

# Plan Sheets – General Information

**Design Manual**  
**Chapter 1**  
**General Information**  
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Plan sets can be very large; therefore, plan sheets are organized in a specific manner. This organization places related information together so it is not scattered throughout the plans, for example: typical cross sections are contained in the B sheets; estimated quantities are contained in the C sheets; mainline plan and profile information is contained in the D sheets; side road plan and profile information is contained in the E sheets; detour plan and profile information is contained in the F sheets; and so on. Organizing plans in this manner helps with the plan development process. In addition, it allows both designers and contractors to quickly locate information. Plan organization also assists in the printing process. Some sheets are printed in color, and others are not. Grouping sheets together reduces the number of files sent to the color printer. It also helps to standardize which types of sheets are printed in color.

## Plan Organization

Plan sheets should be numbered as follows:

Page Number	Description
A.1, A.2, ... (Include listed items in order shown and number sequentially.)	Title Sheets title sheet (for U sheets in the index, provide a list of detail sheets grouped by type) location map sheets (if needed) legend sheet (if Black and White Plan Set) revision sheets (if needed)
B.1, B.2, ...	Typical Cross Sections and Details (including as-built typical cross sections)
C.1, C.2, ... (Include listed items in order shown and number sequentially.)	Quantities and General Information project description estimated project quantities estimate reference information standard road plans index of tabulations general notes tabulations (beginning with tabulation of incidentals (if needed))
CD.1, CD.2, ...	Drainage Structure Quantities Tabulations
CS.1, CS.2, ...	Geotechnical Quantities Tabulations 103 series of tabulations
D.1, D.2, ...	Mainline Plan and Profile Sheets plan and profile legend and symbol information sheet mainline plan and profile sheets as-built plans may be used as plan sheets (if both proposed and as-built are included, place the as-builts at the end of the D sheets)
E.1, E.2, ...	Side Road Plan and Profile Sheets
ED.1, ED.2 ...	Drainage channel and dike plan and profile sheets
F.1, F.2, ...	Detour Pavement, Temporary Pavement Sheets detour plan and profile sheets

Page Number	Description
G.1, G.2, ...	Survey Sheets reference ties and bench marks horizontal control and superelevation tabulations for all alignments alignment graphic layouts
H.1, H.2, ... HE.1, HE.2, ...	Right-of-Way Sheets mainline right-of-way sheets side road right-of-way sheets
J.1, J.2, ...	Traffic Control and Staging Sheets traffic control plan staging notes tabulations (108-23A, 108-23B, 108-25, 108-26A, 111-1, 113-2) modified TC standard road plans traffic control and staging legend and symbol information sheet staging typical cross sections staging and traffic control sheets temporary pavement markings and temporary signing graphic layouts detour maps
K.1, K.2, ...	Interchange Sheets interchange layout sheets ramp plan and profile sheets
L.1, L.2, ...	Geometric, Staking, and Jointing Sheets geometrics and staking island geometrics tabulations edge profiles jointing
M.1, M.2, ...	Storm Sewer Sheets storm sewer legend and symbol information sheet storm sewer tabulations storm sewer plan and profile sheets
MSA.1, MSA.2, ...	Sanitary Sewer Sheets sanitary sewer legend and symbol information sheet sanitary sewer tabulations sanitary sewer plan and profile sheets
MWM.1, MWM.2, ...	Water Main Sheets water main legend and symbol information sheet water main tabulations water main plan and profile sheets
MIT.1, MIT.2	Wetland Sheets
N.1, N.2, ...	Traffic Signal Sheets
P.1, P.2, ...	Lighting Layout Sheets
Q.1, Q.2, ...	Soils Sheets soils legend and symbol information sheet soils plan and profile sheets soils detail sheets
QR.1, QR.2, ...	Soils Borrow Sheets
RC.1, RC.2, ...	Sediment Control Quantities Tabulations pollution prevention plan (PPP) erosion control tabulations

Page Number	Description
RR.1, RR.2, ...	Erosion Control Plan Sheets erosion control legend and symbol information sheet drainage basin plan sheets erosion control device placement plan sheets
RU.1, RU.2, ...	Erosion Control Detail Sheets
S.1, S.2, ...	Sidewalk Sheets sidewalk legend and symbol information sheet sidewalk plan sheets sidewalk tabulations
SPS.1, SPS.2, ...	Bridge Plan Soils Sheets
T.1, T.2, ...	Earthwork Quantity Sheets legend tabulations
U.1, U.2, ...	500 Series Design Detail Sheets, Modified Standards, and Detail Sheets
V.1, V.2, ...	Bridge and Culvert Situation Plans Retaining Wall Plans plan and profile sheets retaining wall notes Other Bridge Design Details
W.1, W.2, ...	Mainline Cross Sections
X.1, X.2, ...	Side Road Cross Sections
Y.1, Y.2, ...	Ramp Cross Sections
Z.1, Z.2, ...	Detour Cross Sections

## Plan Sheet Basics

Information contained varies from sheet to sheet; however, the following information is to be on the bottom of every plan sheet:

- Design Team.
- County(s).
- Project Number.
- Sheet Number.
- Current date stamp, directory, and file name.

When developing plan sheets, keep the following in mind:

- Every sheet needs to be covered by an engineer's signature.
- To the extent possible, avoid repeating information within the plan. Say it once and say it right. This reduces the possibility of conflicts within a plan.
- Check information to determine if it over-rides, duplicates, or conflicts with other contract documents. Eliminate duplication where possible and resolve conflicts. Investigate the impact over-riding one contract document will have on other contract documents. A hierarchy of documents is listed in Section [1105](#) of the Specifications.
- Place information so it is easy for the contractor and inspector to find. Special notes shown on plan or profile views should be referenced from the C sheets, usually in a tabulation or Estimate Reference Note.
- Provide sufficient information so that the contractor can construct the project, but don't overwhelm the contractor with information. In essence, do not include information just because you can – include information that will be of value to the contractor.
- Special notes and drawings should only be used for unique situations and used only when they are absolutely necessary. Just because you can change something doesn't mean you should.

- If a color standard road plan needs to be modified, include it in the U sheets as a black and white sheet per Section 21E-4. This excludes any modified [TC Series](#) Standard Road Plans as outlined in Section 1F-10.
- If adding labels, use the naming conventions from the specifications.
- Something that is clear to you is not necessarily clear to the contractor. Similarly, something that is confusing to you may not be confusing to the contractor.
- Each bid item requires an associated specification, standard, detail, or plan note.

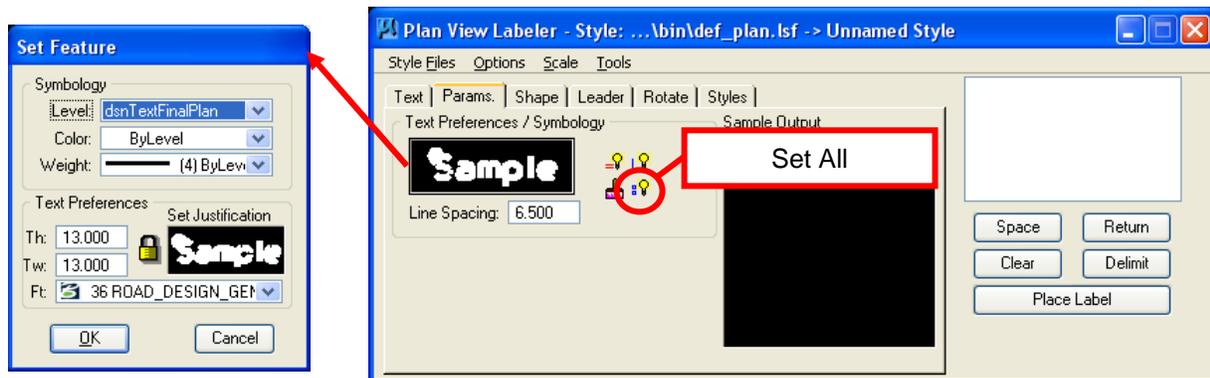
## Sheet and Text Scales

The designer must select an appropriate plan scale for the project and type of sheet. For most rural projects, the plan and profile sheets will be 100 scale. However, 50 scale may be used in rural areas where the complexity of the project requires greater detail. For urban projects, the designer may choose between 20 scale and 50 scale depending on the level of detail necessary. Geometric, Staking, and Jointing Sheets sheets are typically 20 scale. Sidewalk sheets are typically 10 scale. For information on cross section sheet scales, refer to Section 1F-23a.

When using **Plan View Labeler** and **Profile Labeler**, it is important to set the text attributes appropriately with respect to the sheet scale that has been selected. Table 1, below, shows the relationship between sheet scale and text parameters. Figure 1 shows an example of text parameters for a 100 scale sheet. After setting the desired text parameters, set the symbology for the shape and leader tabs to match the parameters tab by selecting *Set All Parameters* as shown in Figure 1.

**Table 1: Sheet and Text Scale Guidelines**

Sheet Scale	Sheet Length	Text Preferences				
		Th	Tw	Justification	Font	Line Spacing
10	300 FT	1.30	1.30	Left	36 ROAD_DESIGN_GENERAL	0.65
20	600 FT	2.60	2.60	Left	36 ROAD_DESIGN_GENERAL	1.30
50	1500 FT	6.50	6.50	Left	36 ROAD_DESIGN_GENERAL	3.25
100	3000 FT	13.00	13.00	Left	36 ROAD_DESIGN_GENERAL	6.50



**Figure 1: Text Parameter Settings**

## Plan Quality Checklist

- Is Design Team information correct and at the bottom of each sheet?
- Is the County(s) included at the bottom of each sheet?
- Is the project number correct and at the bottom of each sheet?
- Are sheet numbers at the bottom of each page? Are sheets numbered sequentially in black text?
- Are the current date stamp, directory, and file name at the bottom of each sheet?
- Is information located on appropriate sheets?
- Are sheets legible?
- Have plan sheets prepared by other offices been appropriately incorporated into the plan set?
- Is color use appropriate according to Section [21E-4](#)?
- For a D4 Submittal, have the following items been included:
  - Road Design Engineer's seal on the first Road Design Sheet
  - Sheet block for bridge projects with design and file numbers on all sheets

# Chronology of Changes to Design Manual Section:

## 001F-001 Plan Sheets - General Information

- |           |                                                                                                                                                                                                                                                                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4/29/2019 | Revised<br>Updated sheet series CE to RC. Added sheet series RR, RU, and QR. Updated broken Links.                                                                                                                                                                                                                                            |
| 6/12/2018 | Revised<br>Corrected header and fixed broken hyperlinks.                                                                                                                                                                                                                                                                                      |
| 2/10/2012 | Revised<br>Added reference to Section 1F-10 for details sheets of modified TC Series Standard Road Plans. Added 'Sheet and Text Scale' information from Section 1F-5b. Added 10 scale to Table 1, information on S sheet scale, and L sheet scale. Added link to Section 1F-23a. Added items to the Plan Quality Checklist for D4 Submittals. |
| 7/29/2011 | Revised<br>Incorporated 1E-2 (Plan Organization) into this section. Changed Wetland Sheets to "MIT" sheets and made Sidewalk Sheets "S" sheets. Moved all geometrics and staking, edge profiles, and jointing layouts to L sheets.                                                                                                            |
| 2/4/2011  | Revised<br>Renamed and updated with new material.                                                                                                                                                                                                                                                                                             |