

Smart Text Codes

Smart text codes are configured in one of three ways (or you can manually enter or edit codes in the main window of the **Text Editor**). In the **Smart Text Editor**, you can:

1. Select a simple property.
2. Select the type of location from which to extract the property's value.
3. Select whether to include a units suffix; if Yes, whether to use the project setting for the suffix.

Then pick a location for the text in the Plan View. Here are the codes for this method:

Property	Extract property from/at	Display a units suffix
E = Easting	T = Text insertion point	T = Yes
N = Northing	LD = Leader point	F = No
EL = Elevation	O = Object (point, line, surface, etc.)	P = Use Project Setting (to display the units suffix)
S = Station/Distance along		
O = Offset		
L = Length		
A = Area		
ELL = Line Elevation		
ELS = Surface Elevation		
SS = Surface Slope		
NM = Name		
LY = Layer		
FC = Feature Codes		

Note: Logically, only certain combinations of codes are valid. For example, you cannot extract a layer from a surface as surfaces do not have a layer property.

Tip: You can override the decimal precision (as set in Project Settings) for any individual, numeric smart text value. Simply add a comma and the number of decimal places within the smart text code (between the @ symbols). For example, after you have selected the smart text code to display a surface elevation of a leader point, the code will look like this in the Text Editor: @<ELS,LD,T>@. To limit the decimal precision of the elevation to one decimal place, add ,1 so the code looks like this: @<ELS,LD,T,1>@

or

1. Select **Object-based** to extract a property from a specific object type.
2. Select (or code) the type of object from which to extract the property's value.
3. Enter the code for the property (from the table below).

Then pick an applicable object in a Plan, Sheet, or other view. Here are the codes for this method:

Property	Extract property from/at	Code
OD = Object-based	<p>O = Object (point, line, surface, etc. e.g., dynaview, cut/fill map, surface volume grid.)</p> <p>L = Line</p> <p>H - Sheet</p> <hr/> <p>Note: You do not need to select a sheet when using this code. The sheet to which the smart text is being added is used.</p>	<p>For point, line, or surface, use the codes under Property above.</p> <p>For cut/fill map or surface volume grid:</p> <p>AC = Area of Cut</p> <p>AF = Area of Fill</p> <p>AZ = Area of Zero volume</p> <p>BD = Depth to Balance</p> <p>VC = Cut volume</p> <p>VF = Fill volume</p> <p>VN = Net volume</p> <p>For dynaview:</p> <p>SC = Scale of dynaview</p> <p>VE = Dynaview vertical exaggeration</p> <p>VS = Dynaview vertical scale</p> <p>For line:</p> <p>S% = Instantaneous Slope (in percent at a point along a line)</p> <p>3DL - Segment slope length (3D length of a selected line segment)</p> <p>S = Slope ratio</p> <p>SB = Segment Bearing</p> <p>SL = Segment Length (2D (planimetric) length of a selected line segment)</p> <p>SM = Surface material (name may come from a site improvement, surface texture, or material property)</p> <p>SR = Segment radius</p> <p>SS = Surface slope</p>

Property	Extract property from/at	Code
		<p>For planset sheet: CT - Sheet Count SI = Sheet number (sheet index) SN - Sheet Name (cross-section sheets are named by their beginning station)</p> <p>For takeoff site improvement - Topsoil ET = Excess topsoil material CM = Excess topsoil config. method CP = Excess topsoil config. parameter MT = Material layer thickness sum PN = Excess topsoil parameter name RI = Region identity SI = Site improvement name TR = Topsoil replacement material TT = Topsoil replacement thickness</p> <p>For takeoff site improvement - Simple subgrade RI = Region identity SA = Subgrade adjustment thickness SI = Site improvement name</p> <p>For takeoff site improvement - <any other type> MT = Material layer thickness sum RI = Region identity SI = Site improvement name</p>

or

1. Select **Property** to extract project properties from Project Settings > Project Information.
2. Enter the code for the property (from the table below).

Then pick a location for the text in a Plan, Sheet, or other view. Here are the codes for this method:

Property	Code
P = Project info	FOE = Field Operators Email FON = Field Operators Name FOP = Field Operators Phone FOF = Field Operators Fax OUE = Office Email OUF = Office Fax OUN = Office Username OUP = Office Phone PD = Project Description PED = Project End Date PFF = Full path of project file PFM = Modify date of project file PFN = File name of project file PN = Project Name PR = Project Reference Number PSD = Project Start Date UA1 = Address 1 UA2 = Address 2 UACS = City, State UACC = Country UACE = Email UACF = Fax UACP = Phone UACW = Web UAZ Zip Code UC1 = Comment 1 UC2 = Comment 2 UC3 = Comment 3 UCN = Company Name

examples of common smart text code combinations that you can copy into the **Smart Text Editor**:

Text label for	Sample Codes (to cut & paste)	Meaning (label: code)
3D location of object	N: @<N,O,F>@ E: @<E,O,F>@ Z: @<EL,O,F>@	Northing label: Northing, from Object, No units suffix Easting label: Easting, from Object, No units suffix Elevation label: Elevation, from Object, No units suffix
3D location of insertion point	N: @<N,T,F>@ E: @<E,T,F>@ Z: @<EL,T,F>@	Northing label: Northing, at Text insertion point, No units suffix Easting label: Easting, at Text insertion point, No units suffix Elevation label: Elevation, at Text insertion point, No units suffix
3D location of leader end point	N: @<N,LD,F>@ E: @<E,LD,F>@ Z: @<EL,LD,F>@	Northing label: Northing, at Leader point, No units suffix Easting label: Easting, at Leader point, No units suffix Elevation label: Elevation, at Leader point, No units suffix
Sheet info	Sheet: @<OD,SN>@ @<OD,SI>@ of @<OD,CT>@	Sheet label: Object-based, Sheet name Sheet number (index) of Sheet count
Station along	Station: @<S,O,F>@ Offset: @<O,O,F>@	Station label: Station, from Object, No units suffix Offset label: Offset, from Object, No units suffix
Project info	Field contact: @<P,FOE>@ End: @<P,PED>@ File: @<P,PFF>@ Last modified: @<P,PFM>@ Web: @<P,UACW>@ @<P,UC1>@	Label: Project, Field Operators Email Label: Project, Project end date Label: Project, Full path of project file Label: Project, Modify date of project file Label: Project, Web address Label: Project, Comment 1
Volume	AC: @<OD,O,AC>@ AF: @<OD,O,AF>@ AZ: @<OD,O,AZ>@ BD: @<OD,O,BD>@ VC: @<OD,O,VC>@ VF: @<OD,O,VF>@ VN: @<OD,O,VN>@	Area of cut label: Object-based, from Object (c/f map), Area of cut Area of fill label: Object-based, from Object, Area of fill Area of zero volume, : Object-based, from Object, Area of zero volume Depth to balance label: Object-based, from Object, Depth to balance Cut volume label: Object-based, from Object, Cut volume Fill volume label: Object-based, from Object, Fill volume Net volume label: Object-based, from Object, Net volume

Here are other individual codes to cut & paste:

Property	Sample Codes (to cut & paste)	Meaning
Elevation	Z: @ <EL,T,F>@	Elevation label: Elevation, at Text insertion point, No units suffix
Station/ Distance along	Station: @ <S,T,P,2>	Station label: Station, at Text insertion point, Units suffix based on project setting, use decimal Precision to two places
Offset	Offset: @ <O,T,F>@	Offset label: Offset, at Text insertion point, No units suffix
Length	Length: @ <L,O,F>@	Length label: Length, from Object, No units suffix
Area	Area: @ <A,O,P>@	Area label: Area, from Object, Units suffix based on project setting
Line elevation	Elevation: @ <ELL,T,T>@	Elevation label: Line elevation, at Text insertion point, Display units suffix
Surface elevation	Elevation: @ <ELS,T,F>@	Elevation label: Surface elevation, at Text insertion point, No units suffix
Surface slope	Slope: @ <SS,LD,P>@	Slope label: Surface slope, at Leader end point, Units suffix based on project setting
Name	@ <NM,O>@	Name, from Object
Layer	Layer: @ <LY,O>@	Layer label: Layer, from Object
Feature codes	Feature codes: @ <FC,O>@	Feature codes label: Feature code, from Object

Related topics

- [Use Smart Text Codes within Text](#)