

SCHEDULE 8 LAKESTONE SPECIFIC DESIGN STANDARDS

GENERAL POLICY

1. This section provides standards specific to the Proposed Development which will supersede those standards laid out in the Servicing Bylaw and Zoning Bylaw. In other words, Works and Services built to the variance standards set out in this Schedule will, notwithstanding the provisions of the Servicing Bylaw and Zoning Bylaw, be judged by the District to be Acceptable, subject to the requirements of this Agreement.
2. The discretion that currently exists in the Servicing Bylaw in Schedule 6 for the District Engineer to approve alternative design standards is embedded into this Agreement.

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8.1 – Variances From Bylaws

GENERAL POLICY

1. The following variances will be approved as part of this Agreement and do not need to be re-applied for during the duration of this Agreement unless this Agreement expressly contemplates otherwise.
2. Any lengths or height beyond the numbers below would require a new variance to be applied for and obtained in the ordinary process and procedure of applicable bylaws.

LIST OF VARIANCES

	Highlands (partial)	Highlands East	Highlands Central	Highlands West	Highlands South	Glenmore Residential
Cul-de-sac (no emergency egress)¹		530m		225m	450m	350m
Cul-de-sac (with emergency egress at terminus)¹	975m		2700m			650m
Retaining wall height (Subdivision related)³	10.3m	10.3m	10.3m	10.3m	15m	
Retaining wall height (Private lot owners)	2m					
Design speed (Schedule Q)	30kph standards contained in Servicing Bylaw Schedule Q will be the default road parameters to meet unless otherwise stated in Schedule 7.					
Maximum depth of cover for sanitary (Schedule K)²	4.5m	4.5m	7m	7m	4.5m	4.5m
Maximum depth of cover for Storm Water²	4.5	4.5m	7m	7m	4.5m	4.5m
Maximum grade at cul-de-sac (entry downhill, entry uphill, and bulbs)	10%.					
Street tree requirements (Schedule H)	The Developer will ensure that a minimum of one tree will be planted in one corner of each lot that has a fronting sidewalk, and that it will be in a position that will allow for that tree to provide shade to pedestrians. This will replace the requirement for boulevard street trees.					

- (1) If the Servicing Bylaw is amended to extend the minimum cul-de-sac lengths, then the cul-de-sac lengths shall be the greater of the current bylaw values, the amended bylaw values, and the values outlined in the table above.
- (2) For sanitary sewer installations at depths between 4.5 m and 7.0 m, the District Engineer, in their sole discretion, may require additional measures to mitigate operational risks, including, but not limited to the following:
 - a. **Manhole Protection** – All manhole barrels shall be lined with a protective coating or HDPE liner to resist H₂S-induced corrosion.
 - b. **Bedding and Compaction** – Provide granular bedding and submit compaction test reports to minimize structural load on the pipe.

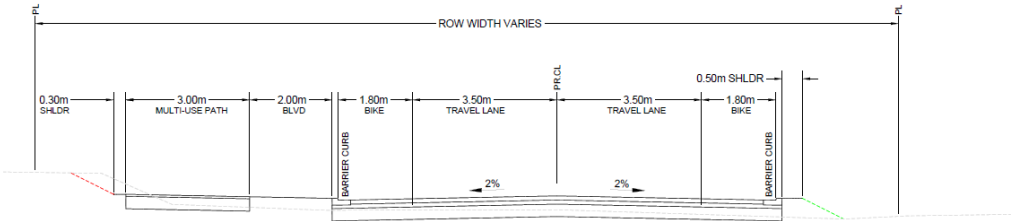
- c. **Pipe Material and Joints** – Select pipe material and joint type to provide additional protection against buckling and deflection under deep burial conditions.
 - d. **Service Connections** – Service connections shall enter through manholes or connect to shallower parallel service lines that are connected into a common manhole, rather than individually connecting directly to the deep main sewer line.
 - e. **Geotechnical Assessment** – Submit geotechnical reports confirming soil conditions and providing recommendations for safe excavation and any required remediation works.
- (3) Refer to Section 8.4

DRAWINGS:

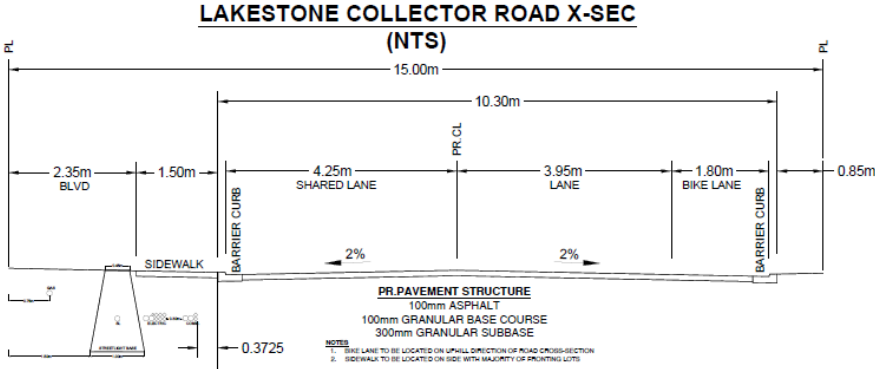
Drawing Number. Drawing Name

- 07.06.02 Sanitary Overview (Areas where sanitary depth requires variance labeled with bubbles and numbers)

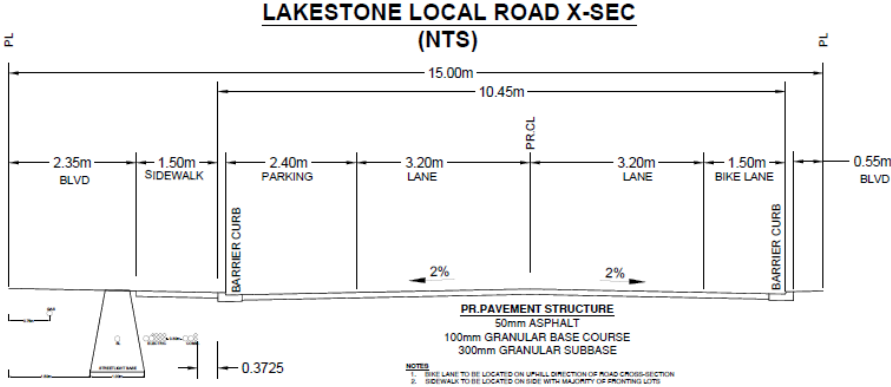
8.2 - Road Cross Sections



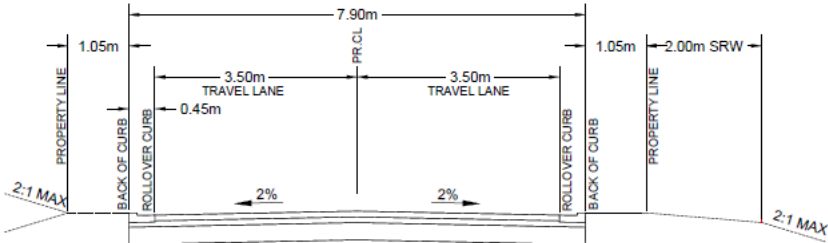
**OKANAGAN CENTRE ROAD WEST TYPICAL SECTION
LAKE COUNTRY BUSINESS PARK
(NTS)**



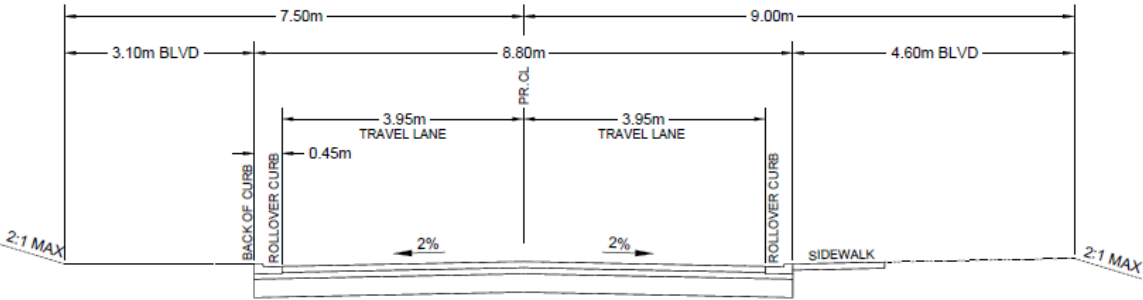
**LAKESTONE COLLECTOR ROAD X-SEC
(NTS)**



**LAKESTONE LOCAL ROAD X-SEC
(NTS)**

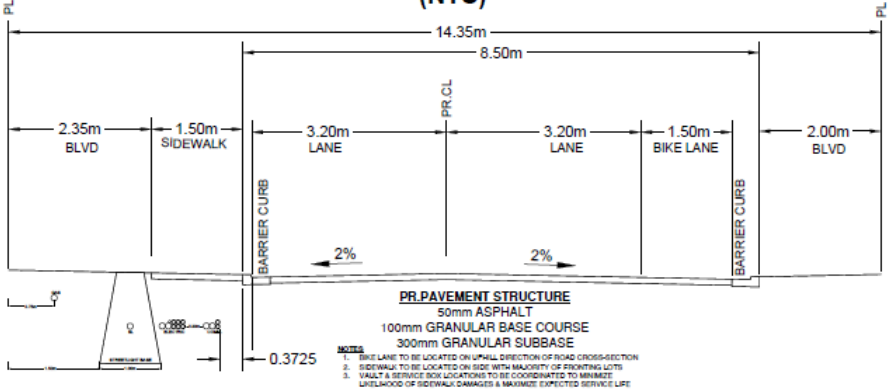


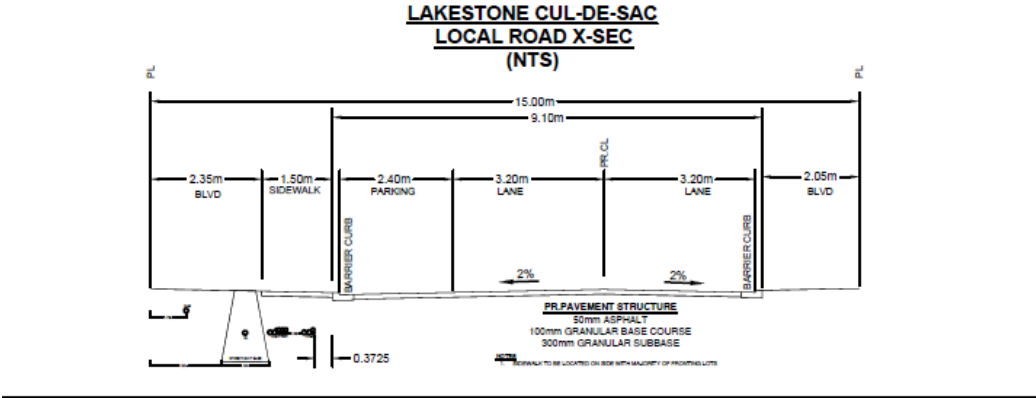
CROFTON RD. TYPICAL ROAD CROSS-SECTION (NTS)



CRIMSON RD. TYPICAL ROAD CROSS-SECTION (NTS)

CHASE LOCAL ROAD X-SEC (NTS)





The District Engineer may approve revision to the road cross-sections if the Developer can show that doing so would assist in the preservation of the natural environment. Final approval of a deviation from the plans shown here would be at the sole discretion of the District Engineer.

DRAWINGS:

Drawing Number. Drawing Name

- 08.01.01 – Roads Overview

8.3 - Street Lighting Standards

Lumenpulse



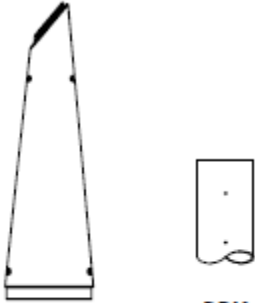
PUR100-120-CSL-M80-40K-CRI80-3-BKTX-DIM-SMG

Pure 100



Arm - PU4-S1E-BKTX

PU4



Pole - PPL-S-5-STL-R-24-M-BXTX-WP-BRK-AB

WP

BRK

MOBB8-R-12-FR-RO-30K-CRI80-5-BKTX-NO-AB-SPL (021274)

8.4 - Retaining Walls

GENERAL POLICY

1. The Developer will be permitted to build retaining walls up to the heights outlined in the table of Section 8.1 without the need for a Development Variance Permit.
2. The “Subdivision related” walls (row 3 in the table in 8.1) are needed for the development of the various subdivisions of Lakestone. If the Developer sells off a parcel of land within Lakestone to another developer, that developer will be allowed to construct walls in the locations and at the listed heights per the attached appendixes without the need for a Development Variance Permit.
3. Private lot owners in Lakestone may build engineered walls up to 2m without the need for a Development Variance Permit.
4. The anticipated location of future public walls is noted in Appendix 04.04.01, 08.04.02 and 07.01.05. This is provided for District planning purposes only as exact wall locations and configurations will be determined at the detailed engineering design stage.
5. Engineering required for all walls over 1.22 m in height, and not for walls under that height.

Allowable engineered materials (Developer or private land owner):

A. Magnum Stone (Barkman)



B. Keystone (Barman)



C. Verti Block



D. Maccaferri



DRAWINGS

Drawing number. Drawing name

- 08.04.01 – Wall and Rock Cuts – Highlands Central
- 08.04.02 - Wall and Rock Cuts – Highlands East
- 08.04.03 - Highlands South - Walls – Private
- 08.04.04 - Highlands South - Walls - Private

8.5 - Rock Cut Catchment

GENERAL POLICY

1. The Developer will be permitted to create cut slopes up to 10 meters high without the need for a Development Variance Permit.
2. Developer may extend its right to build up to 10-meter rock cuts to a sub-developer provided the limitations of the extent of that right are put in writing addressed to the District.
3. Any rock cut slopes must include a catchment ditch per the table below:

ROCKFALL CATCHMENT DITCH (VALLEY GEOTECHNICAL)

ROCK CUT SLOPE HEIGHT	CATCHMENT WIDTH	CATCHMENT DEPTH
(m)	(m)	(m)
1.5 - 3.0	1	0.25
3.0 - 4.0	2	0.5
4.0 - 6.0	2.5	0.75
6.0 - 8.0	3	0.75
8.0 - 10.0	4	1
> 10	4 ¹	1