# LAB 24 - Land Survey Control Diagram Plan Sheet

# Chapter Objectives:

• Import XML data into a MicroStation file

In this sheet, coordinate information will be input in a tabular format.

Return to the MicroStation manager dialog.

1. Select File > Close (if MicroStation is currently open).

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- 2. **<D>** the filename *12345SURV\_PlanLSCD##.dgn*
- 3. Select File > Save As from the MicroStation Manger dialog.
- 4. Key-in 12345SURV\_PlanLSCD3B.dgn

#### 5. **<D> Save**

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- 6. **Zoom/Window** into the upper-right corner of the sheet.
- 7. Edit the text as shown using Edit Text command.

Land Survey Control Diagram								
Plan Sheet								
Project Number: STA 086A-039								
Project Location: SH 86 CORRID	DR PE							
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	12345	09-25-09	3 of X.XX	3B	

8. Use the MicroStation Fit command to view the entire sheet.

In this sheet, place coordinate information representing a Project Coordinate Summary Table. This coordinate information will be extracted from InRoads using the reporting utility XML.

#### Using XML to report on Coordinates

Use InRoads and XML reporting to insert a Project Coordinate Summary Table. Report on points 100-120.

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	108	Quarter Section Corner	T_Quarter Sect	1555					
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- 9. If not already running and loaded:
  - Launch InRoads & Load the Geometry Project 12345\_ROW.alg from C:\Projects\12345\ROW\_Survey\InRoads\Geometry
- 10. Select **Tools > XML Reports** from the InRoads interface.

Horizontal Include: Selected:	Alignments	+	Cogo Point Include: Selected:	s 100-120	÷	Apply Close
Name	Description	Style	Name 100 102 103 104 105 106 107	Style T_Section Comer T_Quarter Section Co T_Quarter Section Co T_Quarter Section Co T_Section Comer T_Quarter Section Co T_Quarter Section Co		Filter Preferences. Help
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11. In the XML Reports dialog, **<D>** the Geometry folder and identify Cogo points **100-120** 

- 12. **<D> Apply**. The report browser will open to a default report style.
- 13. **<D>** the CDOT Folder.
- 14. **<D>** the **CDOT\_ListCoordinates.xsl** style sheet.

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Intersecting Alignment Stations		Cogo Points					
LegalDescription		POINT	NORTH (ft)	EAST (ft)	ELEV (ft)	DESCRIPTION	
UghtRailManufacturing		NAME	NORTH (II)	EAST (II)	ELEV (in)	DESCRIPTION	
MapCheck Obsolete		100	1558457.41	3269295.23	6654.37	Section Corner	
RoadwayDesign		0.00					
Schemas	-	102	1558430.90	3266629.98	6654.37	Quarter Section Corne	er .

15. Select File > Save As

16. Navigate to the 12345\ROW\_Survey\InRoads\Reports folder and input the file name 12345\_PCST01.xml

Save in:	Reports			• +	🗈 📸 🎫	
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Computer						
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	File name: Save as type:	12345_PCST XML File (*x			<b>•</b>	Save Cance

17. **<D> Save** to save the file.

### Excel in MicroStation

Tables can be created in MicroStation by linking information that is contained in an Excel spreadsheet. There are several advantages to using the linked spreadsheet method. Some of these are:

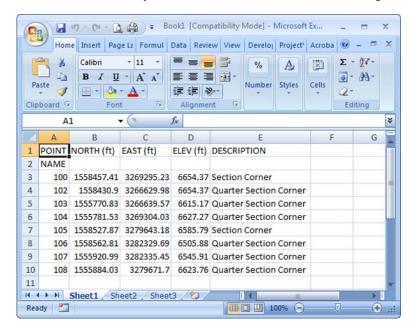
- Text formatting in the spreadsheet is retained by MicroStation
- Graphics (borders, girds, etc) are retained from the Excel file
- Updates to the Excel file are reflected in the MicroStation file

In the Bentley InRoads Report Browser:

- D Bentley InRoads Report Browser C:\Users\PCALLA~1\AppData\Local\Temp\RPT9904.xml - • • File Tools Help C:\Workspace\Workspace-CDOT\_XM\Standards-Global\InRoads\XMI CDOT Back CDOT
   COT Aire Description xel
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  DataCollection
  Evaluation D Add to Favorites... View Source eometry\12345\_ROW.alg Geometry Encoding ۲ ics 0:21 PM Images IntersectingAlignmentStations Print... Print Preview... LegalDescription Cogo LightRailManufacturing MapCheck Obsolete Refresh P ELEV (ft) DESCRIPTION Append to Existing PDF N RoadwayDesign Convert to Adobe PDF 6654.37 Section Corner Schemas Stakeout StationOffset Customize Menu 6654.37 Quarter Section Corner Export to Microsoft Excel ----RoboForm Toolbar Save Form Properties
- 18. **<R>** on the report in the coordinate list area as shown. A fly out menu will appear.

19. Place the cursor over the corrdinates (the bottom half of report) and select **Export to Microsoft Excel** from the fly-out menu.

Excel should automatically launch if it is installed on the PC being used.



	А	В	С	D	E				
1	PROJECT COORDINATE SUMMARY TABLE								
2	POINT NAME	PROJECT COORDINATES		ELEV (ft)	DESCRIPTION				
3		NORTH (ft)	EAST (ft)		DESCRIPTION				
4	100	1558457.41	3269295.23	6654.37	Section Corner				
5	102	1558430.9	3266629.98	6654.37	Quarter Section Corner				
6	103	1555770.83	3266639.57	6615.17	Quarter Section Corner				
7	104	1555781.53	3269304.03	6627.27	Quarter Section Corner				
8	105	1558527.87	3279643.18	6585.79	Section Corner				
9	106	1558562.81	3282329.69	6505.88	Quarter Section Corner				
10	107	1555920.99	3282335.45	6545.91	Quarter Section Corner				
11	108	1555884.03	3279671.7	6623.76	Quarter Section Corner				
12									

20. Make changes to the data or add formatting.

21. and save the spreadsheet to the ... |ROW\_Survey |InRoads |Reports | directory.

Save As						×
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5	102	1558430.9	3266629.98	6		Paste Special
6	103	1555770.83	3266639.57	6		Insert
7	104	1555781.53	3269304.03	6		Delete
8	105	1558527.87	3279643.18	6		Clear Contents
9	106	1558562.81	3282329.69	6		
10	107	1555920.99	3282335.45	6		Filter
11	108	1555884.03	3279671.7	6		Sort
12 M	Sheet verage: 1209588.		eet3 / १२ Sum: 38706832.72	2		Insert Comment <u>F</u> ormat Cells Pick From Drop-down List Name a Range

22. Select the range of information desired in the MicroStation file.

23. **<R>** on the spreadsheet data and select **Copy** from the fly-out menu.

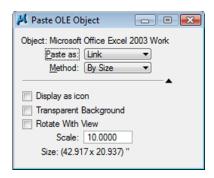
## RETURN TO MICROSTATION

24. Select Edit > Paste Special from the MicroStation menu bar.

Paste Special	83
Data Type	
Picture of Microsoft Office Excel 2003 Wc	
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Text To Design File	
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Paste Cancel	

- 25. <D> the Linked Microsoft Office Excel 2003 Worksheet option.
- 26. <D> Paste
  - **Note:** By choosing linked, updates made to the Excel file can be passed back to the MicroStation file through updating. Selecting embedded does not provide this dynamic ability.

27. In the Paste OLE dialog box, set Paste as to *Link*, Method to *By Size*, and input a Scale of *10* 



**Note:** At this time, we do not fully understand the correlation between the scale and resulting text size. For this example, 10 seemed to produce reasonable results. Once placed, the text height can be measured and the bounding shape of the linked Excel table can be scaled up or down accordingly to achieve required text size.

POINT NAME	PROJECT COORDINATES			DESCRIPTION
	NORTH (ft)	EAST (ft)	ELEV (ft)	DESCRIPTION
100	1558457.41	3269295.23	6654.37	Section Corner
102	1558430.9	3266629.98	6654.37	Quarter Section Corn
103	1555770.83	3266639.57	6615.17	Quarter Section Corn
104	1555781.53	3269304.03	6627.27	Quarter Section Corn
105	1558527.87	3279643.18	6585.79	Section Corner
106	1558562.81	3282329.69	6505.88	Quarter Section Corn
107	1555920.99	3282335.45	6545.91	Quarter Section Corn
108	1555884.03	3279671.7	6623.76	Quarter Section Corn

**Note:** Entering a <D><D> on the table in MicroStation will launch the Excel application. If the Excel file is edited (either from MicroStation or outside the CAD application) select Edit > Update Links from the MicroStation menu bar to refresh the linked MicroStation graphics.

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