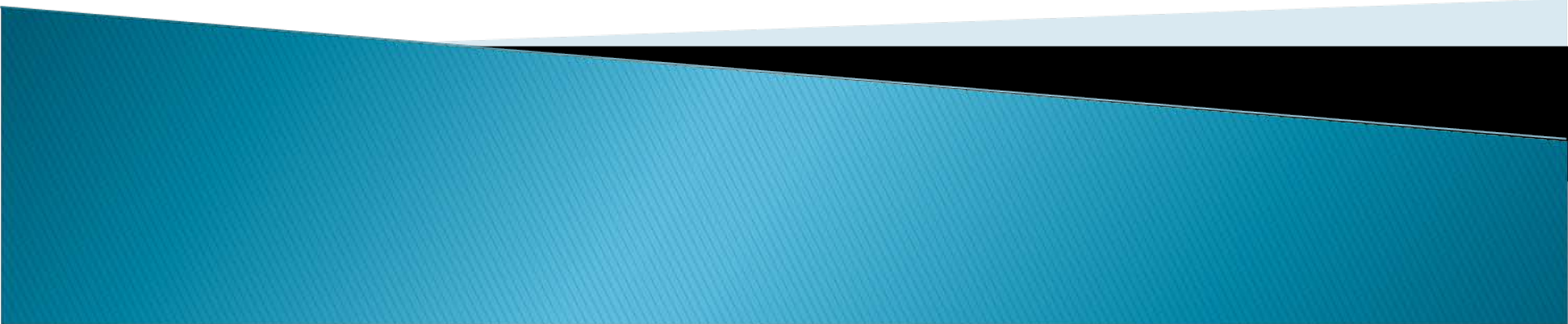


Asset Management

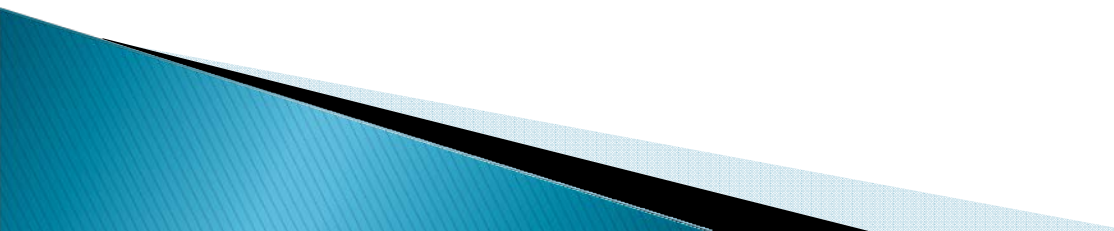
Measurement and Management



Assets Targeted

- ▶ Signs
 - ▶ Signals
 - ▶ Markings
 - ▶ Culverts
 - ▶ Guardrail
 - ▶ Concrete Structures
 - Crosspans
 - Curb and Gutter
 - Sidewalks
- 

Asset Management

- ▶ Inventory – What do we have?
 - Do we know?
 - ▶ Condition – What is the status of what exists?
 - Indices
 - Pavement Condition Index
 - Culvert Condition Index
 - ▶ Triage – What is the most important use of scarce resources
 - Rating Criteria
 - Other elements – traffic counts
- 

GeoXH



Tools

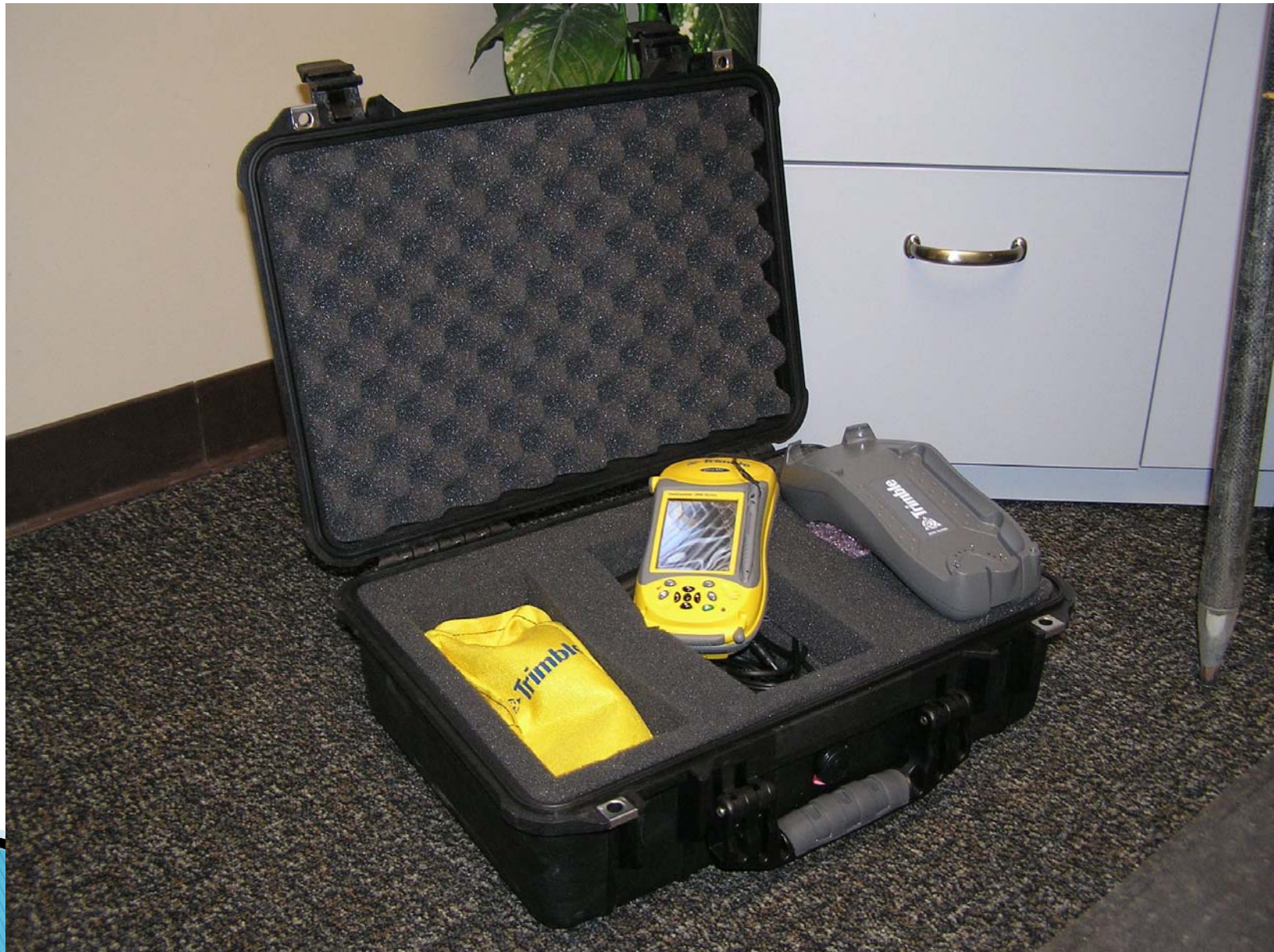
- ▶ CarteGraph Software
 - CMMS Program
 - Versa Tools Module
- ▶ GeoXH
 - Sub-foot Accuracy
- ▶ Ricoh Bluetooth Camera
 - Links picture to record

CarteGraph Software

▶ TRANSPORTATION

- SIGN *view*
- PAVEMENT *view*
- SIGNAL *view*
- MARKING *view*
- BRIDGE *view*

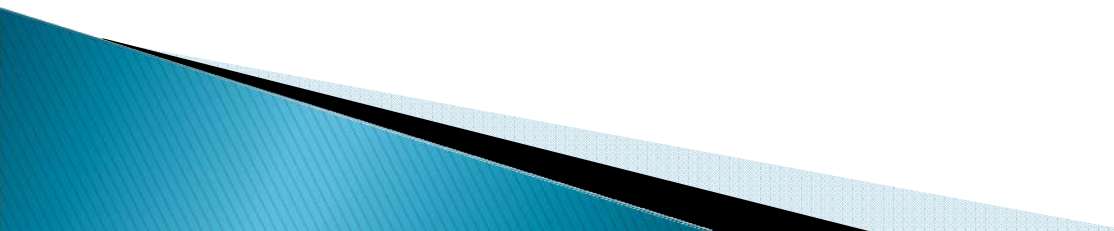
GeoXH 2008

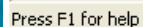


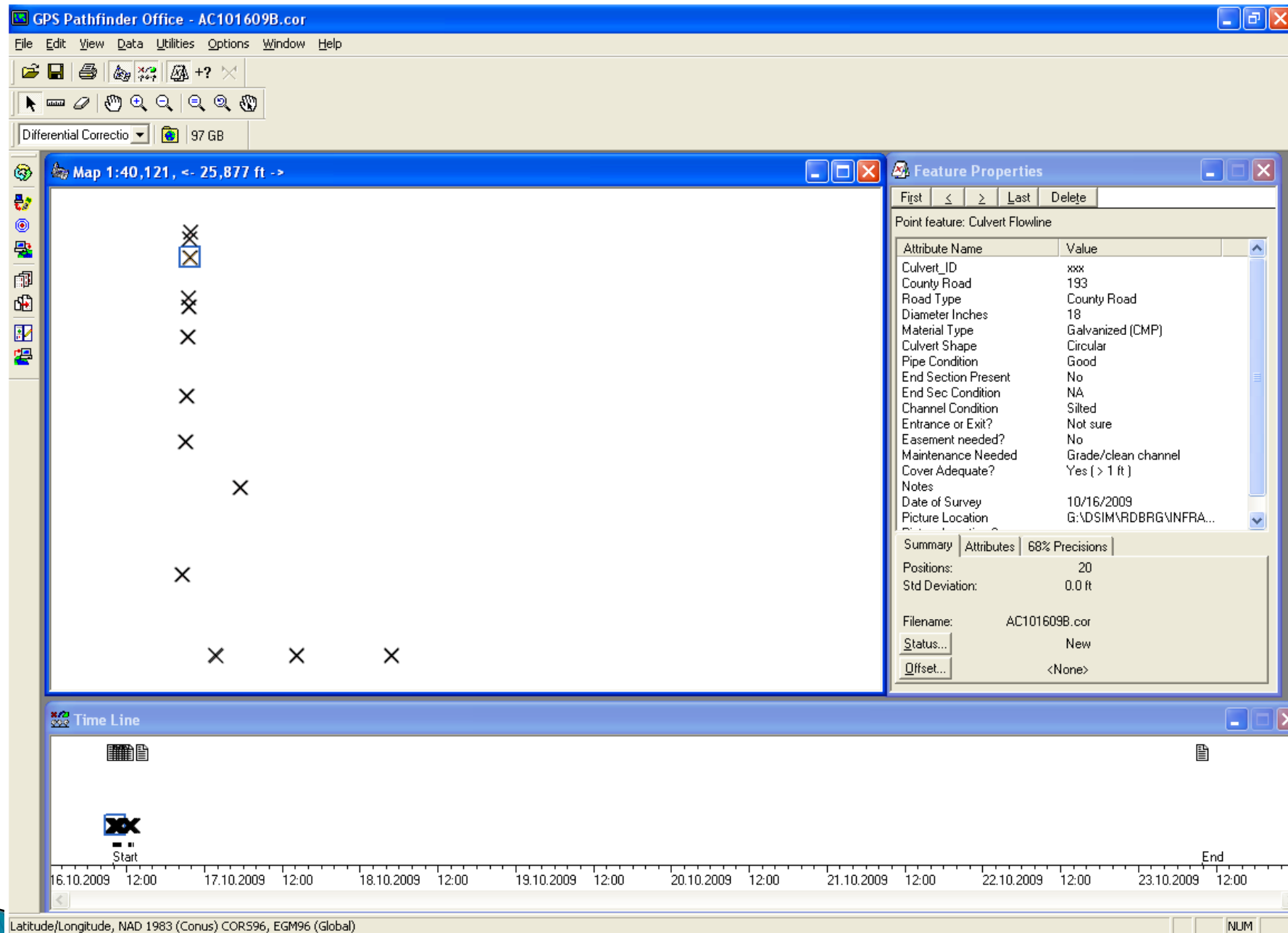
Ricoh Camera



Data Definition

- ▶ Culvert ID
 - ▶ County Road
 - ▶ Road Type
 - ▶ Diameter inches
 - ▶ Material Type
 - ▶ Culvert Shape
 - ▶ Pipe Condition
 - ▶ End Section Present
 - ▶ End Section Condition
 - ▶ Channel Condition
 - ▶ Entrance/Exit
 - ▶ Easement Needed
 - ▶ Maintenance Needed
 - ▶ Cover Adequate
- 





Terrasync data

TerraSync

- ▶ Download the raw data from the GEOXH
- ▶ Perform a differential correction
 - Locates a base or permanent station and reconciles data points
- ▶ Export data points into a shape file
- ▶ View it in GIS

FID	Shape	Culvert_ID	County_Roa	Road_Type	Diameter_I	Material_T	Culvert_Sh	Pipe_Condi	End_Sectio	End_Sec_Co	Channel_Co	Entrance_o	Easement_n	Maintenanc	Cover_Adeq
0	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Entrance	No	None	Yes (> 1 ft)
1	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Exit	No	None	Yes (> 1 ft)
2	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Entrance	No	None	Yes (> 1 ft)
3	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Exit	No	None	Yes (> 1 ft)
4	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Exit	No	None	Yes (> 1 ft)
5	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Entrance	No	None	Yes (> 1 ft)
6	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	NA	Silted	Not sure	No	Grade/clean channel	Yes (> 1 ft)
7	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	NA	Silted	Not sure	No	Grade/clean channel	Yes (> 1 ft)
8	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Crushed	Yes	Crushed	Free flowing	Entrance	No	Repair end	Yes (> 1 ft)
9	Point ZM	xxx	193	Access/Driveway	18	Galvanized (CMP)	Circular	Good	Yes	Good	Free flowing	Exit	No	None	Yes (> 1 ft)
10	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Crushed	No	NA	Free flowing	Exit	No	Repair end	Yes (> 1 ft)
11	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Entrance	No	None	Yes (> 1 ft)
12	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	Good	Free flowing	Exit	No	None	Yes (> 1 ft)
13	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Entrance	No	None	Yes (> 1 ft)
14	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Exit	No	None	Yes (> 1 ft)
15	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Circular	Good	No	Good	Free flowing	Entrance	No	None	Yes (> 1 ft)
16	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Arch	Good	No	NA	Free flowing	Not sure	No	None	Yes (> 1 ft)
17	Point ZM	xxx	193	County Road	18	Galvanized (CMP)	Arch	Silted in	No	NA	Silted	Not sure	No		Yes (> 1 ft)
18	Point ZM	xxx	193	County Road	24	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Exit	No	None	Yes (> 1 ft)
19	Point ZM	xxx	193	County Road	24	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Entrance	No	None	Yes (> 1 ft)
20	Point ZM	xxx	38	County Road	24	Galvanized (CMP)	Circular	Crushed	No	NA	Free flowing	Entrance	No	Repair end	Yes (> 1 ft)
21	Point ZM	xxx	38	County Road	24	Galvanized (CMP)	Circular	Crushed	No	NA	Free flowing	Exit	No	Repair end	Yes (> 1 ft)
22	Point ZM	xxx	38	County Road	36	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Exit	No	Grade/clean channel	Yes (> 1 ft)
23	Point ZM	xxx	38	County Road	36	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Entrance	No	None	Yes (> 1 ft)
24	Point ZM	xxx	38	County Road	48	Galvanized (CMP)	Circular	Good	No	NA	Free flowing	Exit	No	None	Yes (> 1 ft)

Record: 1

Show: All Selected

Records (0 out of 28 Selected)

Options