
Approved by Council – August 21, 2017

Greenhouse Development Policy

1 Background

Municipal infrastructure can be significantly impacted by greenhouse development. The current engineering standards require additional guidance to ensure that new greenhouse development meets a basic standard and not negatively affect the Town's infrastructure. Also the current engineering standards require development to meet requirements that are not necessarily desirable or appropriate for a greenhouse development. A new standard for development is proposed that will address known issues with greenhouse development in an effort to protect the Town's infrastructure.

2 Policy

2.1 Application

This policy will be applied when any application is received for a Development Permit or Subdivision of a site occupied by a commercial greenhouse. This policy is not to be applied to greenhouses that are auxiliary buildings on residential properties with residential zoning.

The policy requires that all of the development (new and existing) on the property and adjacent road right-of-way's be brought up to these basic standards.

2.2 Exemptions from current standards

2.2.1 Water Distribution System

A greenhouse development is exempt from the requirement to provide fire hydrants as per section 3.2.2 of the Design Guidelines (90 metres spacing along all commercial/industrial roads). A greenhouse development shall provide for a hydrant located:

- Within 90.0 metres from any major entrance that does not directly enter a growing area or as deemed prudent by the Town Engineer. Typically loading docks, packing areas, offices, etc.
- Within 180.0 metres of the front door of any existing residential development

2.2.2 Roadways

A greenhouse development is exempt from the requirement to construct all roads around the greenhouse site to a:

- Local Industrial / Commercial Roadway Rural standard (20.0 metre ROW with 8.0 metre paved roadway, 1.5 metre graveled shoulders and ditches on each side or,
- Local Industrial / Commercial Roadway Urban standard (20.0 metre ROW with 11.0 metre paved roadway, curb and gutter both sides and monolithic sidewalk on one side or,

- Local Industrial / Commercial Roadway Urban Low Impact standard (20.0 metre ROW with 8.0 metre paved roadway, curb and gutter both sides and monolithic sidewalk on one side.

A greenhouse development is exempt from the requirement to install street lights on all roads around the greenhouse site with the exception being that all intersections are adequately lit and any road shared with residential or commercial development is adequately lit.

2.3 Additional Standards

2.3.1 Water Distribution System

Greenhouse developments shall provide the following in addition to the current engineering design guide lines for water distribution systems:

- The average day water consumption, peak day water consumption and peak hour water consumption with backup documentation on how these numbers were calculated. Where the water consumption is deemed to be excessive for the Town's system the developer shall provide a report from a professional engineer licenced to practice in the Province of Alberta, detailing the improvements that the developer will need to make to the Town's water distribution system for the Town to meet the developments water consumption needs.
- A water metre installed on the service with access for the Town to the metre without any special tools, equipment or permissions.

2.3.2 Sanitary Sewer Collection System

Greenhouse developments shall provide the following in addition to the current engineering design guide lines for sanitary sewer collection systems:

- The average day sanitary sewage discharge, peak day sanitary sewage discharge and peak hour sanitary sewage discharge with backup documentation on how these numbers were calculated. Peak sewage discharges shall take into account any water storage tanks that may be discharged into the sanitary sewer system. Where the sanitary sewage discharge is deemed to be excessive for the Town's collection system the developer shall provide a report from a professional engineer licenced to practice in the Province of Alberta, detailing the improvements that the developer will need to make to the Town's sanitary sewage system for the Town to meet the developments sewage discharge requirements.
- A sanitary sewage metre shall be installed in a manhole on Town controlled property so that the Town can measure the sewage generated by the development.

2.3.3 Storm Sewer Collection System

Greenhouse developments shall meet the minimum requirements for storm sewer for commercial / industrial developments outlined in the design guidelines with the additional requirements:

- The onsite storm system shall be designed by a professional engineer licenced to practice in the Province of Alberta,

- Where the greenhouse development is not able to retain storm runoff from major events to their property the storm design is to include details of the improvements that the developer will make to the Town's storm system for the Town to meet the developments storm runoff requirements. These requirements could include the expansion of storm ponds, storm piping, ditches, acquiring property for storm ponds and ditches, construction of new storm ponds, etc.

2.3.4 Roadways

Greenhouse developments shall provide the Town with a separate site plan showing:

- all points of access to the Town's roads and road right-of-way's proposed by the developer,
- all uses of the road right-of-way's proposed by the developer including but not limited to parking, loading, stormwater management, access to equipment etc.

Greenhouse developments shall provide the Town with graveled roads meeting the following minimum requirements:

- Town of Redcliff design guidelines for horizontal and vertical alignments,
- 8.0 metre gravel surface, 250mm of 75mm minus pit run and 50mm of 19mm minus road crush both compacted to 100% standard proctor dry density at plus or minus 2% moisture content.
- Culverts a minimum of 400mm in diameter at ever proposed ditch crossing.
- Ditches a minimum of 750mm deep, minimum slope 0.5%, with side slopes of 4 horizontal to 1 vertical,
- Dedication of lands to accommodate the ditch back slopes or construction of retaining walls on the developers property,
- Established vegetative cover on the ditches.

2.4 Responsibility for the costs

The developer is responsible for all of the costs for:

- Engineering,
- Upgrades to bring infrastructure into compliance with this policy, irrespective of who the final owner of the infrastructure is, (i.e. Town or Developer)
- Off-site levies as per the off-site levies bylaw and policy.

2.5 Security

The Developer is required to put up 100% of the estimated construction costs of the infrastructure improvements required to meet the requirements of this policy whether the infrastructure is to be dedicated to the Town or remain owned by the Developer.

2.6 Service / Development Agreement

A service or development agreement shall be a condition of the development or subdivision approval and shall layout how the requirements of this policy are being meet along with the typical items dealt with in a service or development agreement.