to a watercourse, the water discharged shall be done in a manner that does not cause erosion or other damage to adjacent lands.

When required, a permit issued by the Ministry of the Environment (MOE) for taking water from a groundwater source shall be obtained.

#### 518.07.02 Surface Drainage

Gutters shall be kept clear at all times for surface drainage. The flow of water shall not be directed across or over pavements or sidewalks, except through approved pipes or properly designed and constructed methods.

To protect against adverse impacts resulting from erosion and sedimentation, surface drainage from dewatering operations shall be intercepted and controlled using properly designed filtering or impoundment methods or both.

#### 518.07.03 Settling Ponds and Sediment Traps or Basins

Settling ponds and sediment traps or basins shall be designed, constructed, and maintained according to OPSS 805 and as specified in the Contract Documents.

# 518.07.04 Temporary Erosion and Sediment Control Measures

The installation, maintenance, and removal of temporary erosion and sediment control measures shall be according to OPSS 805 and as specified in the Contract Documents.

#### 518.07.05 Management of Excess Material

Management of excess material shall be according to the Contract Documents.

Page 3 Rev. Date: 11/2011 OPSS 518

# 518.10 BASIS OF PAYMENT

Payment at the Contract price for the appropriate tender items associated with dewatering shall include full compensation for all labour, Equipment, and Material to do the work.

When the Contract contains separate items for work required by this specification, payment shall be at the Contract prices and according to the specifications for such work.

Page 4 Rev. Date: 11/2011 OPSS 518

# Appendix 518-A, November 2011 FOR USE WHILE DESIGNING MUNICIPAL CONTRACTS

Note: This is a non-mandatory Commentary Appendix intended to provide information to a designer, during the design stage of a contract, on the use of the OPS specification in a municipal contract. This appendix does not form part of the standard specification. Actions and considerations discussed in this appendix are for information purposes only and do not supersede an Owner's design decisions and methodology.

# **Designer Action/Considerations**

The designer should be aware that this specification is only for uncontaminated water sources.

The designer should specify the following in the Contract Documents:

- Construction requirements for settling ponds and sediment basins. (518.07.03)
- Types of erosion and sediment control measures. (518.07.04)

The designer should ensure that the General Conditions of Contract and the 100 Series General Specifications are included in the Contract Documents.

# **Related Ontario Provincial Standard Drawings**

OPSD 219.100	Light-Duty Straw Bale Barrier
OPSD 219.110	Light-Duty Silt Fence Barrier
OPSD 219.130	Heavy-Duty Silt Fence Barrier
OPSD 219.150	Sandbag Barrier
OPSD 219.180	Straw Bale Flow Check Dam
OPSD 219.190	Silt Fence Flow Check Dam
OPSD 219.200	Sandbag Flow Check Dam
OPSD 219.210	Rock Flow Check Dam, V-Ditch
OPSD 219.211	Rock Flow Check Dam, Flat Bottom Ditch
OPSD 219.220	Excavated Sediment Trap in Ditch
OPSD 219.230	Chute for Excavated Sediment Trap
OPSD 219.231	Berm Barrier
OPSD 219.240	Dewatering Trap
OPSD 219.260	Turbidity Curtain
OPSD 219.261	Turbidity Curtain, Seam Detail

Page 5 Rev. Date: 11/2011 OPSS 518