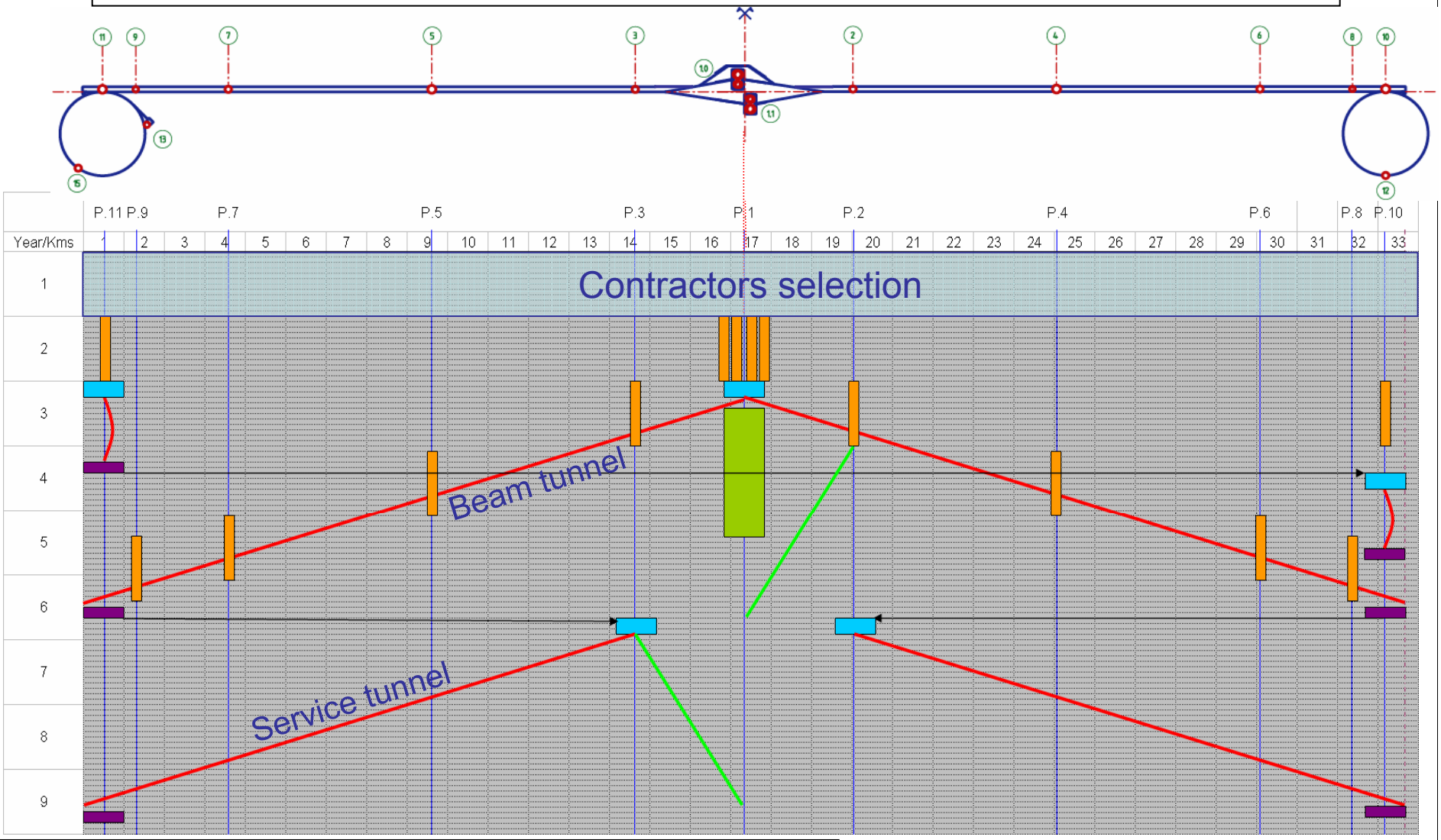
Construction Schedule

JL

- → ILC underground Civil Engineering Work schedule for CERN sample site
- → Assumptions:
  - → **Detailed design and tender documents completed prior to Day 1**
  - → **Market survey, call for tender, mobilisation of equipment, and planning permission to start as from Day 1 and to last 1 year**
  - → **Surface work to be done in parallel with underground activities**
  - → **Further study is needed for the overlap with services, accelerator, and detectors installation**
  - → **Draft schedule valid for CERN and possibly Americas' sites. Asian and DESY site to be studied further based on local parameters.**
  - → **TBM average progress rate 20m/day, Road Header progress rate 20m/week**
- → 3 scenarios considered (function of tunnelling resource):
  - → **3 TBMs**
  - → **6 TBMs**
  - → **10 TBMs**

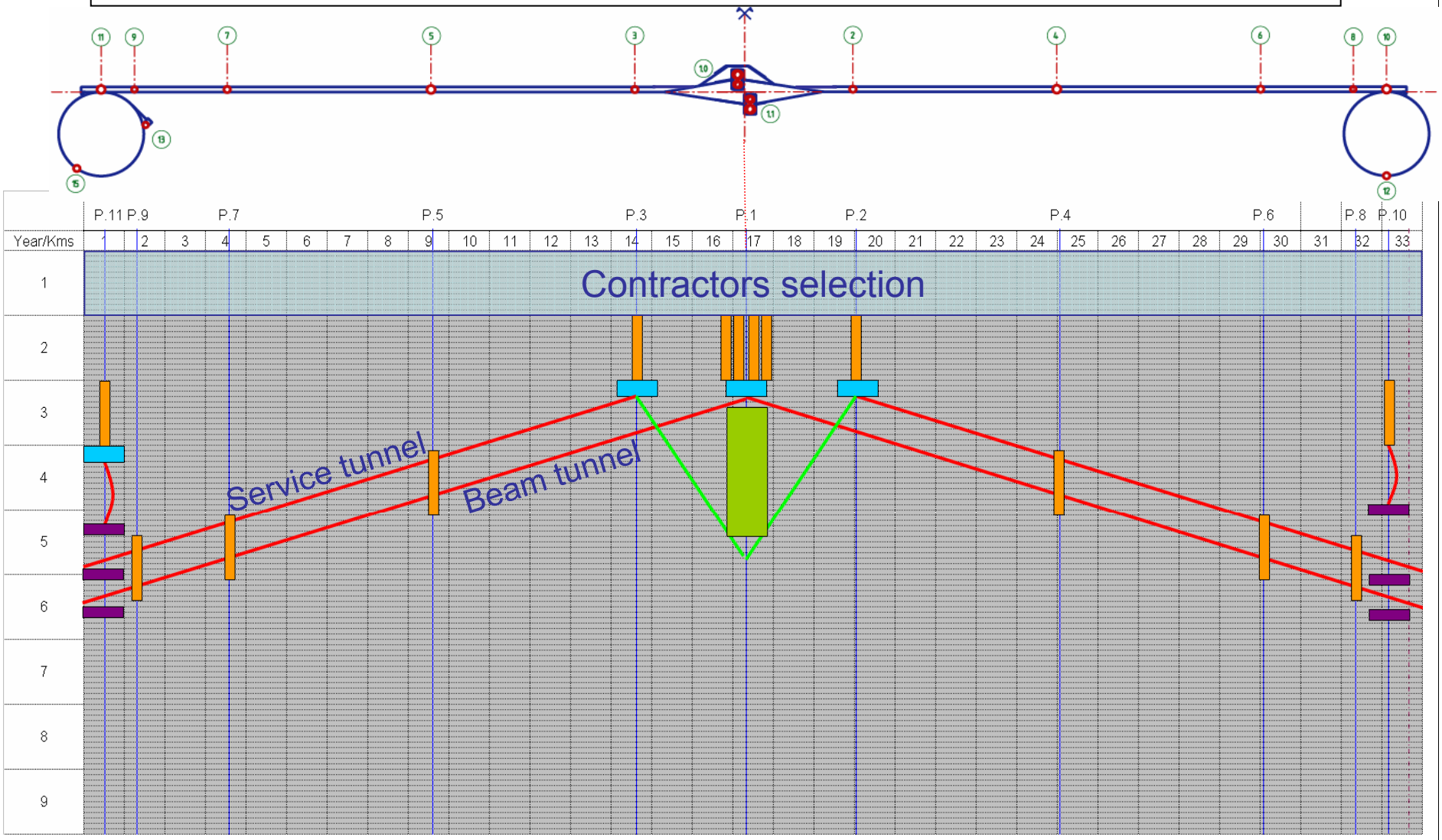
Scenario 1 – Tunnelling resources: *3 TBMs*



TBM $\varnothing_{finished}$=5m
Road header ∅=5m
Cavern construction
Shaft excavation
TBM setup
TBM removal

Underground CE work completion
8 years + 10 months

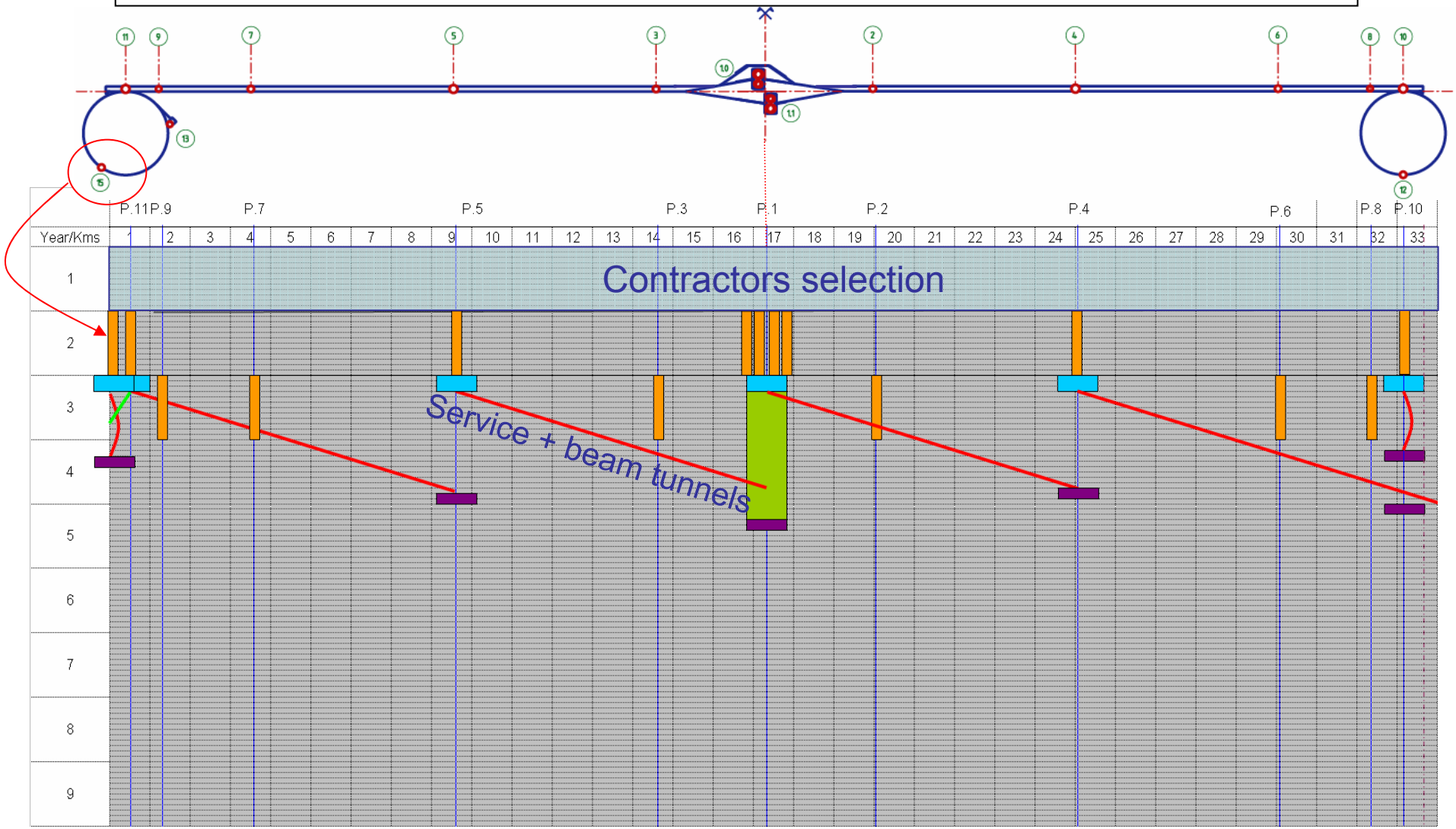
Scenario 2 – Tunnelling resources: *6 TBMs*



TBM $\varnothing_{finished}$=5m
Road header ∅=5m
Cavern construction
Shaft excavation
TBM setup
TBM removal

Underground CE work completion:
5 years & 8 months

Scenario 3 – Tunnelling resources: 10 *TBMs*



TBM $\varnothing_{finished}$=5m
Road header ∅=5m
Cavern construction
Shaft excavation
TBM setup
TBM removal

Underground CE work completion:
4 years & 5 months