

# Drone Surveying – “Field to Finish”

**Christopher G. Hinkley**

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## About the speaker

### Christopher Hinkley

Chris has been in the surveying, civil engineering and construction industry for the past 18 years (14 years with Wright-Pierce). Chris holds a couple of degrees; an Associate's Degree in Architectural and Civil Engineering Technology and a Bachelor's Degree in Construction Management. He works for a multi-disciplinary firm and leads the civil group in software management, training, implementation and project coordination (with the wastewater group, water group and building systems group). Additional tasks related to the civil group include, survey management/coordination, Part 107 Remote Pilot, preliminary and final design as well as construction administration. He is fully immersed in the Autodesk Community; Civil Futures, InfraWorks Customer Council, Land Development Council, and End of Sprint Demos with the InfraWorks/Civil 3D development teams.

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## RECAP PHOTO

- Import Photos
- Use GCPs (Ground Control Points) to align images base on real world coordinates
- Post process your data; creating a report, point cloud and geotiff

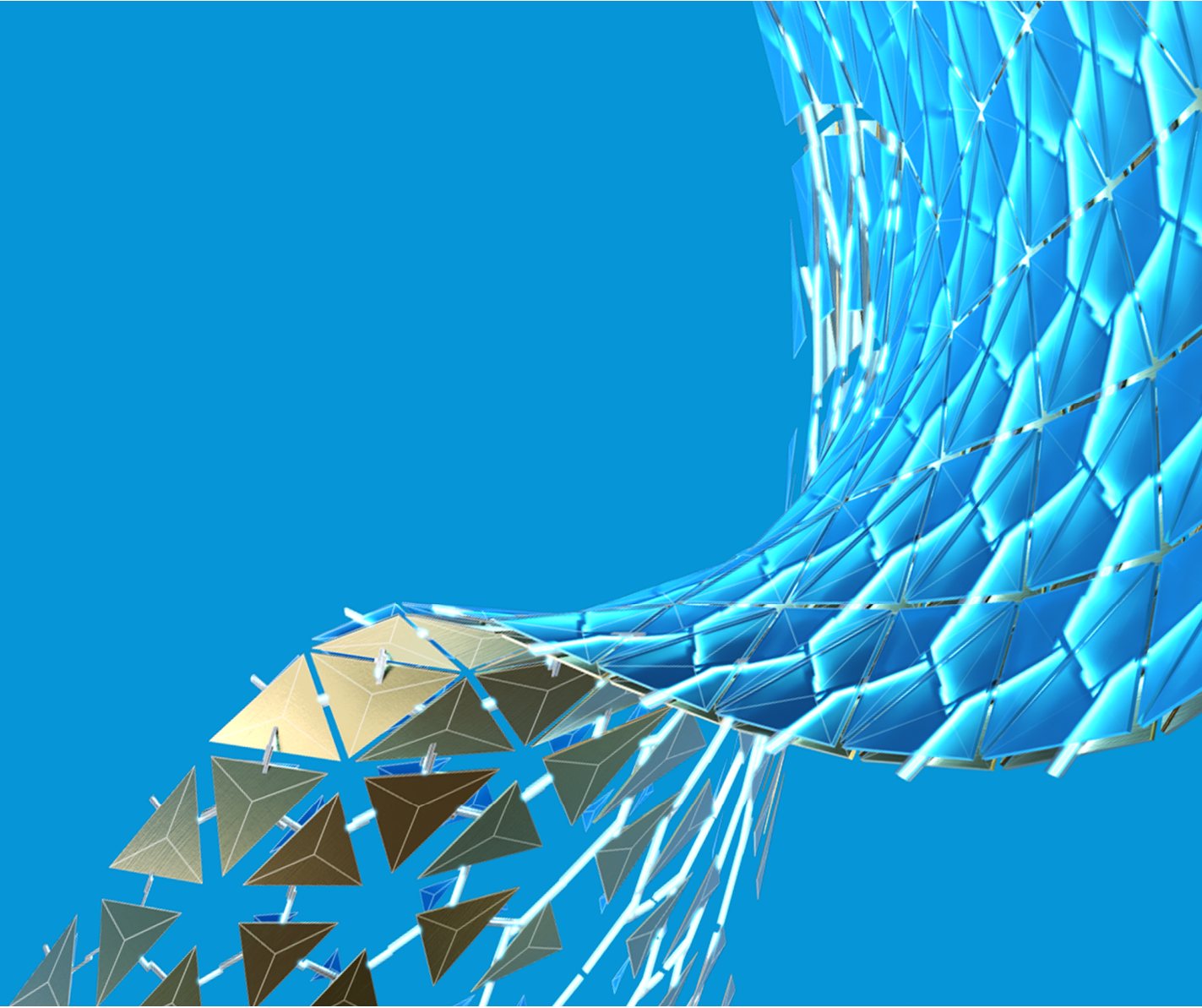
## RECAP TO INFRAWORKS

- Import point cloud into ReCap
- Settings
- Cleanup and Export
- Import point cloud into InfraWorks
- Generate a surface, linework and vertical features.
- Export file format .CSV or .SHP

## CIVIL 3D

- Setup
- Import .CSV or .SHP file format
- Cleanup and Annotate

# Live Demo



# Conclusion

## STEP 1

### RECAP PHOTO

Where all Photogrammetric data collected via the drone is post processed. A report, point cloud and geotiff are generated for use in Autodesk software.

## STEP 2

### RECAP PRO

Import and cleanup of point cloud may or may not be necessary, however, ReCap Pro is where this takes place.

## STEP 3

### INFRAWORKS

Import point cloud, generate surface data, generate linework, generate vertical features and export for use in Civil 3D.

## STEP 4

### CIVIL 3D

Import data from InfraWorks for cleanup and final editing





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