



**CITY OF
SWIFT CURRENT**
where life makes sense

PART A1

GENERAL REQUIREMENTS

OCTOBER 2020



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Abbreviations

The following abbreviations may be used in this document:

BC	-	Beginning of curve
BOW	-	Back of walk
BVC	-	Beginning of vertical Curve
CCC	-	Construction Completion Certificate
EC	-	End of Curve
EVC	-	End of vertical Curve
FAC	-	Final Acceptance Certificate
FOW	-	Face of walk
ha	-	Hectare
ID	-	Inside diameter
Kg	-	Kilogram
lcd	-	Litres per capita per day
m ²	-	meter squared
m ³	-	meter cubed
OC	-	On centre
OD	-	Outside diameter
PVI	-	Point of vertical intersection
l/s	-	Litres per second
m/s	-	Metres per second
kPa	-	kilopascal
MPa	-	megapascal
pH	-	measure of acidity or basicity of an aqueous solution
ACP	-	Asphaltic Concrete Pavement
ASBC	-	Asphalt Stabilized Base Course
SPD	-	Standard Proctor Density
CD	-	Compact Disc
DVD	-	Digital Video Disc
CCTV	-	Closed Circuit Television
ASB	-	Agricultural Service Board
PW	-	Public Works

Other abbreviations may be used or defined elsewhere in this document. Where undefined, an abbreviation shall carry a meaning consistent with industry standards. Ascertaining the meaning of a word or abbreviation in context is the responsibility of the Designer or Developer.

1 REQUIREMENTS PRECEDING STANDARDS AND SPECIFICATIONS

Addressing infrastructure design and construction on a site follows a process of review, discussions, and approvals leading to the actual work to occur on the site. Development starts with having the correct zoning, obtaining the necessary permits and approvals for development, and undertaking the necessary studies and technical evaluations needed to subdivide the land and pursue development or re-development on a site. The design guidelines and construction specifications are tied to any general land use and planning policies and standards that may influence the location of and design of physical improvements on a site.

Consultation with the Planning and Growth Development Department shall occur before undertaking any engineering and technical analysis of the site and development on the property. Once all the preceding activities have occurred and have been approved these Standards and Specifications are to be used for infrastructure design and construction.

2 APPLICATION OF THESE STANDARDS AND SPECIFICATIONS

The City Standards and Specifications in their entirety consist of the following sections:

- Part A – Design and Development Standards
- Part B – Construction Specifications
- Part C – Standards Drawings

This complete document has been prepared to guide designers, developers, and consultants by providing clear direction and expectations of the City of Swift Current (City) when developing, or performing work within the City. The document also provides standards and specifications for use by City departments and their contractors when engaging in infrastructure improvement projects. The objectives of the document are as follows:

- 2.1 To provide a consolidated statement of City policies and expectations regarding the standard of municipal improvements required.
- 2.2 To provide clear and consistent standards to Developers and Consultants regarding the design and servicing of infrastructure in the City.
- 2.3 To establish a series of consistent standards and specifications that the Developer, Consultant, and Contractor are to recognize and follow throughout the design and construction process.
- 2.4 To ensure that infrastructure built for the City meets community quality of life while being safe, functional, environmentally friendly, cost effective, and aesthetically pleasing.
- 2.5 To identify design and construction criteria that the City considers to be minimum standards.

- 2.6 To outline the various stages of planning and design, level of analyses required, and procedures to be followed to obtain approval of conceptual, preliminary, and detail design for developers and consultants for municipal improvement proposals.
- 2.7 To provide clarity for the developer on their obligations for restoration and/or improvements to City infrastructure that is directly/indirectly impacted by the development being considered.

3 DEFINITIONS

In these standards and specifications, unless the context otherwise indicates, the following words shall have the meaning hereinafter assigned to them.

“Applicant”/“Developer” shall mean a person who has applied for the subdivision, development or installation to serve an existing parcel of land, whether as the City or an agent for the City of the land included therein.

“Contractor” will mean any person, persons, or corporations that shall undertake the installation of Municipal Services on behalf of either the Applicant or the City.

“Developer’s Engineer” shall mean a qualified Professional Engineer registered and licensed to practice in the Province of Saskatchewan, who is appointed or engaged by the Developer to be responsible for the design and preparation of drawings and specifications and provision of engineering supervision during the construction of the municipal improvements for the development area.

“City” or **“Engineer”** or **“Project Manager”** means a representative of the City of Swift Current who is assigned authority to act on behalf of the City.

“Municipal Improvements” or **“infrastructure”** shall mean both underground and surface structures including, but not necessarily limited to, watermains, sewer systems, storm drainage systems, roadways, walkways, park areas, shallow utilities, signage, retaining walls, fencing, and other improvements as required by the City, all of which shall become the property of the City to operate and maintain.

“Prime Contractor” as defined by Occupational Health and Safety Act.

“Landscape Architect” refers to the consultant working on behalf of the developer and/or City for the preparation of landscape drawings. The Landscape Architect must be a member in good standing with the Saskatchewan Association of Landscape Architects.

“Servicing Agreements” refers to a legal agreement between Developers and the City of Swift Current which specifies financial obligations and terms and conditions for the construction of the municipal improvements necessary to services lands approved for development. Types of agreements are as follows:

- Servicing Agreement
- Deferred Servicing Agreement

4 USE OF THESE STANDARDS AND SPECIFICATIONS

- 4.1 Where a Developer is required to enter into a Servicing Agreement, any conditions in the agreement will supersede information contained in these design standards.
- 4.2 These design standards and construction specifications shall apply to the design and installation of municipal infrastructure within new and existing developments within the City of Swift Current.
- 4.3 These Standards and Specifications do not cover the design or installation of lighting, power, gas, telephone, and television services, but do include coordination with the various utility companies. The general location of such services must be approved by the City of Swift Current.
- 4.4 The Standard Drawings, as referred to in various sections, will form an integral part of these design guidelines and construction standards. Refer to the Standard Drawings in Part C.
- 4.5 No construction shall commence until all designs have been accepted by the City and the following has been submitted:
- Design drawings
 - Letters of Credit
 - Authority Contacts
 - Submittal requirements as set out in the specific standards sections.

5 CHANGES FROM THE STANDARDS AND SPECIFICATIONS

No departure from these design guidelines and construction standards will be permitted except with written approval of the City. A written “Change Request” to deviate from these standards and specifications shall be submitted to the City Project Manager for the specific project. The “Change Request” shall include the following information:

- Reason for the change request
 - Short and long term benefits associated with the change
 - Evidence indicating successful implementation in other municipalities.
- 5.1 The City reserves the right to request additional information on the proposed Change to the standards and specifications prior to approval.
- 5.2 Any contemplated changes must conform to any City Bylaws.

- 5.3 The City reserves the right to the final decision regarding interpretation on the intent of these standards and specifications and the acceptability of changes.
- 5.4 The City of Swift Current will provide written approval to indicate that the proposed change has been accepted or rejected. Written approval **MUST** be signed by two (2) City General Managers or specified delegates thereof in order to be considered accepted by the City of Swift Current.
- 5.5 The City reserves the right to require any specific situation to exceed the requirements of these standards and specifications if deemed necessary.

6 CITY DEPARTMENT ROLES

The following are the three main City Departments, although each department is dedicated to specific elements there are circumstances where departments will overlap. A meeting for specifics will need to be carried out to determine the project specific role for each.

Planning and Growth Development shall be the first point of contact for any prospective developer or persons wishing to develop land which will directly impact the City of Swift Current's infrastructure. Permits and agreements will be complete with Planning and Growth Development who will communicate and collaborate with other departments, such as emergency services, to ensure that all requirements are covered.

Infrastructure and Operations shall be responsible for the engineering review of prospective developments and how they tie into the City of Swift Current's infrastructure. Infrastructure and Operations will review and advise on the following aspects of the prospective development:

- Streets & Roads
- Watermain
- Sanitary Sewer
- Storm Sewer

During the course of construction representatives from the Infrastructure and Operations department will conduct site visits to verify that City specifications are being met. They will also be available to troubleshoot any existing problems that may arise with existing infrastructure.

Community Services shall be involved in and responsible for the review of all parks, playgrounds, trails, pathways, and associated facilities that will be taken over by the City after the project is complete.

7 ENGINEERING DESIGN REQUIREMENTS

7.1 GENERAL

- 7.1.1 The Applicant shall retain the services of a Professional Engineer, registered and licensed to practice in the Province of Saskatchewan, who shall be responsible for the design and preparation of drawings and specifications for all infrastructure (except lighting, telephone, natural gas, and power) to be constructed within and/or related to the proposed development area, as required, within the City of Swift Current.
- 7.1.2 All required municipal improvements shall be designed in accordance with accepted engineering practices and shall meet or exceed the City of Swift Current Design Standards and Construction Specifications as set out herein. If landscaping plans are deemed required by the City the landscape plans will be prepared and stamped by a Landscape Architect or a Professional Engineer as required by Provincial Legislation.
- 7.1.3 It is the Developer's obligation to provide all off-site infrastructure required to serve their development unless otherwise specified by the City.

7.2 REQUIREMENTS

- 7.2.1 For the installation of services or municipal infrastructure to serve an existing property, the applicant shall make application in writing on the appropriate form provided by the City. These applications do not necessarily require engineering design; however, the applicant must provide proof that the installation will conform to these design standards. If the City deems it necessary that the installation be monitored by a professional engineer, the applicant shall pay all costs for the monitoring.
- 7.2.2 The Design drawings must show all existing and proposed services. It shall be the responsibility of the Developer's Engineer to coordinate with the utility companies to establish the location of their existing and proposed services. All design drawings must be completed in accordance with Section 10 of these guidelines and specifications.
- 7.2.3 The Developer's Engineer shall be responsible for carrying out all surveys and investigations necessary to prepare the design. It shall further be the responsibility of the Developer's Engineer to identify the need for any easements or additional rights-of-way required. The plans and related documents shall be prepared by a qualified licensed Saskatchewan Land Surveyor at the Developer's expense.
- 7.2.4 The Developer's Engineer shall bring to the attention of the Applicant the need for any rights-of-way, outside the subdivision, that the Applicant will have to obtain. The Applicant shall provide proof of rights-of-way to the City prior to the installation of services on such properties. Rights-of-way shall be assigned in the name of the City or, as applicable, the utility company. The Applicant is to pay all costs associated with registering the right-of-way and fulfil all terms and conditions associated with establishing rights-of-way.

- 7.2.5 While the Developer's Engineer may arrange to have certain portions of the work carried out by other qualified persons, he shall remain responsible for the coordination of the work and certification of its quality and accuracy.

7.3 RIGHTS-OF-WAY AND EASEMENTS

- 7.3.1 Streets, lanes, and utility lots shall be designed to accommodate all deep and shallow utilities where possible. Every effort should be made by all utilities to do their work within the rights-of-way dedicated for these purposes and not acquire additional easements for utilities except along common side property lines and along rear property lines without lanes.
- 7.3.2 Other Dedications that have to be factored into any new subdivision or development shall be a municipal reserve, environmental reserve, green space, or park in accordance with the City's Subdivision Bylaw and Provincial Legislation.
- 7.3.3 Rights-of-way and/or easements will be provided for all utilities not located on streets, lanes, or utility lots, including rights-of-way for ditches or water courses accommodating surface runoff.
- 7.3.4 Where easements or rights-of-way are deemed necessary, they will be prepared by a registered Land Surveyor at the Applicant's expense.
- 7.3.5 Rights-of-way shall be registered in the name of the City or, as appropriate, in the name of the utility company. Ownership to be confirmed with the City.

7.4 ENVIRONMENTAL AND HISTORICAL STUDIES

- 7.4.1 In any subdivision development activity, the concern for environmental and culturally sensitive areas must be addressed by the Developer prior to or concurrent with the subdivision of land in order to undertake any development, and during any subsequent subdivision construction activity.
- 7.4.2 Environmental and significant area studies address issues such as wildlife management, sensitive ecological areas, sensitive rivers and creeks, agricultural concerns, noise pollution, light pollution, previous site contamination, sewage disposal, solid waste disposal, and others as necessary.
- 7.4.3 Historical and archaeological studies address issues such as heritage sites, tepee rings, and other such concerns shall be investigated by the Developer at their own expense.
- 7.4.4 Copies of all Correspondence and reports shall be submitted to the correct department at the City of Swift Current.

7.5 GEOTECHNICAL REPORT

- 7.5.1 As part of the Developer's design submission pursuant to a Servicing Agreement, the Developer shall submit a Geotechnical Engineering Report, prepared by a qualified Professional Geotechnical Engineer, that identifies and evaluates the subsurface ground characteristics of the subdivision development area.

- 7.5.2 Such report shall identify soil types and conditions, including frost susceptibility, soil stability, and water table elevations, as well as any potential difficulties that could be encountered during the construction of the municipal improvements.
- 7.5.3 At the requirement of the City, additional geotechnical information may be requested outlining recommended design and construction requirements and techniques that may have to be followed to satisfactorily develop the subdivision, particularly related to water and sewer main construction and roadway structures.
- 7.5.4 Slope Stability – The City of Swift Current requires a full slope stability analysis by a qualified Professional Geotechnical Engineer for slopes 15% or greater, and greater than 2.0 metres in vertical height. A full slope stability analysis is required for any slope greater than 10%, greater than 1.0 metre in vertical height, and with a water body at or near the toe of the slope. These areas can be considered as part of the development if a qualified professional Geotechnical Engineer can certify the stability of the slopes prior to, during, and after development. Slopes of greater than 15% can be considered as part of the development if the engineer can certify the stability of the slopes prior to, during, and after development. The City of Swift Current may require a full slope stability assessment by a qualified professional Geotechnical Engineer, for any slopes of less than 10% and greater than 5% where there are water bodies at or near the development area. The City requires a full slope stability analysis by a qualified professional Geotechnical Engineer for any major erosion area or area of previous slope failure.
- 7.5.5 Fill – Potential fill areas must be identified as part of the development process. Following development approval, all fill placement for roadway sub-grades and building foundations must have a record of compaction testing. Fill for building foundations must be compacted to a minimum of 98% Standard Proctor Density. For any foundation placed on fill, a soil bearing certificate must be presented.
- 7.6 SUBMISSION OF ENGINEERING DESIGN**
- 7.6.1 Upon completion of the design drawings, the Developer’s Engineer will submit to the City two (2) complete sets of stamped and signed drawings and specifications of the proposed works.
- 7.6.2 Drawings shall be in accordance with the Design Drawings and As-built Drawings Sections of these General Requirements.
- 7.6.3 Preliminary design drawings do not need to be stamped by the Engineer.
- 7.6.4 In addition to the design drawings all supporting design documentation, including but not limited to the following, shall be submitted to the City:
- A copy of the Geotechnical Investigation report.
 - Water distribution analysis as specified in “Water Distribution Systems.”
 - A copy of the Contract Documents proposed for construction purposes.

- “Environment/Heritage” Reports outlined in Section 7.4 of these General Requirements.
- Calculations of sanitary and storm sewer capacity, as shown on the overall sewer and water plan, and pipe loading, where these services are to be installed.
- A print of the registerable plan of the subdivision (if not already supplied by the Applicant/Developer).

7.6.5 All proposed streets should be named on the drawings. All street names are to be approved by the City.

7.7 DESIGN REVIEW

7.7.1 All design drawings, specifications, and relevant data will be examined by the City.

7.7.2 Any revisions will be directed to the Developer and/or the Developer’s Engineer in the form of redline drawings or a list of comments. All comments from the City shall be considered for the final design of the development.

7.8 DESIGN APPROVAL

7.8.1 Upon completion of all revisions, the Developer’s Engineer shall submit four (4) complete sets of Contract Drawings and Specifications to the City.

7.8.2 When the design is approved, the City shall stamp “Approved by the City” with the initials of the approval official and the date of the action on the drawings. One set of the drawings shall be returned to the Developer’s Engineer, or a letter issued advising that the design is accepted and listing any conditions of acceptance.

7.8.3 No work will be commenced within any new parcel of land or any of the services to be provided by the Applicant until the City has examined and stamped the revised Contract Drawings.

7.9 SERVICING AGREEMENT

A Servicing Agreement will outline the Developer’s specific obligation to construct improvements to City Standards, identify scope of improvements, special development requirements, cost sharing, and performance security. A typical Servicing Agreement is included in Section 11 of these General Requirements.

7.9.1 The Developer, prior to registration of a subdivision with Saskatchewan Land Titles and prior to commencing construction, will be required to enter into a Servicing Agreement.

7.9.2 The Servicing Agreement will also identify the City’s obligations to review plans, inspect construction, and assume ownership and maintenance responsibilities after construction.

7.9.3 Preparation of the Servicing Agreement by Planning and Growth Development will typically be completed concurrently with Detailed Design Drawing review and approval of relevant reports (Geotechnical, Environmental, and/or Historical) prior to development.

- 7.9.4 The approved engineering drawings and applicable engineering documentation will become part of the Servicing Agreement.
- 7.9.5 The City will not execute the Servicing Agreement until all the required engineering detail has been received and approved.
- 7.9.6 No Development Permits or building permits will be issued until the subdivision plan is registered, all essential services have been provided as specified in the Servicing Agreement, and underground utility service as-built prints have been submitted and accepted by the City.

7.10 DEFERRED SERVICING AGREEMENT

Where there are no public mains (sewer, water, storm) adjacent to a proposed development, or the City deems it necessary on a specific development to delay the installation of services to a future date, then a separate Deferred Servicing Agreement shall be entered into between the City and Developer. A sample Deferred Servicing Agreement is included in Section 11 of these General Requirements.

8 DESIGN DRAWINGS

The following guidelines will govern the preparation of Engineering Drawings for all Municipal Developments. Drawings are necessary to a project to illustrate the extent and nature of the work to be done. The objectives of the drawings are the following:

- To control the physical outcome of the work.
- Provide an accurate estimate of the amount of work to be done and the cost associated with it.
- Provide a record of the work done.
- Ensure the design guidelines and construction standards are met.

8.1 DRAWING SIZE, MATERIAL

- 8.1.1 The Standard Drawing size 24" X 36" will be used. Paper size for lot servicing drawings shall be chosen on an individual's need. The designer must ensure the drawing size satisfies the work and is presented in a clear, legible format.
- 8.1.2 Originals will be prepared in ink on bond.

8.2 GENERAL REQUIREMENTS FOR ALL DRAWINGS

- 8.2.1 Elevations will be relative to the Geodetic datum. The reference bench marks and elevations will be shown on the design drawings.
- 8.2.2 A north arrow, the name of the subdivision and, where appropriate, phase as included in the Servicing Agreement, adjacent lots and plan numbers, street names, and the legal description of the parcel being subdivided will all be shown on the drawing. In general, the north arrows should be orientated toward the top of the plan.
- 8.2.3 All plans shall show the legal subdivision description including lot and block numbers.

- 8.2.4 Drawings shall be submitted for all phases of the project. All plan sets shall be bound along the left hand margin.
- 8.2.5 An Engineer's stamp and Permit to Practice stamp, signed by an Engineer registered in the Province of Saskatchewan, will be shown on the engineering drawings (not required for draft and preliminary design drawings).
- 8.2.6 Care shall be taken to ensure balanced distribution of detail throughout the drawing.
- 8.2.7 Dimensioning shall be in the metric system. Dimensioning of a drawing is extremely important and should be such that it will not be misinterpreted. Dimensions should be given from an iron pin, lot line, a centreline, or any other reference that can be readily established. Wherever possible, all dimensions shall be provided to a minimum of two (2) property lines.

8.3 SCALES

- 8.3.1 Urban Residential/Industrial and Rural Industrial drawings shall be prepared using the following scales:

Overall Plans	1:1000
Plan/Profile	Horizontal 1:500 Vertical 1:50
Cross-Sections	Horizontal 1:100 Vertical 1:50

- 8.3.2 Rural Residential drawings shall be prepared using the following scales:

Overall Plans	1:2000
Plan/Profile	Horizontal 1:1000 Vertical 1:100
Cross-Sections	Horizontal 1:1000 Vertical 1:100

- 8.3.3 Irrigation systems on landscape drawings shall be to a scale of 1:500.

- 8.3.4 Scale overall plans so drawing is clear, uncluttered, and text is legible.

8.4 DRAFTING STANDARDS

The following table details the line types. Pen thickness and text sizes required for the overall plans. Each item list below should be contained on their own individual layer in the electronic files. When additional items are required that are not listed a new layer shall be created and line weight, line type, Object Fill, and Text size are to be selected consistent with the type of item being shown and good drafting practices.

Item	Line Weight	Line Type	Object Fill & Shading	Text Size
General				
Project Boundary	1.00 mm	Dashed	n/a	n/a
Project Boundary Label	0.25 mm	Continuous	n/a	2.5 mm
Pan and Profile Label	0.50 mm	Continuous	n/a	4.5 mm
Drawing List	0.35 mm	Continuous	n/a	3.5 mm
General Notes	0.25 mm	Continuous	n/a	2.0 mm
Proposed Dimensions	0.18 mm	Continuous	n/a	2.0 mm
Legal and Planning				
Lot Block and Plan Lines	0.18 mm	Continuous	n/a	n/a
Street Names	0.50 mm	Continuous	n/a	3.5 mm
Block Numbers	0.25 mm	Continuous	n/a	5.0 mm
Lot Numbers	0.25 mm	Continuous	n/a	2.5 mm
UROW's	0.25 mm	Dashed	n/a	
Zoning Numbers	0.25 mm	Continuous	n/a	2.0 mm
Water				
Existing Water Lines and Appurtenances	0.25 mm	Dashdot	none	n/a
Existing Water Lines and Appurtenances Text, Dimension and Notation	0.18 mm	Continuous	n/a	2.0 mm
Proposed Water Lines and Appurtenances	0.50 mm	Dashdot	Solid	
Proposed Water Lines and Appurtenances Text, Dimension and Notation	0.18 mm	Continuous	Solid	2.0 mm
Sanitary Sewer				
Existing Sanitary Lines and Appurtenances	0.25 mm	Continuous	n/a	n/a
Existing Sanitary Lines and Appurtenances Text, Dimension and Notation	0.18 mm	Continuous	n/a	2.0 mm
Proposed Sanitary Lines and Appurtenances	0.50 mm	Continuous	Solid	
Proposed Sanitary Lines and Appurtenances Text, Dimension and Notation	0.18 mm	Continuous	Solid	2.0 mm
Storm Drainage				
Existing Storm Sewer Trunk Lines and Appurtenances	0.25 mm	Long Dash	none	n/a
Existing Storm Sewer Lines and Appurtenances	0.25 mm	Long Dash	none	n/a
Existing Catch Basin Leads	0.25 mm	Hidden2	none	n/a
Existing Catch Basins	0.25 mm	Long Dash	none	n/a

Proposed Storm Sewer Trunk Lines and Appurtenances	0.50 mm	Long Dash	solid	n/a
Proposed Storm Sewer Lines and Appurtenances	0.50 mm	Long Dash	solid	n/a
Proposed Catch Basin Leads	0.50 mm	Hidden2	none	na
Proposed Catch Basins	0.50 mm	Long Dash	solid	
Drainage Calculation Table	0.18 mm	Continuous	n/a	2.0 mm
Storm Symbols	0.25 mm	Continuous	n/a	n/a
Proposed Storm Drainage Text, Dimensioning and Notation	0.18 mm	Continuous	n/a	2.0mm
Drainage Zone Boundary	1.00 mm	Continuous	70 %	
Zone Number and Area	0.70 mm	Continuous	n/a	5.0 mm
Drainage Arrows	0.35 mm	Continuous	line	n/a
Trap Low Boundary	0.35 mm	Continuous	n/a	n/a
Trap Low Hatch	0.18 mm	Hatch	50 %	n/a
Trap Low Data	0.25 mm	Continuous	n/a	2.0 mm
Overland Flow Data	0.25 mm	Continuous	n/a	2.0 mm
Shallow Utilities				
Existing Gas	0.18 mm	Phantom	none	n/a
Proposed Gas	0.35 mm	Phantom	solid	n/a
Existing Electric	0.18 mm	Center	none	n/a
Proposed Electric	0.35 mm	Center	solid	n/a
Existing Telephone Cable	0.18 mm	Hidden	none	n/a
Proposed Telephone Cable	0.35 mm	Hidden	solid	n/a
Shallow Utility Line Label	0.18 mm	Continuous	n/a	2.0 mm
Roads				
Existing Sidewalk and Curb	0.25 mm	Continuous	n/a	n/a
Proposed Sidewalk and Curb	0.50 mm	Continuous	n/a	n/a
Road Grade Labels	0.18 mm	Continuous	n/a	2.0 mm
Catch Basin Label and Rim Elevation	0.18 mm	Continuous	n/a	2.0 mm
Sidewalk and Curb Description	0.18 mm	Continuous	n/a	2.0 mm
Corner and Bulb Radius	0.18 mm	Continuous	n/a	2.0 mm
Item	Line Weight	Line Type	Object Fill & Shading	Text Size
Road and RROW Widths	0.25 mm	Continuous	n/a	2.0 mm
Existing Bollards and Fencing	0.25 mm	Continuous	none	2.0 mm
Proposed Bollards and Fencing	0.25 mm	Continuous	solid	2.0 mm
Existing Mailboxes	0.25 mm	Continuous	none	2.0 mm
Proposed Mailboxes	0.25 mm	Continuous	solid	2.0 mm
Existing Bus Stops	0.25 mm	Continuous	n/a	2.0 mm

Proposed Bus Stops	0.25 mm	Continuous	n/a	2.0 mm
Existing Street Lights and Traffic Control Devices, Markings and Signs	0.25 mm	Continuous	none	2.0 mm
Proposed Street Lights and Traffic Control Devices, Markings and Signs	0.25 mm	Continuous	soild	2.0 mm
Survey Control Markers	0.25 mm	Continuous	n/a	2.0 mm
Proposed Spot Elevations	0.18 mm	Continuous	n/a	2.0 mm
Cross Sections				
Section Symbols	0.70 mm	Continuous	n/a	4.5 mm
Sections Labels	0.50 mm	Continuous	n/a	3.5 mm
Section Line Weights	0.25 mm	Continuous	n/a	n/a
Sections Hatch Line Weight	0.18 mm	Continuous	n/a	n/a
Sections Dimensions	0.18 mm	Continuous	n/a	2.0 mm
Sections Nodes and Leaders	0.18 mm	Continuous	n/a	2.0 mm
Grading				
Pre-development Original Ground Contours (2.0m Interval)	0.50 mm	Continuous	50 %	2.0 mm
Pre-development Original Ground Contours (0.5m Interval)	0.25 mm	Continuous	50 %	2.0mm
Lot Corner and Boundary Elevation	0.18 mm	Continuous	n/a	2.0mm
Building Envelope	0.18 mm	Dashed	30 %	n/a
Symbols	0.35 mm	Continuous	n/a	2.0 mm
Grading Text	0.18 mm	Continuous	n/a	2.0 mm
General Notes	0.25 mm	Continuous	n/a	2.0 mm
Lot Drainage Arrows	0.18 mm	Continuous		n/a
Existing Trail Alignments	0.25 mm	Continuous		2.0 mm
Proposed Trail Alignments	0.50 mm	Continuous		2.0 mm
Profiles				
Major Grid	0.35 mm	Continuous	50 %	n/a
Minor Gird	0.18 mm	Continuous	50 %	n/a
Elevation and Station Labels	0.50 mm	Continuous		
Original Ground Profile	0.25 mm	Continuous		
Lip of Gutter Profile	0.35 mm	Dashed		3.5 mm
Vertical Curve Dimensioning and Notes	0.25 mm	Continuous		2.5 mm
Road Alignments and Stationing	0.25 mm	Continuous		2.5 mm
Road Structure	0.25 mm	Continuous		2.5 mm
Hydraulic Grade Line	0.25 mm	Hidden		
Landscaping				
Irrigation Services	0.50 mm	Continuous		
Irrigation Mainline	0.50 mm	Continuous		
Irrigation Laterals	0.50 mm	Continuous		

Irrigation Heads	0.25 mm	Continuous		
Irrigation Contours	0.25 mm	Continuous		
Irrigation Conduits	0.25 mm	Continuous		
Irrigation Electric Zone Valves	0.25 mm	Continuous		

8.5 TITLE BLOCK

8.5.1 All drawings must clearly show the following in the title block:

- Developer's/City's Name.
- Developer's Engineer or consulting engineering name.
- Subdivision name, including staging and/or phasing.
- Drawing name, number, and issue date.
- Drawing scale, including horizontal and vertical axes.
- Space for dates and signature of the designer, draftsman, reviewer or checker, and approving professional or principal.
- Space for professional stamps and permits.
- Space for revisions, including number, date, description, and approved signature.
- Legend and notes.

8.6 REQUIRED ENGINEERING DRAWINGS

The following plans will form a part of the design drawings set:

- 8.6.1 **Cover Sheet:** This will show the name of the subdivision, stage of development, location plan, City logo, and names of the Developer and Developer's Engineer. Space permitting, the index plan may be included here. A key plan of City of Swift Current, or a significant portion thereof, shall be included, illustrating the location of the development or project.
- 8.6.2 **Index Plan:** This plan will be prepared on a scale of 1:1000, or a reduction thereof to fit the standard size sheet, and will indicate that portion of the street that relates to a particular plan/profile sheet.
- 8.6.3 **Grading Plan:** This plan will be drawn to a scale of 1:1000 and will indicate finished lot corner elevations, grades and direction of flow, service locations, minimum finished grades, lowest top of footing, and sanitary service elevation at property line.
- 8.6.4 **Road, Sidewalk, and Lanes Plan:** This plan will be drawn to a scale of 1:1000 and will show all locations and widths of roads, lanes, sidewalks, walkways, trails, and right-of-way widths and alignment, as well as all proposed approaches, catch basins and fencing.
- 8.6.5 **Storm Layout Plan:** This plan will be drawn to a scale of 1:1000 and will indicate the alignment, location, size, type, grade, and length of all sanitary sewer including manholes and catch basins.

- 8.6.6 **Water Layout Plan:** This plan will be drawn to a scale of 1:1000 and will indicate alignment, location, size, and type of all watermains, including valves, ties, bends, hydrants, and plugs.
- 8.6.7 **Overland Drainage Plan:** This plan will be drawn to a scale of 1:1000 and will indicate contours at 0.5 m spacing. Areas of trapped lows will be shown shaded and direction of surface drainage with slopes shown along roadways will also be shown.
- **Storm Drainage Plan:** This plan will be drawn to a scale of 1:1000 and will indicate drainage areas (in Ha), including storm sewer and manholes. A table showing storm design calculations will also be included.
 - **Detailed Plan/Profile drawings:** Plan/Profile drawings shall be drawn to a scale of 1:500. The profile portion shall have a 10 times vertical exaggeration.

8.7 PLAN/PROFILE REQUIREMENTS

Generally, all underground services and surface improvement profiles are shown on the same drawing. The plan portion of the sheet shall be at the top, and the title blocks, revisions, legends, company stamps, and similar features will be placed along the bottom of the sheet.

The following information will be included on the detailed plan/profile drawings:

- 8.7.1 Requirements for Sanitary and Storm Sewer:
- The following information will be shown on the profile:
 - Size, type, class of pipe and class of bedding.
 - Length and percent grades between manholes.
 - Invert elevations at both inlet and outlet of manholes.
 - Rim elevations at finished grade.
 - The following information will be shown on the plan:
 - Tie location of manholes, cleanouts, and other appurtenances to property lines.
 - Pipe offsets from property line.
 - The following additional information will also be shown on an appropriate part of the drawing:
 - Manholes shall be numbered.
 - Where the sanitary sewer or water and storm drain are to be installed in a common trench, detail a typical cross-section showing distance between pipes, class of pipe and bedding.
- 8.7.2 Requirements for Water:
- Tie the location of hydrants and other appurtenances to the nearest property pin.
 - Show the offset of the main from the property line and locate the end of the main to the nearest property pin.

- Indicate extent of work required in making the connection to the existing water main.
- Indicate the size, type, class of pipe and bedding on the plan.

8.7.3 Requirements for Roads:

- Both plan and profile must be tied to a property pin, preferably near or at 0 + 000 chainage.
- Show the road width and the curb offsets measured from the property line to the curb face.
- Chainages of the BC and EC of horizontal curves will be shown together with the delta angle, radius, tangent length, and arc length for each curb.
- The percent grade, to two decimal places, shall be shown on the profile, together with the following information on vertical curves:
 - The chainage and elevations of BVC, EVC and PVI.
 - The external value, “e”.
 - The length of vertical curve.
 - The elevation and chainage of the low spot of sag curves or the high spot of crest curves.
- Road profiles will show the Lip-of-Gutter elevations.
- The profile will be shown at true centreline length and projected above the plan in as close a relationship as possible.
- Locate catch basins (using road chainage) and show leads between the catch basin and manhole.
- Label limits of construction.

8.8 GRADING PLAN REQUIREMENTS

8.8.1 This plan will include:

- Invert and location of sewer and water services.
- Existing and proposed contours at 0.5 m intervals.
- Proposed finished lot corner elevations.
- Proposed finished lot elevations at grade break points.
- Standard detailed drawings shall govern the lot grading design, and critical swales elevations will be calculated as per the types shown.
- The grading plan will identify lots with weak subsoil conditions and have a notation indicating the requirement for a geotechnical engineer’s footing design if applicable.

- The grading plan will identify all lots with areas of 1.0 m of fill or greater, with these lots shaded a different colour.

8.9 POWER, GAS, TELEPHONE AND CABLE UTILITY PLAN REQUIREMENTS

8.9.1 This plan will include:

- Street Light Locations as designed, or approved by the power utility.
- Dimension of all Easements.
- Location of pedestals, transformers, cabinets, and other hardware.
- Lot Numbers.

9 AS-BUILT DRAWINGS

These requirements pertain to the as-built drawings of the following services: Storm and sanitary sewers, watermains, roads, curbs, sidewalks, culverts and other miscellaneous permanent structures.

9.1 GENERAL

- 9.1.1 The as-built drawings shall be affixed with the stamp and seal of a Professional Engineer who, by signing, is certifying the information to be accurate and correct.
- 9.1.2 The as-built drawings will clearly show the locations of all services, curb cocks, valves, hydrants, and manholes, using right angle measurement from survey pins.
- 9.1.3 Red line as-built drawings are to be submitted for review, indicating changes.
- 9.1.4 Two complete sets of the as-built drawing prints are to be submitted to the City, within three months of the installation.
- 9.1.5 The as-built drawings referred to in this section will also be submitted to the City in digital format, as per the following requirements:
- Must be compatible with the City version of AutoCAD.
 - Accompanied by a layer list and description.
 - Will conform to layering and symbol standards as established by the City or their consultant.
 - Include a signed 'PDF' format.
 - Be submitted on a media device specified by the City.
- 9.1.6 On as-built drawings submitted to the City, the following information will be included on each drawing:
- Date of completion.
 - Name of the contractor.

- Date on which “as-built” details were added.

9.2 STORM AND SANITARY SEWER

9.2.1 The following information will be included for storm and sanitary sewer systems:

- Size, pipe material, pipe class, bedding, and location of mains.
- Location of manholes, cleanouts, and other appurtenances.
- Grades, lengths, inverts of mains, and rim elevation.
- Profile of pipe top and bottom.
- Corrected flow calculations.

9.3 WATER

9.3.1 The following information will be included for water systems:

- Size, type, and location of pipe.
- Location of valves, tees, hydrants, and other appurtenances.
- Profile of pipe top and invert.

9.4 ROAD, CURB, SIDEWALKS

9.4.1 The following information will be included for roads, curbs, and sidewalk:

- Location of curbs, sidewalks, and elevations of tops-of-curb or lip-of-gutter.
- Top-of-curb or lip-of-the gutter for each curb.
- End of curb, sidewalks, and pavement.
- Type of road structure on overall road plan and each plan profile.
- A typical cross-section referencing the above and representing all conditions.

9.5 WATER, SANITARY, AND STORM SERVICES CONNECTIONS

9.5.1 A table on each plan/profile drawing will be prepared giving the following information with respect to service connections:

- Lot number.
- Distance of service saddle from the downstream manholes.
- Invert elevation at the end of sanitary and storm service.

9.5.2 The service connection provided to each lot will be shown on the plan and the location triangulated to the property lot corners.

9.5.3 The typical location of the curb stop will be identified on each plan/profile, (i.e. 0.3 m F.O.W., 2.65 m B.O.W.) by means of a table chart.

9.6 MECHANICAL SYSTEMS

- 9.6.1 Where the subdivision includes mechanical systems, such as lift stations, the Developer will provide detailed drawings of the facility, as well as operation/maintenance manuals, including the make and model of all equipment, to the satisfaction of the City.

9.7 LANDSCAPING DRAWING REQUIREMENTS

- 9.7.1 A suitably scaled as-built drawing shall be provided upon completion. All components of the irrigation system shall be shown as installed, with clear measurements from an identifiable reference point to the location of the controller and its circuit breaker, master valve, zone control valves, main water connection, blow out connection, pump and its electrical connections, and any other similar features.

9.8 LOT DETAIL FORM

- 9.8.1 Prior to issuance of a Construction Completion Certificate for water, sanitary, and storm services, the Developer shall provide to the City the relevant Building Grade Form for each lot in the Development.

- 9.8.2 The following information shall be shown on the Lot Detail Form:

- Water, sanitary, and/or storm services location and inverts at property line or easement line.
- Power, telephone, and cable television service location if available.
- Sidewalk and boulevard width.
- Easements.
- Lot corner surface elevations.
- Landscape elevations at midpoint of house.
- Lot drainage pattern.
- Streetlights, hydrants, etc. where applicable.

- 9.8.3 This information shall be provided in the form as shown on the sample Lot Detail Form.

10 CONSTRUCTION REQUIREMENTS

10.1 CONSTRUCTION APPROVAL

- 10.1.1 Upon receipt of “Approved by the City” drawings and specifications, the Applicant may proceed to install municipal services subject to:

- Satisfactory execution of a Servicing Agreement pertaining to the development or subdivision.

- Obtaining all required approvals from Saskatchewan Ministry of Environment and any other applicable jurisdictions, through the Developer's Engineer, and a copy received by the City.
- A list of materials that are being installed or a copy of the construction contract and a construction schedule submitted to the City's engineering office.

10.1.2 A copy of all approved drawings and specifications will be maintained by the applicant at the construction site during the installation of services and be made readily available to City representatives.

10.1.3 Underground subdivision services will not be permitted to operate as part of existing Municipal services until the respective subdivision services have been inspected, tested by the Developer's Engineer, and the test results have been approved in writing by the City.

10.2 ENGINEERING SUPERVISION

10.2.1 The applicant shall retain the services of a "Developer's Engineer" who shall be responsible for the layout to ensure finished construction conforms to the lines and grades shown on the approved plans, for inspection and approval of all materials to be used, and for supervision of installation of all services that are the responsibility of the Applicant. The Developer's Engineer, or his authorized representative, shall be available at all times to visit the site during the installation of services.

10.2.2 The Developer's Engineer will be responsible for maintaining field surveys and recording of all "as-built" drawings.

10.2.3 In addition to supervision carried out by the Developer's Engineer, the City, or their agent, may periodically inspect any work being completed. The City will bring the use of any unacceptable materials or practices to the attention of the Contractor and/or the Developer's Engineer. If remedial action is not taken to the satisfaction of the City, they may order the work to cease until such time as the corrective action has been taken.

10.2.4 If the Developer's Engineer wishes to make any changes in the design, either before or during the execution of the work, he will first submit a marked print, showing proposed revisions, to the City. If approval is granted for revision, the original drawing will be immediately revised and new prints issued.

10.3 TESTING

10.3.1 It will be the responsibility of the Developer's Engineer to ensure that testing of all materials called for in the specifications is carried out by an accredited testing firm. Copies of all test results shall be forwarded to the City as soon as possible after completing the tests. The costs of the tests shall be borne by the Developer.

10.4 AS-BUILT DRAWINGS

- 10.4.1 Within four weeks of the Construction Completion Certificate of the underground improvements, the Developer's Engineer shall deliver to the City "as-built" prints indicating the service connections, tie-ins, invert charts on plan/profiles, and service invert elevations on lot grading plans. All as-built plans must also be submitted in digital format compatible with the City's latest version of AutoCAD.
- 10.4.2 Within two months of completion of roadway base course asphalt, the Developer's Engineer will deliver "as-built" drawings: one complete set of prints and digital copies (in the City's latest AutoCAD software version and signed 'PDF' format) to the City.

10.5 CONSTRUCTION COMPLETION CERTIFICATE AND MAINTENANCE PERIOD

- 10.5.1 When the Developer's Engineer is of the opinion that the Work is substantially performed (meaning the Work or a portion thereof is ready for use), he shall apply for a Construction Completion Certificate (CCC) and request an inspection of the Work.
- 10.5.2 The Developer shall apply for a Construction Completion Certificate for each group of improvements within each stage/phase of development. The main construction groups are as follows:
- Sanitary and storm sewers, and water distribution system, including service connections for water and sewer.
 - Sidewalks, curbs and gutters, catch basins, concrete walkways, paved roads, and paved and gravelled lanes.
 - Landscaping, including boulevards, uniform fencing, and subdivision signage.
- 10.5.3 The City shall be given seven (7) days' notice to attend CCC inspections.
- 10.5.4 No such application will be considered by the City unless it is requested in respect of all of the Development Area or one or more approved stages of development.
- 10.5.5 The City may issue a Construction Completion Certificate, issue a Conditional Construction Completion Certificate, or provide a list of deficiencies that must be corrected in order to obtain a Construction Completion Certificate. The details of the process will be outlined in the servicing agreement.
- 10.5.6 The Developer shall maintain all Municipal Improvements constructed pursuant to the servicing agreement to the standard to which they were constructed, reasonable wear and tear excepted, for the period commencing upon the issuance of a Construction Completion Certificate and continuing for the periods as stated in the table below:

Table for Maintenance Period

Underground Services and Utilities	24 months
Roads and Sidewalks	24 months
Fencing, grass, and sod for landscape areas	24 months

10.6 FINAL ACCEPTANCE CERTIFICATE

- 10.6.1 Upon completion of the Maintenance Period, the Developer’s Engineer shall apply for a Final Acceptance Certificate (FAC) and request a final acceptance inspection.
- 10.6.2 The City shall be given seven (7) days’ notice to attend FAC inspections.
- 10.6.3 An FAC will not be granted unless the following criteria are met:
 - The new infrastructure has performed as designed and to the satisfaction of the City throughout the maintenance period.
 - All deficiencies identified in the CCC inspection are corrected.
 - All transverse cracking in the asphalt is sealed.
 - Evidence that landscape areas have been mowed, watered, and kept free of weeds to the satisfaction of the Community Services Department.
- 10.6.4 After final inspection and correction of all deficiencies thereof, a Final Acceptance Certificate will be issued by the City and that group of infrastructure will become the City’s to own and maintain.

10.7 EXISTING UTILITIES

- 10.7.1 Prior to connecting to existing utilities, the City’s Utilities Department shall be given a minimum of two (2) working days notification of the work being done.
- 10.7.2 Once operational, hydrants or main line valves shall only be operated by City staff.
- 10.7.3 No sanitary sewers will be used to discharge storm water.

10.8 ROAD CLOSURES AND CONSTRUCTION WITHIN ROAD RIGHTS-OF-WAY

- 10.8.1 In the event that a road must be partially or fully closed due to construction activity, the party causing this event will provide all detours, signs, flag persons, barricades, and other safety requirements necessary to provide for the orderly control of traffic around the construction area.
- 10.8.2 The City of Swift Current Infrastructure and Operations Department must receive a traffic accommodation plan ten (10) days prior to the proposed work.

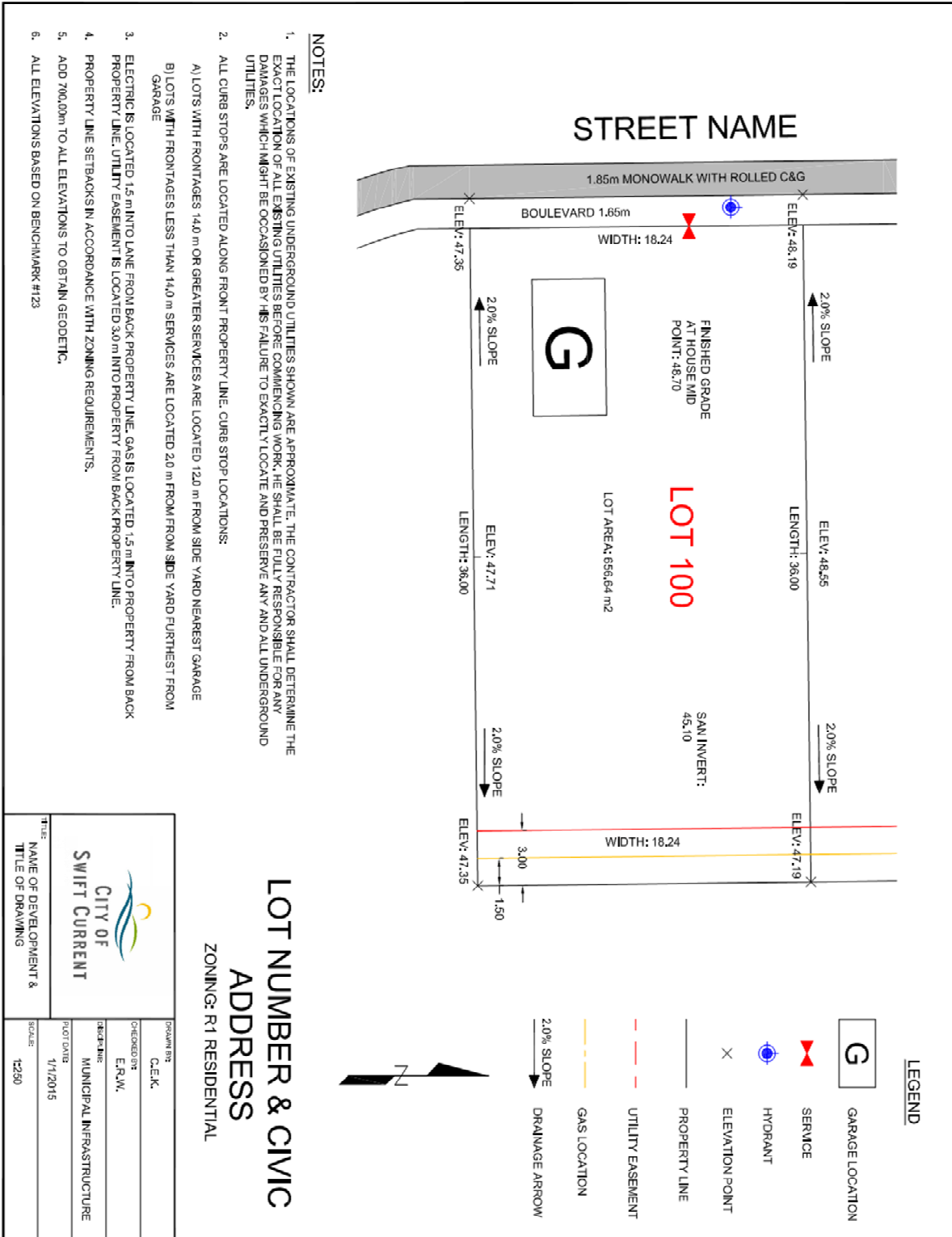
10.9 SURVEY CONTROL SYSTEM

- 10.9.1 The Developer shall provide a survey control system within and adjacent to the subdivision. The survey control system shall consist of survey monuments of a design mutually acceptable to both the City, for community planning approval, and the Information Services Corporation (the Crown Corporation responsible for registries in Saskatchewan herein abbreviated "ISC").
- 10.9.2 The survey monuments (bench marks) shall be placed so as to be inter-visible between adjacent pairs and spaced approximately 300 metres apart. Measurements shall be made between monuments, and connection shall be made to existing geodetic monuments used by the City. The City and ISC shall be provided with the survey measurements for the survey control system.
- 10.9.3 The Developer shall undertake to preserve all existing and new monuments and, should it be necessary to destroy a monument, the Developer shall establish a new one in lieu thereof and provide the City and ISC with survey measurements for it.
- 10.9.4 Any legal pins disturbed or removed during construction must be replaced by the Developer prior to Final Acceptance by the City. The Developer shall supply a certificate from a registered legal survey that all lot and corner pins are intact.


11 TYPICAL DEVELOPMENT FORMS

The forms on the following pages can be used by the City and Developer where applicable. At the City's discretion, similar forms that include all required content and meet the intended purpose may be accepted.

11.1 LOT DETAIL FORM



11.2 CCC AND FAC

 <p style="font-size: 1.2em; margin-top: 5px;">City of Swift Current</p>	<p style="font-size: 1.2em; margin: 0;">CONSTRUCTION COMPLETION - SAMPLE CERTIFICATE</p>
<p>Development Area: _____ Development Name: _____</p> <p>Developer: _____</p> <p>Contractor: _____</p> <p>Municipal Improvement: _____</p> <p>Location of Municipal Improvement referred to herein is as shown, outlined in red, on the plan on the reverse hereof, (Or see attached).</p> <p>Date of Application: _____</p> <p>PURSUANT TO THE DEVELOPMENT AGREEMENT, I _____ OF THE FIRM "DEVELOPER'S ENGINEERS", HEREBY CERTIFY THAT AS OF THE ABOVE DATE, THE SAID MUNICIPAL IMPROVEMENT IS COMPLETE AND CONSTRUCTED IN ACCORDANCE WITH THE SERVICING STANDARDS AS SET OUT IN THE DEVELOPMENT AGREEMENT, AND I HEREBY RECOMMEND THIS MUNICIPAL IMPROVEMENT FOR APPROVAL.</p> <p style="text-align: right;">Date: _____</p> <p>Project Engineer (seal) (Developer's Engineering Firm) _____</p> <p style="text-align: right;">Date: _____</p> <p>Signing Officer (Developer's Engineering Firm) _____</p> <p style="text-align: right;">Date: _____</p> <p>Authorized City Inspector</p> <p>Approved on (date): _____ City: _____</p> <p>Conditional Approval (date): _____ City: _____</p> <p>Conditions: (See attached report) _____</p> <p>Rejected on (date): _____ City: _____</p> <p>Reason for rejection: (See attached report) _____</p> <p>I HEREBY CERTIFY THAT THE ITEMS LISTED AS REASONS FOR CONDITIONAL APPROVAL OR FOR REJECTION HAVE BEEN CORRECTED.</p> <p style="text-align: center;">Project Engineer (Seal) (Developer's Engineering Firm) _____ Date: _____</p> <p>Approved: _____ Date: _____</p> <p style="text-align: center;">City</p> <p>Date Maintenance Period to Start: _____</p> <p>Date Maintenance Period to Expire: _____</p>	

 <p style="font-size: 1.2em; margin-top: 10px;">City of Swift Current</p>	<p style="font-weight: bold; margin: 0;">FINAL ACCEPTANCE - SAMPLE CERTIFICATE</p>
<p>Development or Subdivision : _____ Permit or Subdivision # _____</p> <p>Developer: _____</p> <p>Contractor: _____</p> <p>Municipal Improvement: _____</p> <p>Location of Municipal Improvement referred to herein is as shown, outlined in red, on the plan on the reverse hereof, (Or see attached).</p> <p>Date of Application: _____</p> <p>Maintenance Expiry Date: _____</p> <p>PURSUANT TO THE DEVELOPMENT AGREEMENT, I _____ OF THE FIRM _____ "DEVELOPER'S ENGINEERS", HEREBY CERTIFY THAT AS OF THE ABOVE DATE, THE SAID MUNICIPAL IMPROVEMENT MEETS ALL REQUIREMENTS FOR FINAL ACCEPTANCE AS SPECIFIED IN THE DEVELOPMENT AGREEMENT AND I HEREBY RECOMMEND THIS MUNICIPAL IMPROVEMENT FOR FINAL ACCEPTANCE.</p> <p style="text-align: right;">Date: _____</p> <p>Project Engineer (Developer's Engineering Firm) _____</p> <p style="text-align: right;">Date: _____</p> <p>Signing Officer (Developer's Engineering Firm) _____</p> <p style="text-align: right;">Date: _____</p> <p>Authorized City</p> <p>Approved on (date): _____ City: _____</p> <p>Rejected on (date): _____ City: _____</p> <p>Reason for rejection: (See attached report) _____</p> <p>_____</p> <p>I HEREBY CERTIFY THAT THE ITEMS LISTED AS REASONS FOR REJECTION HAVE BEEN CORRECTED.</p> <p style="text-align: right;">Date: _____</p> <p style="text-align: center;">Project Engineer (Developer's Engineering Firm)</p> <p>Approved: _____ Date: _____</p> <p style="text-align: center;">City</p> <p>Date Maintenance Period to Start: _____</p>	

(hereinafter called the "Developers Engineer") to design and supervise the construction of all work to be carried out under this agreement. The Developer shall inform the City Project Manager of the Developers Engineer who is appointed by the Developer. The Developers Engineer shall be deemed to be an agent of the Developer. The Developer shall give the City at least three (3) days written notice should the Developer wish to change the Developers Engineer.

3.2 The Developers Engineer shall:

- Certify that all materials supplied and all work performed conforms in all respects to the City's specifications and designs, or is approved by the City in writing.
- Prepare, submit and certify Construction Completion and Final Acceptance Certificates.
- Certify the correction of all defects and deficiencies.
- Carry out inspections under this agreement.
- Prepare, review, certify, and submit the plans, specifications and schedules which the Developer is required to supply under this agreement.

4.0 CONSTRUCTION PLANS AND SPECIFICATIONS

Plans Approval - the Developer shall submit in duplicate to the City plans, specifications and design data which shall provide and properly set out all information required herein and in accordance with good engineering practice. Approval in writing shall be received from the City prior to the commencement of any construction.

The plans shall be in accordance with the requirements of the Design & Development Standards and the following shall be generally shown:

- The location, alignment and profile of any sanitary sewers, storm sewers and watermains,
- The alignment and specification of any roadways including, if required, curb, gutter and sidewalk.
- Service connection locations and sizes.
- An overall site grading and drainage plan showing property and roadway grading, catch basin locations and other pertinent information.
- The proposed alignment of the shallow utilities (electric, telephone, cable and gas).
- A landscaping plan if applicable.
- A phasing plan for the development of the lands.
- Any other information required by the City.

After examination by the City, one mark-up copy of the preliminary plans will be returned to the Developer or his representative showing any amendments the City may require.

Three copies of the final amended plan shall be supplied to the City prior to the authorization of any construction work.

5.0 INSPECTION PRIVILEGES

The Developer shall grant to the City or its duly accredited representatives free and uninterrupted access to any and all parts of the lands for the purposes of making inspections or taking samples of the materials being used in the construction. If the materials, design and installation work does not conform to the City's specification and standards the City Project Manager may immediately stop any work and order the removal of unsatisfactory work from the area.

6.0 TESTING

The Developer shall at no cost to the City furnish tests from an accredited testing company as follows:

- Standard Proctor Density tests of trenches, subgrade, base, and any areas that are to be filled.
- Density tests of all asphalt paving.
- Compressive strength test of all concrete.
- Samples of any materials proposed to be used or installed in the construction reasonably requested by the City.

Reports of these tests shall be furnished to the City on a regular basis.

7.0 AS BUILT DRAWINGS

Immediately upon the completion of the construction and installation the improvements the Developer shall deliver to the City for its approval, a complete set of all testing records and two (2) complete sets of prints of all design and construction drawings setting out the improvements constructed pursuant to this Agreement and showing the actual locations, descriptions and all "as-built" elevations referred to the City's data. All plans and information required by the City to be amended or revised shall be corrected by the Developer and re-submitted for final acceptance by the City. Upon final approval of the "as-built" plans, the Developer shall deliver to the City the original plans, plus a digital file containing the same plans in "AutoCad" format.

8.0 APPROVAL BY THE CITY

The approval of drawings and/or supporting documents given by the City or its representative does not relieve the Developer of this responsibility to ensure that all work pursuant to this agreement done or to be done by the Developer is in accordance with current practices and is technically acceptable, nor does it relieve him of the responsibility and obligation to remedy subsequently discovered omissions and discrepancies.

9.0 USE OF PUBLIC WAYS IN PERFORMANCE OF THE WORK

Developer's right to work - the City grants to the Developer the right, permission and power to use, break-up, dig, trench or excavate in the public highways, streets, roads, lanes and similar public places of the City, within or adjacent to the lands, and otherwise to do such work as may be necessary to lay, operate, maintain, repair, extend, re-lay and remove water and sewer mains forming part of the work of the Developer as may be necessary for the purposes of this Agreement, Provided:

- That the performance of such work shall adhere strictly to the requirements of the City;
- That the Developer shall do as little damage as possible in the performance of such work, and will cause as little obstruction to such public places as possible;
- That upon completion of such work the Developer shall restore all such public places to a condition and state of repair equivalent to that which prevailed prior to the performance of such work, and shall maintain such restored portions of such public places for a period of two (2) years after completion, ordinary wear and tear and third party damage excepted, and further that such restoration shall include the replacement and maintenance of grass, trees and shrubs as applicable. If grass, trees or shrubs die within this period the replacement shall be during the next planting season even if the season is beyond the two (2) year period.
- That the Developer shall indemnify and save harmless the City from and against all losses, costs, claims, suits or demands of any nature which may arise by reason of the negligence of the Developer in such public place.

10.0 COMPLIANCE WITH PROVINCIAL LEGISLATION, ETC.

The Developer shall, at all times, comply with all valid provincial legislation and regulations and municipal bylaws and regulations relating to the development of lands by the Developer.

11.0 SECURITIES

Prior to the commencement of construction of the permanent servicing, the Developer shall provide the City with an Irrevocable Letter of Credit (LOC) for 50% of the servicing cost of the site. The servicing included shall include, but not necessarily be limited to, sanitary sewer, storm sewer, water, natural gas, telephone, cable TV, roads, fencing and landscaping.

The City will release the Letter of Credit within Fifteen (15) days of the issuing of the Construction Completion Certificate. Where deficiencies have been identified to be rectified during the maintenance/warranty period a reduced LOC may be required.

Any irrevocable letter of credit provided pursuant to the Agreement shall be issued by a Chartered Bank in Canada or a Trust Company and in a form to be approved by the City, but in any event, shall contain the following terms and provisions:

- A statement that the irrevocable letter of credit is issued in favor of the City in consideration of the City entering this Agreement with the named customer of the issuing bank;
- An acknowledgment by the issuing bank that it has full knowledge of the terms, covenants and conditions of this Agreement.
- An acknowledgment by the issuing bank that it has full knowledge that the issuing of the irrevocable letter of credit is a condition precedent to the execution of this Agreement by the City;
- An acknowledgment by the issuing bank that the City shall be entitled to draw on the said irrevocable letter of credit in accordance with the provision of this Agreement and an undertaking by the issuing bank to promptly honor and pay draws made by the City.

12.0 MAINTENANCE

The Developer shall be responsible for the maintenance of all services installed under this agreement until such time that a Final Acceptance Certificate is issued. Upon issuance of a FAC the City will become responsible for all aspects of the infrastructure. Where the development is a bareland condominium, the condo association will take over all infrastructure ownership and responsibility.

13.0 GENERAL

The validity and interpretation of this Agreement, and each article and part thereof, shall be governed by the laws of the Province of Saskatchewan. If any term, covenant or condition of this Agreement or application thereof, to any things or circumstance shall to any extent to invalid or unenforceable, the remainder of the Agreement or application of such term, covenant or condition to any thing or circumstance other than those to which it is held as invalid or unenforceable shall not be affected thereby and each other term, covenant or condition of this Agreement, shall be valid and shall be enforced to the fullest extent permitted by law. In the event that any provision contained herein or the application or any provision conflicts with, contravenes, contradicts or is inconsistent with or gives rise to any conflict, contravention, contradiction or inconsistency with the terms, covenants, conditions, stipulations, provision or reservations of any Developer's Agreement or any other matter or thing arising out of the terms of this Agreement, then, the provisions of this Agreement shall prevail and wherever and whenever necessary or advisable the offending provisions of any Developers Agreement or other matter or thing shall be deemed amended so as to remove any such conflict, contravention, contradiction or any inconsistency, and made to correspond with the provision of this Agreement. Neither the City nor the Developer will initiate, or assist any other person or person in initiating, any Court Proceedings with a view to rendering this Agreement or any provision thereof null and void.

14.0 REGISTRATION OF A CAVEAT

The City shall have the right to register a caveat or an interest in the Land Titles Office pursuant to the current version of the Planning and Development Act.

15.0 NOTICES

Any notices to be given to the Developer hereunder may be mailed or delivered to the office of the Developer at:

And to the City either by mail or delivery to the:

City of Swift Current
177 - 1st Avenue North East
P.O. Box 340
Swift Current, Saskatchewan
S9H 2B1

IN WITNESS WHEREOF the Developer and City have caused to be hereunto affixed their respective Corporate Seals attested by their respective proper officials in that behalf, the day and year first above written.

CITY OF SWIFT CURRENT
177 - 1st Avenue North East
P.O. Box 340
Swift Current, Saskatchewan
S9H 2B1

Mayor

City Clerk

Developer

Developer

11.4 TYPICAL DEFERRED SERVICING AGREEMENT

THIS AGREEMENT dated the day of , A.D. 20 , is made
between:

- (1) **CITY OF SWIFT CURRENT**, a municipal corporation, in the Province of Saskatchewan (hereinafter referred to as "the City")

OF THE FIRST PART

- and - (2)

name,
individuals residing in the City of Swift Current
(hereinafter referred to as "the Owner")

OF THE SECOND PART

DEFERRED SERVICES AGREEMENT

1. In this Agreement:
- (a) the "Land" means the lands described as follows:

EXCEPTING THEREOUT ALL MINES AND MINERALS
 - (b) "Development" means any improvement or work including (but is not limited to) buildings, dwellings, structures, excavations or stockpiles on the Land at the time of execution of this Agreement.
 - (c) "Surface Improvements" includes all surface works including (but is not limited to) carriageways, curbs, gutters, catch basins, sidewalks and street lighting.
 - (d) "Underground Utilities" includes all subsurface works including (but is not limited to) water and sewer mains and all associated appurtenances.
 - (e) "Usual Urban Services" includes (but is not limited to) public water and sewer services, road construction and maintenance, snow removal, waste collection and fire protection.
2. This Agreement is entered into by the Owner, as one of the conditions of approval of the subdivision of the Land.

3. The Owner shall bear the cost of constructing all Underground Utilities and Surface Improvements which relate to the Development which may include (but are not limited to) any site utility service connections and any driveways from the adjacent public carriageway.
4. The Owner shall bear the cost of maintaining all Underground Utilities and Surface Improvements on the Land.
5. The Owner shall not:
 - i) alter, redirect, block, or otherwise affect the natural drainage pattern, including storm water flow rates and volumes, on or adjacent to the Land; or
 - ii) fill or alter the existing grades on or adjacent to the Land,without the approval of the General Manager of Infrastructure and Operations.
6. Owner agrees to control on-site storm water to the satisfaction of the General Manager of Infrastructure and Operations so that such water does not flood or create a ponding or erosion problem on adjacent lands. In doing so, the Owner agrees to employ satisfactory on-site storm water management techniques to limit post- development storm water runoff to pre-development rates and volumes.
7. The City will not provide Usual Urban Services to or in the vicinity of the Land until their availability becomes economically feasible in the opinion of the General Manager of Infrastructure and Operations.
8. Private potable water systems required for the Development require Cypress Regional Health Authority approval for water quality. Private sanitary sewer facilities shall be in accordance with Saskatchewan Labour Standard of Practice guidelines for Sewage Systems and require a plumbing permit and associated inspection of the installation.
9. The Owner acknowledges that fire protection to the Development may be limited by the lack of Usual Urban Services and the distance of the Development from fire fighting facilities and Underground Utilities. The Owner agrees to indemnify and save the City harmless from and against all claims, demands, actions, or losses for personal injury or property damage to any persons or property on, or immediately proximate to, the Land arising out of or related to the provision of limited fire protection.
10. When Underground Utilities or Surface Improvements are made available to the Land, or in the opinion of the General Manager of Planning and Growth Development, should be installed by the City, the Owner shall:
 - (a) provide any utility easements, as required, at no cost to the City,
 - (b) pay to the City the cost normally attributable to an owner of land according to the requirements applicable to any person developing land in the City, at the rates established at the time, and

- (c) at its own expense, and with reasonable diligence, cause its sewer and water facilities to be connected to the municipal lines.
11. The Owner owns the Land and agrees that this Agreement shall constitute a charge against the Land for all sums payable or which may become payable to the City pursuant to the terms of this Agreement and the Owner encumbers the Land for the benefit of the City with such sums to be paid pursuant to the terms of this Agreement, and the City shall be entitled to file an interest against title to the Land to protect its interest in accordance with Section 172 (1) of the *Planning and Development Act*, 2007.
12. The covenants, terms and conditions contained in this Agreement are intended and shall be deemed to be covenants legally annexed to and running with the Land.
13. This Agreement shall be binding upon the Owner, its successors-in-title and assigns.
14. Where any of the Owner's interest in the Land is assigned or transferred in any way prior to the City filing a Caveat protecting its interest under this Agreement, the Owner shall deliver to the City an Assumption Agreement acceptable to the City Solicitor, executed by the holder of the Owner's interest and the Owner shall bear any cost associated with the registration of such Assumption Agreement.
15. Any notice, communication or request to be given to either party shall be in writing by registered mail, postage prepaid, or by personal delivery or by FAX addressed to such party at the following address:
- as to the City: General Manager of Infrastructure and Operations
 PO Box 340
 Swift Current, Sask
 S9H 3W1
 FAX NO. 306-778-2194
- as to the Owner: "Name"
- or at such other address as either party may from time to time advise the other in writing by notice. Any such notice, communication or request whenever mailed shall be deemed to have been received on the fourth (4th) business day next following the date it is so mailed or, if by FAX, the business day next following the date of transmission; provided that if normal mail, or FAX service is interrupted by strikes, slowdown or other cause, then any of the said services which have not been so interrupted shall be utilized or the notice, communication or request shall be personally delivered to ensure prompt receipt.
16. Should part of this Agreement be or become illegal or unenforceable, it will be considered severable from this Agreement and the remainder of this Agreement will remain in effect as though the illegal or unenforceable parts had not been included.



SIGNED ON BEHALF of the City this _____ day of _____, 20__.

THE CITY OF SWIFT CURRENT

MAYOR

“SEAL”

CITY CLERK

SIGNED ON BEHALF of the Owner/s this _____ day of _____, 20__.

Witness

“Name”

Witness

“Name”