



# STOP USING YOUR IMAGINATION

How LiDAR Technology Is Changing The Way We Design Substations

Logan Cane



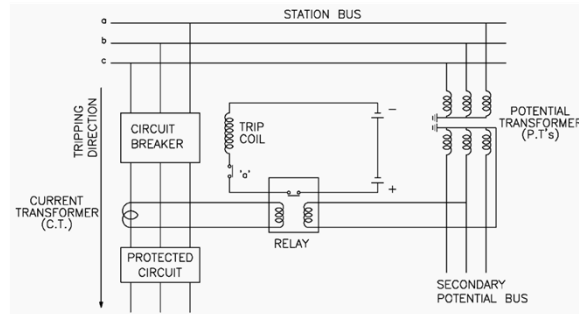


## How are substations typically designed?

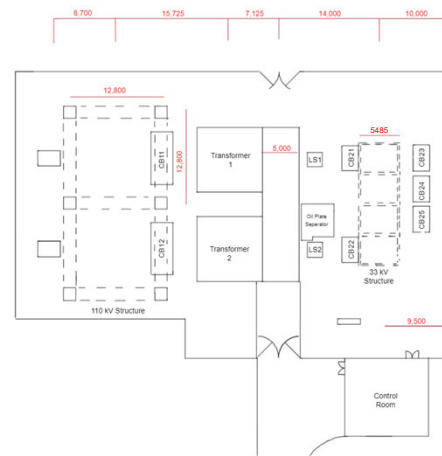
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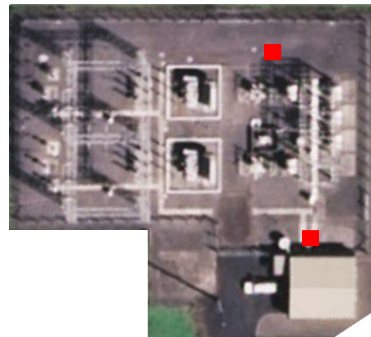
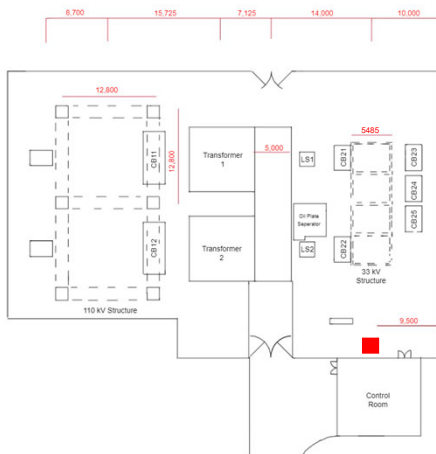
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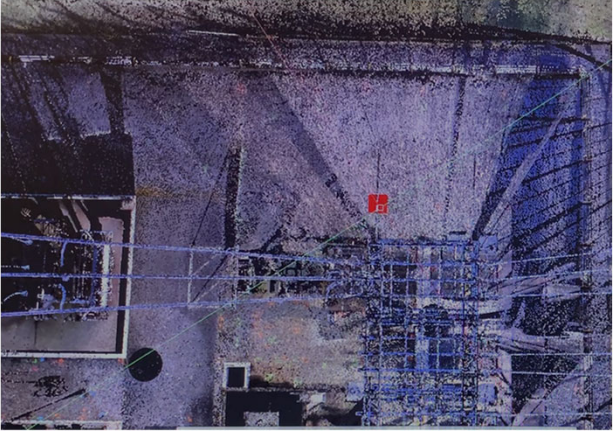


Source: data.linz.govt.nz





## So, What's The Problem?



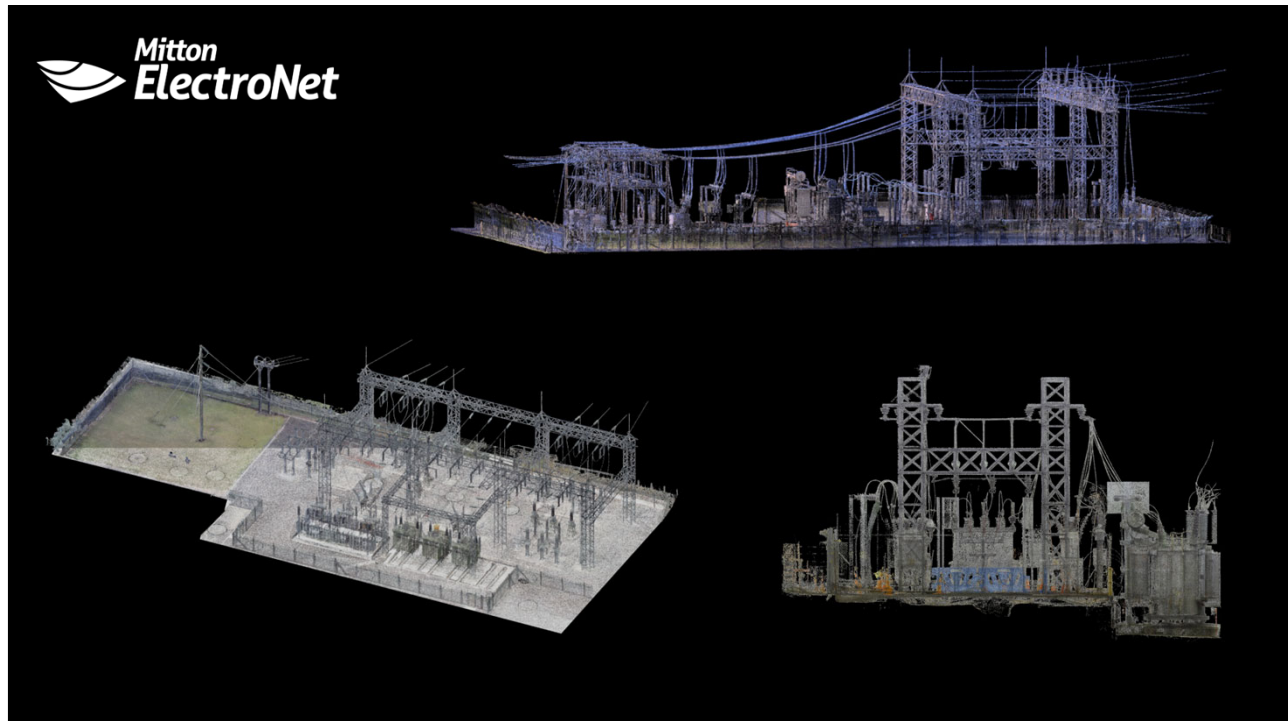
## Problems with existing methodology

- Multiple sources
- Incomplete information
- Design must be “imagined” and checked
- Often out of date





## What are we already doing?



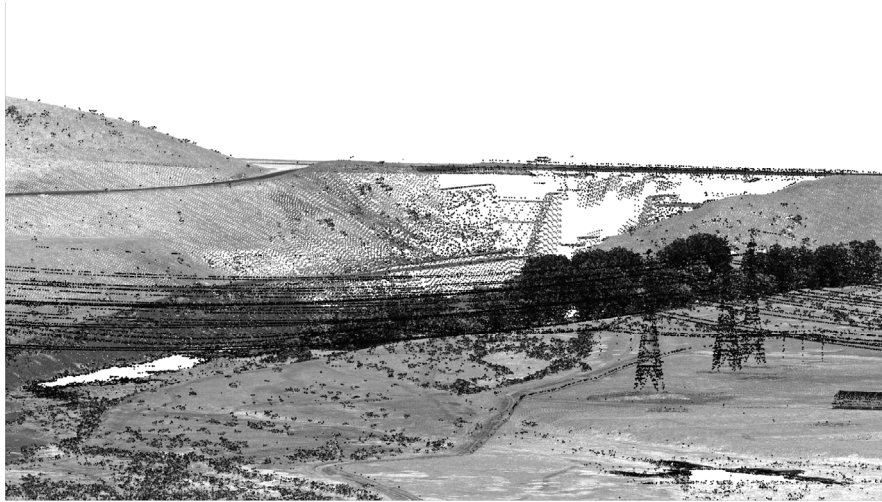


## Survey Report

Abs. Mean Error of Control to 'Bundle 1': **0.006 m**

Bundle Name	Setup	Label	Error
Bundle 1	[REDACTED]	T01	0.007 m
		T00	0.006 m
		BM01	0.003 m
		T02	0.008 m
		T03	0.008 m





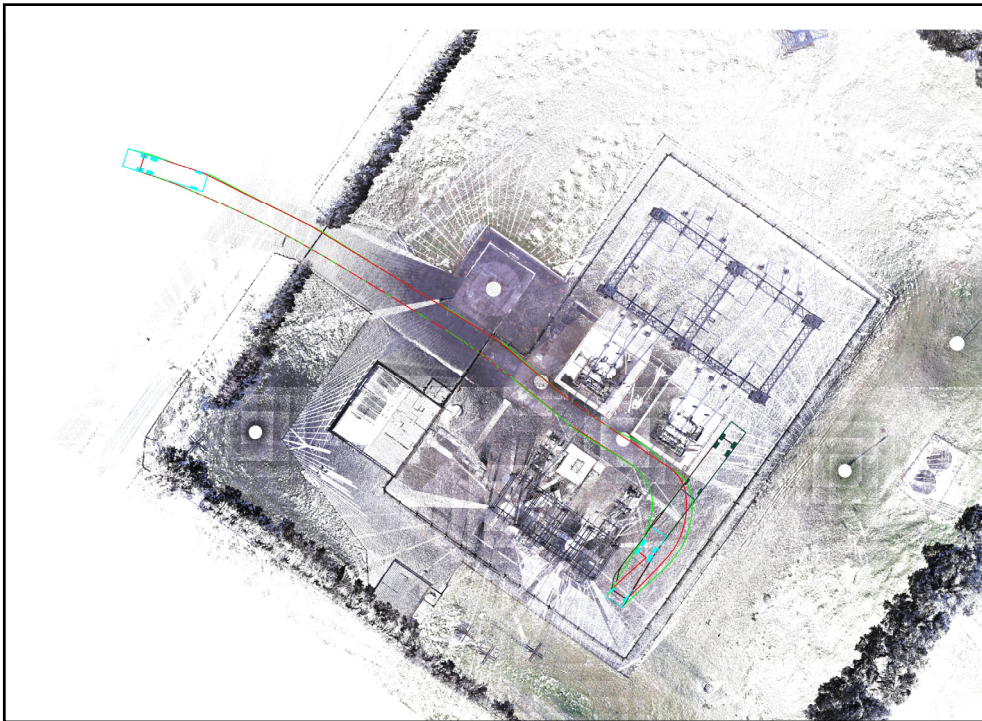
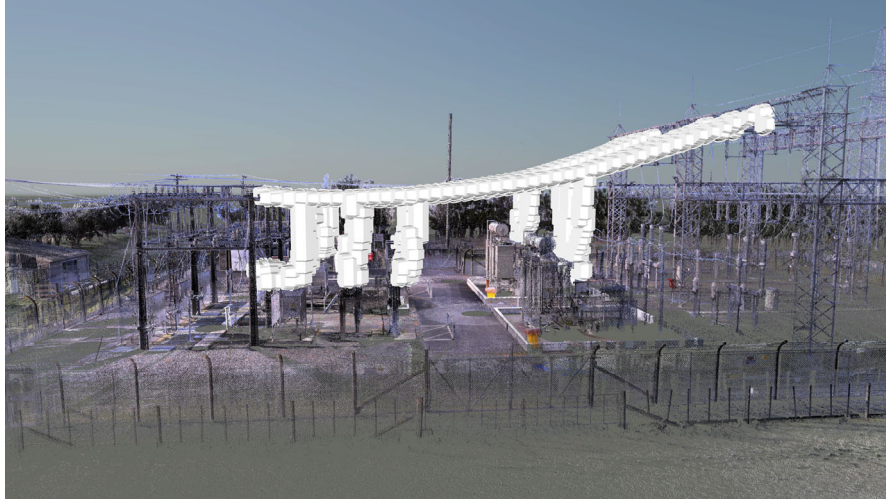


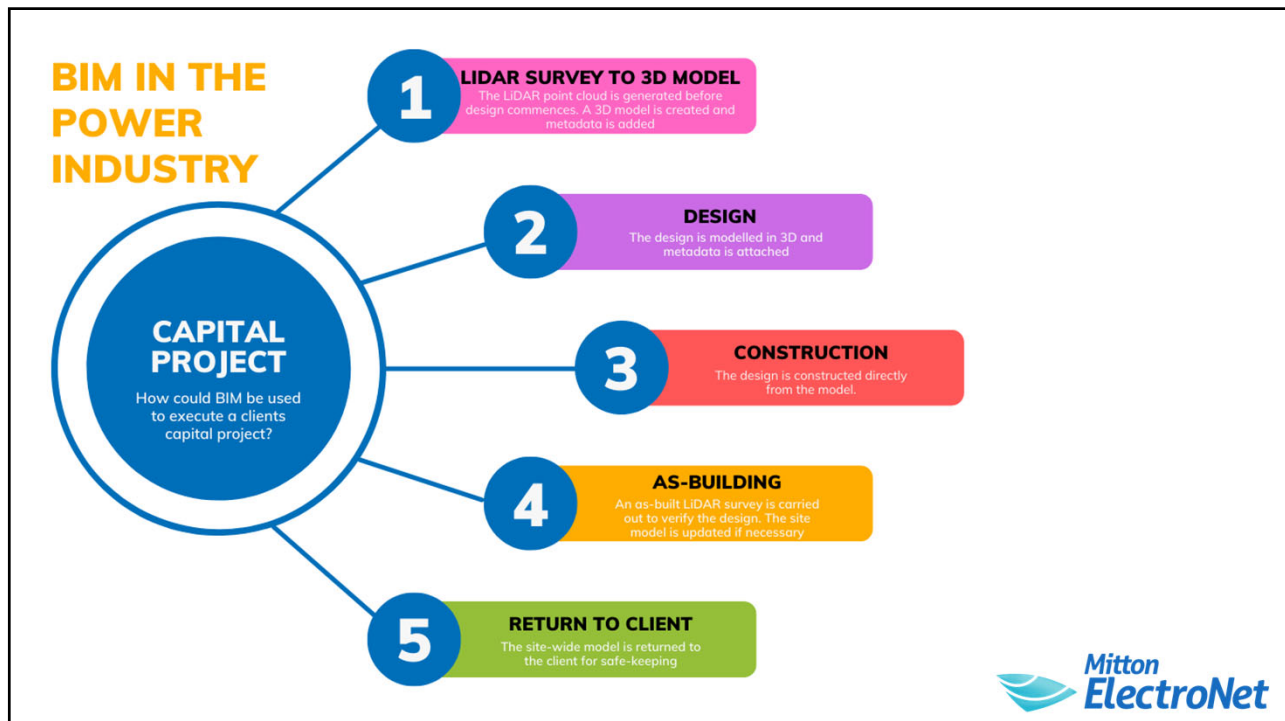
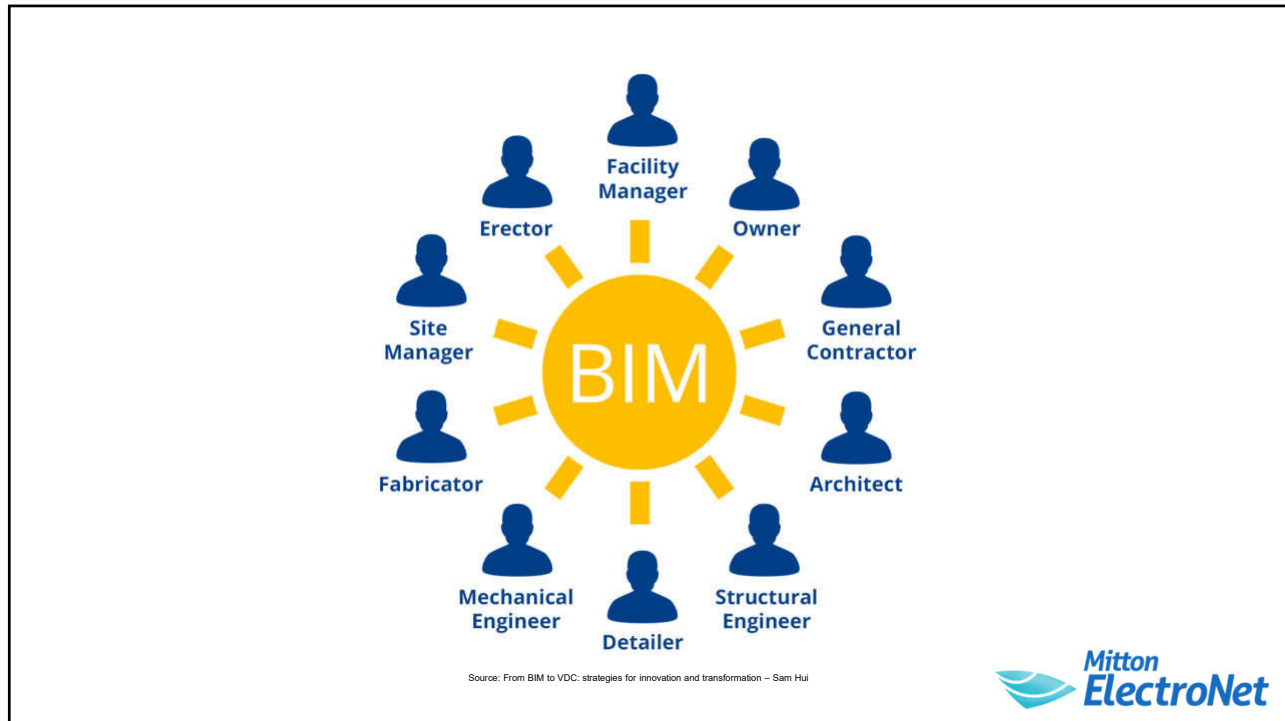
## Benefits of LiDAR

- More accurate designs
- Reduces the risk of oversights
- Reduces contractor queries
- Better visualisation, enabling collaboration



**Where to from here?**







Mitton  
**ElectroNet**  
ERSOR

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Thank You! Questions?