2 Drawing File Organization

Design Cube

Available drawing area

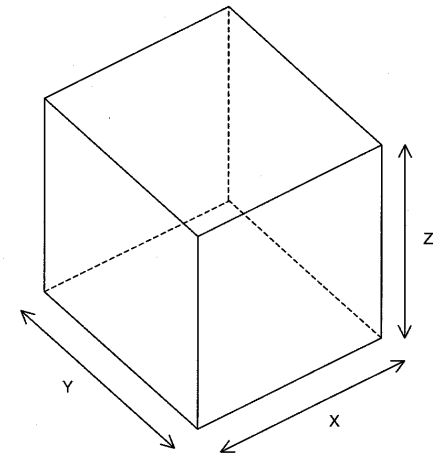
The two most extensively used CADD applications within the DoD Tri-Service, AutoCAD and MicroStation, manage the available drawing area in an electronic file differently. MicroStation has a limited drawing area (design cube) composed of individual points that restrict the physical size of any drawing (Figure 1).

MicroStation's design cube has 4,294,967,296 points in each axis (x,y,z) of the design cube. These points are called positional units (PU). Positional units are grouped into larger units called subunits (SU), and subunits are grouped into even larger units called master units (MU). Together, these groups are called working units (MU:SU:PU). These groups will be discussed in more detail in the next section.

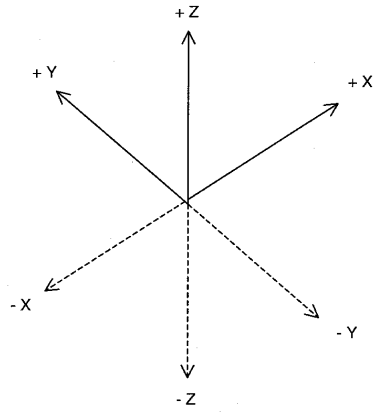
By defining the values of working units, the MicroStation user defines the measurable limits of the design cube. For example, the working units for most architectural drawings (feet-inches) are 1:12:8000 (MU = feet, SU = inches). With these working units, a design cube of 44,739 feet per side is created:

4,294,967,296 ÷ (12 in./ft x 8000) = 44,739 ft

For an SI (metric) drawing with working units of 1:1:10 (MU = millimeters, SU = none), the design cube has a length of 429,496,729 millimeters per side.



MicroStation's Finite Design Cube
(Each axis has 4,294,967,296 positional units)



AutoCAD's Infinite Drawing Area

Figure 1. Available drawing size

4,294,967,296 ÷ (1 mm x 10) = 429,496,729 mm

In contrast, AutoCAD's approach provides for a drawing area with infinite range in each positive and negative axis (x,y,z).

File accuracy (units)

CADD systems allow the designer to work in "real world" units. The most common units are feet and inches, feet and tenths of feet, meters, and millimeters.

MicroStation's approach to file accuracy allows the user to set the working units (i.e., real world units) as the following, introduced in the previous section:

- Master units (MU) = The largest unit that may be referred to when working in the design file (e.g., feet, meters).
- Subunits (SU) = Subdivisions of master units in the working unit definition (e.g., inches, millimeters).
- Positional units (PU) = The smallest unit that may be addressed in the design file. The number of positional units per subunit determines the precision of the drawing and the size of the design cube.

In AutoCAD, the basic drawing unit for any file is the distance between two fixed Cartesian coordinates. For example, the distance between coordinates (1,1,1) and (1,1,2) is one drawing unit. A drawing unit can correspond to any measurement (e.g., inch, foot, meter, mile). AutoCAD users may enter the "Units" display option to set the desired drawing units (also called "report format").

The "Units" command of AutoCAD Release 14 does not have a direct metric system setup. For metric designs, the recommended procedure is to choose the "decimal" report format in the units display option (Figure 2). This will allow each drawing unit to represent decimal meters,

Figure 2. AutoCAD Units Dialog Box

millimeters, etc., at the discretion of the user.

Drawing units/working units recommendations

Recommendations for working units in MicroStation design files are shown in Table 2.

Release 1.4 of the Tri-Service A/E/C CADD Standards (Tri-Service CADD/GIS Technology Center 1995) recommended working units of 1:12:254 (MU:SU:PU). These working units allow simple conversion between inch-pound and metric drawings, but only provide an accuracy down to 1/8 in. Release 1.8 recommends working units of 1:12:8000 to allow accuracy to 0.001 of 1/8 in. (i.e., 1000 positional units per 1/8 in.).

Note: *Any drawings previously designed with working units of 1:12:254 will not be compatible with drawings created with working units of 1:12:8000. The old drawings can be made compatible by resetting the working units to the new standard and scaling the drawing by a scale factor of 31.496.*

AutoCAD users should choose either the architectural (feet and inches), engineering (feet and tenths), or decimal (suitable for meters or millimeters) report formats as provided in the "Units" command screen.

Table 2
MicroStation Working Units and Global Origins

Units	MU	SU	PU	Design Cube Size	Recommended Global Origin
Inch-pound (A/E/C)	1 (ft)	12 (in)	8000	44,739 ft/side	GO=22369.6213, 22369.6213, 22369.6213
Inch-pound (Civil/Site, Civil Works, Geotechnical, Survey/Mapping)	1 (ft)	100	10	4,294,967 ft/side	GO=0, 0, 2147483.648
Metric (A/E/C)	1 (mm)	1	10	429,496,724 mm/side	GO=214748364.8, 214748364.8, 214748364.8
Metric (Civil/Site, Civil Works, Geotechnical, Survey/Mapping)	1 (m)	1000	1	4,294,967 m/side	GO=0, 0, 2147483.648
Metric (Mechanical Machine Design)	1 (mm)	1000	1	4,294,967 mm/side	GO=2147483.648, 2147483.648, 2147483.648

Origin (Global Origin)

Positioned within every electronic drawing file is an origin ("global origin" in MicroStation and "origin" in AutoCAD). The origin of a drawing file is important because it serves as the point of reference from which all other elements are located. Origins are typically defined (located) in a drawing file by the Cartesian coordinate system of x, y, and z (Figure 3).

The benefit of standardizing the location of the origin of a drawing is most notable in the use of reference files (see section "Reference Files (XREFs)" in Chapter 4). Also, in certain disciplines, particularly mapping, the location of the origin determines the available drawing area (MicroStation only). A standardized origin is also helpful when translating files between CADD applications. Origin recommendations are given in Table 2 (Note: for AutoCAD users the recommended global origin will be 0,0,0).

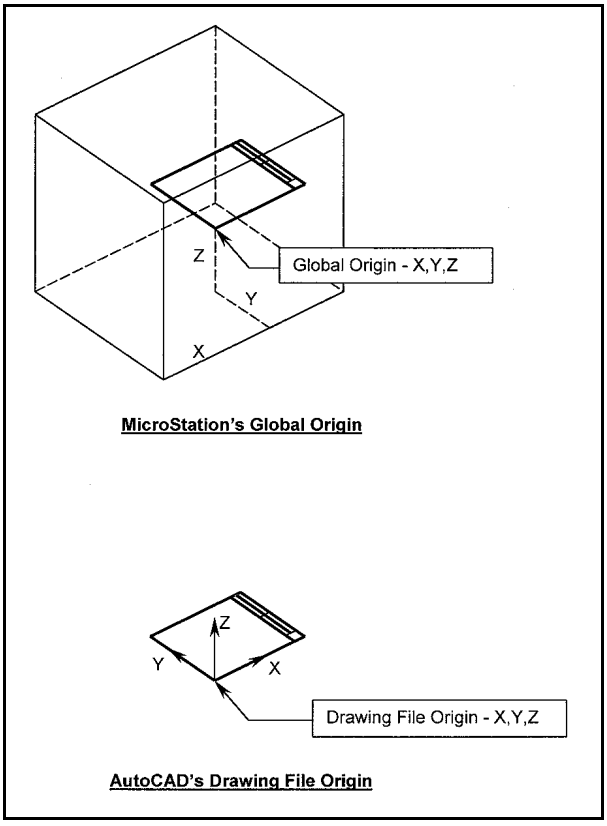


Figure 3. Origins in MicroStation and AutoCAD

Note: *In MicroStation, the location of the global origin does not affect the size of the design cube, but does limit the range of the positive and negative x, y, and z positional units. For example, a design file with the global origin located in the center of the design cube limits the number of positional units in each axis (x, y, and z) to 2,147,483,648.*

Model Files and Sheet Files

Two distinct types of CADD files are addressed in this standard: model files and sheet files.

A model file contains the physical components of a building (e.g., columns, walls, windows, ductwork, piping, etc.). Model files are drawn at full scale and typically represent plans, elevations, sections, etc.

A sheet file is synonymous with a plotted CADD drawing file. A sheet file is a selected view of the model file(s) within a border sheet. Sheet files are usually plotted at full scale (1=1), since the model files are referenced into the sheet file at a particular scale ratio. In other words, a sheet file is a "ready-to-plot" CADD file.

Figure 4 illustrates how different model files are referenced to a sheet file (notice that the border sheet is always a referenced model file). A sheet file is the combination of referenced model files with sheet-specific text/symbols to create a final "ready-to-plot" CADD file. A useful American Institute of Architects (AIA) rule of thumb states: "Model files are always referenced by other files, while sheet files are never referenced by other files." See Chapter 4 for additional information.

Electronic Drawing File Naming Conventions

Naming conventions for electronic drawing files (both model files and sheet files) allow CADD users to determine the contents of a drawing without actually displaying the file. They also provide a convenient and clear structure for organizing drawing files within project directories. The standard naming conventions provided within this manual are based on the eight-character file name limitation of the DOS operating system. To accommodate the more common conventions currently used within the DoD Tri-Services, this manual provides two acceptable file naming

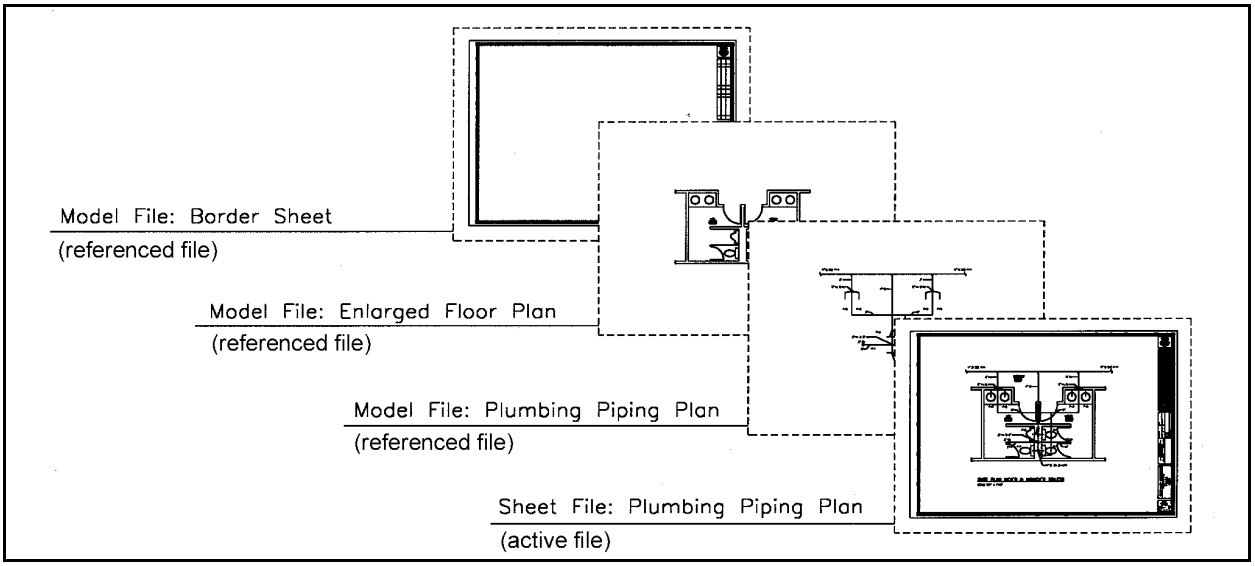


Figure 4. Sheet file composition

methodologies. These methodologies are the Industry Standard and the Tri-Service Optional.

Note: *Most current operating systems allow for file names longer than eight characters. However, some file transfer methods (e.g., CD-ROM writers, e-mail) are not able to handle long file names and will truncate the name to eight characters. Therefore, this standard will continue to promote eight-character file names until this limitation is resolved.*

Note: *The Industry Standard file naming conventions are those developed by the AIA (model file naming) (AIA 1997) and Construction Specifications Institute (CSI) (sheet file naming) (CSI 1997) as part of the United States National CAD Standard Initiative.*

Industry Standard model file naming convention

The Industry Standard model file naming convention has two sets of two-character fields followed by a four-character user-definable field (Figure 5).

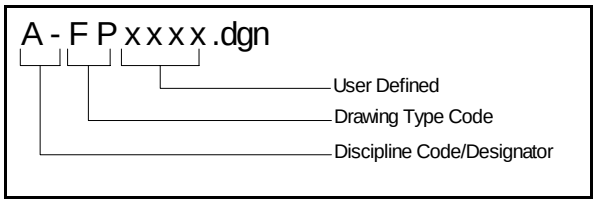


Figure 5. Industry Standard model file naming convention

The first two-character field represents the *Discipline Code/Designator*. The allowable characters for this field are listed in Table 3. (Note: the second character of this field is, in most cases, a hyphen. However, this character can be used to further define a discipline code; e.g., kitchen equipment would be designated as QK, see note on *Uniform Drawing System* on page 11.) The second two-character field represents the *Drawing Type Code* (Table 4). The final four-character field is user-definable.

Table 3
Industry Standard Discipline Codes/Designators

Discipline	Character
General	G
Survey and Mapping	V
Hazardous Materials	H
Civil	C
Geotechnical	B
Landscape	L
Structural	S
Architectural	A
Interiors	I
Equipment	Q
Fire Protection	F
Plumbing	P
Mechanical	M
Electrical	E
Telecommunications	T
Process	D
Resource	R
Operations	O
Other Disciplines	X
Contractor/Shop Drawings	Z

Note: *Some CD-ROM writing utilities do not recognize a hyphen (" -") as a legal file name character. For these utilities, use either an underscore ("_") for the hyphen or utilize the Tri-Service Optional file naming conventions.*

Example 1: The name for a simple Architectural Demolition Plan model file would be:

A-DP.dgn/dwg

Example 2: For a building that has multiple floors, a possible model file name for an architectural demolition plan for Floor 1 would be:

A-DPF1.dgn/dwg

Table 4

Industry Standard Drawing Type Codes

Discipline	Code	Definition
All Disciplines		
	FP	Floor Plan
	SP	Site Plan
	DP	Demolition Plan
	QP	Equipment Plan
	XP	Existing Plan
	EL	Elevation
	SC	Section
	DT	Detail
	SH	Schedule
	3D	Isometric/3D
	DG	Diagram
Architectural (A-)		
	CP	Ceiling Plan
	EP	Enlarged Plan
	NP	Finish Plan
	RP	Furniture Plan
Civil (C-)		
	EP	Environmental Plan
	GP	Grading Plan
	RP	Road/Topographic Plan
	SV	Survey Plan
	UP	Utility Plan

Table 4 (continued)

Discipline	Code	Definition
Electrical (E-)		
	CP	Communications Plan
	GP	Grounding Plan
	LP	Lighting Plan
	PP	Power Plan
Fire Protection (F-)		
	VP	Evacuation Plan
	KP	Sprinkler Plan
Interiors (I-)		
	CP	Ceiling Plan
	EP	Enlarged Plan
	NP	Finish Plan
	RP	Furniture Plan
Mechanical (M-)		
	CP	Control Plan
	HP	HVAC Ductwork Plan
	PP	Piping Plan
Plumbing (P-)		
	PP	Plumbing Plan
Structural (S-)		
	FP	Framing Plan
	NP	Foundation Plan
Telecommunications (T-)		
	DP	Data Plan
	TP	Telephone Plan

Industry Standard sheet file naming convention

The Industry Standard sheet file naming method (Figure 6) standardizes the first two characters as the *Discipline Code/Designator* (Table 3 and note on *Uniform Drawing System* on page 11), the third character as the *Sheet Type Code/Designator* (Table 5), and the fourth and fifth characters as the *Sheet Sequence Identifier* (01-99). The remaining three characters are user-definable.

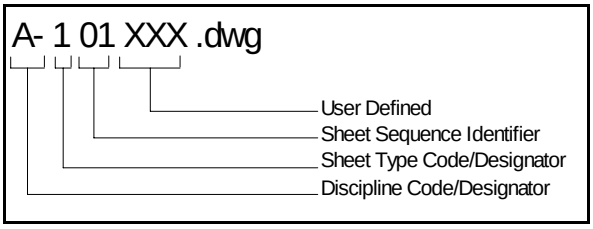


Figure 6. Industry Standard sheet file naming convention

Table 5
Industry Standard Sheet Type Codes/Designators

Drawing Type	Characters
General (symbols, legend, notes, etc.)	0
Plans (horizontal views)	1
Elevations (vertical views)	2
Sections (sectional views)	3
Large Scale (plans, elevations, or sections that are not details)	4
Details	5
Schedules and Diagrams	6
User Defined	7
User Defined	8
3D Views (isometrics, perspectives, photographs)	9

Example 1: The file name for a simple Architectural Floor Plan sheet file would be:

A-101.dgn/dwg

Example 2: For a building that is divided into multiple quadrants and multiple floors, a possible sheet file name for an architectural floor plan showing Floor 2, Quadrant C, would be:

A-101F2C.dgn/dwg

Note: *The Uniform Drawing System (CSI 1997) (Appendix A, UDS-01.35-.41) contains two levels for designating the discipline code/designator based on the complexity of the project. For the simplest level, Level One (which is presented here), the second character is filled by a hyphen (-). Examples would be Architectural (A-), Electrical (E-), etc. For very complex projects with the possibility of hundreds of sheet files within disciplines, the Level Two discipline codes/designators fill the second character with a discipline modifier (e.g., Landscape Demolition (LD), Landscape Irrigation (LI), Landscape Planting (LP)). For more information on this topic, please see CSI 1997.*

The Industry Standard file naming methodology relies solely on directory structure to differentiate individual projects (i.e., all the design files for a particular project are in a directory with the project name). Some system administrators find this method inadvisable because it permits the same file name to exist in different directories. The possibility of overwriting files with identical names is a constant problem. Figure 7 shows a typical file structure for this method.

Tri-Service Optional model file naming convention

In the Tri-Service Optional model file naming convention (Figure 8), the first three characters of the file name are the *Project Code*. Project codes are developed by the user and are not standardized. The fourth character represents

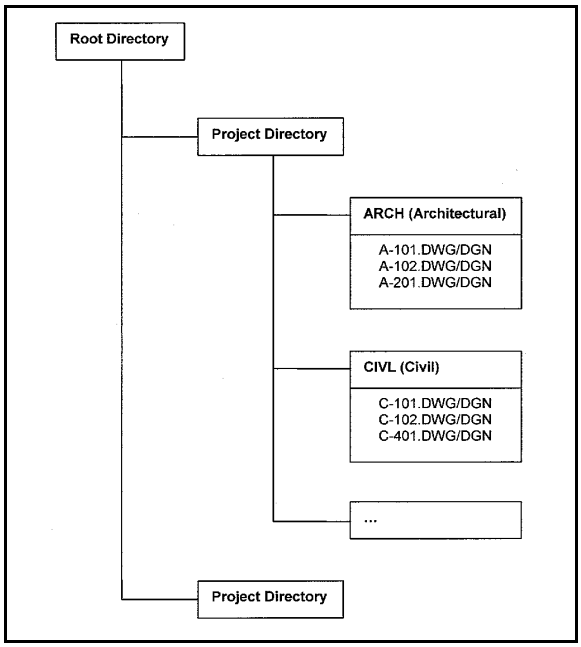


Figure 7. Typical file structure

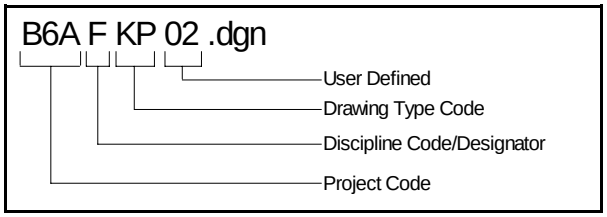


Figure 8. Tri-Service Optional model file naming convention

the *Discipline Code/Designator* (Table 6). Table 6 includes disciplines not covered by AIA or CSI, such as Utilities and Civil Works. The fifth and sixth characters designate the *Drawing Type Code* (Table 7). Table 7 includes drawing type codes not covered by AIA or CSI. The remaining two characters are user-definable.

Example 1: The name for a simple architectural demolition plan model file for project number B6A would be:

B6AADP.dwg/dgn

Table 6

Tri-Service Optional Discipline Codes/Designators

Discipline	Character
General	G[1]
Survey and Mapping	V[1]
HTRW[2]/Environmental	H[1]
Civil/Site	C[1]
Civil Works	W
Geotechnical	B[1]
Utilities	U
Landscape Architecture	L[1]
Structural	S[1]
Architectural	A[1]
Interior Design	I[1]
Equipment	Q[1]
Fire Protection/Suppression	F[1]
Plumbing	P[1]
Mechanical	M[1]
Electrical	E[1]
Telecommunications	T[1]
Resource	R[1]
Process	D[1]
Operations	O[1]
Other Disciplines	X[1]
Contractor/Shop Drawings	Z[1]

[1] AIA compliant.
[2] Hazardous, Toxic, and Radioactive Waste.

Example 2: For a building with multiple floors, the architectural demolition plan model file name for Floor 2 would be:

B6AADPF2.dwg/dgn

Table 7

Tri-Service Optional Drawing Type Codes

Discipline	Code	Definition
General (G)		
	BS	Border Sheet
	KP	Keyplan
Survey and Mapping (V)		
	3D[1]	Isometric/3D
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	SC[1]	Section
	SP	Survey and Mapping Plan
HTRW/Environmental (H)		
	3D[1]	Isometric/3D
	AB	Asbestos Sample Location
	DD	Demolition Basin Detail
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	ED	Evapotranspiration Bed Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	EV	Environmental Plan
	FD	Leachate Field Detail
	GC	Gas Collection System Detail
	GD	Ground Storage Resevoir Detail
	HP	Hydraulic Profile
	LC	Leachate Collection Detail
	LD	Lift Station Detail
	LF	Landfill Liner and Cover Detail
	LP	Lead Paint Sample Location
	OD	Oil Water Separator Detail
	PP	Pollution Prevention Plan
	QP[1]	Equipment Plan
	SC[1]	Section
	SD	Spill Containment Detail

[1] AIA compliant

Table 7 (Continued)

Discipline	Code	Definition
HTRW/Environmental (H) (continued)		
	ST	Septic Tank Detail
	WD	Water Supply Building Detail
	WP	Water Treatment Plan
	WT	Elevated Water Tank Detail
	WW	Wastewater Treatment Plan
Civil/Site (C)		
	3D[1]	Isometric/3D
	AF	Airfield Plan
	AI	Airfield Paving Plan
	AP	Apron Striping Plan
	BL	Boring Location
	CP	Channel Plan
	CS	Cross Section
	DD	Storm Drainage Detail
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	DU	Utility Detail
	EC	Erosion Control Plan
	ED	Erosion Control Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	FD	Fence Detail
	GP[1]	Grading Plan
	IP	Installation Plan
	JD	Joint Detail
	JE	Joint Elevation Plan
	JP	Joint Layout Plan
	KP	Staking Plan
	LD	Lift Station Detail
	LP	Layout Plan
	OD	Oil Water Separator Detail
	PD	Pavement Detail
	PI	Piping Plan
	PL	Project Location Map
	PM	Pavement Marking Plan
	PV	Pavement Plan

[1] AIA compliant

Table 7 (Continued)

Discipline	Code	Definition
Civil/Site (C) (continued)		
	QP	Equipment Plan
	RP[1]	Road Plan
	SC[1]	Section
	SM	Sanitary Manhole Detail
	SP[1]	Site Plan
	SR	Sanitary Sewer Profile
	SS	Sanitary Sewer Plan
	SV[1]	Survey Plan
	TP	Topography Plan
	TS	Transportation Site Plan
	TX	Topography Plan - Demolition
	UP[1]	Utility Plan
	WD	Water Detail
	WP	Water Line Profile
Civil Works (W)		
	3D[1]	Isometric/3D
	CP	Civil Works Plan
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged PLan
	QP[1]	Equipment Plan
	SC[1]	Section
Geotechnical (B)		
	3D[1]	Isometric/3D
	BL	Boring Location
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	LB	Boring Log
	QP[1]	Equipment Plan
	SA	Stability Access
	SC[1]	Section
	SP	Soil Profile

[1] AIA compliant

Table 7 (Continued)

Discipline	Code	Definition
Utilities (U)		
	3D[1]	Isometric/3D
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EC	EMCS Plan
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	EU	Electrical Utilities Plan
	FU	Fuel Utilities Plan
	GA	Gas Utilities Plan
	GE	General
	HT	HTCW Utilities Plan
	PP	Poles Plan
	QP[1]	Equipment Plan
	SC[1]	Section
	WA	Domestic Water Plan
Landscape Architecture (L)		
	3D[1]	Isometric/3D
	AD	Arbor Detail
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	IP	Irrigation Plan
	LP	Landscape Plan
	QP[1]	Equipment Plan
	SC[1]	Section
	TP	Turfing Plan
Structural (S)		
	3D[1]	Isometric/3D
	CP	Column Plan
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan

[1] AIA compliant

Table 7 (Continued)

Discipline	Code	Definition
Structural (S) (continued)		
	FD	Foundation Detail
	FP	Foundation Plan
	FS	Foundation Section
	JL	Joist Girder Load Diagram
	MD	Masonry Detail
	PP	Precast Panel Layout Plan
	QP[1]	Equipment Plan
	RD	Roof Framing Detail
	RF	Roof Framing Plan
	RP	Reinforcement Plan
	RS	Roof Framing Section
	SC[1]	Section
	SF	Stair Framing Plan
	TB	Truss Bracing Plan
	TE	Truss Elevation
	WG	Wind Girt Elevation
Architectural (A)		
	3D[1]	Isometric/3D
	AC	Area Calculations
	BE	Building Elevation (Exterior)
	BS	Building Section
	CP[1]	Reflected Ceiling Plan
	CW	Casework Detail
	DD	Door Detail
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	ED	Exterior Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	FP[1]	Floor Plan
	IE	Interior Elevation
	KP	Keyplan
	LS	Life Safety Plan
	NP[1]	Finish Plan
	QP[1]	Equipment Plan
	RP	Roof Plan
	SC[1]	Section

[1] AIA compliant

Table 7 (Continued)

Discipline	Code	Definition
Architectural (A) (continued)		
	WD	Window Detail
	WS	Wall Section
Interior Design (I)		
	3D[1]	Isometric/3D
	AP	Artwork Placement Plan
	CP[1]	Ceiling Plan
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	NP[1]	Finish Plan
	QP[1]	Equipment Plan
	RP[1]	Furniture Plan
	SC[1]	Section
	SD	Signage Detail
	SP	Signage Placement Plan
	WP	System/Prewired Workstation Plan
	WT	System/Prewired Workstation Typical
Equipment (Q)		
	3D[1]	Isometric/3D
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	KP	Kitchen Plan
	QP[1]	Equipment Plan
	SC[1]	Section
	SP	Security Plan
Fire Protection/Suppression (F)		
	3D[1]	Isometric/3D
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan

[1] AIA compliant

Table 7 (Continued)

Discipline	Code	Definition
Fire Protection/Suppression (F) (continued)		
	FS	Fire Suppression Plan
	KP[1]	Sprinkler Plan
	QP[1]	Equipment Plan
	SC[1]	Section
	VP[1]	Evacuation Plan
Plumbing (P)		
	3D[1]	Isometric/3D
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	PP[1]	Plumbing Plan
	PR	Plumbing Riser Diagram
Mechanical (M)		
	3D[1]	Isometric/3D
	CD	Control Detail
	CP[1]	Control Plan
	CS	Control Schematic
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EM	EMCS Plan
	EP[1]	Enlarged Plan
	HC	HVAC Condensate Riser Diagram
	HD	HVAC Detail
	HP[1]	HVAC Ductwork Plan
	HR	HVAC Riser Diagram
	HX	HVAC Demolition Plan
	MD	Machine Design Plan
	MH	Material Handling Plan
	PP[1]	Piping Plan
	QP[1]	Equipment Plan

[1] AIA compliant

Table 7 (Concluded)

Discipline	Code	Definition
Mechanical (M) (continued)		
	SC[1]	Section
	SP	Specialty Piping Plan
Electrical (E)		
	3D[1]	Isometric/3D
	AP	Auxiliary Power Plan
	CP[1]	Communication Plan
	CR	Communication Riser
	CX	Communication Demolition Plan
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	GP[1]	Grounding Plan
	LD	Lighting Fixture Detail
	LP[1]	Lighting Plan
	LR	Lighting Protection Plan
	LX	Lighting Plan - Demolition
	PP[1]	Power Plan
	PR	Power Riser
	PX	Power Plan - Demolition
	QP[1]	Equipment Plan
	SC[1]	Section
Telecommunications (T)		
	3D[1]	Isometric/3D
	CD	Communication System Plan
	DG[1]	Diagram
	DP[1]	Demolition Plan
	DT[1]	Detail
	EL[1]	Elevation
	EP[1]	Enlarged Plan
	QP[1]	Equipment Plan
	SC[1]	Section
	TP[1]	Telephone/Data Plan

[1] AIA compliant

Tri-Service Optional sheet file naming convention

In the Tri-Service Optional sheet file naming convention (Figure 9), the first three characters of the file name are the *Project Code*. Project codes are developed by the user and are not standardized. The fourth character represents the *Discipline Code/Designator* (Table 6), and the fifth character defines the sheet type designator (Table 5). The sixth and seventh characters designate the *Sheet Sequence Number* (01-99). The remaining character is user-definable.

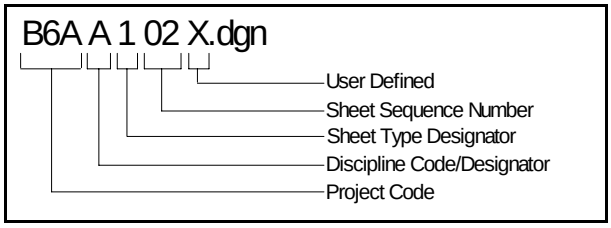


Figure 9. Tri-Service Optional sheet file naming convention

Example 1: The sheet file name for the first page of a set of mechanical HVAC plans for project number B6A would be:

B6AM101.dwg/dgn

Example 2: For a building that has multiple floors the architectural demolition plan sheet file name for Sheet 1, Floor 2, would be:

B6AA1012.dwg/dgn

Coordination Between Sheet File Name and Sheet Identifier

In assigning a sheet identifier (for use in the sheet identification block, reference bubbles, etc.), the user should coordinate with the name assigned to the electronic sheet file. The sheet identifier should consist of the discipline code/designator, sheet type designator, and the sheet sequence identifier/number (Figure 10). This sheet identifier convention is compatible with both the Industry Standard and the Tri-Service Optional sheet file naming conventions.

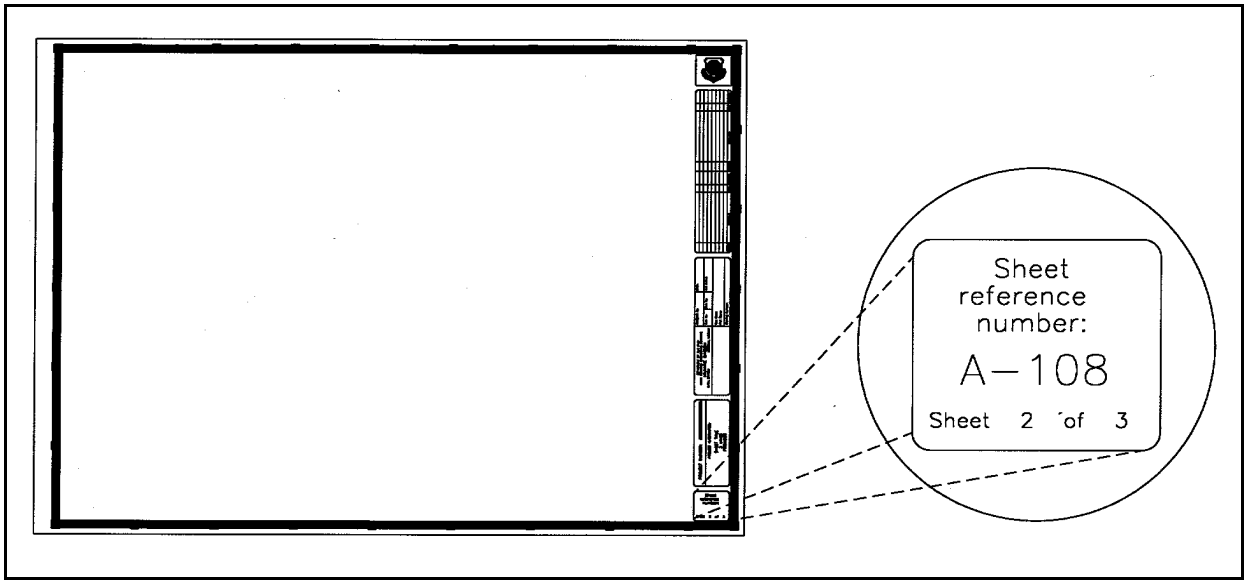


Figure 10. Typical border sheet title block with sheet identification block