

CITY OF NANAIMO

MANUAL OF ENGINEERING
STANDARDS & SPECIFICATIONS



Edition No. 4415
(REVISE? TBD 2025)

ENGINEERING STANDARDS & SPECIFICATIONS

INTRODUCTION

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0.01 INTRODUCTION

- .1 This Manual of Engineering Standards ~~and~~ Specifications ~~has been compiled to reflect~~(MoESS), also referenced as Schedule A in the *Subdivision and Development Servicing Bylaw*, reflects the design requirements, material specifications, and installation requirements for Municipal Works constructed in the *City* of Nanaimo. For a list of acceptable products for installation within the *City* of Nanaimo, refer to the *City* of Nanaimo Approved Products List []. (REVISE? TBD 2025)
- .2 This Manual is intended for use by *City* Engineering, Public Works, Parks and Recreation Department employees; ~~Consulting Engineers~~ *Qualified Professionals*, working for the *City* of Nanaimo; private developers and others doing work in the *City*. (REVISE? TBD 2025)
 - (a) The majority of Manual users are registrants governed by the *Professional Governance Act* (PGA) along with their respective professional regulatory bodies, who are working with a Professional of Record. (REVISE? TBD 2025)
- .3 The Manual is divided into fourteen (14) sections.
 - (a) Section 1 covers General Drafting Requirements and provides standards for design drawings, ~~record as-built~~ drawings, certification of installed works and design in statutory rights-of-way, etc. (REVISE? TBD 2025)
 - (b) Section 2 covers the General Definitions and References for the manual, followed by General Requirements covered in Section 3.
 - (c) Section 4 covers excavation, trenching and backfill as it applies to the installation of underground utilities such as water, sanitary sewer and storm sewer lines, and private utilities installed within statutory rights-of-way and road right-of-way. (REVISE? TBD 2025)
 - (d) Sections 5, 6 and 7 deal with standards for water, sanitary sewer, storm sewer.

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- (e) Section 8 deals with standards for transportation infrastructure. Section 9 covers standards for the roadway structure, the aggregates and granular materials required. Section 10 deals with standards for roadway lighting and traffic signals.
- (f) Sections 11 and 12 deal with information on requirements for cast in place concrete works as well as asphaltic concrete paving.
- (g) Section 13 deals with surface treatments, for use in road rights-of-way.
- (h) Section 14 covers standards for landscaping in City streets, including required maintenance.

.4 The sections on water, sanitary sewer, storm sewer, transportation, roadway lighting and traffic signals are divided into three basic parts under the following sub-headings:

- (a) Design Criteria.
- (b) Specifications.
- (c) Installation.

.5 Individually, these sub-headings have a numbering sequence common to each section. Each sub-section or sub-heading has a block of numbers reserved and applied to it.

.6 The numbers which have been reserved for each sub-section and which would be preceded by the applicable section number are as follows:

- (a) Design Criteria .00 to .19
- (b) Specifications .20 to .39
- (c) Installation .40 to .69

.7 With this method of numbering, the numbering sequence is not continuous from sub-section to sub-section. Some sub-sections do not use all the numbers allotted to them.

0.02 APPLICATION OF THE STANDARDS

.1 The Manual of Engineering Standards ~~and &~~ shall apply ~~applies~~ to City of Nanaimo capital projects, works within statutory rights-of-way and dedicated road rights-of-way and works taken over by the City of Nanaimo related to private development ~~(i.e., subdivision, etc.). There are sections of the Manual which are not applicable to all the various users. However, contracts, designs and construction of works within the scope of the manual shall comply with the intent of the Manual and adhere to the Design, Specification and Installation Requirements.~~ (REVISE? TBD 2025)

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- (a) In the context of subdivisions, this document is Schedule A in the *Subdivision and Development Servicing Bylaw*, the associated Works must be in compliance with the bylaw. (REVISE? TBD 2025)
- (b) ~~.1 (part of)~~ In other applications, there are sections of the Manual where the contracts, designs and construction of the works within the scope of the ~~Manual~~ ~~Manual shall~~ are to comply with the intent of the Manual ~~adhere~~ and be in conformance to the Design, Specification and Installation Requirements. (REVISE? TBD 2025)
- (c) ~~.5 No departure from the requirements of the Manual shall be permitted without the prior approval of the City Engineer.~~ Non-conformance from the requirements of the Manual must be documented and requires approval from the City Engineer. (REVISE? TBD 2025)
- (d) Portions of the MoESS may apply to private property infrastructure where it is a requirement of a service being provided by the City such as, but not limited to, the requirement for cross connection control, standards for private fire hydrant installation, and stormwater management infrastructure. (REVISE? TBD 2025)

.2 ~~.7~~ Where "approval" or "approved" is ~~requested by~~ used in the Manual, it ~~shall mean~~ means approval by the City Engineer unless otherwise stated. For "approval", all requests shall be submitted by ~~a Professional Engineer~~ the Professional of Record, complete with any supporting documentation, to the City Engineer. (REVISE? TBD 2025)

.3 ~~.2~~ For the definition of terms used within the Manual, ~~please~~ refer to Section 2.01 – ~~DEFINITION OF TERMS~~ ~~Defined Terms~~ []. (REVISE? TBD 2025)

.4 ~~.3~~ For the list of products acceptable for the design within the scope of the Manual, please refer to the ~~City~~ of Nanaimo Approved Products List. (REVISE? TBD 2025)

- (a) The Approved Product List does not imply automatic ~~approval~~ as a product substitution for a contract specified product. Product substitution is subject to the ~~Design Engineer's approval~~ approval by the City Engineer. (REVISE? TBD 2025)

.5 ~~.6~~ Where the users of this Manual have any doubt as to the meaning or interpretation of any part of the Manual, they are advised to contact ~~Engineering Department (MoESS@nanaimo.ca)~~ the ~~Engineering, Municipal Infrastructure division for clarification~~. (REVISE? TBD 2025)

.6 ~~.4~~ For a list of specifications and other references by the Manual, please refer to Section 2.01B – ~~Reference~~. Reference documents that commonly apply to Works are located as reference resources accessible on the public website that is periodically updated. (REVISE? TBD 2025)

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.7 ~~For proposed works not covered by the requirements of the Manual, supplementary specifications, product information or other supporting documentation shall be submitted by a Professional Engineer for approval are to be submitted by the Professional of Record for approval by the City Engineer. (REVISE? TBD 2025)~~

0.03 REQUESTS FOR CHANGES TO THE STANDARDS

.1 Suggestions for changes to the Manual of Engineering Standards ~~and~~ & Specifications are welcomed and ~~should~~ are to be directed to the ~~Engineering Department (MoESS@nanaimo.ca)~~ ~~MoESS@nanaimo.ca~~. ~~Engineering, Municipal Infrastructure division using the standard Revision Request Summary Sheet form included in Appendix A of this document.~~ (REVISE? TBD 2025)

.2 Requests for change ~~should~~ are to include the number of the section and clause for which a change is requested; suggested new wording and an explanation of the reason for the requested change. (REVISE? TBD 2025)

.3 Requests for change ~~should~~ are to include red lined mark-ups of the written specifications or standard drawings that are relevant to the suggested change. (REVISE? TBD 2025)

.4 Changes ~~which are made will be implemented~~ are considered at the ~~next update of the Manual, following due process. discretion of the Engineering Services Division.~~ (REVISE? TBD 2025)

0.04 AMENDMENTS TO STANDARDS

.1 The Manual of Engineering Standards ~~and~~ & Specifications ~~will be~~ are reviewed ~~approximately every three years~~ ~~on a regular basis~~ and amendments issued accordingly. ~~When required, interim amendments will be issued.~~ (REVISE? TBD 2025)

.2 Amendments and clarifications are published to the City of Nanaimo's website. ~~Amendments and interim amendments will be published~~ (REVISE? TBD 2025)

.3 For the use of the copy holder, an Amendment Record Sheet has been included at the back of the Manual.