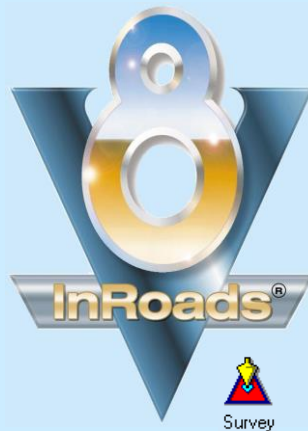


# Welcome to the InRoads® SURVEY v8i Basics Class



by Mark S. Ditko



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Page 1-1  
27 Oct 11



## Introduction - Objectives

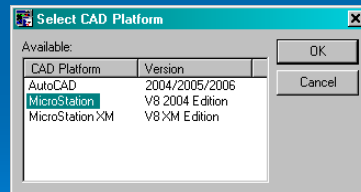
- Starting InRoads Survey
- The InRoads Survey interface
- Accessing the Tools and commands
- Survey Options
- Project Defaults
- A bit about user preferences
- Exiting the software

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Page 1-2  
27 Oct 11

# Before Starting InRoads

- Start In-Survey by double-clicking on Survey shortcut
- But first ...select the CAD Platform
  - ⤴ If more than one is installed
- Once the CAD platform is locked in, that's which one launches when Survey is started



# Starting In-Survey

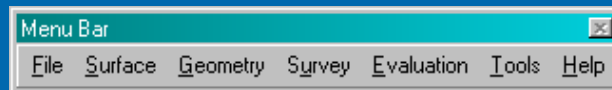
- Start In-Survey directly by either:
  - ⤴ Double-clicking on the Survey shortcut icon on the Desktop, or
  - ⤴ Going to *Start > Programs > Bentley > InRoads Survey*
- This will load the Defaulted CAD package as well as Survey
- Or, start MicroStation / AutoCAD by double-clicking on the CAD shortcut then ...



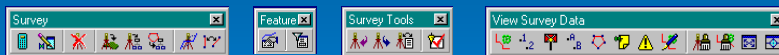
Survey

# Commands

- Commands for Survey can either be selected from the Main menu



- ... or the Toolbars.



## Survey Main Menu

- All of the Survey functionality can be accessed by from the **Main Menu** under each category

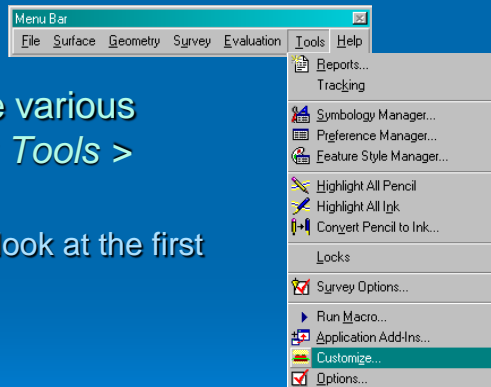
or by...



# Accessing the Functionality

## Toolbars

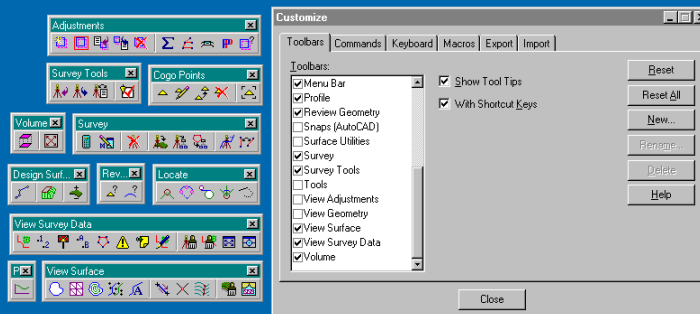
- Pulling out the various toolbars under *Tools > Customize*
  - Go there and look at the first tab...



# Accessing the Functionality

## Toolbars

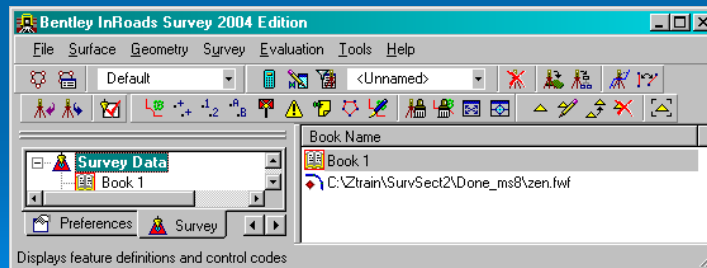
- Toggle on the Toolbars that contain frequently accessed tools



# Accessing the Functionality

## Docking

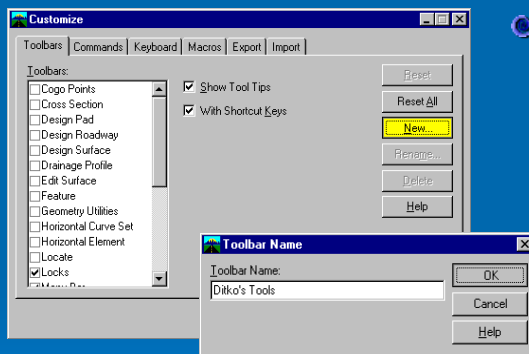
- The first time toolbars are toggled on they embed themselves into the In-Survey interface
- Reposition the toolbars where you want them



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Page 1-11  
27 Oct 11

# Customized Toolbars



- Create your own Custom Toolbars
  - Tools>Customize;
  - Toolbar Tab
  - Select New...
  - Key-in the *Toolbar Name*
  - Find the empty Toolbar
  - And then...

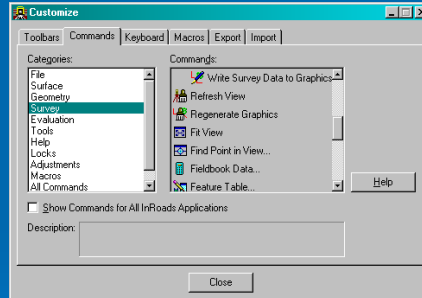


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Page 1-12  
27 Oct 11

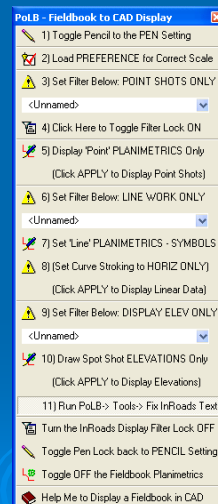
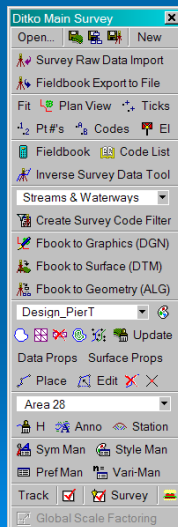
# Customized Tool Palettes

- Go to the *Commands* Tab;
- Select a *Category*;
- Drag and Drop a command into the new Toolbar.
- Build your Toolbar with the commands that you need.

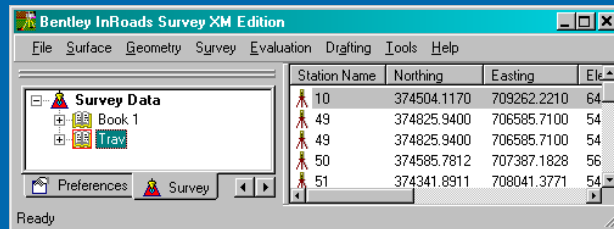


# Customized Tool Palettes

- Create any toolbars that you like.
- Export as a **.TBR** file
- Import **.TBR** files created by others
- Open & Close them when needed.
- Resize & dock them just like other toolbars



# The In-Survey Interface



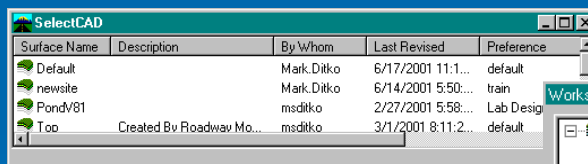
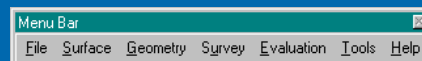
## 3 Parts of the InRoads Survey Interface:

- **Main Menu Bar** - Dropdown menus
- **Workspace Bar** - InRoads Project Data Explorer
- **Feedback Pane** - Presents Project Details

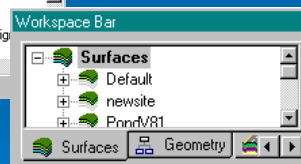
# The In-Survey Interface

## The Civil menu really does have 3 parts to it.

- The **Main Menu Bar**
- The **Feedback Pane**

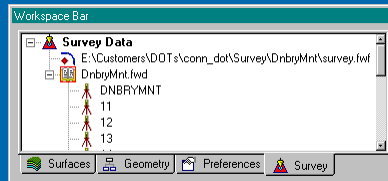


- The **Workspace Bar**



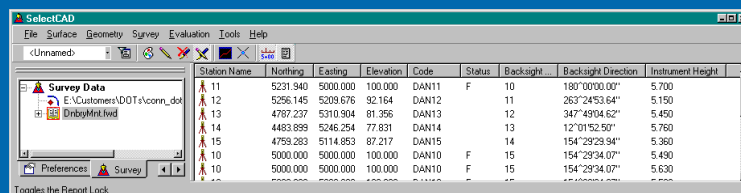
## Normally these are attached but they don't have to be

# The Workspace Bar

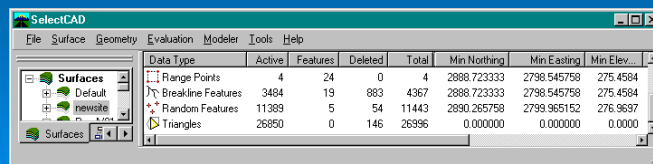


- The *Workspace Bar* allows you to explore the various types of project data that is loaded
- Selecting a particular data type on the *Workspace Bar* shows you what information is currently loaded into memory
  - This is your 'window' into what data is opened

# The Feedback Pane

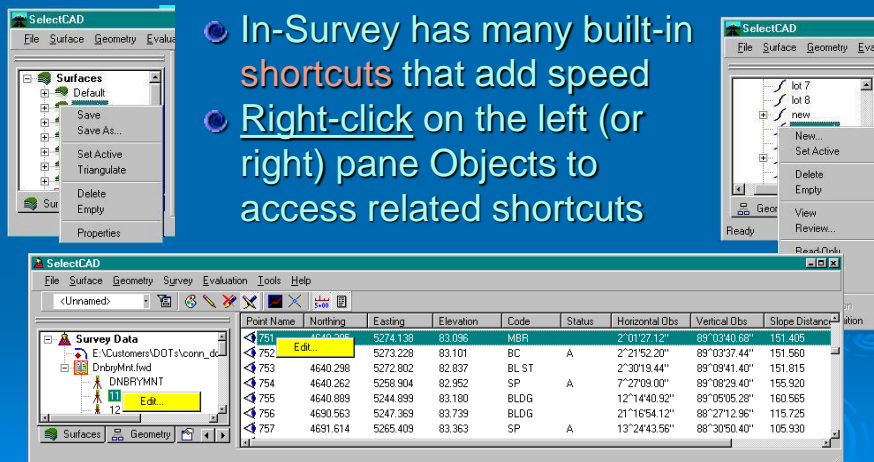


- Select left pane objects to view right pane details
- 'Explore' this viewing capability further as data is loaded & created throughout the class





# Command Shortcuts



- In-Survey has many built-in **shortcuts** that add speed
- Right-click on the left (or right) pane Objects to access related shortcuts

Point Name	Nothing	Easting	Elevation	Code	Status	Horizontal Obs	Vertical Obs	Slope Distance
P51		5274.138	83.056	MBR		2°10'27.12"	89°03'40.68"	151.406
752		5273.228	83.101	BC	A	2°21'52.20"	89°03'37.44"	151.560
753		5272.902	82.837	BL ST	A	2°30'19.44"	89°09'41.40"	151.815
754		4640.262	5256.904	SP		7°27'09.00"	89°09'29.40"	155.920
755		4640.989	5244.899	BLDG		12°14'40.32"	89°05'05.29"	160.565
756		4690.563	5247.369	BLDG		21°16'54.12"	88°27'12.96"	115.725
757		4691.614	5265.409	SP	A	13°24'43.56"	88°30'50.40"	105.930

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Page 1-19  
27 Oct 11

## General Survey V8 Software Note

- 'Survey' has it's own controls for setup *Options* & *View* display (similar to how it existed previously in Fieldworks)
- In-Survey has evolved to include key InRoads functionality useful to a Survey department
- The 'InRoads' functionality uses different *Options* and display settings
  - Those familiar with earlier versions of Survey and Civil software (InRoads, Site, ... etc) will see the distinction between working with Survey vs InRoads functionality.

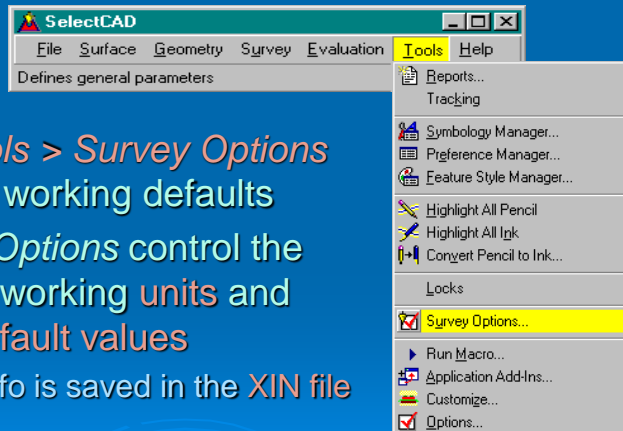
... stay tuned for more on this later

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Page 1-20  
27 Oct 11

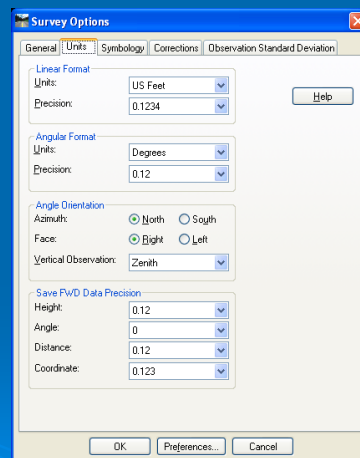
# User Defined Survey Settings

- The *Tools > Survey Options* sets the working defaults
- *Survey Options* control the display, working **units** and other **default values**
  - This info is saved in the **XIN file**

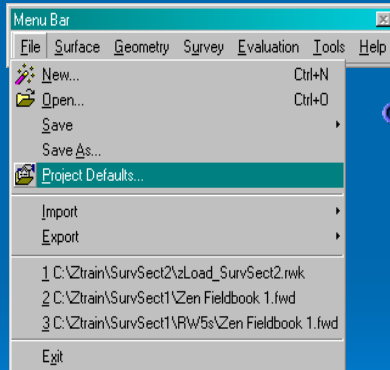


# Survey Units & Other Settings

- Units should be correctly set per job
- Survey Options also define:
  - Corrections
  - Certain Symbologies
  - Planimetric Scales & other general settings
  - Adjustment Criteria

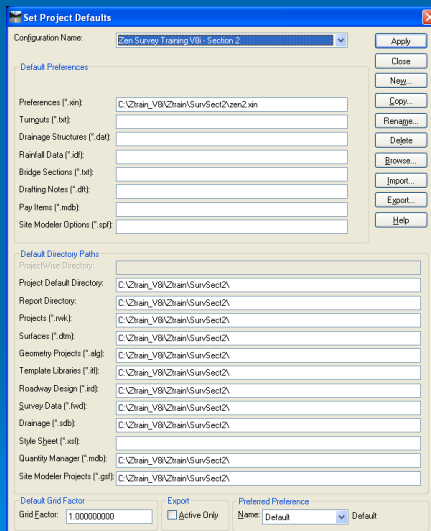


# In-Survey File Paths



- *In-Survey > File > Project Defaults...* configure the default paths that In-Survey will use.

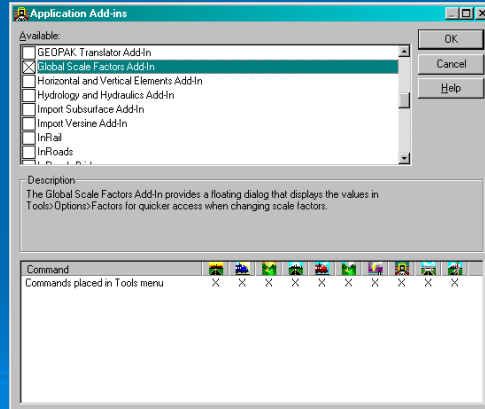
# Project Defaults



- *File > Project Defaults* establish 'project' specific files & paths
- Upper settings load physical files
- Lower setting lock in data paths only
- '**Close**' on a specific 'Config Name' will activate those settings.

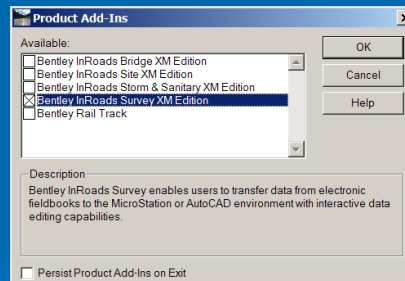
# Application Add-ins

- *Tools>Application Add-ins*
- Add-ins are special tools that may be available
- Explore and switch on anything useful

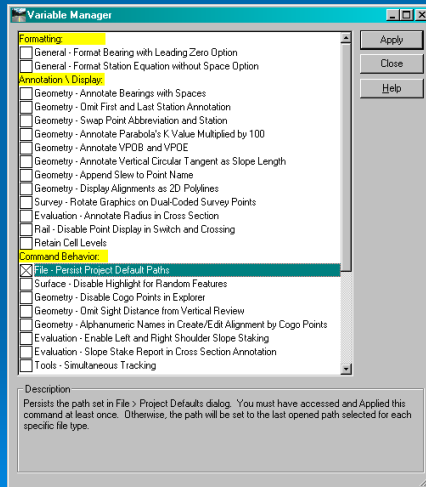


# Product Add-ins

- *Tools> Product Add-ins*
- Apps like Survey, S&S, ... etc, can act as Add-ins to the s/w currently running
- **Persist** option in the lower left corner

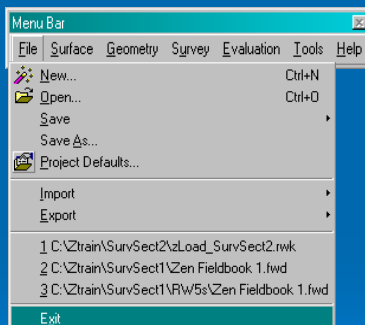


# Variable Manager



- This is a Special Application Add-in
- Variable Options
  - Formatting
  - Annotation \ Display
  - Command Behavior
  - Customer Specific
- Be aware of these new optional settings

# Exiting InRoads Survey



- Exit In-Survey just the way that you would in most other programs
- Exit Survey & stay in the CAD platform, or
- Exit both by closing out of the CAD platform

# Introduction - Summary

- Either **start In-Survey** directly, or start CAD and then load InRoads as an *Application*
- Get to the functionality of Survey by using either the **pull down menus**, or going to *In-Survey > Tools > Customize...* and the **provided tool palettes**, the many **shortcuts**, or by creating your own **Custom Toolbars**.
- **Left / Right** pane allows you to view & edit selected data
- **Survey Options** can set and store the setting for displays, units and other defaults for In-Survey
- Set up **Project Defaults** for Job1, 2, 3, ... etc
- **Exit** both the CAD package & Survey, or Survey only

## Lab 2.1 – Getting Started

- Start InRoads Survey
- Establish some default startup settings
- Create a Project Default 'project'
- Save those settings
- Exit InRoads Survey

- **Start on page 100**