Creating a Plot Plan

In this tutorial you'll learn about:

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A plot plan is essentially a map of a property's legal description. Plot plans usually have a North Pointer and can also include other features such as the location of buildings and setback lines.

When a property's shape is more complicated than a basic rectangle, you may find it easiest to draw the plot lines yourself, rather than try to edit the terrain perimeter to meet your needs.

To create a plot plan polyline

1. Open a new Home Designer Pro plan. Select CAD> Points> Input Point in to open the New CAD Point dialog. See "Input Point" on page 814 of the Reference Manual.

| | New CAD Point × | | | |
|---|----------------------|--|--|--|
| Current P | oint | | | |
| X | Position: 0" | | | |
| Y | Position: 0" | | | |
| New Point | t | | | |
| Absolute Location | | | | |
| Relative to Current Point | | | | |
| | Polar | | | |
| x | Position: 0" | | | |
| Y | Position: 0" | | | |
| | Next | | | |
| Number | Style OK Cancel Help | | | |

- 2. Select **Absolute Location** and define the point's position at (0,0) and click **OK**. This is the current point that serves as the Start Point for the first line of the plot plan. See "Point Tools" on page 814 of the Reference Manual.
- 3. Select CAD> Lines> North Pointer 2. then click and drag to create a North Pointer. For more information on this tool, see "North Pointer" on page 740 of the Reference Manual.
- 4. Select **CAD**> **Lines**> **Input Line** is to open the **New CAD Line** dialog. Notice that the Start Point is at (0,0): the location of the Current CAD Point. See "Input Line" on page 818 of the Reference Manual.
- 5. Click the Num Style button and in the Number Style/Angle Style dialog:
 - Select Decimal Feet for the Number Style;
 - Select **Quadrant Bearing** for the **Angle Style**. See "Dialog Number/Angle Style Dialog" on page 100 of the Reference Manual.
- 6. Click **OK** to return to the **New CAD Line** dialog
- 7. Select Relative to Start Point and check the box beside Polar.
- 8. Enter the length of the first side of your property boundary's legal description in the **Distance** field, and the angle of that line in the **Angle** field. To enter an angle using Quadrant Bearings, type:
 - The primary direction (N or S), followed by a space; then,
 - The angle in degrees, minutes, and seconds with a space after each value; then,

• The secondary direction (E or W).

| | New CAD Line × | | | | |
|---|----------------|--|--|--|--|
| Start Point | | | | | |
| X Position | : 0" | | | | |
| Y Position | : 0" | | | | |
| End Point | | | | | |
| Absolute Location | | | | | |
| Relative to Start Point | | | | | |
| ✓ Polar | | | | | |
| Relative to Previous Line | | | | | |
| Distance: | 123 3/16" | | | | |
| Angle: | N90°E | | | | |
| | Next | | | | |
| Number Style | OK Cancel Help | | | | |

- 9. Click Next and enter the Distance and Angle of the next property line.
- 10. Continue until all property lines are entered, then click **OK** to close the **New CAD Line** dialog. The resulting polyline should be closed, with the end point of the last line the same as the start point of the first.

Note: The angle of a given line can be described differently depending on which end is used as the start point. Some property descriptions proceed in the same direction around the perimeter, whereas some do not.

To correct an error

- 1. If a line is entered incorrectly, click **OK** to close the **New CAD Line** dialog.
- 2. Select Edit> Edit Behaviors> Edit Object Parts 🛅 to edit individual line segments within a polyline.
- 3. Click on the incorrect line to select it, then click **Delete X**.
- 4. Click the Edit Object Parts 🛅 toggle button again to turn it off.
- 5. Place a CAD point at the end of the last correct line using the **Place Point** \Join tool to create a new current point.
- 6. Select CAD> Lines> Input Line 🚔 and continue entering data in the New CAD Line dialog.

To create a curved property line

- 1. Click a property line to select it, then click the **Change Line/Arc** edit button to turn this line into an arc.
- 2. If necessary, use the triangular Reshape edit handle to make the arc concave or convex.
- 3. Click the **Open Object** D edit button to open the **Polyline Specification** dialog.
- 4. On the Selected Arc panel, click the **Lock Chord** radio button, then specify the length of the **Radius** and click **OK**.

A curved property line can also be created by entering data in the New Arc dialog. See "Input Arc" on page 826 of the Reference Manual.

To display line length, bearing and radius

- 1. Select Edit> Default Settings 🟠.
- 2. In the **Default Settings** dialog, select CAD and click the **Edit** button.
- 3. In the CAD Defaults dialog, check Display Line Angle as Quadrant Bearing.
- 4. Click **OK**, then click **Done** to close the **Default Settings** dialog, as well.
- 5. Click the plot plan polyline to select it, then click the **Open Object** D edit button.
- 6. On the Line Style panel of the **Polyline Specification** dialog, check **Show Length**, **Show Angle**, and **All Angles**.



To create setback lines

- 1. Select Edit> Preferences Preferences and on the Behaviors panel of the Preferences dialog, select the Concentric Edit Mode. See "Behaviors Panel" on page 87 of the Reference Manual.
- 2. In the **Jump** field, type in the required setback distance, such as 10', and click **OK**.
- 3. Click the plot plan polyline to select it, then click the **Copy/Paste** 🔤 edit button.
- 4. Place your cursor over a corner edit handle, then click and drag towards the center of the polyline. When a second, inner polyline appears, release the mouse.
- 5. Select the inner polyline and click the **Open Object** difference button to open the **Polyline Specification** dialog.
- 6. On the Line Style panel, select a dashed line style from the drop-down list, uncheck **Show** Length and Show Angle, then click OK.



 When you have finished creating your concentric copy, select Edit> Edit Behaviors> Default to restore the default edit behavior.

To convert to a terrain perimeter

1. Select the plot plan polyline and click the **Convert Polyline** solution. See "Convert Polyline" on page 177 of the Reference Manual.

2. In the Convert Polyline dialog, select Convert To: Terrain Perimeter, then click OK.

| | Convert | Convert Polyline | | |
|-----------|--------------------------------|---|--|--|
| | Convert To | | | |
| | Countertop | 🔾 Slab | | |
| | O Elevation Line | Slab with Footing | | |
| | O Landing | Sprinkler Line | | |
| | O Walkthrough Path | Terrain Break | | |
| | | Terrain Feature | | |
| | | Terrain Perimeter | | |
| | ОК | Cancel Help | | |
| Perimeter | | d out as an option, our floor plan which y onvert the polyline. | | |

3. Make any needed changes in the **Terrain Specification** dialog and click **OK**. See "Terrain Specification Dialog" on page 583 of the Reference Manual.

To accurately position a building

1. Select **CAD> Point> Place Point** \Join , and then click at a reference point along the perimeter of the building, such as at a corner.



- 2. Select CAD> Points> Input Point is to open the New CAD Point dialog.
 - Select Relative to Current Point;
 - Using the **X Position** and **Y Position** fields, specify the distance that a known point on the property line should be from the Current CAD Point on the building perimeter.

Unless you want to specify the location in distance and bearing, **Polar (CCW from horz)** should remain unchecked.

- Unless you want to specify the location in distance and bearing, **Polar (CCW from horz)** should remain unchecked.
- 3. When you click **OK**, a point is created at the specified location. Use this point as a reference to accurately position the Terrain Perimeter polyline.