Subdivide and Conquer! - Tips and Tricks for Working with Parcels in Autodesk® Civil 3D®.

Marissa Jenkinson - CADD Microsystems, Inc.

CV13-2  Intended for existing AutoCAD users, this session will demonstrate how to work more efficiently and effectively with parcels in Autodesk Civil 3D. Learn about the tools available for manual and automatic parcel creation, editing, and labeling. Generate accurate and consistent drawings by using parcel, label, and table styles to enforce your company's standards. In addition, learn how to work with LandXML to quickly customize and produce Metes and Bounds reports, area reports, Surveyors Certificates, and more. Users of AutoCAD, Civil 3D, and/or Land Desktop, including land planning professionals and surveyors, will benefit from this class.

About the Speaker:
Marissa earned a B.S. in Civil Engineering and an M.S. in GIS and CAD Applications in Civil Engineering from Virginia Tech. During her graduate education, Marissa taught hands-on AutoCAD and Land Desktop sessions to undergraduate civil engineering students. She has worked for a number of engineering firms in Virginia, providing CAD support to transportation, utility, land development, mapping, and GIS projects. Marissa has been working with Autodesk products for over 10 years and is currently the ISD application engineer for CADD Microsystems, Inc., a leading Autodesk software dealer and authorized Autodesk Premier Training Center.

marissaj@caddmicro.com
Introduction

Autodesk Civil 3D is a dynamic model-based civil engineering tool that allows you to increase productivity and accuracy in all aspects of your design. The dynamic and intelligent nature of the objects and engineering model used by Civil 3D defines relationships between design objects. When one object is changed, all related objects, labels, and tables are automatically updated to reflect these changes, erasing time spent on manual updates and greatly improving accuracy.

In particular, you can use the dynamic engineering model in Civil 3D to quickly and intelligently layout parcels for multiple applications. Create parcels manually using line and curve layout tools, or generate parcels automatically using Civil 3D’s dynamic parcel sizing and layout tools. Generate labels one at a time or on the fly, and create reports from standard templates. In this session, we will explore these different tools and go over a few Tips and Tricks that will help you during your parcel layout processes.

Key

💡 Light Bulb symbols and maroon italicized text are used throughout this document to designate a Tip

🔍 Magic Wand symbols and orange italicized text are used throughout this document to designate a Trick (or a Treat, depending on your point of view!)

Parcel Basics

Parcels are made up of a series of nodes (points), lines and curves. Whether they are created from polylines, manually created, or automatically created, all parcels are represented in Civil 3D as closed polylines with a label at the center or centroid. This label is used to select the entire parcel for editing. The display properties of the polylines and the labels are controlled by object styles (these will be covered later).

Parcel Topology and Sites

Parcel topology is controlled through the use of Sites. Drawings may have multiple Sites and Sites may contain multiple parcels. Each Site represents a different set of relationships (topology) between objects. Here are some rules for working with Parcels and Sites

- Each Site has a Site Parcel associated with it that represents the extents of all objects within the Site.
- All parcels within a Site are dynamically related to each other. However, parcels in one Site are not related to parcels in a different Site.
- While parcels within a Site cannot overlap, Sites can overlap, which in turn allows you to work with overlapping parcels (Ex. property parcels overlapping soil mapping parcels)
- Parcels can be moved to a different Site, but the original relationship to the other parcels in the original Site is lost.
- Objects within a Site do not have to touch each other.
- A complete list of Sites and the parcels within them can be seen the Prospector tab of the Toolspace (shown here).

💡 Tip – There are a number of helpful commands for locating and working with Parcels that can be accessed by right-clicking on the parcel in the Prospector tree.

🔍 Trick (or Treat) – If you click on a parcel in the Prospector tree, you can view a preview of it in the preview pane. To make sure this function is turned on, hit the icon to depress it, then right-click on the Parcels category in the Prospector tree and select “Show Preview”.

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Parcel Creation

There are many different tools for generating parcels. They can be created from existing objects (lines, curves, polylines), they can be created by generating these objects through the use of the Parcel Layout Tools, or they can be automatically generated using the Parcel Layout Tools. We will walk through a few of these options today.

Tip – If you are a command line user, all of the commands you need for each object are listed in the Settings tab of the Toolspace under the object trees. Here the commands can be viewed and customized for specific uses. These commands are also available in the Help documentation included with Civil 3D.

Parcel Creation from Objects

Parcels can be created from any series of objects that form a closed area. We will be working with closed polygons. Here are the steps to create parcels from objects:

1. From the Parcels menu, choose “Create from Objects”.
2. Select the objects you would like to turn into parcels and hit Enter.
3. In the dialog that appears (shown here), choose the appropriate Site, Parcel, and Label Styles (covered later), layers, and other options and hit “OK”
4. The objects you selected will be converted to a closed polygon, assigned particular display properties, and given a label at the center, depending on the Styles you assigned. Also, the newly created parcel will be shown under the chosen Site in the Prospector (may require a refresh).

Trick (or Treat) – If you are having trouble defining parcels from existing objects, the objects may contain drawing errors (gaps at intersections, duplicate vertices, etc…). To correct this, use the Drawing Cleanup tools in Autodesk Map (conveniently included in Civil 3D!)

Tip – When subdividing existing parcels, one of the smaller subdivisions will maintain the properties of the original parcel.

Tip – If you create a polygon from a closed area that is fully enclosed in a parcel, the smaller area will be subtracted from the total area of the larger parcel. You will end up with two parcels, with one being an island parcel inside of the other.

Parcel Creation by Manual Subdivision

Once parcels are created within a Site, they can be easily subdivided to create more parcels. Any object line or arc (parcel segment line, parcel segment arc, alignment, etc…) that is drawn through a parcel will subdivide the parcel. Here are the steps for manually subdividing parcels:
Tip – As mentioned above, any object drawn through an existing parcel polygon will subdivide the parcel. If you don’t want this to happen, create the new objects in a different Site. This way, they will not be included in the same topology as the original parcels.

1. Create an alignment or other object that passes through the parcel. (See Civil 3D Help for more information on alignments and other objects). The parcel is automatically subdivided and a new parcel is created using the default styles. **OR**

   From the **Parcels** menu, choose “Create by Layout”. The **Parcel Layout Tools** Toolbar will appear (shown here).

2. From the **Parcel Layout Tools** toolbar, choose the “Add Fixed Line” button, the “Add Fixed Curve” button, or the “Tangent-Tangent With No Curves” button.

3. Make the appropriate selections in the Create Parcels dialog and hit “OK”.

4. Draw the line or arc through or crossing existing parcels. If the line, arc, or combination thereof, subtends the parcels, they will be automatically subdivided and new parcels will be created using the settings you chose in the Create Parcels dialog.

Trick (or Treat) – If you would like to cancel out of (ESC) a parcel creation command while using the Parcel Layout Tools toolbar, make sure you watch the command line carefully. If you hit ESC too many times, the toolbar will close. If you simply hit ESC until the command line reads “Select from the layout tools”, you will have successfully canceled out of the command while keeping the toolbar open. This is true of any Layout Toolbar in Civil 3D – (Alignments, Profiles, etc). This trick also allows you to change the parcel settings without having to close and reopen the toolbar. To do this, simply click on the “Create Parcel” icon.

Parcel Creation by Semi-Automatic Subdivision

Another method for subdividing parcels is to use the Parcel Layout Tools to “semi-automatically” divide existing parcels. By setting a desired area, minimum frontage, and snap increment before selecting a tool, you can let the program assist you in laying out new parcels with these particular restraints. Here are the instructions on how to “semi-automatically” divide existing parcels:

1. From the **Parcels** menu, choose “Create by Layout”. The **Parcel Layout Tools** Toolbar will appear.

2. Hit the “Expand the Toolbar” button and the expanded **Parcel Layout Tools** toolbar will appear.

3. Enter the values you wish to use for Default Area, Minimum Frontage, and Snap Increment (optional).

4. Choose a creation tool from the pull down (shown below). For more information on these tools, see the help documentation packaged with Civil 3D.

5. Pick a point inside the parcel you would like to subdivide.
6. Select start and end points of the frontage line. As you draw along the frontage, you will see a temporary line appear. This line is called a “Jiggy”

7. Depending on the tool you selected (Slide Angle, Slide Direction, etc.) provide the information requested by the Command Prompt.

8. You can either hit Enter to accept the default area, or you can drag your cursor along the parcel. A line will be shown and a tooltip will appear next to the cursor that shows the area and frontage of the current parcel line position. If you turned on the snap increment, the cursor will automatically jump to the area increments that you set. However, also notice that if you try to move your cursor below the minimum frontage, the line will no longer move with it. This prevents you from creating parcels that do not match your criteria. To subdivide the parcel, click once to accept the current position of the lot line.

Trick (or Treat) – To switch between tools in the Parcel Layout Tools toolbar and maintain the frontage definition while in another command, simply left click on the desired tool and the command prompt will change accordingly.

Tip – To aid you in the manual creation process, a red circle will appear if you try to select an inappropriate location.

Parcel Creation by Automatic Subdivision

The final method we will discuss for subdividing parcels is to use the Parcel Layout Tools to automatically divide existing parcels. By setting a desired area, minimum frontage, and setting Automatic Mode to “on” before selecting a tool, you can let the program automatically layout multiple new parcels for you with these particular restraints. You can also tell the program how to handle the remainder of the space that does not meet the criteria you selected. Here are the instructions on how to automatically divide existing parcels:

1. From the Parcels menu, choose “Create by Layout”. The Parcel Layout Tools Toolbar will appear.

2. Hit the “Expand the Toolbar” button and the expanded Parcel Layout Tools toolbar will appear.

3. For “Automatic Layout”, choose “On” from the drop-down.

4. For “Remainder Distribution”, choose the appropriate selection.

5. Choose a tool from the toolbar (Slide Angle, Slide Direction, etc…).

6. Make the appropriate selections in the Create Parcels dialog that appears.

7. Pick a point inside the parcel to be divided and select the frontage as before.
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8. New parcels will be created and the remainder will be handled using the method you specified.

Tip – Civil 3D uses the Frontage as the most restrictive criteria.

Parcel Creation by Additional Methods
Here is a list of additional methods that can be used to generate parcels. For more information about these methods, see the Help files that come with Civil 3D.

• Automatic ROW Parcel Creation along an alignment
• Import Land Desktop Data
• Import LandXML Data
• Free-Form Semi-automatic Sizing

Parcel Styles and Settings
All intelligent objects in Civil 3D, including parcels and parcel segments, have a set of styles and settings associated with them. Styles control how objects are displayed in the drawing, while settings control the design behavior of objects. By establishing styles and settings before you begin your project, you can ensure that your objects are consistent and that your company standards are met. Both Styles and Settings can be accessed from the “Settings” tab of the Toolspace.

Tip – All of the Styles and Settings for all objects can be stored in drawing templates (*.dwt) files and used over and over again.

Trick (or Treat) – You can drag-and-drop styles from one drawing to another in the “Settings” tab of the Toolspace. To do this, simply have both drawings open and switch to the Master View. Find the style you’d like to transfer, then drag it and drop it onto the destination drawing name.

Parcel Styles
Styles control object layers and how objects are displayed in the drawing. Parcels have three different types of styles associated with them:

• Parcel Styles – Control the display of different aspects of the parcel. Here, you set the layer, linetype, and lineweight for segments and fill, as well as the visibility of these pieces. You can also set the format for Parcel naming in these styles.
• Label Styles – Control the format, layout, layers, and visibility of area, line, and curve labels. Here you can change the content and format of different pieces of the labels, change the font and height, add borders, and set other formatting options.
• Table Styles – Control the format, layout, layers and visibility of tables. Here you can change the columns that make up a table, control the display and visibility of table components, sort the table, or set other formatting options.

Every time you create a parcel, a label, or a table, a style is used to control how it is displayed. As you saw in the Parcel Creation section of this document, you can set which styles are used for the parcel and any labels that get created directly from the Parcel Creation dialog (Labels and Tables are covered later).

Once objects are created, you can change the display of the object by changing which style is used or by editing the current style. To choose a different style for an object follow these steps:
1. Select the object either by locating it in the Prospector or by highlighting it on the screen.
2. Right-click on the object and go to “Properties” (or “Parcel Properties” if you clicked on the object in the screen). The Parcel Properties dialog appears.

   Trick (or Treat) – To select an entire parcel, you must click on the main parcel label that is located at the centroid of the parcel. The label itself and the surrounding parcel boundaries will all be highlighted.

3. On the “Information” tab, under “Object Style”, select a different Style from the drop-down.
4. On the “Composition” tab under “Area Label Style”, you can choose a different style for the parcel’s area label.

   Tip – On this tab, you can also view the Area and Perimeter of the parcel.

5. Hit “Apply” or “OK”, and the parcel will be updated on the screen to reflect the style change.

   Trick (or Treat) – To change the style of multiple parcels at once, left click on the parcel collection in the Prospector to bring up the parcel table list (shown at the bottom of the Prospector). In this table, you can highlight more than one row, right-click on the style column and choose “Edit”.

You can edit the current style being used by a parcel through the Parcel Style dialog. There are a number of ways to access this dialog:

   - From the Settings tab of the Toolspace, expand the tree until you find the style you want to change. Right-click on it and hit “Edit”.
   - From the drawing window, select the object, right-click and choose “Edit Parcel Style”
   - From the Parcel Properties dialog (show above), click on the down arrow in the Action icon and choose “Edit Current Selection”.

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![Parcel Properties dialog](image)
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Tip – Generating a wide variety of parcel styles and applying them appropriately can save a lot of time in many ways. The use of these styles ensures that the objects in the drawing are consistent and adhere to your company’s standards.

Trick (or Treat) – A quick and easy way to create new styles is to copy an existing style, rename it, and then make the desired changes.

You can edit the current label style being used by a parcel through the Label Style Composer dialog. There are a number of ways to access this dialog:

- From the Settings tab of the Toolspace, expand the tree until you find the style you want to change. Right-click on it and hit “Edit”.
- From the drawing window, select the object, right-click and choose “Label Properties”. When the Label Properties dialog appears, hit the ellipsis (…) next to the Style name and the Label Style dialog will appear. From here, you can either change which style is being used, or you can hit the down-arrow on the Action icon and choose “Edit Current Selection”.

Trick (or Treat) – From the Label Properties dialog, you can also choose whether or not the label is pinned.

- From the Parcel Properties dialog (shown above), go the Composition tab, and under “Area Label Style” click on the down arrow in the Action icon and choose “Edit Current Selection”.

It is important to note that Site Parcels also have a set of properties that can control how the parcels within that Site will behave. To access these, right-click on the Parcels collection under the Site and choose “Properties”. From this dialog, you can view statistics on the Site Parcel, change the display order of the Parcel Styles in the drawing, and perform analyses on the Site Parcel.

Tip – If you see an area label in the drawing that does not appear to be linked to your parcels and you can’t figure out what it is, this may be the label for the overall Site. To turn this label off, locate the Site in the Prospector, right-click and go to “Properties” and change the Site Area Label Style to either “None” or a different label style.

Another option you have within the Site Parcel Properties dialog is the ability to add User-Defined Classifications to the Site. User-Defined Classifications control and manage User-Defined Properties. Once a classification is assigned to a Site, the properties can be accessed in Label Styles and used in the parcel labels in the drawing. For more information on User-Defined Properties, see the Help files that come with Civil 3D.
Parcel Settings

The master settings for Parcels can be accessed through the “Settings” tab of the Toolspace. On the Settings tab of the Toolspace, expand the drawing tree, right-click on “Parcels”, and choose “Edit Feature Settings”. This dialog (shown above) shows you all of the settings that are inherited from the drawing (indicated by the red drawing symbol) and those settings that are specific to parcels (indicated by the parcel symbol).

*These settings are default values that control how parcels are created and which styles are used. However, they can be overridden at the individual parcel or Site level. This is called “Child Override”.*

Parcel Editing

Once parcels are created and subdivided, they can be edited dynamically. There are a number of methods for parcel editing. One such method is to further subdivide existing parcels. This can be done using the steps discussed above. Parcels can also be edited both graphically and tabularly.

Graphic editing is done through the use of Grips in the drawing. While grip editing in standard AutoCAD is rudimentary, grip editing in Civil 3D is intelligent due to the nature of the objects being edited. When a parcel lot line is edited through the use of grips, all of the adjoining lot lines and parcels are updated automatically. To grip edit a parcel, simply click on the lot line you’d like to change. Blue grips will appear on the lot line in specific places, depending on how the parcel was originally created. For example, a lot line created using the Slide Angle Create command will display a grip at the end of the line along the frontage. If you select this grip, you can slide the line along the frontage and it will maintain the given angle to the frontage. When you release the grip, the two adjoining parcels, as well as their area labels, are updated automatically.

Another way to edit parcels in Civil 3D is tabularly through the “Sub-Entity Editor”. To do this, choose “Edit” from the Parcels menu, and the Parcel Layout Tools toolbar will appear. From this toolbar, you can choose the “Sub-entity Editor” icon. Once the Sub-Entity Editor is open, you can hit the “Pick Sub-Entity” icon and choose the particular segment you’d like to change. The information about the segment will be displayed in the editor. In this editor, any item shown in grey is fixed and cannot be changed. However, any item shown in black can be changed in this editor. When you have finished making changes to the first sub-entity, you can continue to click on other segments and make the necessary changes. As you close the editor or move on to another segment, the objects on the screen will update and all adjoining parcels will be updated automatically.

Additional tools for editing parcels are found in the Parcel Layout Tools toolbar. These include the following:

- Point of Intersection tools – Insert, Delete, or Break Apart points of intersection.
- Delete Sub-Entity – Delete individual sub-entities.
- Parcel Union – Join two or more parcels into one parcel. When you use this particular tool, you will be asked to choose the destination parcel, then others that you’d like to join with it. The final parcel that is created will take on the style of the destination parcel that was chosen.

*Trick (or Treat) – You can also merge two parcels that share a boundary segment simply by deleting the shared line. The parcels will merge automatically. To merge two parcels that do not share a boundary segment, use the Parcel Union command in the Parcel Layout Tools toolbar.*

*Trick (or Treat) – Parcels and Parcel segments can be offset using the standard AutoCAD “Offset” command. To offset an entire parcel, select the parcel label when asked to pick objects. To offset just one segment of a parcel, select the segment entity when asked to pick objects.*

Parcel Labeling

Static and dynamic labels can easily be added to parcels and parcel segments. Labels can be created one at a time or for entire parcels. You can add labels automatically during the label creation process, or you can add them after parcels have been created. No matter how they are created, all parcel labels can be dynamic. This means that whenever any part of a parcel is changed, the labels associated with that parcel and any other affected parcel will automatically update. When creating labels for existing parcels, you can either place them one at a time or you can create all the labels for entire parcels. Here are the steps for creating labels on existing parcels:
1. Go to the **Parcels** menu and choose “Add Labels”. The **Add Labels** dialog will appear.

2. Choose whether you’d like to place a Single Segment label or Multiple Segment labels.

3. Choose the styles for Line labels and Curve labels and hit “Add”.

4. If you chose Single Segment labeling, click on a sub-entity and a label will appear. If you chose Multiple Segment labeling, click on a parcel area label and labels will appear on all segments of the parcel.

**Tip** – If you choose two adjoining parcels, Civil 3D will not label the shared segments twice due to the topology intelligence between the objects.

**Tip** – When adding segment labels one at a time, pay close attention as you are selecting the segment, because the label will automatically be placed in the exact location where your mouse was when you selected the segment.

Parcel labels can also be placed automatically when a parcel is created. To do this, make sure you select the “Automatically Add Segment Labels” check box in the **Create Parcels** dialog. This will allow you to set label styles and preferences before you create the parcels. Then when the parcels are created, segment labels are automatically placed. Also, as mentioned above, any changes to the parcel or parcel segments will cause these labels to be automatically be updated.

Once labels have been placed, their position and direction can be changed to suit the needs of the project. Segment labels can be moved using intelligent grips. These grips allow the labels to be slid along the segment or dragged away to allow for readability. When the labels are dragged, leader arrows are automatically created that point back to the segment they belong to. Labels with one element above the segment and one below can be flipped, causing the elements to switch places. The direction of bearing labels can be reversed, which will also reverse the direction of the bearing arrow. To flip or reverse labels, simply click on the label to highlight it, right-click and choose “Flip Label” or “Reverse Label”. If you do not like the changes you have made to your labels, you can also right-click on them and hit “Reset Label” to return them to their original state.

**Trick (or Treat)** – Segment and Area labels can contain user-defined fields based on the User-Defined Properties you assign to the parcels.
Parcel Numbering

Every time a parcel is created, it is assigned a number and name. Whether these items are displayed or not is controlled by the Parcel Style. The name and numbering is also based on the Parcel Style. For instance, if the style of a parcel is set to “Road(Local)” and the parcel number is 100, then the name will be “Road (Local): 100”. Parcel numbering is controlled by the properties of the Site in which the parcels are built. These properties can be viewed by right-clicking on the Site in the Prospector and going to “Properties”. The “Numbering” tab is where you can set the starting number for automatic and manual numbering. The “Automatic” items control numbering when parcels are created. The “Manual” items control renumbering. Using these starting numbers, parcels are automatically numbered in order of creation with an increment of one.

Once parcels are created, they can be renumbered and/or renamed by going to the **Parcels** menu and choosing “Renumber/Rename Parcels”. From this dialog, you can renumber the parcels starting with any number and using any increment value. You also have the option to rename the parcels with alphanumeric values.

Once you have selected the settings, hit “OK”. You will be prompted for a “Start Point”. Select a point inside the first parcel and draw lines through the parcels you would like to renumber. Once you hit okay, the parcels will be renumbered in the order the line intersected them.

Parcel segments can also be numbered to conserve space in the drawing. These numbers are called Tags, and they replace the standard segment label. These tags are built-in components of every segment label style. Line segments and curve segments that are assigned Tags are numbered separately. The display of Tags is controlled in the label style under “Display Mode”. To show Tags along a segment, change the Label Style used on the segment to any style that has this display mode set to “Tag”. Like Parcel Area Labels, segment tags can be renumbered, simply by going to the **Parcels** menu, then “Tables”, and choosing “Renumber Tags”.

⚠️ **Tip** – Segment renumbering can only occur if a segment table has been generated.
Parcel Tables

Segment Tags and Area Tags are used in the creation of Parcel Tables. Like all other objects in Civil 3D, these tables are intelligent, and they can be set to a static or dynamic state. Dynamic tables will update whenever a parcel or parcel segment is changed. The tags are used to tie the drawing objects to the rows in the table. Also, tables can be set to automatically update when any new parcels are created.

There are four different types of tables that can be generated: Line Tables, Curve Tables, Segment Tables (containing both lines and curves), and Area Tables.

**Tip** – While all three different segment tables require tags to be assigned to segments, Area tables can use any information in the Area Label as the tag. For example, Area Tables can use the Parcel Number as a tag.

To create tables, go to the Parcels menu, then “Tables” and choose the type of table you’d like to build. The Table Creation dialog will be displayed. This dialog allows you to set the table style to use, set the properties of the table such as maximum rows and behavior, and choose which parcels or segments will be included in the table. You can pick segments or parcels either by selecting them in the drawing or by choosing Label Styles. If you choose Label Styles, all parcels that have been assigned the Label Styles you choose will be included in the table.

**Tip** – Only the styles actually used by the parcels in the drawing will be listed in this dialog.

Here you can also decide whether the tables will include only existing parcels, or both existing and new parcels that are created.

Once you have made the appropriate choices and hit “OK”, choose a spot in the drawing for the upper left corner of the table. Tables can be easily moved using grips or simply using the AutoCAD MOVE command, and you can erase individual rows once they are created.

**Tip** – Not only do Styles allow you to maintain and adhere to standards, but you can use label styles to determine what parcels get put into particular tables. For example, if you have a style called “Park Land” applied to multiple parcels within a subdivision plan, you can create a table that will include only these parcels simply by choosing the style, instead of having to click on each one individually. Also, as mentioned above, you can tell Civil 3D to automatically add any new parcels created with the style “Park Land” to the same table.

Parcel Reporting

Once Parcels are created, Civil 3D allows you to generate reports and get information pertaining to the design and make-up of the parcels. One way to access this information is through the “Analysis” tab of the Parcel Properties dialog. This tab allows you to run both an Inverse Analysis and a Mapcheck.
Analysis. You also have options for setting the Point of Beginning and for switching the direction (clockwise/counter-clockwise) of these analyses.

Trick (or Treat) – The Inverse Analysis and Mapcheck Analysis can be quickly used in other documents without having to generate a full report. To do this, simply highlight and copy (right-click or CTRL+C) the text in the dialog and then paste (right-click or CTRL+V) it into the destination document.

Textual reports can be created through the use of Autodesk’s LandXML Reporting tool, which is automatically installed on your machine when you install Civil 3D. These reports are created from pre-defined report forms, whose settings can be customized to reflect your needs. Also, if you are familiar with LandXML and XML style sheets, you can customize your own forms and output reports that are tailored to your specifications.

There are a number of ways to access the LandXML Reporting tool.

- Go to the General menu and select “Generate Report”.
- In the Prospector, expand the “Sites” section and expand the Site you’re working on. Then, right-click on the “Parcels” collection and choose “Generate Report”.
- In the Prospector, further expand the “Parcels” collection in the Site you’re working with and right-click on a specific parcel. From the right-click menu, choose “Generate Report”.

Trick (or Treat) – You can actually right-click on almost any object in the Prospector to bring up the LandXML reporting tool. Any time you access the Reporting tool from within the Prospector, a dialog will appear that allows you to choose which objects you would like to build reports for.

Autodesk’s LandXML Reporting tool comes equipped with eight pre-defined report forms that are specific to Parcels:

1. Area Reports
2. Inverse Reports
3. Metes and Bounds Reports
4. Surveyor’s Certificates
5. Parcel Area in CSV forms
6. General Legal Description for Parcels
7. TxDOT Legal for Parcels
8. FDOT Legal for Parcels

These last two are specifically tailored for these two DOT’s but are good examples of customized forms.

You can use any of these pre-defined forms or create your own through the use of XML Style sheets. When using the pre-defined forms, you can easily change settings on the form to reflect your company’s needs by selecting the “Settings” tab. In addition to settings that specify unit precision and format for each parcel measurement value, there are settings that allow you to input your company information, client information and more. These settings are stored in configuration files so they can be accessed and used multiple times.

Tip – If you would like to customize your forms through the use of the XML language, you can easily access the existing style sheets (*.xsl), make edits to them and save new ones. The default location for these style sheets is C:\Program Files\Autodesk\LandXML Reporting 6\Support\xsl.

Once you have established your settings and chosen a form, you can view the report by going to the “Output” Tab. You can then go back and change settings for the report, or you can save it to an HTML (*.htm) file from the File menu. These files can be opened and interactively edited with multiple text editors such as Microsoft Word, WordPad, and Notepad.