

CHAPTER 13 EXERCISES

1. Engineering Drawing Setup

Create a template drawing for use in engineering drawings to be plotted at a scale of 1"=10'. Begin a *New* drawing and *Start from Scratch*; use the *English* default settings. Next, follow the steps listed below.

- A. Set *Units* to *Engineering* and *Precision* to 0'-0.00"
- B. Set *Limits* for a D-size sheet (24x36). At 1"=10', this is 360',240'.
- C. Set *Snap* to 1'.
- D. Set *Ltscale* to 60.
- E. *Load* the *Center*, *Hidden*, and *Phantom Linetypes*.
- F. Create the following *Layers* and change their *Color* and *Linetype* as indicated.

OBJECT	<i>continuous</i>	<i>red</i>
CENTER	<i>center</i>	<i>yellow</i>
PHANTOM	<i>phantom</i>	<i>blue</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>

- G. Use the *SaveAs* command. In the dialog box select *AutoCAD Drawing Template File (.dwt)* and assign the name **ENG120D**. Enter **Engineering D-size 1"=10'** in the *Template Description* box.

2. Engineering Template Using Quick Setup

A plot plan is to be plotted on D-size paper at 1"=40'. Use the *Quick Setup Wizard* to assist with the following setup.

- A. Select the *Units* tab and set to *Engineering*.
- B. Select the *Area* tab and set to 1440',960'.
- C. Select *Finish*.
- D. Set *Snap* to 1'.
- E. Set *Ltscale* to 240.
- F. *Load* the *Center*, *Hidden*, and *Phantom Linetypes*.
- G. Create the following *Layers* and change their *Color* and *Linetype* as indicated.

PAVEMENT	<i>continuous</i>	<i>red</i>
CONTOURS	<i>continuous</i>	<i>green</i>
CENTER	<i>center</i>	<i>yellow</i>
PROPERTY	<i>phantom</i>	<i>blue</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>

- H. Use the *SaveAs* command. In the dialog box select *AutoCAD Drawing Template File (.dwt)* and assign the name **ENG480D**. Enter **Engineering D-size 1"=40'** in the *Template Description* box.

3. Alternate Units in Engineering Drawings

In the previous exercises, the units were set for feet, inches, and decimal inches. Engineers frequently draw in feet and decimal feet. Follow these steps to create a template for a drawing to be plotted on D-size paper at 1"=40'.

- A. Start from scratch.
- B. Set *Units* to *Decimal*. You will then interpret one "Unit" as a foot instead of as one inch when you begin drawing.
- C. Set the *Limits* to **1440,960**.
- D. Set *Snap* to **1**.
- E. Set *Ltscale* to **20**.
- F. *Load* the *Center*, *Hidden*, and *Phantom Linetypes*.
- G. Create the following *Layers* and change their *Color* and *Linetype* as indicated.

PAVEMENT	<i>continuous</i>	<i>red</i>
CONTOURS	<i>continuous</i>	<i>green</i>
CENTER	<i>center</i>	<i>yellow</i>
PROPERTY	<i>phantom</i>	<i>blue</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>

- H. *SaveAs* CENG40D.dwt (a template file).

4. Advanced Drawing Setup

Create a template drawing using the *Advanced Setup Wizard*. The template is for a 1"=20' drawing using feet and decimal feet on a D-size sheet.

- A. Select the *Units* tab and set to *Decimal*.
- B. Select the *Area* tab and set to **720,480**.
- C. Set *Snap* to **1'**.
- D. *Load* the *Center*, *Hidden*, and *Phantom Linetypes*.
- E. Set *Ltscale* to **10**.
- F. Create the following *Layers* and change their *Color* and *Linetype* as indicated.

OBJECT	<i>continuous</i>	<i>red</i>
CENTER	<i>center</i>	<i>yellow</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>

- G. *SaveAs* CENG20D.