

# Module 1 - Drawing Set Organization

# **1.3 SHEET IDENTIFICATION**

The sheet identification format has its roots in traditional construction drawing techniques. However, the advent of systems methods, overlay drafting, and CAD has demanded more consistency in labeling and organizing sheets. These technologies have also provided an opportunity to expand the role of the sheet identifier. Accordingly, the sheet identification format is a key part of UDS.

## 1.3.1 Standard Sheet Identification

The sheet identification format is applicable to both manual and CAD drawing production. It is consistent, yet flexible enough for a wide range of project scopes. The UDS sheet identification format depicted here includes the following components:

- the **discipline designator**, consisting of one alphabetical character and a hyphen or two alphabetical characters.
- the **sheet type designator**, consisting of one numerical character
- the **sheet sequence number**, consisting of two numerical characters

The one- or two-character discipline designator identifies the sheet as a member of a subset. A sheet type designator that identifies the type of information on the sheet is followed by the sheet sequence number.



A = alphabetical character N = numerical character

Recognizing the wide variance in project complexity, UDS allows two levels of sheet identification. Either of these or a combination of the two can be used to suit the project or the intended use of the drawings. Level 1 offers the simplest identification format and would be suitable for all but the most complex projects. Level 2 provides guidance for complex or special types of projects. Refer to <u>UDS Appendix A - Discipline Designators, UDS section 1.6</u> for examples of the two levels of sheet identification.

Note that the hyphen in the Level 1 discipline designator is a required place holder in the absence of the second character. The hyphen is preferred rather than a decimal point due to the use of the "dot" in electronic file names. Alternatively, an underscore may be used to replace the hyphen when a particular operating system does not accept hyphens in file names.

#### **1.3.2 Discipline Designator**

The first component of the sheet identification format, the discipline designator, is based on the traditional system of alphabetical discipline designators, using either a single alphabetical character with a hyphen (Level 1) or two alphabetical characters (Level 2).

The discipline designator denotes the category of subject matter contained in the file or on the layer designated. A dash always

# Discipline Designator Name Format



Level 1 Discipline Designator

follows the Level 1 discipline designator; a dash is not used when the Level 2 discipline designator is used.

LEVEL 1 DISCIPLINE DESIGNATORS			
G	General		
Н	Hazardous Materials		
V	Survey/Mapping		
В	Geotechnical		
С	Civil		
L	Landscape		
S	Structural		
А	Architectural		
I	Interiors		
Q	Equipment		
F	Fire Protection		
Р	Plumbing		
D	Process		
Μ	Mechanical		
E	Electrical		
W	Distributed Energy		
Т	Telecommunications		
R	Resource		
Х	Other Disciplines		
Z	Contractor/Shop Drawings		
0	Operations		



Level 2 Discipline Designator



Discipline Character



Modifier Character

A = alphabetical characterN = numerical character

For example, the electrical engineer may be the designer for a telephone system. The drawings required may be included on the **E** (**E**lectrical) sheets along with the rest of the drawings produced by that designer. If the level of detail demands it, the electrical engineer may decide to segregate the telephone system information onto sheets with the Level 2 designator **ET** (**E**lectrical **T**elecommunications).

For an even more complex project involving voice, data, security, and signal systems, sepa-rate drawings for each communications system may be required, perhaps even produced by a network specialist. In this case the discipline designator **T** (**T**elecommunications) could be used, combined with specific modifier characters to create the Level 2 discipline designators **TN** (**T**elecommunications **N**etwork), **TT** (**T**elecommunications **T**elephone), or **TY** (**T**elecommunications **S**ecurity).

In order to differentiate among multiple buildings on a "campus" or among multiple features on a large civil works project the use of  $\Delta$  user-defined Level 2 Discipline Designators will be allowed so long as an alphabetic character is used and is clearly defined on the same sheet as the index of drawings.

Example Text:

Sheets are numbered using Level 2 Discipline Designator to denote buildings within the overall project and do not correlate to discipline-specific sub content.

<b>Building Feature</b>	Designation	Example
Building #1	А	AA101 - Architectural Floor Plan for Building #1
Building #2	В	AB101 - Architectural Floor Plan for Building #2
Building #3	С	AC101 - Architectural Floor Plan for Building #3

Multi-discipline projects should coordinate building designations when possible to avoid confusion (i.e. "A" would be

the designation for the same building regardless of the discipline for the sheet).

Use of Level 2 Discipline Designators is to be consistent for the entire project. Level 2 Discipline Designators may be used as campus building identifiers **OR** discipline modifiers but **NOT** both.

For additional examples of discipline designators for other disciplines, refer to <u>UDS Appendix A - Discipline</u> <u>Designators, UDS section 1.6</u>. A detailed example of discipline designators based on the Telecommunications discipline follows.

Designator		Description of	Contont
Level 1	Level 2	Suggested Names	Content
Т	-	Telecommunications	
-	TA	Audio Visual	Cable, music, and closed-circuit television (CCTV) sytems
-	тс	Clock and Program	Time generators and bell program systems
-	ті	Intercom	Intercom and public address systems
-	тм	Monitoring	Monitoring and alarm systems
-	TN	Data Networks	Network cabling and equipment
-	TT	Telephone	Telephone systems, wiring, and equipment
-	ТҮ	Security	Access control and alarm systems
-	TJ	User Defined	
-	тк	User Defined	

#### 1.3.3 Sheet Type Designator

The sheet type designator is a single numerical character that identifies the sheet type. All sheet types may apply to all discipline designators. It is not necessary to use all the sheet types for a project or within a discipline.

#### SHEET TYPE DESIGNATORS

- 0 **General** (symbols legend, notes, etc.)
- 1 Plans (horizontal views and combination Plan & Profile)
- 2 Elevations and Profiles (vertical views)
- 3 Sections (sectional views, wall sections)
- 4 **Large-Scale Views** (Scaled up reproductions of plans, elevations,  $\Delta$  or sections that are not details)
- 5 Details
- 6 Schedules and Diagrams
- 7 **User Defined** (for types that do not fall in other categories, including typical detail sheets)
- 8 User Defined (for types that do not fall in other categories)
- 9 **3D Representations** (isometrics, perspectives, photographs)

#### Sheet Type Name Format

A A N N N

Sheet Type Designator

A = alphabetical character N = numerical character

The use of sheet type designators does not preclude combining different types of drawings on the same sheet for simplicity. For instance, it is acceptable to

- · Place profile drawings on sanitary sewer or road plan sheets
- Place same scale sections on the same sheet as large-scale plans of stairs or escalators
- Place schedules on a plan sheet when the information is closely associated

· Combine different types of drawings on the same sheet on small projects

Refer to discussion on Sheet Title Blocks, UDS section 2.3 for information about naming sheet titles.

#### **1.3.4 Sheet Sequence Number**

The sheet sequence number is a two-digit number that identifies each sheet in a series of the same discipline and sheet type. Sequence numbering starts with 01; sheet number 00 is not permitted. The first sheet of each series is numbered **01**, followed by **02** through **99**. Sequence numbers need not be sequential, to permit future insertion of sheets during design. While many projects may not require more than a single digit, standardization of a two-digit sequence number allows for efficient electronic file sorting and facility management databases.

On plan sheets, it may be desirable to replicate the floor name within each discipline. This makes sheets **A-102**, **M-102**, and **E-102** the second floor plan for each of the various disciplines. This system may become cumbersome when basements and mezzanines or split-level plans are involved. Evaluate each project carefully before deciding to implement this option.

Additional drawings inserted in a set of drawings after a sheet identification organization has already been established can be identified with a suffix. This suffix may be comprised of three user-defined designators.

## **1.3.5 Supplemental Drawings**

Small changes on a drawing are normally accomplished with the use of revision clouds and numbers accompanied with a brief description in the revision block. Occasionally an entire drawing

#### Sheet Sequence Name Format



Sheet Sequence Number



User-Defined Designators



A-102-R1 for a partially revised floor plan.



A-102-X1 for a totally revised floor plan.



A-102-A1 for Phase 1 of a sequenced construction floor plan.

**A** = alphabetical character

- N = numerical character
- **U** = user-defined character

must be altered and reissued for supplementary work involving a change in scope. When this occurs, a user-defined suffix character to the sheet identifier may be introduced. Descriptors include **R** for revised issues of similar scope, **X** for complete changes, and **A**, **B**, **C**,... for phased work where multiple versions of the same drawing are expected. A dash always follows the sheet sequence number to separate it from the numbering for supplemental drawings.

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