The Stockholm Bypass

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Project Director

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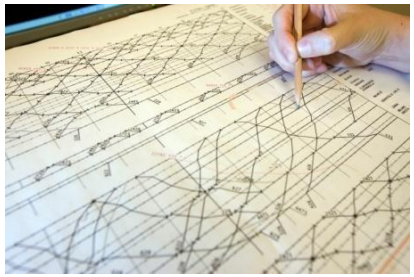
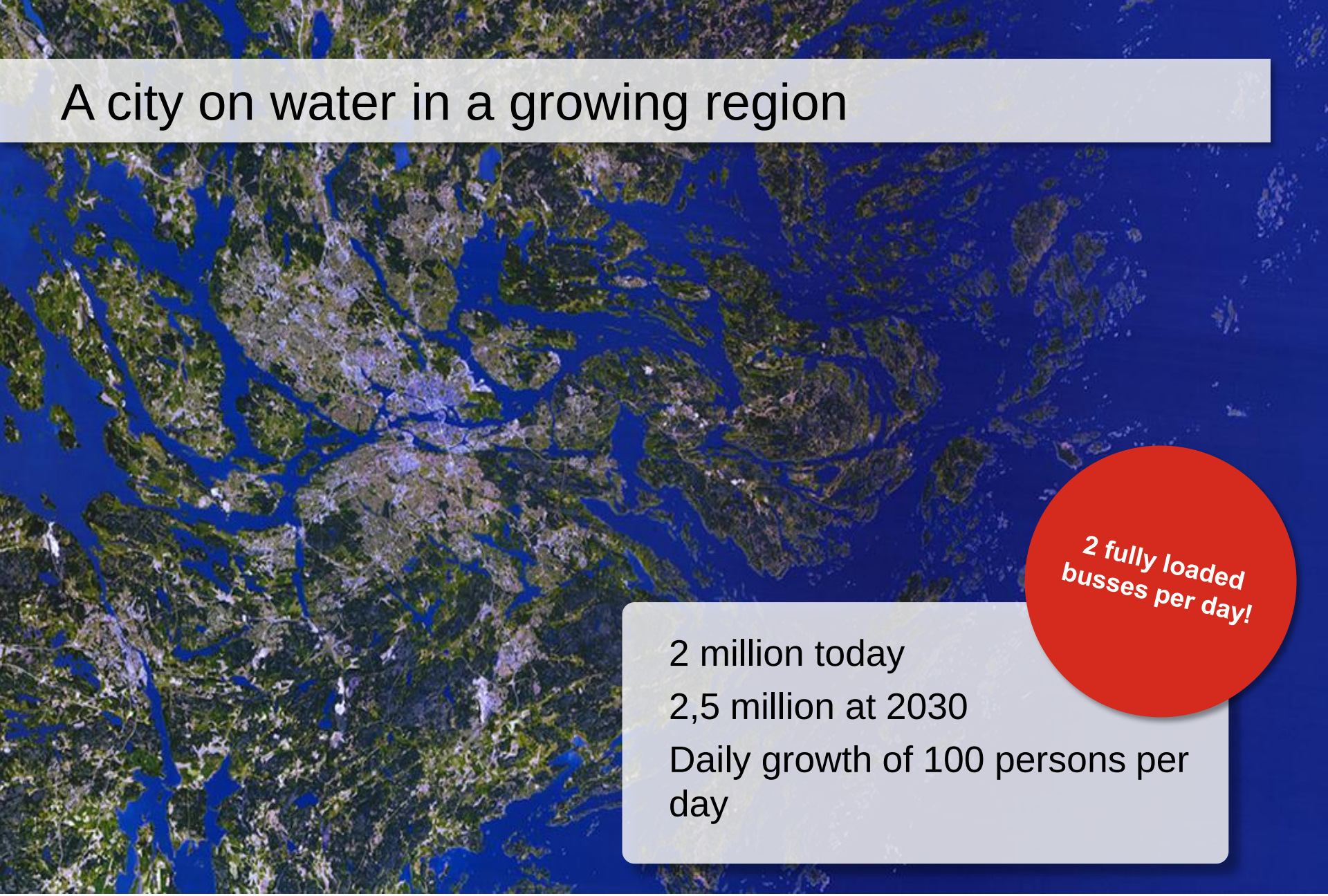
SWEDISH TRANSPORT ADMINISTRATION

Trafikverket is responsible for long-term planning of the transport system for road traffic, rail traffic, and transport by sea and air. Trafikverket is also responsible for building, operating and maintaining national roads and railways.



A city on water in a growing region



2 fully loaded busses per day!

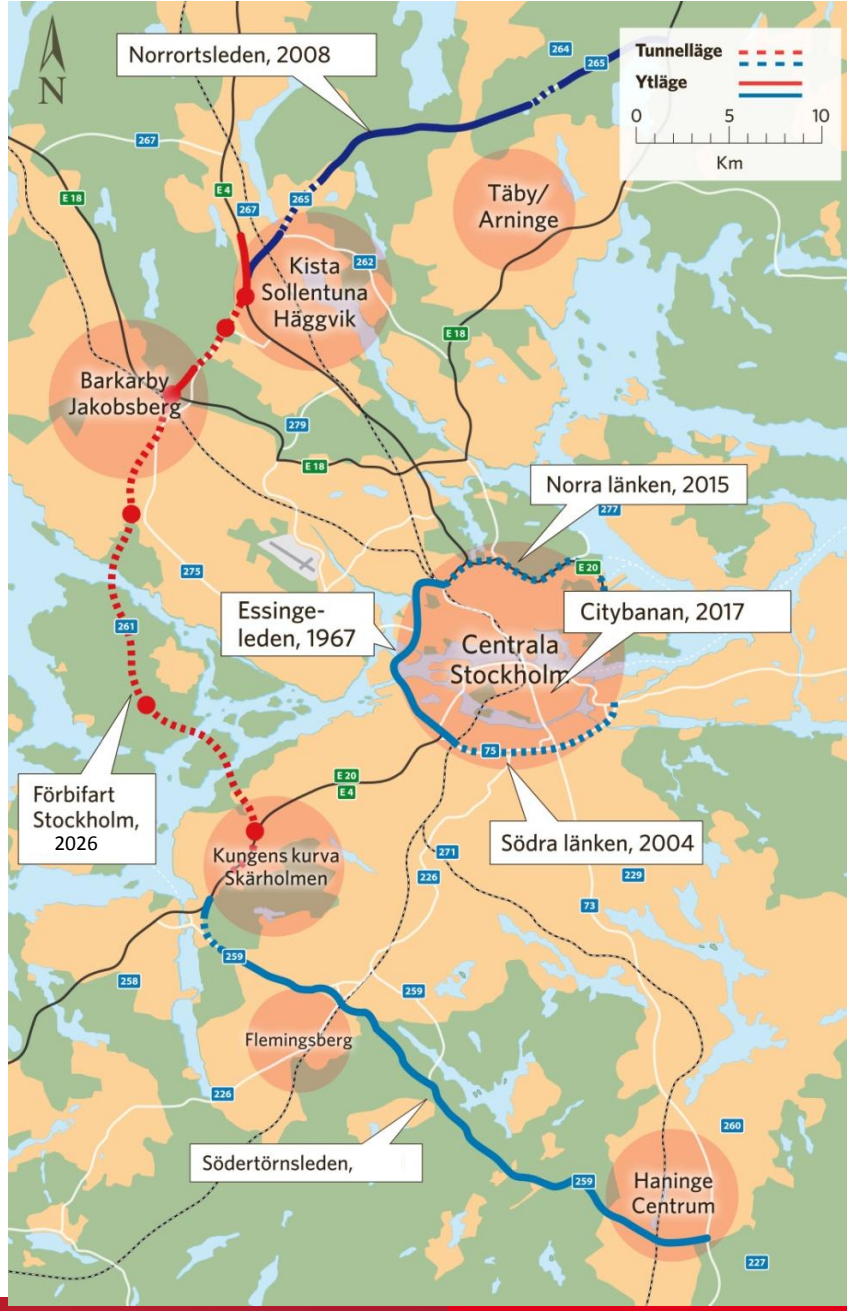
- 2 million today
- 2,5 million at 2030
- Daily growth of 100 persons per day

Why we need the Stockholm bypass

- Growing region
- Divided region – few connections between north and south
- Lack of capacity
- Sensitive traffic system

Part of the regional developement

- The outer ring – a motorway to drive around the city
- Connection between north and south
- Important for a growing region
- Also an important connection for public transportation by bus



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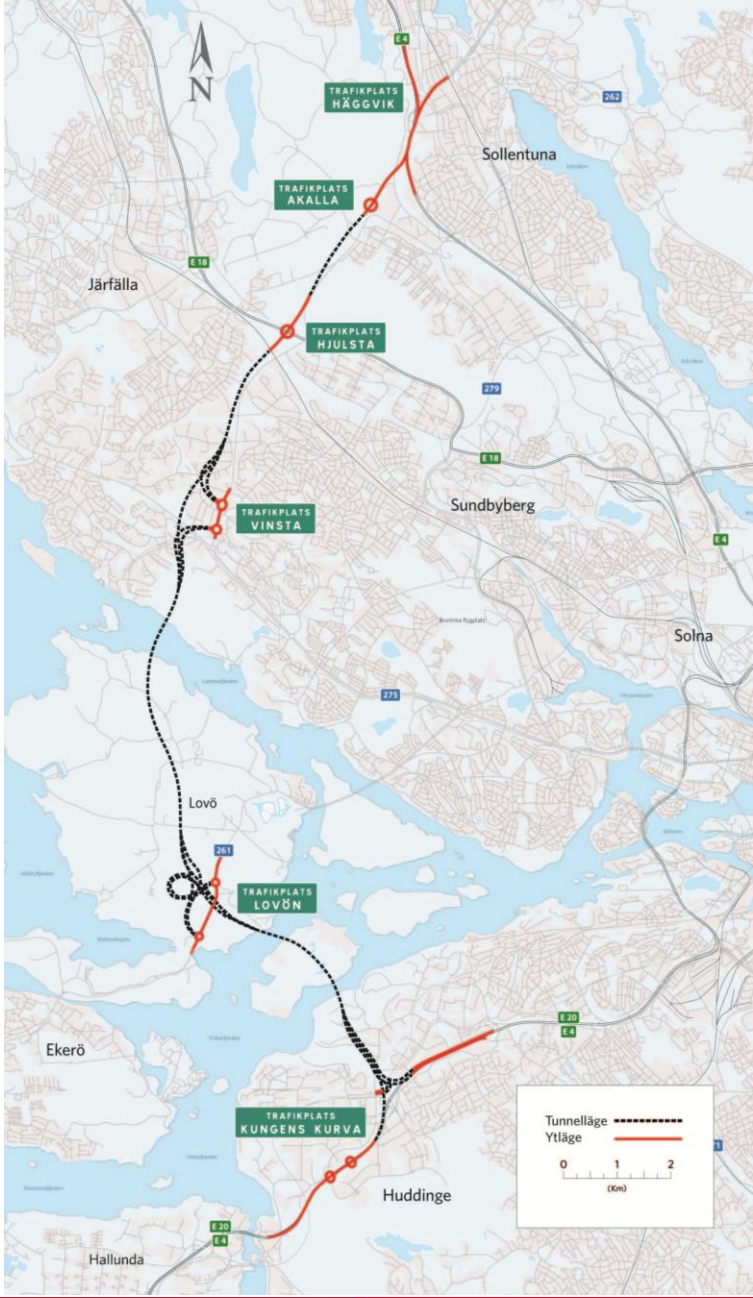
The Stockholm bypass

Length:	21 km
Tunnel:	18 km
Travel time:	15 min
Lanes:	3 in each direction
Interchanges:	6
Traffic 2035:	140 000 cars/day
Cost (2009):	27,6 billion SEK
	(approx 3 billion €)



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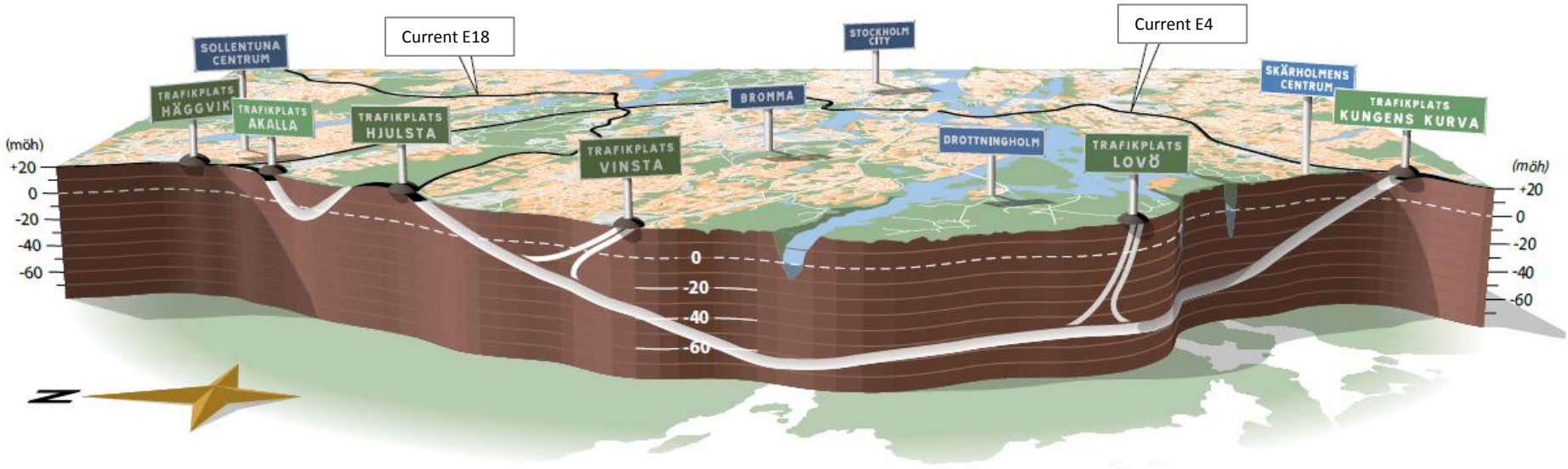
18 out of 21 km in tunnel

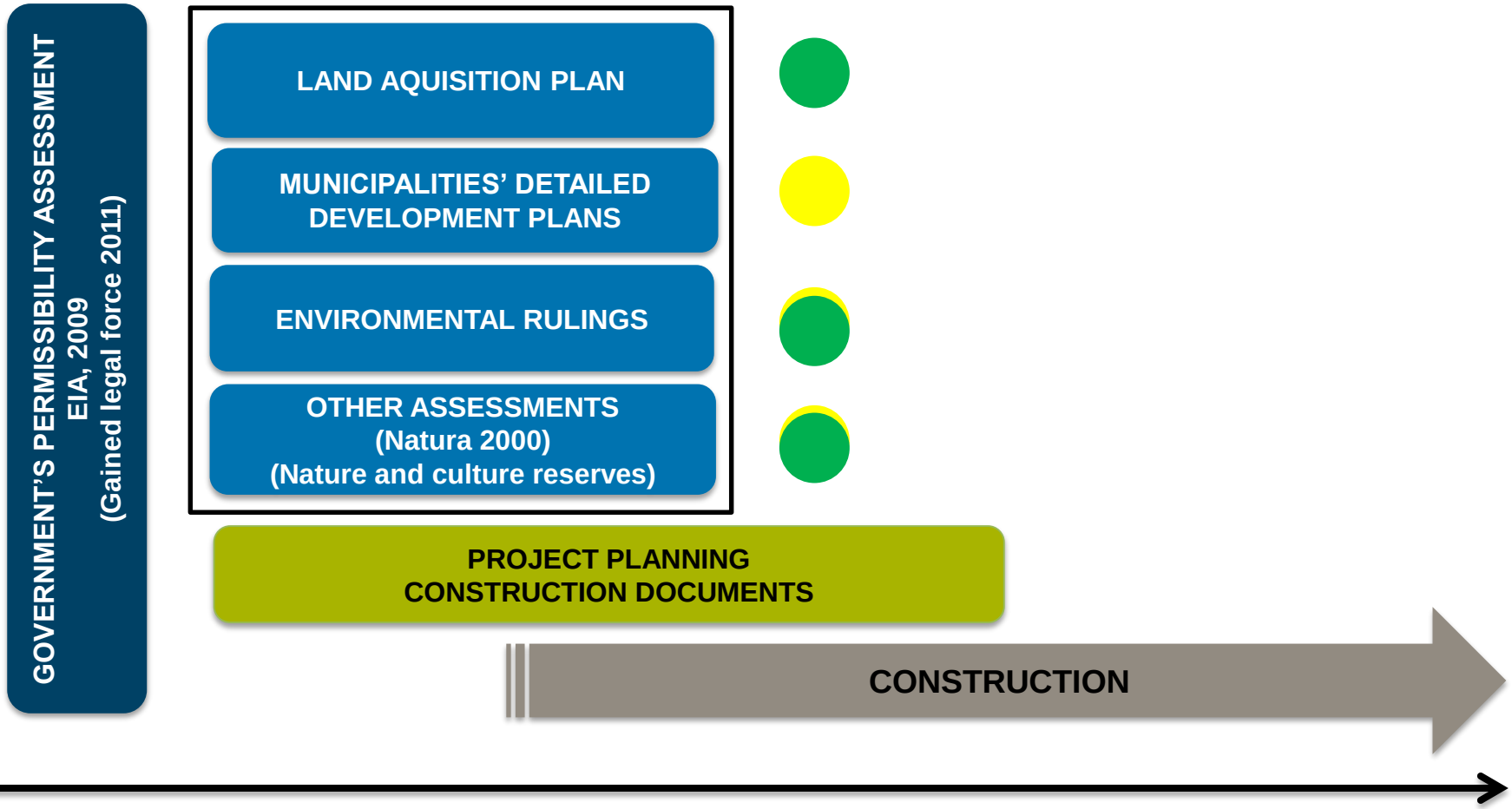


Graphics: Tomas Öhrling 2010

- 60 m below water level
- 100 m rock overburden
- High quality rock with critical parts under lake Mälaren

Time Schedule

The Stockholm bypass 2012 and onwards

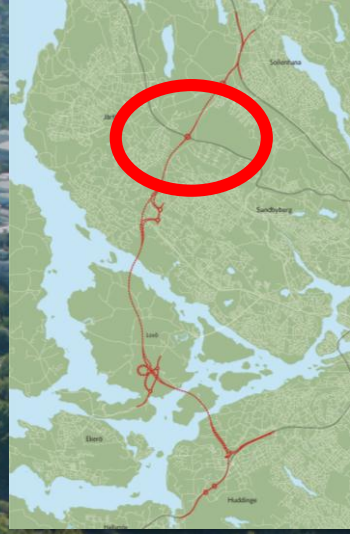


EIA = Environmental Impact Assessment

Häggvik today

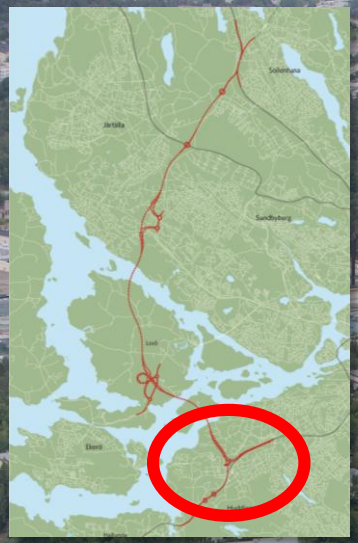
Trafikplats Häggvik

Hjulsta today



Trafikplats Hjulsta

Kungens kurva today



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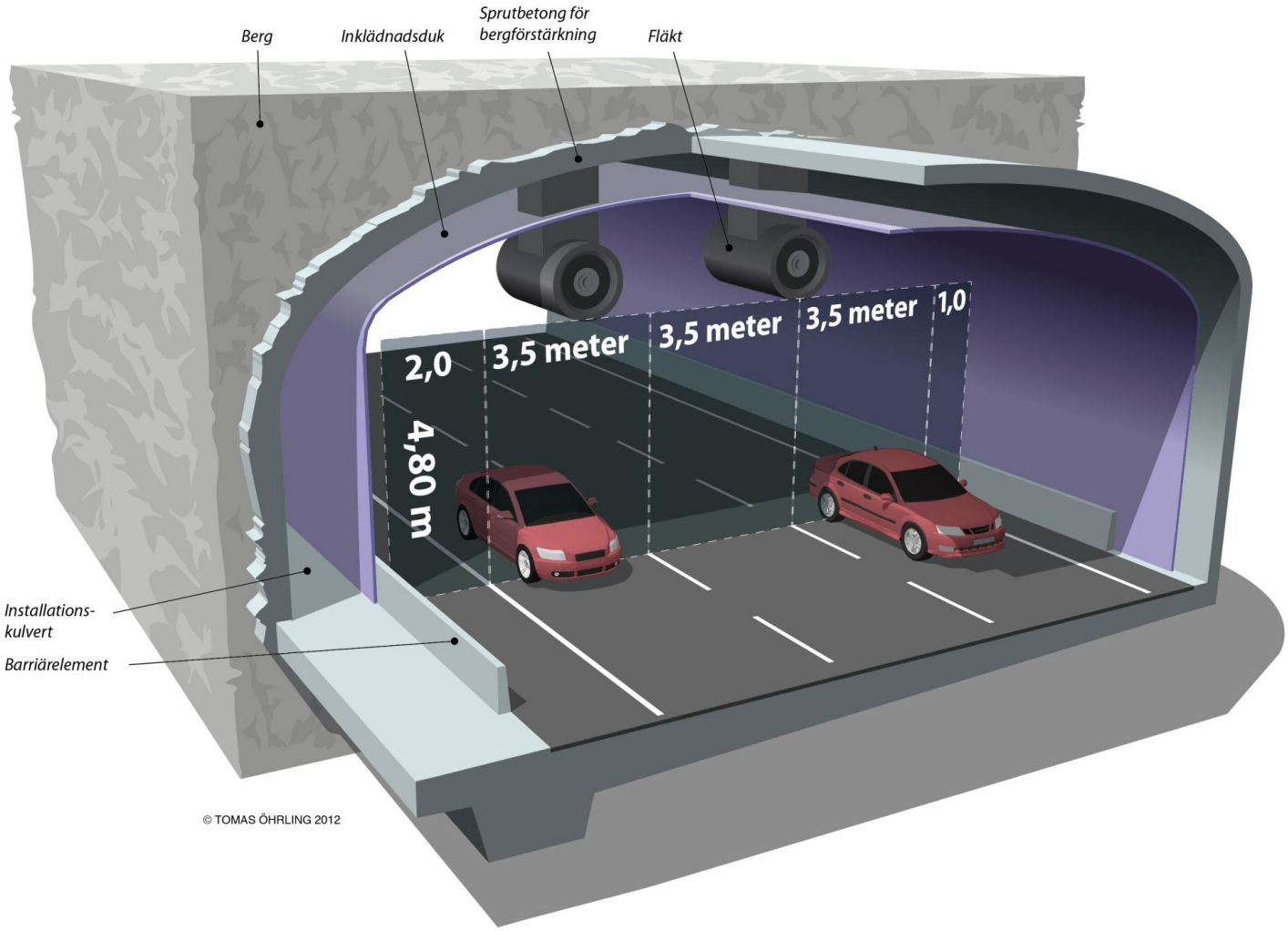
Trafikplats Kungens kurva

Trafikplats Kungens kurva

Cross section, tunnels



The tunnels…

- Total length: 2x18 km
- Ramps: 14 km
- 3 temporary jetties
- Total rock: 19 million tonnes

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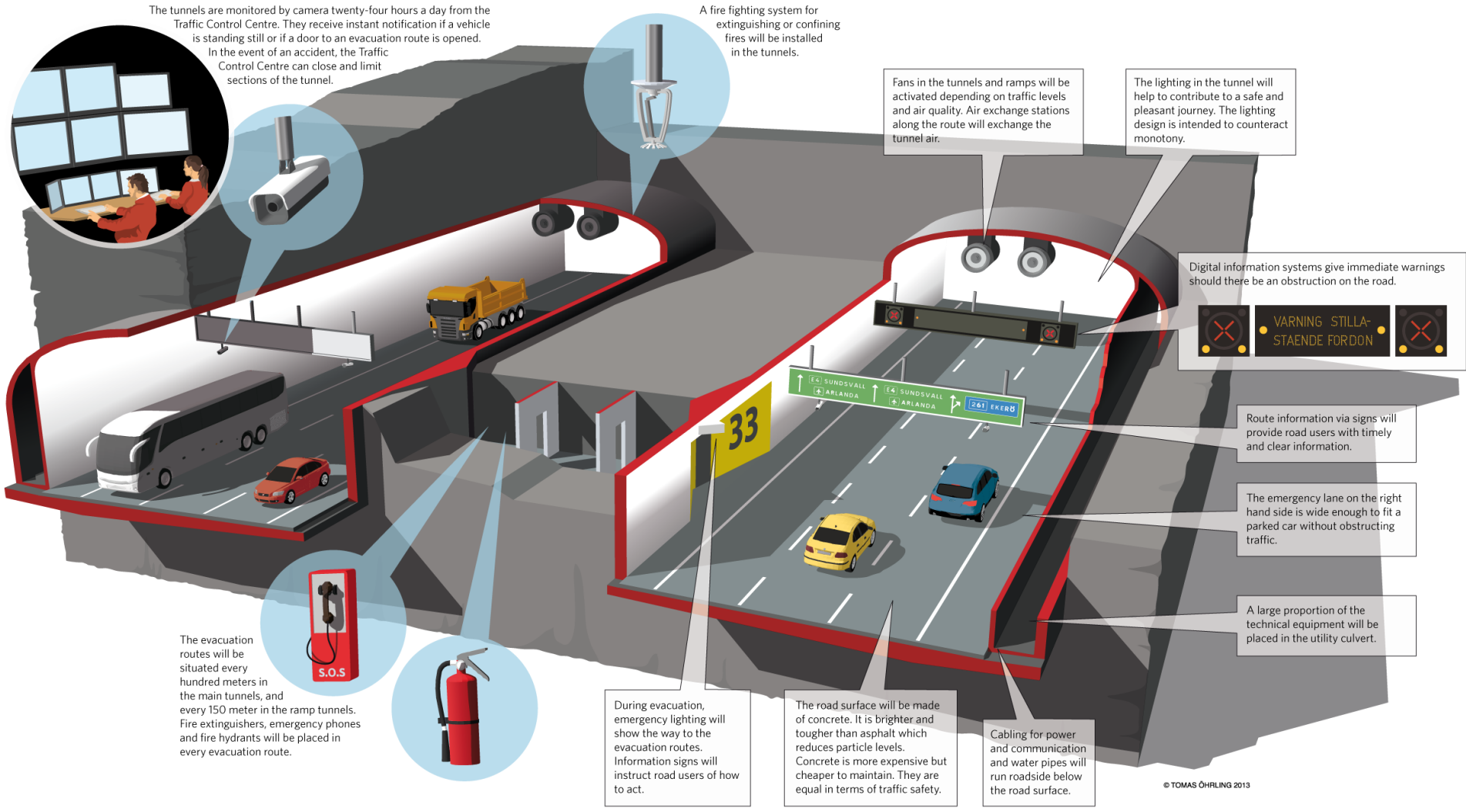
Safety concept in tunnels



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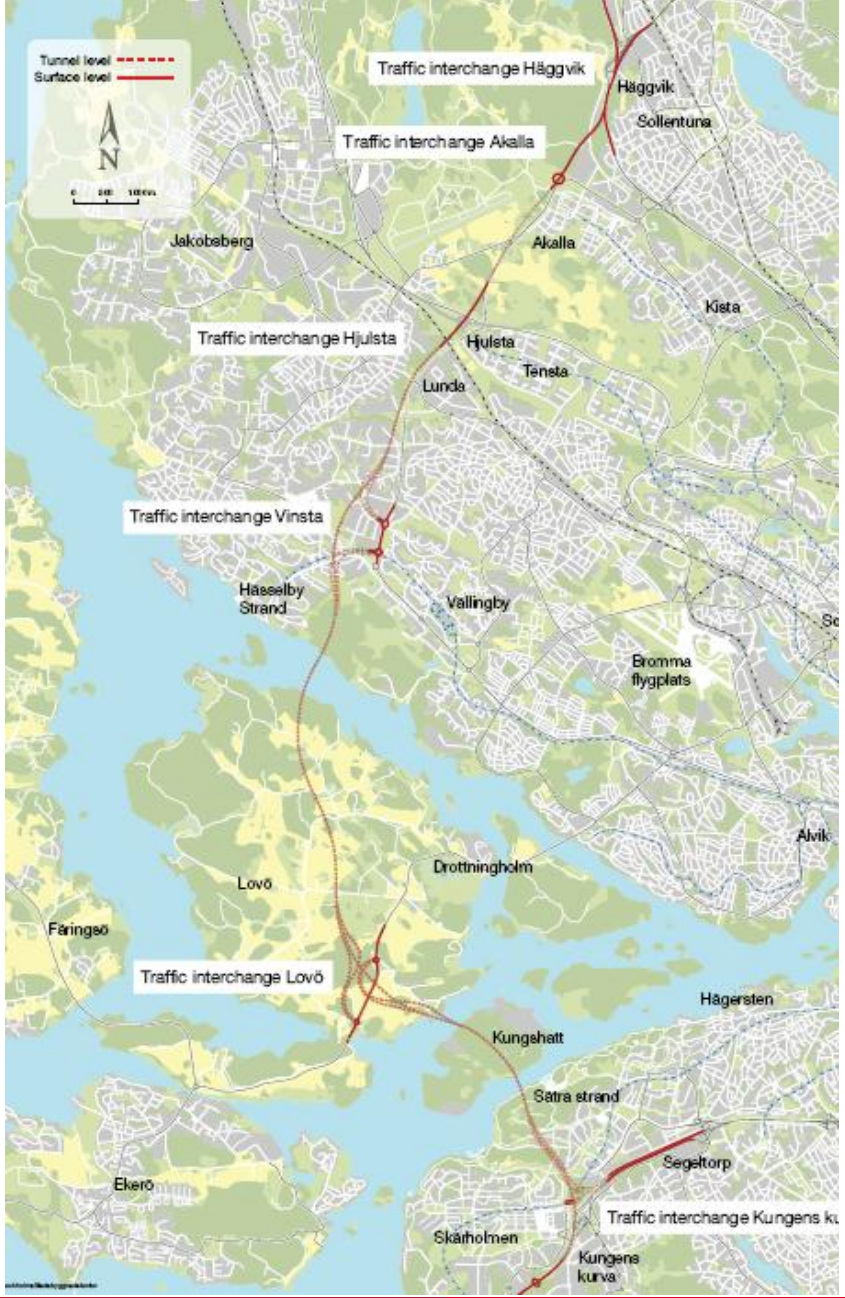
Challenges

- Safety during construction
- Safe and efficient traffic arrangements during construction
- Ground water management
- Rock and soil handling during construction
- Deep excavations in soft clays
- Quality control
- 3D models - Bim
- Sensitive nature- and cultural- landscape
- Climate change
- Time and cost



Carrying out The Stockholm bypass

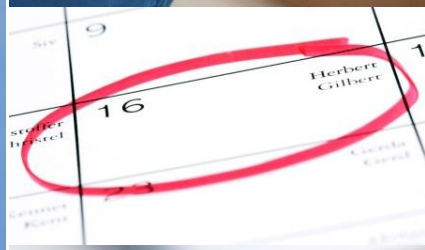
- 50 contracts of varying sizes
- 11 civil contracts in excess of 100 million Euro
- 5 E&M Contracts
- Construction of rock tunnels, civil engineering, bridges, roads and installations of E&M.
- The size of the main civil contracts varies between 50 and 300 million Euro.

Procurement forms

- In accordance with the Swedish Public Procurement Act (LOU).
- The majority of our contract procurements are above the threshold value.
- All procurements are published in the EU database Tenders Electronic Daily (TED).
- Open procurements.
- Selective procurement - prequalification

Our tender request documents

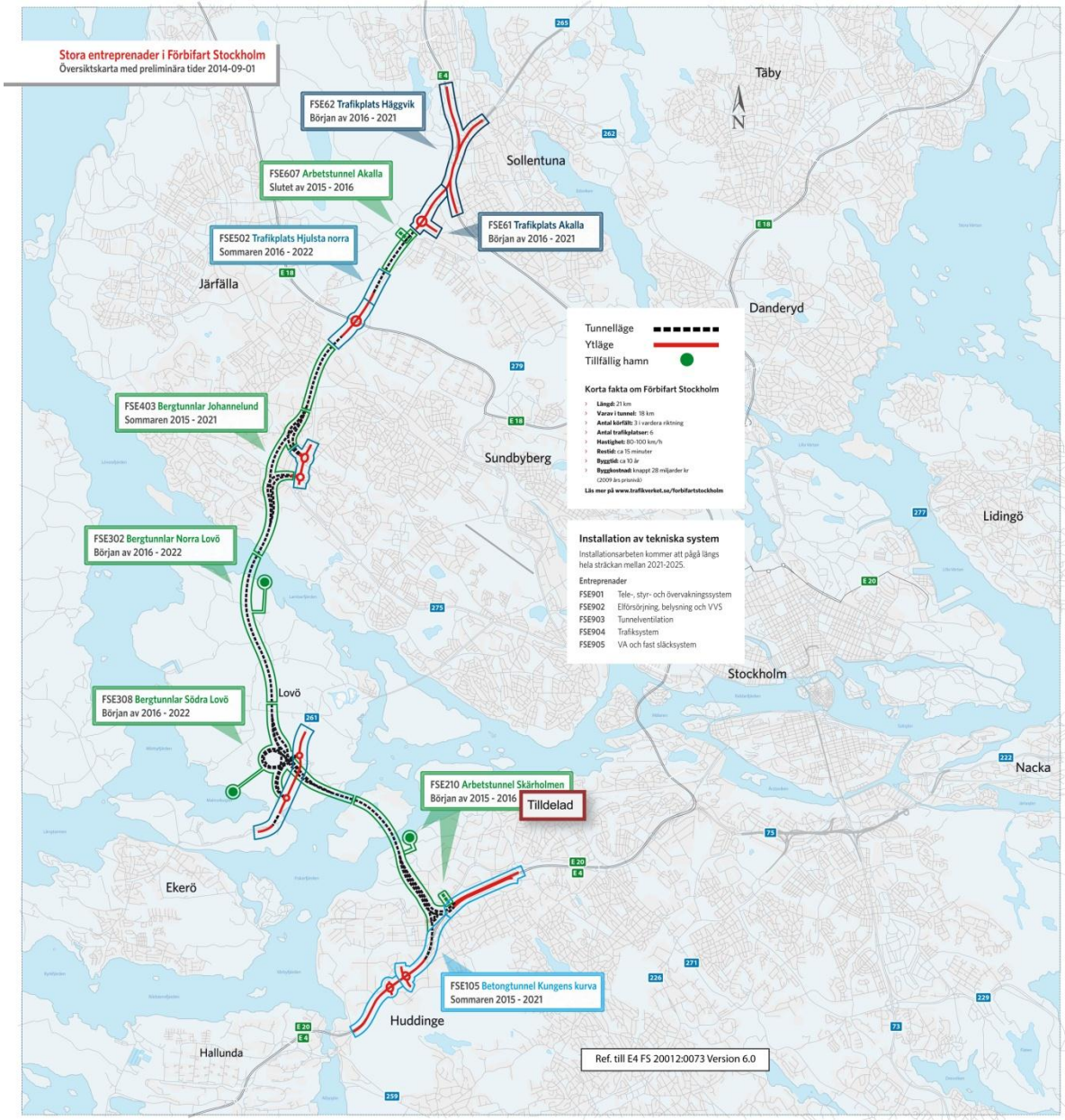
- All technical qualifications and contract documents are drawn up in Swedish.
- If a need is demonstrated, individual documents as well as complete acts can be translated into English.
- We follow the industry's common standard agreements for contracts.



Contract forms

- Rock tunnels and work tunnels – build only contracts, based on BQ.
- Bridges and concrete tunnels for junctions – design-build contracts.
- Roads and reconstructions of existing installations – build only contracts, based on BQ.
- Installations in tunnels are procured as design-build contract, based on system and functional requirements.

Tenders during 2015



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Question time

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