

SECTION 1.0 GENERAL CONDITIONS

1.1 Planning and Conceptual Servicing

- 1.1.1 Prior to any development taking place, the Developer must have undergone the proper planning process and an Area Structure Plan (A.S.P.) must be in place and adopted by the Town.
- 1.1.2 The plans would include all pertinent information as to the conceptual outline of the ultimate subdivision area and the overall servicing concepts for water, sanitary sewer, storm sewer and drainage, roadways, public reserves, land uses and other significant aspects relating to the complete development area.
- 1.1.3 The conceptual plans must be in accordance with the town's existing municipal servicing plans, concepts and other related documents or studies.

1.2 Standards

- 1.2.1 These set of standards have been prepared with the following objectives in mind:
 - .1 To establish a minimum standard. Where conditions dictate and good engineering practice requires, a standard higher than these indicated herein shall be incorporated into the design.
 - .2 To establish standards that will minimize the costs to the consumer while maintaining an acceptable level of service.
 - .3 To encourage consistency and quality in the standard of improvements provided by development throughout the Town.
 - .4 To minimize chance of error, omissions or conflict between various utilities.
 - .5 The design standards shall apply to the design and installation of service within the Town of Whitecourt. They apply to the design and installations of storm and sanitary sewers, watermains and streets, together with other services which are required to be designed and/or installed.
- 1.2.2 Material installed within the subdivision shall conform to the most recent standards of AWWA or ASTM and where CSA Standards are applicable shall be certified by the Canadian Standards Association. All materials may be inspected by the Town Engineer prior to incorporation into the works.
- 1.2.3 Further reference is to be made to the Town of Whitecourt's latest "Standard Specifications" document, wherein greater detail is available for the various utility, roadway and other relevant sections. All work must be done in accordance to these specifications or amendments.
- 1.2.4 The Town will endeavor to keep up to date on current engineering practices_ and will update the Standards as required.

1.3 **Local Improvements**

1.3.1 In the Town, complete local improvements within the area covered by the Development Agreement or Development Permit shall be installed by the Developer at its own cost. This includes redevelopment, new subdivisions, land use changes or rezoning and renovations of existing properties.

1.3.2 “Local Improvements” shall be interpreted to include the following:

- .1 Sanitary sewer and storm drainage systems, including storm sewer connections where required by the plans.
- .2 Water mains including fittings, valves and hydrants and including the looping of water mains beyond the development area in order to safeguard and insure the continuous supply of water in the development area.
- .3 Service connections from the sanitary sewer and water mains to the property lines of individual lots.
- .4 Oversizing of water, sanitary and storm sewer systems to accommodate future land development.
- .5 Concrete curbs and gutters, sidewalks, driveway installation or removal.
- .6 Asphalt street paving or gravel roads, and lane construction.
- .7 Landscaping of utility lots, buffers, boulevards and reserves.
- .8 Street lighting.
- .9 Fire lanes.
- .10 Traffic signs and street signs.
- .11 Development on dedicated lands or reserves in accordance with the standards of the Community Services Department (this may include park apparatus).
- .12 Clearing and grubbing; stripping and stockpiling of top soil; pre-grading of service area. Burning of cleared material and/or removal from site as per the Town’s request.
- .13 Survey control network.
- .14 Gas, power, telephone and cablevision services.
- .15 Fencing, buffer strips, walkways, stormwater management facilities, pipeline right-of-ways, utility lots and easements as required.
- .16 All other services or improvements as required for the completion of the development area as stipulated in the Development Agreement.

1.4 **Definitions**

- 1.4.1 In these design standards, unless the context otherwise requires, the following words shall have the meaning hereinafter assigned to them.
- 1.4.2 “Municipal” or “Municipality” or “Town” shall refer to the Town of Whitecourt.
- 1.4.3 “Town Engineer” or his authorized representative shall mean a Municipal employee or Consulting Engineer who for the time being is acting for the Municipality in their respective positions.
- 1.4.4 “Consulting Engineer” or “Engineer” shall mean the Professional Engineer retained or employed by the Applicant to be responsible for the design layout and supervision of installation, recording of as-built information and performing these duties in connection with the provision of Municipal Services as set out in these design standards.
- 1.4.5 “Applicant” or “Developer” shall mean a person who has applied for approval of a proposed subdivision or to service an existing parcel of land, whether as the owner or an agent for the owner of the land included therein.
- 1.4.6 “Contractor” shall mean person or persons or corporations which shall undertake the installation of Municipal Services on behalf of either the applicant or the Municipality.
- 1.4.7 “Essential Services” shall mean the complete and approved installation of watermains, sewer mains, service connections, adequate gravel or paved access, gas, power, telephone, cablevision, street lighting and street signage.

1.5 **Engineering Design**

- 1.5.1 The Applicant shall retain or employ a Professional Engineer who shall be responsible for the design and preparation of drawings and specifications for all services as required by the Town.
- 1.5.2 The Developer’s Engineer shall undertake all design, obtain all required approvals, provide general and on-site engineering services during construction, as defined by the Alberta Association of Professional Engineers. Record plans shall be provided for all work completed. The record drawings and operating manuals if applicable, shall be submitted with to the Town within one year of acceptance on each phase or local improvement. Prior to issuance of a Completion Certificate, the Developer shall provide the Town with one set of construction drawings marked up with record information.
- 1.5.3 The design drawings shall show all existing and proposed services. It shall be the consulting Engineer’s responsibility to coordinate with the utility companies to establish the location of their existing and proposed services.
- 1.5.4 Geotechnical Report - the Developer shall have a qualified Geotechnical Engineer submit a report of sufficient detail to establish the suitability of the proposed subdivision for the type of development proposed. In the event the report reveals areas of high water table or unusual subsurface soil conditions, it will recommend special construction or other techniques required to insure the stability of any of the proposed local improvements.

1.6 **Submission of Preliminary Engineering Design**

The Consulting Engineer shall submit a minimum of 14 days prior to commencement of construction to the Town Engineer together with three (3) complete sets of preliminary plans and construction specifications the following information:

- 1.6.1 Calculation of sanitary and storm sewer capacity and pipe loading and where these services are to be installed. Overall servicing and calculations for the ASP, if required.
- 1.6.2 Water distribution system analysis. Overall servicing for the ASP, if required.
- 1.6.3 Roadway details and pavement design calculations, including geotechnical reports.
- 1.6.4 A hydrogeological impact assessment as may be required to define constraints imposed by soil and groundwater conditions, which will affect the choice of design philosophy and construction practices to be applied.

1.7 **Design Review**

- 1.7.1 All design drawings and construction specifications and relevant data shall be reviewed by the Town Engineer and any revisions required by the Town Engineer shall be incorporated into the final design.

1.8 **Final Design Review**

- 1.8.1 Upon completion of all revisions, the Consulting Engineer shall submit three (3) sets of Contract Drawings with construction specifications to the Town Engineer for design approval.
- 1.8.2 When the design is approved, the Town Engineer shall accept the plans and construction specifications and return one set to the Consulting Engineer or Applicant.
- 1.8.3 There shall be no development within any parcel of land until the Town has accepted the Design Drawings, Subdivision Approval; and the Development Agreement has been executed.

1.9 **Construction Approval**

- 1.9.1 Upon receipt of the Accepted Drawings and specifications, the applicant may proceed to install Municipal services subject to:
 - .1 Execution of a satisfactory Development Agreement or a Development Permit if applicable.
 - .2 Reasonable inspection by the Town Engineer and making arrangements for adequate independent testing where required.
 - .3 Provisions of copies of all test results, progress and inspection reports as they become available.
 - .4 Proper soils testing report for foundations and unusual ground conditions.

1.10 **Record Drawings**

1.10.1 Within one year of completion of all services to be installed, the Consulting Engineer shall deliver three (3) complete sets of stamped "Record" prints, including one sepia mylar set and pertinent Autocad disk files, to the Town Engineer showing the following:

- .1 Date of Completion.
- .2 Name of Contractor.
- .3 Storm & Sanitary Sewer:
 - a) Size, pipe material, pipe class, pipe bedding and location of mains.
 - b) Location of manholes, manhole numbers and other appurtenances.
 - c) Grades, lengths, rim elevations and inverts of mains.
- .4 Watermains:
 - a) Size, type and locations of mains.
 - b) Locations of appurtenances, valves, tees, bends, hydrants and fittings.
 - c) Profile of pipe, and pipe bedding.
 - d) Hydrant numbers, elevation of the hydrant riser
- .5 Roads, Sidewalks & Curbs:
 - a) Location from property line of curbs and sidewalks.
 - b) Curb elevations.
 - c) Lip of gutter profile.
 - d) Location of structures with a distance from property line
 - e) Design of road structure.
- .6 Water & Sanitary Service Connection:
 - a) Three (3) copies of the service connection reports, showing lot, block, lengths of material, fittings and locations measured from property lines to the connections.
 - b) Service connection and curb stop location on overall and/or lot serving plan (if service connection is not in the centre of the lot)

1.11 **Municipal Acceptance**

1.11.1 Upon satisfactory completion of the project or a portion thereof and after all the major deficiencies have been corrected to the satisfaction of the Town, a Construction Completion Certificate (C.C.C.) will be issued to the applicant notifying:

- .1 Acceptance of the work by the Town.
- .2 Commencement date of the maintenance period.

1.11.2 The applicant shall be responsible for and at his own cost, remedy any defect, fault or deficiency in the completed works during the maintenance period. Maintenance periods shall be two years for surface construction and one year for underground construction. The maintenance period shall be extended, as required, if any outstanding deficiencies remain after the end of the maintenance period.

- 1.11.2 Upon completion of the maintenance period and after a final inspection and correction of all deficiencies to the satisfaction of the Town Engineer, a final Acceptance Certificate (F.A.C.) will be issued by the Town.

1.12 **Materials**

- 1.12.1 All materials shall conform to these design standards and to the list of approved manufacturers of materials in Appendix A.

1.13 **Local Conditions**

- 1.13.1 The Developer or Contractor shall notify the Planning & Works Department 48 hours in advance of their intention to connect to existing sanitary sewer, water and storm sewer mains and services. All connections must be inspected by the Town Engineer prior to backfill.
- 1.13.2 The Planning & Works Department shall be contacted to coordinate any road closures or detours of existing streets. The Developer shall provide, erect and maintain all signage necessary to protect and control public traffic. This signage must meet or exceed all applicable standards and guidelines and be acceptable to the Town or as in Uniform Traffic Control Manual.
- 1.13.3 The local Fire Department, R.C.M.P., School Districts and Ambulance shall also be contacted for proper coordination of any road access or service disruptions.
- 1.13.4 The Developer or Contractor is responsible to be aware of Town bylaws and procedures relating to the development.
- 1.13.5 Permits and/or approvals from other government bodies or agencies must be obtained by the Developer as required.

1.14 **Abandoned Mains, Services and Other Work's**

- 1.14.1 Any mains, services or other works (such as driveways) that are no longer required, abandoned due to changes in a development, must be removed, at the Developer's expense or abandoned in a manner acceptable to the Town.

1.15 **Existing Studies**

- 1.15.1 The Developer's Engineer shall make reference to the Town's latest documents and studies for servicing, transportation, land use and other relevant areas for proper planning and design of any proposed developments.

1.16 **Building Permits**

- 1.16.1 The Town will not issue a Development Conformance Certificate until essential services are approved by the Town.

1.17 **Construction Site Safety**

- 1.17.1 The Developer shall take the necessary steps and measures to ensure that the Alberta Occupational Health and Safety Regulations are followed at all times on the construction site for the protection of workers and the public at large.

1.18 Asphalt Maintenance Period

- 1.18.1 The maintenance period for asphalt paving work shall be two years for asphalt base course and one year for asphalt surface course after final lift is completed.