

GuideSIGN MDT V8i

Standard MDT Sign Design Calculation using MicroStation & GuideSIGN



Roger D. Schroeder
MDT ©2020
Updated 2/5/2020

MicroStation and GuideSIGN

GuideSIGN Manual Index:

Getting STARTED with MicroStation for GuideSIGN	2-7
GuideSIGN Setup	8-18
GuideSIGN Setup & Troubleshooting	19-29
GuideSIGN Updating	30-33
GuideSIGN Arrows, Shields & Symbols	34-36
GuideSIGN Aligning Text in Diamond Shape Warning Sign Designs	37
GuideSIGN SDC Sheet Naming Convention	38
GuideSIGN FAQs Link	38

GuideSIGN MDT V8i I

Standard MDT Sign Design Calculation

MicroStation Setup



By Roger D. Schroeder
MDT ©2020
Updated 1/17/2020

Getting STARTED with MicroStation for GuideSIGN

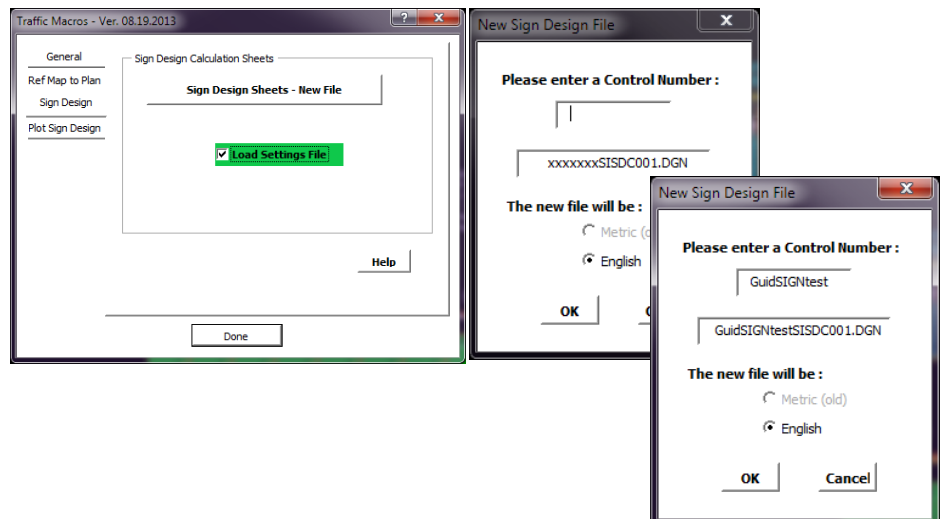
Using the 25 sheet **GS_SNDGNCALC_REF.DGN** with the DocuPlot Application.

Open MicroStation under a format to use the Traffic Macros under Traffic\Traffic Macros to create a Sign Design Calculation Sheet (25).

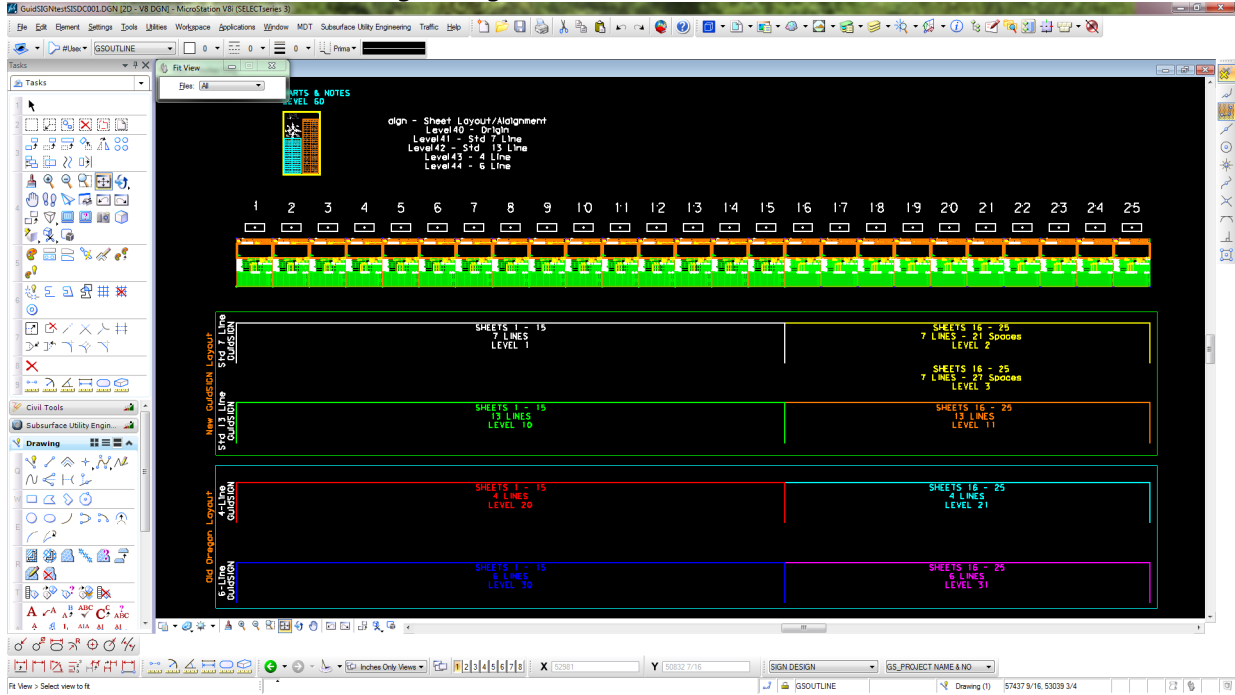
Check the **“Load Settings File”**
Click the **“Sign Design Sheets-New File”**

Enter the **“Control Number”** or
“Project Name”

Use a 2 point line weight when designing Sign Designs for better visual printing in MicroStation.



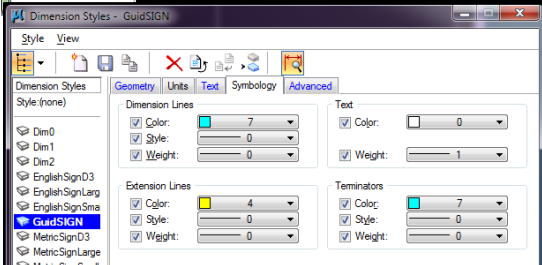
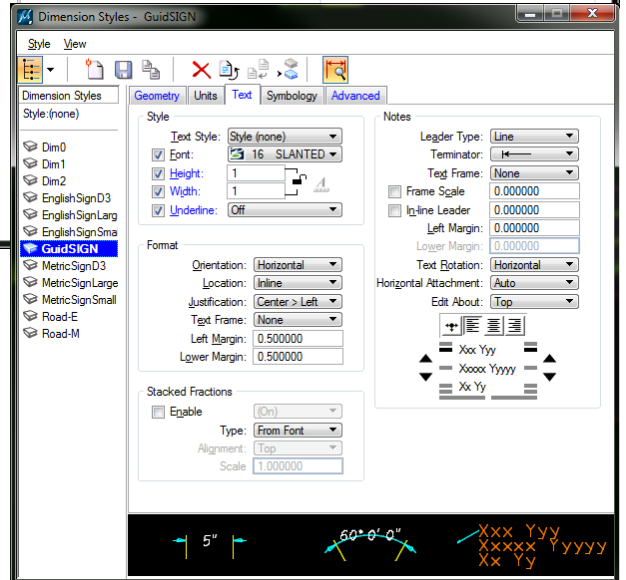
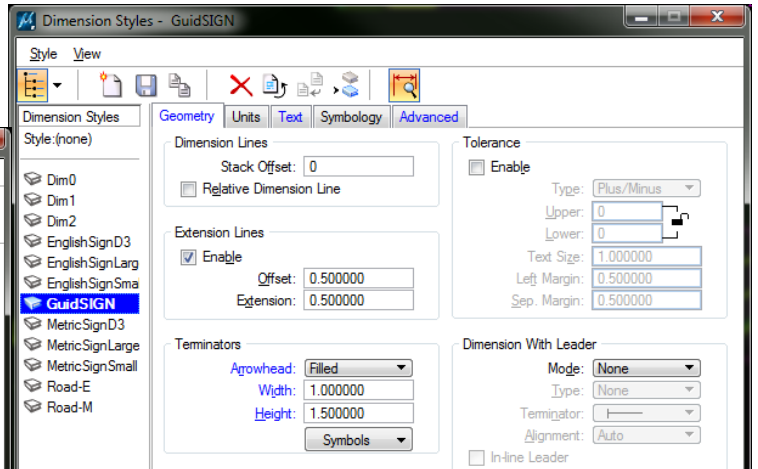
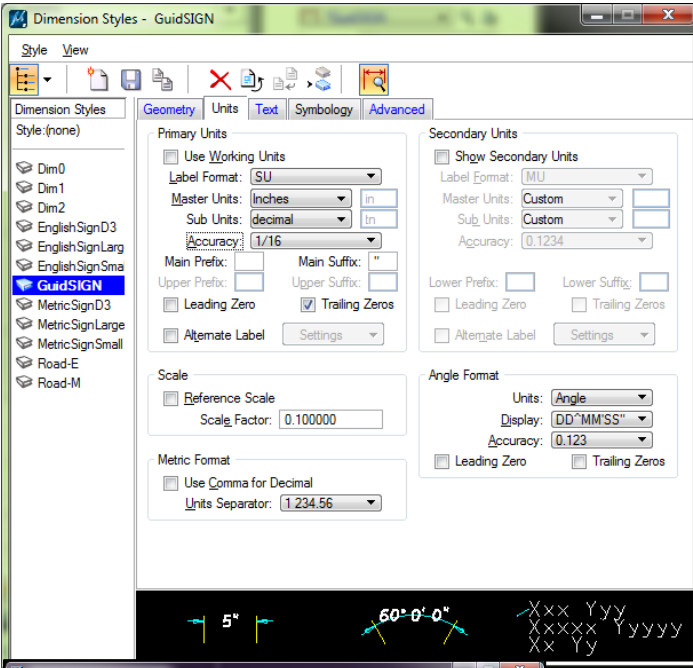
Your New Sign Design Calculation Sheet should look like this.



Settings for MicroStation V8i

(Element) Dimension Styles settings

Go to: Element/Dimension Styles/
Set the Geometry, Units, Text &
Symbology to the following:



Text Size will vary with Size of Panel.

Color Scheme to the left is optional.

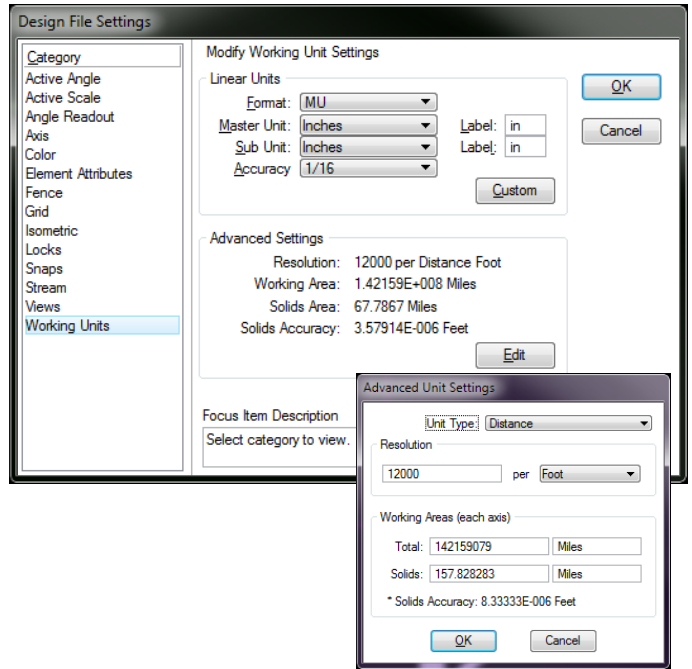
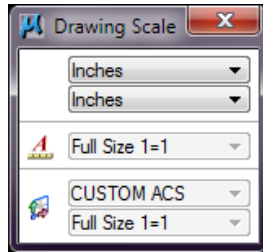
(Settings) DESIGN FILE Working Unit settings

Go to: Settings/Design File Settings/
Set the format to (MU), master to (Inches),
sub units to (decimal), and accuracy to (1/16).

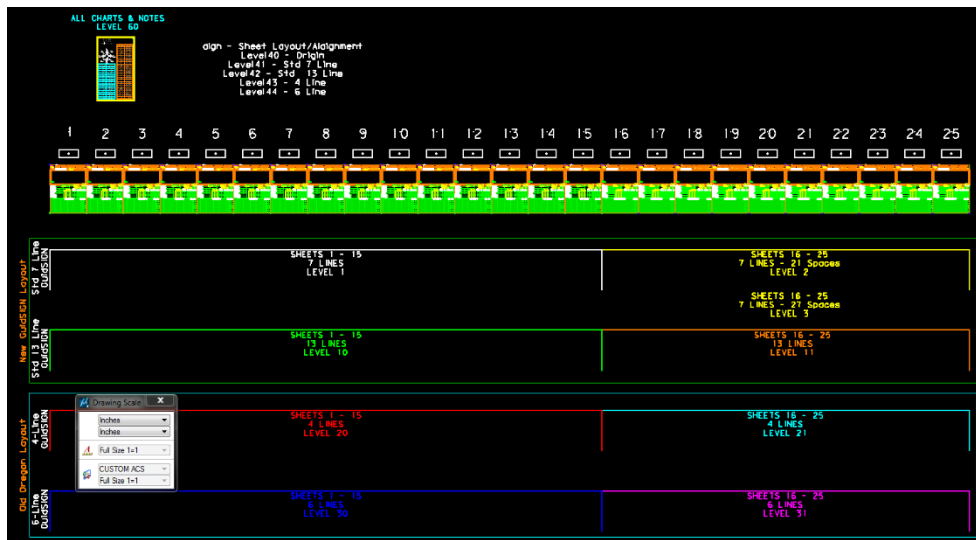
Click the **Edit** button for the
Advanced Unit Settings.
Set Resolution to **12000** per foot.
Click OK, then OK closing dimension settings
dialog boxes.

(Settings) Drawing Scale settings

Set to Inches & Inches.



LAYOUT SHEET STYLES



This is a typical **GS_SNDGNCALC_REF.DGN** sheet layout sheet view.

Notes and Level info are at the top & bottoms of the Sign Sheets. The sheets 1 thru 25 with the basic Types & Levels on which the sheets are located can easily be turned off for viewing purposes.

program opens with Levels 1 & 2 of the **Standard 7 Line** layout. The aln level along with the MDT Logo and the Info Bar are levels 60, 65 and 70 are also turned on.

The levels are listed for easy layout of sheet types, charts and miselanous notes (level 60) are for typical conversions used with the sign design program.

Std 7 Line – “new” Standard MDT 7 Line layout.
Std 13 Line – “new” Standard MDT 13 Line layout.

The 4 Sheet Styles are:

- 4 Line** – older style 4 line layout with modification for “Letter Series” below each column.
- 6 Line** – older style 6 line layout with modification for “Letter Series” below each column.

Conversion & Angle Quick Chart

The

4'-0" = 4:0		Inches		Decimal
4'-6" = 4:6		1/2"	0.042	
6'-6 1/2" = 6:1.542		1"	0.083	
		1-1/2"	0.125	
		2"	0.167	
		2-1/2"	0.208	
		3"	0.250	
		3-1/2"	0.292	
		4"	0.333	
		4-1/2"	0.375	
		5"	0.417	
		5-1/2"	0.458	
		6"	0.500	
		6-1/2"	0.542	
		7"	0.583	
		7-1/2"	0.625	
		8"	0.667	
		8-1/2"	0.708	
		9"	0.750	
		9-1/2"	0.792	
		10"	0.833	
		10-1/2"	0.875	
		11"	0.917	
		11-1/2"	0.958	
		12"	1.000	

The 4 & 6 line layout may be eliminated in the future.

The standard sheet layout of the GS_SNDGNCALC_REF.DGN

Std 7 Line

Sheets 1-15Level 1
 Sheets 16-25Level 2
 Sheets 16-25... Level 3

Std 13 Line

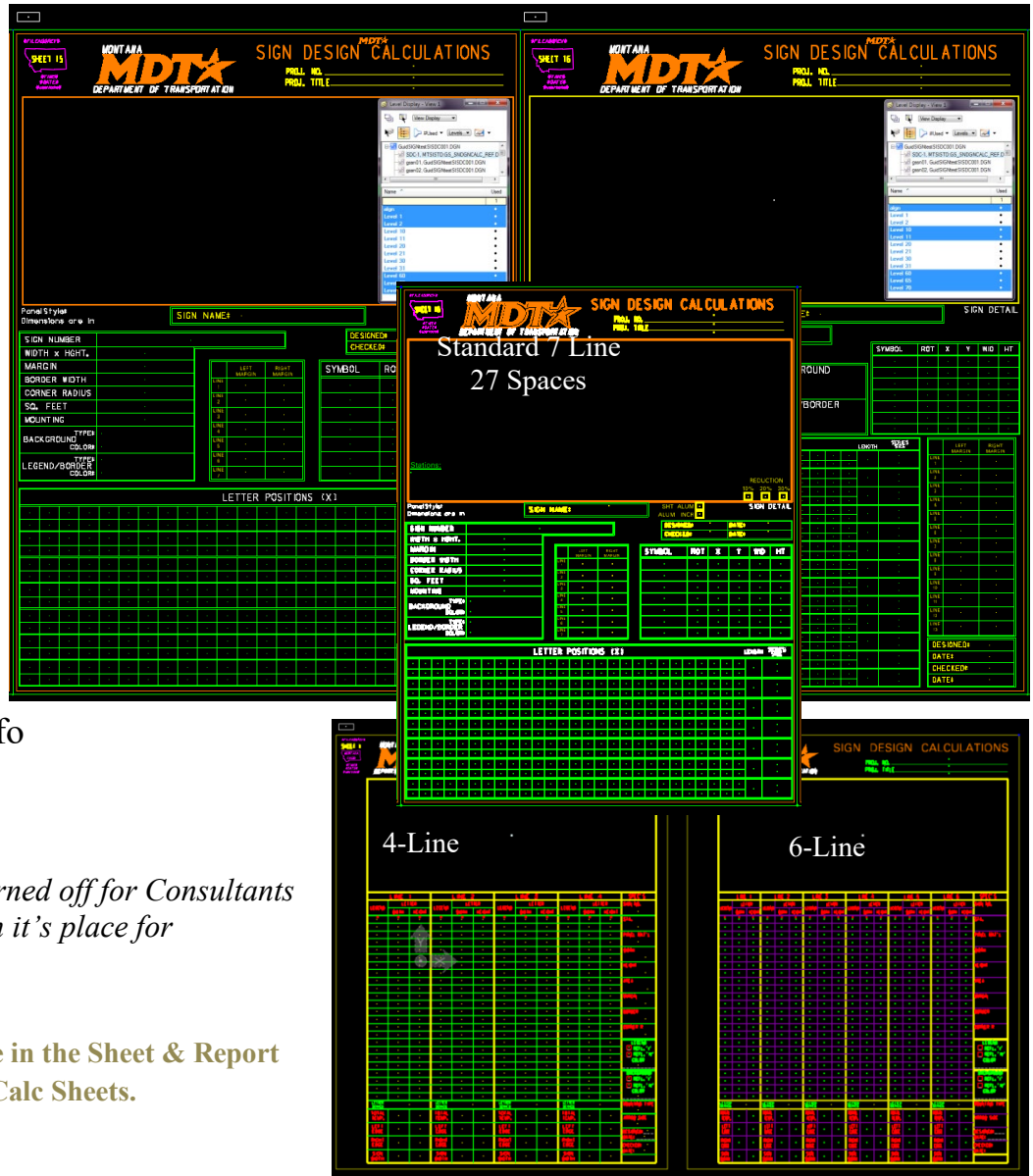
Sheets 1-15Level 10
 Sheets 16-25Level 11

4-Line

Sheets 1-15Level 20
 Sheets 16-25Level 21

6-Line

Sheets 1-15Level 30
 Sheets 16-25Level 31



Level 60 – Sheet Level Info
 Level 65 – MDT Logo
 Level 70 – MDT Header

Level 65-MDT Logo can be turned off for Consultants to place their Business Logo in it's place for personalization of Sheets.

GuideSIGN is scaled 1:8 scale in the Sheet & Report placements in the Sign Design Calc Sheets.

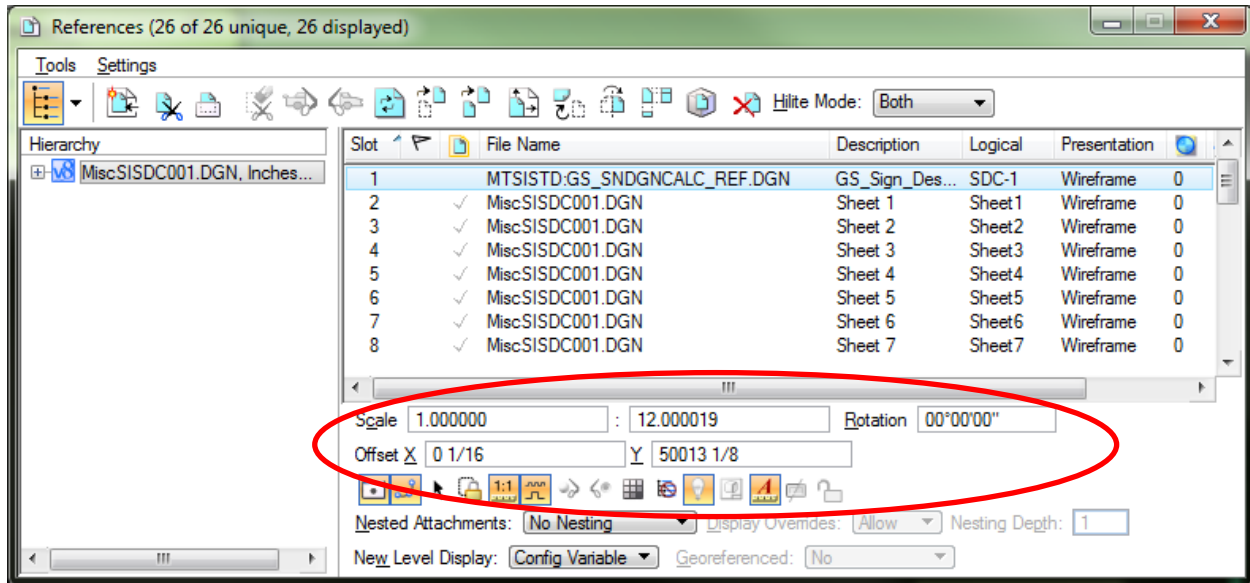
Updating GuideSIGN Report, Sheets, Symbols, Arrows & Templates

Open the Windows Explorer then go the the caddstd\WORKGROUP\SISTD\GuideSIGN\Contents User folder
 Copy the “Contents” folder by highlighting and Right Click, then **“Copy”** or highlight and go to Edit\COPY.

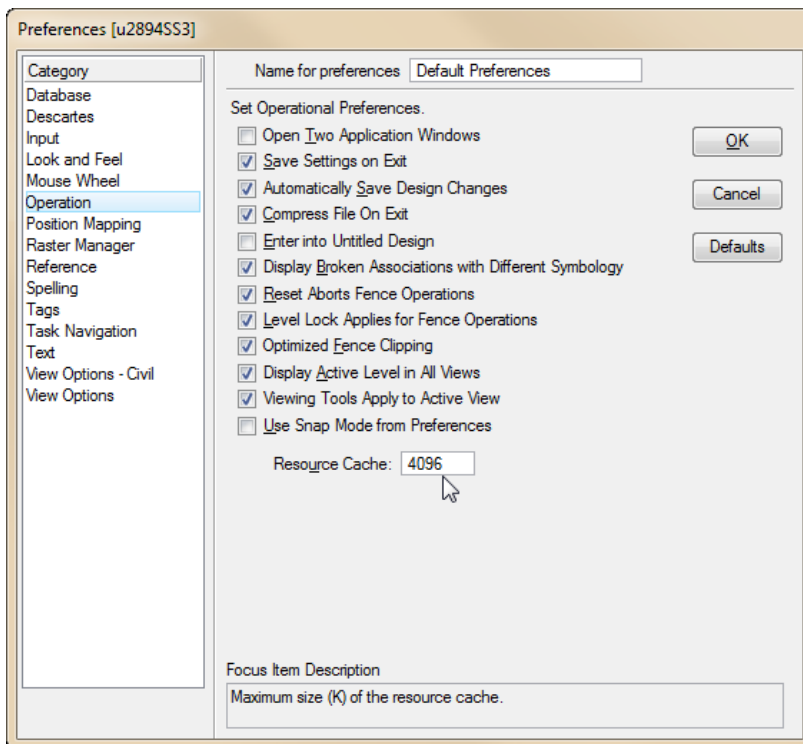
Open the C:\Program Files\Transoft Solutions\GuideSIGN 6, 7 or Pro 7 folder then **“Paste”** the updated version of the **“Contents User”** folder. This will update the following folders (Arrows, Reports, Sheets, Shields, Symbols & Templates. These updates in the Arrow, Shields, Symbols & Templates will be under the **“MDT”** folders. Use a different folder name for your personal “Contents User” folder so your files don’t get replaced.

Any files you create in the GuideSIGN program are located in the C:\Users\Public\Transoft Solutions\GuideSIGN ***\Contents User folder. This is where you’re files and others you might exchange with other Sign Designers are to be placed. Not in the “Contents” folder of the GuideSIGN program.

Reference Settings for GS_SNDGNCALC_REF.DGN Referencing the Sign Design Calc File for GuideSIGN program.



Bentley has informed us of a preference setting that should increase performance in MicroStation.



“When we load resources, we keep them in a “Most Recently Used” cache. When the program asks for a resource (like a dialog box, or a message, or whatever), we first look in the cache, and if it’s not there we read it from the disk. The larger the cache, the more resources are in memory, so there is some performance benefit to a larger cache.

The 1024 size was probably set many years ago when computers had far less memory. Setting it to 4096 is probably a good idea.”

MDT EISS’ recommendation is to set this to 4096. To set this, do the following in MicroStation:

Workspace > Preferences > Operation > change Resource Cache to 4096 & Click OK. (see below)

This updates your UPF file located in the C:\MDOH folder. You may want to make a backup of that file at this time also.

Not making this change will have no effect on your current MicroStation operation.

If you have questions concerning this or any other CADD questions, please email MDT CADD Support.

To All Summary & Spec Sheet Users

The Wording and Levels have been changed and added for the variety needed for Stationing and Locations. The wording & levels are as follows:

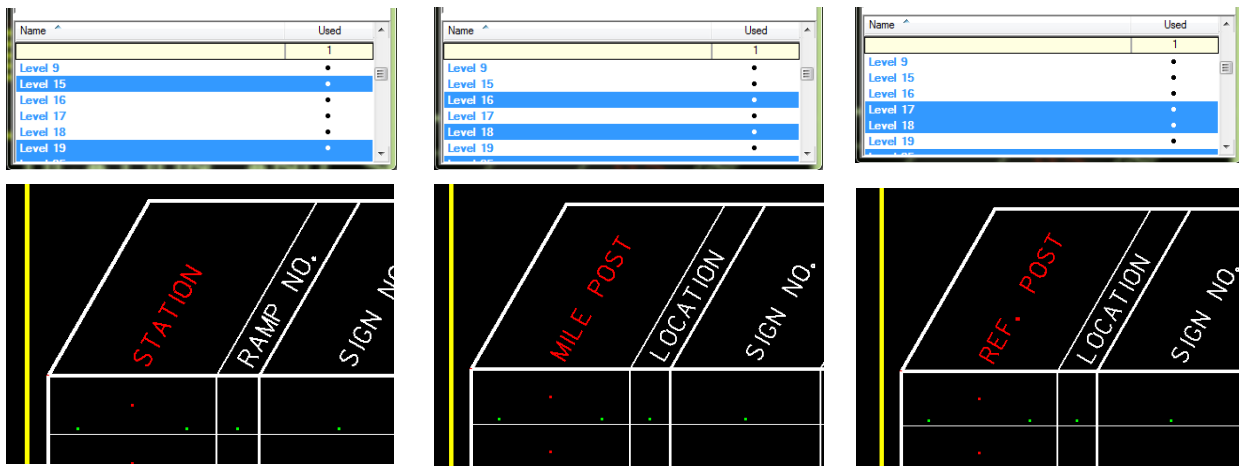
Sheet 1 (bottom)

Level 5 “Station”	default-off
Level 6 “Ref. Post”	default-off
Level 7 “Mile Post”	default-off
Level 8 “Location”	default-off
Level 9 “Ramp No.”	default-off

Sheet 2 (middle)

Level 15 “Station”	default-on
Level 16 “Ref. Post”	default-off
Level 17 “Mile Post”	default-off
Level 18 “Location”	default-off
Level 19 “Ramp No.”	default-on

Example of Sheet 2 (middle)



Sheet 3 (top)

Level 25 “Station”	default-on
Level 26 “Ref. Post”	default-off
Level 27 “Mile Post”	default-off
Level 28 “Location”	default-off
Level 29 “Ramp No.”	default-on

GuideSIGN MDT V8i II

Standard MDT Sign Design Calculation

GuideSIGN Setup



By Roger D. Schroeder
MDT ©2020
Updated 1/17/2020

Directory Where The Created Templates & Panel Styles are located.

Templates are located in:

GuideSIGN Program templates

<C:\Program Files\Transoft Solutions\GuideSIGN 6,GuideSIGN 7 or GuideSIGN Plus 7\Contents>

GuideSIGN MDT templates

<C:\Users\Public\Transoft Solutions\GuideSIGN 6,GuideSIGN 7 or GuideSIGN Plus 7\Contents User>

(Example) G11-a_Inter Distance Panel Style (GuideSIGN 6)

[C:\Public\Transoft Solutions\GuideSIGN 6\Contents\Templates\2009\MDT_Temps\](C:\Public\Transoft Solutions\GuideSIGN 6\Contents\Templates\2009\MDT_Temps)

(Example) N6-3a_Maj County Panel Style (GuideSIGN 6)

[C:\Public\Transoft Solutions\GuideSIGN 6\Contents User\Templates\2009\MDT_Temps\](C:\Public\Transoft Solutions\GuideSIGN 6\Contents User\Templates\2009\MDT_Temps)

(Example) G11-a_Inter Distance Panel Style (GuideSIGN 7)

[C:\Public\Transoft Solutions\GuideSIGN 7\Contents\Design\USA\Templates\2009\MDT_Temps\](C:\Public\Transoft Solutions\GuideSIGN 7\Contents\Design\USA\Templates\2009\MDT_Temps)

(Example) N6-3a_Maj County Panel Style (GuideSIGN 7)

[C:\Public\Transoft Solutions\GuideSIGN 7\Contents User\Design\USA\2009\Templates\MDT_Temps\](C:\Public\Transoft Solutions\GuideSIGN 7\Contents User\Design\USA\2009\Templates\MDT_Temps)

(Example) G11-a_Inter Distance Panel Style (GuideSIGN 7.1)

[C:\Public\Transoft Solutions\GuideSIGN Plus7\Contents\Design\USA\2009\Templates\MDT_Temps\](C:\Public\Transoft Solutions\GuideSIGN Plus7\Contents\Design\USA\2009\Templates\MDT_Temps)

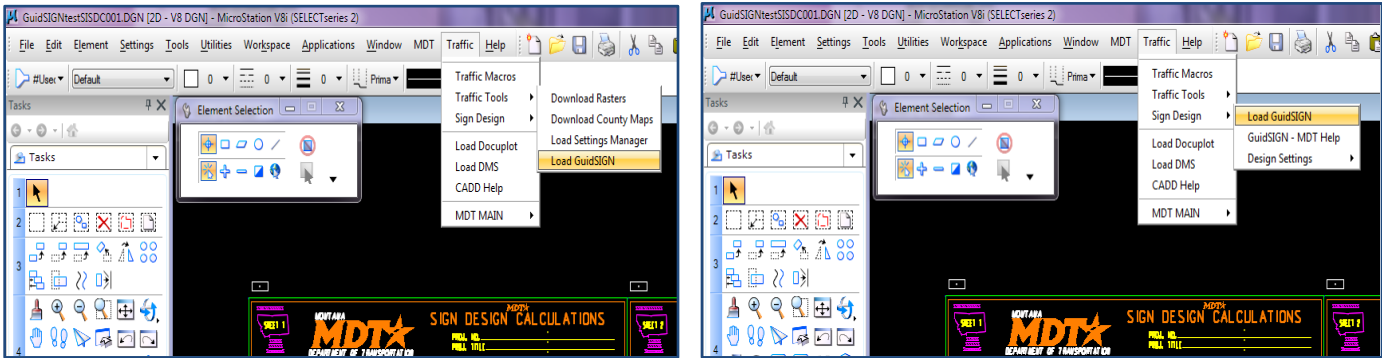
(Example) N6-3a_Maj County Panel Style (GuideSIGN 7.1)

[C:\Public\Transoft Solutions\GuideSIGN Plus 7\Contents User\Design\USA\2009\Templates\MDT_Temps\](C:\Public\Transoft Solutions\GuideSIGN Plus 7\Contents User\Design\USA\2009\Templates\MDT_Temps)

Consultant FTP Web Site Download <ftp://ftp.mdt.mt.gov/CaddStandards/>

Loading GuideSIGN in MicroStation

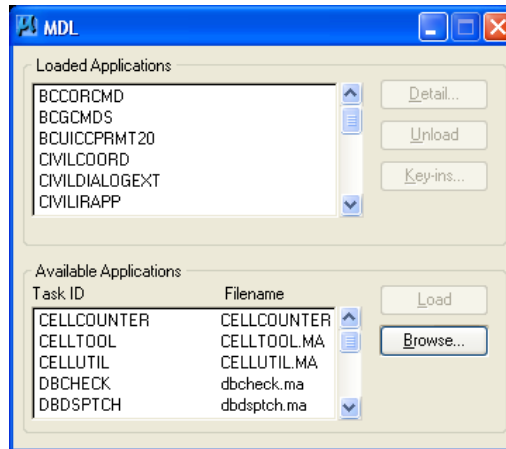
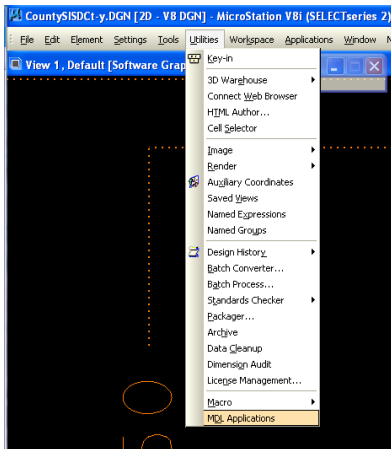
You can load the GuideSIGN program by clicking on the Menu Bar the “Load GuideSIGN” under the Traffic\Traffic Tools\Load GuideSIGN or the Traffic\Sign Design\Load GuideSIGN in your MicroStation File.



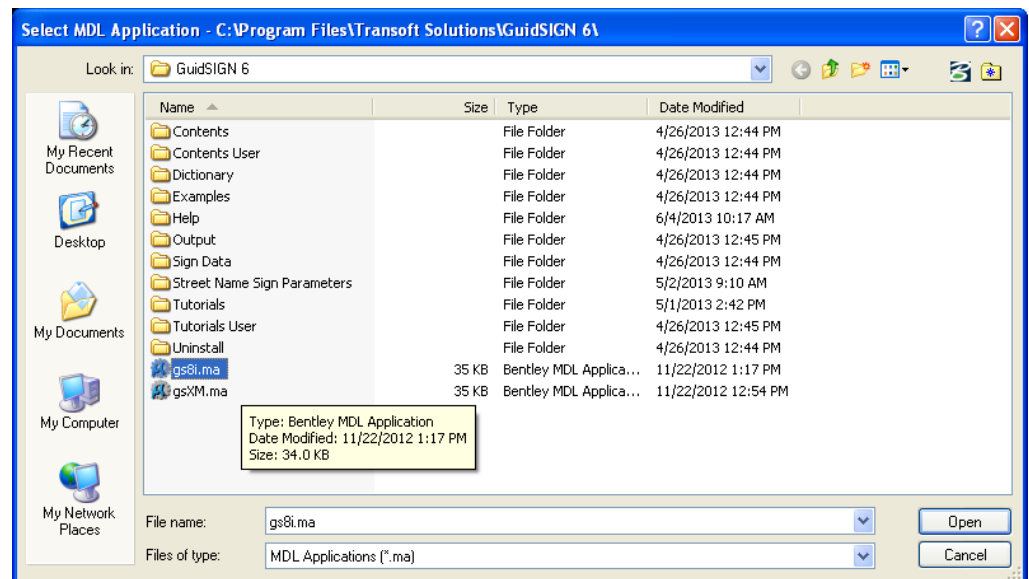
You can **unload** the GuideSIGN program by opening the same boxes and the “Unload GuideSIGN” will appear after you have loaded the program.

Loading GuideSIGN Manually

You can also load GuideSIGN program manually if you are on a different network:



Under the Utilities/MDL Applications, click on the browse button of the MDL box and choose the gs8i.ma file. **GuideSIGN** will now load. You can close the MDL box now and proceed designing signs.



Program Settings for GuideSIGN

Settings



Program Settings

General

Units: *inches*
M.U.T.C.D.: *2009 Edition*

Display Options

Set at **Color**, **Black & White** or **Outline**

Locks

Auto should be checked for, Auto update report & Auto place dimensions.

Auto zoom is up to the users preference.
Leave Auto updates panel unchecked for specific locking in the "Update Existing Panel"

Dimensions

Plot Scale 1:**8**
Plotted Text Height
D3 Street Name: **.01** to **.02**
Guide: **.02** to **.04**

Letter positions: **Spaces Between**
Letter positions should be unchecked.

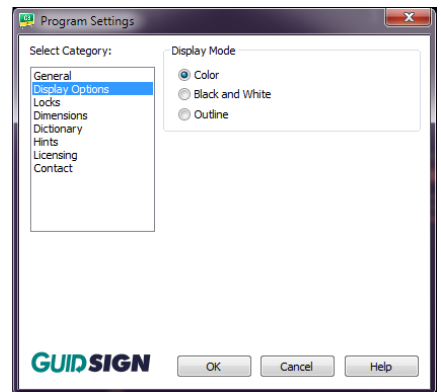
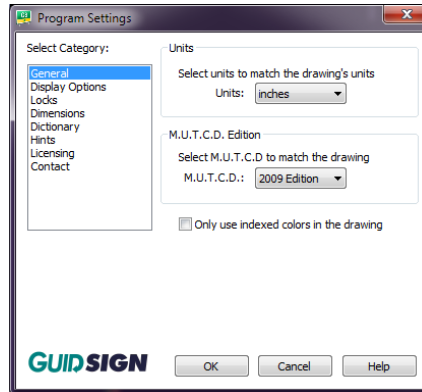
Dictionary

AASHTO Control Cities & Montana selected. Deselect all others.

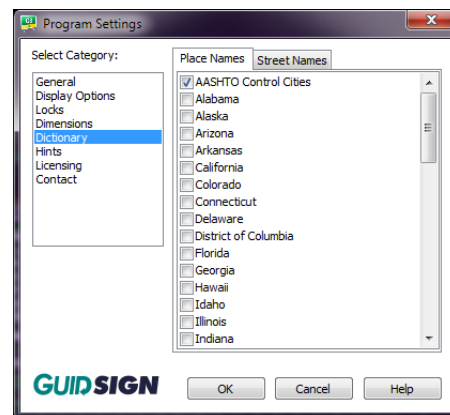
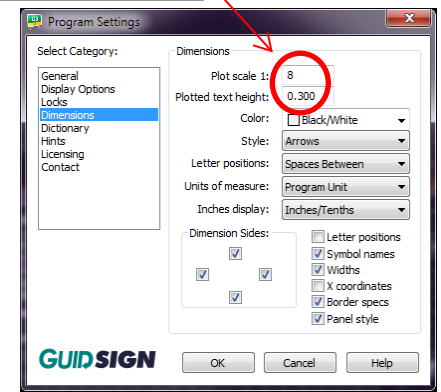
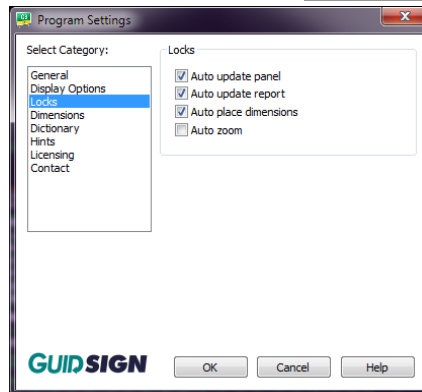
Hints

Personal Preference: May want to have selected as you learn to use the program.
If you are using MicroStation, please start it, click on Workspace -> Preferences, select Look and Feel category, and then on the right hand side please make sure that Single Click is set to Locked, and that Default Tool is set to Selection.

Click "OK" to save the changes. You're now ready to use GuideSIGN.



Scale Must Be Set To 1:8



GuideSIGN “STYLE” Layouts

Interstate 13.33”> (10”>) Font

<i>Size</i>	<i>Size</i>	<i>Border</i>	<i>Margin</i>	<i>Radius</i>
1’-6” to 2’-6”	18” to 30”	1”	½”	3”
3’-0” to 4’-6”	36” to 54”	2”	½”	6”
5’-0” to 6’-6”	60” to 78”	2”	½”	9”
7’-0” & Greater	84” & Greater	2”	½”	12”

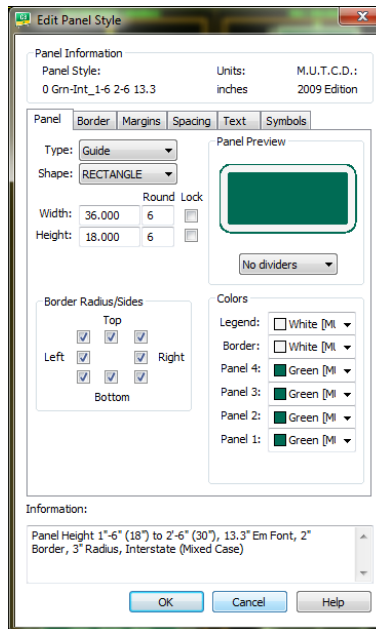
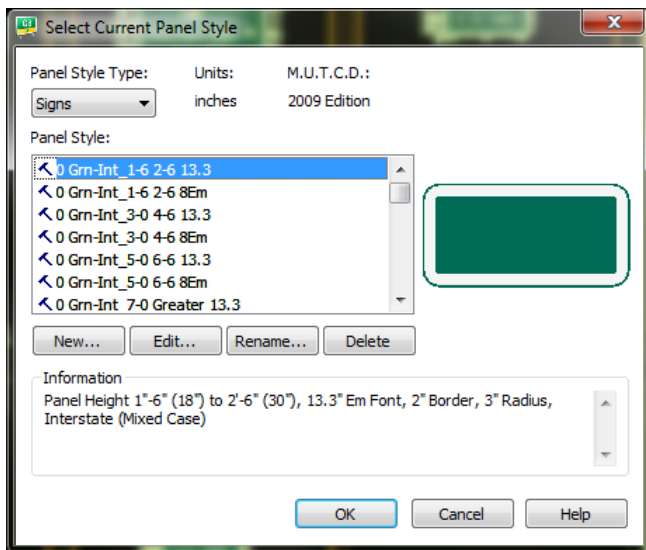
Interstate 8”< Font

<i>Size</i>	<i>Size</i>	<i>Border</i>	<i>Margin</i>	<i>Radius</i>
1’-6” to 2’-6”	18” to 30”	¾”	½”	3”
3’-0” to 4’-6”	36” to 54”	1”	½”	6”
5’-0” to 6’-6”	60” to 78”	1”	½”	9”
7’-0” & Greater	84” & Greater	2”	½”	12”

Primary/Secondary 8”< Font

<i>Size</i>	<i>Size</i>	<i>Border</i>	<i>Margin</i>	<i>Radius</i>
1’-6” to 2’-6”	18” to 30”	¾”	½”	3”
3’-0” to 4’-6”	36” to 54”	1”	½”	6”
5’-0” to 6’-6”	60” to 78”	1”	½”	9”
7’-“0 & Greater	84” & Greater	2”	½”	12”

Black, Blue, Brown & Green Panels. White Text & Borders. No Margins.
Orange, White & Yellow Panels. Black Text & Borders. With ½” Margins.



- 0 Grn-Int_1-6 2-6 8Em.ssi
- 0 Grn-Int_1-6 2-6 13.3.ssi
- 0 Grn-Int_3-0 4-6 8Em.ssi
- 0 Grn-Int_3-0 4-6 13.3.ssi
- 0 Grn-Int_5-0 6-6 8Em.ssi
- 0 Grn-Int_5-0 6-6 13.3.ssi
- 0 Grn-Int_7-0 Greater 8Em.ssi
- 0 Grn-Int_7-0 Greater 13.3.ssi
- 0 Grn-PS_1-6 2-6.ssi
- 0 Grn-PS_3-0 4-6.ssi
- 0 Grn-PS_5-0 6-6.ssi
- 0 Grn-PS_7-0 Greater.ssi
- 1 Blk-Int_1-6 2-6 8Em.ssi
- 1 Blk-Int_1-6 2-6 13.3.ssi
- 1 Blk-Int_3-0 4-6 8Em.ssi
- 1 Blk-Int_3-0 4-6 13.3.ssi
- 1 Blk-Int_5-0 6-6 8Em.ssi
- 1 Blk-Int_5-0 6-6 13.3.ssi
- 1 Blk-Int_7-0 Greater 8Em.ssi
- 1 Blk-Int_7-0 Greater 13.3.ssi
- 1 Blk-PS_1-6 2-6.ssi
- 1 Blk-PS_3-0 4-6.ssi
- 1 Blk-PS_5-0 6-6.ssi
- 1 Blk-PS_7-0 Greater.ssi
- 1 Blue-Int_1-6 2-6 8Em.ssi
- 1 Blue-Int_1-6 2-6 13.3.ssi
- 1 Blue-Int_3-0 4-6 8Em.ssi
- 1 Blue-Int_3-0 4-6 13.3.ssi
- 1 Blue-Int_5-0 6-6 8Em.ssi
- 1 Blue-Int_5-0 6-6 13.3.ssi
- 1 Blue-Int_7-0 Greater 8Em.ssi
- 1 Blue-Int_7-0 Greater 13.3.ssi
- 1 Blue-PS_1-6 2-6.ssi
- 1 Blue-PS_3-0 4-6.ssi
- 1 Blue-PS_5-0 6-6.ssi
- 1 Blue-PS_7-0 Greater.ssi
- 1 Brw-Int_1-6 2-6 8Em.ssi
- 1 Brw-Int_1-6 2-6 13.3.ssi
- 1 Brw-Int_3-0 4-6 8Em.ssi
- 1 Brw-Int_3-0 4-6 13.3.ssi
- 1 Brw-Int_5-0 6-6 8Em.ssi

GuideSIGN “REGULATORY” Style Layouts

REGULATORY STYLES w/o Margins

Panel	Text	Margin	Border	
Grn/Wht	White	No	Yes	
Blk/Wht	White	No	Yes	
Blue/Wht	White	No	Yes	
Brwn/Wht	White	No	Yes	
Wht/Red	Red	No	Yes	*Exceptions

**All Borders of 0.438" converted over to 0.375" Border.*

Difference is in the # of Rows & Font Size.

0.375" 1-3 Rows Text

0.438" 4 or > Rows of Text

REGULATORY STYLES w/Margins

Panel	Text	Margin	Border	
Orgn/Blk	Black	Yes	Yes	
Wht/Blk	Black	Yes	Yes	
Yel/Blk	Black	Yes	Yes	
Blu/Wht	White	Yes	Yes	*Exceptions
Wht/Red	Red	Yes	Yes	*Exceptions

REGULATORY Panel Sections Vertical

Top	9d
Bot	9e
Mid	9f

REGULATORY Panel Sections Horizontal

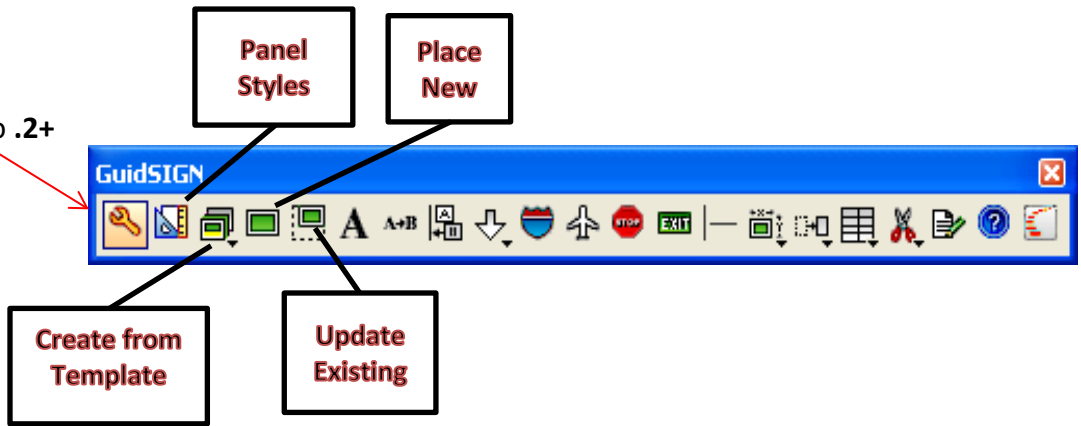
Left	9g
Right	9h
Cntr	9i

		Radius	Border	Margin		
STANDARD REGULATORY STYLES	2 Reg_ Blk-Wht	6-12	No Margin	1.5	0.375	-
	2 Reg_ Blk-Wht	18-24	No Margin	1.5	0.625	-
	2 Reg_ Blk-Wht	30	No Margin	1.875	0.75	-
	2 Reg_ Blk-Wht	36	No Margin	2.25	0.875	-
	2 Reg_ Blk-Wht	48	No Margin	3	1.25	-
	2 Reg_ Wht-Blk	6-12	w/Margin	1.5	0.375	0.375
	2 Reg_ Wht-Blk	6-12-	w/Margin	1.5	0.5	0.375
	2 Reg_ Wht-Blk	18-24	w/Margin	1.5	0.625	0.375
	2 Reg_ Wht-Blk	30	w/Margin	1.875	0.75	0.5
	2 Reg_ Wht-Blk	36	w/Margin	2.25	0.875	0.625
	2 Reg_ Wht-Blk	48	w/Margin	3	1.25	0.75
	2 Reg_ Wht-Red	6-12	w/Margin	1.5	0.375	0.375
	2 Reg_ Wht-Red	18-24	w/Margin	1.5	0.625	0.375
	2 Reg_ Wht-Red	30	w/Margin	1.875	0.75	0.5
	2 Reg_ Wht-Red	36	w/Margin	2.25	0.875	0.625
	2 Reg_ Wht-Red	48	w/Margin	3	1.25	0.75
	2 Reg_ Wht-Red	6-12a	No Margin	1.5	0.375	-
	2 Reg_ Wht-Red	18-24a	No Margin	1.5	0.625	-
	2 Reg_ Wht-Red	30a	No Margin	0.875	0.75	-
	2 Reg_ Wht-Red	36aa	No Margin	1.5	0.75	-
	2 Reg_ Wht-Red	36a	No Margin	2.25	0.875	-
	2 Reg_ Wht-Red	42a	No Margin	1.875	0.875	-
	2 Reg_ Wht-Red	48a	No Margin	3	1.25	-
	COLORED REGULATORY PANEL STYLES	3 Reg_ Blu-Wht	6-12	w/Margin	1.5	0.375
3 Reg_ Blu-Wht		18-24	w/Margin	1.5	0.625	0.375
3 Reg_ Blu-Wht		30	w/Margin	1.875	0.75	0.5
3 Reg_ Blu-Wht		36	w/Margin	2.25	0.875	0.625
3 Reg_ Blu-Wht		48	w/Margin	3	1.25	0.75
3 Reg_ Blu-Wht		6-12a	No Margin	1.5	0.375	-
3 Reg_ Blu-Wht		18-24a	No Margin	1.5	0.625	-
3 Reg_ Blu-Wht		30a	No Margin	1.875	0.75	-
3 Reg_ Blu-Wht		36a	No Margin	2.25	0.875	-
3 Reg_ Blu-Wht		48a	No Margin	3	1.25	-
3 Reg_ Brwn-Wht		6-12	No Margin	1.5	0.375	-
3 Reg_ Brwn-Wht		18-24	No Margin	1.5	0.625	-
3 Reg_ Brwn-Wht		30	No Margin	1.875	0.75	-
3 Reg_ Brwn-Wht		36	No Margin	2.25	0.875	-
3 Reg_ Brwn-Wht		48	No Margin	3	1.25	-
3 Reg_ Grn-Wht		6-12	No Margin	1.5	0.375	-
3 Reg_ Grn-Wht		18-24	No Margin	1.5	0.625	-
3 Reg_ Grn-Wht		30	No Margin	1.875	0.75	-
3 Reg_ Grn-Wht		36	No Margin	2.25	0.875	-
3 Reg_ Grn-Wht		48	No Margin	3	1.25	-
3 Reg_ Orgn-Blk		6-12	w/Margin	1.5	0.375	0.375
3 Reg_ Orgn-Blk		18-24	w/Margin	1.5	0.625	0.375
3 Reg_ Orgn-Blk		30	w/Margin	1.875	0.75	0.5
3 Reg_ Orgn-Blk		36	w/Margin	2.25	0.875	0.625
3 Reg_ Orgn-Blk		48	w/Margin	3	1.25	0.75
3 Reg_ Yel-Blk		6-12	w/Margin	1.5	0.375	0.375
3 Reg_ Yel-Blk		18-24	w/Margin	1.5	0.625	0.375
3 Reg_ Yel-Blk		30	w/Margin	1.875	0.75	0.5
3 Reg_ Yel-Blk		36	w/Margin	2.25	0.875	0.625
3 Reg_ Yel-Blk		48	w/Margin	3	1.25	0.75

PLACING A SIGN

Plot Scale 1:8

Plotted Text Height .01 to .2+



There are 2 ways to start.

1: Using a blank panel (the "Place New" Panel will open up to whatever "Panel Styles" is set at.

2: Using a Template (GuideSIGN Templates & MDT Templates)

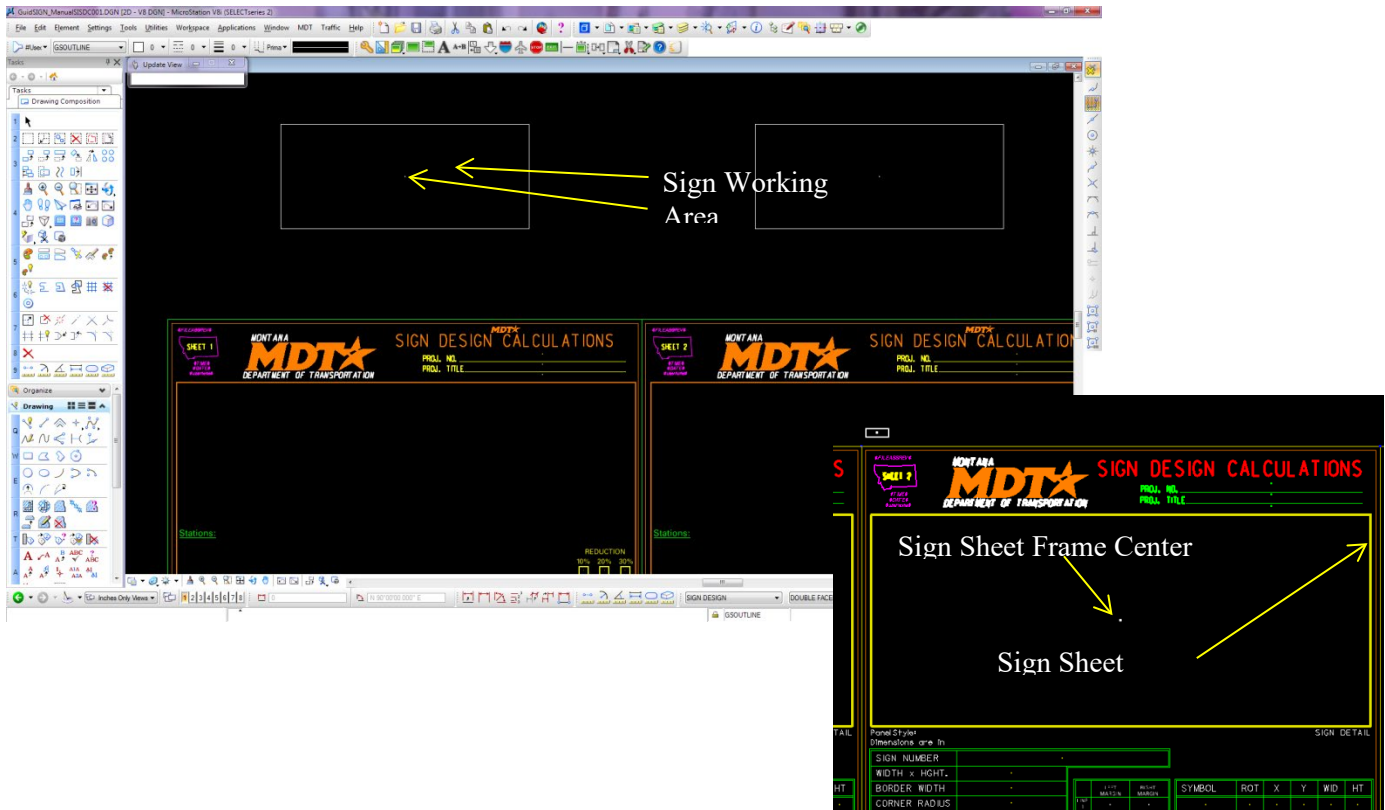
Go to: "Panel Styles" to select what type of Sign you are creating or pick "Create from Template". Select the **Panel Style** or **Template** you are going to work with (guide, street name, etc.).

con=conventional (**Primary/Secondary**)

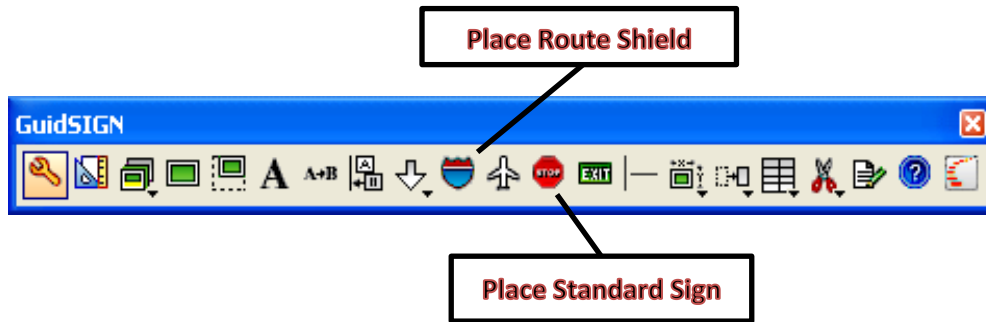
exp=express (**4 Lane non-Inter.**)

fwy=freeway (**Interstate**)

Place the New panel or template into the sign working area when using the 25 sheet **Sign Design Calc sheet**. The panel should be **centered** on the Center Alignment Dot. This will place the sheets & the reports in the same alignment with the 25 sheet **Sign Design Calc sheets**. If the alignment of the report is off, just align the Sign Sheet Frame center dot with the 25 sheet **Sign Design Calc sheet** Sign Sheet Frame center dot. Proceed with the sign design.

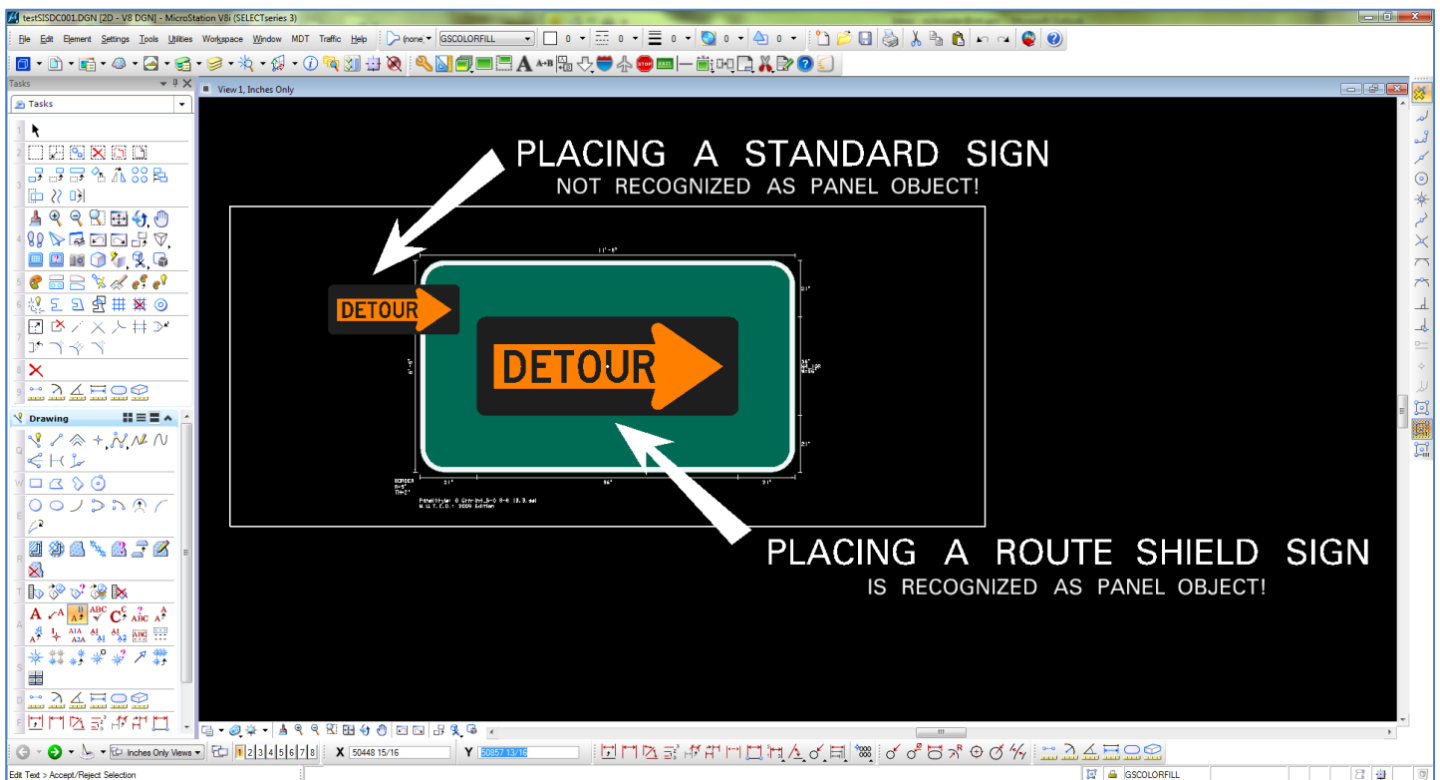


PLACE ROUTE SHIELD or PLACE STANDARD SIGN



The Place Standard Sign icon is used for placing typical signs in your plan sheets or layouts. These cells will not place within a Sign Panel and is not recognized as panel objects.

The Place Route Shield is for placing typical Shields within a Sign Panel. The Standard Sign cells are also placed in this Icon for placement of the standard signs in a panel itself. The program will now recognize them as panel objects (see below) although it is under Route Shields and not Standard Signs.



PLACING A DRAWING SHEET

You only need to place a drawing sheet when doing a single sign design. It only places a sheet when you've created a panel or sign to start. This feature could also be used to place a sheet directly into a detail sheet or other MicroStation file for special projects, reports, etc. This in turn will have to be fenced and plotted.

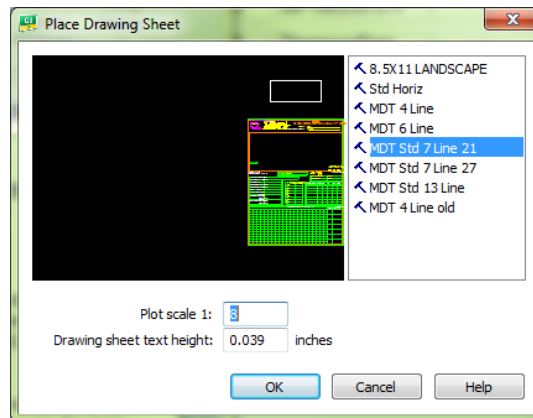
Click on the Sign Design that's just been created with the Place Drawing Sheet tool in the GS tool bar. Pick the MDT Sheet you wish to use. The **MDT Std. 7 line & 13 Line** will become the standard with room for more updates in the future. The old style 4 & 6 sheets are included for familiar usage as most features are from these styles out of the older 25 sheet format but will be deleted in the near future.

Make sure the Plot Scale is set!

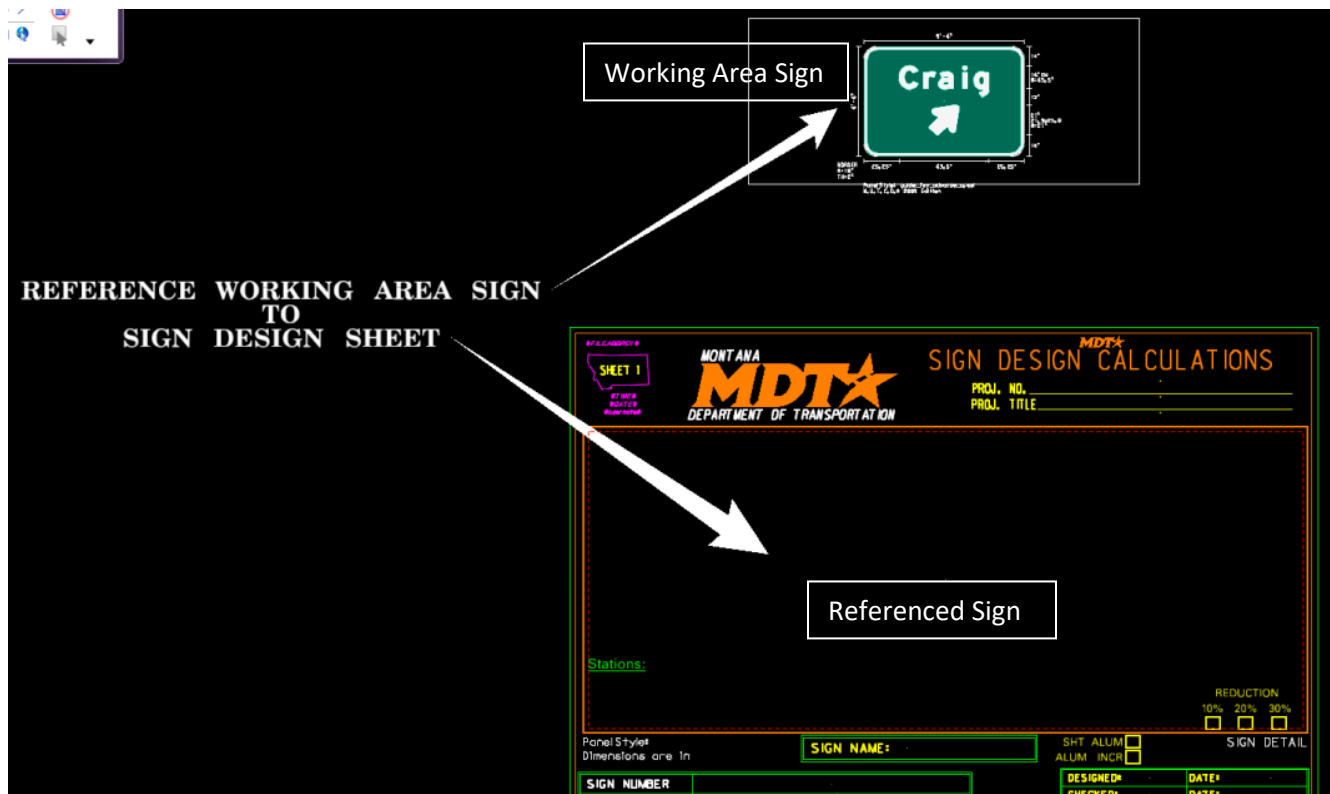
Plot Scale 1:8

Plotted Text Height: **0.039**

The Sign Design Sheet will appear with your sign in the *sign working area*.



This scale is used because the 25 sheet format uses this feature for referencing in the 25 sign designs from the sign working areas to the sign sheet frames, and the many sign sizes which would be necessary to fit the sheets for standard printing. Reference the Sign Design in the Sign Working Area to the Sign Sheet Frame (Working Area). This way changes can be made in the future. If you scale the sign design to the Calc Sheet, you will have to start over to modify the sign design.



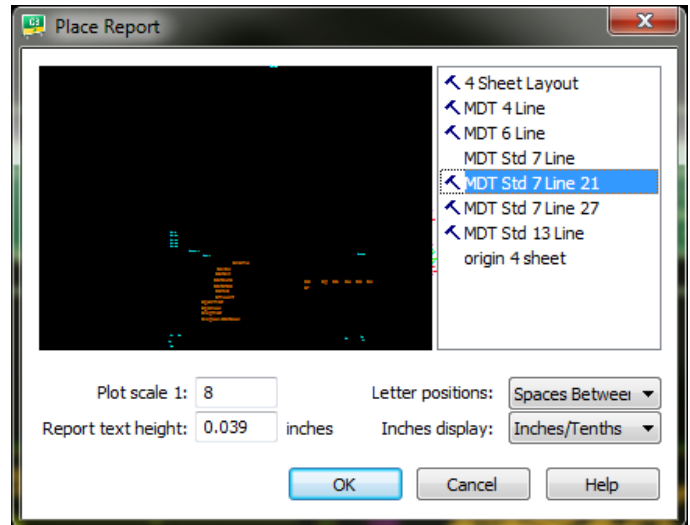
PLACING A REPORT & Modifying the Report display

So far we have the dimension tool for the widths between words & symbols. We have to place the dimension within the Calc sheet for the sign makers. Margin widths for the LINE's have to be inserted manually if needed (More than 1 Line). The dimension tool can be used for this instead and more dimensions can also be shown this way.

“When placing the report, choose the style you’re working with and click on the Sign you’ve just created. (The same as placing a work sheet [7Line or 13 Line]).

The **Letter positions:** are set at “Spaces Between”
The **Inches display:** are set at “Inches/Tenths”

*Note: For Consultants & Updates to the GuideSIGN program the **reports.cel** is located in
Caddstd\WORKGROUP\SISTD\GuideSIGN\reports.cel



Make sure the Plot Scale and the Plotted Text Height are set!

Plot Scale **1:8**

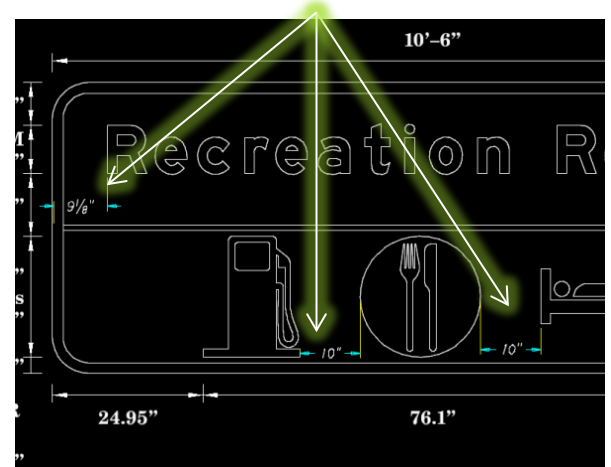
Plotted Text Height **0.039**

Information that isn't placed in the the "Report" automatically is in Yellow Text for easier identification.

The other pertinent information the Sign Designer needs to insert such as Project Information, Sign Name, Alum Sht/Inc, Designer/Checker & Dates, Reduction & Margins if Dimensions aren't used.

SIGN NUMBER	05-42	DESIGNED:	DATE:
WIDTH x HIGHT,	9'-6" x 6'-6"	CHECKED:	DATE:
MARGIN	0'	SYMBOL	
BORDER WIDTH	2"	25X21,815	315
CORNER RADIUS	10'	46.5	15
SO. FEET	61.8 Sq.Ft.	21.9	25
MOUNTING	Ground	HT	
BACKGROUND	TYPE: Reflective COLOR: Green	LINE 1	
LEGEND/BORDER	TYPE: Reflective COLOR: White/White	LINE 2	
		LINE 3	
		LINE 4	
		LINE 5	
		LINE 6	
		LINE 7	

*Dimensions Example Using
MicroStation Dimensioning Tool*



REFLECTIVE SHEET MATERIAL

MDT uses the following reflective material for sign sheeting.

Reflective – **IV** (Guide, Regulatory, Street Names, etc.)

High Intensity – **IX** (OH, Horizontal Alignment Signs & Plaques, & Schools)

High Intensity – **IX FY** (Florescent Yellow for Horizontal Alignment Signs & Plaques)

High Intensity – **IX FYG** (Florescent Yellow-Green for Schools)

For Reflective Sheeting & Increment Sheeting, MDT uses the following:

Reflective: MDT Reflective Sheeting IV

Reflective: MDT Reflective Sheeting IX Horizontal Signing.

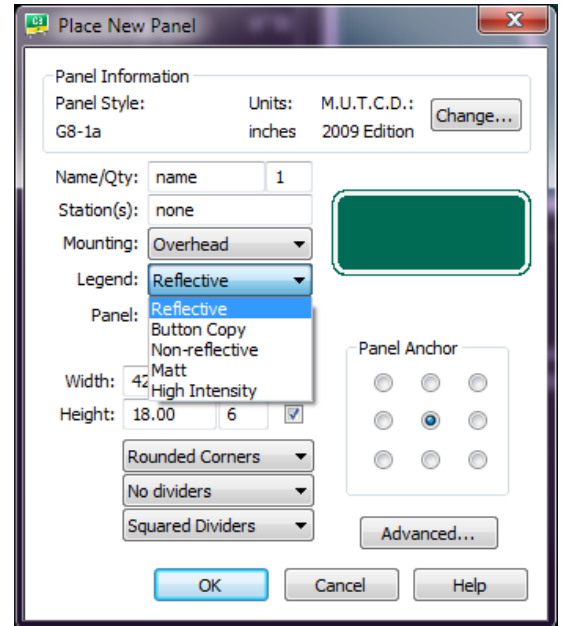
Non-Reflective: (Black)

High Intensity: MDT Reflective Sheeting IX for School.

The Report can be manipulated with the text tool. However, this will revert back to the default setting when up-dating the Report.

SIGN NUMBER	W8-12c
WIDTH x HGHT.	5' -5" x 5' -5"
MARGIN	0"
BORDER WIDTH	0"
CORNER RADIUS	0"
SO. FEET	29.2 Sq.Ft.
MOUNTING	Ground
BACKGROUND TYPE:	Reflective IV
BACKGROUND COLOR:	Blue
LEGEND/BORDER TYPE:	Reflective IV
LEGEND/BORDER COLOR:	Black/Black

Add
 "IV", "IX", "IXFY" or
 "IXFYG" to the
 Report to reflect the
 MDT Reflective Sheeting Material Type.

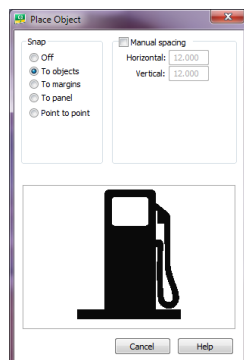
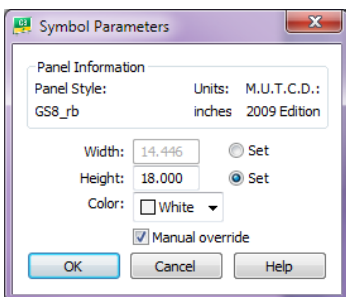


Symbol Placement

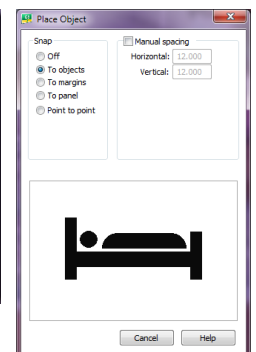
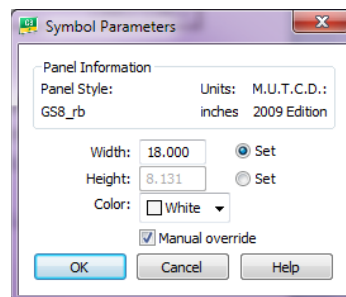
When placing Symbols, the sizing is based on manual overrides for the largest dimension required.

Examples below show for a 24" Panel. They Symbol itself is 6" less than the Panel Size.

A 24" Panel will use a 18" Symbol as the largest measurement between Width & Height.



24" – 18"
 30" – 24"
 36" – 30"
 42" – 36"



GuideSIGN Reference & Seed File Issues

Under C:\Program Files\Transoft Solutions\GuideSIGN 6, 7 or Pro 7 you can run gsconfig.exe, which will open the GuideSIGN configuration utility. Under here you can see what the full path for User Contents is on your machine. Once I corrected the user contents and contents paths and restarted the GuideSIGN program in MicroStation, the reports generated correctly at the correct scale, refer to the GuideSIGN Setup & Troubleshooting. This utility requires administrative permission to log in for MDT users since the State operates on a network server.

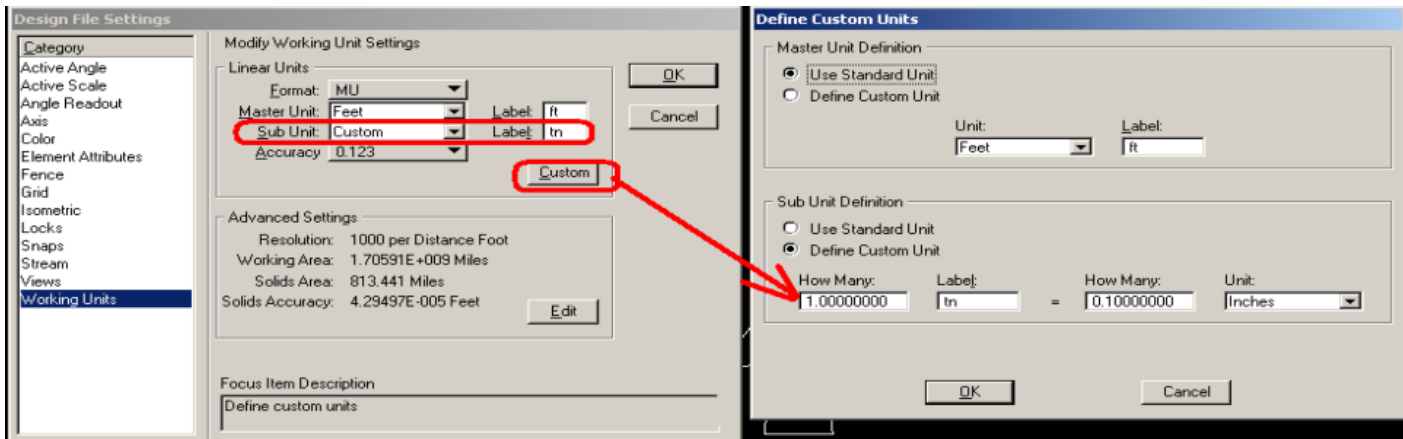
GuideSIGN MDT V8i III Setup & Troubleshooting



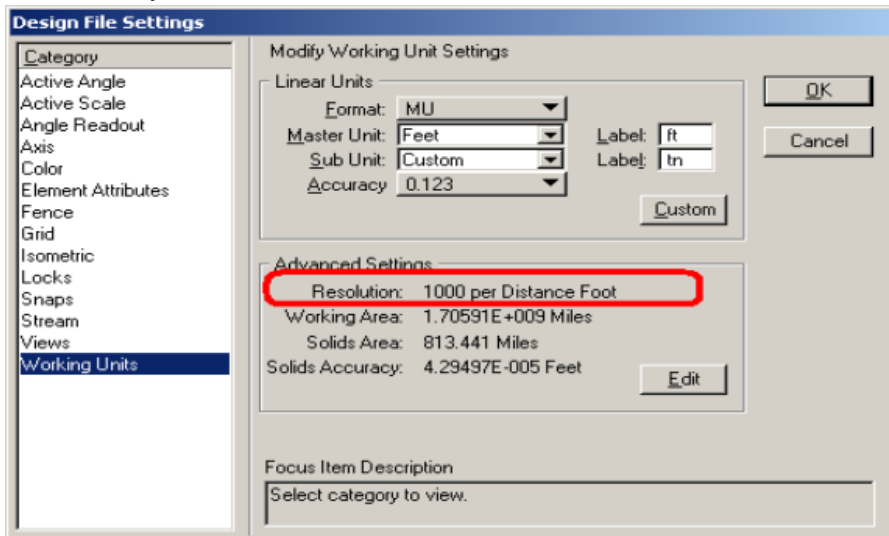
Schroeder, Roger
Montana Department of
Transportation
12/19/2016

Updated 1/28/2020

In your dgn file if you are using custom sub units:



This is a very low resolution:



Please note that for Imperial units, we do recommend using feet and inches, and it is recommended that Resolution is at least **12000 per foot**. If you prefer to use tenths as custom units, we would recommend that you adjust the resolution in that case to at least **12000 per foot**.

However, please note that if you are going to change the resolution in your drawing, then the objects that are already placed in that drawing will become out scale, so we recommend creating a new file which will have the updated resolution, and perhaps you can use it as a seed file when using GuideSIGN.

#1- What happened to the Contents User folder? This was handy as we could update everyone in the Contents folder for our MDT Standards and they would have their personal library for the oddball stuff they're working on.

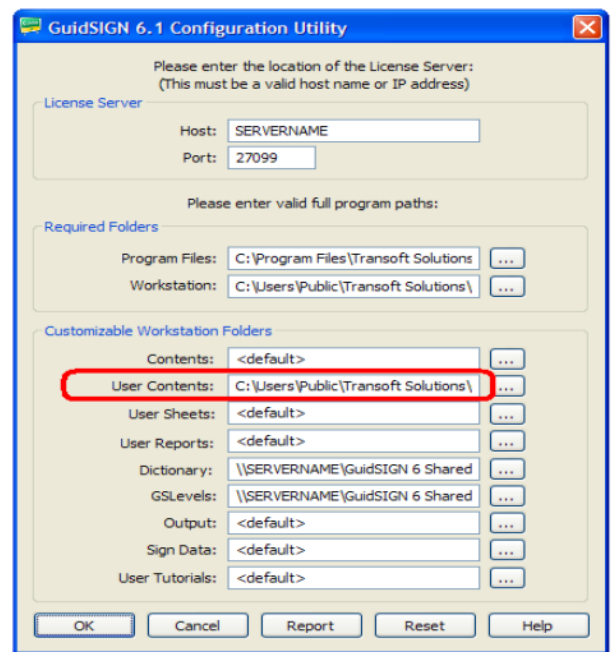
Answer:

Contents folder on Windows 7 machines is by default installed to:
 C:\Users\Public\Transoft Solutions\GuideSIGN 6,GuideSIGN 7 or GuideSIGN Plus 7\Contents User

If you are not sure where Contents User is on your machine, please browse to:

C:\Users\Public\Transoft Solutions\ GuideSIGN 6,GuideSIGN 7 or GuideSIGN Plus 7

In there you will be able to run gsconfig.exe which will open GuideSIGN configuration utility and you will be able to see what is the full path for User Contents on your machine:



#2- Is there a code to list the Square Feet total?

Answer:

Yes, you can get the square feet total if for example you have a custom report which is using Area tag: \$area

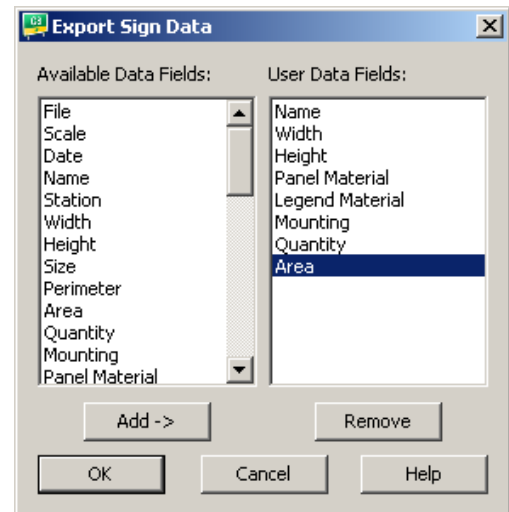
Or, if you click on Export Sign Data:



And then click on Area and click on Add.

If you then click ok and click on the sign, GuideSIGN will create a text file which will have the same name as the drawing file you are using, and the text file will be saved in Sign Data folder. Default location on Windows 7 for that folder is:

C:\Users\Public\Transoft Solutions\ GuideSIGN 6,GuideSIGN 7 or GuideSIGN Plus 7\Sign Data



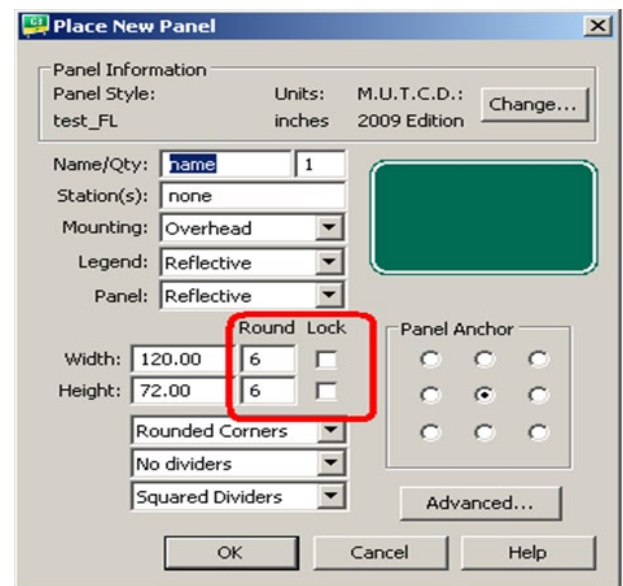
#3- Panel Widths add a waste factor which we don't use. Our panels are pre-cut. Is there a way to lock these widths x height panels without any waste factors?

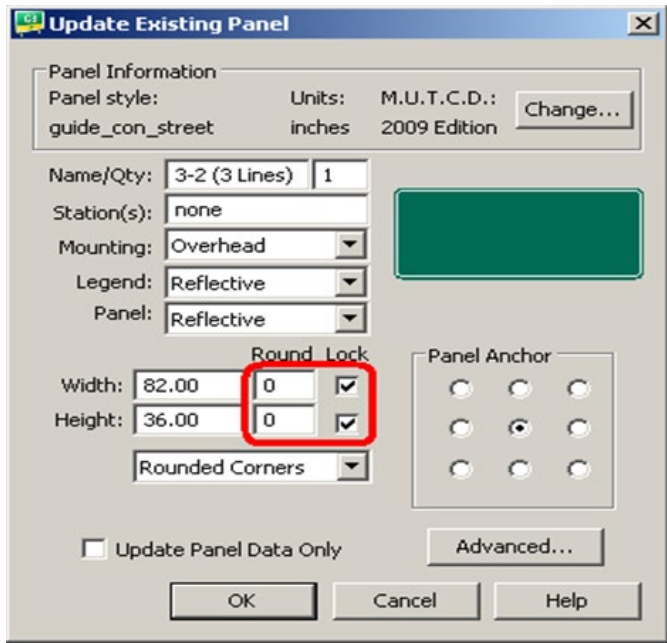
Answer:

If you would like to lock width and/or height of a new panel, then when you click on Place New Panel, please note that you can remove the rounding factor and set it to 0 for example, and you can check the Lock option for the width and/or height:

Also, if you create a custom panel (in Panel Styles -> New), you can preset the new panel style to have a specific locked width and height by default.

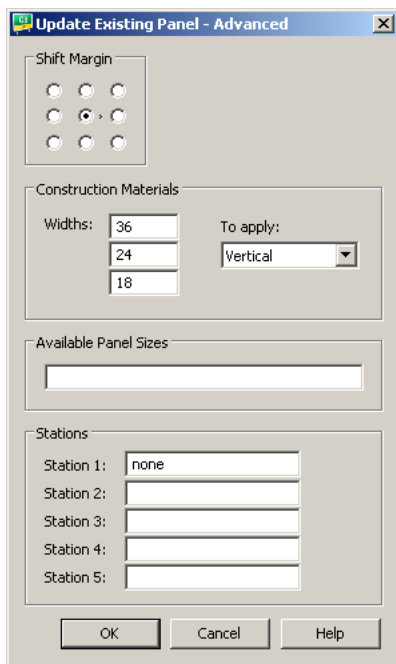
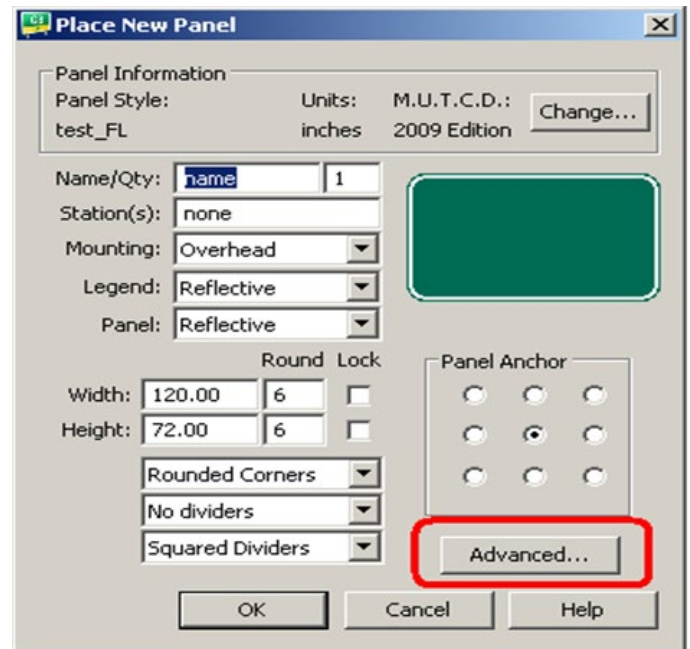
Or, if you would like to lock width and/or height of a panel that is already placed, you can click on Update Existing Panel, click on the panel, and then you will be able to set the rounding and lock factor.





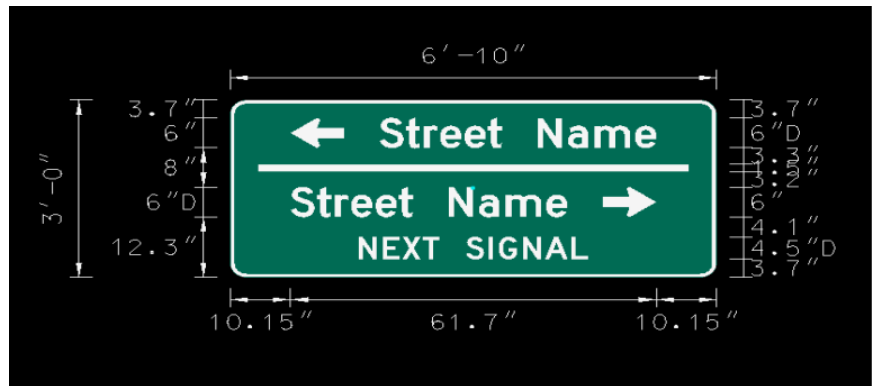
For example, in this example I have set the width to be 82" and height to be 36":

When placing or updating a panel, if you click on Advanced:

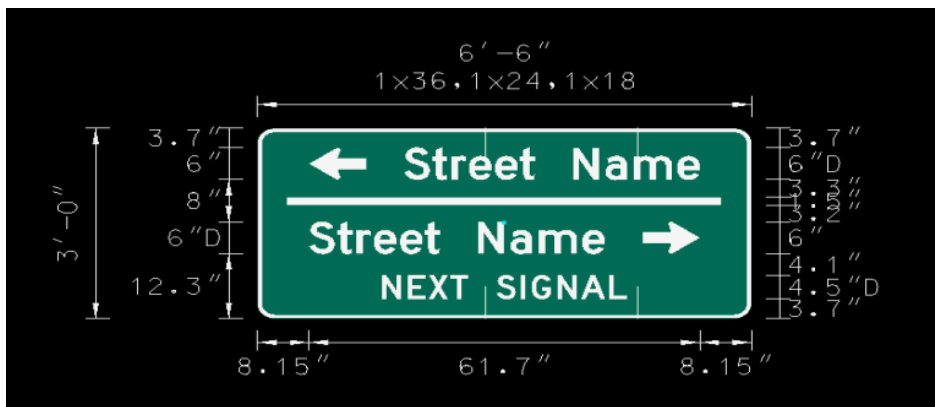


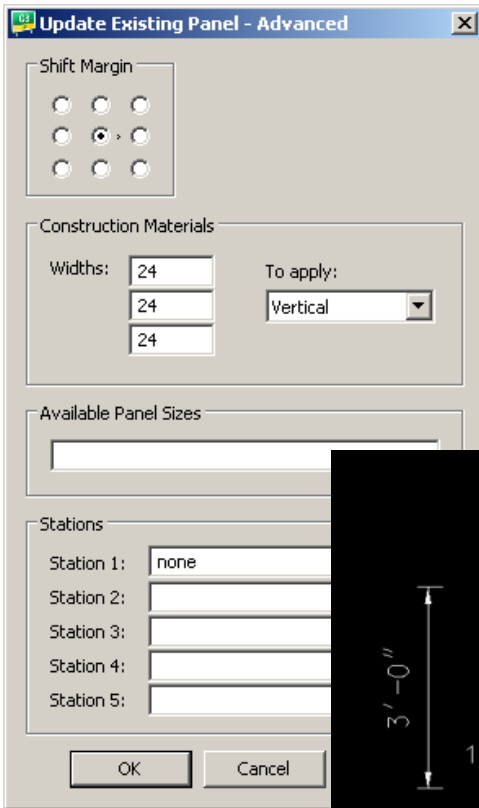
You will be able to specify Construction Materials, and if you want to apply them vertically or horizontally.

For example in this case I have selected default widths of 36, 24 and 18 and applied them vertically:



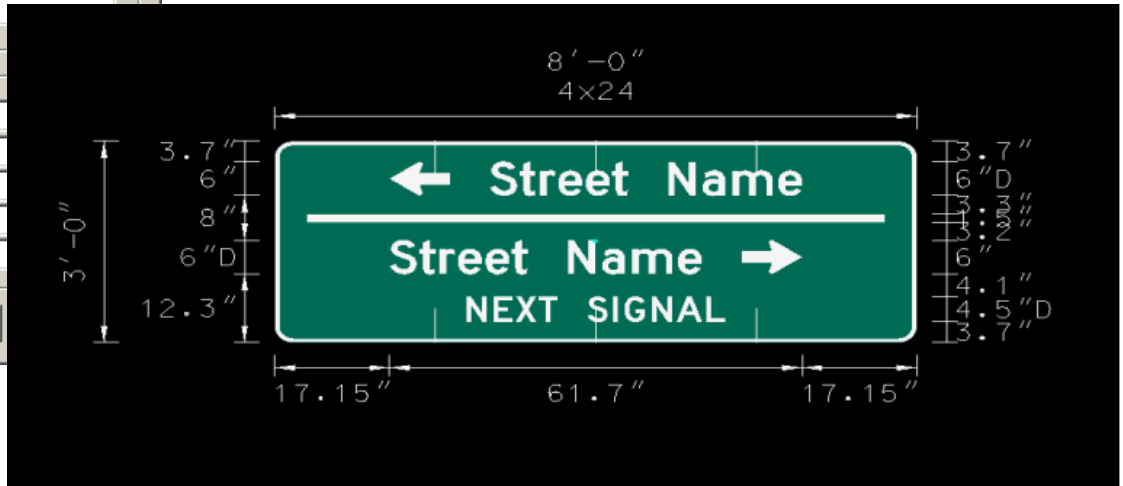
And when I have clicked ok and updated the panel, I was able to see how those material widths are applied and where:





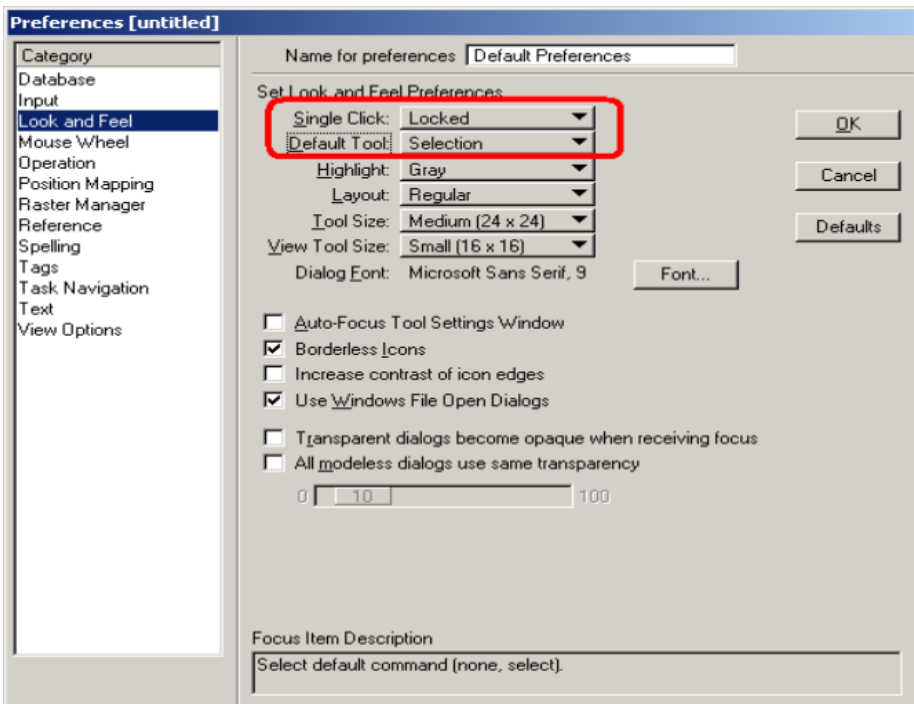
Or let's say that I want to have uniform material width of 24", and then I could set it up like this:

And when applied, I would see that I need 4 sheets:



If you are using MicroStation, please start it, click on Workspace -> Preferences, select Look and Feel category, and then on the right hand side please make sure that Single Click is set to Locked, and that Default Tool is set to Selection.

Click ok to save the change, and then load and try using GuideSIGN.



Q1: Is there a reason why when using the “move single object” on an arrow/shield that it won’t pick up a text string to align off of.

A1. I am not sure which problem you are referring to. However, if you have a object that you want to move, it might be easier to use Move Multiple Objects tool. That will allow you to click on the object you want to move, for example arrow, then you can click outside of the panel to confirm your selection, and then click on the object(s) you want to align your arrow to, and again click outside of the panel to confirm the selection. You will then be able to move your arrow and align it to the selected objects.

Q2: On placing a divider line, is there a tool to set the line to stay where I want it. When I created a panel style as you see below, the line moves instead of staying centered in the panel.

A2. In GuideSIGN, if you click on Program Settings -> Locks, please note that if you do not want panel to auto update you should uncheck the first option which is “Auto update panel”. Our suggestion for your question is to create a panel, and when you are done before you place the line, please turn off auto update panel option, and then place the line. Or, keep the auto update panel off at the beginning, and then place a panel with fixed width and height and position your objects, lines, etc, exactly where you want, and panel will not resize or update.

Reflective Sheeting

When you start GuideSIGN and click on Place New Panel for example, then when Place New Panel dialog box is displayed, and in there you can select Legend and Panel material type:

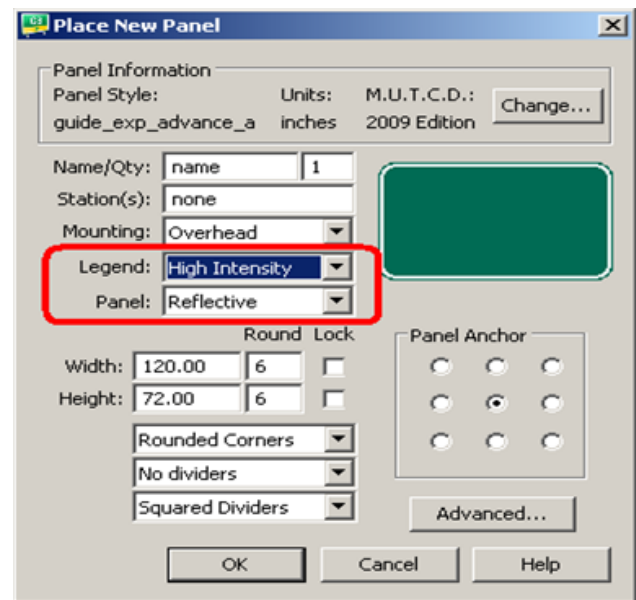
Legend options are:

- Reflective
- Button Copy
- Non-reflective
- Matt
- High Intensity

Panel options are:

- Reflective
- Non-reflective
- Matt
- High Intensity

At the moment these options are hard coded and cannot be changed. I will create an improvement request to allow users to add their own material types for these two options, however, that will be addressed in a future version of GuideSIGN.



Currently, if you select a Legend and or Panel material type, then when you later place a sheet and report, you will see that info in the placed report, for example:

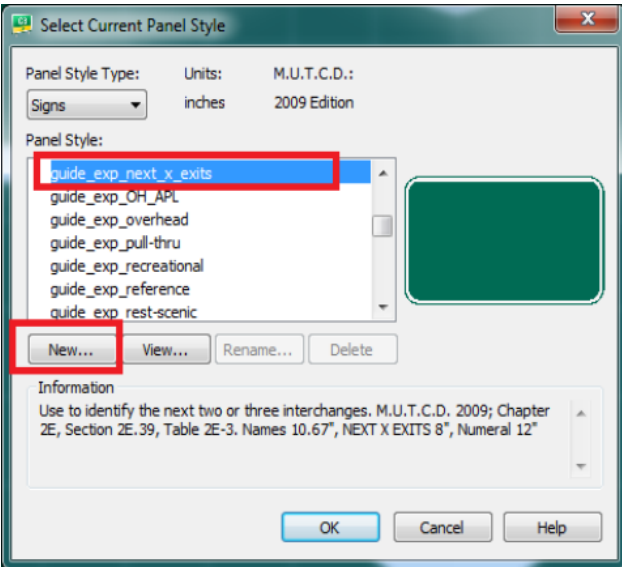
The only workaround at this time is to drop the complex status of the report and to edit the text using MicroStation text tools.

SIGN NUMBFR	name				
WIDTH x HGHT.	16'-6" x 5'-6"				
BORDER WIDTH	2"				
CORNER RADIUS	9"				
MOUNTING	Overhead				
BACKGROUND	TYPE: Reflective COLOR: Green				
LEGEND/BORDER	TYPE: High Intensity COLOR: White/White				
SYMBOL	ROT	X	Y	WID	HT

If you do change the report manually, that does not affect the Export Sign to Cutter, since that function is only using the panel itself, not the report or the sheet.

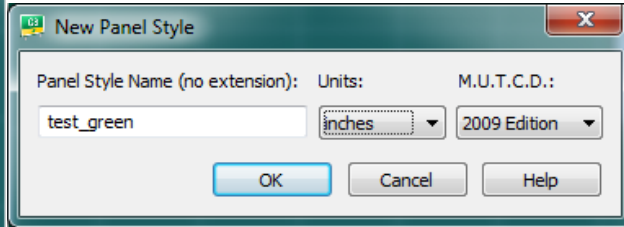
Creating 2 Color Panels using 2 separate panels.

1. Start GuideSIGN and click on **Panel Styles**. Select for example the following panel style: **guide_exp_next_x_exists**



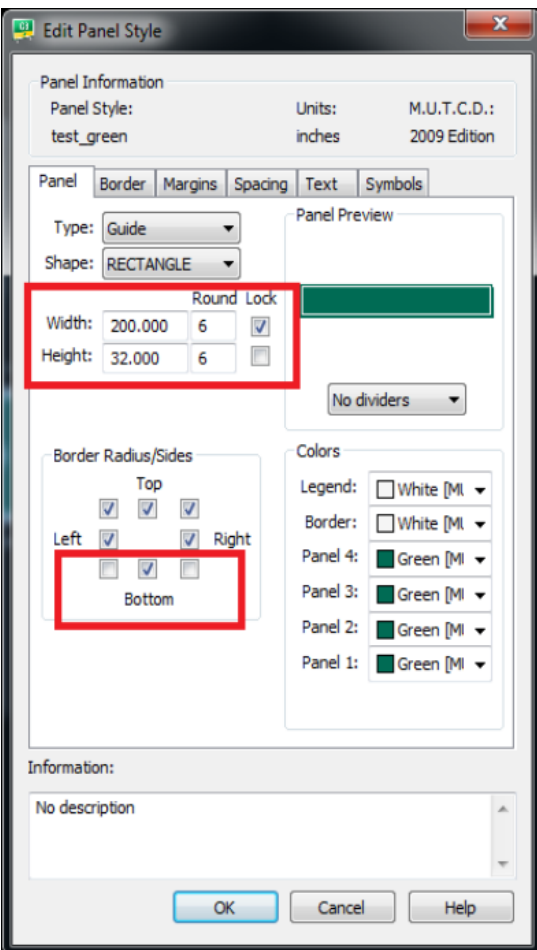
While you have that panel style selected, in the same dialog box click on the option **New**.

Enter the new panel style name, for example I have entered **test_green**:



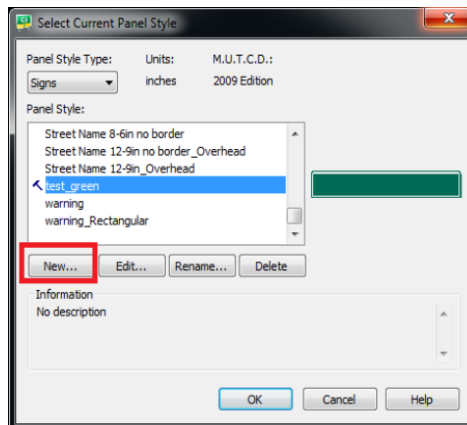
When you click ok, you will then be able to see the following dialog box in which please uncheck the corner checkboxes for the bottom side of the panel. That will cause that bottom side of the panel will have square corners and the top side will have rounded corners.

Also, you could adjust the width and height. For example I have selected in this case width to be 200 (and it is locked), and height is 32.



At this point you could go into the tabs options and adjust border, margins, spacing, etc, but for now I will leave everything as is, and just click on ok to create this new panel style.

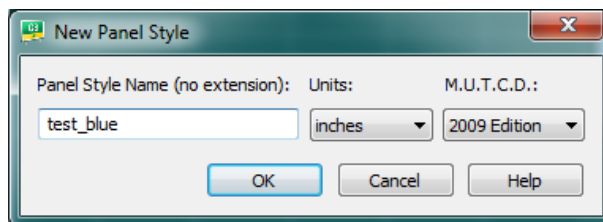
2. While you still have Select Current Panel Style dialog box open, if you have selected test_green, we will now create a blue portion of your panel. So when you select test_green, please click on **New**.



Enter the new panel style name to be for example **test_blue** and click ok:

When you click ok, you will then be able to see the following dialog box in which please uncheck all three checkboxes for the top side of the panel. That will cause that top side of the panel will have square corners and no border. Also, for the Panel 1, please change the color to be blue.

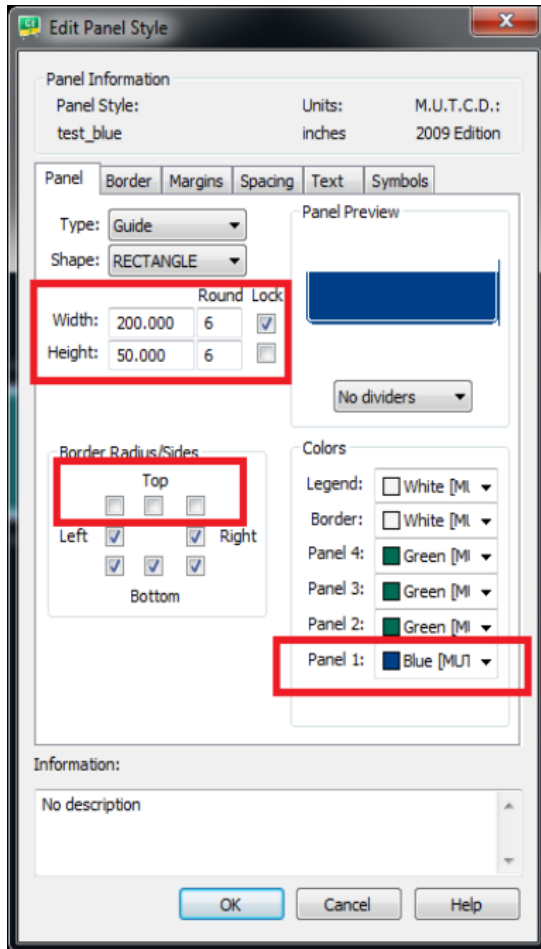
Click ok to save the change.



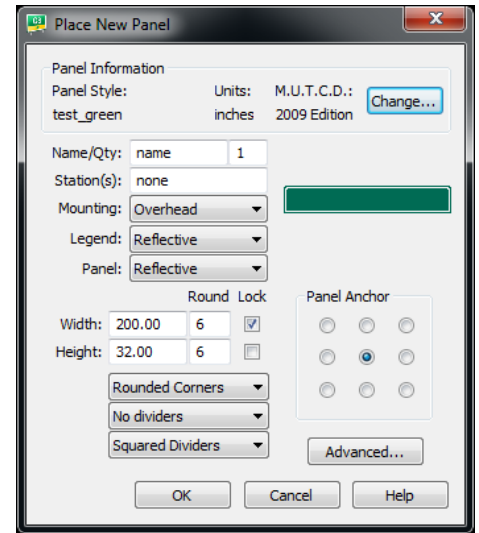
And adjust the Width and Height accordingly (in this case I have locked the width to be the same as the green panel, and made width to be 50).

The only other thing that I have changed was on the Symbols tab, I have adjusted Symbol Height to be 2x max text height.

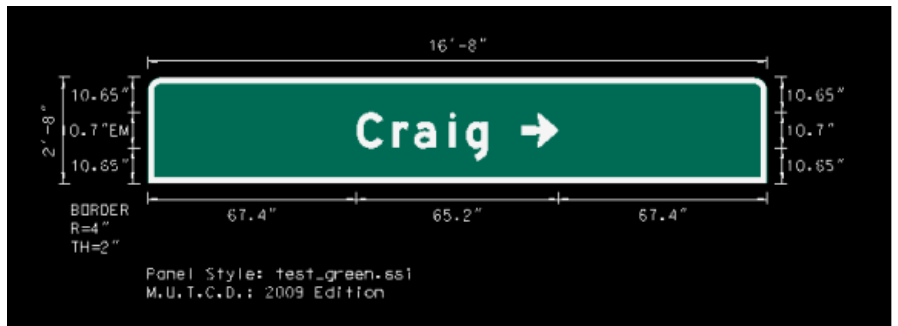
(Again, if need be, at this point you can adjust settings for borders, margins, etc, but for now I am not going to go into those settings.)



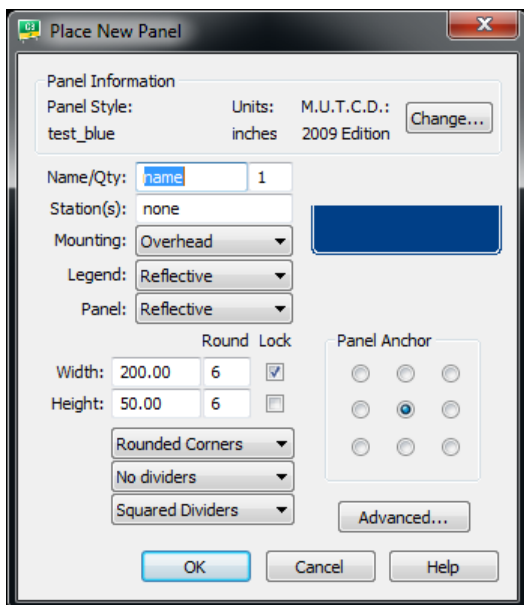
3. Next, you can select for example **test_green**, and click on **Place New Panel** and in the dialog box that will be displayed you could further adjust Width and Height if need be. I have left it as-is:



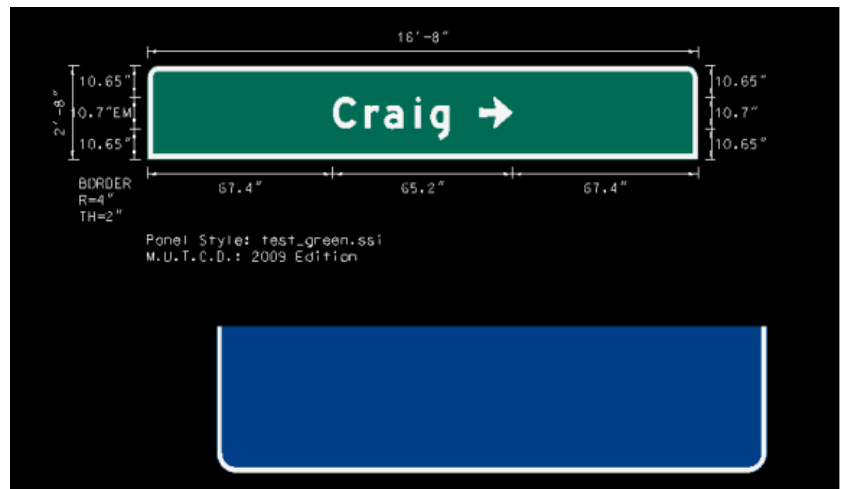
4. After that when you click ok and when panel is placed, you can place the text and the arrow, and will see for example this:



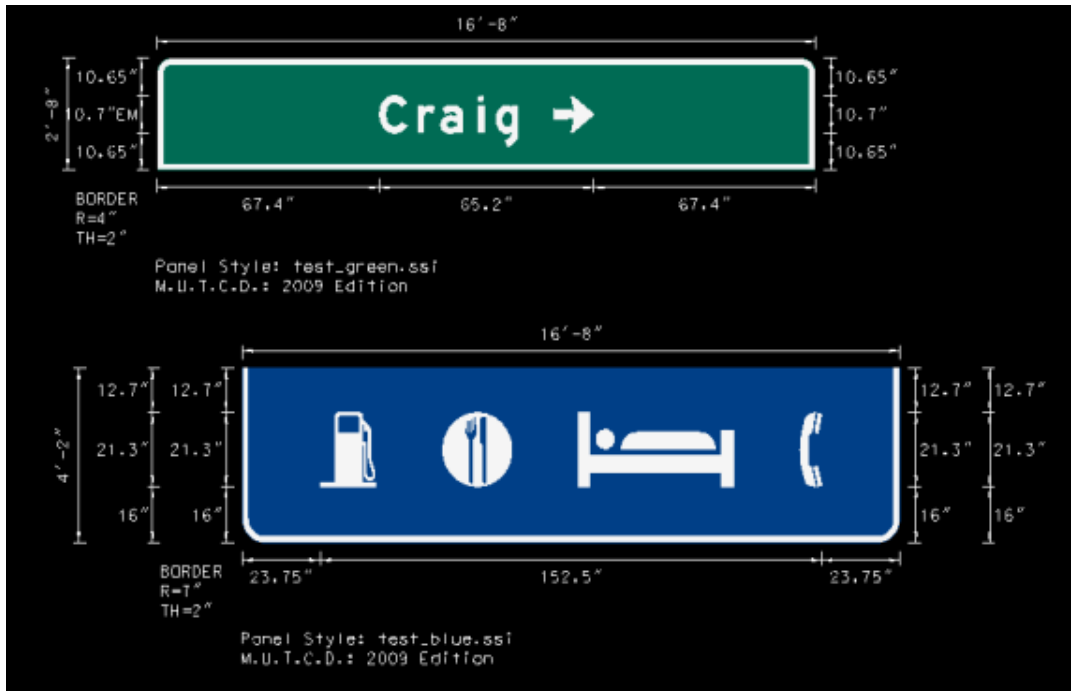
5. Next, please go to Panel Styles and select **test_blue**, click ok, and then click on **Place New Panel** and again if need be adjust the Width and Height. I did not change anything and this is what I got:



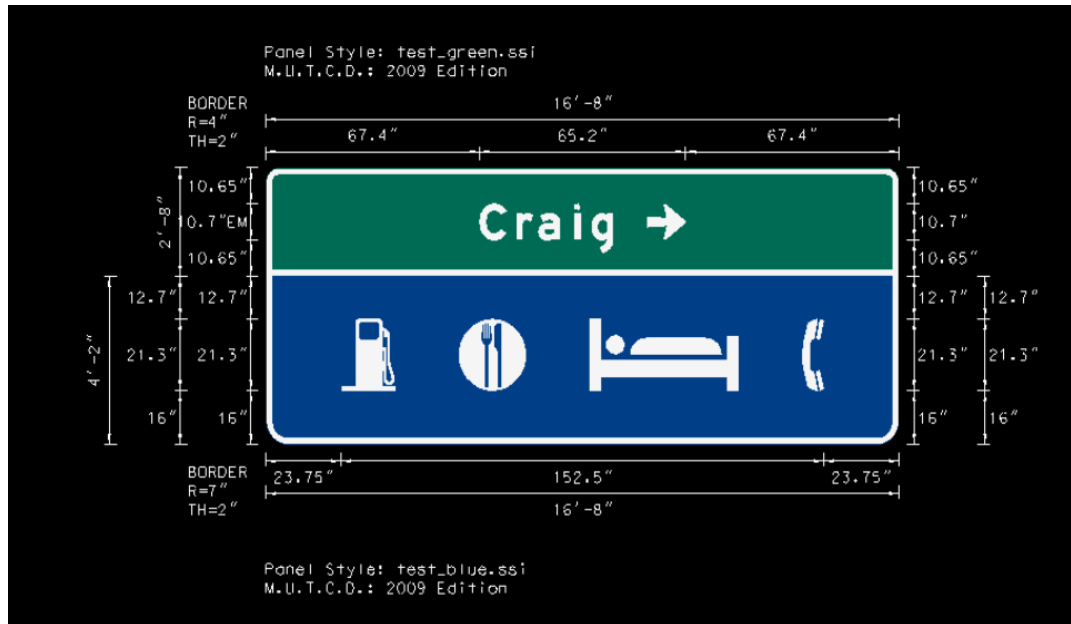
When you click ok, place that panel anywhere in the drawing, since we will place all the symbols first, and then we will move it at the end to snap to the green panel. For example, for now I have placed it like this:



6. Then you can use Place Symbol and place desired symbols in the blue panel. For example after placing a few I had this:



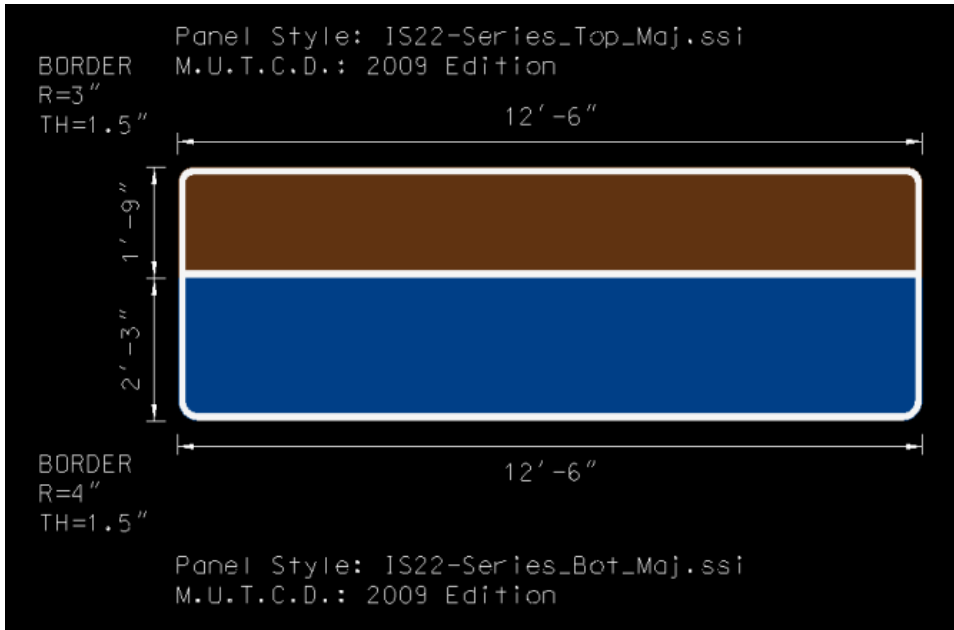
7. After that, if you click on Move Single Object and click on the blue panel, then as you move your mouse pointer closer to the green panel, you will see that blue panel will snap into place, and when you left click you will have something like this:



You will then be able to place a drawing sheet and a report.

How Border Radius is Calculated

If I select any of your custom panel styles, click on Edit and go to Border tab I see the following settings:

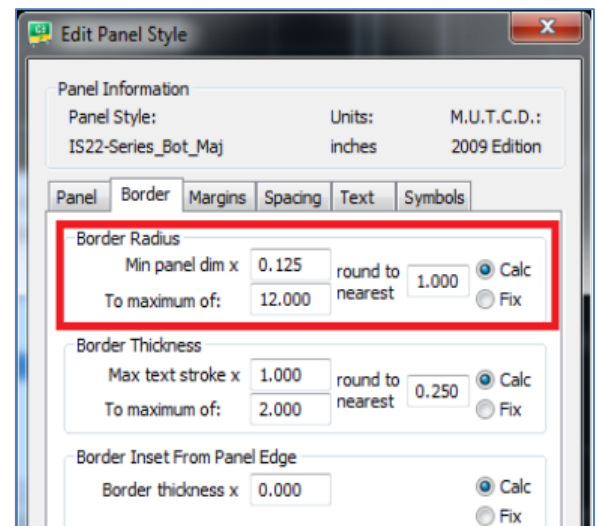


In your drawing you have placed brown and blue panels and here is the simplified display:

So, if we start with the brown panel, that panel has width of 12'-6" and height of 1'-9". If you look at the top screen cap it is saying that "Min panel dimension" should be multiplied with 0.125 and the result will be rounded to the nearest 1.000.

So in brown panel case, height is the smaller value and that means that 1'-9" will be converted to inches (21") and then that value will be multiplied with 0.125 which will give you $21 \times 0.125 = 2.625$, and then that value will be rounded to the nearest round number which is 3".

As for the blue panel, width is 12'-6", and height is 2'-3". In this case again, height is the smaller number so 2'-3" is converted to inches and you will get 27", then multiply that with 0.125 and you will get 3.375, and then round it to the nearest full number which is 4".



Miscellaneous Notes:

Please note that symbols in GuideSIGN are by default black and white, and that is hardcoded.

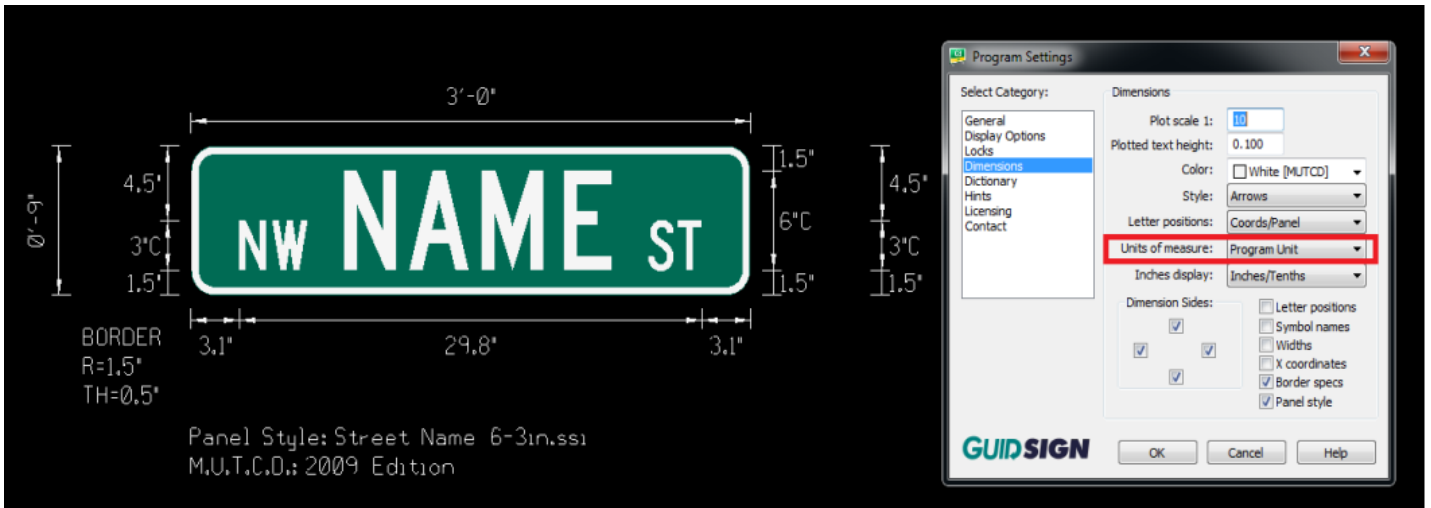
If you need to have a symbol that is using a different color, please note that you would need to put it in the route shield library, and place it as a route shield.

At this time GuideSIGN only displays 1 decimal place by default, and since that is hardcoded there is no option to change that setting at the moment.

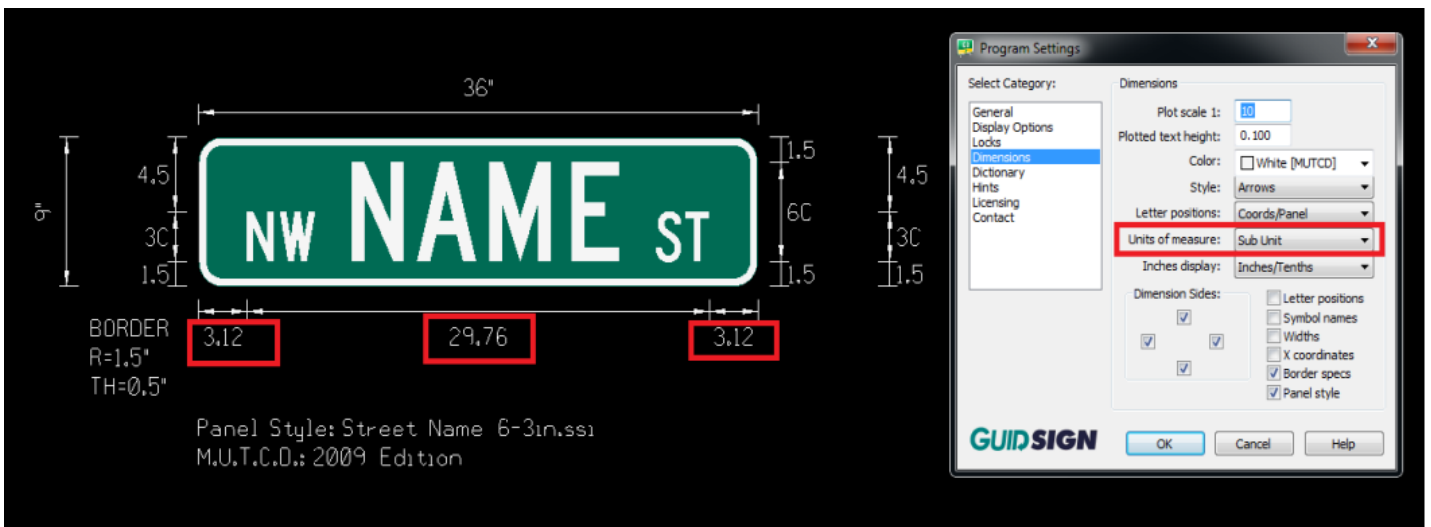
One option that you could use right now is this.

If you click on Program Settings -> Dimensions at the moment (based on your screen cap) you have selected Units of Measure to be Program Unit.

For example on my end I have placed a sign and dimensioned it using that same setting and I see this:



If in Program Settings -> Dimensions I then change Units of Measure to be Sub Unit, and I then click on Place Dimensions again, then as you can see my sign is dimensioned in inches in this case and I can see 2 decimal places.



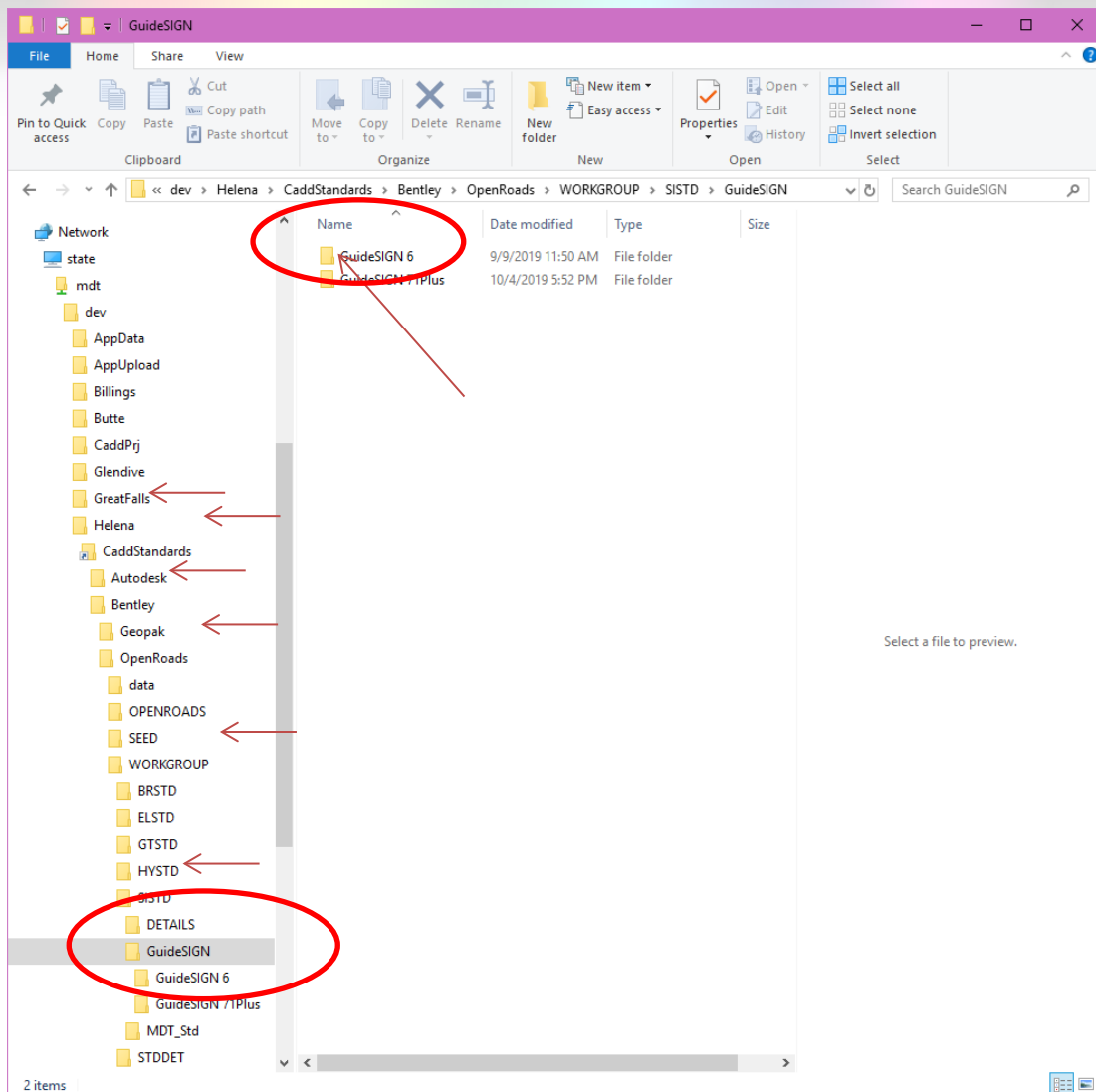
Changing order of display (bringing an object forward or back)

When you have a guide sign for example with the text that is showing behind the sign and you want to bring it forward from the panel:

1. Select the text that needs to be highlighted
2. Open Key-in Browser (help, key-in browser)
3. Type in: WSET ADD
4. Press enter key
5. Select desired text again
6. Type in WSET DROP

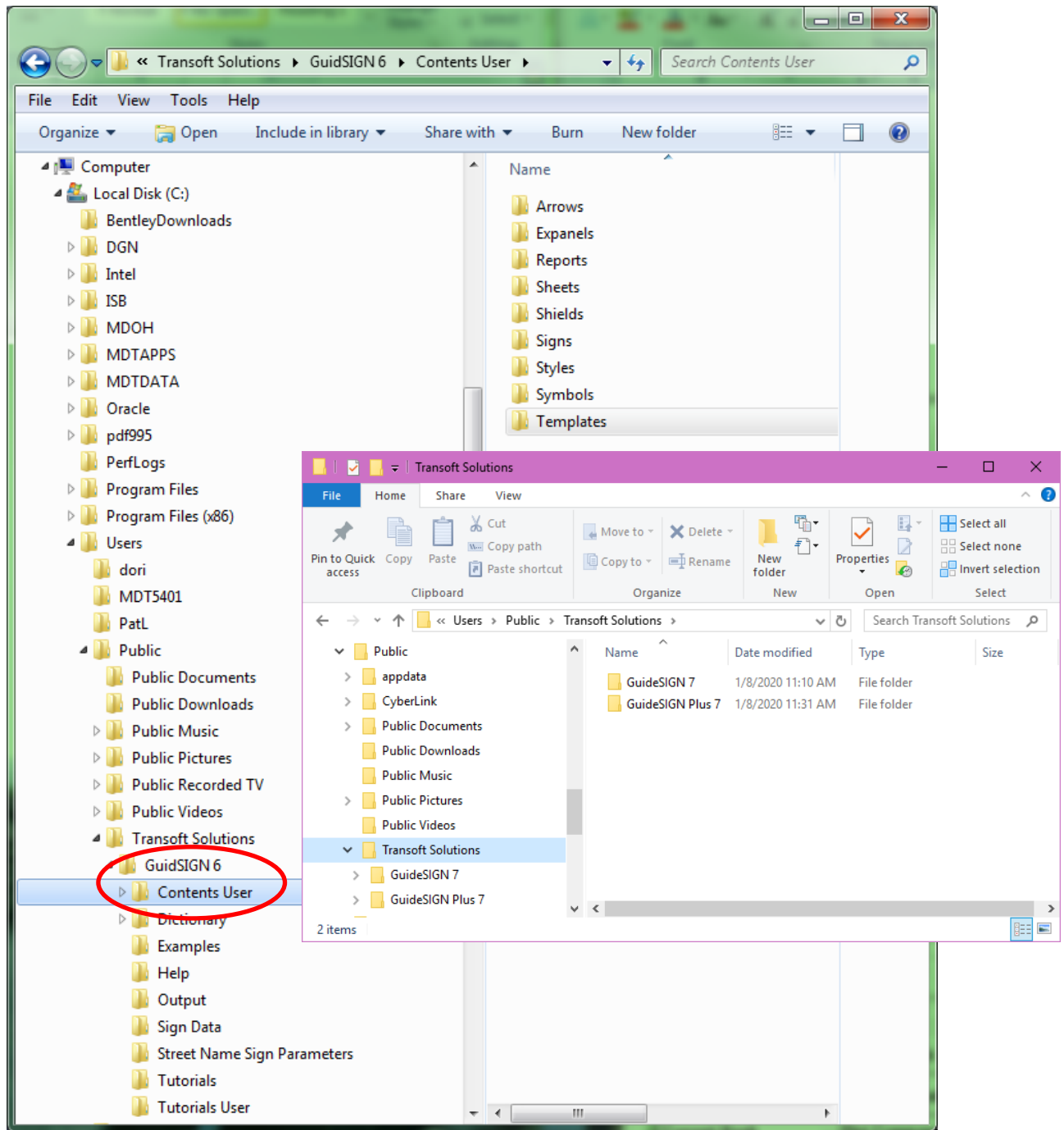
UPDATING GuideSIGN “CONTENTS USER” ARROWS, PANELS, TEMPLATES, REPORTS, SYMBOLS, etc.

The “Contents User” Folder is located on the Main Server under
\Common\GuideSIGN\ GuideSIGN 6 or GuideSIGN Plus 7



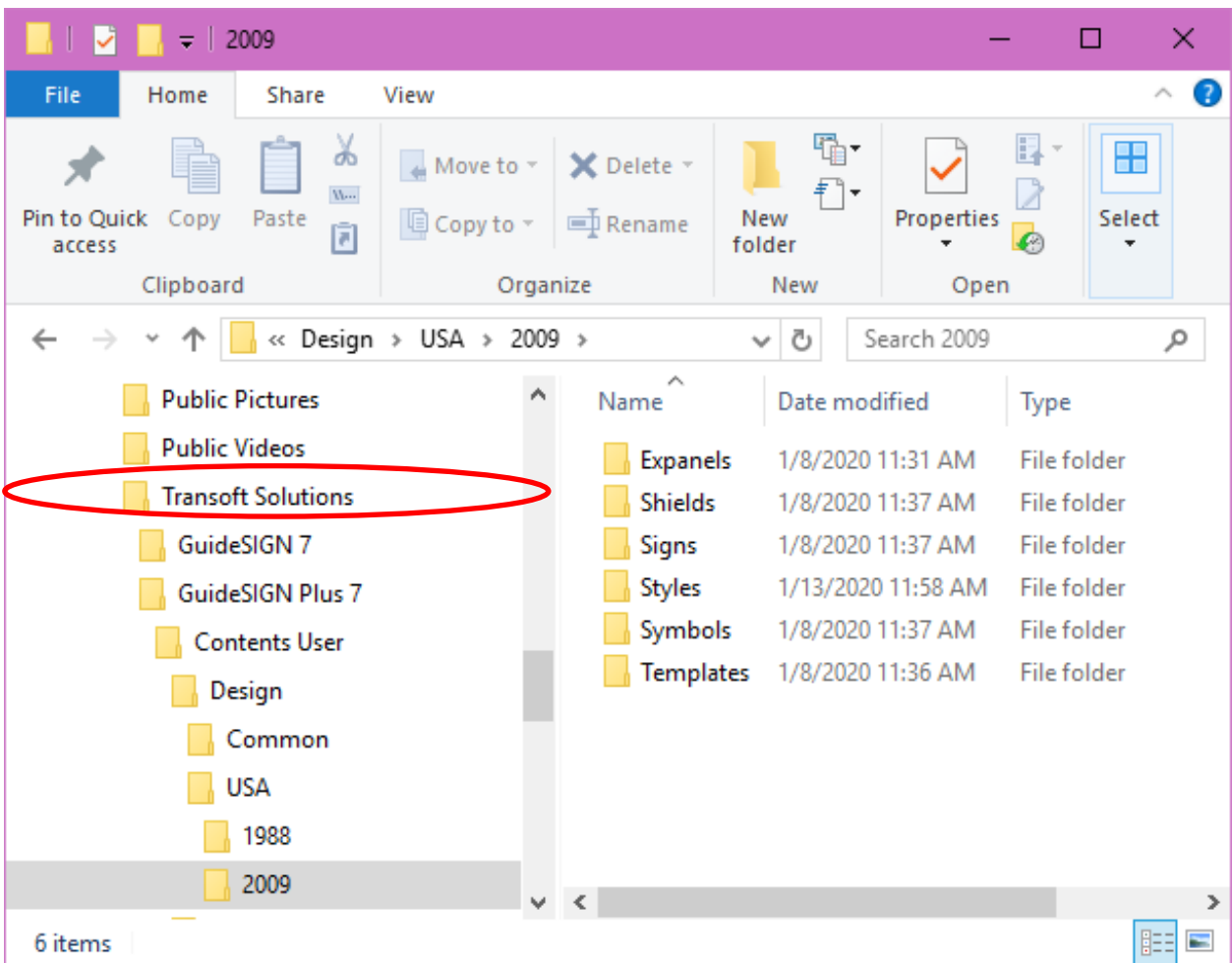
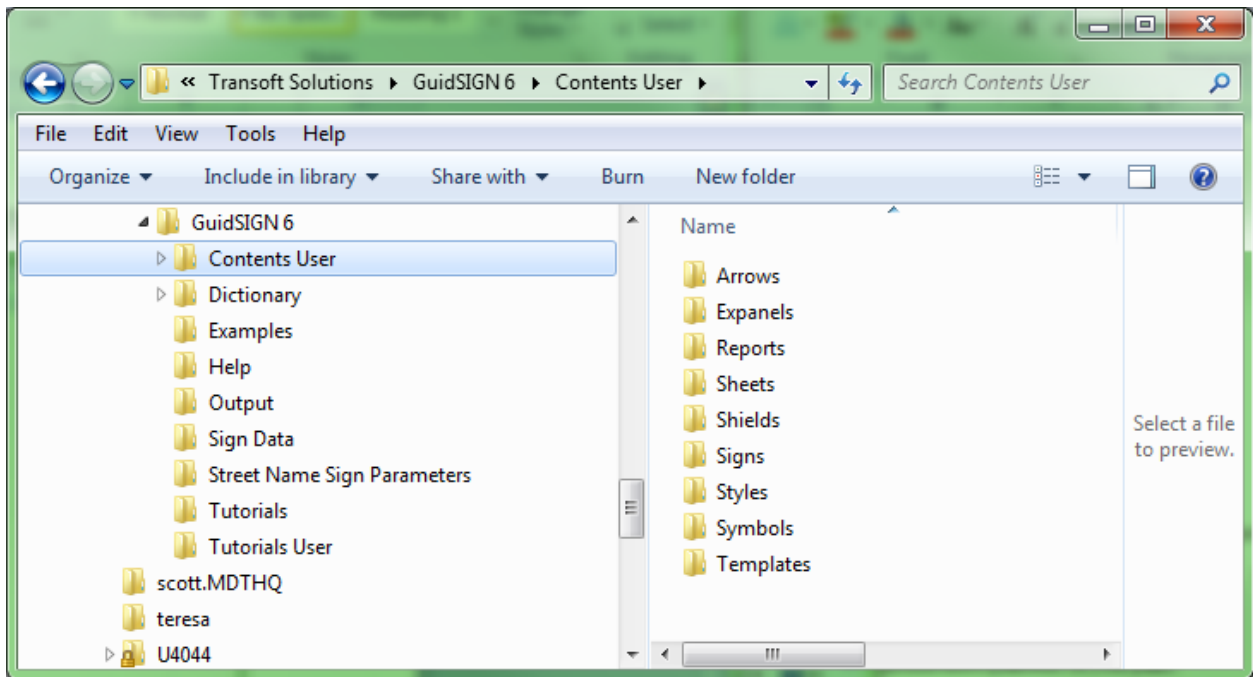
**Copy the “Contents User” folder
(Right Click on the folder, click “Copy” or “Ctrl-C” for copy)
from \Common\GuideSIGN\ GuideSIGN 6 or GuideSIGN Plus 7**

**NEXT STEP to Your Personal Harddrive:
The “Contents User” Folder on your hard drive is located under
C:\Users\Public\Transsoft Solutions\GuideSIGN 6, 7 or Plus 7**



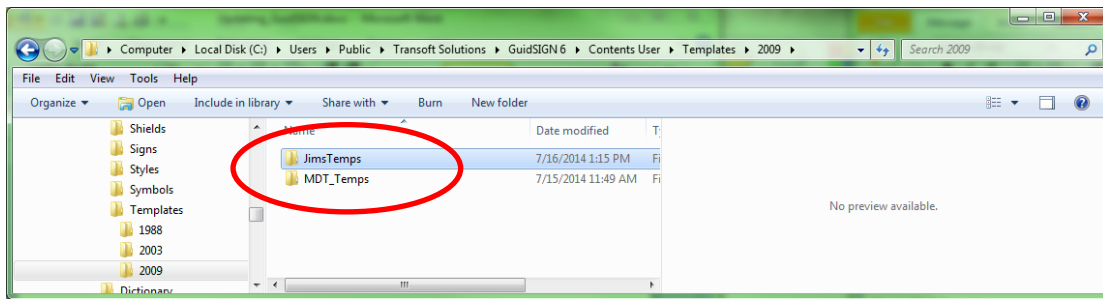
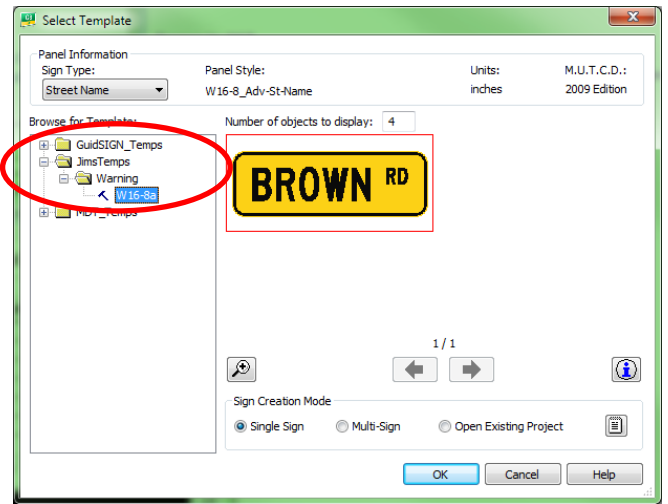
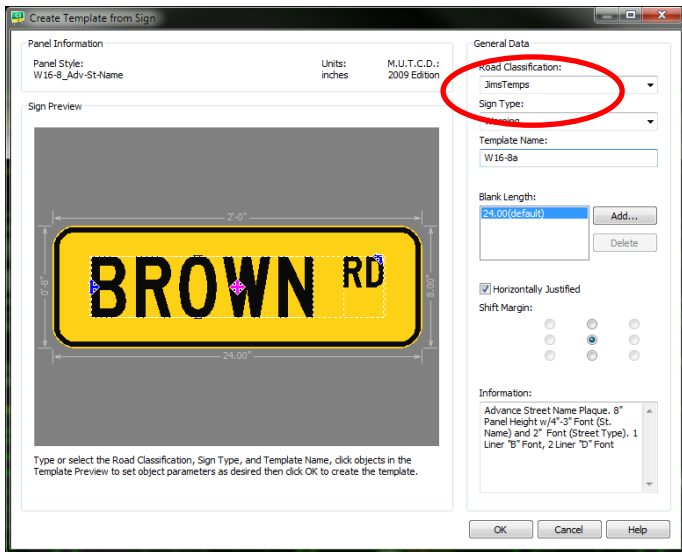
**Paste the “Contents User” folder
(Right Click on the space in the folder, click “Paste” or “Ctrl-V” for paste)
to C:\Users\Public\Transsoft Solutions\GuideSIGN 6, 7 or Plus 7**

The GuideSIGN folder contains the different Models used for the GuideSIGN program.



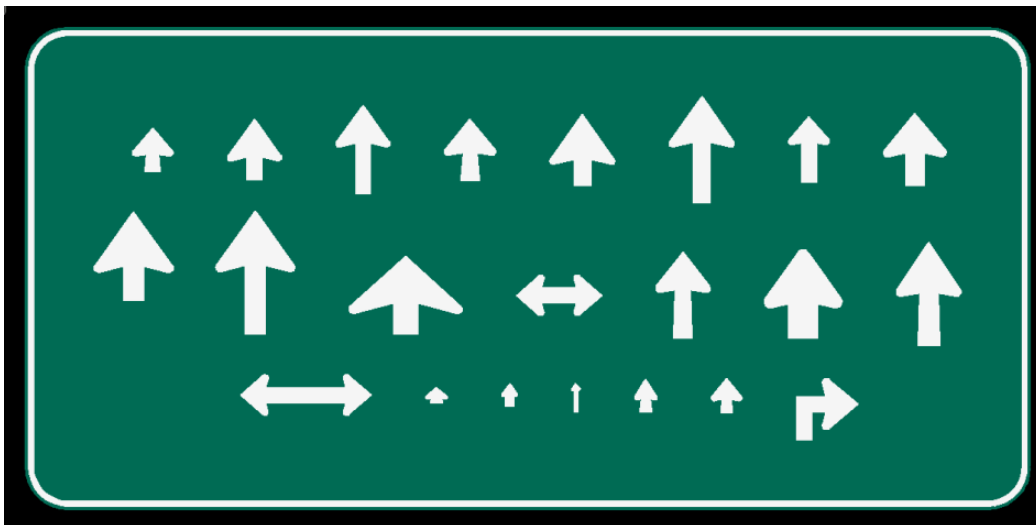
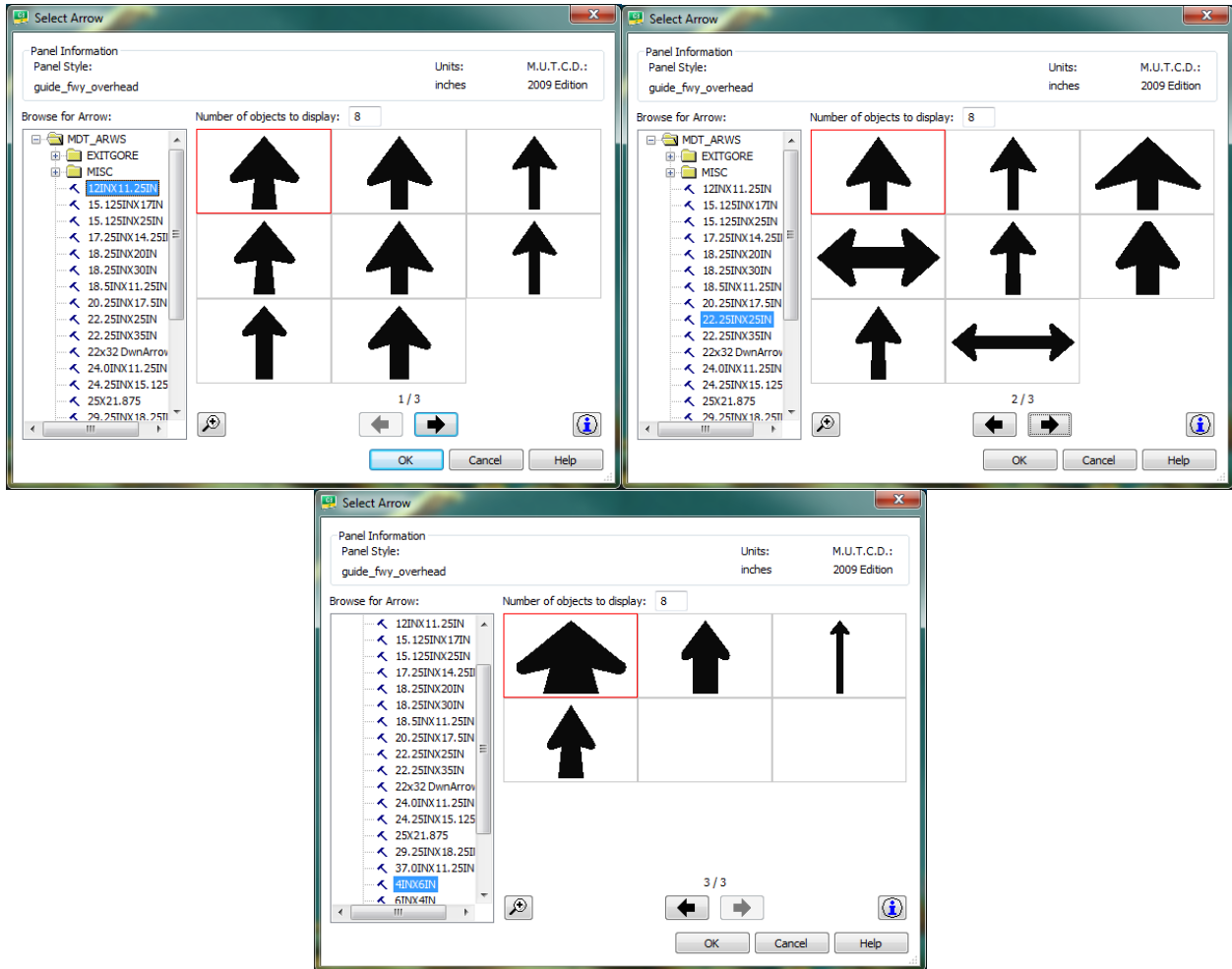
If you are making your own templates, symbols, arrows, etc., name your folders under a personal name (Jim, Personal, Mine, etc.). This is so your personal files don't get replaced when pasting, updating the "Contents User" Folder to your hard drive.

(See Sample Below saved *as JimsTemps*)



GuideSIGN Arrows, Shields & Symbols

ARROWS

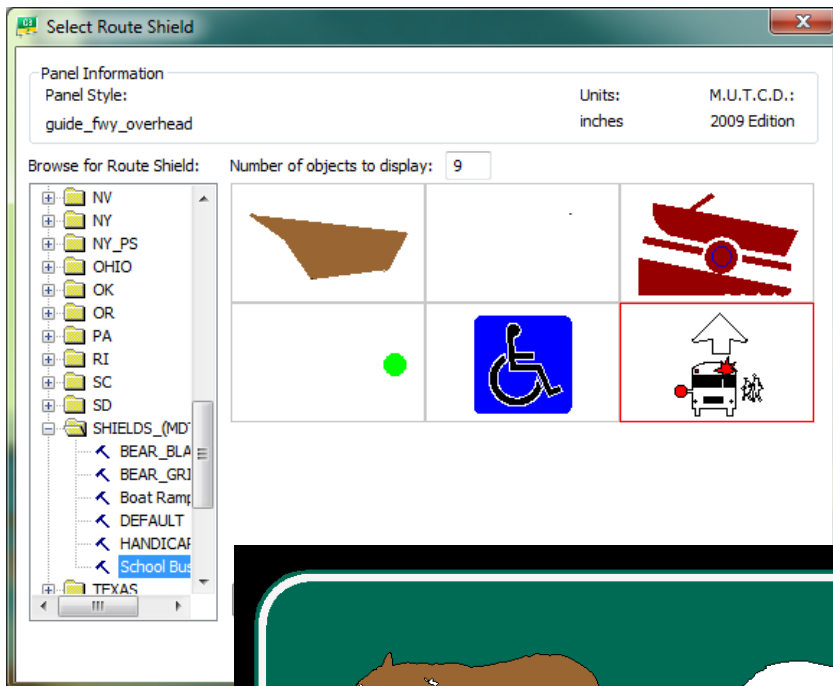


*ARROW NOTES:

Displays not showing correctly are from too much detail, not enough pixel resolution, or a GS default.

Arrows use only Black & White display for GSBWFILL & GSCOLORFILL.

SHEILDS

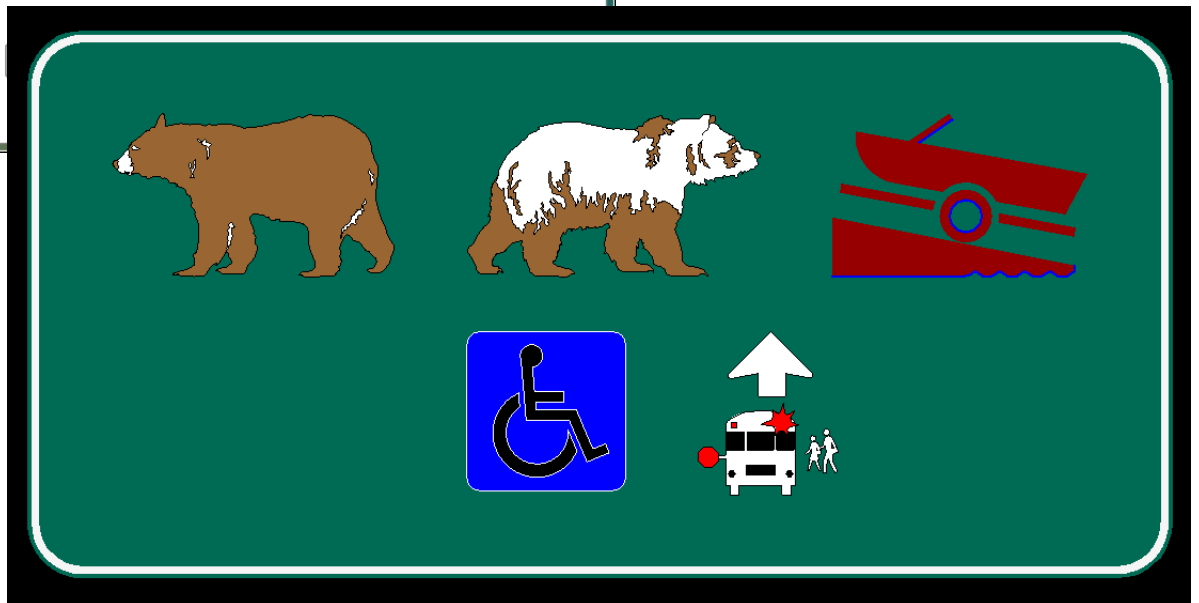


*SHEILDS NOTES:

Displays not showing correctly are from too much detail for the pixel resolution.

When making **Shields**, use Line Weight 1 for GSOUTLINE and Line Weight 0 for Fills in GSBWFILL & GSCOLORFILL. This works best for displaying in Placement Frames and in Sign Design Calc Sheets.

Shields use GSBWFILL & GSCOLORFILL.



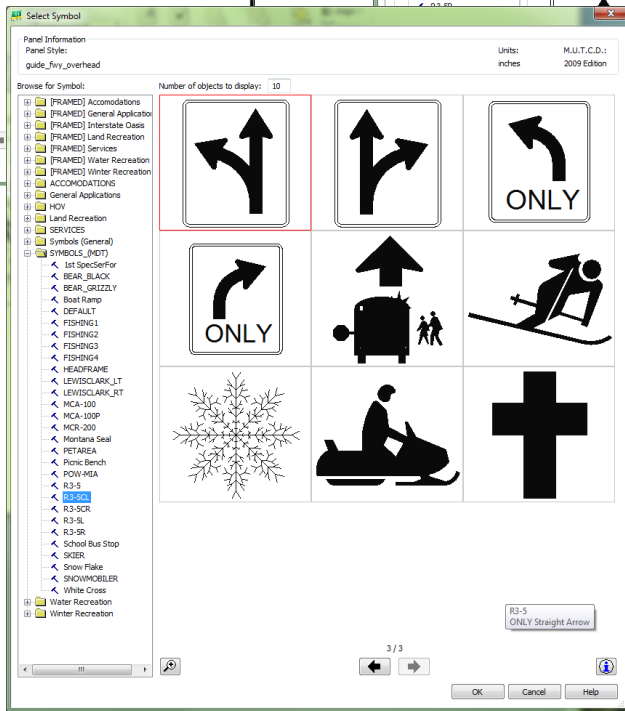
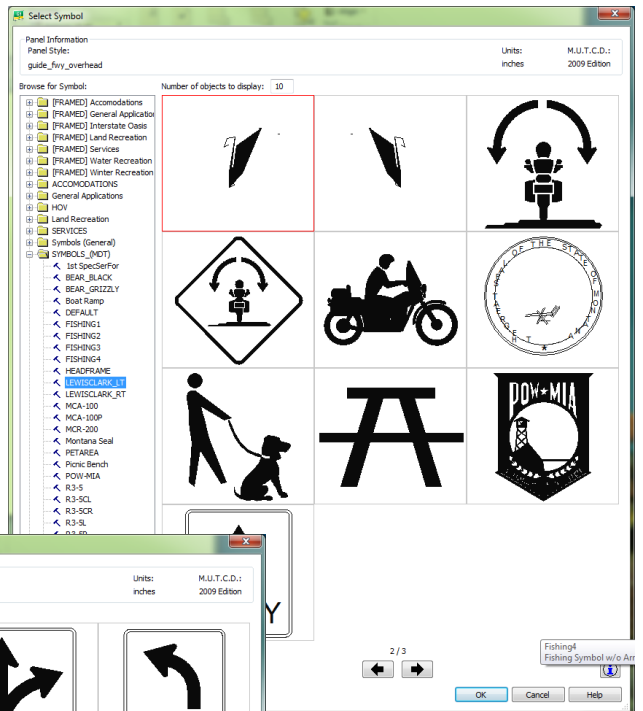
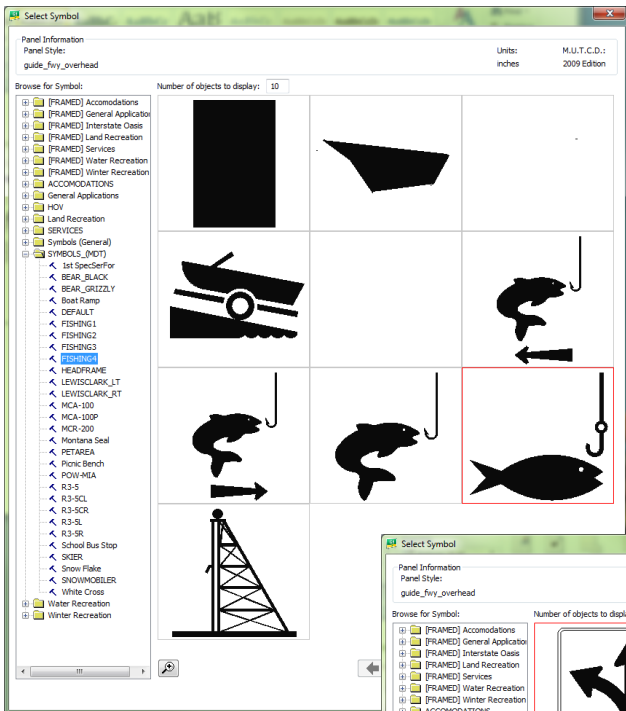
*SYMBOL NOTES:

Displays not showing correctly are from too much detail for the pixel resolution.

When making **Symbols**, use Line Weight 1 for GSOUTLINE and Line Weight 0 for Fills in GSBWFILL & GSCOLORFILL. This works best for displaying in Placement Frames and in Sign Design Calc Sheets.

Symbols use only Black & White display, although sometimes the coloring will appear in the GSBWFILL. Don't know the cause of this yet.

SYMBOLS



Aligning Text in a Diamond Shape Warning Sign Designs

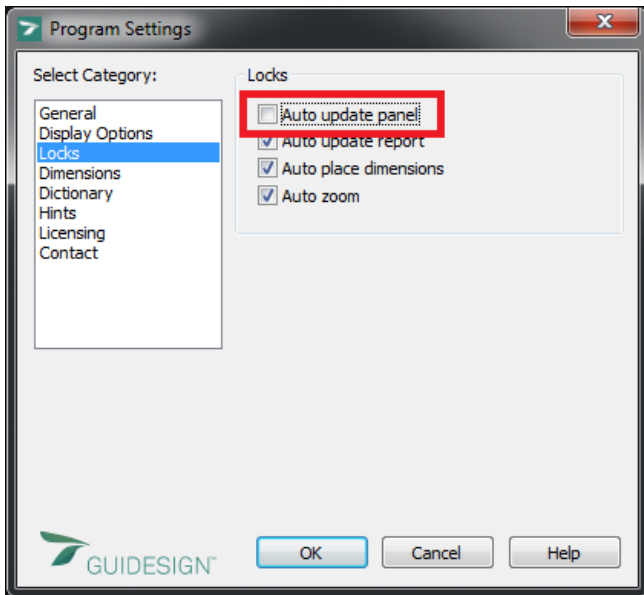
Ben Kowalyk (Transoft Solutions)

Dec 19, 13:29 PST

Hello,

I checked with one of our Designers and he said the issue is likely because the Update Panel Lock is on, which will center objects in the panel to obey margin specifications in the Panel Style.

So, start by turning that off in Program Settings -> Locks

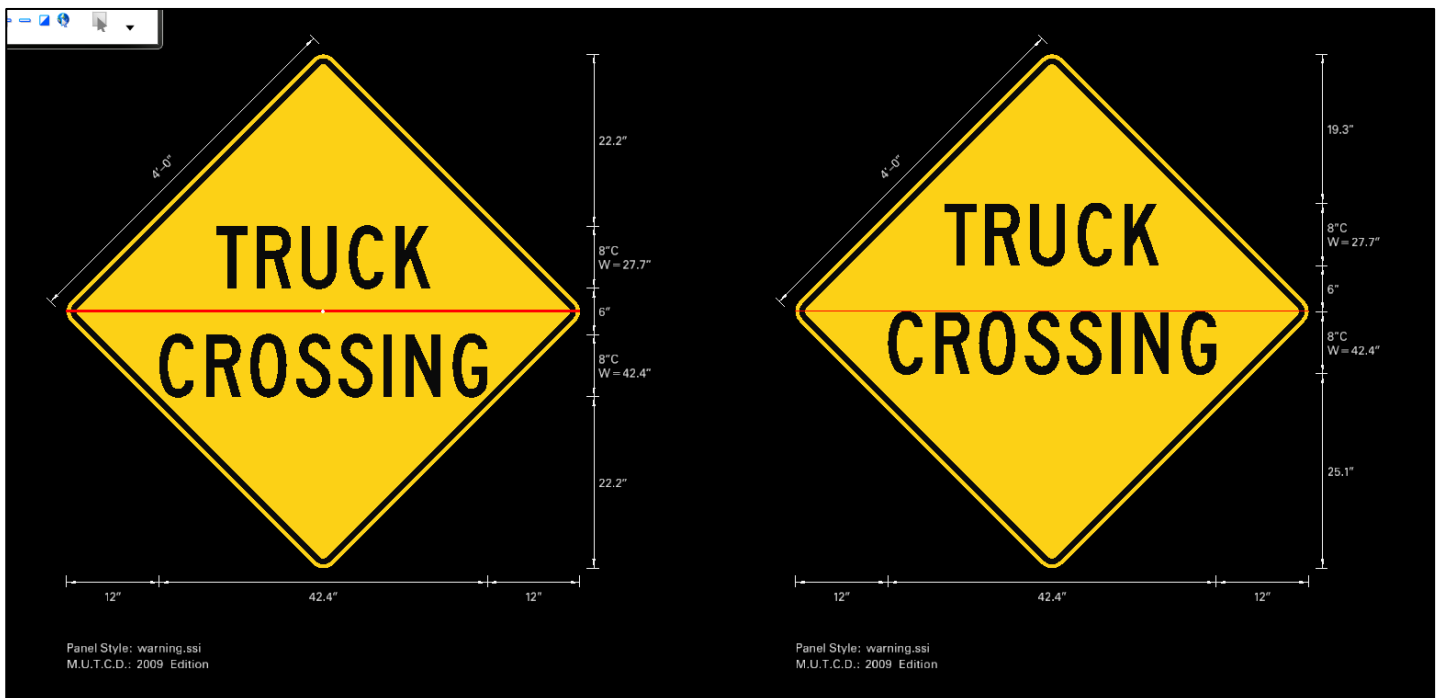


From there, use Place Highway Text, snap "to margins", using the manual spacing options, to place the CROSSING text. If further positional fine-tuning is required he should use Move Single Object with the same settings. After the first object is placed the TRUCK text string can be placed using snap "to objects" (using the initial text as reference, fine-tuned using the manual spacing options if need be).

Avoid using the Update Existing Panel command as well or GuideSIGN will move the objects around again in an

attempt to obey the margin specifications.

"Update Existing Panel" will center text automatically.



Sign Design Calculation Sheet Naming Convention

To all Traffic Signing Staff

1/28/2020

If working with both Legacy Files and Enhanced Files when creating any new Sign Design Calc sheets for any project, use this new naming convention or something similar .

For Legacy Files, use the ####000SISDCI01.dgn (using the L for Legacy) or (.L01)

For Enhanced Files, use the ####000SISDCe01.dgn (using the E for Enhanced) or (.E01)

We have found that when opening a file created in one format, then opening it in another will collapse the file as the seed file is changed from one format to another. In the new naming format, you'll know which format to open the file, so you won't corrupt that file.

Try creating all new Sign Design Calc sheets in the Enhanced format as the Legacy will eventually be phased out. This will also keep any future files made to work with the new software's coming out. Hopefully we can keep some of the corruption of files from occurring.

Please refer this to any contractors that may also be creating their files, so we know what format to open them in to keep the corruption minimal.

Thanks

Roger Schroeder

NOTE:

If you are working with only Enhanced file at some point, there is no need to use the naming format as all Calculations will be in the Enhanced format.

GuideSIGN FAQs

For further information or troubleshooting, go to:

<https://helpdesk.transoftsolutions.com/hc/en-us/categories/202633888-Frequently-Asked-Questions-FAQ-#207214427>