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STANDARD SPECIFICATIONS

3.01 TEMPORARY CONSTRUCTION FACILITIES

.1 Access Road:

- (a) Temporary roads are to be constructed as required for access to the working areas. Access to temporary roads from public roadways require prior written [approval](#) from the [City](#). (REVISED JUNE 2026)
- (b) Adequate drainage system in the form of ditches, culverts, or other conduits are to be installed to drain these access roads. During the construction of access roads, existing drainage works, whether natural or constructed, must not pose a hazard to properties outside the work area or harm the watercourse environment. Expect that restoration to original condition will be required upon completion of works. Unless specified otherwise, these facilities should be restored to their original condition as much as possible upon completion of the work. (REVISED JUNE 2026)
- (c) Site access requires erosion and sediment control measures as per existing bylaws, such as *Storm Sewer Regulation and Fee Bylaw and Development Approval Information Bylaw*. (REVISED JUNE 2026)

.2 Sanitary Facilities:

- (a) Clean, sanitary latrine accommodations are to be provided by the [Contractor](#) and located and maintained such that they are not offensive to any [property owner](#) or member of the public. Workers will use these facilities. (REVISED JUNE 2026)
- (b) These facilities are to be removed by the [Contractor](#) at the conclusion of the Works or when instructed to do so by the [City Engineer](#). (REVISED JUNE 2026)

3.02 OPERATING MANUALS

- .1 For installations which include mechanical and electrical equipment or machinery having wearing parts and requiring periodical repair and adjustment, all special tools, wrenches and accessories required for removing work parts, making adjustments and carrying out maintenance must be supplied. These include all gauges, indicators and lubricating devices necessary for the proper operation of the equipment shall be furnished. (REVISED JUNE 2026)
- .2 With each piece of equipment, 4 sets of operating manuals and as constructed shop drawings shall be supplied. The manuals give the manufacturer's recommended maintenance schedules with the grades of lubricants required and instructions as to how the equipment may be take apart for periodic inspection and replacement. (REVISED JUNE 2026)

3.03 EXPLOSIVES

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- .1 The General method of storage, handling, use and character of all explosives must comply to the Accident Prevention Regulations covering explosives, pursuant to the *Occupational Health and Safety Regulation Part 21: Blasting Operations and Explosives Act and Regulation* of British Columbia and must conform to local police requirements. (REVISED JUNE 2026)
 - .2 Explosives must be kept only in registered premises, which have been licensed under the *Explosives Act* (Canada). (REVISED JUNE 2026)
- 3.04 SITE MAINTENANCE AND CLEANUP
- .1 The working areas are to be maintained in an orderly manner and not be encumbered with equipment, materials or debris. (REVISED JUNE 2026)
 - .2 Cleanup is a continuing process from the start of the work to final acceptance of the project. The Contractor will, at all times, and without further order, keep property, on which work is in progress free from accumulations of waste materials or rubbish caused by employees or by the work. Accumulations of waste materials which might constitute a fire hazard is prohibited. Spillage from the Contractor's hauling vehicles on travelled public roadway or private roads shall be promptly cleaned up. On completion of construction, the Contractor shall remove all temporary structures, rubbish and waste materials resulting for their operations. (REVISED JUNE 2026)
- 3.05 TIMING OF INSTALLATION
- .1 The Contractor will schedule the work in a manner such that disruption of normal traffic and inconvenience to residents in the working area is kept to a minimum. Testing of pipe and cleanup of the site shall be completed no later than 30 days following commencement of construction on any street block. (REVISED JUNE 2026)
 - .2 Departure from scheduling, as specified above, will be permitted only with the written consent of the City to a request made by the Contractor. (REVISED JUNE 2026)
- 3.06 WORK WITHIN ROAD RIGHTS-OF-WAY
- .1 All work within road rights-of-way must conform with, but not be limited to, the following requirements: (REVISED JUNE 2026)
 - (a) Surface runoff is to be prevented from seeping into trenches.
 - (b) Excavation across entrances, whether private or commercial, shall be backfilled and thoroughly compacted, within two hours unless otherwise approved in writing by the tenant or property owner.
 - (c) Open cut excavation shall not be left open overnight or on weekends unless there are workers on duty and there is authorization by letter from the City. (REVISED JUNE 2026)

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- (d) Adequate signs, barriers, flares, etc., to ensure the safety of the public, workers and traffic, are to be provided at all times. Lights and flares are to be in good working order at all times and are to be checked daily. Lights that are not operational shall be removed from the worksite. *(REVISED JUNE 2026)*
- (e) Existing drainage courses and culverts are to be preserved and maintained as required.
- (f) If the **City**, at any time, deems it necessary, a representative from **City forces**, will be stationed at the work site to ensure that no damage is done to existing services. *(REVISED JUNE 2026)*

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EXISTING STRUCTURES AND UTILITY WORKS

3.20 LOCATION OF STRUCTURES

- .1 Prior to commencing any excavation the **Contractor** is responsible for exposing existing surface and underground structures that may affect the work or may be damaged during construction. *(REVISED JUNE 2026)*
- .2 Drawings or descriptions, verbal or otherwise, of existing structures or their location that are given to the **Contractor** are intended only as an aid to the location of these structures. Measurements and location of the existing underground structures shown on the drawings are no guaranteed to be accurate and must be verified by the **Contractor** prior to proceeding with construction.

3.21 PROTECTION, ADJUSTMENT AND SALVAGE OF STRUCTURES

- .1 Unless removal is **approved** by the **City Engineer**, underground and surface structures encountered during construction must be protected from damage. If damage occurs as a result of construction activities, the **Contractor** is responsible for repairing or replacing the affected structures at their own expense to a condition at least equivalent to that which existed prior to construction. *(REVISED JUNE 2026)*

3.22 EMERGENCY SITUATIONS

- .1 In emergency situations resulting from the construction operation, where life or property is endangered, the **Contractor** must immediately take whatever action is required to eliminate the danger and also notify the appropriate authorities of the situation. *(REVISED JUNE 2026)*
- .2 In the specific case of a water or sewer break, the **contractor** must immediately notify the Public Works Department at 250-758-5222. *(REVISED JUNE 2026)*
- .3 During periods when the **Contractor's** personnel are not on the job (after hours and weekends) at least one of the three **Contractor's** representatives in Nanaimo shall be available by phone contact. The names, addresses and phone numbers of the three **Contractor's** representatives shall be filed with the **City Engineer** prior to commencement of construction and this list shall be updated by the **Contractor** as is necessary. *(REVISED JUNE 2026)*

3.23 ACCESS MAINTAINED

- .1 Existing hydrants, valve or manhole covers, valve boxes, curb stop boxes, fire or police call boxes, and all other utility controls, warning systems, and appurtenances thereof must remain clear of obstructions and accessible at all times during construction. The **Contractor** is required to provide bridges, walks, or other temporary facilities, as may be necessary, to ensure these controls or warning systems remain fully accessible and usable in their normal manner at all times during construction. *(REVISED JUNE 2026)*

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EXISTING STRUCTURES AND UTILITY WORKS

3.24 CURTAILMENT OF UTILITY SERVICE

- .1 Where existing utilities such as water, sanitary sewer, storm sewer, electricity, telephone, and gas are serving the public, work shall be planned and executed such that there is no curtailment of service provided by these utilities without prior receipt of **approval** of the authority having jurisdiction for provision and maintenance of these utilities. The **Contractor** shall obtain the above approvals from the authority having jurisdiction. If **approval** for such disruption of utility service is not granted, the **Contractor** may be able to establish temporary facilities to provide continuous utility service during the course of construction. Such temporary facilities must only be implemented after receiving the **approval** of the utility authority and all costs relating to the establishment of temporary services are to be borne by the **Contractor**. *(REVISED JUNE 2026)*
- .2 After receiving **approval** of the authority having jurisdiction, if the **Contractor** is to temporarily close off an existing utility, they must notify individual users of the utility at least forty-eight (48) hours prior to the time of shut-off, unless otherwise **approved** by the **City Engineer**. The notification is in the form of a hand delivered letter with the contractors contact information. *(REVISED JUNE 2026)*

3.25 SUPPORT OF STRUCTURES

- .1 Existing structures other than pipes must be protected against damage from settlement by means of support or compaction of backfill as required. Support shall remain in place following backfill of excavations. *(REVISED JUNE 2026)*
- .2 Backfill which is placed under or adjacent to existing structures which have been undermined during excavation shall be compacted in a manner which will prevent damage of the structure from settlement. Such backfill shall be of **approved** granular material suitable for compaction.
- .3 For support of existing piping, other than asbestos cement or cast iron piping, refer to Standard Drawing No. T-11  in Section 4.0 – Excavation, Trenching and Backfill.
- .4 Where excavations for works cross underneath existing asbestos cement or cast iron piping the existing pipe shall be replaced by the **Contractor** with PVC pipe **approved** by the **City Engineer** or supported with a concrete grade beam refer to Standard Drawing No. T-11 , Section 4.0 – Excavation, Trenching and Backfill as determined by the **City Engineer**. *(REVISED JUNE 2026)*

SECTION 3 – GENERAL REQUIREMENTS EXISTING STRUCTURES AND UTILITY WORKS

3.26 DRAINAGE SYSTEMS (REVISED JUNE 2026)

- .1 Existing culverts, enclosed drains, flumes and ditches, and other drainage works affected by the work but left in place, will be kept clear of excavated material at all times during construction. When it is necessary to temporarily remove an existing drainage works, the Contractor will install suitable temporary ditches or other approved means of handling the drainage during construction. Refer to Temporary Construction Facilities – Section 3.01 [→]. (REVISED JUNE 2026)
- .2 Culverts and drain pipes will be replaced as per design at the time of trench backfilling, in accordance with this manual. (REVISED JUNE 2026)
- .3 Discharging chlorinated water is prohibited into the storm drainage system without prior approval from the City Engineer. (REVISED JUNE 2026)
- .4 Prior to, and during construction, the Contractor is responsible for erosion and sediment control measures as per existing bylaws, such as *Storm Sewer Regulation and Fee Bylaw* and *Development Approval Information Bylaw*. (REVISED JUNE 2026)

3.27 TREE PROTECTION

- .1 Tree protection fencing is to be installed around all areas where trees are to be retained, as per the Tree Protection Area Plan. Refer to Standard Drawing No. TP-1 [↑]. (REVISED JUNE 2026)
- .2 Excavation is not to occur within the Tree Protection Area without direction and supervision from a qualified project arborist. After excavation outside of the Tree Protection Area has occurred, all exposed roots over 25 mm in diameter must be cleanly cut. (REVISED JUNE 2026)
- .3 The operation of equipment, placing of fill, debris or any other construction related materials within the Tree Protection Area is prohibited.

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CONTROL OF PUBLIC TRAFFIC

3.60 CONTROL OF PUBLIC TRAFFIC – GENERAL

- .1 The following general principles shall be maintained when performing works, construction or maintenance work, upon Right-of-Way and thereby affecting use of Municipal facilities. *(REVISED JUNE 2026)*
 - (a) All control of public traffic will be carried out in accordance with the **BC 2020 Traffic Management Manual for Work on Roadways**, current edition and as amended. *(REVISED JUNE 2026)*
 - (b) All control of public traffic will be carried out in accordance with WorkSafeBC regulations.
 - (c) Make adequate provision to accommodate normal traffic along streets and highways immediately adjacent to or crossing the works so as to cause minimum inconvenience to the general public whilst maintaining the required level of safety. *(REVISED JUNE 2026)*
 - (d) Emergency vehicles utilizing warning devices (sirens, horns, lights) must be given immediate access through the site at all times. *(REVISED JUNE 2026)*
 - (e) Regional District of Nanaimo Transit and other forms of public transit are given priority over regular vehicles, such that they are not unnecessarily delayed. Co-ordination with transit authorities is the responsibility of the **Contractor**. *(REVISED JUNE 2026)*
 - (f) Regardless of the condition/width of existing facilities, accommodation is to be made for all forms of travel, including, but not limited to, pedestrians, cyclists, wheelchairs and mobility scooters, and users who are visually impaired.
 - (g) Provide and maintain reasonable roadway access and egress to properties fronting along, or in the vicinity of, the work. *(REVISED JUNE 2026)*
 - (h) The length of the worksite is proportional to the Works a **contractor** expects to complete in any one shift. *(REVISED JUNE 2026)*
 - (i) Unless otherwise accepted by the **City**, all regular forms of traffic must be reinstated to as near normal as possible when Works are not in progress. *(REVISED JUNE 2026)*
- .2 Contractors shall prepare Traffic Management Plan(s) encompassing all activities on the Municipal rights-of-way.
 - (a) Traffic Management Plans must be submitted to the **City** for review. *(REVISED JUNE 2026)*
 - (b) Traffic Management Plans will be reviewed within ten (10) working days and either accepted or returned with a request for re-submission.
 - (c) Re-submissions will be reviewed within ten (10) working days from the date of resubmission.
 - (d) No works shall occur before the Traffic Management Plan has been accepted by the **City**.

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- (i) Acceptance of the Traffic Management Plan, by the **City**, does not imply any responsibility or liability for the completeness or correctness of the Traffic Management Plan. *(REVISED JUNE 2026)*
 - (e) The **City**, as part of the Traffic Management Plan, may require traffic disruptions to be limited to specific hours.
- .3 The minimum level of Traffic Management Plan required for any works within the Municipal right-of-way (local roadways, lanes, pathways, parks and other Municipal facilities) include, but not be limited to, the following: *(REVISED JUNE 2026)*
 - (a) Description of the works and all impacted rights-of-way. *(REVISED JUNE 2026)*
 - (b) Name of the **Contractor**; Traffic Control Personnel/Subcontractor; **Contractor's** Traffic Manager.
 - (c) Provide 24 hour emergency contact information. *(REVISED JUNE 2026)*
 - (d) Note the location(s) of worksite identification signs. These signs shall have the name and phone number of the **contractor** and identify the project. *(REVISED JUNE 2026)*
 - (e) Note the location of safety equipment, muster station(s) and any other site facilities.
 - (f) Note locations of equipment/materials laydown/storage areas are for both working and non-working hours.
 - (g) Identify the figures used from the **BC 2020 Traffic Management Manual for Work on Roadways**. *(REVISED JUNE 2026)*
 - (h) Identify the expected truck movements to/from and through the site.
 - (i) Identify how the following street users will be accommodated: *(REVISED JUNE 2026)*
 - (i) Pedestrians
 - (ii) Visually Impaired
 - (iii) Persons with Mobility Issues
 - (iv) Cyclists
 - (v) Transit
 - (vi) Heavy Trucks
 - (vii) Vehicles
- .4 For all arterial streets, collector streets and any local streets which have special requirements identified by the **City**, the following items are required in addition to the above: *(REVISED JUNE 2026)*
 - (a) Be prepared by a Qualified Registered Professional, and in accordance with the **BC 2020 Traffic Management Manual for Work on Roadways**, current edition and as amended. *(REVISED JUNE 2026)*

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- (b) Be prepared using editable computer program, relatively to scale, and submitted in digital PDF 11x17 format.
 - (c) Include an accurate street configuration with street names, north arrow marker, speed limit and proposed extents of the relevant work item. *(REVISED JUNE 2026)*
 - (d) Indicate placement marker and distance of signs; sign images and sign number; delineators, cones, barricades, etc; position of dedicated TCP's; and any traffic control equipment including Flashing Arrow Boards (FAB) and High Level Warning Devices (HLWD); symbols should match those within Chapter 4 and 5 of the **BC 2020 Traffic Management Manual for Work on Roadways**. *(REVISED JUNE 2026)*
 - (e) Identify lanes to be obstructed, along with taper lengths and widths of lanes.
 - (f) Identify impacts to driveways, bus stops, parking, pedestrian and cyclist traffic. Include measures to facilitate and maintain access.
 - (g) Identify any road closures or detours.
- .5 It is expected that the site superintendent designate, in charge of traffic control, will have the plan and/or copies of the relevant traffic control figures onsite available for review, at all times, for Works occurring within the right-of-way. It is understood that traffic control operations may require adjustment to site specific conditions; however, significant changes should be submitted to the [City](#) for acceptance. *(REVISED JUNE 2026)*
- .6 The [City](#) reserves the right to issue a Shut Down Notice for works within the [City](#) right-of-way at any time. Work within the right-of-way is not resume until a revised Traffic Management Plan has been submitted and accepted. Conditions for a [City](#)-based Shut Down Notice are if:*(REVISED JUNE 2026)*
- (a) The [Contractor's](#) traffic set-up on site differs significantly from the accepted Traffic Management Plan.
 - (b) A copy of the accepted Traffic Management Plan and/or figures cannot be supplied. *(REVISED JUNE 2026)*
 - (c) Emergency services or Regional District of Nanaimo Transit cannot be accommodated.
- .7 Road Closures and Detours:
- (a) Road closures and detours require [approval](#) of the [City Engineer](#) and may not be granted.
 - (b) A road closure must accommodate emergency traffic at all times unless otherwise [approved](#) by the [City Engineer](#).
 - (c) At a minimum, local traffic must be reinstated at the end of every shift for Road Closures. *(REVISED JUNE 2026)*
 - (d) Where practical, detours will avoid diverting traffic from a major or collector street to a local street. *(REVISED JUNE 2026)*

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- (e) Where detours are to be installed, directional signage must be installed for length of the detour in both directions. *(REVISED JUNE 2026)*
- (f) Where detours or roadway closures are permitted, the **Contractor** will notify emergency services (fire, police and ambulance), as well as the Regional District of Nanaimo Transit, if the closure is on a bus route. *(REVISED JUNE 2026)*
- (g) Where detours are to be in place for longer than five days, the **Contractor** is to submit a pre-construction photo survey prior to implementing the detour. At the end of construction, the **contractor** is to complete a final inspection of the detour route and rectify any damage at the contractor's cost, in the opinion of the **City Inspector**, that was not evident prior to the detour implementation. *(REVISED JUNE 2026)*
- (h) Where roadway closures/detours affect private residences or businesses, the **contractor** shall provide written notice five (5) days in advance to all **property owners** and business **owners** affected by the closure or detours. A draft of the written notice needs to be accepted by the **City** prior to distribution. . *(REVISED JUNE 2026)*

SECTION 3 – GENERAL REQUIREMENTS

GEOTECHNICAL ASSESSMENT AND REPORTING

3.70 GEOTECHNICAL ASSESSMENT AND REPORTING

- .1 The design process for new roadway and underground utilities shall be supported by geotechnical engineering assessment and input. The scope of geotechnical assessment and engineering input is commensurate with the nature of the project, the complexity of ground conditions, and project specific performance requirements identified by the **City Engineer** and **Professional of Record**. The assessment and reporting will comply to the most recent version of the **City's Guidelines for Geotechnical Reports**. In the absence of project specific design criteria provided by the **City**, the geotechnical assessment shall consider a functional design life under normal loading conditions of 100 years for new or upgraded underground utilities or road base, and 20 years for pavement design. *(REVISED JUNE 2026)*
- .2 Standard reporting expectations for projects involving new roadway and underground utilities include an assessment of geohazards; the characterization of soil and groundwater conditions pertinent to the project; subgrade conditions relative to the **City's** standard pavement sections and pipe bedding requirements, and trench backfill including the re-use potential of native backfill. Where appropriate, reporting includes construction recommendations related to site preparation, excavation, temporary trench stability, requirements for shoring, dewatering, and erosion and siltation control. *(REVISED JUNE 2026)*
- .3 Seismic considerations and performance must be consistent with the latest version of the **City's Seismic Design Guidelines for Water, Sewer Utilities, and Roads**. *(REVISED JUNE 2026)*
- .4 The **City** expects geotechnical engineering, analysis, design and field reviews to conform with standard industry practice, including pertinent Professional Practice Guidelines and Advisories issued by the Engineers and Geoscientists of BC. *(REVISED JUNE 2026)*