

Structure Post Office, Rotterdam

Aanpak sloop Rodezandvleugel en constructie toren

A-DD-M-N-R-007

12-09-2018

Leeswijzer:

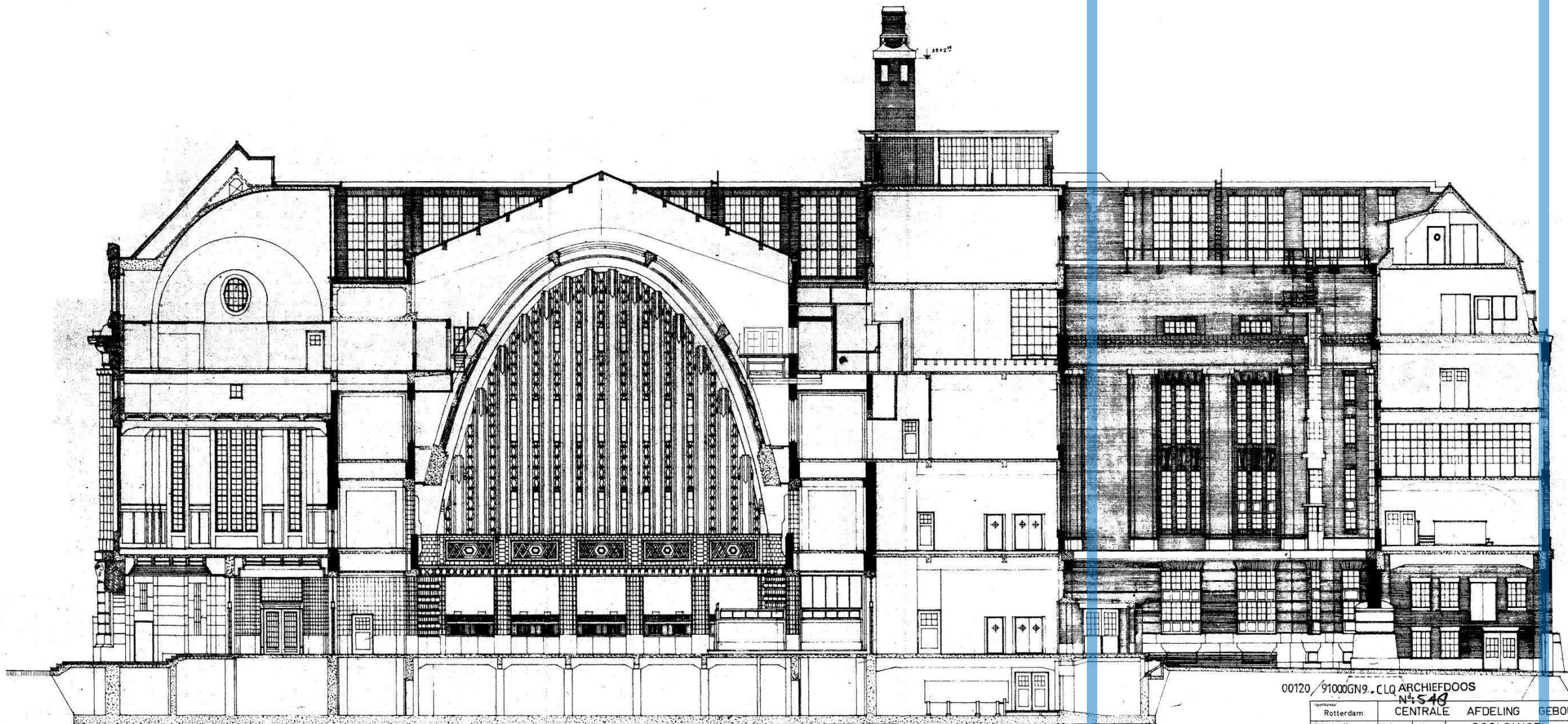
Dit document is als aanvullende informatie behorend bij het stappenplan van de uitvoering (interactie nieuwe en oude palen) in bijlage 3 van ons uitgangspuntendocument R-316-125-BA-101.

De voor u liggende informatie is op 3 juni gepresenteerd aan de commissie Welstand en Monumenten (monumenten werkgroep).

- Slooplijnen laten zien. Bestaande delen niet afhankelijk van te slopen delen.
- Sloopwerk voorzichtig uitvoeren, klein materieel aan randen.
- Raakvlak nieuwe en oude fundering laten zien.
- Uitvoeringsmethoden met laag risico: damwanden drukkend aanbrengen, stempelraam toepassen om vervorming te minimaliseren, funderingspalen grondverdringend geschroefd.
- Nieuwe funderingen naar 2^e zandlaag om zettingen te minimaliseren.
- Grondige analyse van effecten, zettingen, vervormingen damwanden.
- Goed uitleggen aan aannemers.
- Goede controle uitvoering. Uitgebreide monitoring.

Post Rotterdam





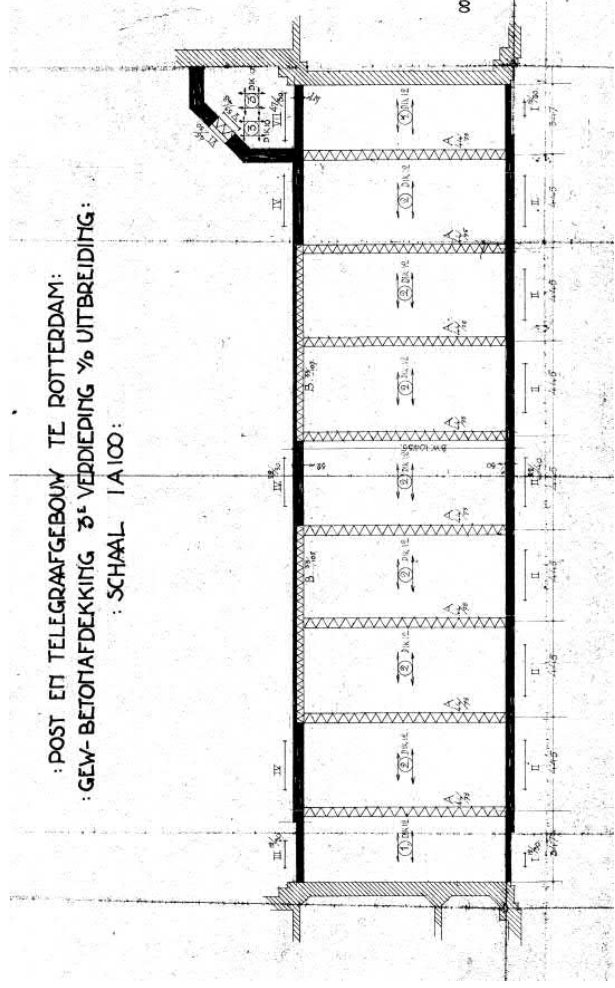
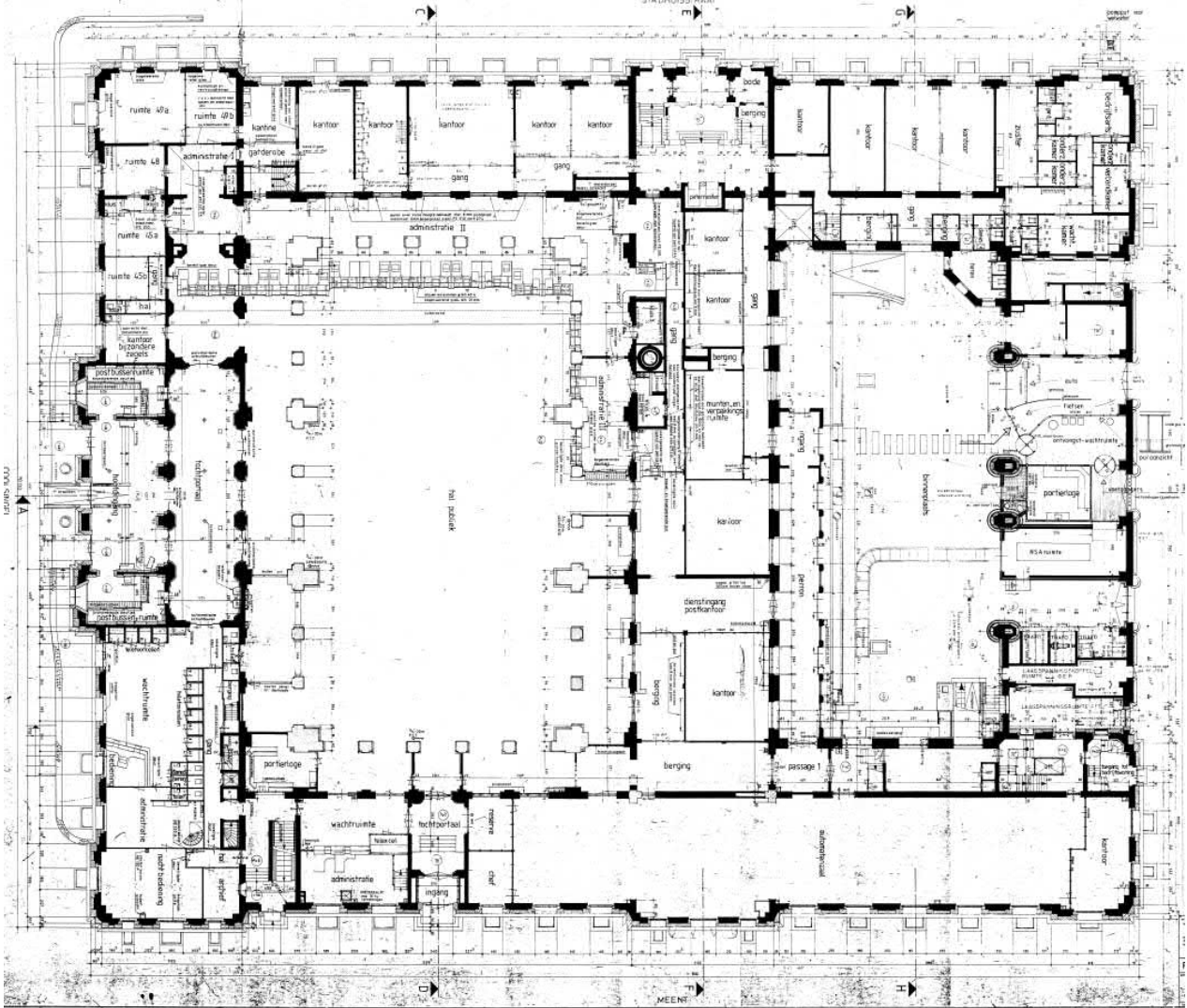
Doorsnede A-B.

00120 / 91000GN9 - CLQ ARCHIEFDOOS

N^o 548

Rotterdam	AFDELING	GEBOUWEN
	CENTRALE	COOLSINGEL
	VLOER IN DE HALKAP.	
	DOORSNEDE A-B	
PTT-CAG		00120. BPB.35-2.

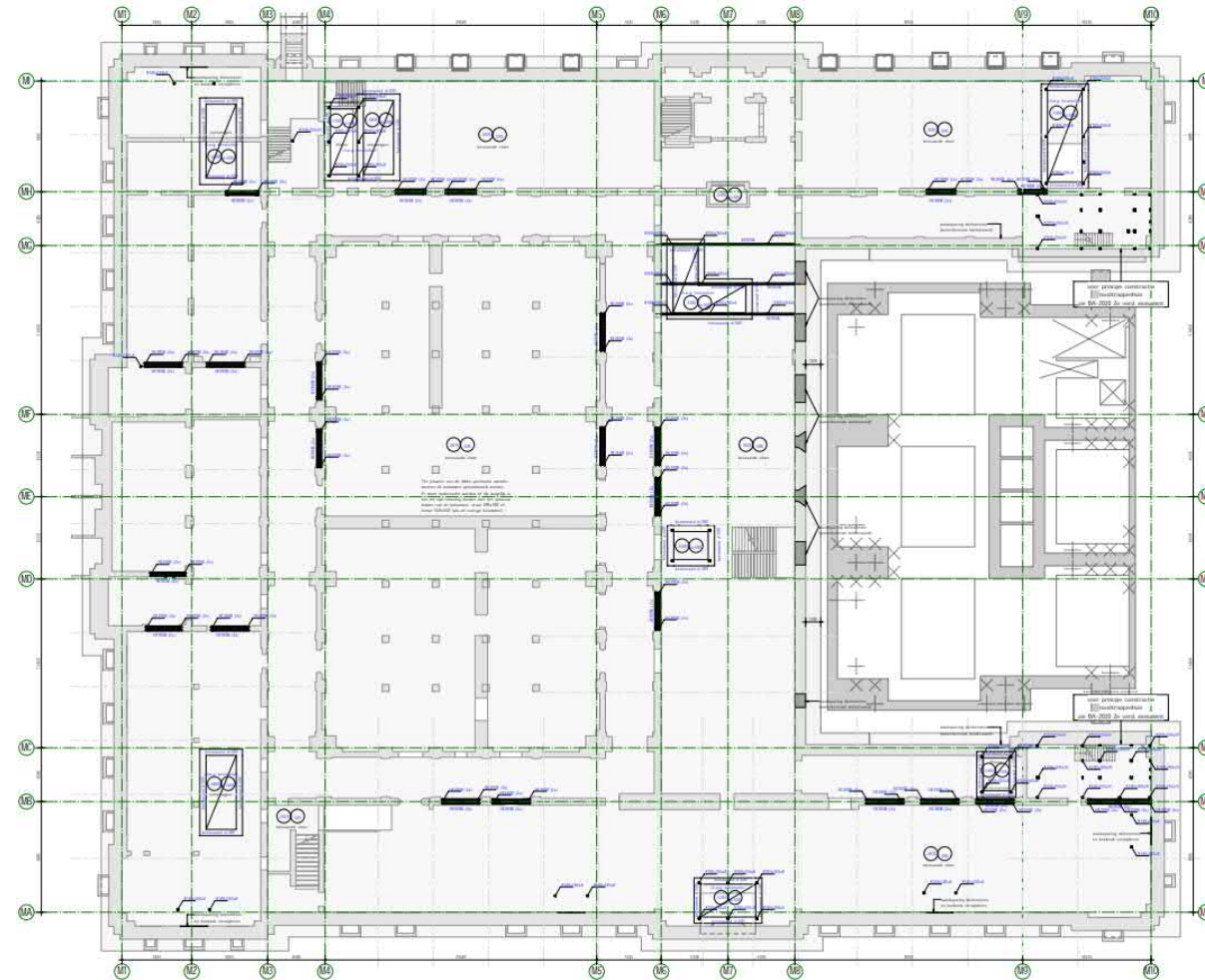
Demolition



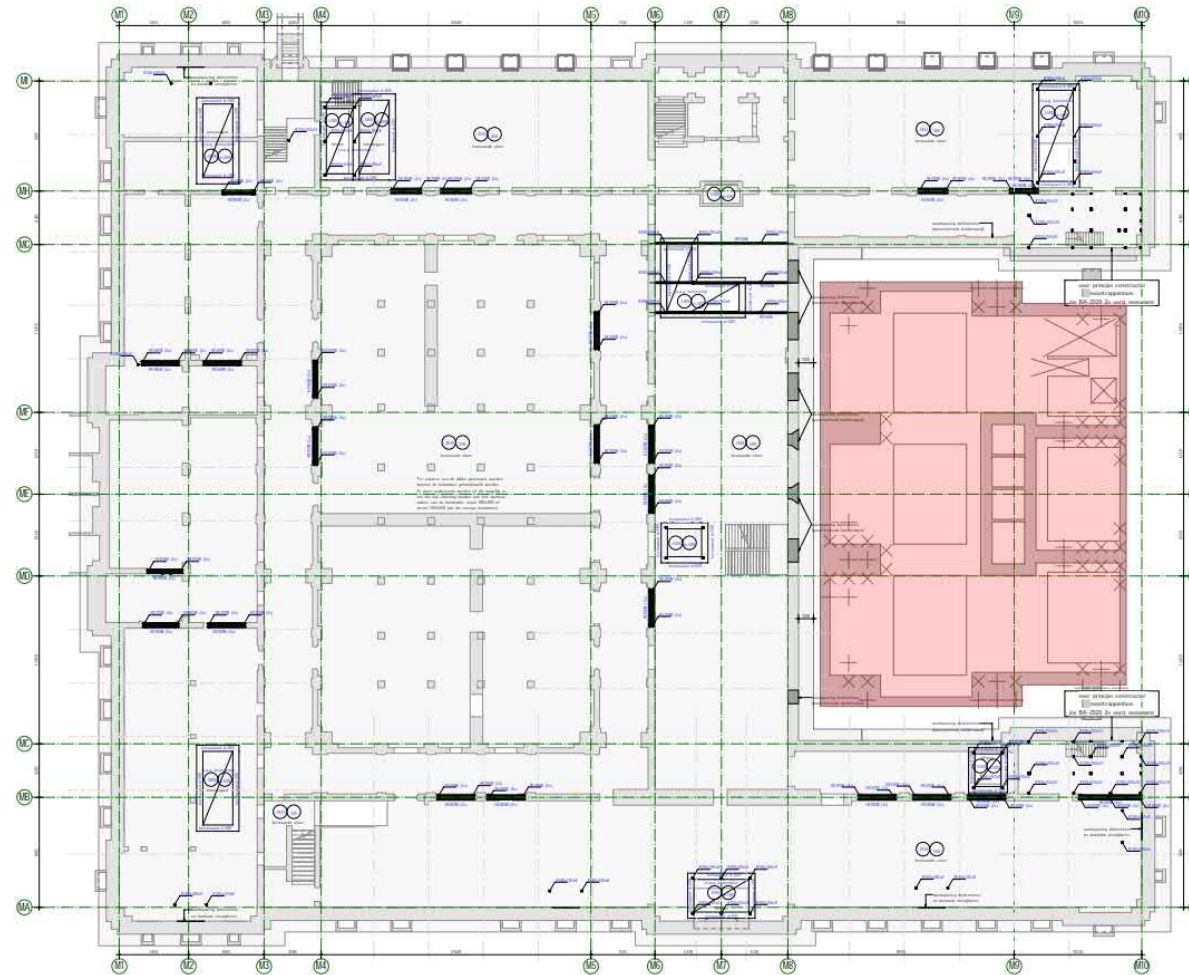
Careful demolition



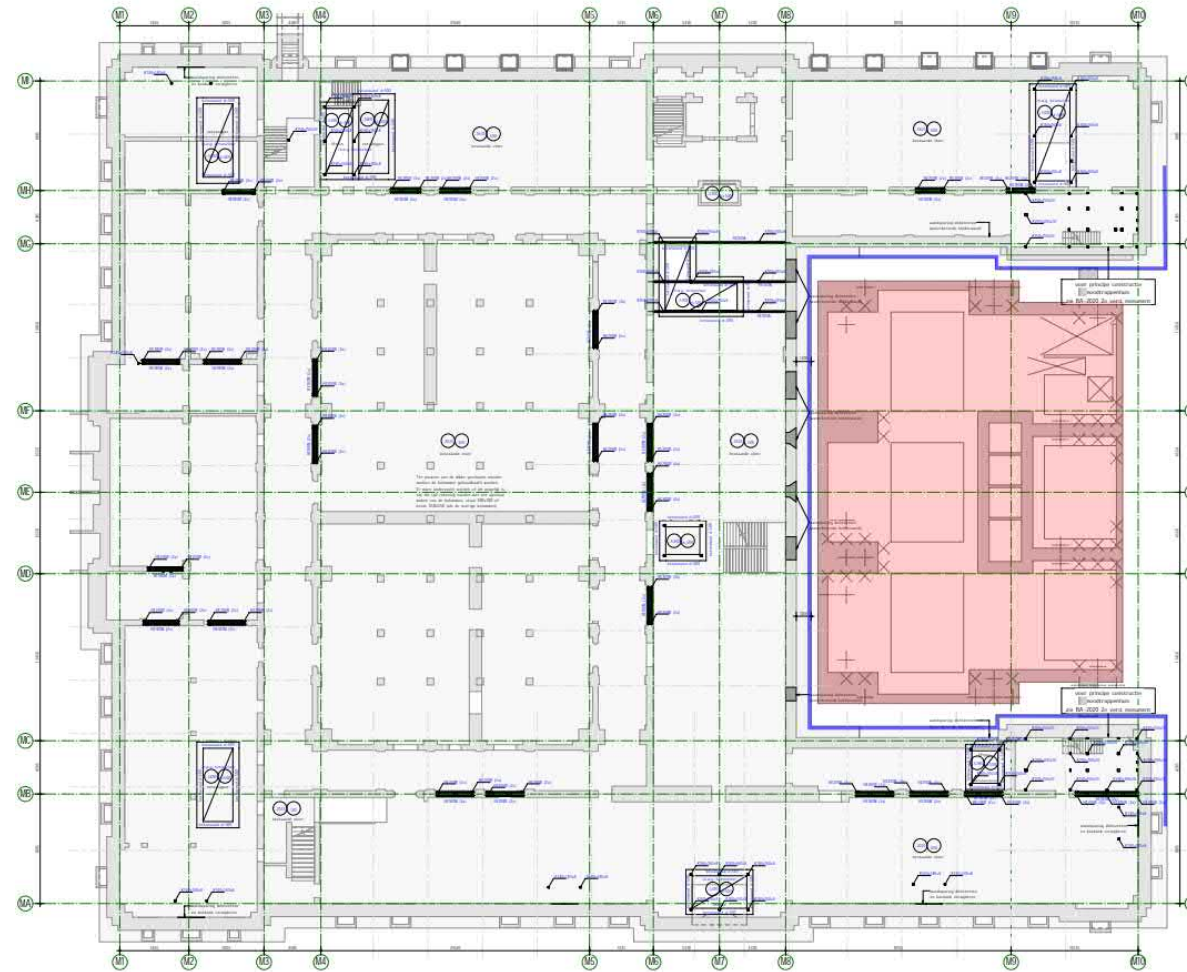
Interaction existing and new foundation



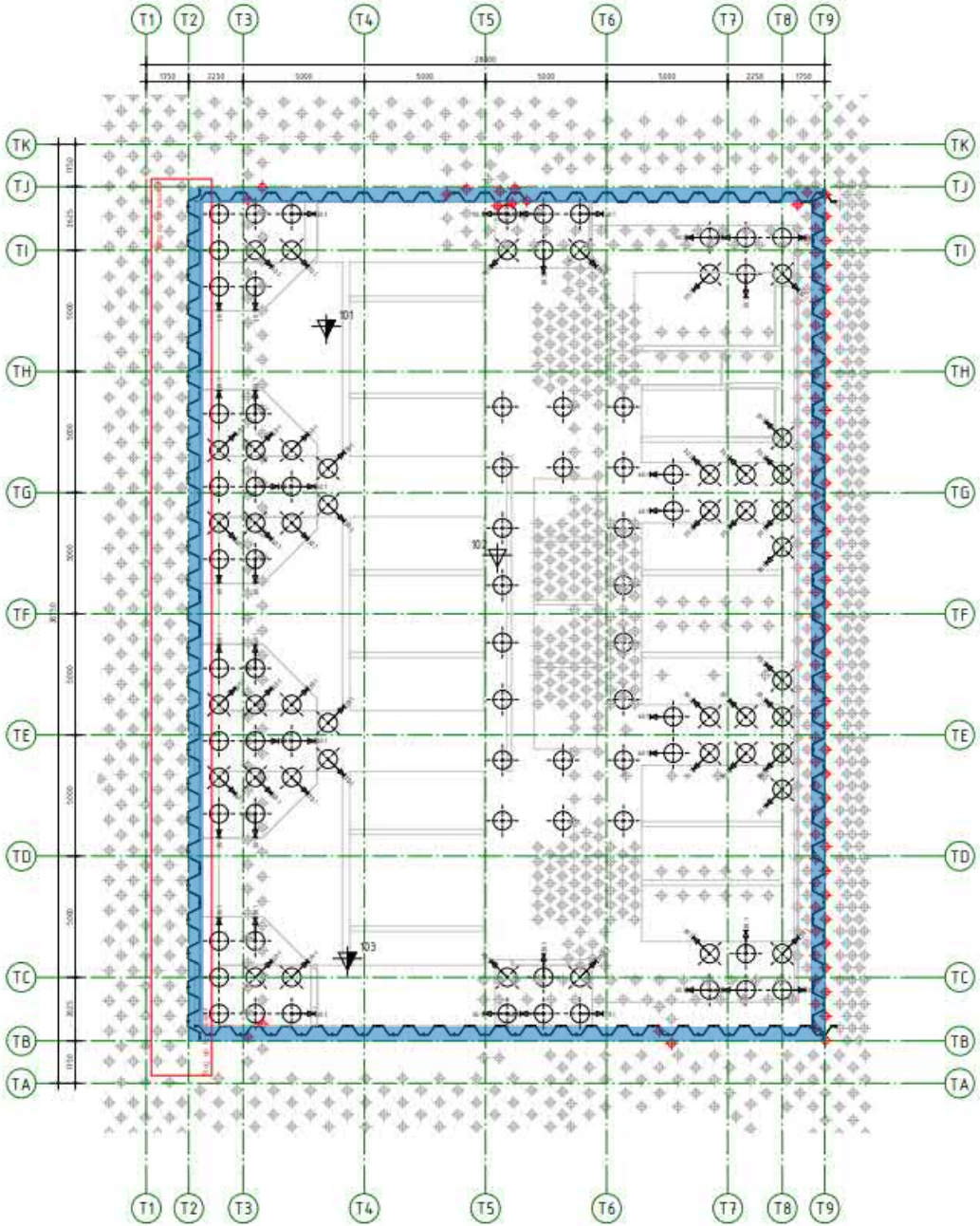
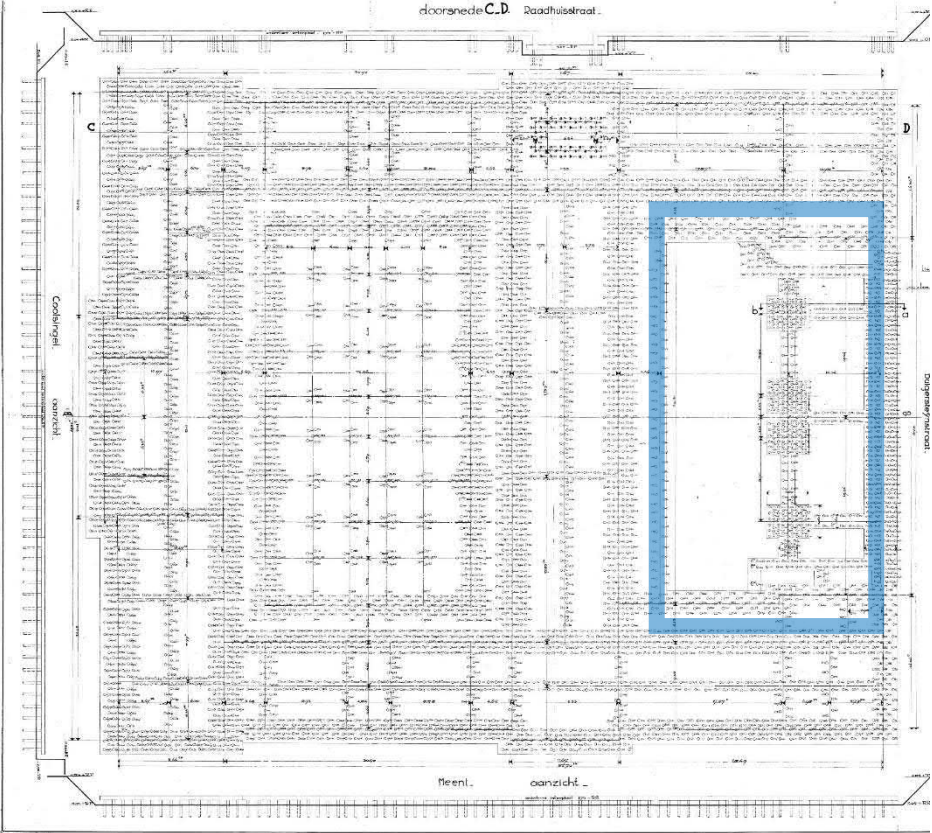
Interaction existing and new foundation



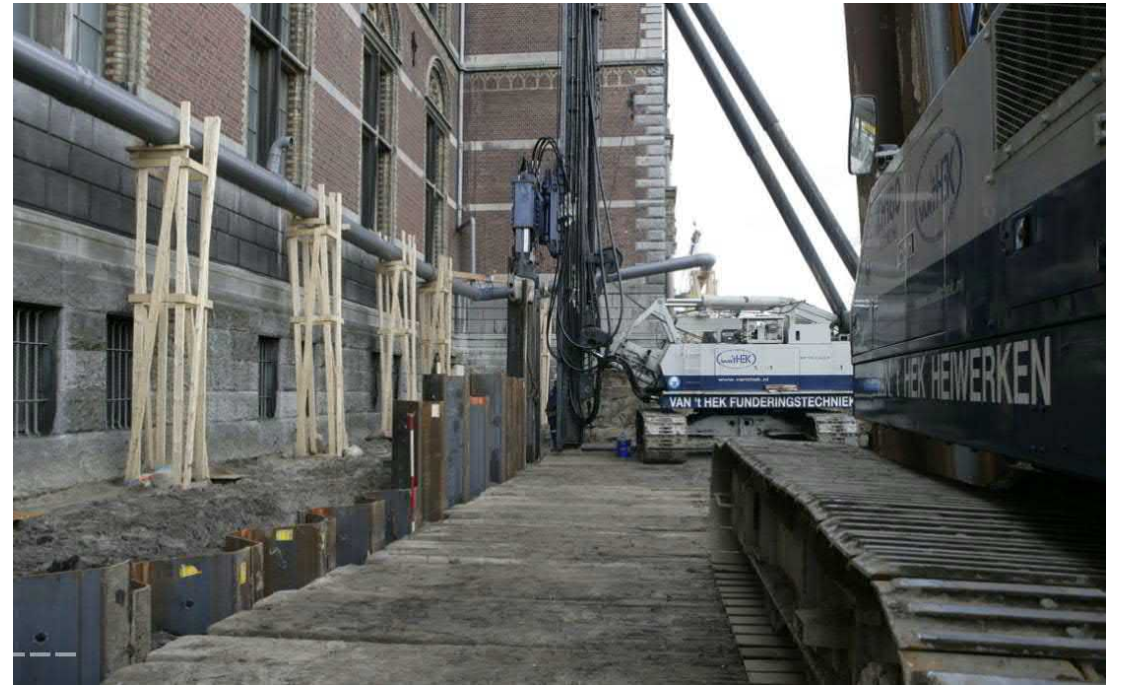
Interaction existing and new foundation



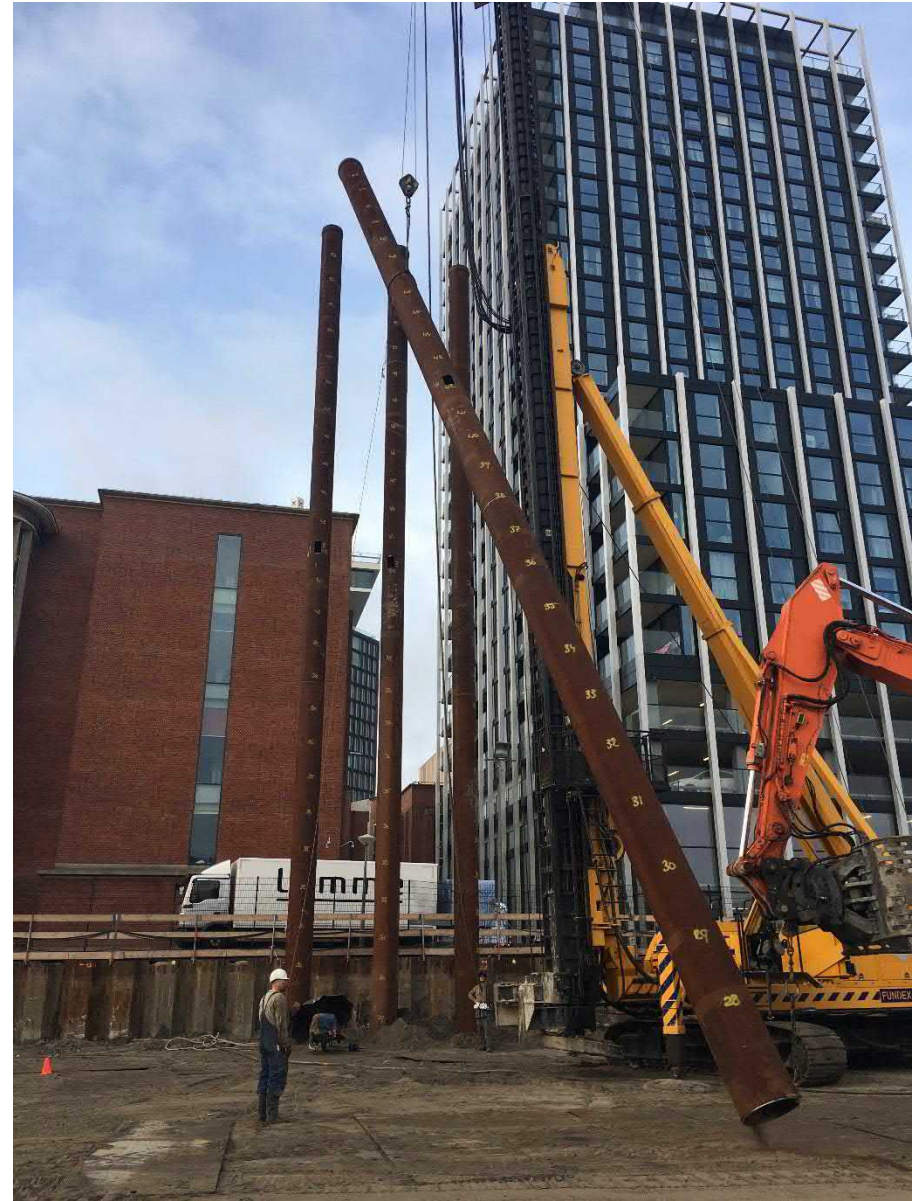
Interaction foundation

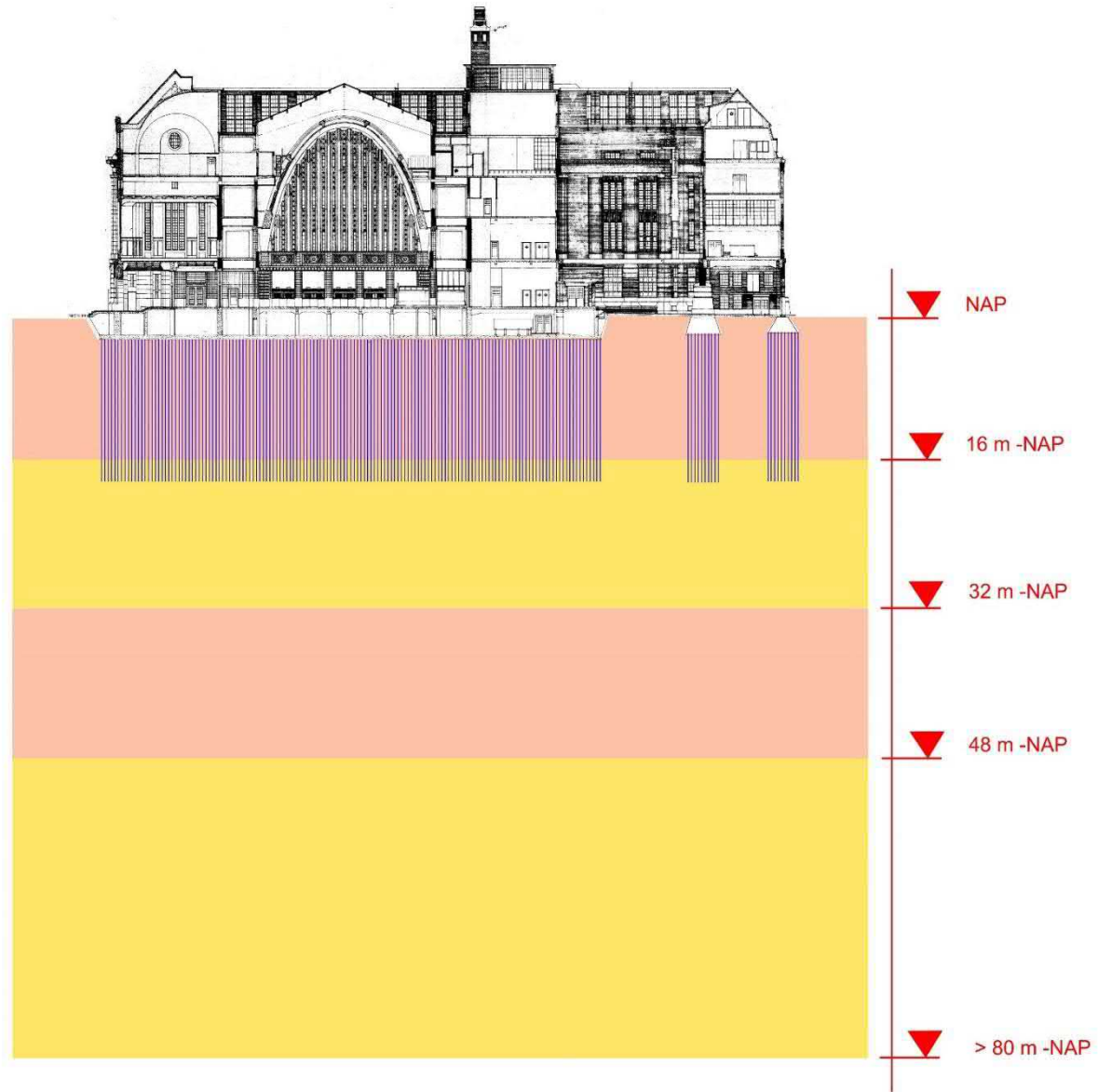


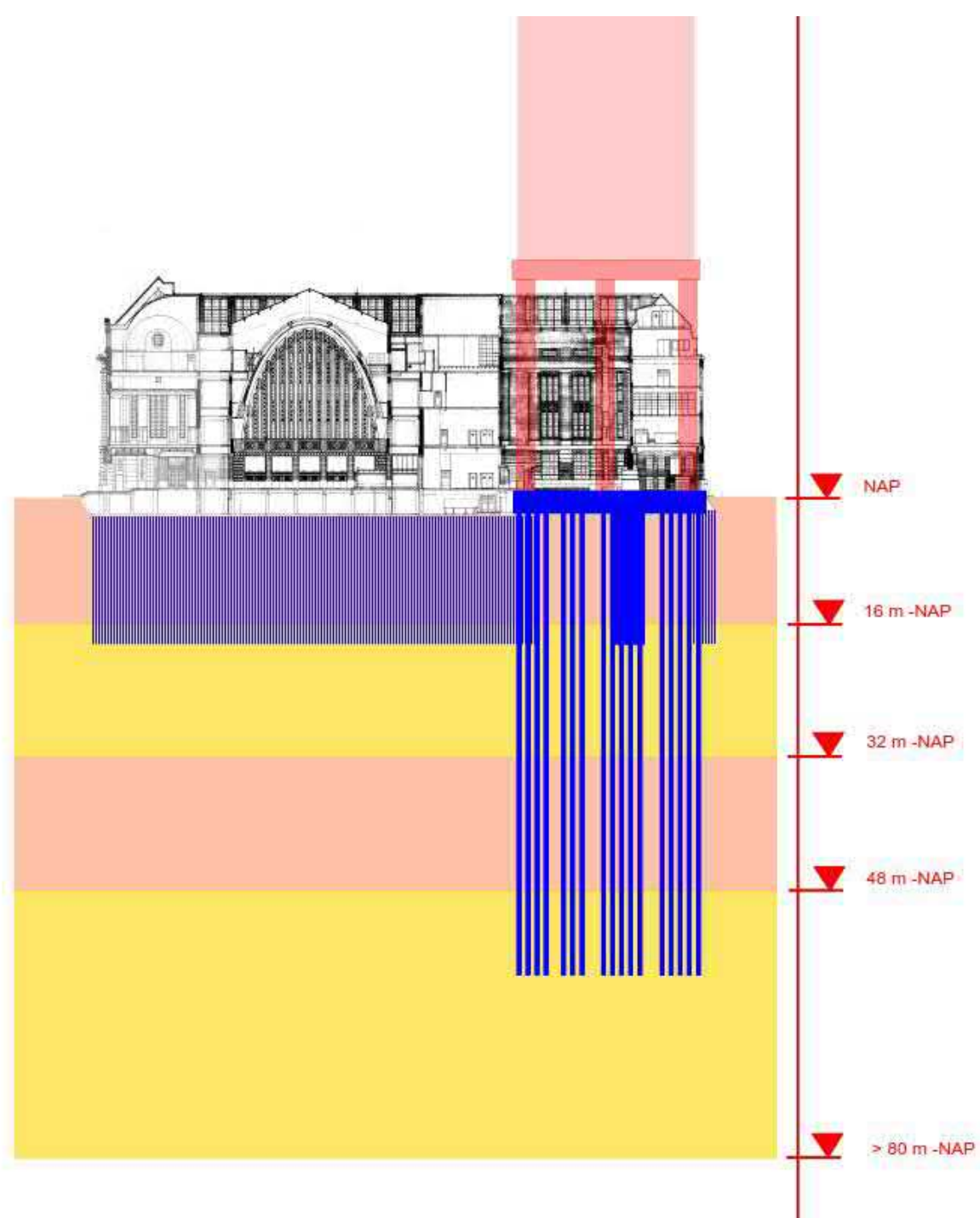
Damwanden



Funderingspalen





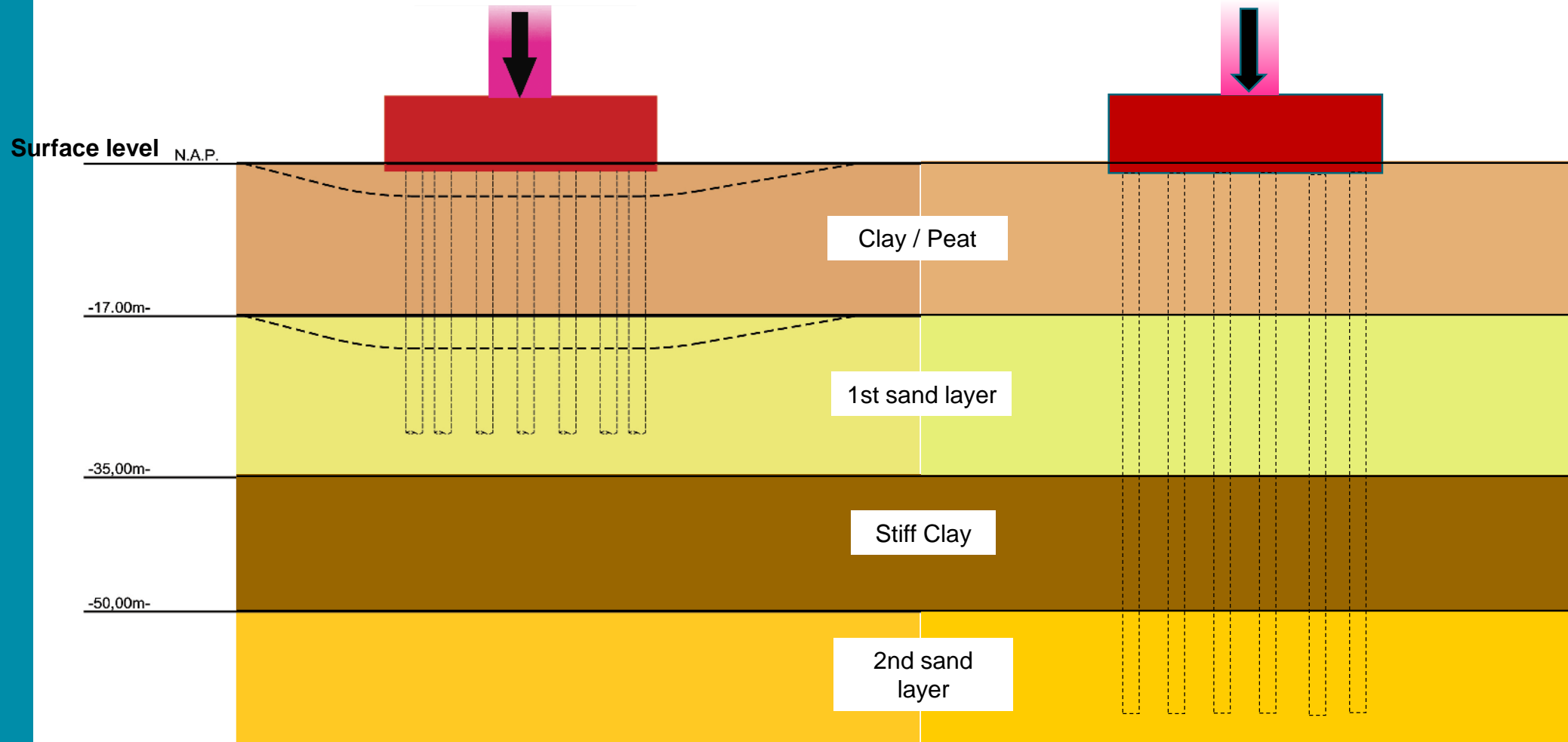


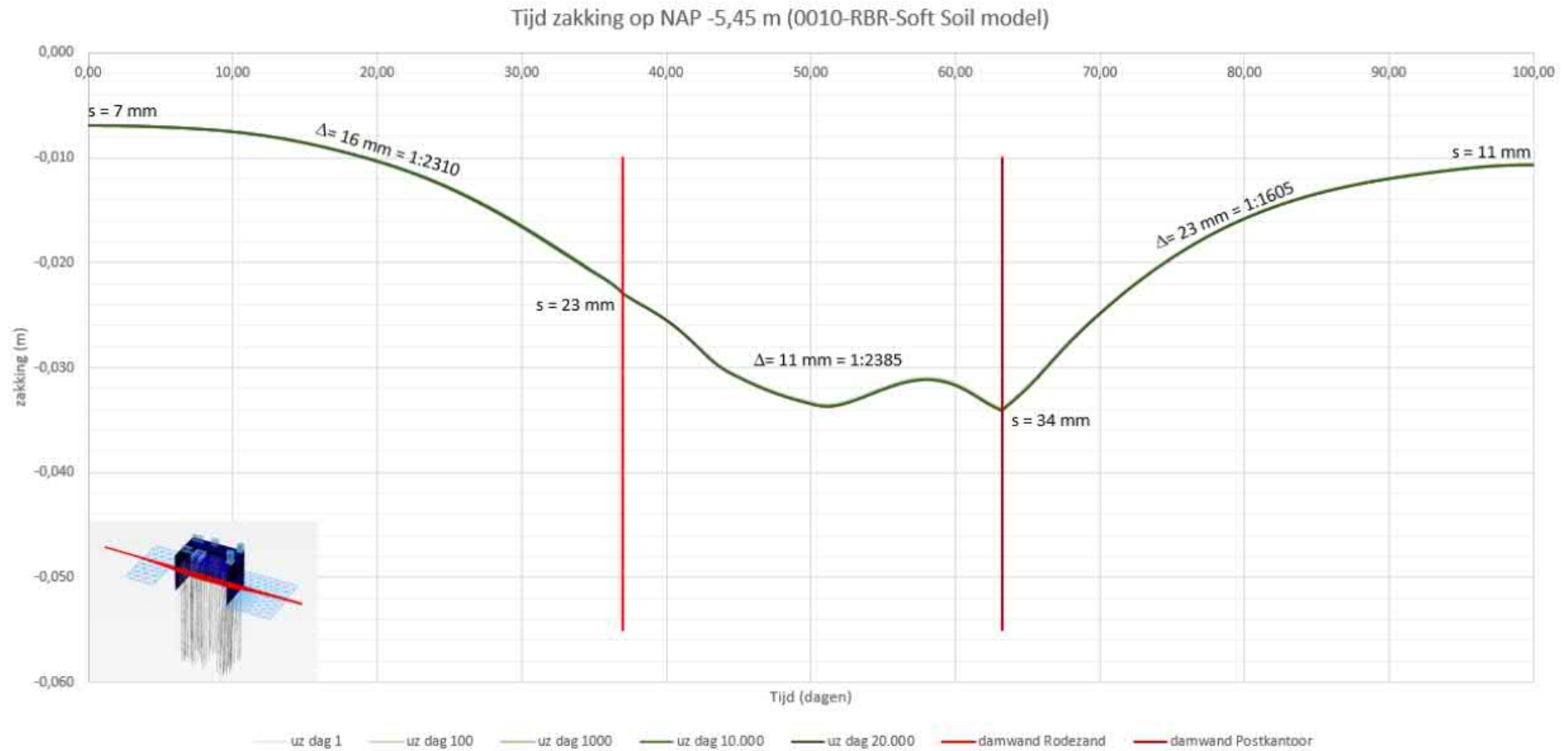
'Normal' foundation

Maastoren (165 m) $\Delta z \approx 130$ mm
De Rotterdam (155 m) $\Delta z \approx 250$ mm

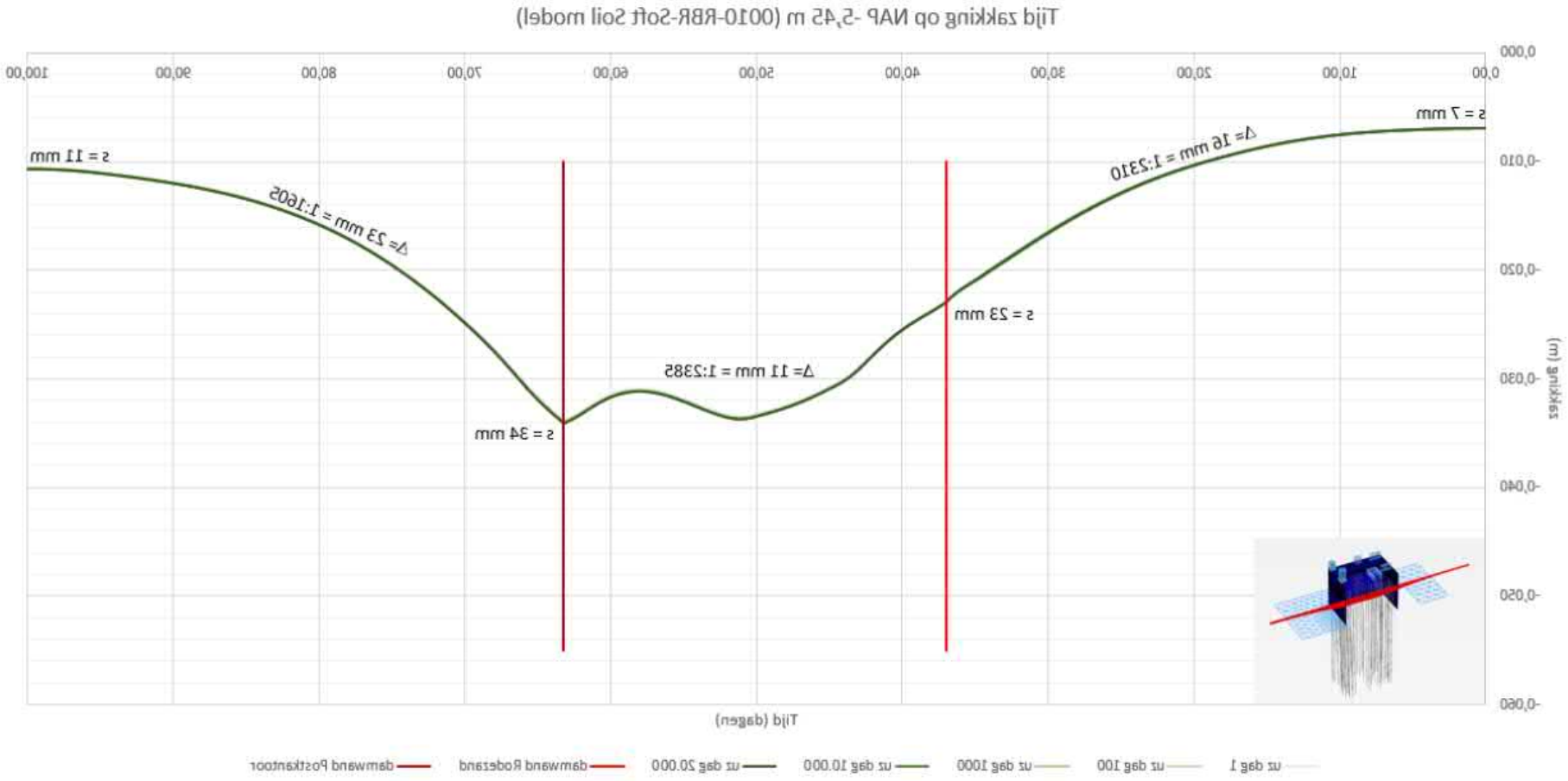
Deep foundation XL

Zalmhaven (215 m) $\Delta z \approx 25$ mm
Post Office (150 m) $\Delta z \approx 20$ mm



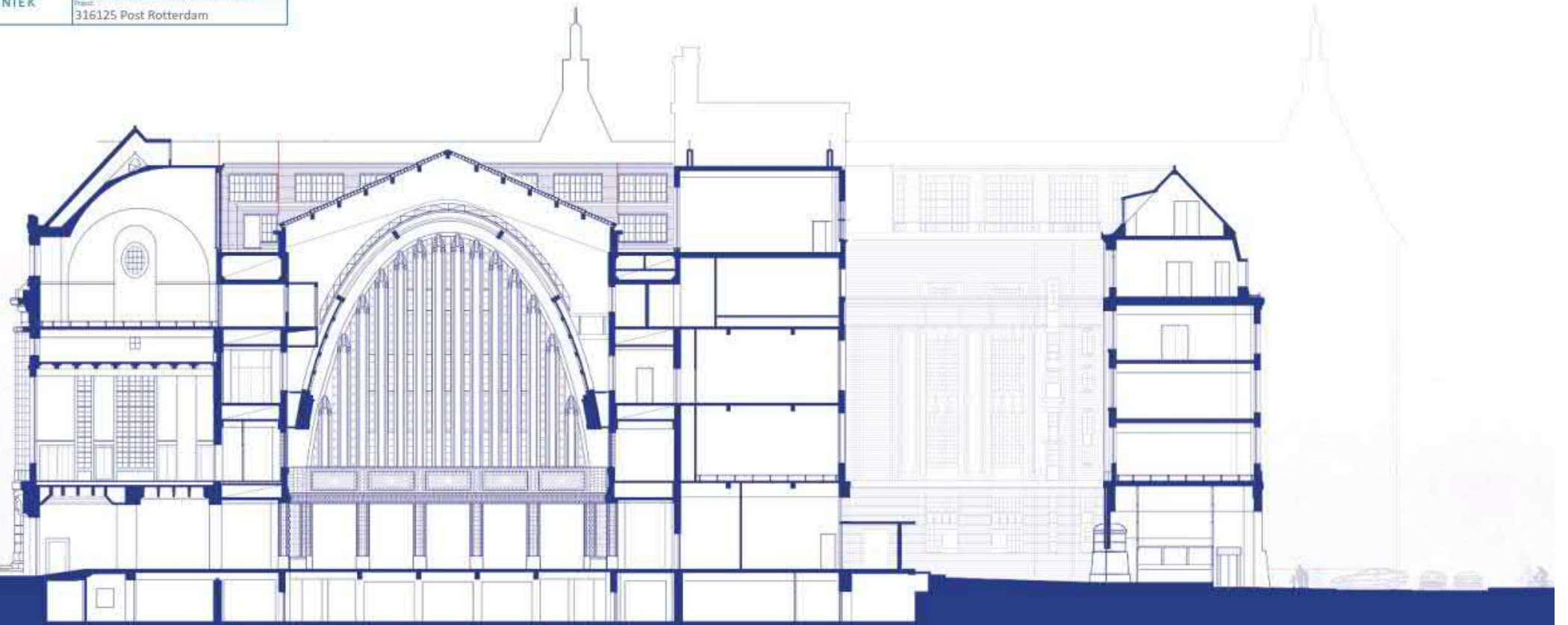


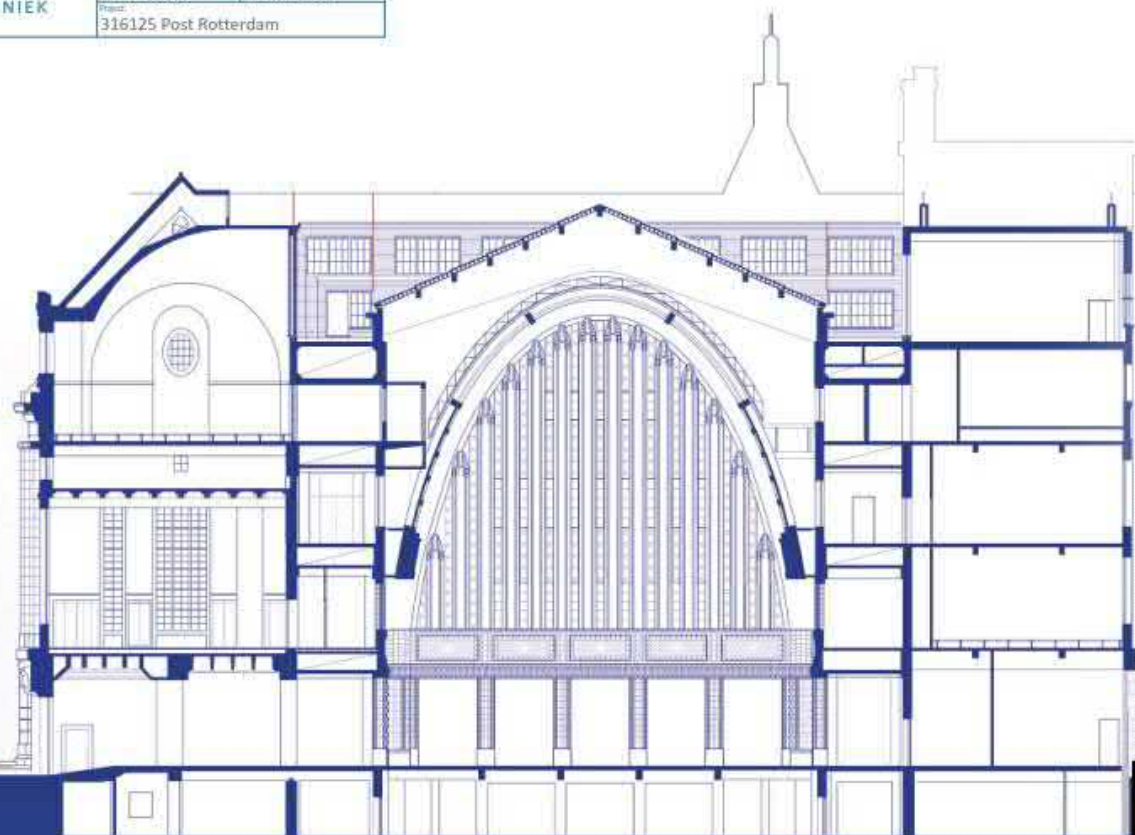
Figuur 42: zettingslijnen indicatief, Best Estimate benadering op het niveau NAP -5,45 m (op basis van Soft Soil)



Figuur 42: zettinglijnen indicatief, Best Estimate benadering op het niveau NAP -2,45 m (op basis van Soft Soil)

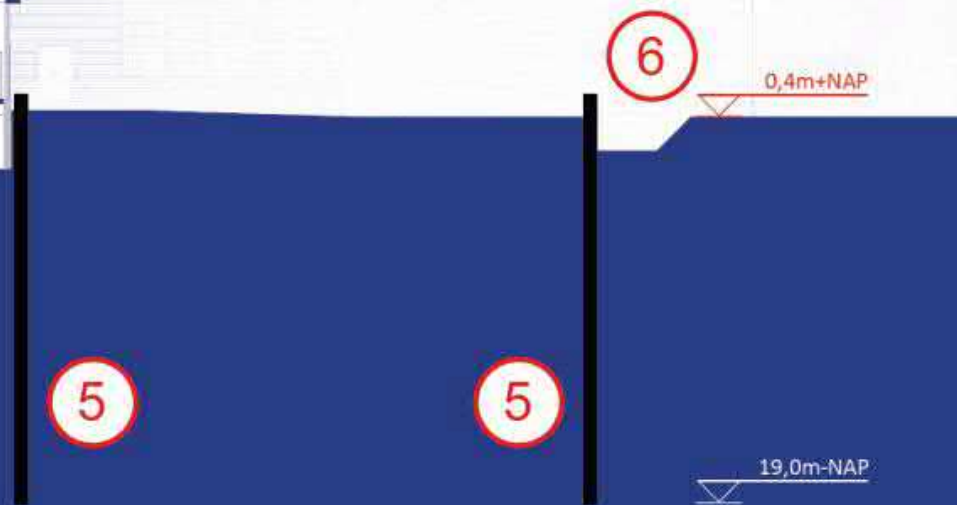
Excavation plans

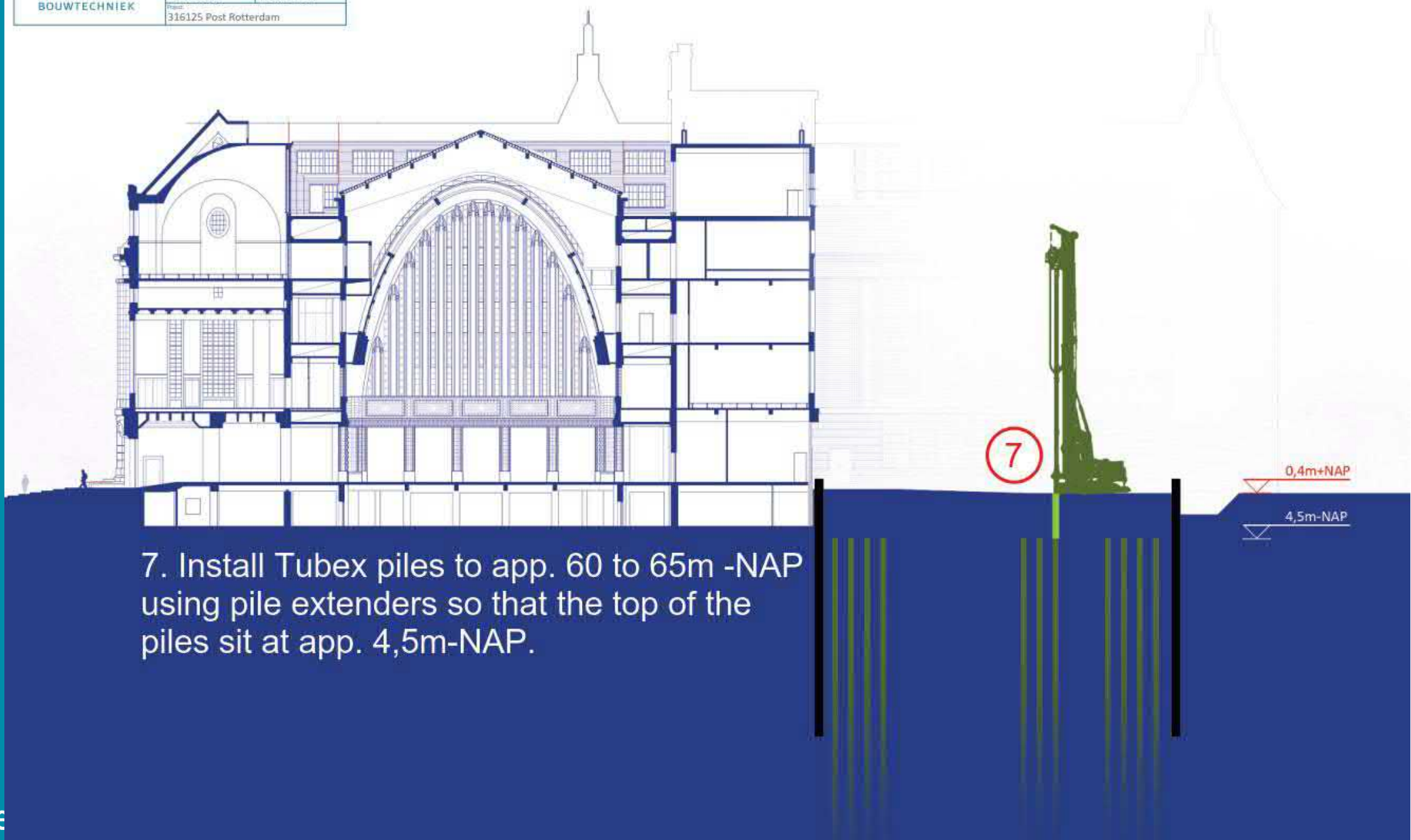




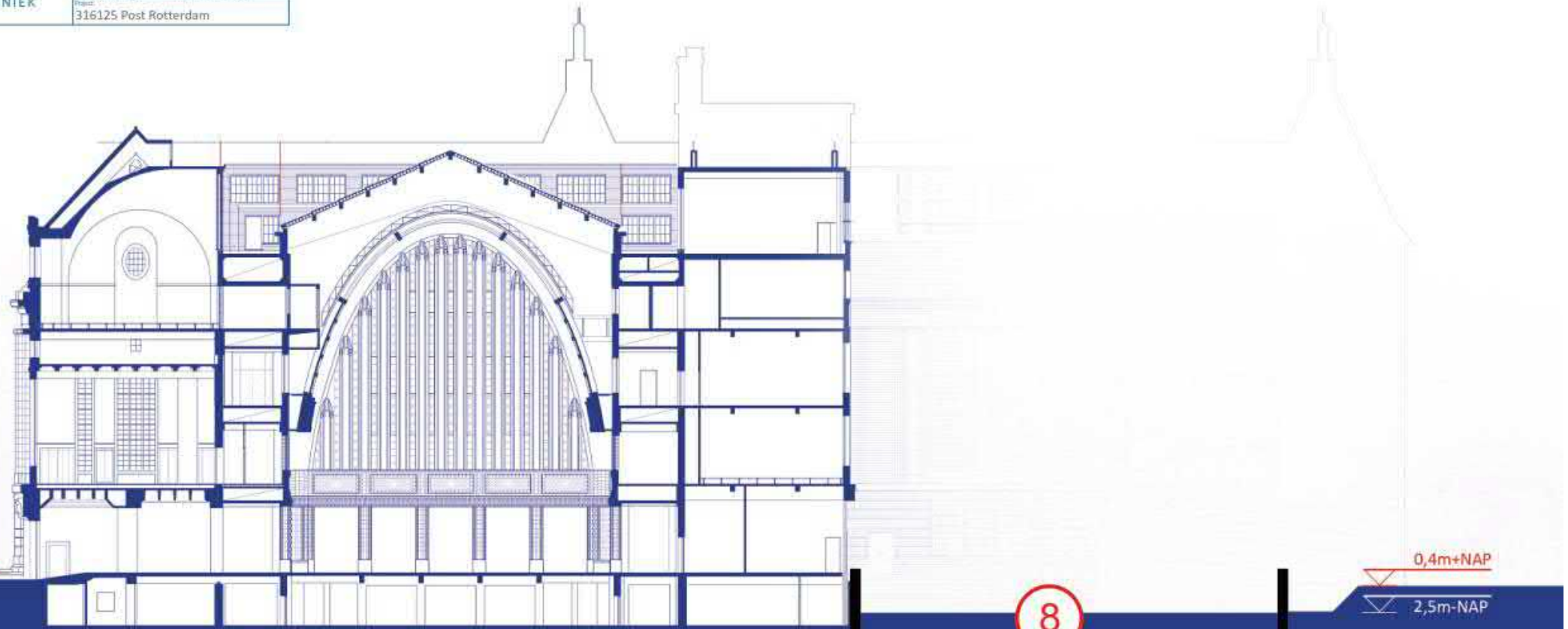
5. Install sheet piles to 19m-NAP using push-pull method (silent piling).

6. Dig trench on Rode Zand side of sheet piles to reduce forces.
(if needed, according to advice Geobest)

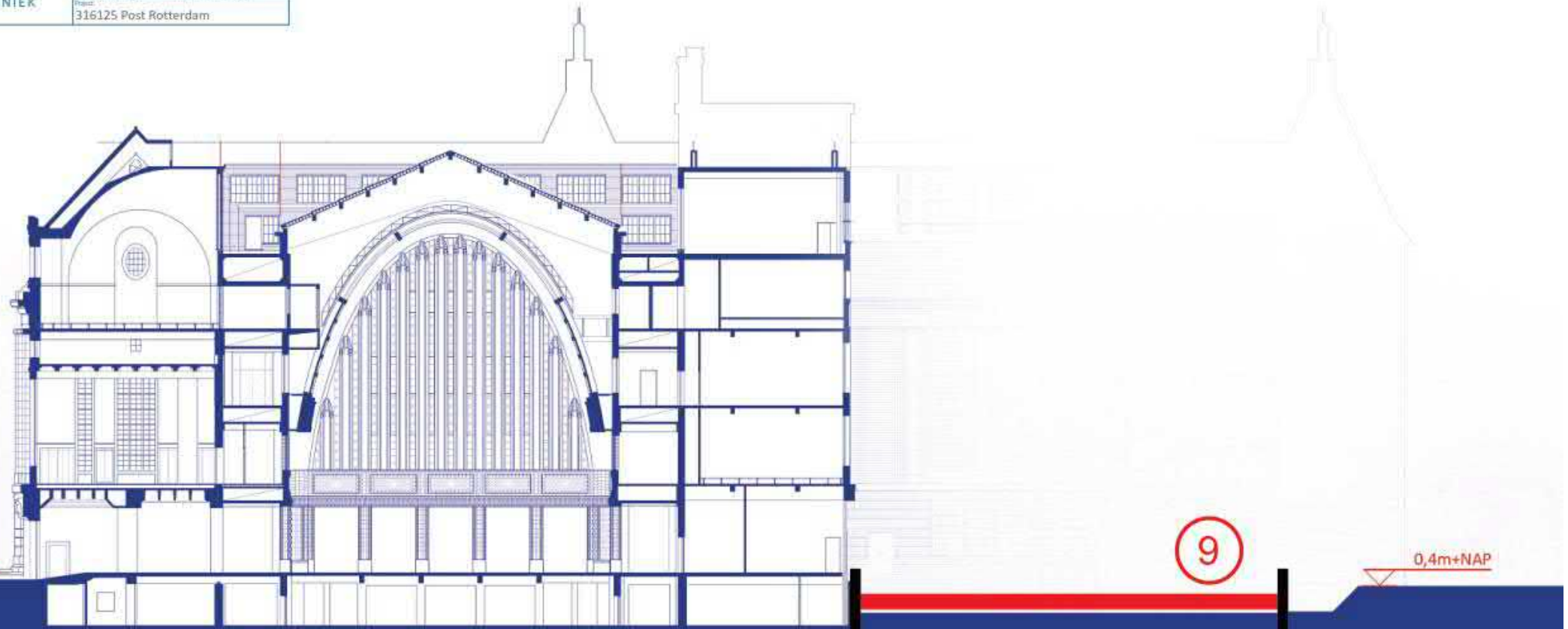




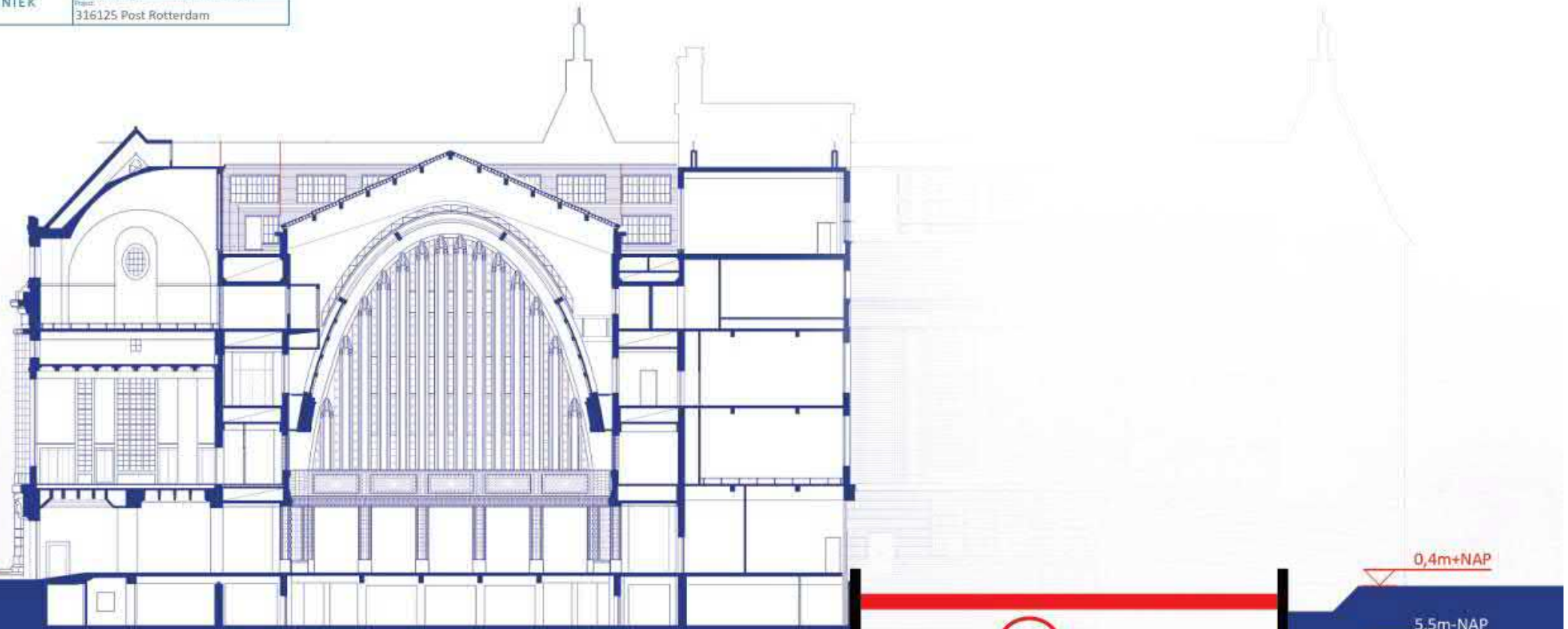
7. Install Tubex piles to app. 60 to 65m -NAP using pile extenders so that the top of the piles sit at app. 4,5m-NAP.



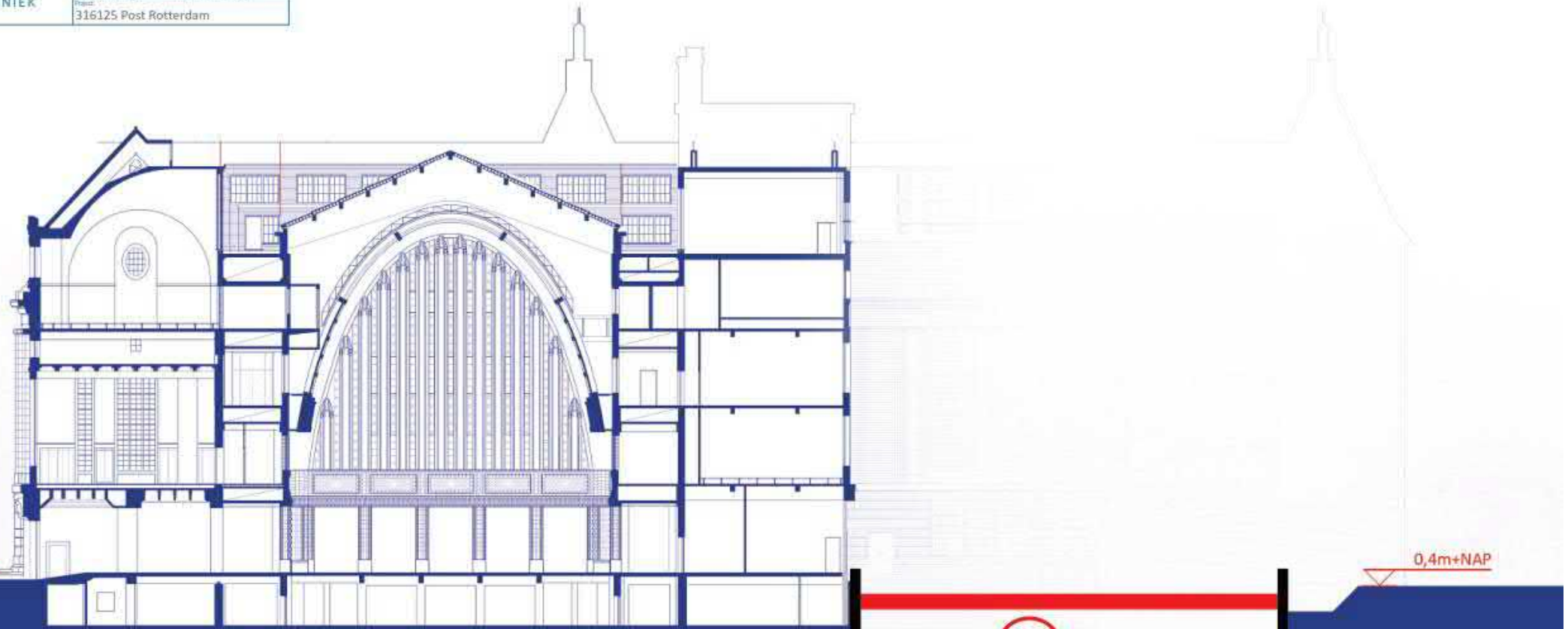
8. Install drainage pumps if necessary and excavate building pit until 2,5m-NAP.



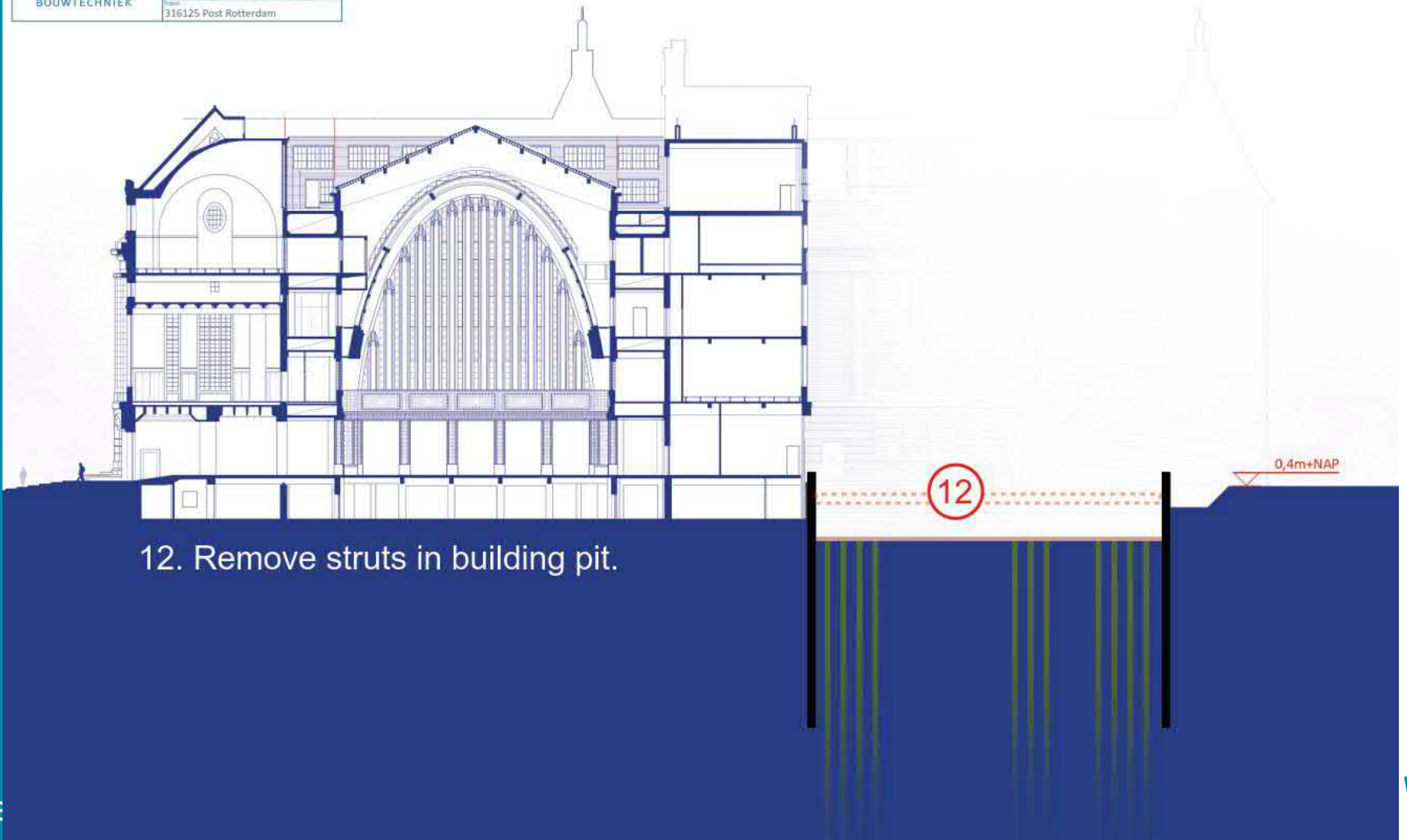
9. Install post-tensioned struts in building pit.
The center of the struts is positioned at 2m-NAP.



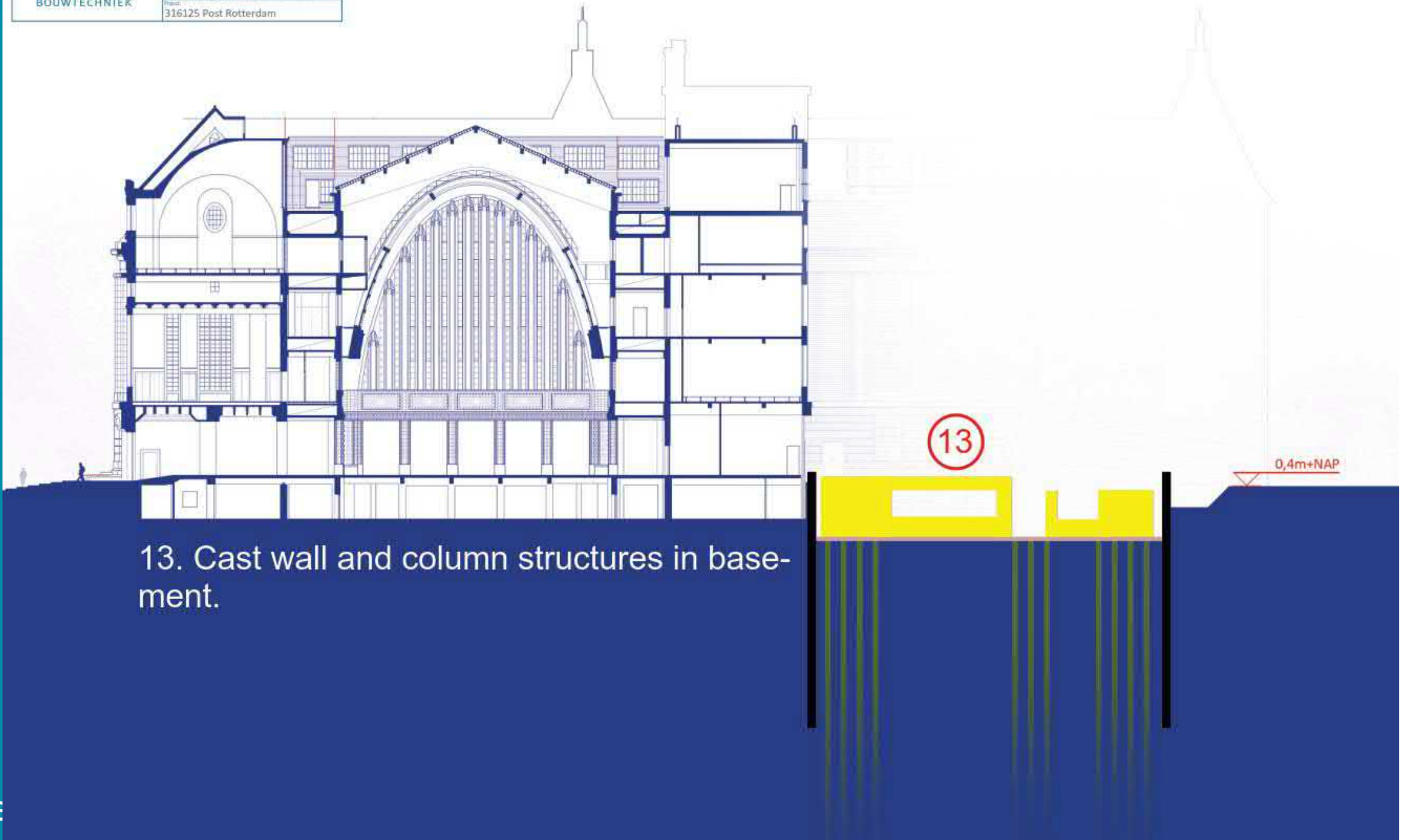
10. Install drainage pumps (if not already present) and further excavate building pit until 5,5m-NAP.



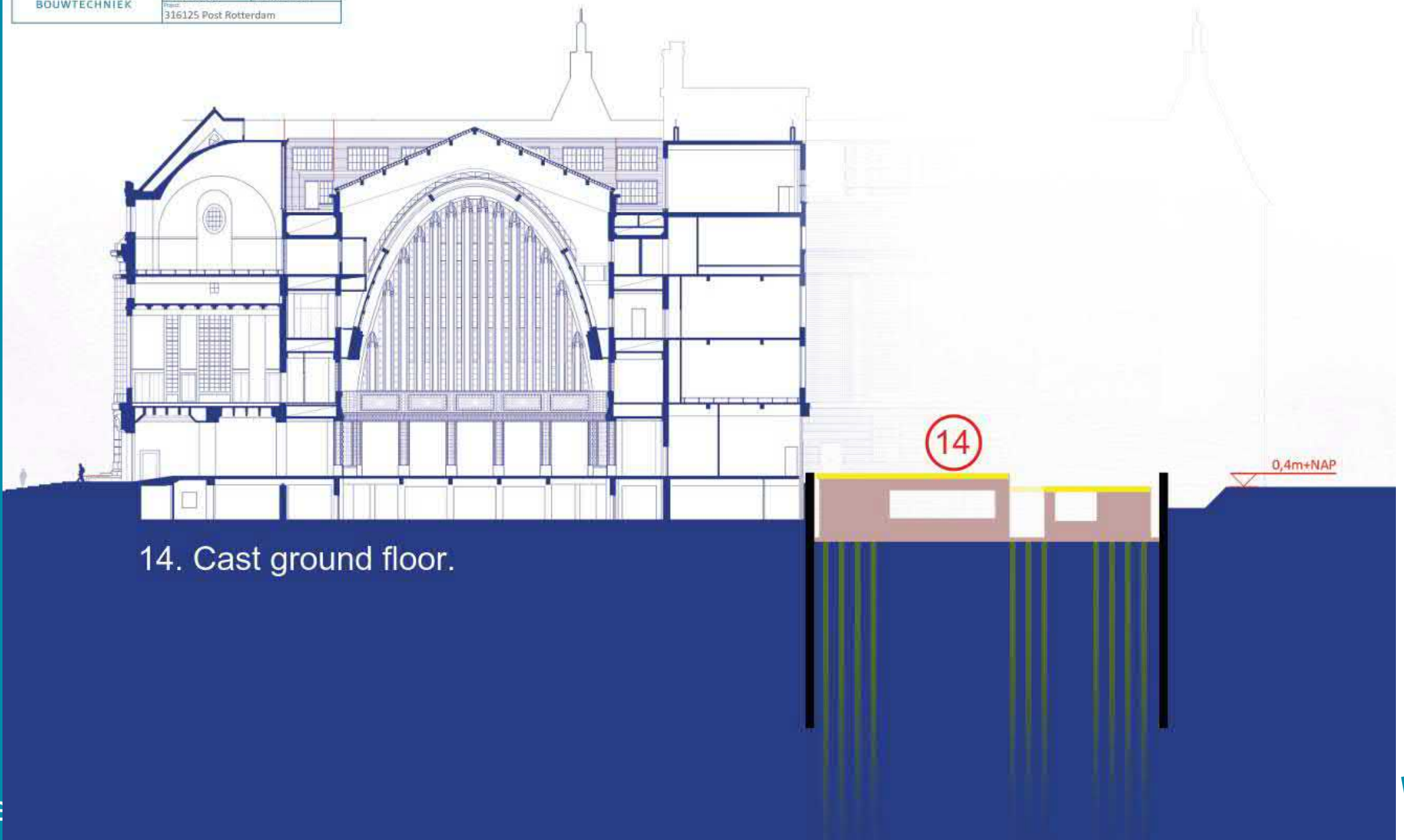
11. Cast basement floor. Floor has to be completely watertight.



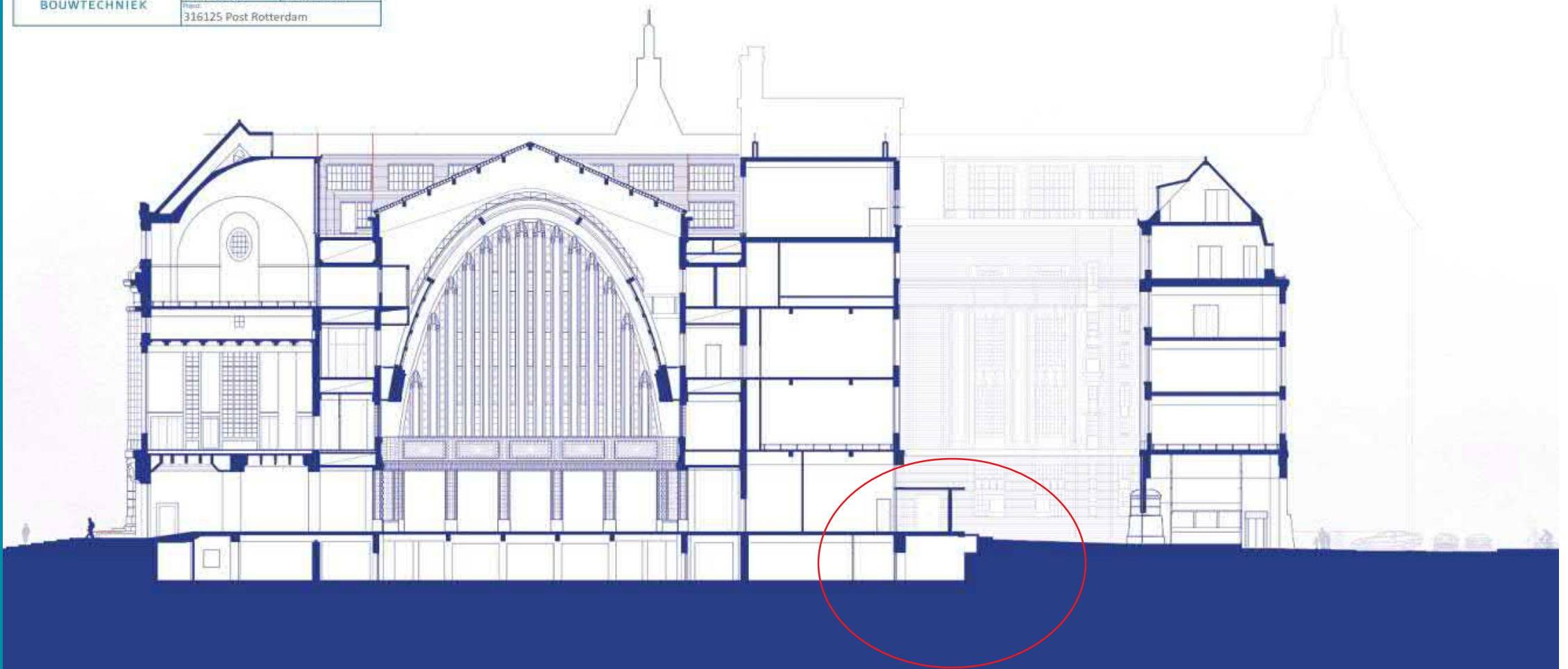
12. Remove struts in building pit.



13. Cast wall and column structures in basement.



14. Cast ground floor.



More in detail:

