



# STOP USING YOUR IMAGINATION

How LiDAR Technology Is Changing The Way We Design Substations

Logan Cane



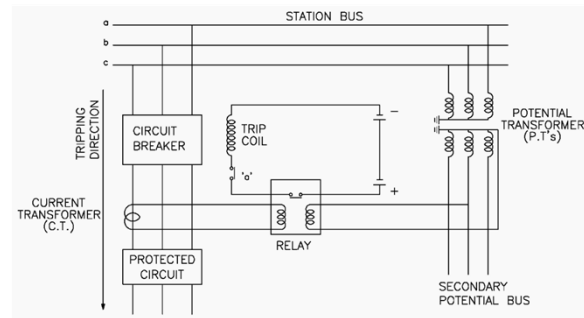


## How are substations typically designed?

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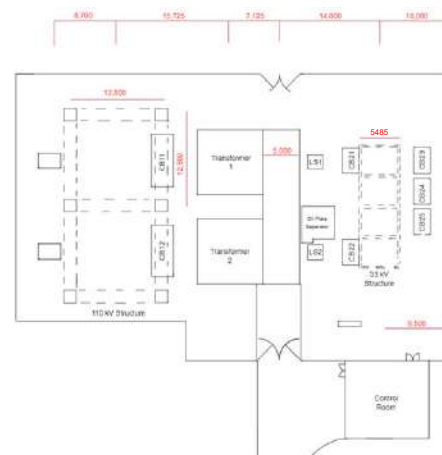


## How Are Substations Typically Designed?



Mitton  
ElectroNet

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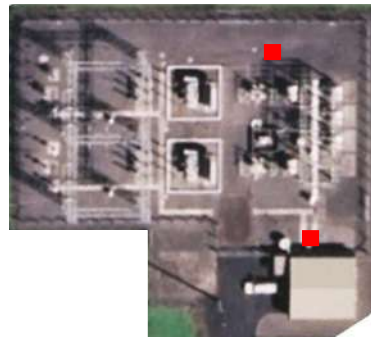
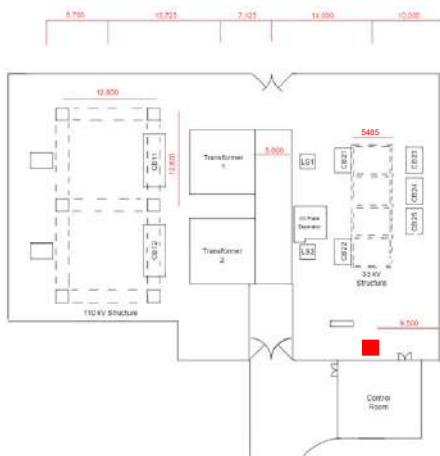


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## So, What's The Problem?

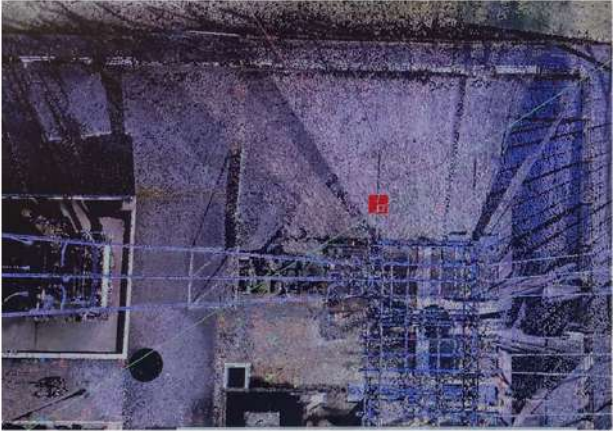
## So, What's The Problem?



Source: data.linz.govt.nz



## So, What's The Problem?



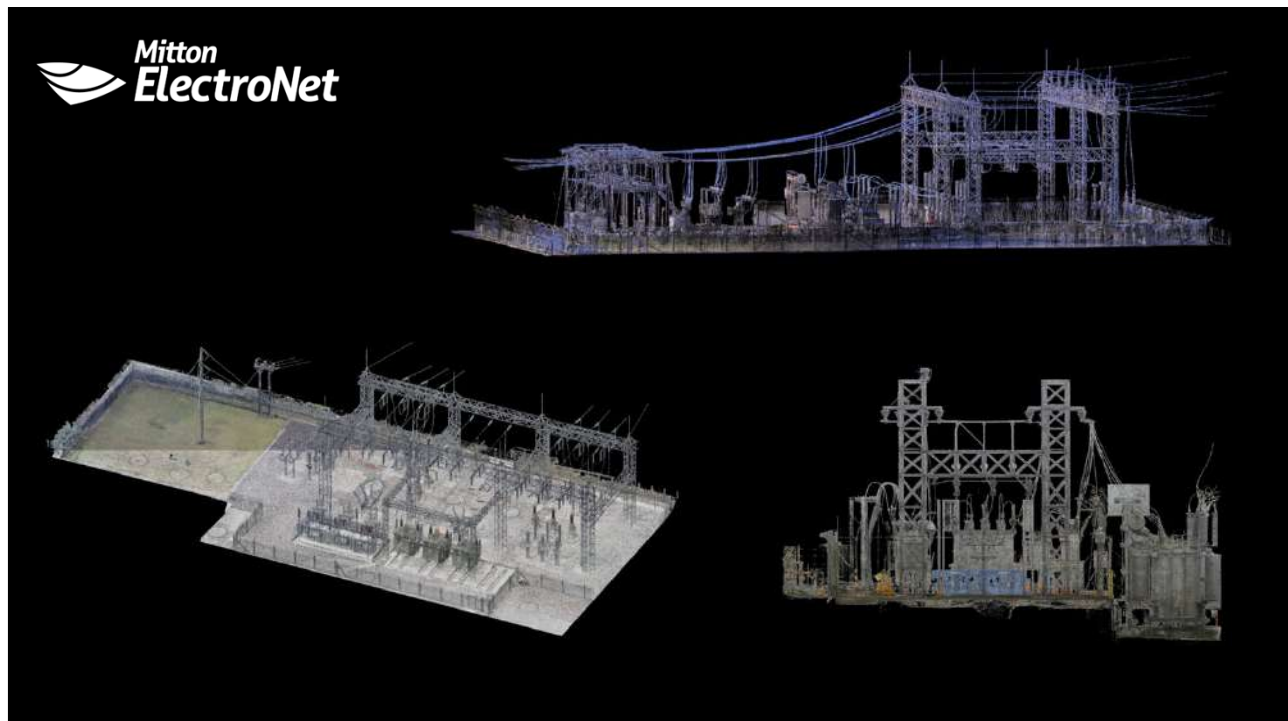
## Problems with existing methodology

- 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- Often out of date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		T01	0.007 m
		T00	0.006 m
		BM01	0.003 m
		T02	0.008 m
		T03	0.008 m





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## Benefits of LiDAR

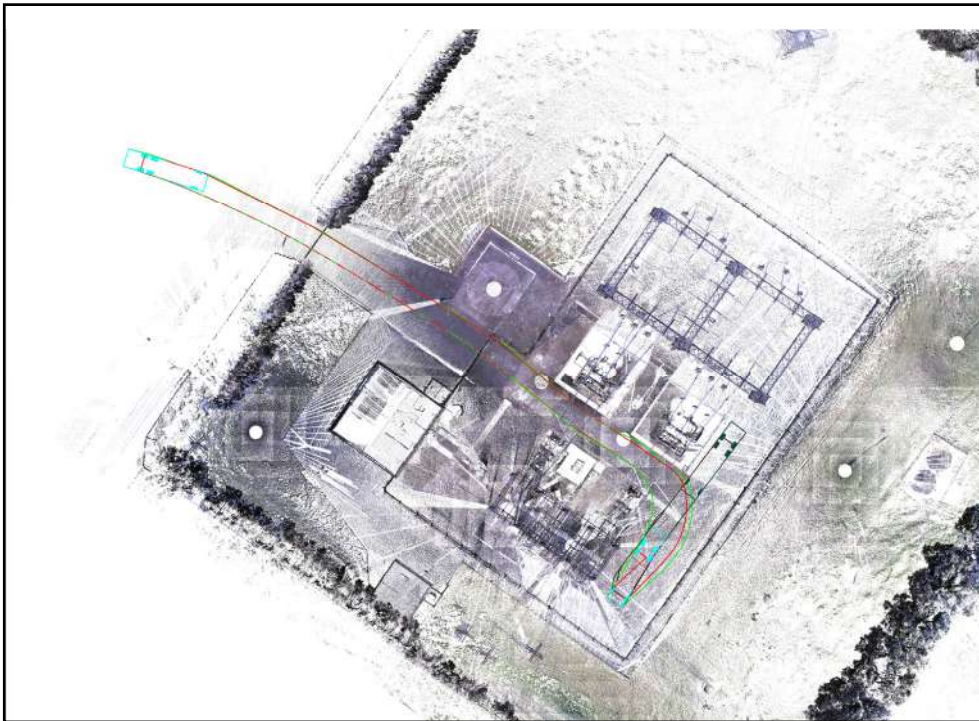
- More accurate designs
- Reduces the risk of oversights
- Reduces contractor queries
- Better visualisation, enabling collaboration



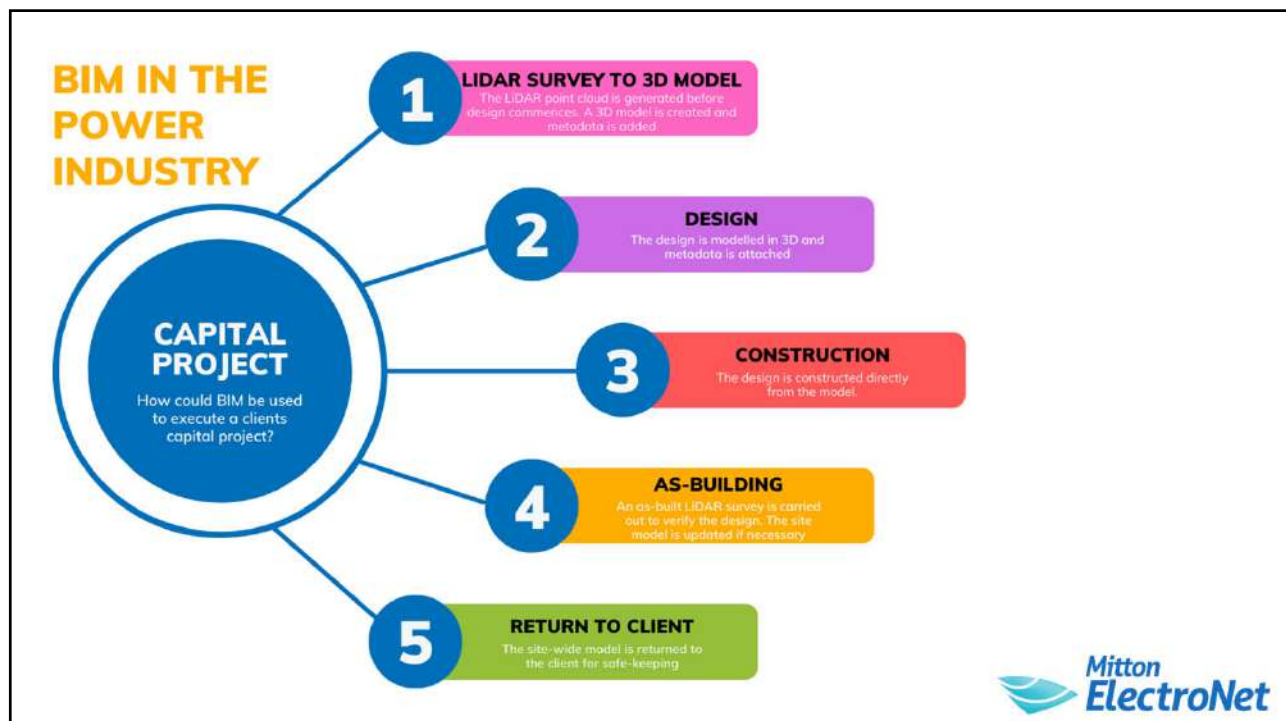
**Where to from here?**



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ElectroNet





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**ElectroNet**

ERROR

~~STOP~~ USING YOUR IMAGINATION

Thank You! Questions?