

Mobile Mapping for Public Works

GIS IS MAGIC

Overview

- ① Context
- ② Scope of Project
- ③ Methodology
- ④ Results
- ⑤ Discussion
- ⑥ Questions

City of Brookings



Public Works

- Limited Resources
- 5 Million Budget
- 2.5 Million CIP
- 5 Person Crew

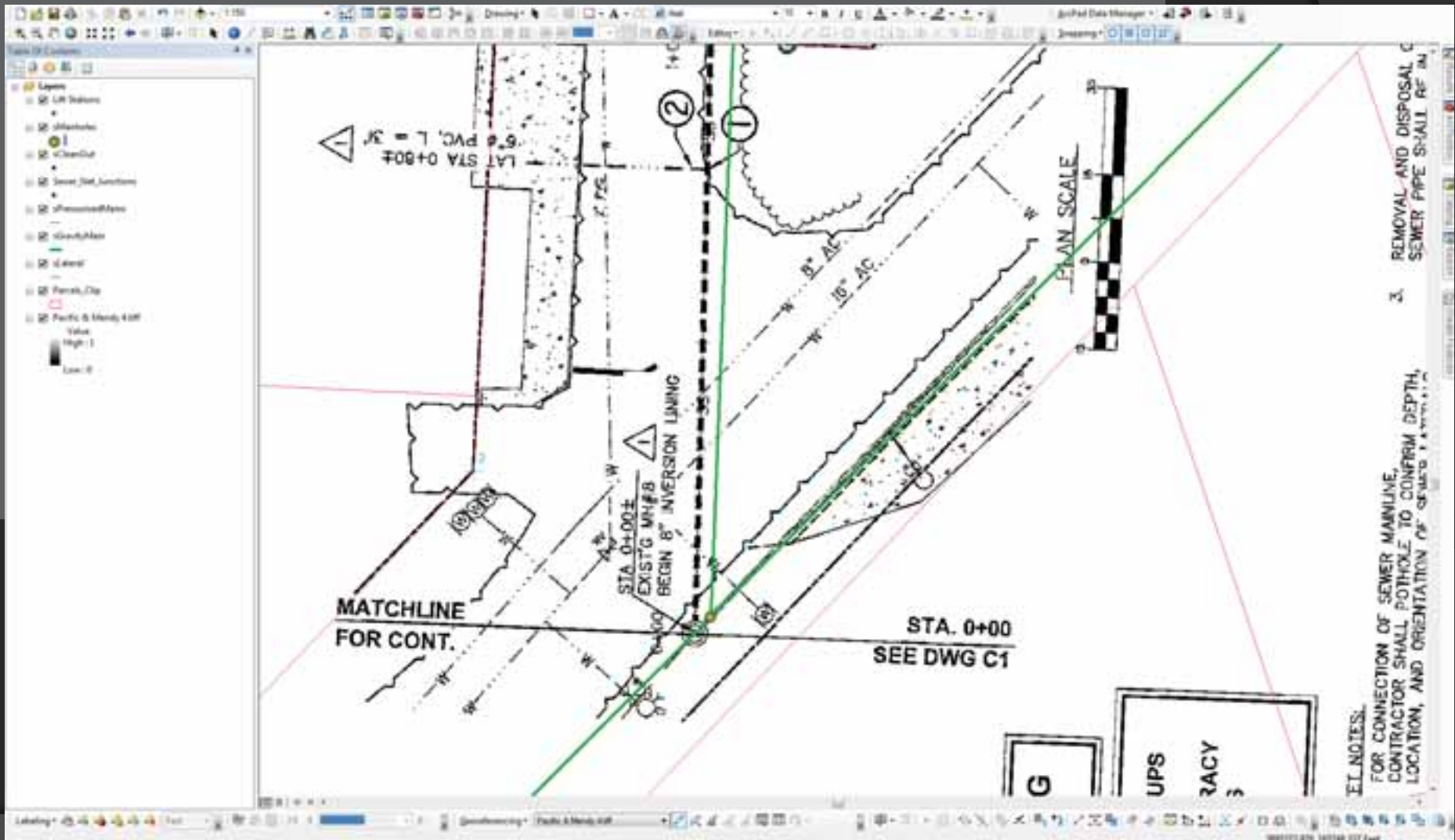
GIS in Brookings

Techni-mana-lyst

Data collection

Public Works Department

Digitizing



Surveying



- ⦿ \$\$\$
- ⦿ Time
- ⦿ Resources
- ⦿ Lots of money

Handheld GPS



Mobile Mapping

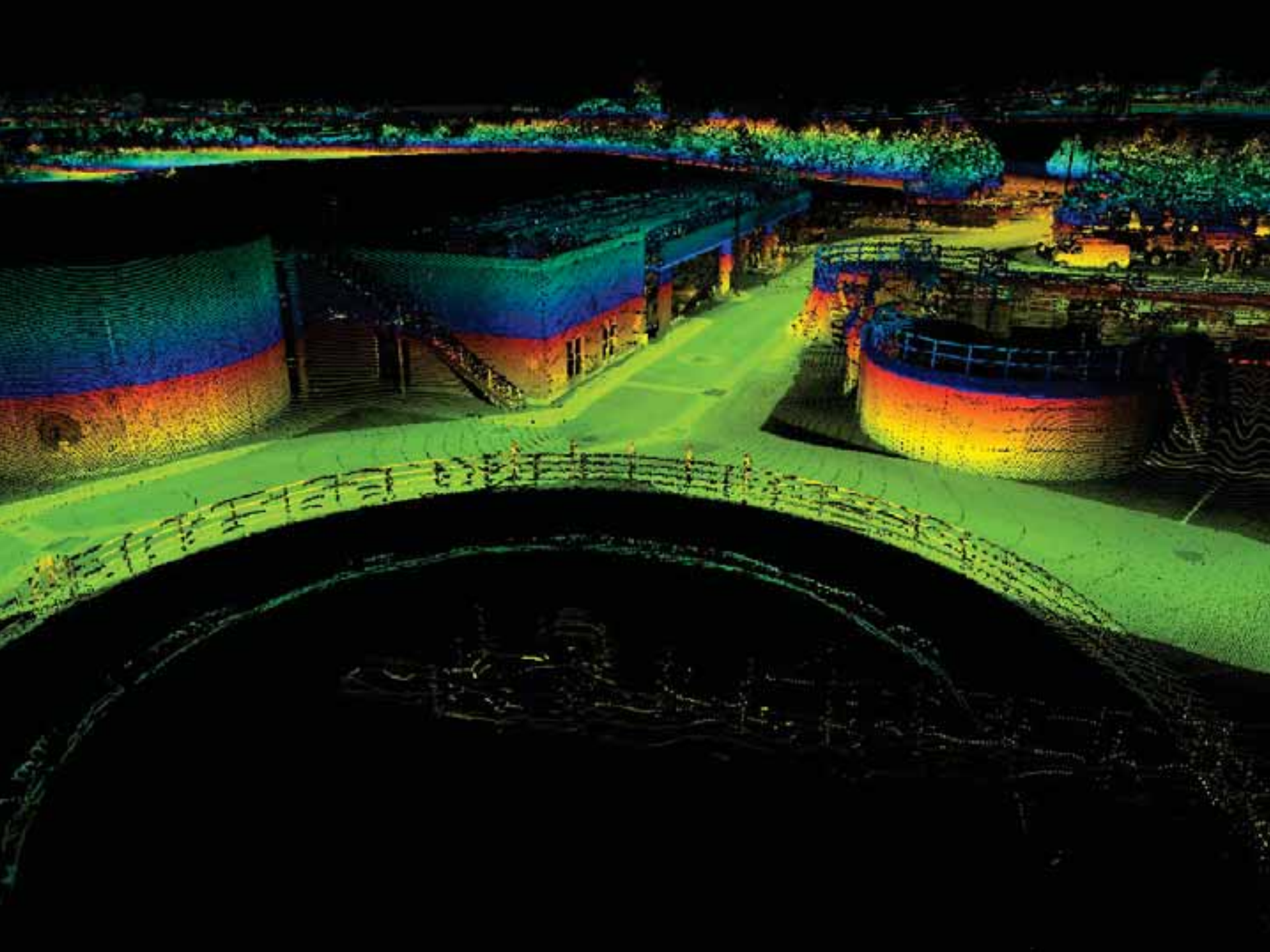
- ◎ +/- 4.5 cm accuracy*
- ◎ 360° Image Reference
- ◎ 3 mp images
- ◎ 3D Virtualization

*-ish. Only under the most optimal of conditions.



06/14/2013





Object Inspector Mobile Mapping

Select Follow Focus Clear all



Distance

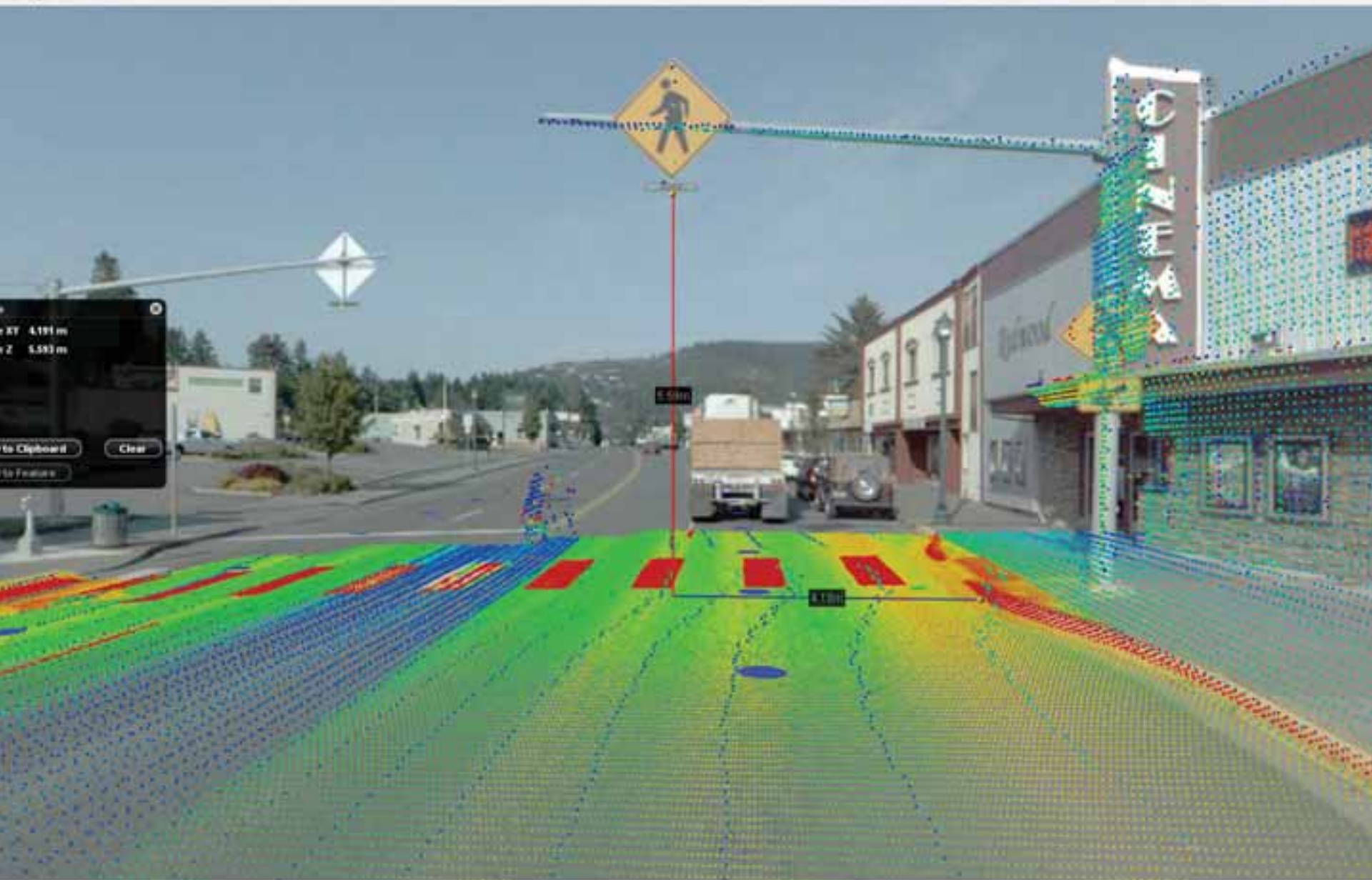
Position	Distance XYZ	2.411 m
Distance	Distance XY	2.172 m
Polyline	Distance Z	1.046 m
Area	Slope	48.1 %
Volume		

Copy to Clipboard Clear

Copy to Feature

Use point cloud

2019-07-01 00:00:00
Camera000100



4.191 m
5.593 m

Copy to Clipboard
Clear

Feature



Data Collection

- ◎ **Stormwater**
 - *1297 point features*
 - *18.5 Miles of pipeline*

- ◎ **Sewer**
 - *857 point features*
 - *43 Miles of pipeline*

- ◎ **Streets**
 - *30 Miles of Sidewalks*
 - *288 Street Lamps*
 - *304 Fire Hydrants*

Collection by the numbers

- > \$15,000
- 8 hours of staff time
- 500 GB
- 100% City Owned Data

Discussion



Christine Amedzake
City of Troutdale



Sources

- ◉ City of Brookings. Public Works Department. 2012-2014.
- ◉ Topcon Corporation. *IP-S2 - 3D Mobile Mapping System*. USA: Topcon Corporation, 2011. Print.
- ◉ Claudiusmm. *Field-Map Birdie.jpg*. 2010. *Wikimedia*. Web. 26 June 2014.