

Standards for Consultant Deliverables

**Software Standards
Master Specifications
CAD Drawing Standards
CAD Layering Standards**

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This document establishes standards for consultant deliverables related to Alberta Infrastructure design and construction programs for buildings. Consultant agreements for architectural, engineering and related services typically require the production and submission to Alberta Infrastructure of ‘deliverables’ in the form of drawings, specifications, reports, schedules, etc.

To take advantage of the significant efficiencies afforded through the distribution, use, and storage of these documents in electronic form, by multiple users, and throughout the project life cycle, it has become necessary to establish standards for these documents. As a prime example, making bid documents (drawings, specifications and addenda) available to bidders electronically in a consistent format would be extremely difficult to accomplish without standards for consultant deliverables.

There are four parts to this document addressing four distinct areas:

- Part 1 - Software Standards

These standards identify the software applications currently in use by Alberta Infrastructure internally, the software formats in which Alberta Infrastructure produced documents are made available to users, and the software formats in which consultant deliverables for building projects are to be submitted to Alberta Infrastructure. These are subject to change, as new software releases come out and are put into use by Alberta Infrastructure. Consultants are expected to comply with the latest revision of this standard.

- Part 2 – Master Specifications

- Part 3 - CAD Drawing Standards

These standards establish basic CAD drawing practices and conventions for building projects (other than for CAD layering).

- Part 4 - CAD Layering Standards

These standards establish a common and consistent approach to organizing and naming CAD drawing layers. They are based on the CAD layers and layering format in ‘CAD Layering Guidelines (Computer-Aided Design Management Techniques for Architecture, Engineering and Facility Management) Second Edition’ published by the American Institute of Architects Press. Additional layers have been added to suit specific Alberta Infrastructure needs.

Part 1 - Software Standards

Software Used by Alberta Infrastructure

Table 1 indicates software used internally by Alberta Infrastructure project related work, as of the date of this standard:

Application Type	Application Name	Version
Word Processing	Microsoft Word	2003
Spreadsheet	Microsoft Excel	2003
CAD	AutoCAD, AutoCAD Architecture, AutoCad Map 3D, Civil 3D.	Current Software Release or 1 Release Previous to Current
GIS	SHP, SDF	n/a
Viewer for Portable Document Files (PDF)	Adobe Acrobat Reader	7.0 or higher
Creating Portable Document (PDF) files	Adobe Acrobat Pro	7.0 or higher

Table 1 - Software Used by Alberta Infrastructure

Document Distribution Formats

Table 2 indicates the types of documents that Alberta Infrastructure commonly makes available to users outside the department (e.g. consultants) and the electronic formats in which they are distributed:

Type of Document	Format
Master Specifications	
- Specification sections that are intended to be edited	Microsoft Word
- Specification sections that are not intended to be edited (e.g. General Conditions of Contract)	Adobe Acrobat (PDF)
- Detail drawings that are part of the master specification system and are not intended to be edited	Adobe Acrobat (PDF)
Standards and Guidelines	
- Standards and guideline documents intended for reference purposes (e.g. this standard)	Adobe Acrobat (PDF)
CAD Drawings	
- Title block drawings	AutoCAD DWT (template)
- Drawings of existing facilities	AutoCAD DWG
Correspondence, Reports etc.	Microsoft Word or Adobe Acrobat (PDF)

Table 2 - Alberta Infrastructure Document Distribution Formats

Consultants who choose to use software that is different from, or not completely compatible with, the software indicated in the above table, are responsible for conversion of the Alberta Infrastructure documents to the format indicated.

Formats for Consultant Deliverables

Submit documents produced for delivery to Alberta Infrastructure, in the following formats:

Deliverables	Format
Project Specifications	
- Specification text	Microsoft Word and Adobe Acrobat (PDF)
- Project specific detail drawings, schedules etc.	AutoCAD DWG and Adobe Acrobat (PDF)
Project Drawings	
- Tender Set, Working Drawings	AutoCAD DWG and Adobe Acrobat (PDF)
- Record Drawings, As-built Drawings	AutoCAD DWG and Adobe Acrobat (PDF)
Cost Information	
- Interim Cost Reports	Microsoft Excel
- Final Cost Report	Adobe Acrobat (PDF)
- Pretender Report	Microsoft Word
Project Addenda	
- Addenda text	Microsoft Word and Adobe Acrobat (PDF)
- Revised drawings	AutoCAD DWG and Adobe Acrobat (PDF)
- Revised sketches	AutoCAD DWG and Adobe Acrobat (PDF)
Reports	Microsoft Word or Adobe Acrobat (PDF)

Table 3 - Formats for Consultant Deliverables7

The formats in which documents are submitted shall be compatible with the respective versions used by Alberta Infrastructure, as identified in Table 1.

If a Consultant chooses to create documents in an application different from that indicated in Table 3, or a version different from that indicated in Table 1, the Consultant is responsible for arranging for the conversion of the documents into a format which is compatible.

All submitted documents shall be capable of being printed and converted to an Adobe Acrobat PDF without any visually apparent errors. Caution: Shaded areas and shaded text can either blank-out or print as solid black on some printers and plotters. Use solid linework as much as possible when creating PDF documents.

Consultants are not necessarily expected in all cases to use the software currently used by Alberta Infrastructure in the 'production' of their deliverables (although this is the preferred and most efficient route). Conversions of documents from and to the Alberta Infrastructure software standard are acceptable, provided the final deliverables (electronic and hard copy) are 'clean' and free of formatting errors when printed.

Electronic Communication

Consultants are required to have the capability to communicate with Alberta Infrastructure electronically via e-mail, and other Internet tools.

Electronic Document Submission

Upon submission, only the complete sets of documents will be acceptable and will always pass from the Prime Consultant to the Project Manager.

When submitting documents electronically, include the following information in the e-mail message or a text file:

- Project Numbers
- Building / Project Name
- Name of the software and version used to create the document

Submit a complete set of bid documents in electronic form to Alberta Infrastructure via e-mail, CD-ROM, DVD, or other pre-arranged electronic means such as ftp, Sharepoint, Autodesk Buzzsaw, etc.

Submit a complete set of documents (including information documents) in:

- Adobe Acrobat (PDF) file format for electronic distribution to bidders, and
- in their original file format for Alberta Infrastructure record purposes.

For CAD drawings also include the following information using E-Transmit:

- Include all Xrefs, images, CTB files and all other files required to properly display drawings.

Electronic Bid Document Distribution

Alberta Infrastructure distributes building project documents for bidding purposes via COOLNet Alberta (<http://www.coolnet.ab.ca>) and COOLNet Edmonton (<http://www.coolnetedmonton.ab.ca>). Bid documents are distributed in Adobe Acrobat (PDF) format.

Part 2 – Master Specification

Mandatory Use

Use of the Alberta Infrastructure Master Specification is **mandatory** for “**Owned Infrastructure**” projects. Owned Infrastructure are those projects that are designed, constructed and operated under the direction and control of Alberta Infrastructure.

The use of the Alberta Infrastructure Master Specification is not mandatory for “Supported (Grant Funded) Infrastructure” projects. Supported Infrastructure normally includes schools and post-secondary institutions where the design is under the direction and control of the funded entity.

How to Obtain the Master Specification

The Alberta Infrastructure Master Specifications are available from the [Alberta Infrastructure - Technical Resource Centre](http://www.infrastructure.alberta.ca/500.htm) (<http://www.infrastructure.alberta.ca/500.htm>) on the Alberta Infrastructure website.

A series of separate Master Specifications designed to respond to the needs of a specific Infrastructure program or project type are available.

Editing the Master Specification

Master Specification Sections that require editing are provided in Microsoft Word format.

- Submit completed project specifications in Microsoft Word format.

To avoid formatting and other problems inherent in converting from one word processing application to another, we strongly recommend that Microsoft Word be used for creating and editing project specification documents.

- Correction of conversion errors may be time consuming and laborious and are the responsibility of the consultant/individual responsible for the production of the documents.

Sections in Adobe Acrobat PDF format generally do not require editing. Selected sections are designed to be filled in electronically.

- Include the applicable

Page Format

Do Not modify the page format, including:

- Fonts style and sizes
- Margins
- Indents
- Numbering
- Style sheets

Specification Style

When editing or creating new specification sections, maintain the format and writing style of the Infrastructure Master Specification, including:

- 3 part Section format
- Page format
- Streamlined point form style
- Active voice
- No large block paragraphs

Specification Length

As a general rule limit the length of a section to a maximum of about 10 pages. If necessary, organize the section content into narrower scope sections to limit the length of the section.

Avoid Splitting Information

- Avoid splitting clauses between pages.
- Avoid separating introductory clauses and headings from a following clause on following pages.

Use the techniques provided for this purpose in the word processing program, e.g. “keep lines together” and “keep with next” codes in Microsoft Word. Do not use forced page breaks or multiple paragraph spaces.

Make Choices

Square brackets within the master specification text indicate that an informed choice must be made from the options provided. Empty square brackets indicate that information must be inserted.

Part 3 - CAD Drawing Standards

Building Information Model Development

- Alberta Infrastructure is supportive of Building Information Modeling (BIM). While CAD remains the required deliverable, consultants who choose to develop the BIM model in addition to CAD files should provide Alberta Infrastructure with the BIM model. Access to the BIM models would assist in further verification of areas, volumes, efficiency ratios and general relationships. The specific format and technological platform of the BIM model should be discussed with Alberta Infrastructure in advance of the model creation.

CAD Drawing Standards

The purpose of the Alberta Infrastructure and CAD Drawing Standards is to establish drawing practices and conventions that should be followed when preparing CAD documents for Alberta Infrastructure projects.

Drawing File Format

AutoCAD is the standard format for development and production of CAD drawings for Alberta Infrastructure building project projects. Refer to Part 1 – Software Standards (page 6).

Drawing Sizes

The following standard drawing sizes are in the proto-type title blocks posted on the [Technical Resource Centre](#) web page.

Sheet Size	Dimensions
A0	1189 x 841 mm
A1	841 x 594 mm
A2	594 x 420 mm
Tabloid	11" x 17" (432 x 279 mm)

Title Block Drawings

[Title block](#) drawings have been produced in electronic form to include the Alberta Infrastructure title block and standard layers identified in the Alberta Infrastructure CAD Layering Standards for Building Projects. The following chart identifies the discipline that the title block drawings have been prepared for.

Disciplines:	
A	Architectural
C	Civil (Site Development)
E	Electrical
F	Fire protection
L	Landscape
M	Mechanical
P	Plumbing
S	Structural
T	Telecommunications

Drawing Sheet Numbering

Building Projects: Use the following numbering system when numbering drawing sheets:

Sheet Numbers:	Sheet Name / Title
0	Title Sheet and Index
001 - 099	Architectural (Small Scale)
101 - 199	Architectural (Large Scale)
201 - 299	Structural
301 - 399	Mechanical
401 - 499	Electrical
500	Site Plan
501 - 599	Site Development
601 - 699	Food Services
701 - 799	Landscape Development
801 - 899	Acoustics

File Naming

To completely identify a project and to facilitate electronic file storage and retrieval each file name, create the file name using the following elements:

- Contract Identifier (a unique number that identifies the construction contract, usually a plan number)
- Building or Site Number
- Drawing Number
- File Type Extension

Following is an example of a complete drawing file name:

Plan Number		Building or Site No.		Drawing Number		File Type Extension
008764	-	0192A	-	100	.	dwg

008764-192A-100.dwg is an example of a file name for a project that has a building / site number and a contract identifier.

Obtain the building / site number and contract identifier from the Alberta Infrastructure Project Manager.

Peripheral files

When including x-ref files in a drawing (title blocks, base plans, details, etc...) try to keep the naming convention of the files simplistic as possible.

Measurement Units

Create all drawings using SI (metric) units.

Measurement Method	Units
Linear measurement	meters
Angular measurement	degrees, minutes and seconds

Set the display precision to the number of significant decimal places that is appropriate to the work.

Scale

Draw all physical objects in 1 to 1 scale (their real world size). DO NOT use any scale factor. If a wall is to be drawn 10 m long, the corresponding CAD lines will also be 10 m.

Fonts

Only use the standard fonts supplied with AutoCAD.

Text Height

Text height is dependent on the scale of the finished plot. Normally, text height is 2 to 3 mm for the final plot.

Text Location	Text Size
Paper space	Use a one to one relationship
Model space	Calculate the text height from the scale of the plot. For example at a plot scale of 1:1000, text must be 2.0 m high in order for the text in the plot to print 2 mm high.

The following formula may be used to calculate text height in model space for a specific scale:

Desired text height in plot	X	Scale	=	text height in model space
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Example:

Desired text height on final plot: 3 mm (0.003m)

Scale factor: 1000 (1:1000)

Desired text height in plot	X	Scale	=	text height in model space
3 mm (0.003m)	X	1000 (1:1000)	=	3.00 m

Symbols and Blocks

Create new blocks in layer zero ONLY. Predefined symbols and blocks must be inserted on the proper layer. All blocks must be uniformly scaled.

Locations of Drawing Elements

Place title blocks, general notes, schedules, charts and other non-graphic information in paper space or a scaled paper space viewport.

Place drawing items and related descriptive text in model space.

Entity Construction

Whenever possible assign entity color and linetype "by layer". Use closed polyline boundaries for all hatched areas.

Part 4 - CAD Layering Standards

The purpose of this standard is to establish a common and consistent approach to naming drawing layers for Alberta Infrastructure building projects.

To assist Consultants in implementing the Alberta Infrastructure CAD Layering standards for building projects, title block drawings have been prepared for each discipline. These title block drawings contain the Alberta Infrastructure title block and the appropriate layers for the discipline. [Title block drawings](#) are available from the Alberta Infrastructure [Technical Resource Centre](#).

The Alberta Infrastructure CAD Layers have been based on the CAD layers and layering format published in the “CAD Layering Guidelines (Computer-Aided Design Management Techniques for Architecture, Engineering and Facility Management)” Second Edition, published by The American Institute of Architects Press. Alberta Infrastructure has added layers to meet its specific needs.

Layer Naming Format - Major and Minor Groups

Discipline		Major Group
A	-	WALL

Simple layer name with only a major group

Discipline		Major Group		Minor Group
A	-	WALL	-	JAMB

Layer name with a major group and a minor group

Discipline

Layer Format	Description	Discipline Codes
A-FLOR or A-FLOR-WDWK	<p>The Discipline field consists of two-characters with the second character a hyphen.</p> <p>The Discipline field is intended to identify the creator of the graphic information.</p>	A Architectural C Civil E Electrical F Fire protection G General H Hazardous materials I Interiors L Landscape M Mechanical P Plumbing Q Equipment R Resource S Structural T Telecommunications X Other disciplines Z Contractor / Shop Drawings

Major Group

Layer Format	Description	Major Group Codes
A-FLOR or A-FLOR-WDWK	The Major Group field identifies the building system. Major Group use four characters.	A complete list of Major and Minor Group codes used in the drawing layer names are included in Appendix A.

Example:

A-WALL	Walls
A-DOOR	Doors
A-LITE	Lighting fixtures
A-FIXT	Plumbing fixtures

Minor Group

Layer Format	Description	Minor Group Codes
A-FLOR-WDWK	Minor Group codes further define Major Group elements. Minor Group codes consist of a four character field separated with a hyphen. The Minor Group code modifier is optional and need not be used when the Major Group code alone will suffice.	A complete list of Major and Minor Groups codes used in the drawing layer names are included in Appendix A. Users may define their own Minor Groups to accommodate special project requirements. This should only be done if the defined layers do not adequately satisfy project requirements.

Examples:

A-WALL-FULL	Full height walls
A-DOOR-IDEN	Door number etc.
A-FLOR-OVHD	Overhead items

Layer Format - Status Field or Common Modifiers

Discipline		Major Group		Status Field or Common Modifier
A	-	WALL	-	NEWW

Layer name with a major group and a status field or common modifier

Status Field

Layer Format	Description	Status Codes
A-DOOR-NEWW	<p>Status field is primarily used to differentiate between new, existing and future construction work.</p> <p>Status field consist of a four character field separated with a hyphen.</p> <p>Use of Status field is optional.</p> <p>Status field is always the last code in the layer name.</p>	<p>NEWW New work</p> <p>EXST Existing to remain</p> <p>DEMO Existing to demolish</p> <p>FUTR Future work</p> <p>TEMP Temporary work</p> <p>MOVE Items to be moved</p> <p>RELI Relocated items</p> <p>NICN Not in contract</p> <p>PHS1-9 Phase numbers</p>

Example: **A-WALL-NEWW** New wall

A-WALL-EXST Existing wall to remain

A-DOOR-DEMO Existing door to be demolished

Common Modifiers

Layer Format	Description	Common Modifier Codes
A-DOOR-PATT	<p>Common modifiers are used further define the preceding field.</p> <p>Common modifiers consist of a four character field separated with a hyphen.</p> <p>Use of the common modifier is optional.</p>	<p>PATT Cross-hatching poche</p> <p>IDEN Identification tags</p> <p>ELEV Elevation</p> <p>X-RDME Read-me layers, not to be plotted</p>

Example: **A-GLAZ-IDEN** Window number
A-WALL-ELEV Wall surfaces, 3D views

Layer Format - Annotation

Discipline		Annotation		Type
A	-	ANNO	-	DIMS

An annotation layer

Annotation

Layer Format	Description	Annotation Codes
<p>*-ANNO-DIMS</p> <p>* asterisk represents discipline code</p>	<p>Annotation comprises text, dimensions, sheet borders, detail references, and other elements on CAD drawings that don't represent aspects of a building.</p>	<p>DIMS Dimensions</p> <p>KEYN Keynotes</p> <p>LEGN Legends and schedules</p> <p>NOTE Notes</p> <p>NPLT Construction lines, non-plotting information</p> <p>REDL Redline</p> <p>REVS Revisions</p> <p>SYMB Symbols</p> <p>TEXT Text</p> <p>TTLB Border and title blocks</p>

Examples: A-ANNO-**DIMS** Dimensions
 C-ANNO-**TEXT** Text
 M-ANNO-**TTLB** Border and title blocks

Layer Name	Description	Remark	Color	Linetype
+ 0	Do not draw on this layer Use this layer to create new blocks	on	(white)	continuous

Layer Name	Description	Remark	Color	Linetype
+ A-ANNO-TTLB	Lines, logo and text for construction documents		0 to 15	continuous
+ A-ANNO-TTLB-INVP	Lines, logo and text for Space Inventory Plan		0 to 15	as required
+ A-SHEL-BASE	Base building shell, include all elements of exterior walls, columns c/w glazing, doors, base building services and core, fixtures, vertical shanges		3 (green)	varies
+ A-SHEL-SLID	Architectural shell base (ASHBASE), solid	solid	3 (green)	continuous
+ A-SHEL-TEXT	Text and building services labeling		7 (white)	continuous
+ A-SHEL-DIMS	Dimensioning		1 (red)	continuous
+ A-SHEL-GRID	Column grid line		252	centerx2
+ A-SHEL-BSFX	Fixtures for building services including fire hose cabinets, drinking fountains		3 (green)	continuous
+ A-SHEL-PKNG	Parking lines		2 (yellow)	continuous
+ A-SHEL-POLY	Polyline for building service hatch		1 (red)	Polyline
+ A-SHEL-PATT	Hatching	dots	2 (yellow)	continuous
+ A-SHEL-KEYP	Key plan		0 to 15	as required
+ A-SHEL-CONV	Convectors	off	1 (red)	continuous

Layer Name	Description	Remark	Color	Linetype
+ A-EXST	Existing Drawings			continuous
+ A-EXST-INTR	Existing Interior Walls, Doors, Glazing, Millwork, etc		3 (green)	continuous
+ A-EXST-IDEN	Room numbers, names		5 (blue)	continuous
+ A-EXST-PATT	Hatching		2 (yellow)	continuous
+ A-EXST-SLID	Solid		3 (green)	continuous
+ A-EXST-TEXT	Text – room name (eg. GEN OFF)		7 (white)	continuous
A-WALL	Walls		3 (green)	as required
A-WALL-FULL	Full-height walls, stair and shaft walls, walls to structure		3 (green)	as required
A-WALL-PRHT	Partial-height walls (do not appear on reflected ceiling plans)		As required	as required
A-WALL-MOVE	Movable partitions		0 to 15	as required
A-WALL-HEAD	Door and window headers (appear on reflected ceiling plans)		0 to 15	as required
A-WALL-JAMB	Door and window jambs (do not appear on reflected ceiling plans)		0 to 15	as required
A-WALL-PATT	Wall insulation, hatching and fill		0 to 15	as required
+ A-WALL-SLID	Wall, solid		3 (green)	continuous
A-WALL-ELEV	Wall surfaces: 3D views		0 to 15	as required
A-WALL-FIRE	Fire wall patterning		0 to 15	as required
A-DOOR	Doors		0 to 15	as required
A-DOOR-FULL	Full-height (to ceiling) door: swing and leaf		0 to 15	as required
A-DOOR-PRHT	Partial-height door: swing and leaf		0 to 15	as required
A-DOOR-IDEN	Door number, hardware group etc.		0 to 15	as required
A-DOOR-ELEV	Doors: 3D views		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
A-GLAZ	Windows, window walls, curtain walls, glazed partitions		0 to 15	as required
A-GLAZ-FULL	Full-height glazed walls and partitions		0 to 15	as required
A-GLAZ-PRHT	Windows and partial height glazed partitions		0 to 15	as required
A-GLAZ-SILL	Windowsills		0 to 15	as required
A-GLAZ-IDEN	Window number		0 to 15	as required
A-GLAZ-ELEV	Glazing and mullions - elevation views		0 to 15	as required
A-FLOR	Floor information		0 to 15	as required
+ A-FLOR-TEXT	Text and millwork labeling, room usage		7 (white)	continuous
A-FLOR-OTLN	Floor or building outline		0 to 15	as required
A-FLOR-LEVL	Level changes, ramps, pits and depressions		0 to 15	as required
A-FLOR-STRS	Stair treads, escalators and ladders		0 to 15	as required
A-FLOR-RISR	Stair risers		0 to 15	as required
A-FLOR-HRAL	Stair and balcony handrails and guard rails		0 to 15	as required
A-FLOR-EVTR	Elevator cars and equipment		0 to 15	as required
A-FLOR-TPTN	Toilet partitions		0 to 15	as required
A-FLOR-SPCL	Architectural specialties (toilet room accessories, display cases)		0 to 15	as required
A-FLOR-WDWK	Architectural woodwork (field-built cabinets and counters)		0 to 15	as required
A-FLOR-CASE	Casework (manufactured cabinets)		0 to 15	as required
+ A-FLOR-APPL	Appliances		0 to 15	as required
A-FLOR-OVHD	Overhead items (skylights, overhangs usually dashed lines)		0 to 15	as required
A-FLOR-RAIS	Raised floors		0 to 15	as required
A-FLOR-IDEN	Room numbers, names, targets, etc.		0 to 15	as required
A-FLOR-PATT	Paving, tile and carpet patterns		0 to 15	as required
A-FLOR-PFIX	Plumbing fixtures		0 to 15	as required
A-FLOR-FIXT	Miscellaneous fixtures		0 to 15	as required
A-FLOR-SIGN	Signage		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
A-EQPM	Equipment		0 to 15	as required
A-EQPM-FIXD	Fixed equipment		0 to 15	as required
A-EQPM-MOVE	Movable equipment		0 to 15	as required
A-EQPM-NICN	Equipment not in contract		0 to 15	as required
A-EQPM-ACCS	Equipment access		0 to 15	as required
A-EQPM-IDEN	Equipment identification numbers		0 to 15	as required
A-EQPM-ELEV	Equipment surfaces: 3D views		0 to 15	as required
A-EQPM-CLNG	Ceiling-mounted or suspended equipment		0 to 15	as required
A-FURN	Furniture		0 to 15	as required
A-FURN-FREE	Furniture: freestanding (desks credenzas, etc.)		0 to 15	as required
A-FURN-CHAR	Chairs and other seating		0 to 15	as required
A-FURN-FILE	File cabinets		0 to 15	as required
A-FURN-PNLS	Furniture system panels		0 to 15	as required
A-FURN-WKSF	Furniture system work surface components		0 to 15	as required
A-FURN-STOR	Furniture system storage components		0 to 15	as required
A-FURN-POWR	Furniture system - power designations		0 to 15	as required
A-FURN-IDEN	Furniture numbers		0 to 15	as required
A-FURN-PLNT	Plants		0 to 15	as required
A-FURN-PATT	Finish patterns		0 to 15	as required
A-FURN-ELEV	Furniture: 3D views		0 to 15	as required
A-CLNG	Ceiling information		0 to 15	as required
+ A-CLNG-TEXT	Text notes, ceiling height		4 (cyan)	continuous
A-CLNG-GRID	Ceiling grid		252	continuous
A-CLNG-OPEN	Ceiling / roof penetrations		0 to 15	as required
A-CLNG-TEES	Main tees		0 to 15	as required
A-CLNG-SUSP	Suspended elements		0 to 15	as required
A-CLNG-PATT	Ceiling patterns		0 to 15	as required
A-CLNG-ACCS	Ceiling access		0 to 15	as required
A-LITE	Light fixtures		2 (yellow)	as required

Layer Name	Description	Remark	Color	Linetype
A-COLS	Columns		0 to 15	as required
+ A-HVAC	HVAC		0 to 15	as required
A-HVAC-SDFF	Supply diffusers		0 to 15	as required
A-HVAC-RDFF	Return air diffusers		0 to 15	as required
A-GRID	Planning grid or column grid		0 to 15	as required
A-ROOF	Roof		0 to 15	as required
+ A-ROOF-TEXT	Zone designations text notes	romanc	as required	continuous
+ A-ROOF-DIMS	Roof plan dimensions	romans	2 (yellow)	continuous
+ A-ROOF-CUTL	Cut lines and hidden lines		5 (blue)	hidden
+ A-ROOF-SYMB	Symbols for equipment on roof		4 (cyan)	continuous
A-ROOF-OTLN	Roof outline		0 to 15	as required
A-ROOF-LEVL	Level changes		0 to 15	as required
A-ROOF-STRS	Stair treads and ladders		0 to 15	as required
A-ROOF-RISR	Stair risers		0 to 15	as required
A-ROOF-HRAL	Stair handrails, nosings and guardrails		0 to 15	as required
A-ROOF-PATT	Roof surface patterns, hatching	ansi 31	as required	continuous
A-ROOF-ELEV	Roof surfaces: 3D views		0 to 15	as required
+ A-ROOF-VDH1	Visual defect history 1		0 to 15	as required
+ A-ROOF-VDH2	Visual defect history 2		0 to 15	as required
+ A-ROOF-VDH3	Visual defect history 3		0 to 15	as required
+ A-ROOF-RHST	Repair history		0 to 15	as required
+ A-ROOF-CREC	Current recommendation		0 to 15	as required
+ A-ROOF-DRAN	Drainage		0 to 15	as required
+ A-ROOF-SKYL	Skylight		0 to 15	as required
+ A-ROOF-STRF	Steep roof		0 to 15	as required
+ A-ROOF-BASE	Building Layout with all Roof Zones		6 (magenta)	continuous
+ A-ROOF-ZONE	Zone area		7 (white)	continuous

+ Alberta Infrastructure specific layer - not listed in AIA CAD Layer Guidelines

2011-11-10

Layer Name	Description	Remark	Color	Linetype
A-AREA	Area calculation boundary lines		0 to 15	as required
A-AREA-PATT	Area cross hatching		0 to 15	as required
A-AREA-IDEN	Room numbers, tenant identifications, area calculations		0 to 15	as required
A-AREA-OCCP	Occupant or employee names		0 to 15	as required
+ A-AREA-BLDS	Building service area	polyline	4 (cyan)	continuous
+ A-AREA-BLDS-REGN	Building service area region	off	6 (magenta)	continuous
+ A-AREA-USBL	Usable area	polyline	4 (cyan)	continuous
+ A-AREA-USBL-REGN	Usable area region	off	151	continuous
+ A-AREA-GROS	Gross area	polyline	1 (red)	continuous
+ A-AREA-UBND	User boundaries	polyline	6 (magenta)	continuous
+ A-AREA-TEXT	User names – text (eg. INFRA)	romand	1 (red)	continuous
	Area, usage – text (eg. 12.0)	romans	7 (white)	continuous
A-ELEV	Interior and exterior elevations		0 to 15	as required
A-ELEV-OTLN	Building outlines		0 to 15	as required
A-ELEV-FNSH	Finishes, woodwork and trim		0 to 15	as required
A-ELEV-CASE	Wall-mounted casework		0 to 15	as required
A-ELEV-FIXT	Miscellaneous fixtures		0 to 15	as required
A-ELEV-PFIX	Plumbing fixtures in elevation		0 to 15	as required
A-ELEV-SIGN	Signage		0 to 15	as required
A-ELEV-PATT	Textures and hatch patterns	dots	2 (yellow)	as required
A-ELEV-IDEN	Component identification numbers		0 to 15	as required
+ A-ELEV-STAK	Stacking plan		3 (green)	continuous
+ A-ELEV-TEXT	Text - users / area		1 (red)	continuous
	All other text		7 (white)	continuous
A-SECT	Sections		0 to 15	as required
A-SECT-MCUT	Material cut by section		0 to 15	as required
A-SECT-MBND	Material beyond section cut		0 to 15	as required
A-SECT-PATT	Textures and hatch patterns		0 to 15	as required
A-SECT-IDEN	Component identification numbers		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
A-DETL	Details		0 to 15	as required
A-DETL-MCUT	Material cut by section		0 to 15	as required
A-DETL-MBND	Material beyond section cut		0 to 15	as required
A-DETL-PATT	Textures and hatch patterns		0 to 15	as required
A-DETL-IDEN	Component identification numbers		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
+ C-ANNO-TTLB	Line work, logos, and text	font varies	varies	varies
+ C-ANNO-TTLB-TRIM	Trim line for finished plot		0 to 15	continuous
C-PROP	Property lines, survey benchmarks		1 (red)	center
C-PROP-ESMT	Easements, rights-of-way, setback lines		1 (red)	center
+ C-PROP-ESMT-TEXT	Easements, right of way text	romand	2 (yellow)	continuous
C-PROP-BRNG	Bearings and distance labels		2 (yellow)	continuous
C-PROP-CONS	Construction controls		1 (red)	continuous
+ C-PROP-TEXT	Plan numbers	romand	2 (yellow)	continuous
+ C-PROP-BNMG	Benchmark, monument		1 (red)	continuous
+ C-PROP-BNMG-TEXT	Benchmark, monument text	romans	2 (yellow)	continuous
C-TOPO	Proposed contour lines and elevations		0 to 15	as required
C-TOPO-SPOT	Spot elevations	romans	4 (cyan)	continuous
C-TOPO-BORE	Test borings		2 (yellow)	continuous
C-TOPO-RTWL	Retaining wall		2 (yellow)	continuous
+ C-TOPO-1000	Contour	romans	4 (cyan)	continuous
+ C-TOPO-DRAN	Drainage features		4 (cyan)	continuous
+ C-TOPO-BERM	Berms, embankments		4 (cyan)	continuous
C-BLDG	Building outline	polyline	6 (magenta)	continuous
+ C-BLDG-TEXT	Building name, number	romand	1 (red)	continuous
+ C-BLDG-PATT	Hatching	asnsi37	5 (blue)	continuous
+ C-BLDG-OVHD	Overhangs, canopies etc.		5 (blue)	continuous
C-PKNG	Parking lots		0 to 15	as required
C-PKNG-STRP	Parking lot striping, handicapped symbol		2 (yellow)	continuous
C-PKNG-CARS	Graphic illustration of cars		0 to 15	as required
C-PKNG-ISLD	Parking islands		0 to 15	as required
C-PKNG-DRAN	Parking lot drainage slope indications		0 to 15	as required
+ C-PKNG-EXST	Existing parking lots to remain		0 to 15	as required
+ C-PKNG-DEMO	Existing parking lots to be demolished		0 to 15	as required
+ C-PKNG-TEXT	Parking stall lines and parking text	romans	2 (yellow)	continuous

+ Alberta Infrastructure specific layer - not listed in AIA CAD Layer Guidelines

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Layer Name	Description	Remark	Color	Linetype
C-ROAD	Roads		0 to 15	as required
C-ROAD-CNTR	Centre lines		0 to 15	as required
C-ROAD-CURB	Curbs		0 to 15	as required
+ C-ROAD-TEXT	Street names etc.	romans	2 (yellow)	continuous
+ C-ROAD-EXST	Existing parking road to remain		0 to 15	as required
+ C-ROAD-DEMO	Existing road to be demolished		0 to 15	as required
+ C-ROAD-PATT	Hatch Patterns		0 to 15	as required
* C-UTIL-STRM	Storm sewer		3 (green)	continuous
* C-UTIL-STRM-TEXT	Storm sewer text	romans	4 (cyan)	continuous
+ C-UTIL-STRM-FRDR	Storm sewer (french drain)		3 (green)	continuous
C-UTIL-STRM-UNDR	Storm drainage pipe - underground		0 to 15	as required
* C-UTIL-COMM	Site communication/telephone poles, boxes, towers		0 to 15	as required
* C-UTIL-COMM-UNDR	Underground communication lines		0 to 15	as required
* C-UTIL-COMM-OVHD	Overhead communication lines		0 to 15	as required
* C-UTIL-WATR	Domestic water - manholes, pumping stations, storage tanks		1 (red)	continuous
* C-UTIL-WATR-UNDR	Domestic water - underground lines		0 to 15	as required
+ C-UTIL-WATR-TEXT	Domestic water text	romans	1 (red)	continuous
* C-UTIL-FIRE	Fire water		4 (cyan)	continuous
C-UTIL-FIRE-UNDR	Fire protection-underground lines		0 to 15	as required
+ C-UTIL-FIRE-TEXT	Fire water text	romans	4 (cyan)	continuous
* C-UTIL-NGAS	Natural gas		5 (blue)	continuous
* C-UTIL-NGAS-UNDR	Natural gas - underground lines		0 to 15	as required
+ C-UTIL-NGAS-TEXT	Natural gas text	romans	5 (blue)	continuous
* C-UTIL-SSWR	Sanitary sewer		3 (green)	continuous
* C-UTIL-SSWR-UNDR	Sanitary sewer - underground		0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
	lines			
+ C-UTIL-SSWR-TEXT	Sanitary sewer text	romans	4 (cyan)	continuous
+ C-UTIL-POWR	Power		2 (yellow)	continuous
+ C-UTIL-POWR-TEXT	Power text	romans	2 (yellow)	continuous
+ C-UTIL-SERT	Security		2 (yellow)	continuous
+ C-UTIL-SERT-TELV	Security (TV)		2 (yellow)	continuous
+ C-UTIL-ALRM	Alarm system		2 (yellow)	continuous
+ C-UTIL-CATV	Cable television		2 (yellow)	continuous
+ C-UTIL-CATV-TEXT	Cable television text	romans	2 (yellow)	continuous
+ C-UTIL-ABND	Abandoned utilities		3 (green)	dot
+ C-UTIL-ABND-TEXT	Abandoned utilities text	romans	3 (green)	continuous
+ C-FUEL	Petroleum product systems		1 (red)	continuous
+ C-FUEL-TEXT	Petroleum product systems text	romans	1 (red)	continuous
+ C-FUEL-IDEN	Tank ID and contents chart	romans	1 (red)	continuous

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Layer Name	Description	Remark	Color	Linetype
+ E-ANNO-TTLB	Line work, logos, and text	font varies	varies	varies
E-LITE	Lighting		0 to 15	as required
E-LITE-SPCL	Special lighting		0 to 15	as required
E-LITE-EMER	Emergency lighting		0 to 15	as required
E-LITE-EXIT	Exit lighting		0 to 15	as required
E-LITE-CLNG	Ceiling-mounted lighting		0 to 15	as required
E-LITE-WALL	Wall-mounted lighting		0 to 15	as required
E-LITE-FLOR	Floor-mounted lighting		0 to 15	as required
E-LITE-OTLN	Lighting outline for background (optional)		0 to 15	as required
E-LITE-NUMB	Lighting circuit numbers		0 to 15	as required
E-LITE-ROOF	Roof lighting		0 to 15	as required
E-LITE-SITE	Site lighting (also see civil)		0 to 15	as required
E-LITE-SWCH	Lighting switches		0 to 15	as required
E-LITE-CIRC	Lighting circuits		0 to 15	as required
E-LITE-IDEN	Luminaire identification and text		0 to 15	as required
E-LITE-JBOX	Junction box		0 to 15	as required
E-POWR	Power		0 to 15	as required
E-POWR-WALL	Power wall outlets and receptacles		0 to 15	as required
E-POWR-CLNG	Power-ceiling receptacles and devices		0 to 15	as required
E-POWR-PANL	Power panels		0 to 15	as required
E-POWR-EQPM	Power equipment		0 to 15	as required
E-POWR-SWBD	Power switchboards		0 to 15	as required
E-POWR-CIRC	Power circuits		0 to 15	as required
E-POWR-URAC	Under floor raceways		0 to 15	as required
E-POWR-UCPT	Under-carpet wiring		0 to 15	as required
E-POWR-CABL	Cable trays		0 to 15	as required
E-POWR-FEED	Feeders		0 to 15	as required
E-POWR-BUSW	Busways		0 to 15	as required
E-POWR-NUMB	Power circuit numbers		0 to 15	as required
E-POWR-IDEN	Power identification, text		0 to 15	as required
E-POWR-SITE	Site power (also see civil)		0 to 15	as required
E-POWR-ROOF	Roof power		0 to 15	as required
E-POWR-OTLN	Power outline for backgrounds		0 to 15	as required
E-POWR-JBOX	Junction box		0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
E-CTRL	Electric control systems		0 to 15	as required
E-CTRL-DEVC	Control systems devices		0 to 15	as required
E-CTRL-WIRE	Control system wiring		0 to 15	as required
E-GRND	Ground system		0 to 15	as required
E-GRND-CIRC	Ground system circuits		0 to 15	as required
E-GRND-REFR	Reference ground system		0 to 15	as required
E-GRND-EQUI	Equipotential ground system		0 to 15	as required
E-GRND-DIAG	Ground system diagram		0 to 15	as required
E-AUXL	Auxiliary systems		0 to 15	as required
E-LTNG	Lightning protection system		0 to 15	as required
E-FIRE	Fire alarm, fire extinguishers		0 to 15	as required
E-COMM	Telephone, communication outlets		0 to 15	as required
E-DATA	Data outlets		0 to 15	as required
E-SOUN	Sound / PA system		0 to 15	as required
E-TVAN	TV antenna system		0 to 15	as required
E-CCTV	Closed-circuit TV		0 to 15	as required
E-NURS	Nurse call system		0 to 15	as required
E-SERT	Security		0 to 15	as required
E-PGNG	Paging system		0 to 15	as required
E-DICT	Central dictation system		0 to 15	as required
E-BELL	Bell system		0 to 15	as required
E-CLOK	Clock system		0 to 15	as required
E-ALRM	Miscellaneous alarm system		0 to 15	as required
E-INTC	Intercom system		0 to 15	as required
E-LEGN	Legend of symbols		0 to 15	as required
E-1LIN	One-line diagrams		0 to 15	as required
E-RISR	Riser diagram		0 to 15	as required
E-SITE	Site electrical substations, poles		0 to 15	as required
E-SITE-LITE	Site lighting		0 to 15	as required
E-SITE-UNDR	Underground electrical issues		0 to 15	as required
E-SITE-POLE	Electric poles		0 to 15	as required
E-SITE-OVHD	Overhead lines		0 to 15	as required
+ E-SITE-PKNG	Parking Rails and Pedestals		0 to 15	as required

Layer Name		Remark	Color	Linetype
+ F-ANNO-TTLB	Line work, logos, and text	font varies	varies	varies
F-CO2S	Co₂ system		0 to 15	as required
F-CO2S-PIPE	Co ₂ sprinkler piping		0 to 15	as required
F-CO2S-EQPM	Co ₂ equipment		0 to 15	as required
F-HALN	Halon		0 to 15	as required
F-HALN-EQPM	Halon equipment		0 to 15	as required
F-HALN-PIPE	Halon piping		0 to 15	as required
F-IGAS	Inert gas		0 to 15	as required
F-IGAS-EQPM	Inert gas equipment		0 to 15	as required
F-IGAS-PIPE	Inert gas piping		0 to 15	as required
F-SPRN	Fire protection sprinkler system		0 to 15	as required
F-SPRN-CLHD	Sprinkler head - ceiling		0 to 15	as required
F-SPRN-OTHD	Sprinkler head - other		0 to 15	as required
F-SPRN-PIPE	Sprinkler piping		0 to 15	as required
F-SPRN-STAN	Sprinkler system standpipe			
F-STAN	Fire protection standpipe system		0 to 15	as required
F-PROT	Fire protection systems		0 to 15	as required
F-PROT-EQPM	Fire system equipment (fire hose cabinet extinguishers)		0 to 15	as required
F-PROT-ALRM	Fire alarm		0 to 15	as required
F-PROT-SMOK	Smoke detectors / heat sensors		0 to 15	as required

Layer Name	Remark	Color	Linetype
G-PLAN	Floor plan - key plan	0 to 15	as required
G-SITE	Site plan - key plan	0 to 15	as required
G-ACCS	Access plan	0 to 15	as required
G-FIRE	Fire protection plan	0 to 15	as required
G-EVAC	Evacuation plan	0 to 15	as required
G-CODE	Code compliance plan	0 to 15	as required

Layer Name	Remark	Color	Linetype
H-PLAN	Floor plan	0 to 15	as required
H-SITE	Site plan	0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
I-WALL-FULL	Full-height walls, stair and shaft walls, walls to structure		0 to 15	as required
I-WALL-PRHT	Partial-height walls (do not appear on reflected ceiling plans)		0 to 15	as required
I-WALL-MOVE	Moveable partitions		0 to 15	as required
I-WALL-HEAD	Door and window headers (appear on reflected ceiling plan)		0 to 15	as required
I-WALL-JAMB	Door and window jambs (do not appear on reflected ceiling plans)		0 to 15	as required
I-WALL-PATT	Wall insulation, hatching and fill		0 to 15	as required
I-WALL-ELEV	Wall surfaces: 3D views		0 to 15	as required
I-WALL-FIRE	Fire wall patterning		0 to 15	as required
I-DOOR	Doors		0 to 15	as required
I-DOOR-FULL	Full-height (to ceiling) door: swing and leaf		0 to 15	as required
I-DOOR-PRHT	Partial-height door: swing and leaf		0 to 15	as required
I-DOOR-IDEN	Door number, hardware group, etc.		0 to 15	as required
I-DOOR-ELEV	Doors: 3D views		0 to 15	as required
I-GLAZ	Glazing		0 to 15	as required
I-GLAZ-FULL	Full-height glazed walls and partitions		0 to 15	as required
I-GLAZ-PRHT	Windows and partial-height glazed partitions		0 to 15	as required
I-GLAZ-SILL	Windowsills		0 to 15	as required
I-GLAZ-IDEN	Window number		0 to 15	as required
I-GLAZ-ELEV	Glazing and mullions - elevation views		0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
I-FLOR	Floor information		0 to 15	as required
I-FLOR-OTLN	Floor or building outline		0 to 15	as required
I-FLOR-LEVL	Level changes, ramps, pits, depressions		0 to 15	as required
I-FLOR-STRS	Stair treads, escalators, ladders		0 to 15	as required
I-FLOR-RISR	Stair risers		0 to 15	as required
I-FLOR-HRAL	Stair and balcony handrails, guard rails		0 to 15	as required
I-FLOR-EVTR	Elevator cars and equipment		0 to 15	as required
I-FLOR-TPTN	Toilet partitions		0 to 15	as required
I-FLOR-SPCL	Architectural specialties (toilet room accessories, display cases)		0 to 15	as required
I-FLOR-WDWK	Architectural woodwork (field-built cabinets and counters)		0 to 15	as required
I-FLOR-CASE	Casework (manufactured cabinets)		0 to 15	as required
I-FLOR-OVHD	Overhead items (skylights, overhangs - usually dashed lines)		0 to 15	as required
I-FLOR-RAIS	Raised floors		0 to 15	as required
I-FLOR-IDEN	Room numbers, names, targets, etc.		0 to 15	as required
I-FLOR-PATT	Paving, tile, carpet patterns		0 to 15	as required
I-FLOR-PFIX	Plumbing fixtures		0 to 15	as required
I-FOR-FIXT	Miscellaneous fixtures		0 to 15	as required
I-FLOR-SIGN	Signage		0 to 15	as required
I-EQPM	Equipment		0 to 15	as required
I-EQPM-FIXD	Fixed equipment		0 to 15	as required
I-EQPM-MOVE	Moveable equipment		0 to 15	as required
I-EQPM-NICN	Equipment not in contract		0 to 15	as required
I-EQPM-ACCS	Equipment access		0 to 15	as required
I-EQPM-IDEN	Equipment identification numbers		0 to 15	as required
I-EQPM-ELEV	Equipment surfaces: 3D views		0 to 15	as required
I-EQPM-CLNG	Ceiling-mounted or suspended equipment		0 to 15	as required
I-FURN	Furniture		0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
I-FURN-FREE	Furniture: freestanding (desks, credenzas, etc.)		0 to 15	as required
I-FURN-CHAR	Chairs and other seating		0 to 15	as required
I-FURN-FILE	File cabinets		0 to 15	as required
I-FURN-PNLS	Furniture system panels		0 to 15	as required
I-FURN-WKSF	Furniture system work surface components		0 to 15	as required
I-FURN-STOR	Furniture system storage components		0 to 15	as required
I-FURN-POWR	Furniture system - power designations		0 to 15	as required
I-FURN-IDEN	Furniture numbers		0 to 15	as required
I-FURN-PLNT	Plants		0 to 15	as required
I-FURN-PATT	Finish patterns		0 to 15	as required
I-FURN-ELEV	Furniture: 3D views		0 to 15	as required
I-CLNG	Ceiling information		0 to 15	as required
I-CLNG-GRID	Ceiling grid		0 to 15	as required
I-CLNG-OPEN	Ceiling/roof penetrations		0 to 15	as required
I-CLNG-TEES	Main tees		0 to 15	as required
I-CLNG-SUSP	Suspended elements		0 to 15	as required
I-CLNG-PATT	Ceiling patterns		0 to 15	as required
I-CLNG-ACCS	Ceiling access		0 to 15	as required
I-LITE	Light fixtures		0 to 15	as required
			0 to 15	as required
I-COLS	Columns		0 to 15	as required
			0 to 15	as required
I-HVAC-SDFF	Supply diffusers		0 to 15	as required
I-HVAC-RDFF	Return air diffusers		0 to 15	as required
			0 to 15	as required
I-GRID	Planning grid or column grid		0 to 15	as required
			0 to 15	as required
I-AREA	Area calculation lines		0 to 15	as required
I-AREA-PATT	Area cross hatching		0 to 15	as required
I-AREA-IDEN	Room numbers, tenant identifications, area calculation		0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
I-AREA-OCCP	Occupant or employee names		0 to 15	as required
I-ELEV	Interior and exterior elevations		0 to 15	as required
I-ELEV-FNSH	Finishes, woodwork, trim		0 to 15	as required
I-ELEV-CASE	Wall-mounted casework		0 to 15	as required
I-ELEV-FIXT	Miscellaneous fixtures		0 to 15	as required
I-ELEV-PFIX	Plumbing fixtures in elevation		0 to 15	as required
I-ELEV-SIGN	Signage		0 to 15	as required
I-ELEV-PATT	Textures and hatch patterns		0 to 15	as required
I-ELEV-IDEN	Component identification numbers		0 to 15	as required
I-SECT	Sections		0 to 15	as required
I-SECT-MCUT	Material cut by section		0 to 15	as required
I-SECT-MBND	Material cut beyond section cut		0 to 15	as required
I-SECT-PATT	Textures and hatch patterns		0 to 15	as required
I-SECT-IDEN	Component identification numbers		0 to 15	as required
I-DETL	Details		0 to 15	as required
I-DETL-MCUT	Material cut by section		0 to 15	as required
I-DETL-MBND	Material beyond section cut		0 to 15	as required
I-DETL-PATT	Textures and hatch patterns		0 to 15	as required
I-DETL-IDEN	Component identification numbers		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
+ L-ANNO-TTLB	Line work, logos, and text	font varies	varies	varies
L-PLNT	Plant and landscape materials		0 to 15	as required
L-PLNT-TREE	Trees (new)		0 to 15	as required
+ L-PLNT-EXST	Existing trees to remain		0 to 15	as required
+ L-PLNT-DEMO	Existing trees to be removed		0 to 15	as required
L-PLNT-GRND	Grounds covers and vines		0 to 15	as required
L-PLNT-BEDS	Rock, bark and other landscaping beds		0 to 15	as required
L-PLNT-TURF	Lawn areas		0 to 15	as required
L-PLNT-PLAN	Planting plans		0 to 15	as required
L-IRRG	Irrigation system		0 to 15	as required
L-IRRG-SPKL	Irrigation sprinklers		0 to 15	as required
L-IRRG-PIPE	Irrigation piping		0 to 15	as required
L-IRRG-EQPT	Irrigation equipment		0 to 15	as required
L-IRRG-COVR	Irrigation coverage		0 to 15	as required
L-WALK	Walks and steps		0 to 15	as required
L-WALK-PATT	Walks and steps cross-hatch patterns		0 to 15	as required
L-SITE	Site improvements		0 to 15	as required
L-SITE-FENC	Fencing		0 to 15	as required
L-SITE-WALL	Walls		0 to 15	as required
L-SITE-STEP	Steps		0 to 15	as required
L-SITE-DECK	Decks		0 to 15	as required
L-SITE-BRDG	Bridges		0 to 15	as required
L-SITE-POOL	Pools and spas		0 to 15	as required
L-SITE-SPRT	Sports fields		0 to 15	as required
L-SITE-PLAY	Play structures		0 to 15	as required
L-SITE-FURN	Site furnishings		0 to 15	as required
+ L-SITE-HARD	Concrete		0 to 15	as required
+ L-SITE-PATT	Concrete Hatch		0 to 15	as required

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Layer Name	Description	Remark	Color	Linetype
M-BRIN	Brine systems		0 to 15	as required
M-BRIN-EQPM	Brine system equipment		0 to 15	as required
M-BRIN-PIPE	Brine system piping		0 to 15	as required
			0 to 15	as required
M-CHIM	Prefabricated chimneys		0 to 15	as required
M-CMPA	Compressed air systems		0 to 15	as required
M-CMPA-CEQP	Compressed air equipment		0 to 15	as required
M-CMPA-CPIP	Compressed air piping		0 to 15	as required
M-CMPA-PEQP	Process air equipment		0 to 15	as required
M-CMPA-PPIP	Process air piping		0 to 15	as required
M-CONT	Controls and instrumentation		0 to 15	as required
M-CONT-THER	Thermostats		0 to 15	as required
M-CONT-WIRE	Low voltage wiring		0 to 15	as required
M-DUST	Dust and fume collection system		0 to 15	as required
M-DUST-EQPM	Dust and fume collection equipment		0 to 15	as required
M-DUST-DUCT	Dust and fume ductwork		0 to 15	as required
M-ELHT-EQPM	Electric heat equipment		0 to 15	as required
M-ENER	Energy management system		0 to 15	as required
M-ENER-EQPM	Energy management equipment		0 to 15	as required
M-ENER-WIRE	Energy management wiring		0 to 15	as required
M-RCOV	Energy recovery		0 to 15	as required
M-RCOV-EQPM	Energy recovery equipment		0 to 15	as required
M-RCOV-PIPE	Energy recovery piping		0 to 15	as required
+ M-FUME	Fume hoods		0 to 15	as required
M-FUME-EXHS	Fume hood exhaust system		0 to 15	as required
M-FUME-EQPM	Fume hoods		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
M-EXHS	Exhaust system		0 to 15	as required
M-EXHS-EQPM	Exhaust system equipment		0 to 15	as required
M-EXHS-DUCT	Exhaust system ductwork		0 to 15	as required
M-EXHS-RFEQ	Rooftop exhaust equipment		0 to 15	as required
M-FUEL	Fuel system piping		0 to 15	as required
M-FUEL-GPRP	Fuel gas process piping		0 to 15	as required
M-FUEL-GGEP	Fuel gas general piping		0 to 15	as required
M-FUEL-OPRP	Fuel oil process piping		0 to 15	as required
M-FUEL-OGEP	Fuel oil general piping		0 to 15	as required
M-HVAC	HVAC system		0 to 15	as required
M-HVAC-CDFF	HVAC ceiling diffusers		0 to 15	as required
M-HVAC-ODFF	HVAC other diffusers		0 to 15	as required
M-HVAC-DUCT	HVAC ductwork		0 to 15	as required
M-HVAC-EQPM	HVAC equipment		0 to 15	as required
M-HVAC-SDFF	HVAC supply diffusers		0 to 15	as required
M-HVAC-RDFF	HVAC return air diffusers		0 to 15	as required
M-HOTW	Hot water heating system		0 to 15	as required
M-HOTW-EQPM	Hot water equipment		0 to 15	as required
M-HOTW-PIPE	Hot water piping		0 to 15	as required
M-CWTR	Chilled water systems		0 to 15	as required
M-CWTR-PIPE	Chilled water piping		0 to 15	as required
M-CWTR-EQPM	Chilled water equipment		0 to 15	as required
M-MACH	Machine shop equipment		0 to 15	as required
M-MDGS	Medical gas systems		0 to 15	as required
M-MDGS-EQPM	Medical gas equipment		0 to 15	as required
M-MDGS-PIPE	Medical gas piping		0 to 15	as required
M-LGAS	Laboratory gas systems		0 to 15	as required
M-LGAS-EQPM	Laboratory gas equipment		0 to 15	as required
M-LGAS-PIPE	Laboratory gas piping		0 to 15	as required
M-NGAS	Natural gas systems		0 to 15	as required
M-NGAS-EQPM	Natural gas equipment		0 to 15	as required
M-NGAS-PIPE	Natural gas piping		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
M-PROC	Process systems		0 to 15	as required
M-PROC-EQPM	Process equipment		0 to 15	as required
M-PROC-PIPE	Process piping		0 to 15	as required
M-REFG	Refrigeration systems		0 to 15	as required
M-REFG-EQPM	Refrigeration equipment		0 to 15	as required
M-REFG-PIPE	Refrigeration piping		0 to 15	as required
M-SPCL	Special systems		0 to 15	as required
M-SPCL-EQPM	Special systems equipment		0 to 15	as required
M-SPCL-PIPE	Special systems piping		0 to 15	as required
M-STEM	Steam systems		0 to 15	as required
M-STEM-CONP	Steam systems condensate piping		0 to 15	as required
M-STEM-EQPM	Steam systems equipment		0 to 15	as required
M-STEM-LPIP	Low pressure steam piping		0 to 15	as required
M-STEM-HPIP	High pressure steam piping		0 to 15	as required
M-STEM-MPIP	Medium pressure steam piping		0 to 15	as required
M-TEST	Test equipment		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
+ P-ANNO-TTLB	Line work, logos, and text	font varies	varies	varies
P-ACID	Acid, alkaline, oil waste systems		0 to 15	as required
P-ACID-PIPE	Acid, alkaline, oil waste piping		0 to 15	as required
P-DOMW	Domestic hot and cold water systems		0 to 15	as required
P-DOMW-EQPM	Domestic hot and cold water equipment		0 to 15	as required
P-DOMW-HPIP	Domestic hot water piping		0 to 15	as required
P-DOMW-CPIP	Domestic cold water piping		0 to 15	as required
P-DOMW-RISR	Domestic hot and cold water risers		0 to 15	as required
P-SANR	Sanitary drainage		0 to 15	as required
P-SANR-PIPE	Sanitary piping		0 to 15	as required
P-SANR-FIXT	Plumbing fixtures		0 to 15	as required
P-SANR-FLDR	Floor drains		0 to 15	as required
P-SANR-RISR	Sanitary risers		0 to 15	as required
P-SANR-EQPM	Sanitary equipment		0 to 15	as required
P-STRM	Storm drainage system		0 to 15	as required
P-STRM-PIPE	Storm drain piping		0 to 15	as required
P-STRM-RISR	Storm drain risers		0 to 15	as required
P-STRM-RFDR	Roof drains		0 to 15	as required
P-EQPM	Plumbing miscellaneous equipment		0 to 15	as required
P-FIXT	Plumbing fixtures		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
Q-OTLN	Equipment outlines		0 to 15	as required
Q-POWER	Power information		0 to 15	as required
Q-PIPE	Piping information		0 to 15	as required

Information provided by product manufacturers.

Layer Name	Description	Remark	Color	Linetype
R-****-OTLN	Outlines or profile graphics		0 to 15	as required
R-****-DETL	Additional detail graphics		0 to 15	as required
R-****-PATT	Textures and hatch patterns		0 to 15	as required
R-****-ANNO	Annotation		0 to 15	as required

+ Alberta Infrastructure specific layer - not listed in AIA CAD Layer Guidelines

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Layer Name	Description	Remark	Color	Linetype
+ S-ANNO-TTLB	Line work, logos, and text	font varies	varies	varies
S-GRD	Column grid		0 to 15	as required
S-GRID-EXTR	Column grid outside building		0 to 15	as required
S-GRID-INTR	Column grid inside building		0 to 15	as required
S-GRID-DIMS	Column grid dimensions		0 to 15	as required
S-GRID-IDEN	Column grid tags		0 to 15	as required
S-FNDN	Foundation		0 to 15	as required
S-FNDN-PILE	Piles, drilled piers		0 to 15	as required
S-FNDN-RBAR	Foundation reinforcing		0 to 15	as required
S-SLAB	Slab		0 to 15	as required
S-SLAB-EDGE	Edge of slab		0 to 15	as required
S-SLAB-RBAR	Slab reinforcing		0 to 15	as required
S-SLAB-JOIN	Slab control joints		0 to 15	as required
S-ABLT	Anchor bolts		0 to 15	as required
S-COLS	Columns		0 to 15	as required
S-WALL	Structural bearing or shear walls		0 to 15	as required
S-METL	Miscellaneous metal		0 to 15	as required
S-BEAM	Beams		0 to 15	as required
S-JOIS	Joists		0 to 15	as required
S-DECK	Structural floor deck		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
T-CABL	Cable plan		0 to 15	as required
T-EQPM	Equipment plan		0 to 15	as required
T-JACK	Data/telephone jacks		0 to 15	as required
T-DIAG	Diagram		0 to 15	as required

Layer Name	Description	Remark	Color	Linetype
+ 1	BLIMS Required Layer	Do Not Delete	140	continuous
+ 2	BLIMS Required Layer	Do Not Delete	40	continuous
+ 3	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ FDC-KEY	BLIMS Required Layer	Do Not Delete	9	continuous
+ FIM-QRY	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-EQNT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-EQT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-FUNT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-FUT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-FXNT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-FXT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-SPC-G	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-SPC-R	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-SPC-U	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ K-TXT-ZONE	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ LNK-EMP	BLIMS Required Layer	Do Not Delete	3 (green)	continuous
+ LNK-EQNT	BLIMS Required Layer	Do Not Delete	5 (blue)	continuous
+ LNK-EQT	BLIMS Required Layer	Do Not Delete	4 (cyan)	continuous
+ LNK-FLR	BLIMS Required Layer	Do Not Delete	2 (yellow)	continuous
+ LNK-FUNT	BLIMS Required Layer	Do Not Delete	5 (blue)	continuous
+ LNK-FUT	BLIMS Required Layer	Do Not Delete	4 (cyan)	continuous
+ LNK-FXNT	BLIMS Required Layer	Do Not Delete	5 (blue)	continuous
+ LNK-FXT	BLIMS Required Layer	Do Not Delete	4 (cyan)	continuous
+ LNK-NON	BLIMS Required Layer	Do Not Delete	1 (red)	polyline
+ LNK-SPC-GA	BLIMS Required Layer	Do Not Delete	6 (magenta)	continuous
+ LNK-SPC-RA	BLIMS Required Layer	Do Not Delete	5 (blue)	continuous
+ LNK-SPC-UA	BLIMS Required Layer	Do Not Delete	4 (cyan)	continuous
+ LNK-ZONE	BLIMS Required Layer	Do Not Delete	3 (green)	continuous
+ MOVE-LAYER	BLIMS Required Layer	Do Not Delete	2 (yellow)	continuous
+ MOVE-TAG	BLIMS Required Layer	Do Not Delete	2 (yellow)	continuous
+ MOVE-TRACE	BLIMS Required Layer	Do Not Delete	2 (yellow)	continuous
+ Q-TXT-EMP	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-EMP-ATT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-EQNT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-EQNT-ATT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-EQT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-EQT-ATT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-SPC	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ Q-TXT-SPC-ATT	BLIMS Required Layer	Do Not Delete	7 (white)	continuous

+ Alberta Infrastructure specific layer - not listed in AIA CAD Layer Guidelines

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Layer Name	Description	Remark	Color	Linetype
+ XREF1	BLIMS Required Layer	Do Not Delete	7 (white)	continuous
+ XREF2	BLIMS Required Layer	Do Not Delete	7 (white)	continuous

Group Name	Group Name Description	Group Name	Group Name Description
1000	Contour	CLHD	Ceiling Overhead
ILIN	One Line Diagram	CLNG	Ceiling
ABLT	Anchor Bolt	CLOK	Clock
ABND	Abandoned	CMPA	Compressed
ACCS	Access	CNTR	Center Lines
ACID	Acid	CO2S	CO2
ALRM	Alarm	CODE	Code
ANNO	Annotation	COLS	Column
ANNO-DIMS	Dimensions	COMM	Communications
ANNO-KEYS	Key Notes	CONP	Condensate Piping
ANNO-LEGN	Legends and schedules	CONS	Construction
ANNO-NOTE	Notes	CONT	Control
ANNO-NPLT	Construction lines, nonplotting information	COVR	Coverage
ANNO-REDL	Redline	CPIP	Compressed Air Piping
ANNO-REVS	Revisions	CPIP	Cold Piping
ANNO-SYMB	Symbols	CREC	Current recommendations
ANNO-TEXT	Text	CTRL	Control
ANNO-TTLB	Border and title block	CURB	Curbs
APPL	Appliances	CUTL	Cut lines and hidden lines
AREA	Area	CWTR	Chilled Water
AUXL	Auxiliary	DATA	Data
BASE	Base Plan	DECK	Deck
BEAM	Beams	DECK	Decks
BEDS	Beds	DEMO	Demolition
BELL	Bell	DETL	Details
BERM	Berms, embankments	DEVC	Device
BLDS	Building service	DIAG	Diagram
BSFX	Fixtures for building services	DICT	Dictation
BLDG	Buildings	DIMS	Dimensions
BNMK	Benchmarks	DOMW	Domestic Water
BORE	Borings	DOOR	Door
BRDG	Bridges	DRAN	Drainage
BRIN	Brine	DUCT	Ductwork
BRNG	Bearings and distance	DUST	Dust and Fume
BUSW	Busway	EDGE	Edge
CABL	Cable	EDST	Electorial district
CATV	Cable Television	ELEV	Elevation
CARS	Cars	ELHT	Electric Heat
CASE	Casework	EMER	Emergency
CCTV	Closed Circuit TV	ENER	Energy Management
CDFF	Ceiling Diffusers	EQPM	Equipment
CEQP	Compressed Air Equipment	EQPT	Equipment
CHAR	Chair	EQUI	Equipotential
CHIM	Chimney	ESMT	Easements
CIRC	Circuit	EVAC	Evacuation
CITY	City	EVTR	Elevator

Bolded names have been added by Alberta Infrastructure

Group Name	Group Name Description	Group Name	Group Name Description
EXAR	Excluded area	INTR	Interior
EXHS	Exhaust	IRSR	Indian reserve
EXIT	Exit	INVP	Inventory plan - space
EXST	Existing to Remain	IRCA	Irrigation canal
EXTR	Exterior	IRRG	Irrigation
FEED	Feeder	ISLD	Islands
FENC	Fencing	JACK	Data/telephone jacks
FILE	File	JAMB	Jamb
FIRE	Fire	JBOX	Junction Box
FIXD	Fixed	JOIN	Joints
FIXT	Fixture	JOIS	Joists
FLDR	Floor	JDST	Judicial district
FLOR	Floor	KEYN	Key Notes
FLOR	Floor	KEYP	Key plan
FNDN	Foundation	LAKE	Lake
FNSH	Finishes	LAPE	Lake - perennial
FRDR	French drain	LEGN	Legend
FRSR	Forest reserve	LEVL	Level
FREE	Freestanding	LGAS	Laboratory Gas
FUEL	Fuel	LITE	Lighting
FULL	Full Height	LOGO	Lines and logo
FUME	Fume	LPIP	Low Pressure Piping
FURN	Furniture	LTNG	Lightning
FURN	Furnishings	MACH	Machine Shop Equipment
FUTR	Future Work	MBND	Material Beyond
GEOB	Geographic border	MCUT	Material Cut
GGEP	Gas General Piping	MDST	Municipal district
GLAZ	Glazed	MDGS	Medical Gas
GPRP	Gas Process Piping	METL	Metal
GRID	Grid	MOVE	Movable
GRND	Ground	MOVE	Items to be moved
GROS	Gross	MPIP	Medium Pressure Piping
HALN	Halon	MSNT	Settlement, metis
HMLT	Hamlet	NBND	International boundary
HEAD	Header	NEWW	New Work
HOTW	Hot Water	NGAS	Natural Gas
HPIP	High Pressure Piping	NICN	Not in Contract
HPIP	Hot Piping	NOTE	Notes
HRAL	Handrail	NPLT	Construction lines, nonplotting information
HVAC	HVAC Related	NPRK	National park
HVAC	HVAC	NUMB	Numbers
HYDR	Hydrography	NURS	Nurse
IDEN	Identification	OCCP	Occupant
IGAS	Inert Gas	ODFF	Other Diffusers
INTC	Intercom	OGEP	Oil General Piping
INPT	Interior partitions	OPEN	Opening

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Group Name	Group Name Description	Group Name	Group Name Description
OPRP	Oil Process Piping	ROOF	Roof
OTHD	Other	RIMA	River, stream - major
OTLN	Outline	RIPE	River, stream - perennial
OVHD	Overhead	RTWL	Retaining Wall
PANL	Panel	SANR	Sanitary
PATT	Pattern (Cross-Hatching, poche)	SDFD	Supply Diffusers
PBND	Interprovincial Boundary	SECT	Sections
PEQP	Process Air Equipment	SERT	Security
PFIX	Plumbing Fixtures	SHEL	Shell Plan
PGNG	Paging System	SIGN	Signage
PPRK	Provincial park	SILL	Sill
PTEN	Port of entry	SITE	Site
PHS1-9	Phase Numbers (1-9)	SKYL	Skylight
PILE	Piles	SLAB	Slab
PIPE	Piping	SLID	Solid fill
PKNG	Parking	SMNT	Settlement
PLAN	Plants	SMOK	Smoke
PLAN	Plan - Floor	SOUND	Sound
PLAY	Play	SPCL	Special
PLNT	Plants	SPCL	Specialties
PNLS	Panels	SPKL	Sprinkler - Irrigation
POLE	Poles	SPRN	Sprinklers
POLY	Polyline	SPOT	Spot
POOL	Pools	SPRT	Sport
POWR	Power	SSWR	Sanitary Sewer
PPIP	Process Air Piping	STAK	Stacking plan
PRHT	Partial Height	STAN	Standpipe
PROC	Process	STEM	Steam
PROP	Property	STEP	Steps
PROT	Protection	STNR	Station, rail line
RAIS	Raised	STOR	Storage
RBAR	Reinforcing	STRF	Steep roof
RCOV	Energy Recovery	STRM	Storm
RDFD	Return Air Diffusers	STRP	Striping
REDL	Redline	STRS	Stair
REFG	Refrigeration	SUSP	Suspended
REFR	Reference	SWBD	Switchboards
RELO	Relocated Items	SWCH	Switch
RENT	Rentable	SYMB	Symbols
REVS	Revisions	TEES	Tees
RFDR	Roof	TELV	Television
RFEQ	Rooftop Equipment	TEMP	Temporary Work
RHST	Repair history	TEST	Test
RISR	Riser Diagram	TEXT	Text
RISR	Riser	THER	Thermostat
ROAD	Roadways	TOPO	Topographical

Bolded names have been added by Alberta Infrastructure

Group Name	Group Name Description	Group Name	Group Name Description
TPNS	Toilet Partitions		
TPTN	Toilet Partitions		
TOWN	Town		
TREE	Trees		
TRIM	Trim lines for final plot		
TTLB	Title Block		
TURF	Turf		
TVAN	TV Antenna		
UBND	User boundries		
UCPT	Under Carpet		
UNDR	Underground		
URAC	Underfloor Raceways		
USBL	Useable		
UTIL	Utilities		
VDH1-9	Visual defect history (number 1 to 9)		
VILG	Village		
VILS	Village, summer		
WALK	Walks		
WALL	Wall		
WATR	Water		
WDWK	Woodwork		
WIRE	Wiring		
WKSF	Worksurface		
WLDA	Wilderness area		
X-RDME	Read-me layer, not to be plotted		
ZONE	Zone area		

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