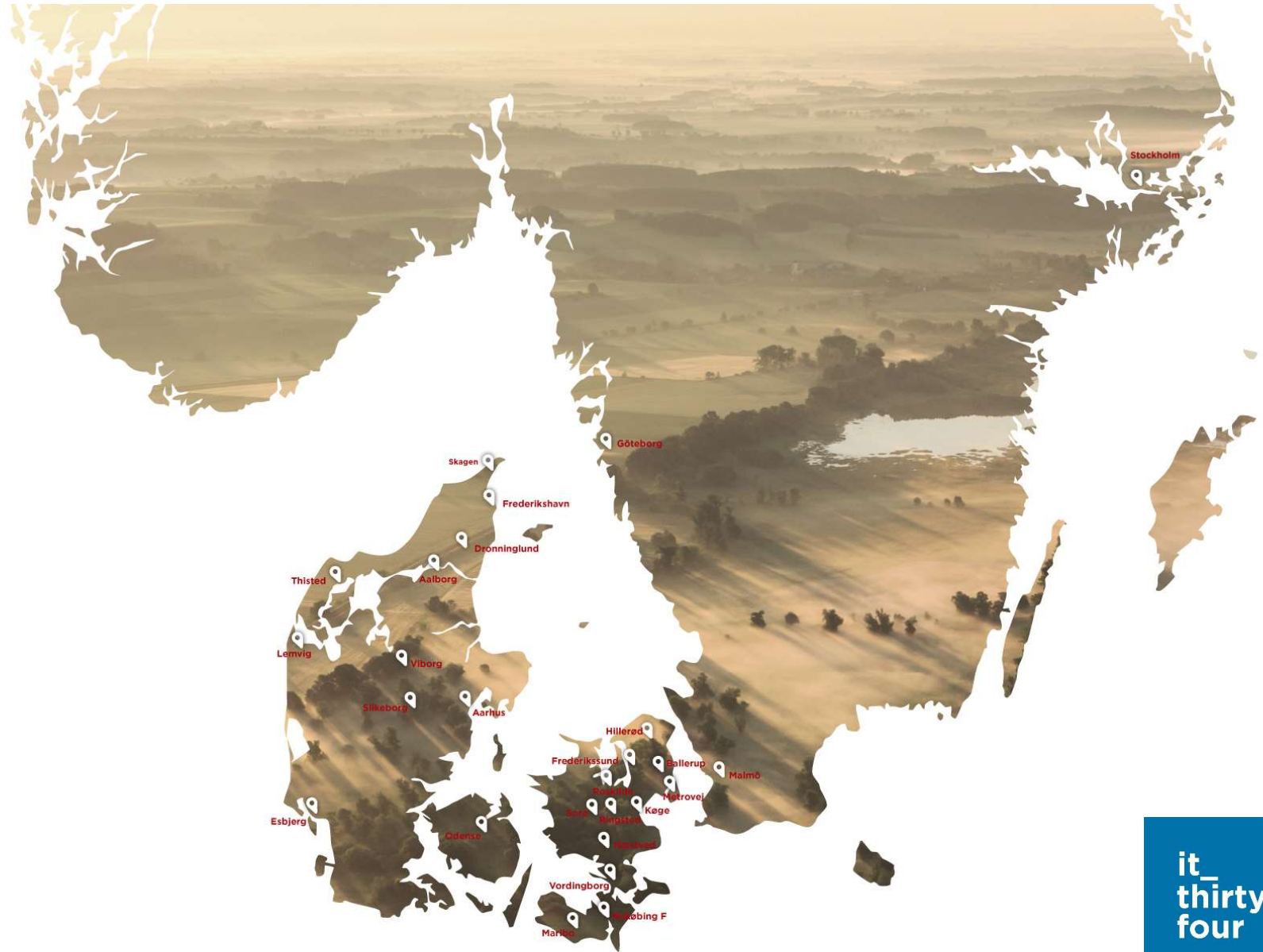


IT34



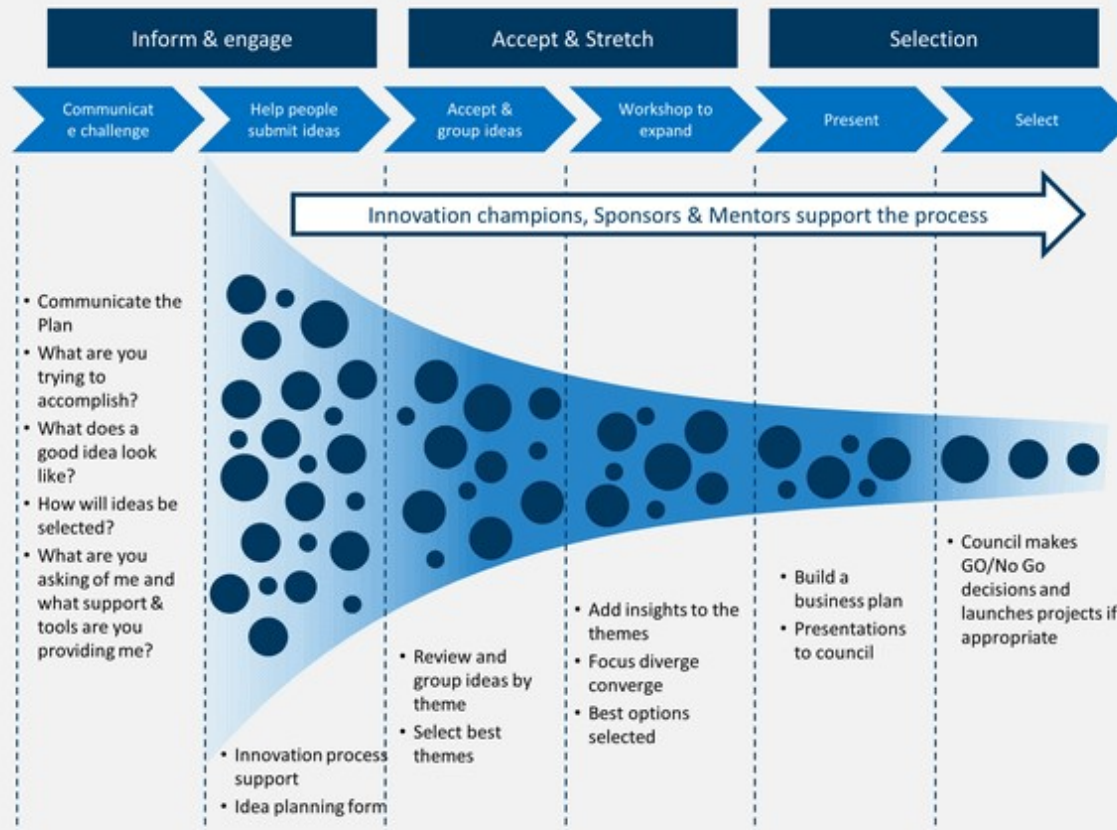
# Rasmus Lindeneg Johansen

- 2003, Chartered Surveyor, Aalborg University
- 15 years in COWI Mapping and about 2 years in IT34
  - Ended up as Senior Project Manager
  - Presently product owner of PointView and SmartSurvey
- Geodata production
  - 3D City modeling, Orthophoto, Oblique imagery, Aerial LiDAR, Terrain models, Vector mapping, Panorama images for Denmark, UAV acquisition for inspection, 3D content for simulations, etc

Innovation is Easy!

# INNOVATION FUNNEL

Enter your sub headline here





CONCEPT

STRATEGY

PLAN

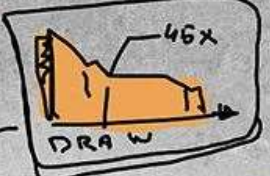
HAVE

REALISATION

TEAM

AND THEN...

2x



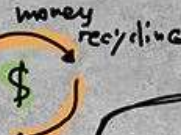
years



STEAL

MARKETING

Business



SALES not everyone

45% IS  
45%  
15  
??  
A. B. C.

PRODUCT

?...?



CONSUMERS

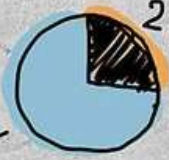
25% time

INTERNET

SUCCESS

- A. 640.320.00
- B. 144.000.00
- C. 286.000.00
- D. 255.500.00
- E. 540.000.00

RIGHT NOW DOWN



LOADING TV SERVER



MAIN

300. [icon]

2000

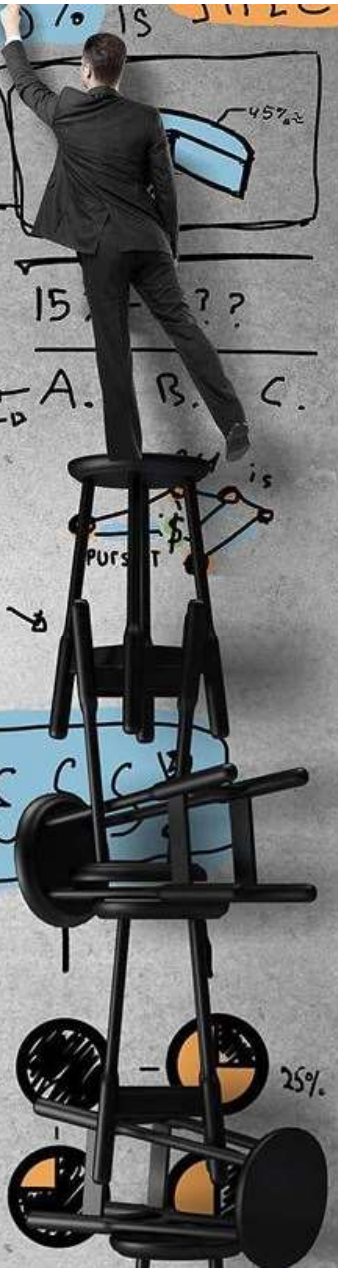
Other

A. to server  
B. to DOWN town  
C. to Biller  
D. to town

SUB

100%

25%

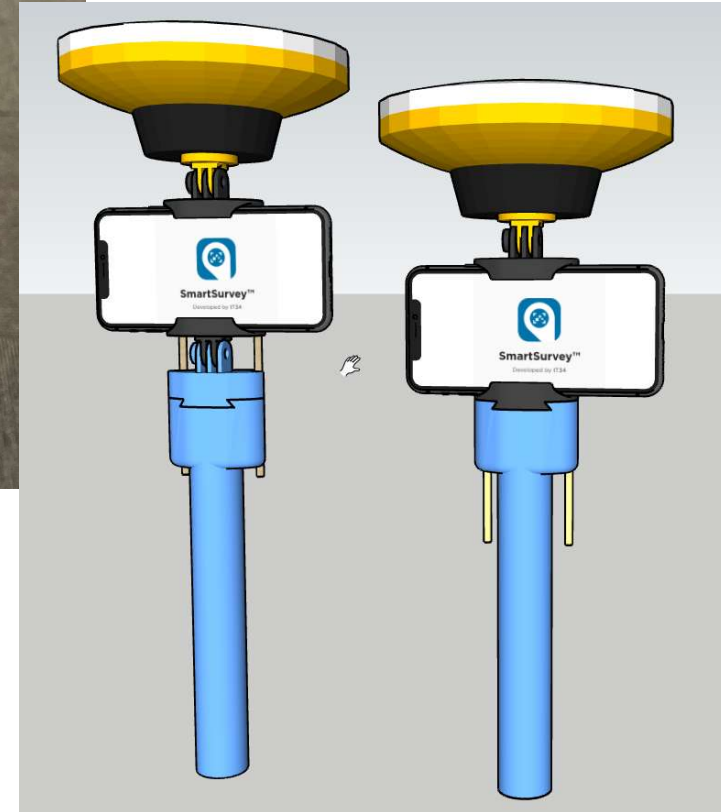
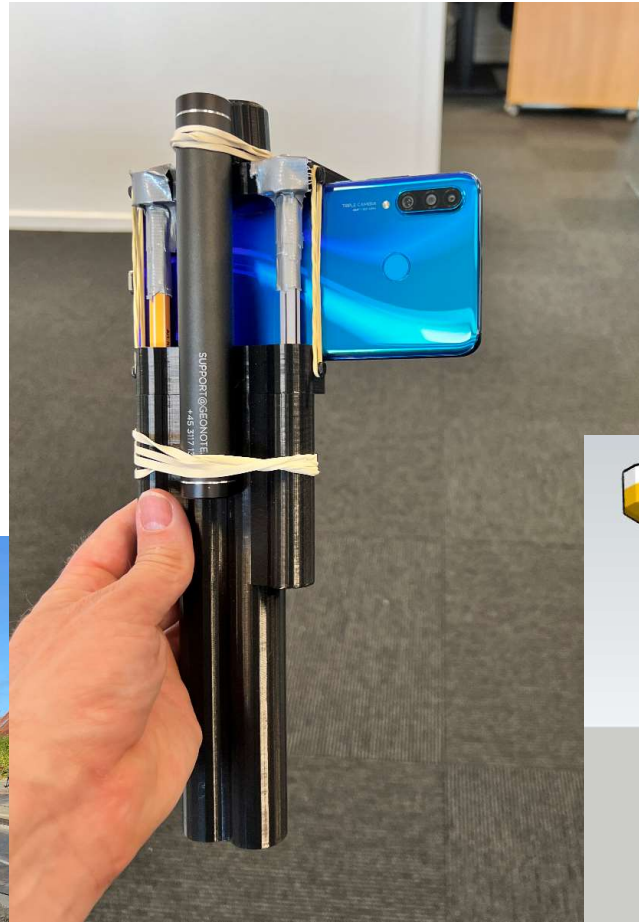




# DEN RØDE TRÅD

## Fra udfordring til løsning





# PointView & SmartSurvey





# SmartSurvey, PointView og Dashboard

## SmartSurvey

Mobil app til indsamling af videodata

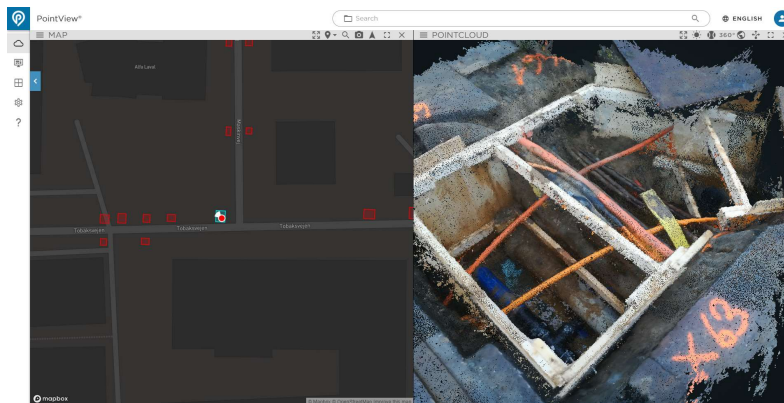


SmartSurvey\_Webinar



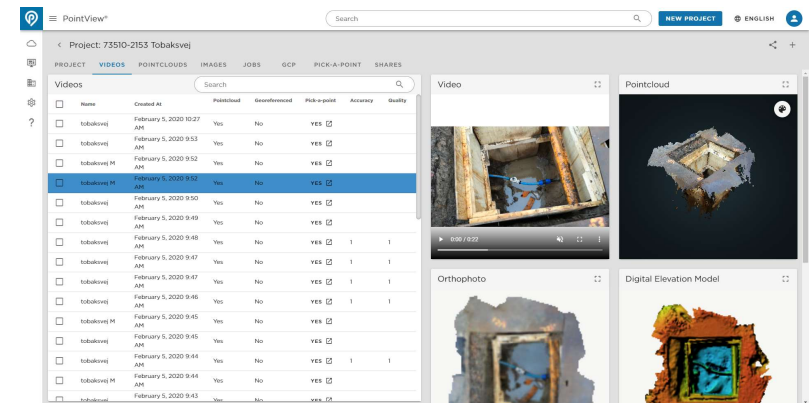
## PointView

Online platform forankret i browser til visualisering af massive datamængder



## Dashboard

Administration af data samt visualisering af dokumentation









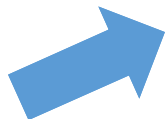
TLS

SLAM



Multi Beam


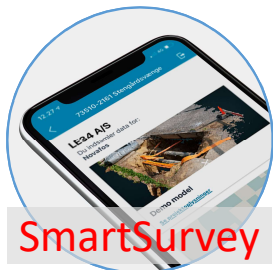
-  Upload Video
-  Upload Pointcloud
-  Upload Images
-  Upload GCP



PointView®

MAP

- 1903590\_B43
- 1904726\_UBBI
- 1904726\_UBBO
- 1904726\_UBLU
- 1904726\_UBMO
- 1904726\_UBVA
- 1905168\_Viborg
- 1905432\_Nykobing
- 1905432\_Skagen
- 1905970
- 1906469-Vassingerød
- 1906631\_Waterhouse
- 1906665-Via\_Naestved
- 1906700
- 1906871\_Universitetsbyen Aarhus BSS
- 1907517\_RoskildeLuft
- 1907830\_Banedanmark
- 1908430\_VIG305F
- 1908430\_VIG643R
- 1908430\_VIG645R
- 1909200\_RMx50
- 1909200\_RMx56

SmartSurvey



Mobile Mapping



UAV



**Introducing SmartSurvey™**











Videos

Search

<input type="checkbox"/>	Name	Created At	Pointcloud	Georeferenced	Pick-a-point	Accuracy	Quality
<input type="checkbox"/>	tobaksvej	9:34 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej M	February 5, 2020 9:29 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej	February 5, 2020 9:28 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej	February 5, 2020 9:27 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej	February 5, 2020 9:26 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej	February 5, 2020 9:25 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej	February 5, 2020 9:24 AM	Yes	No	YES		
<input type="checkbox"/>	tobaksvej	February 5, 2020 9:24 AM	Yes	No	YES		
<input type="checkbox"/>	080 Tobaksvej M	January 10, 2020 11:23 AM	Yes	No	YES		
<input type="checkbox"/>	074 Tobaksvej M	January 10, 2020 11:12 AM	Yes	No	YES		
<input type="checkbox"/>	057 Tobaksvej	January 10, 2020 10:53 AM	Yes	No	YES		
<input type="checkbox"/>	038 Tobaksvej M	January 10, 2020 10:38 AM	Yes	No	YES		
<input type="checkbox"/>	020 Tobaksvej M	January 10, 2020 10:11 AM	Yes	No	YES		
<input type="checkbox"/>	004 Maskinvej	January 10, 2020 9:43 AM	Yes	No	YES		
<input type="checkbox"/>	004 Maskinvej	January 10, 2020 9:29 AM	Yes	No	YES		

Video



0:04 / 0:57

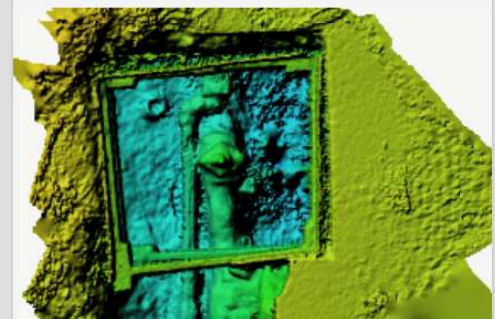
Pointcloud



Orthophoto



Digital Elevation Model







PointView®

73510-2153 Tobaksvej

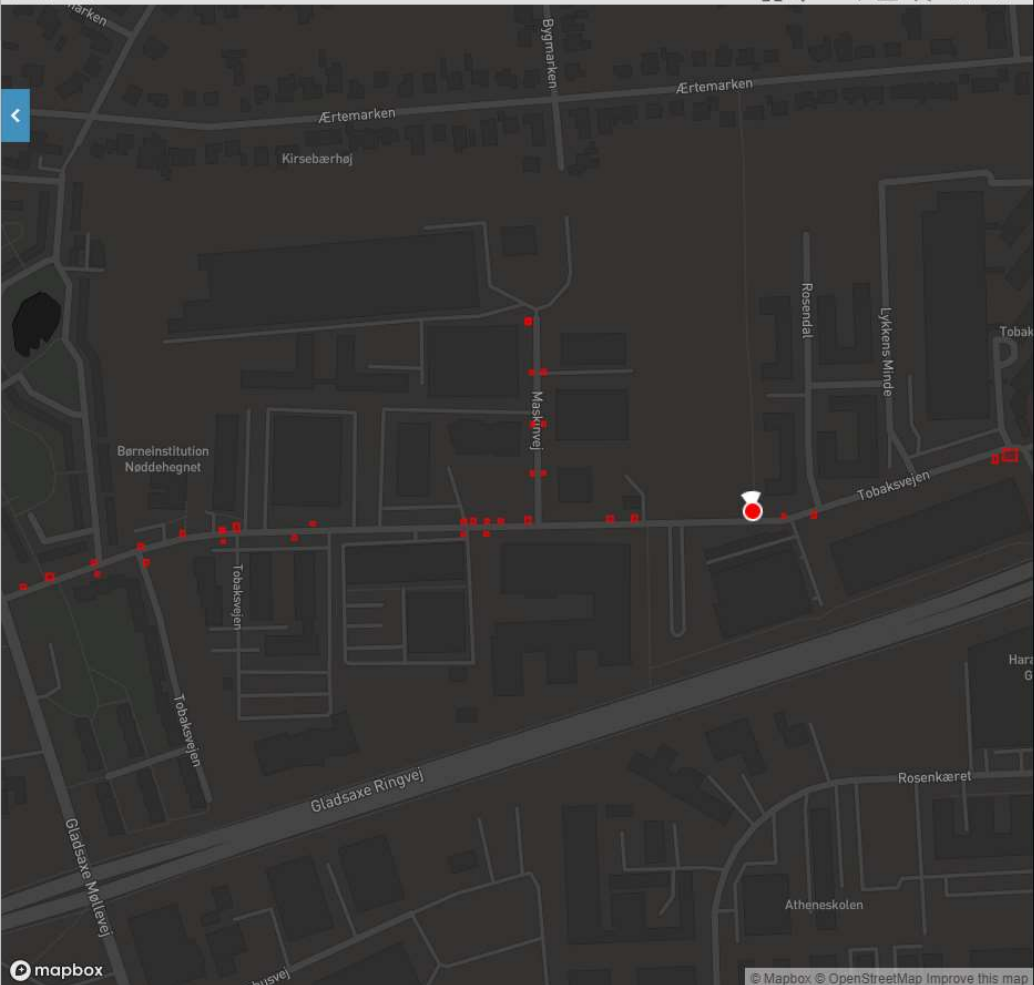


ENGLISH



MAP

POINTCLOUD



mapbox

© Mapbox © OpenStreetMap Improve this map



PointView®

73510-2153 Tobaksvej



ENGLISH



POINTCLOUD

360° PHOTO







PointView®

73510-2153 Tobaksvej



ENGLISH



POINTCLOUD

360° PHOTO









PointView®

73510-2153 Tobaksvej

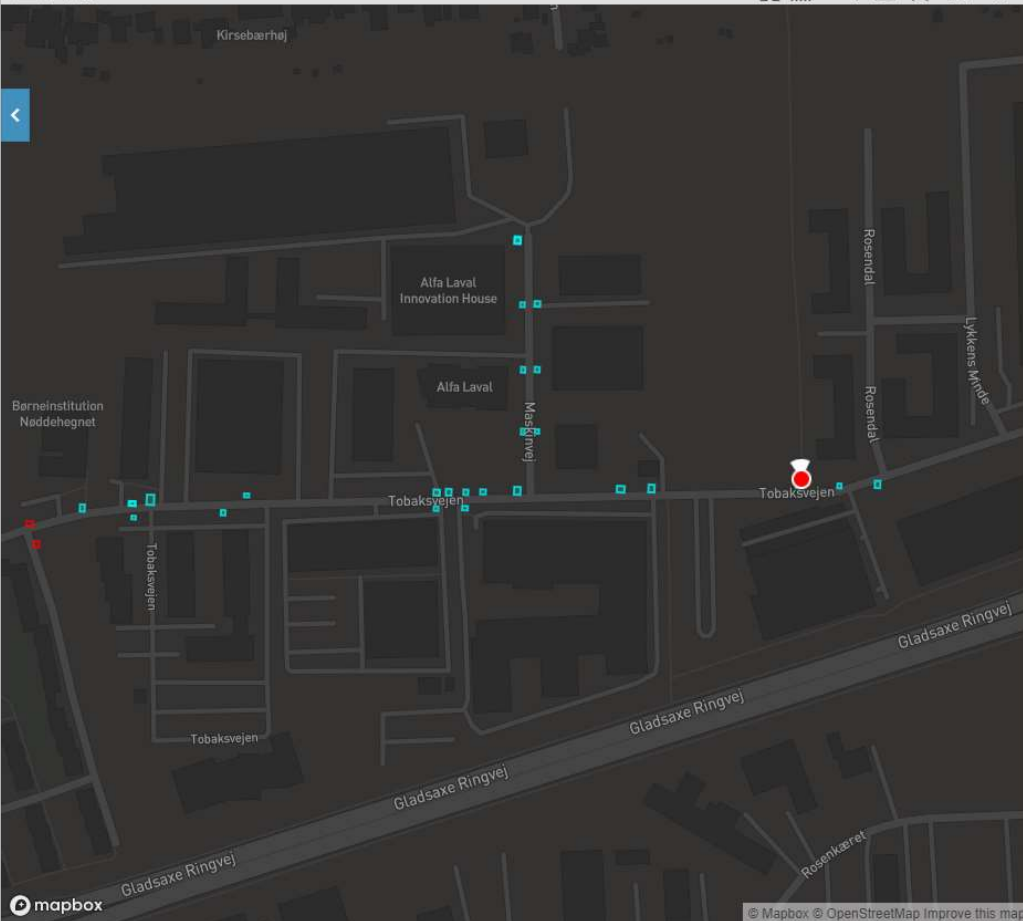


ENGLISH



MAP

POINTCLOUD



mapbox

© Mapbox © OpenStreetMap Improve this map



PointView®

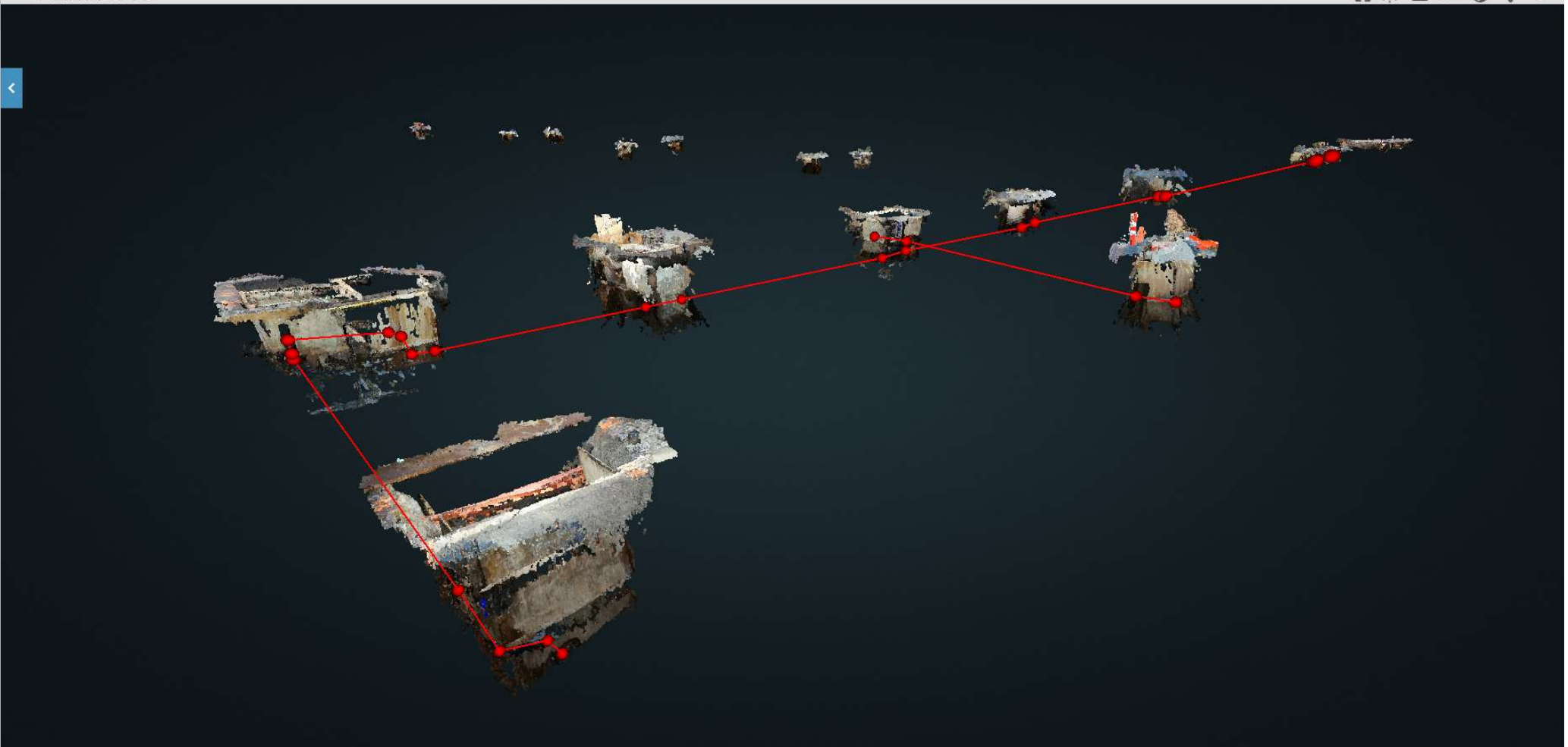
73510-2153 Tobaksvej



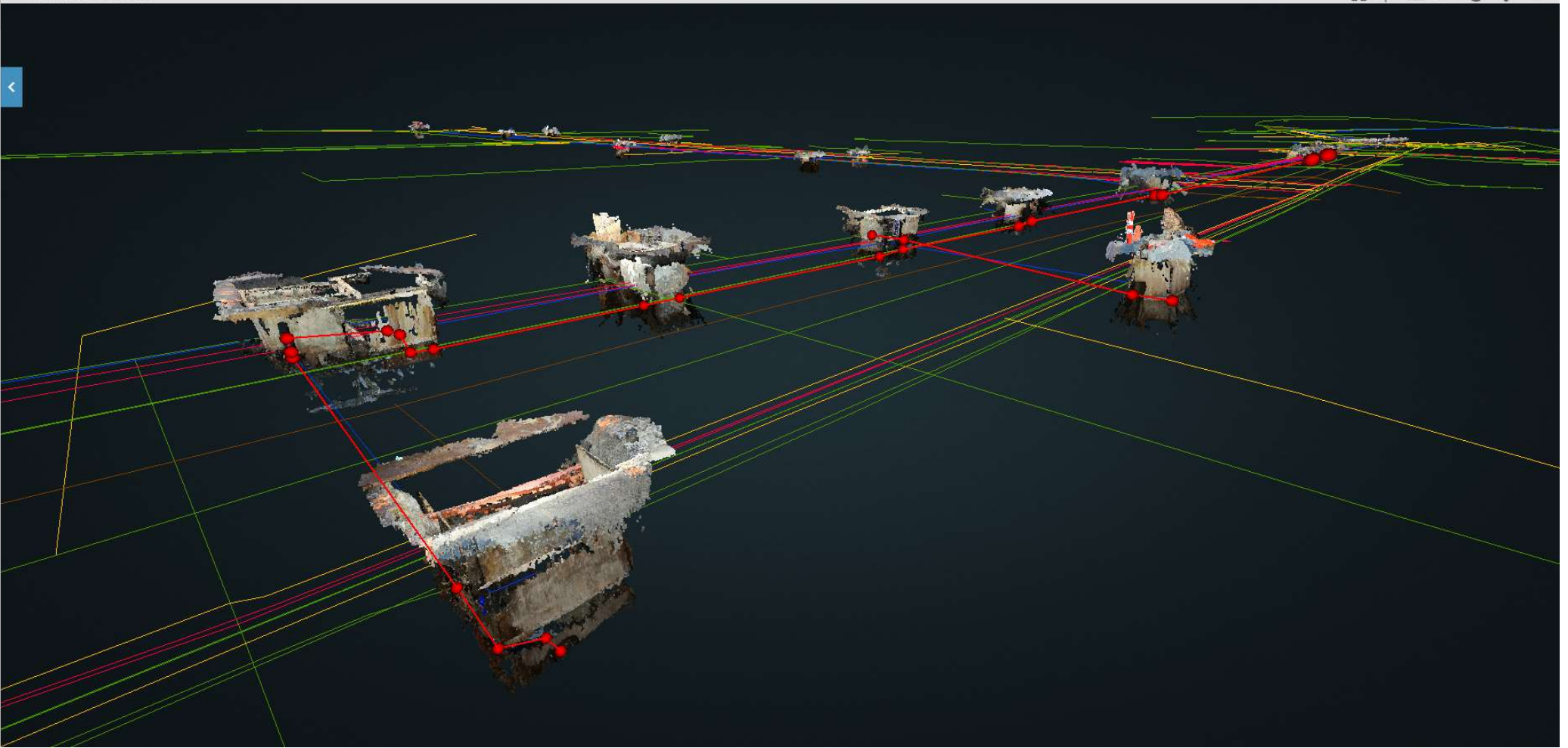
ENGLISH



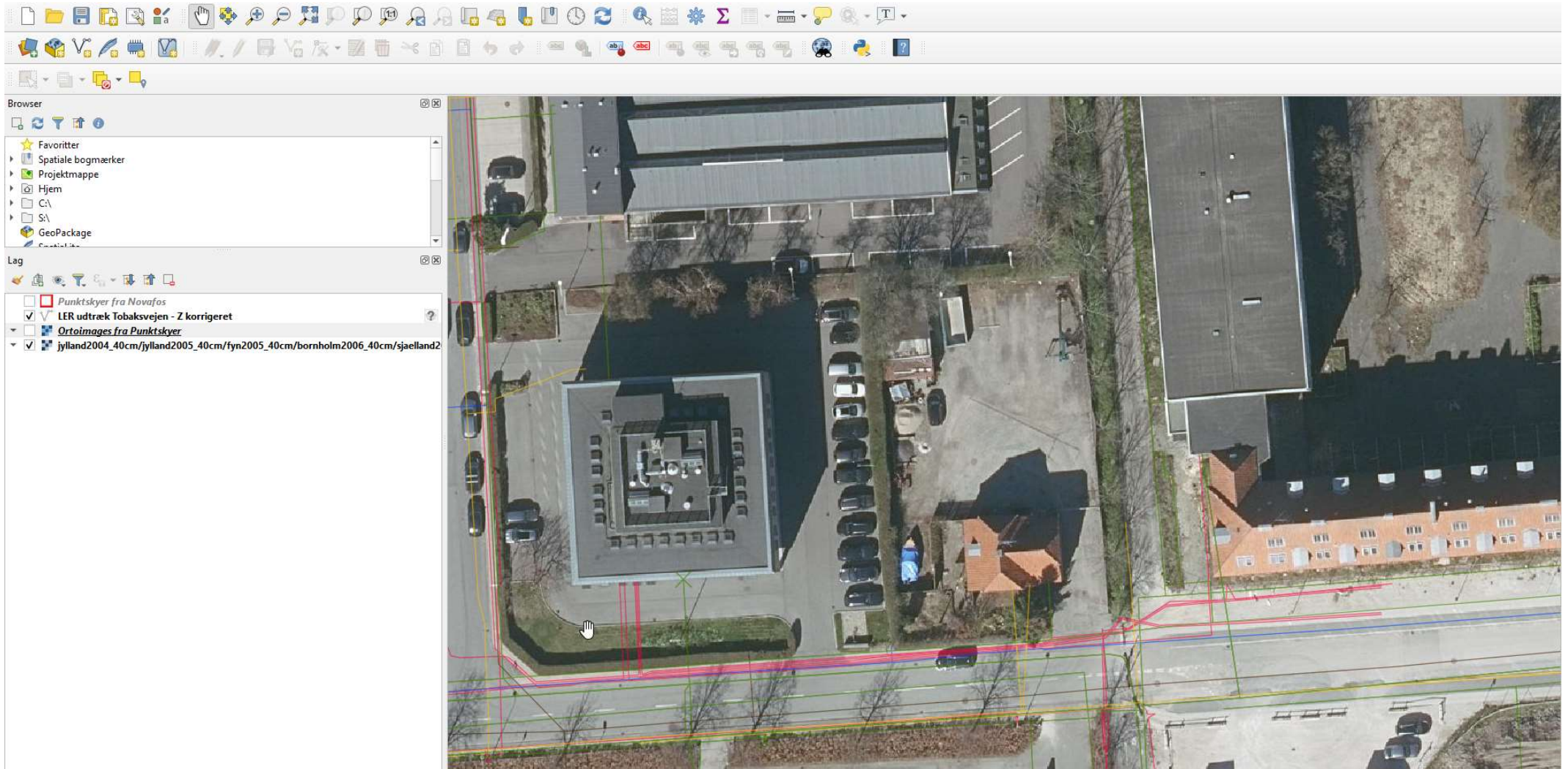
POINTCLOUD





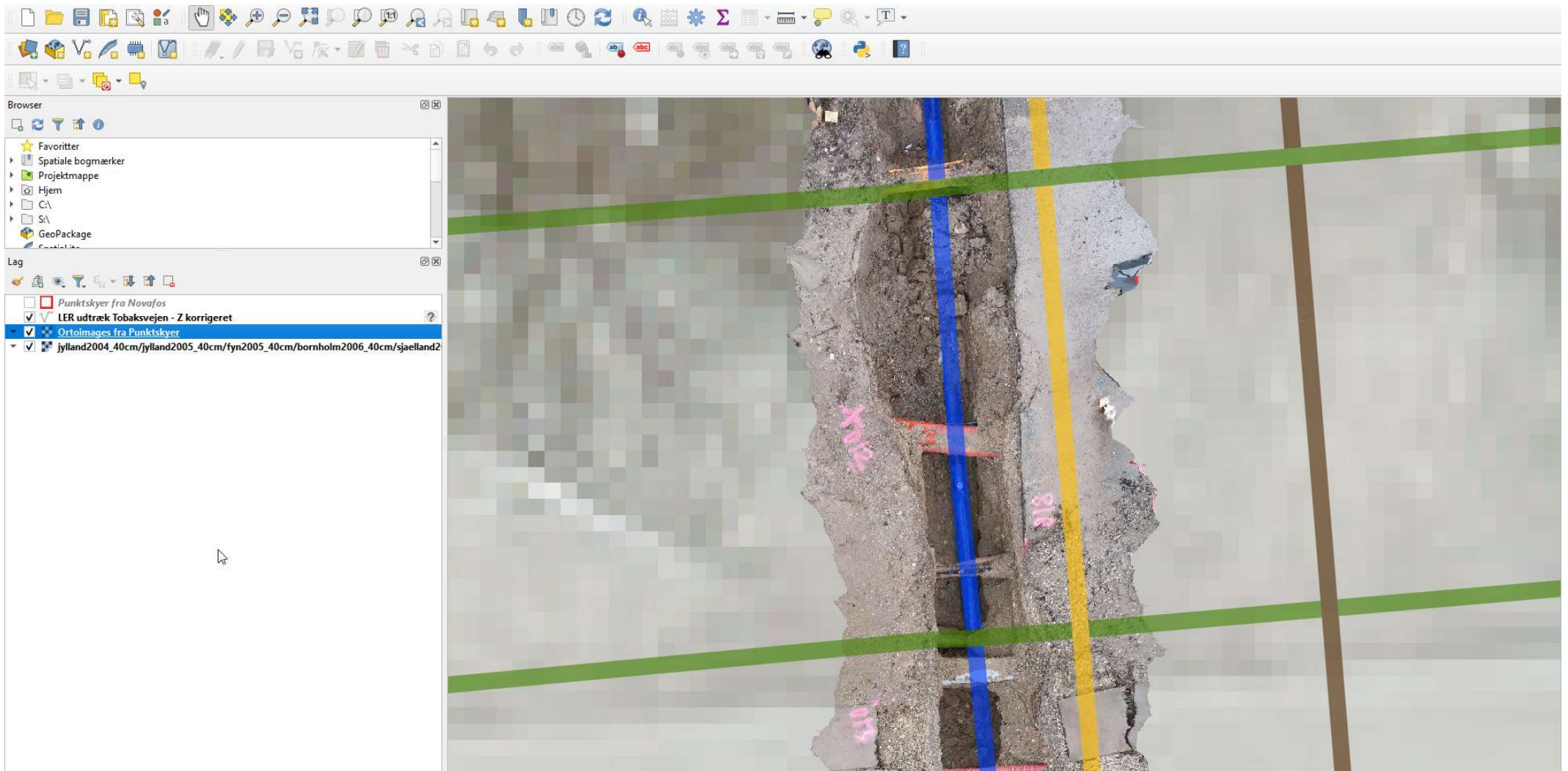


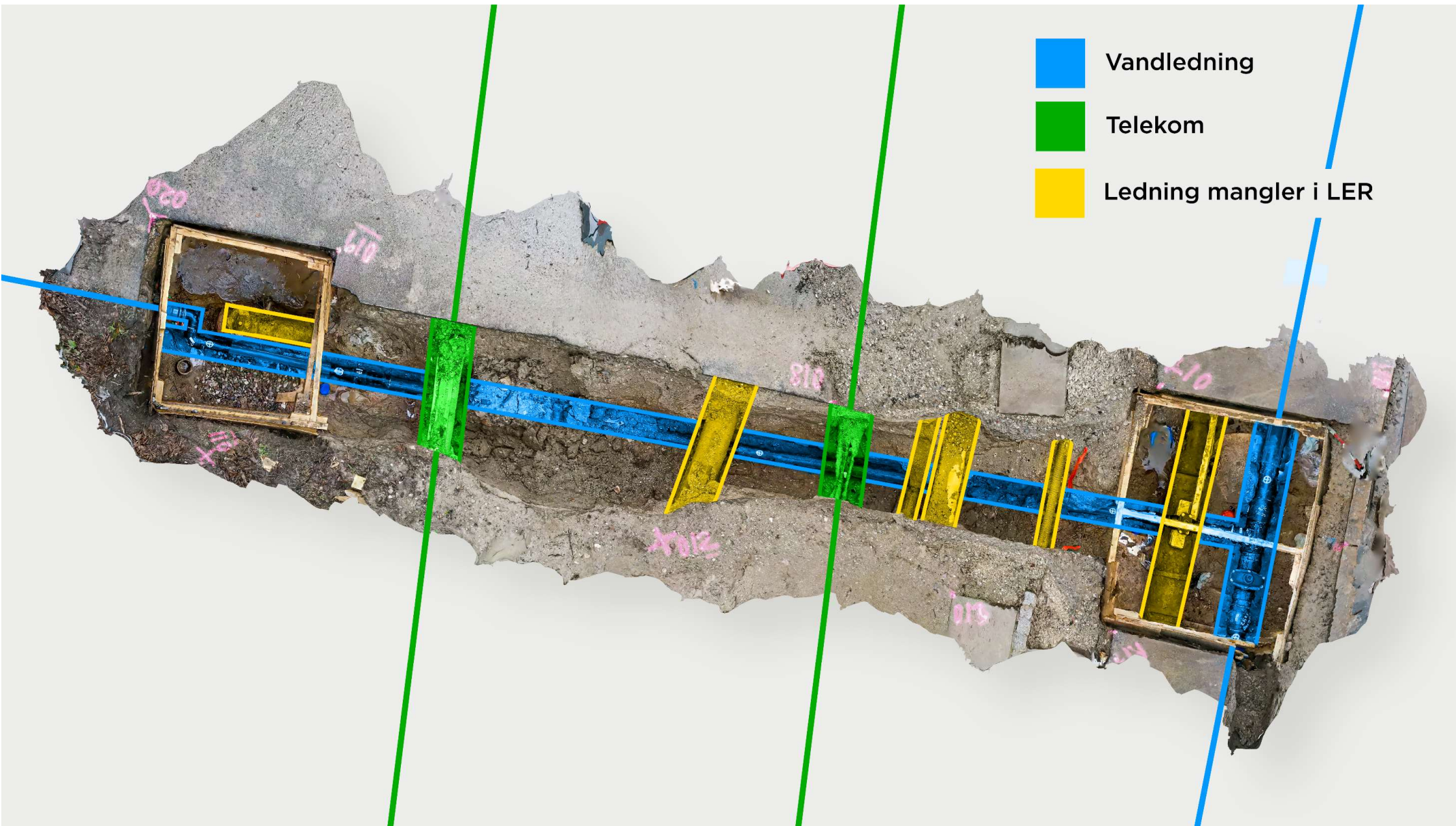
# Q-GIS example





# Q-GIS example





Vandledning



Telekom

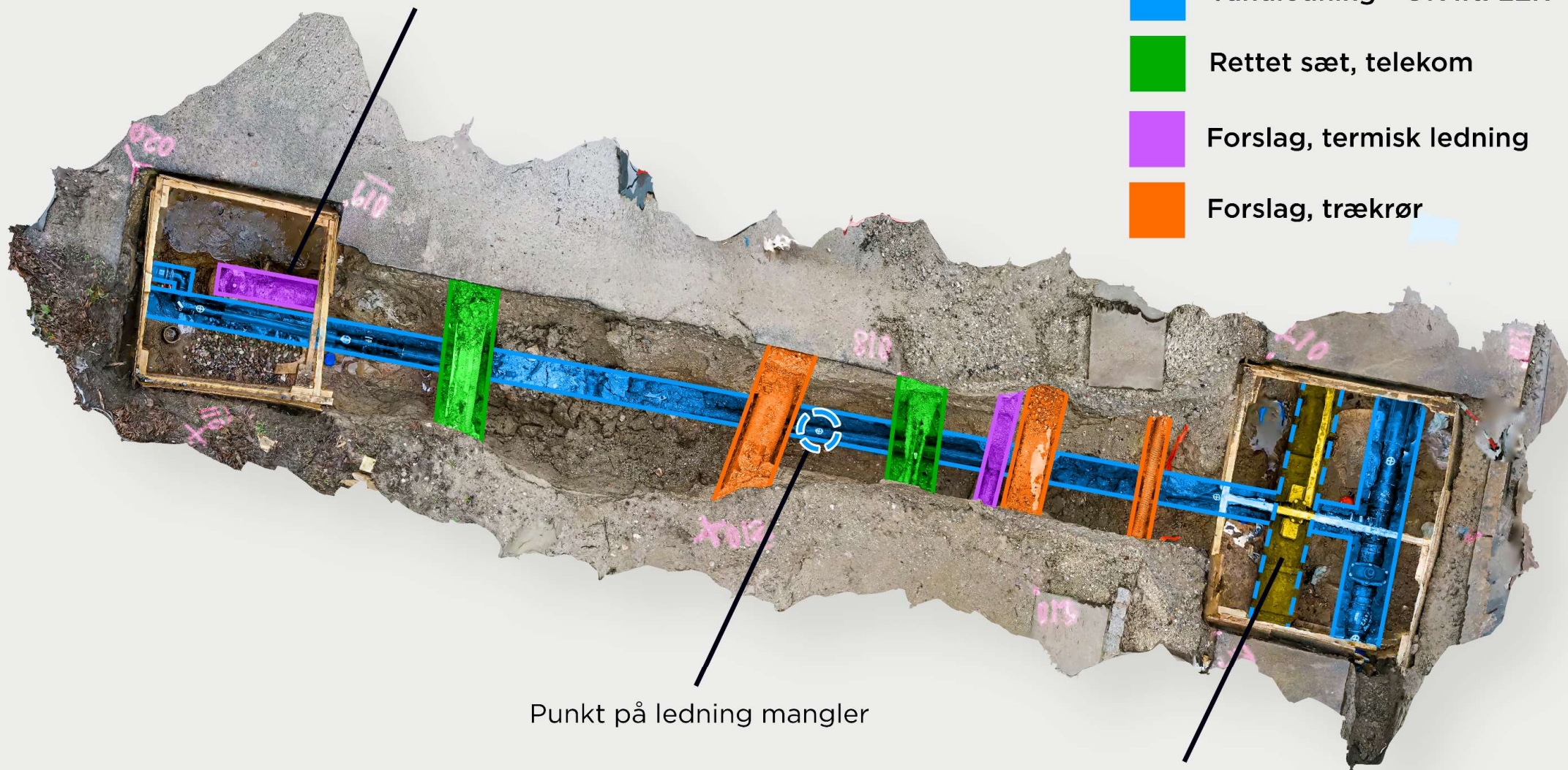


Ledning mangler i LER



Gammel ledning - ukendt

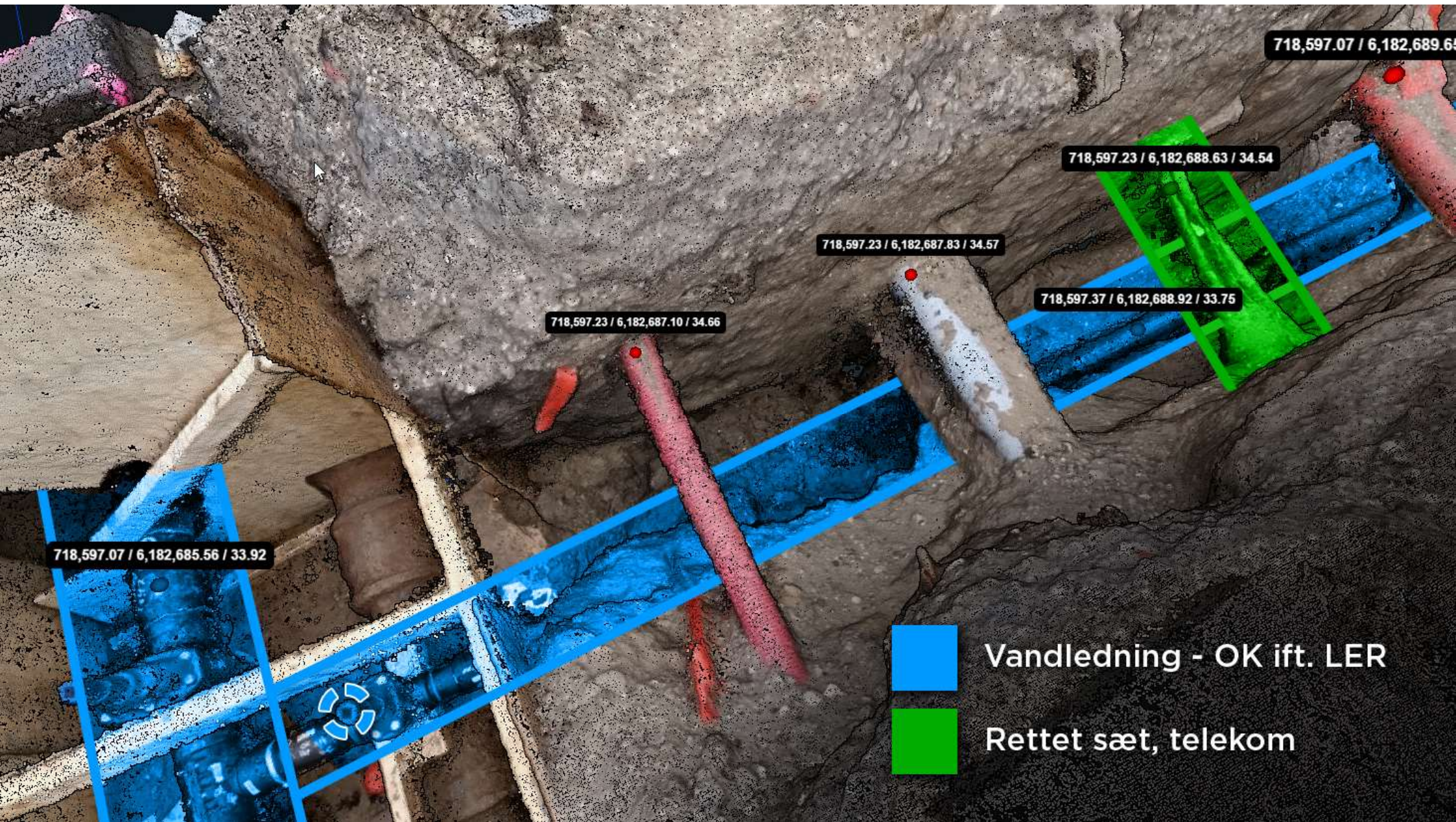
-  Vandledning - OK ift. LER
-  Rettet sæt, telekom
-  Forslag, termisk ledning
-  Forslag, trækrør



Punkt på ledning mangler

Forslag, vandledning metal





718,597.23 / 6,182,687.10 / 34.66

718,597.23 / 6,182,687.83 / 34.57

718,597.37 / 6,182,688.92 / 33.75

718,597.23 / 6,182,688.63 / 34.54

718,597.07 / 6,182,689.64

718,597.07 / 6,182,685.56 / 33.92



Vandledning - OK ift. LER



Rettet sæt, telekom




\*NovafosWFSv2 — QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Dataforsyningen Processing Help Vektor

Layers Geosearch DK

Søg adresse, stednavn, postnummer, matrikel m.m.

- novafos:view\_pointclouds novafos
- Ortofoto forår



Coordinate 711446,6186790 Scale 1:43791 Magnifier 100% Rotation 0,0° Render EPSG:25832

Type to locate (Ctrl+K) Getting map via WMS.




NovafosWF-Sv2 - QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Dataforsyningen Processing Help Vektor

Geosearch DK  
Søg adresse, stednavn, postnummer, matrikel m.m.

Layers  
 novafos:view\_pointclouds\_novafos\_wfs  
 Ortofoto forår



Identify Results

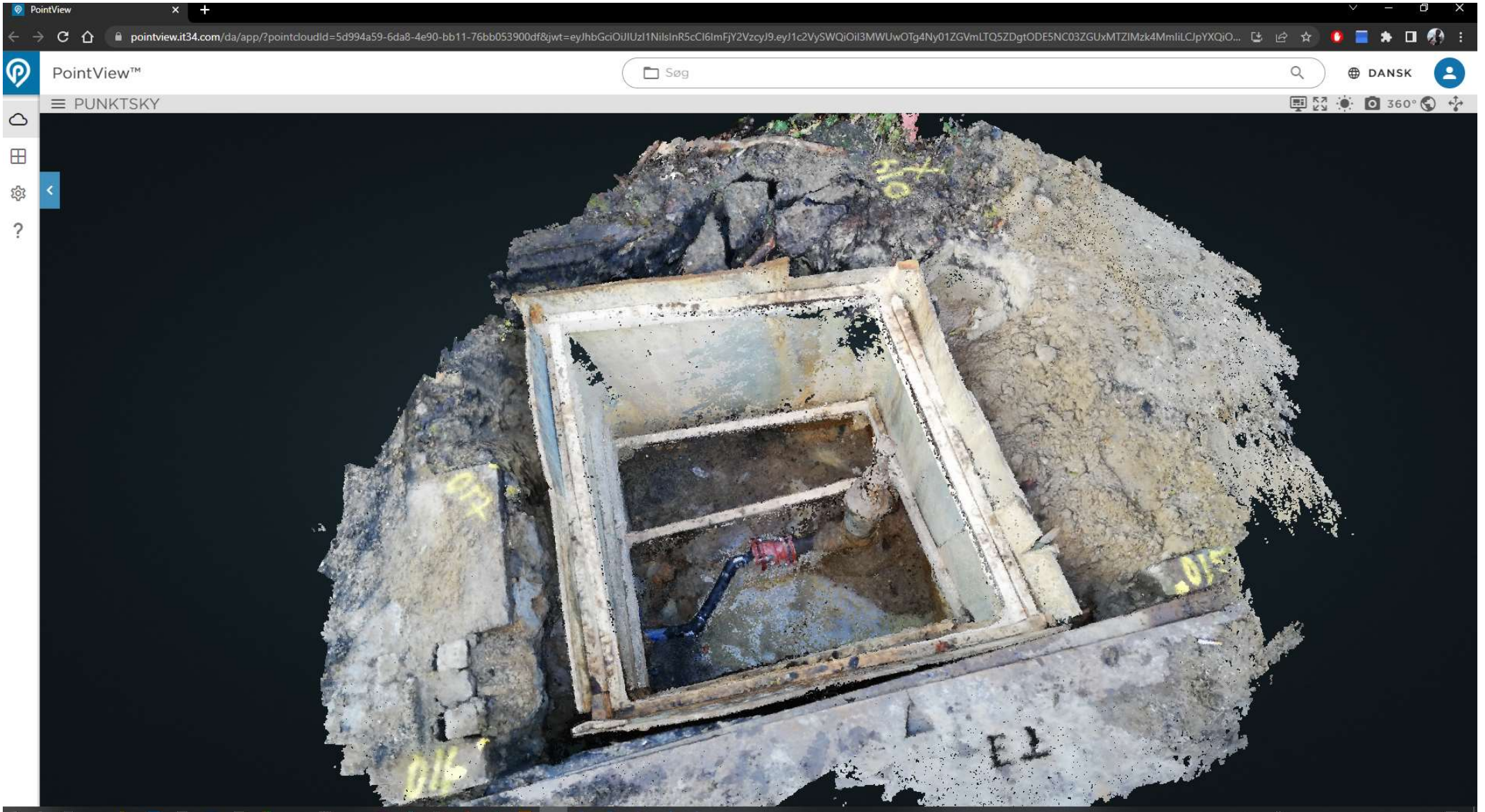
Feature	Value
novafos:view_pointclouds_novafos_wfs [4]	
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(Derived)	
(Actions)	
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active	true
projectId	db923e4a-29c5-49e1-806b-654a669784be
type	vand
date	2019-12-13
udfort	Landinspektør, LE34
hepsg	25832
vepsg	5799
PointcloudLink	<a href="https://pointview.it34.com/da/app/?pointcloudId=5d994a59-6da8-4e90-bb11-76bb053900df">https://pointview.it34.com/da/app/?pointcloudId=5d994a59-6da8-4e90-bb11-76bb053900df</a>
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id	5d994a59-6da8-4e90-bb11-76bb053900df
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Mode: Current Layer

View: Tree

Getting map via WMS. Coordinate: 721657.2,6183311.6 Scale: 1:1487 Magnifier: 100% Rotation: 0,0° Render EPSG:25832







it\_

# Questions and Comments

Rasmus Lindeneg Johansen

[RLJ@it34.com](mailto:RLJ@it34.com)