



TOWN OF STRATHMORE
ENGINEERING DESIGN AND
CONSTRUCTION STANDARDS MANUAL

APPENDIX D

AutoCAD Development Drawing – General
Submission Requirements

2022

CIVIL Drawings

1. Town of Strathmore Digital Drawing Submission Standards

The standards described in this manual are to assist applicants in providing the required digital Computer Aided Drafting (CAD) information in the correct format and appearance for acceptance by the Town of Strathmore. These standards apply to coversheets only. Block profiles are to remain consistent with the current version of the City of Calgary's "Standard Block Profile Specifications for CAD and Manual Formats".

2. Drawing Format

All AutoCAD files submitted to the Development Services Department are to be AutoCAD 2008 version or greater. All other formats will not be accepted.

3. Drawing Submission

Digital AutoCAD drawings are required at CCC (final design drawings) and at FAC As Recorded (As-Built) drawings, if changes have occurred. The AutoCAD files (.dwg) on a USB Flash Drive are to be in addition to the associated PDF files for the current submission. All information needed to reproduce the approved drawings (PDF's) is required to be included on the drive. Folders and Subfolders on the drive will be clearly labeled with the subdivision or development name, phase number (if applicable), Consultant information, date submitted, and the reason of submission (CCC, FAC, etc.)

4. Drawing Presentation

Drawings submitted must adhere to the following rules:

- a. The units of the submitted AutoCAD drawing must be metric and are to be prepared using a standard metric scale.
- b. All drawing objects to be shown at actual length and in ground coordinates based on NAD83 3TM projection, central meridian -114, Scale Factor of 0.9999 with no rotating, or shifting required. Local Datum is not permissible.
- c. Elevations are to be geodetic and related to the Town of Strathmore datum. The description of the benchmarks used shall be annotated on the drawings.
- d. Drawing must be purged of all definitions that are not used such as: layers, layer filters, text styles, dimension styles, blocks, etc.
- e. All objects must be contained within a separate layer:
 - i. Features of different types (points, lines, polylines, polygons and rasters) must be within separate layers
 - ii. Point, line, polyline and polygon features of different types must be contained in separate layers (i.e. hydrants must be within an individual layer, water mains must be on an individual layer)
- f. Duplicate objects and text are to be removed.
- g. External References are to be bound within the drawing.

5. Digital Data Structure

- Line / Polyline
- Point
- Polygon
- Raster
- Text
- Dimension

5.1 Drawing Format

All linear features within the drawing are to be on its correct layer. Linear features are created by the AutoCAD commands, line, circle, arc and polyline. Lines representing a segment of any utility are to be one segment from point feature to point feature. For example, a water main is drawn as a polyline or line from each valve, reducer, etc. to the next point feature. The lines representing utilities are not to be broken at curves; they are to be one polyline until the next point feature. The exceptions to this rule are water mains that have a 45° or greater bend; the bend is treated as a point feature without requiring symbolic representation.

5.2 Point Feature

Point features within the drawing are to be represented by a point or a block. Points or Blocks shall be 'snapped' to linear features. All blocks are to be inserted on the layer that corresponds with the feature. Point Features are not to be exploded.

5.3 Text

All text within the CAD file is to be in model space or paper space.

5.4 Dimensions

All dimensions within the CAD file are to be in model space or paper space.