

Ingenieursbureau voor bouwkundige en civiele bouwwerken

Gemeente Vlissingen

1343752

WABO/2021/321

  
Behoort bij besluit van burgemeester en wethouders  
van de gemeente Vlissingen  
met nummer 1364974 d.d. 31 maart 2022

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Titel

# Koperslagerij te Vlissingen Blok 1

Subtitel

Sterkte en stabiliteit hoofddraagconstructie



Opdrachtgever

BuroSalt

Opgesteld door:

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Gecontroleerd door:

ing D.J. Wagenaar

Vrijgegeven door:

ing M.J. Moonen MSEng

| Datum      | Revisie      | Ons kenmerk    |
|------------|--------------|----------------|
| 05-07-2021 | Definitief 0 | 2021-032RAP1.0 |

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## **1 Inleiding**

### *1.1 Projectomschrijving*

Nieuwbouw woningen Koperslagerij te Vlissingen in opdracht van Bouwbedrijf Joziasse

### *1.2 Rapportomschrijving*

De hierna volgende rapportage betreft de gewichtsberekening van de hoofddraagconstructie. Deze berekening zal als uitgangspuntenrapport gaan dienen voor de verdere detaillering van de constructie in de uitvoeringsfase.

### *Situatie*



### *1.3 Tekeningen en rapporten*

*Geotechnisch onderzoek:*

*Tekeningen Goes Engineers*

Projectnummer 2021-078

## 2 Technische uitgangspunten

### 2.1 Toegepaste Normen

| Documentnummer                                                          | Titel                                                     |
|-------------------------------------------------------------------------|-----------------------------------------------------------|
| NEN-EN 1990+A1                                                          | Eurocode 0 - Grondslagen van het constructief ontwerp     |
| NEN-EN 1991                                                             | Eurocode 1 - Belastingen op constructies                  |
| NEN-EN 1992                                                             | Eurocode 2 - Ontwerp en berekening van betonconstructies  |
| NEN-EN 1993                                                             | Eurocode 3 - Ontwerp en berekening van staalconstructies  |
| NEN-EN 1994                                                             | Eurocode 4 - Ontwerpen berekening staal-betonconstructies |
| NEN-EN 1995                                                             | Eurocode 5 - Ontwerp en berekening houtconstructies       |
| NEN-EN 1996                                                             | Eurocode 6 - Ontwerp en berekening metselwerk             |
| NEN-EN 1997                                                             | Eurocode 7 - Geotechnisch ontwerp van constructies        |
| Elke eurocode moet worden gelezen met de bijbehorende nationale bijlage |                                                           |

### 2.2 Gebouwgegevens

|                          |                           |                |
|--------------------------|---------------------------|----------------|
| Gebruik:                 | Woon- en verblijfsruimten |                |
| Gevolgsklasse:           | CC1                       | $K_{FI} = 0,9$ |
| Ontwerplevensduurklasse: | 3                         | 50 jaar        |

### 2.3 Belastingfactoren en belastingcombinaties

#### 2.3.1 Uiterste grenstoestanden

| Blijvende belastingen                                                                 |                                 | Overheersende<br>Veranderlijke belasting | Overige veranderlijke belastingen   |                                                             |
|---------------------------------------------------------------------------------------|---------------------------------|------------------------------------------|-------------------------------------|-------------------------------------------------------------|
| Ongunstig                                                                             | Gunstig                         |                                          | Belangrijkste                       | Overige                                                     |
| <b>1,22 <math>G_{sup}</math> *</b>                                                    | <b>0,9 <math>G_{inf}</math></b> |                                          | <b>1,35 <math>\Psi_0 Q_i</math></b> | <b>1,35 <math>\Psi_0 Q_i</math> (<math>i &gt; 1</math>)</b> |
| <b>1,08 <math>G_{sup}</math></b>                                                      | <b>0,9 <math>G_{inf}</math></b> | <b>1,35 <math>Q_1</math></b>             |                                     | <b>1,35 <math>\Psi_0 Q_i</math> (<math>i &gt; 1</math>)</b> |
| * met vloeistoffen met een fysiek beperkte waarde mag zijn volstaan met 1,2 $G_{sup}$ |                                 |                                          |                                     |                                                             |

STR/GEO: Groep B: Fundamentele combinatie t.b.v. toetsing bezwijken of buitensporig vervormen.

| Blijvende belastingen           |                                 | Overheersende<br>Buitengewone belasting | Overige veranderlijke belastingen         |                                                            |
|---------------------------------|---------------------------------|-----------------------------------------|-------------------------------------------|------------------------------------------------------------|
| Ongunstig                       | Gunstig                         |                                         | Belangrijkste                             | Overige                                                    |
| <b>1,0 <math>G_{sup}</math></b> | <b>1,0 <math>G_{inf}</math></b> | <b>1,0 <math>A_d</math></b>             | <b>1,0 <math>\Psi_1 Q_1</math> (wind)</b> | <b>1,0 <math>\Psi_2 Q_i</math> (<math>i &gt; 1</math>)</b> |
| <b>1,0 <math>G_{sup}</math></b> | <b>1,0 <math>G_{inf}</math></b> | <b>1,0 <math>A_d</math></b>             |                                           | <b>1,0 <math>\Psi_2 Q_i</math></b>                         |

Buitengewone belastingcombinaties

#### 2.3.2 Bruikbaarheidsgrenstoestanden

| Combinatie            | Blijvende belastingen           |                                 | Overige veranderlijke belastingen  |                                                            |
|-----------------------|---------------------------------|---------------------------------|------------------------------------|------------------------------------------------------------|
|                       | Ongunstig                       | Gunstig                         | Overheersende                      | Overige                                                    |
| <b>Karakteristiek</b> | <b>1,0 <math>G_{sup}</math></b> | <b>1,0 <math>G_{inf}</math></b> | <b>1,0 <math>Q_1</math></b>        | <b>1,0 <math>\Psi_0 Q_i</math> (<math>i &gt; 1</math>)</b> |
| <b>Frequent</b>       | <b>1,0 <math>G_{sup}</math></b> | <b>1,0 <math>G_{inf}</math></b> | <b>1,0 <math>\Psi_1 Q_1</math></b> | <b>1,0 <math>\Psi_2 Q_i</math> (<math>i &gt; 1</math>)</b> |
| <b>Quasi-blijvend</b> | <b>1,0 <math>G_{sup}</math></b> | <b>1,0 <math>G_{inf}</math></b> | <b>1,0 <math>\Psi_2 Q_1</math></b> | <b>1,0 <math>\Psi_2 Q_i</math> (<math>i &gt; 1</math>)</b> |

#### 2.4 *Toegepaste software*

- Technosoft Paal draagvermogen
- Technosoft Balkrooster

### **3 Technische beschouwing**

#### 3.1 *Constructie principe*

De woningen worden traditioneel gebouwd in kalkzandsteen. De begane grondvloer middels kanaalplaatvloer en de verdiepingsvloer middels breedplaat. De kap

#### 3.2 *Stabiliteit*

De woningen zijn van voldoende wanden voorzien om de stabiliteit te waarborgen. De spatkrachten in de kap worden opgenomen door momentvaste borstweringen.

#### 3.3 *Fundering*

Er wordt gefundeerd op een ringbalkfundering onderheid met prefab betonpalen.

#### 3.4 *Constructiematerialen*

##### *Beton (in-situ)*

- |                   |                                |
|-------------------|--------------------------------|
| ○ Betonkwaliteit: | C20/25                         |
| ○ Milieuklasse:   | XC1 (binnen) / XC4 (fundering) |

##### *Metselwerk*

- |                  |      |
|------------------|------|
| ○ Kalkzandsteen: | CS12 |
|------------------|------|

##### *Betonstaal*

- |                    |        |
|--------------------|--------|
| ○ Staven / netten: | B 500B |
|--------------------|--------|

## 4 Belastingaannamen

### 4.1 Blijvende belastingen

#### **Kap**

|              |             |                   |
|--------------|-------------|-------------------|
| Sporenkap    | 0,65        |                   |
| Zonnepanelen | <u>0,20</u> |                   |
|              | <b>0,85</b> | kN/m <sup>2</sup> |

#### **Dakvloer**

|                            |             |                   |
|----------------------------|-------------|-------------------|
| Breedplaatvloer d = 270 mm | 6,75        |                   |
| Grind + Zonnepanelen       | <u>1,00</u> |                   |
|                            | <b>7,00</b> | kN/m <sup>2</sup> |

#### **Verdiepingsvloer**

|                               |             |                   |
|-------------------------------|-------------|-------------------|
| Breedplaatvloer d = 270 mm    | 6,75        |                   |
| Zand cement dekvloer d= 70 mm | <u>1,40</u> |                   |
|                               | <b>8,15</b> | kN/m <sup>2</sup> |

#### **Begane grond**

|                             |             |                   |
|-----------------------------|-------------|-------------------|
| Kanaalplaatvloer d = 200 mm | 3,10        |                   |
| Cement dekvloer d = 70 mm   | <u>1,40</u> |                   |
|                             | <b>4,50</b> | kN/m <sup>2</sup> |

#### **Wanden**

|                                 |      |                   |
|---------------------------------|------|-------------------|
| Metselwerk d = 100 mm           | 2,00 | kN/m <sup>2</sup> |
| Kalkzandsteen d = 100 mm        | 2,00 | kN/m <sup>2</sup> |
| Kalkzandsteen d = 120 mm        | 2,20 | kN/m <sup>2</sup> |
| Kalkzandsteen d = 150 mm (as D) | 2,80 | kN/m <sup>2</sup> |
| HSB                             | 0,50 | kN/m <sup>2</sup> |
| Puien                           | 0,50 | kN/m <sup>2</sup> |

#### 4.2 Veranderlijke belastingen

| Omschrijving                   | Functie                 | Gebruiksklasse | $q_k$ (kN/m <sup>2</sup> ) | $Q_k$ (kN) | $\psi_0$ | $\psi_1$ | $\psi_2$ |
|--------------------------------|-------------------------|----------------|----------------------------|------------|----------|----------|----------|
| Begane grondvloer              | Woonfunctie             | <b>A</b>       | 1,75                       | 3,00       | 0,40     | 0,50     | 0,30     |
| Begane grondvloer              | Lichte scheidingswanden |                | 0,80                       |            | 0,40     | 0,50     | 0,30     |
| 1 <sup>e</sup> verdiepingvloer | Woonfunctie             | <b>A</b>       | 1,75                       | 3,00       | 0,40     | 0,50     | 0,30     |
| 1 <sup>e</sup> verdiepingvloer | Lichte scheidingswanden |                | 0,80                       |            | 0,40     | 0,50     | 0,30     |
| Platdak                        | Daken                   | <b>H</b>       | 1,00                       | 2,00       | 0,00     | 0,00     | 0,00     |

#### **Sneeuwbelastingen ( $\psi_0 = 0$ - $\psi_1 = 0,2$ - $\psi_2 = 0$ )**

Conform NEN-EN 1991-1-3

|                                        |                                                 |
|----------------------------------------|-------------------------------------------------|
| Type dak:                              | Plat dak, zadeldak                              |
| Dakhelling:                            | 0° en 45°                                       |
| Sneeuwbelasting op de grond ( $s_k$ ): | 0,7 kN/m <sup>2</sup>                           |
| $C_e$ :                                | 1,0                                             |
| $C_t$ :                                | 1,0                                             |
| $\mu_1$ :                              | 0,8 (plat dak), 0,40 ( $\alpha=45^\circ$ )      |
| $\mu_2$ :                              | ---                                             |
| $S: (\mu * C_e * C_t * s_k)$           | 0,56 kN/m <sup>2</sup> , 0,28 kN/m <sup>2</sup> |

#### **Windbelastingen ( $\psi_0 = 0$ - $\psi_1 = 0,2$ - $\psi_2 = 0$ )**

Conform NEN-EN 1991-1-4

|                                    |                        |
|------------------------------------|------------------------|
| Windgebied:                        | II                     |
| Terreincategorie:                  | 1 (onbebouwd)          |
| Gebouwhoogte (h):                  | 6,2 m                  |
| Stuwdruk ( $q_p$ ):                | 0,71 kN/m <sup>2</sup> |
| Vormfactor ( $C_s C_d$ ):          | 0,85                   |
| Winddruk en -zuiging ( $C_{pe}$ ): | (0,8+0,5) = 1,3        |

## **5 Slotconclusie**

### **5.1 Fundering**

Heipalen: 220x220 prefab  
250x250 prefab  
PPN: -7,0 m NAP  
FvEd: 220x220: -280 kN  
250x250: -330 kN  
Balken: 400x500 mm

### **5.2 *Verdiepingsvloer***

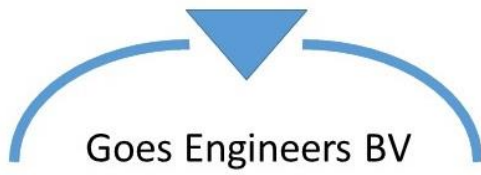
Breedplaat: 270mm  
ZC dekvloer: 70mm  
qvEd kap: 11,0 kN/m1

### **5.3 *Begane grondvloer***

Kanaalplaat: 200mm  
ZC dekvloer: 70mm

### **5.4 Toetsing constructie onderdelen**

In bijgaande bijlage worden de diverse constructieonderdelen in het gebouw getoetst op sterkte en stijfheid. Overige onderdelen van toeleveranciers zullen separaat volgen en als indieningsvereiste documenten op een later tijdstip aan te leveren documenten behandeld worden.



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**Bijlagen:**

## Bijlage 1 Bodemonderzoek



Opdrachtgever: Bouwbedrijf Joziassie B.V.

Plaats: Vlissingen

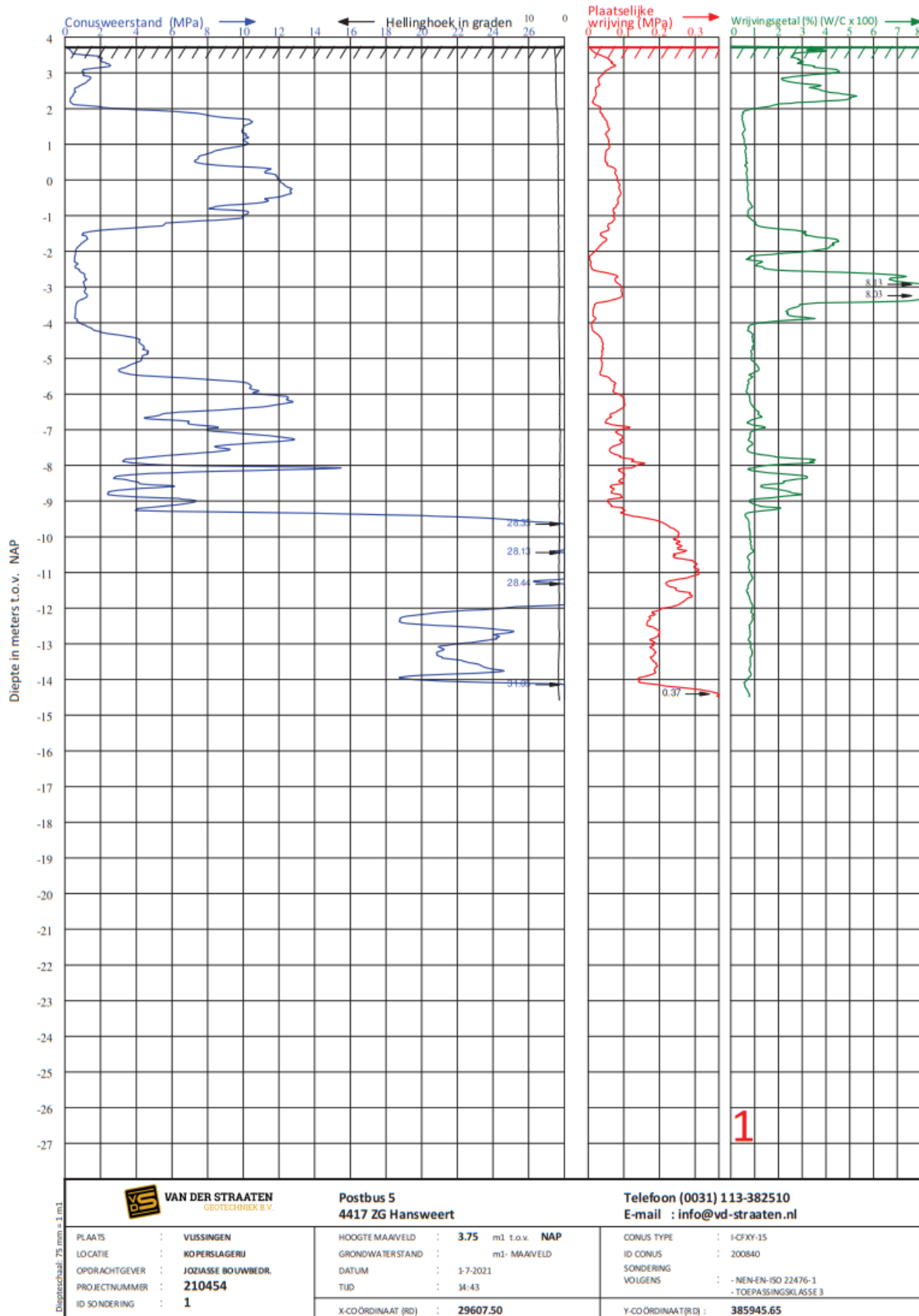
Locatie: Koperslagerij

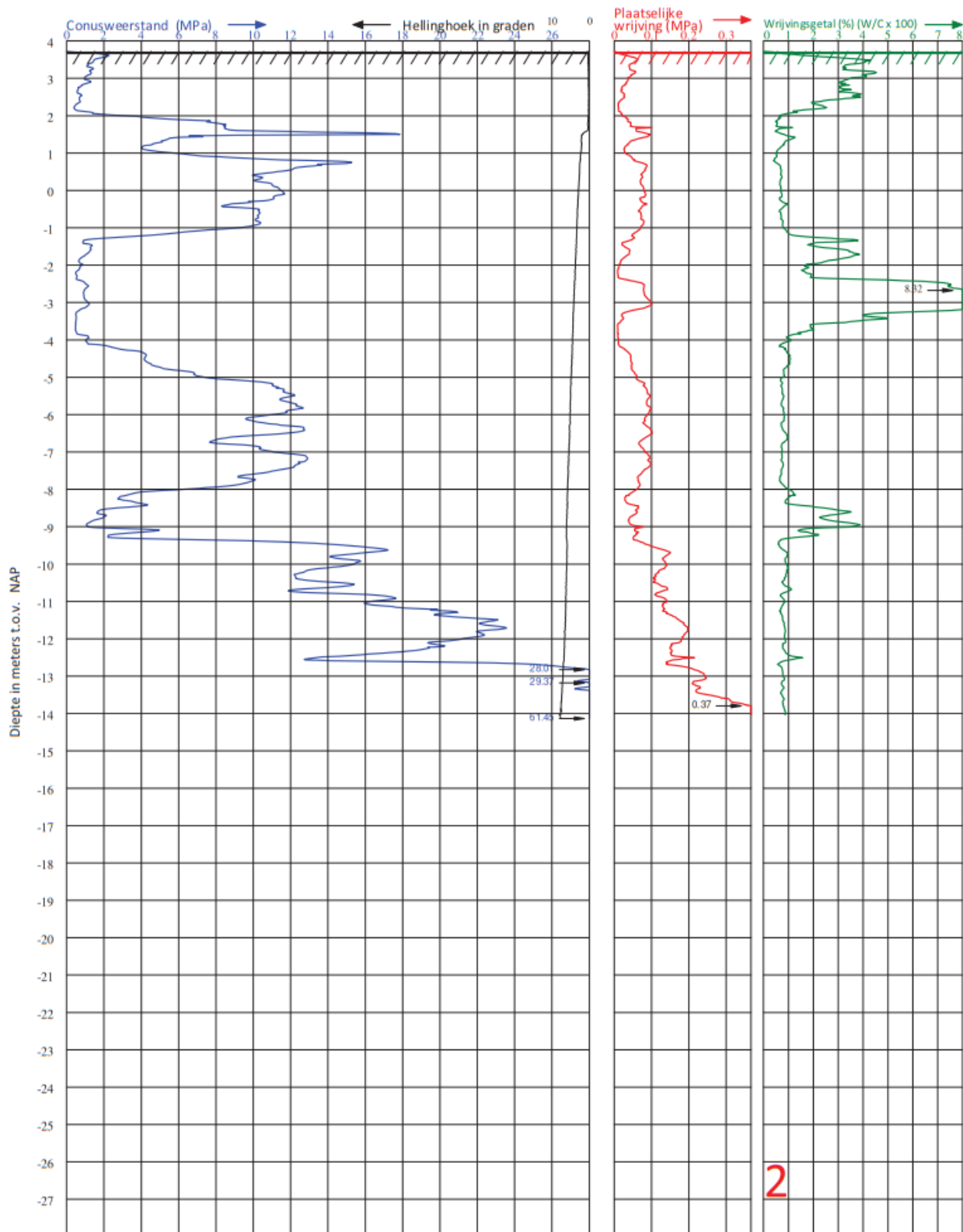
Projectnr.: 210454

Getekend: md

Schaal: 1:500

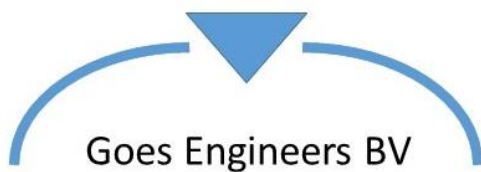
Datum: 14 juni 2021





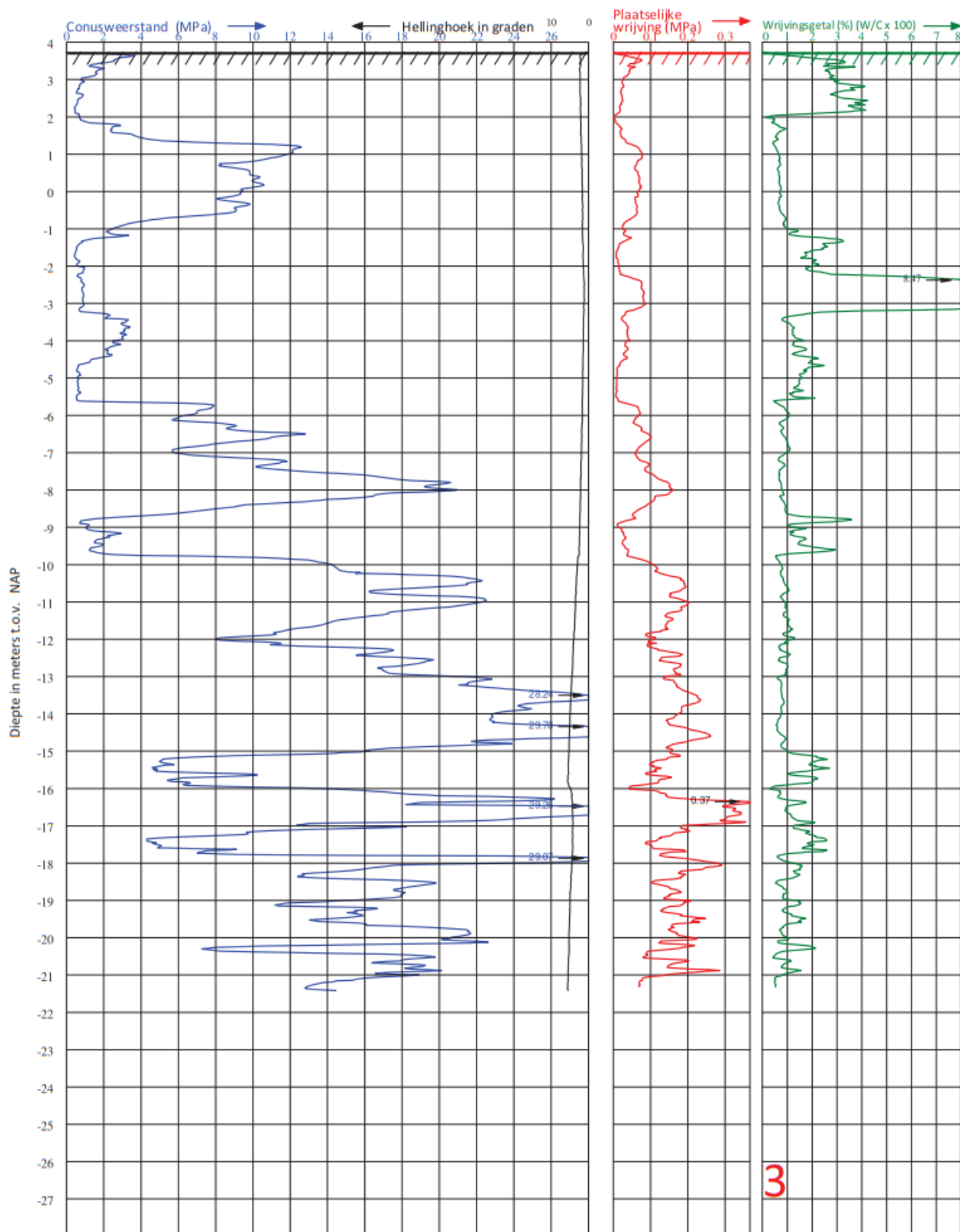
|                                                            |                      |                                |                     |                                                            |                                                 |
|------------------------------------------------------------|----------------------|--------------------------------|---------------------|------------------------------------------------------------|-------------------------------------------------|
| <b>VAN DER STRAATEN</b><br><small>GEOTECHNIEK B.V.</small> |                      | Postbus 5<br>4417 ZG Hansweert |                     | Telefoon (0031) 113-382510<br>E-mail : info@vd-straaten.nl |                                                 |
| PLAATS                                                     | : VLISSINGEN         | HOOGTE MAAVELD                 | : 3.72 m t.o.v. NAP | CONUS TYPE                                                 | : S15CRIP.S19523                                |
| LOCATIE                                                    | : KOPERSLAGERIJ      | GRONDWATERSTAND                | : m t.o.v. MAAVELD  | ID CONUS                                                   | : S19523                                        |
| OPDRACHTGEVER                                              | : JOZIASSE BOUWBEDR. | DATUM                          | : 14-6-2021         | SONDERING VOLGENS                                          | : - NEN-EN-ISO 22476-1<br>- TOEPASSINGSKLASSE 3 |
| PROJECTNUMMER                                              | : 210454             | TUO                            | : 16.16             |                                                            |                                                 |
| ID SONDERING                                               | : 2                  | X-COÖRDINAAT (RD)              | : 29624.43          | Y-COÖRDINAAT (RD)                                          | : 385940.00                                     |

Diepteschaal: 75 mm = 1 m



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Diepteschaal: 75 mm = 1 m



VAN DER STRAATEN  
GEOTECHNIEK B.V.

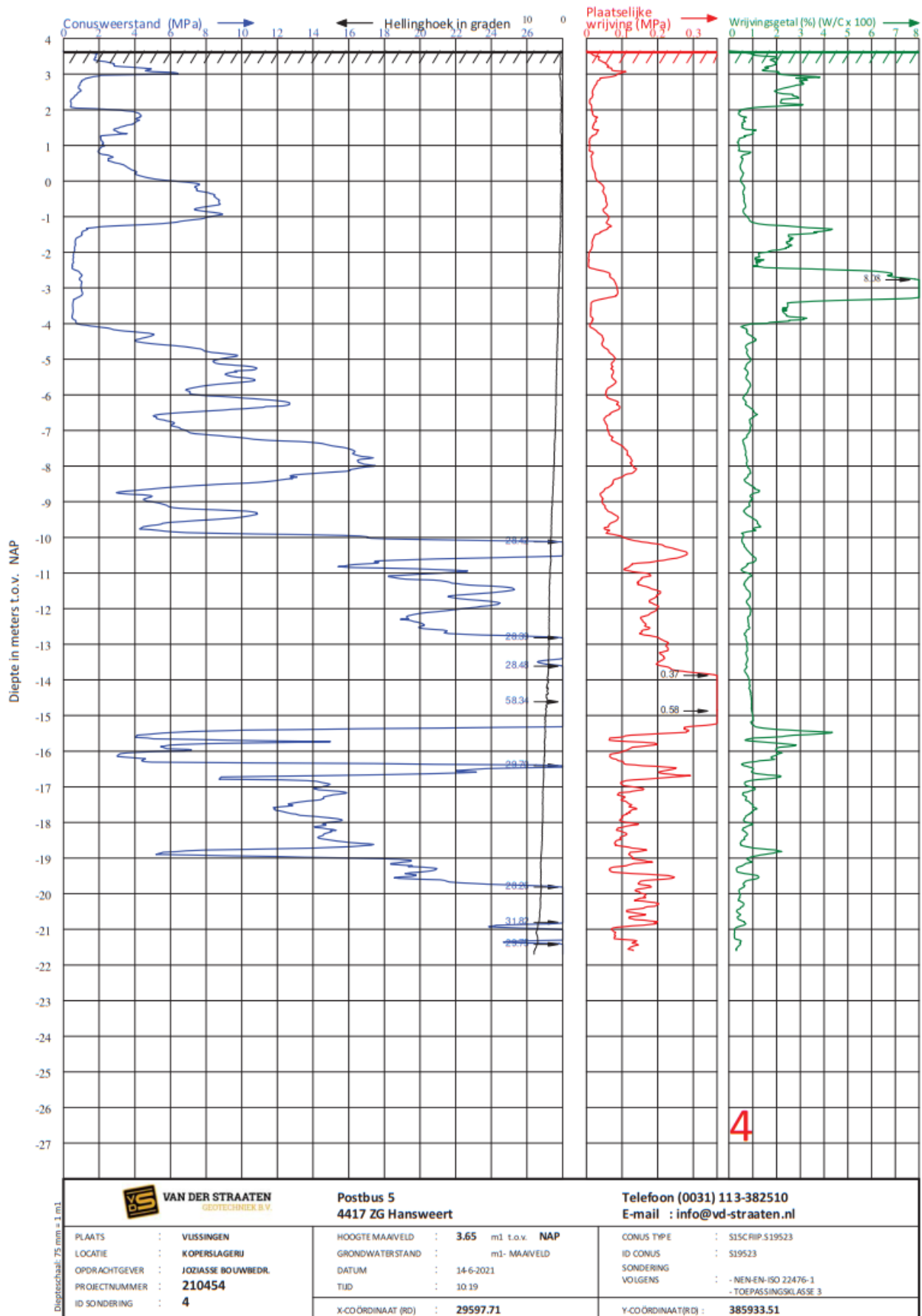
Postbus 5  
4417 ZG Hansweert

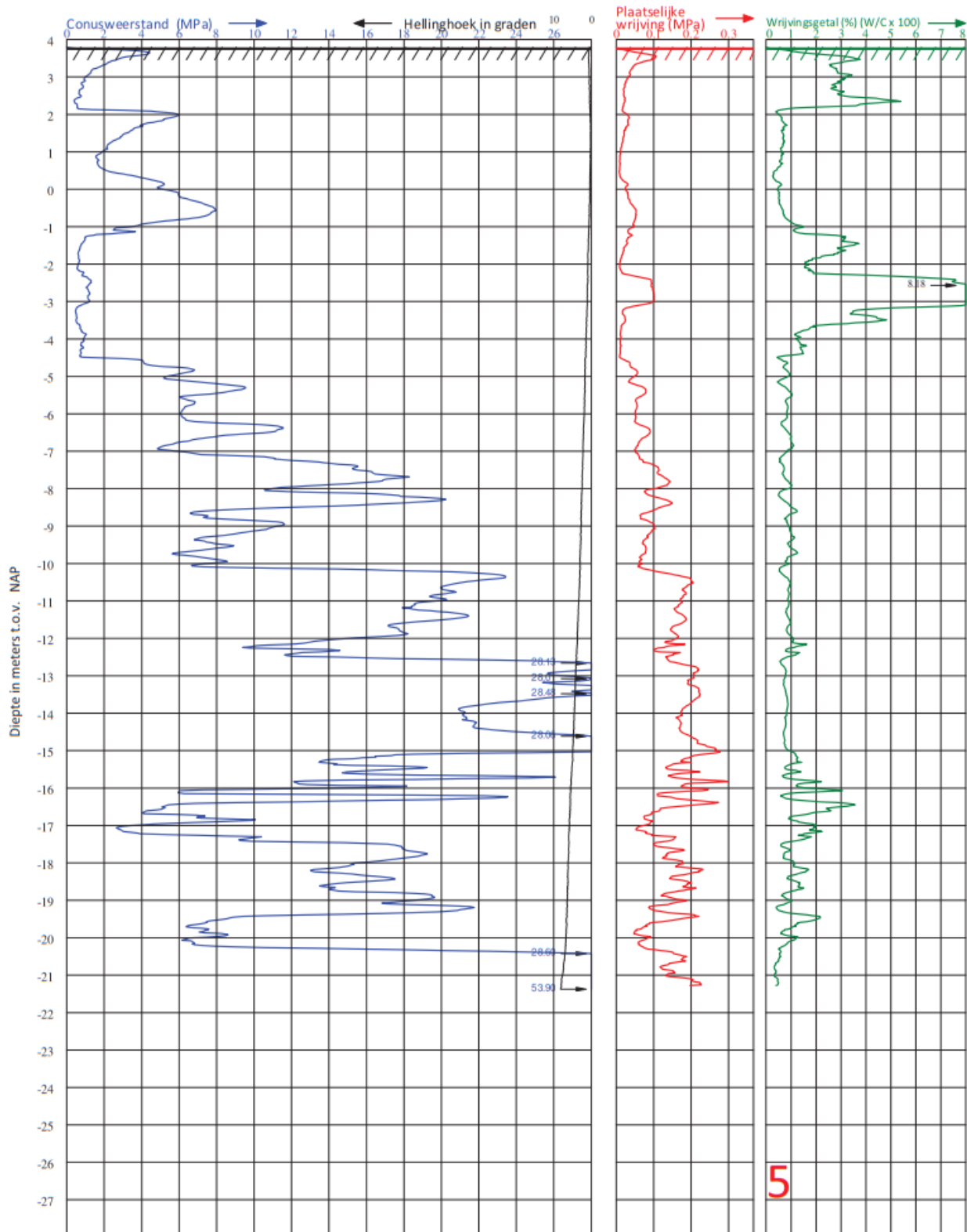
Telefoon (0031) 113-382510  
E-mail : info@vd-straaten.nl

PLAATS : VUSSINGEN  
LOCATIE : KOPERSLAGERIJ  
OPDRACHTGEVER : JOZIASSE BOUWBEDR.  
PROJECTNUMMER : 210454  
ID SONDERING : 3

HOOGTE MAAVELD : 3.74 m t.o.v. NAP  
GRONDWATERSTAND : 1.80 m t.o.v. MAAVELD  
DATUM : 14-6-2021  
TIJD : 15:35  
X-COÖRDINAAT (RD) : 29648.93

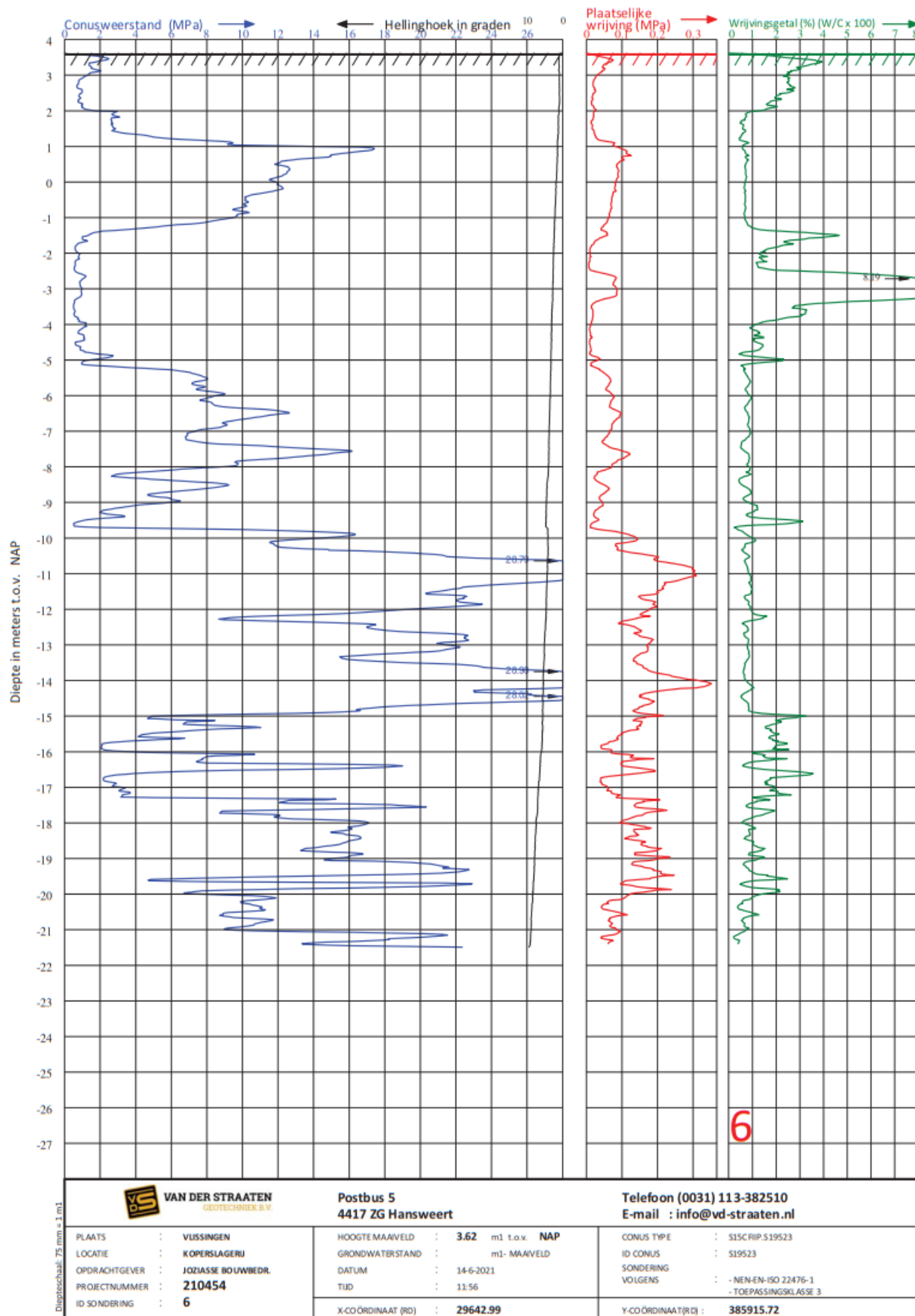
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ID CONUS : S19523  
SONDERING VOLGENS : - NEN-EN-ISO 22476-1  
TOEPASSINGSKLASSE 3  
Y-COÖRDINAAT (RD) : 385930.19

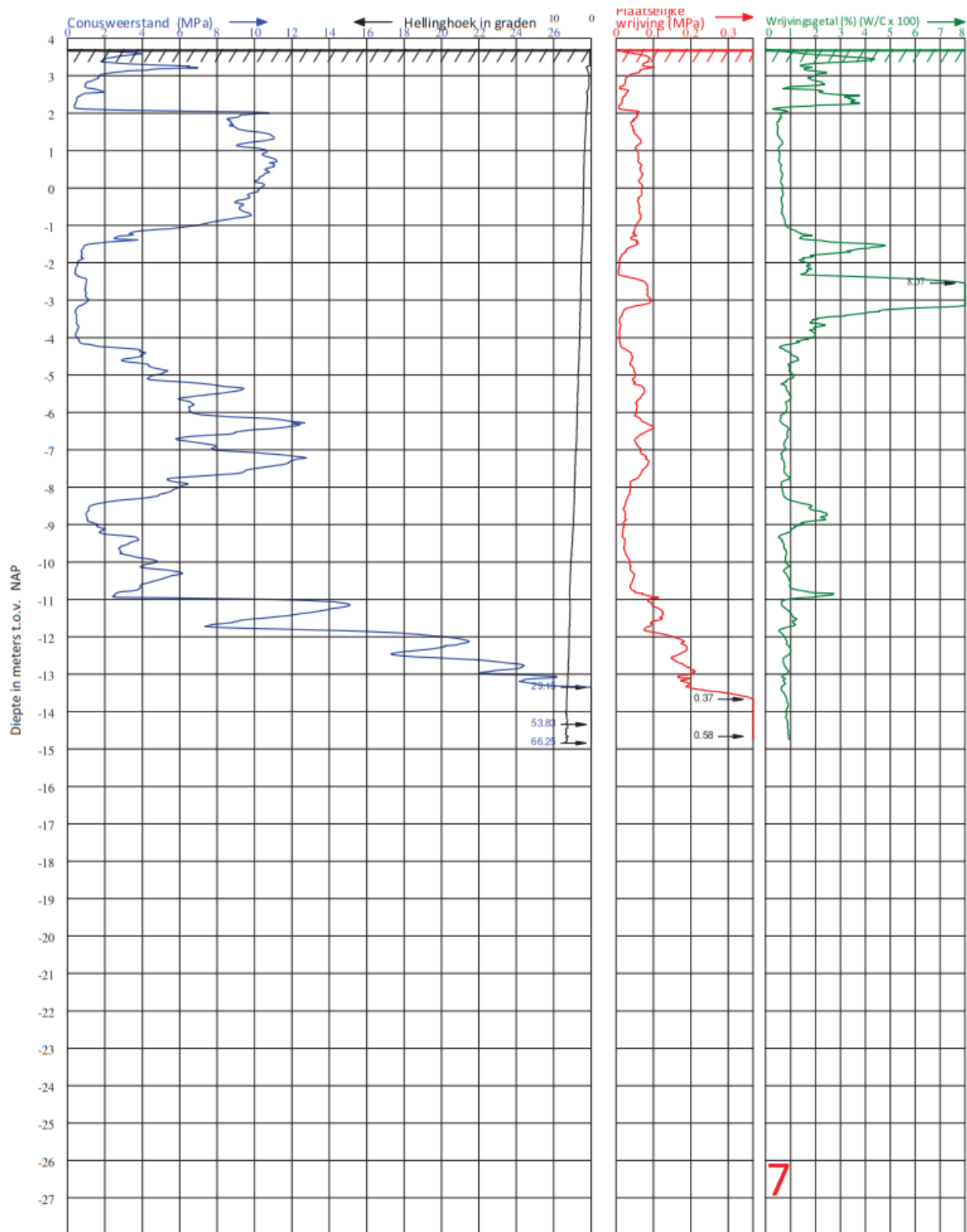




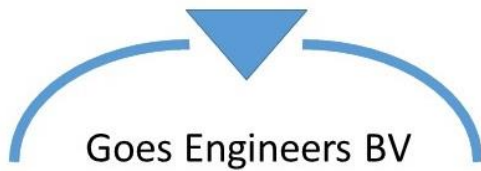
|                                                                                                                                                |                    |                                              |                          |                                                                          |                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------|--------------------------|--------------------------------------------------------------------------|-----------------------------------------------|
|  <b>VAN DER STRAATEN</b><br><small>GEOTECHNIEK B.V.</small> |                    | <b>Postbus 5</b><br><b>4417 ZG Hansweert</b> |                          | <b>Telefoon (0031) 113-382510</b><br><b>E-mail : info@vd-straaten.nl</b> |                                               |
| PLAATS :                                                                                                                                       | VUSSINGEN          | HOOGTE MAAVELD :                             | 3.79 m t.o.v. <b>NAP</b> | CONUS TYPE :                                                             | S15CRIP.S19523                                |
| LOCATIE :                                                                                                                                      | KOPERSLAGERIJ      | GRONDWATERSTAND :                            | 1.80 m t.o.v. MAAVELD    | ID CONUS :                                                               | S19523                                        |
| OPDRACHTGEVER :                                                                                                                                | JOZIASSE BOUWBEDR. | DATUM :                                      | 14-6-2021                | SONDERING VOLGENS :                                                      | - NEN-EN-ISO 22476-1<br>- TOEPASSINGSKLASSE 3 |
| PROJECTNUMMER :                                                                                                                                | <b>210454</b>      | TIJD :                                       | 11:19                    |                                                                          |                                               |
| ID SONDERING :                                                                                                                                 | <b>5</b>           | X-COÖRDINAAT (RD) :                          | <b>29618.95</b>          | Y-COÖRDINAAT (RD) :                                                      | <b>385925.57</b>                              |

Dispersiechaal: 75 mm = 1 m

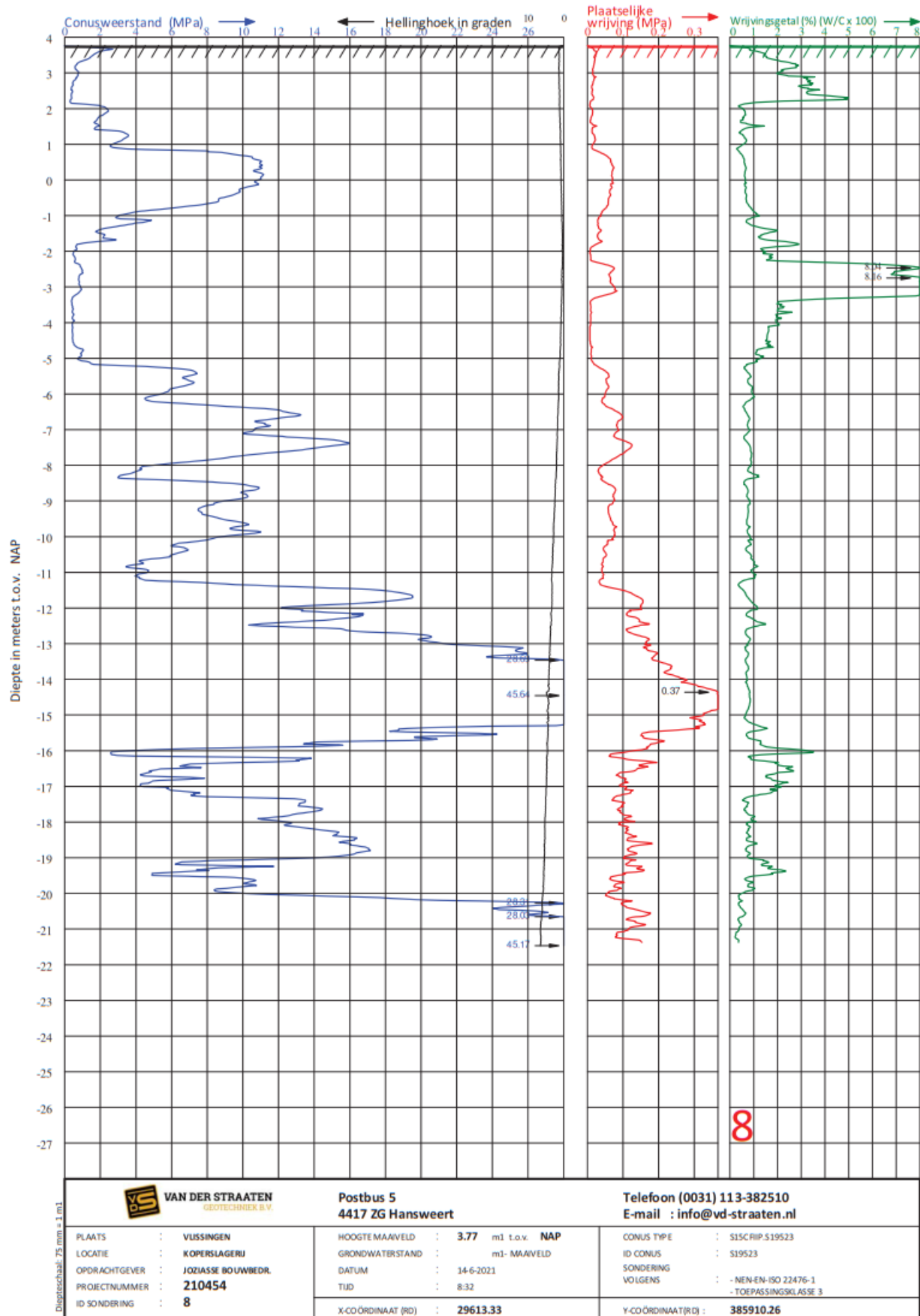


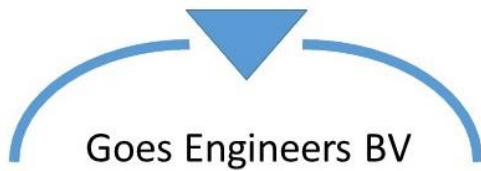


|                                                            |                    |                                              |                                                                          |
|------------------------------------------------------------|--------------------|----------------------------------------------|--------------------------------------------------------------------------|
| <b>VAN DER STRAATEN</b><br><small>GEOTECHNIEK B.V.</small> |                    | <b>Postbus 5</b><br><b>4417 ZG Hansweert</b> | <b>Telefoon (0031) 113-382510</b><br><b>E-mail : info@vd-straaten.nl</b> |
| PLAATS :                                                   | VUSSINGEN          | HOOGTE MAAVELD :                             | 3.71 m t.o.v. NAP                                                        |
| LOCATIE :                                                  | KOPERSLAGERIJ      | GRONDWATERSTAND :                            | m t.o.v. MAAVELD                                                         |
| OPDRACHTGEVER :                                            | JOZIASSE BOUWBEDR. | DATUM :                                      | 14-6-2021                                                                |
| PROJECTNUMMER :                                            | 210454             | TIJD :                                       | 9:43                                                                     |
| ID SONDERING :                                             | 7                  | X-COÖRDINAAT (RD) :                          | 29594.73                                                                 |
|                                                            |                    | Y-COÖRDINAAT (RD) :                          | 385917.72                                                                |
|                                                            |                    | CONUS TYPE :                                 | S15CRIP.S19523                                                           |
|                                                            |                    | ID CONUS :                                   | S19523                                                                   |
|                                                            |                    | SONDERING VOLGENS :                          | - NEN-EN-ISO 22476-1<br>- TOEPASSINGSKLASSE 3                            |



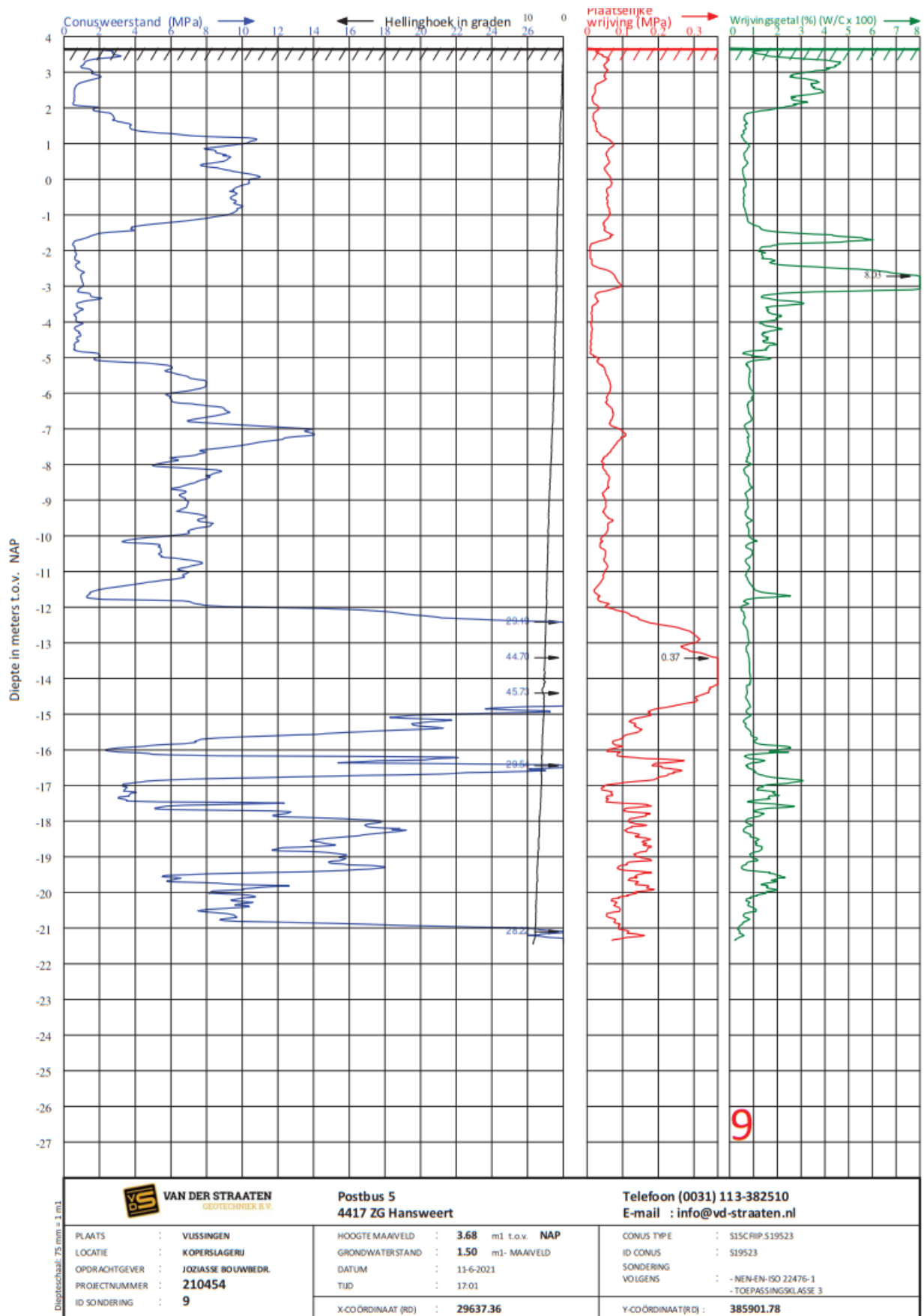
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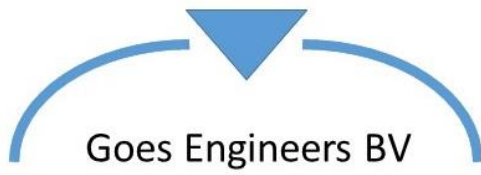
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## 4. Waterpasstaat

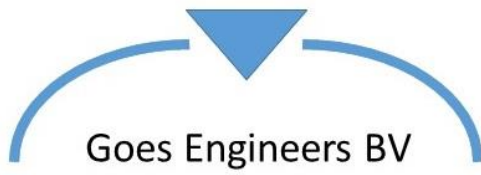
Projectnummer : 210454  
Omschrijving vast punt : putdeksel  
NAP-hoogte vast punt : 3.76 m'  
Bron hoogte maat : GPS  
x-coördinaat (RD) vast punt : 29625.95  
y-coördinaat (RD) vast punt : 385869.98

| Sondering | X-coördinaat | Y-coördinaat | Hoogte t.o.v.<br>NAP | Grondwaterstand<br>t.o.v. maaiveld |
|-----------|--------------|--------------|----------------------|------------------------------------|
| 2.        | 29624.43     | 385940.00    | 3.72 m'              |                                    |
| 3.        | 29648.93     | 385930.19    | 3.74 m'              | - 1.80 m'                          |
| 4.        | 29597.71     | 385933.51    | 3.65 m'              |                                    |
| 5.        | 29618.95     | 385925.57    | 3.79 m'              | - 1.80 m'                          |
| 6.        | 29642.99     | 385915.72    | 3.62 m'              |                                    |
| 7.        | 29594.73     | 385917.72    | 3.71 m'              |                                    |
| 8.        | 29613.33     | 385910.26    | 3.77 m'              |                                    |
| 9.        | 29637.36     | 385901.78    | 3.68 m'              | - 1.50 m'                          |



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## **Bijlage 2      Constructie overzichten**

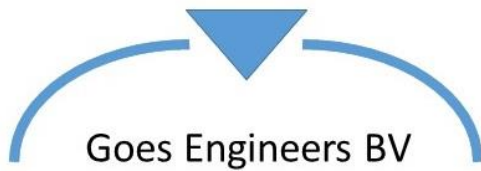


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### **Bijlage 3      Gewichtsberekening**

Alle niet dragende gevels zijn belast met één meter breedplaatvloer.

Met uitzondering van as C en E, welke zijn belast met 1,3 meter breedplaatvloer



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Roepers-lagerij 2021-032

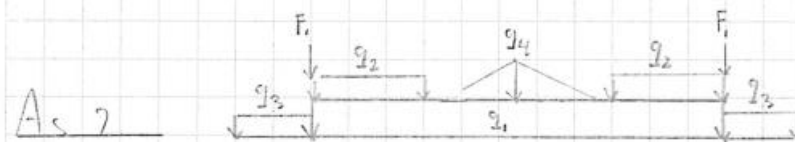
As 1

$$q_1 = \text{lap} : 5.5 \cdot 0.85$$

$$\text{Verd.} : \frac{1}{2} \cdot 6.4 \cdot 8.15 [2.55]$$

$$\text{beggr.} : \frac{1}{2} \cdot 6.4 \cdot 4.50 [2.55]$$

$$\text{Wand.} : 4.1 \cdot (2.00 + 2.20)$$



As 2

$$q_1 = q_1 \text{ As 1 lap}$$

$$q_2 = \text{Verd.} : \frac{1}{2} \cdot 6.4 \cdot 8.15 [2.55]$$

$$\text{beggr.} : \frac{1}{2} \cdot 6.4 \cdot 4.50 [2.55]$$

$$q_3 = \text{Dak} : \frac{1}{2} \cdot 6.4 \cdot 7.75 [1.00] \quad \gamma_0 = 0.0$$

$$\text{beggr.} : \frac{1}{2} \cdot 6.4 \cdot 4.50 [2.55] \quad \gamma_0 = 0.4$$

$$\text{wand.} : 3.7 \cdot (2.00 + 2.20)$$

$$q_4 = \text{Wand.} : 4.5 \cdot (2.00 + 2.20)$$

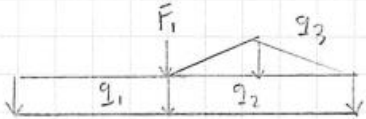
$$F_1 = \text{lap} : 4.5 \cdot 0.85 [1.00] \quad \gamma_0 = 0.0$$

$$\text{boorst.} : 1.0 \cdot (2.00 + 1.00)$$

Lijnlast 1.6 v breedplaatvloeren.

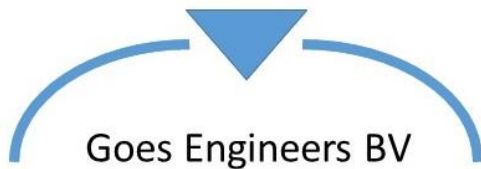
$$\text{Puntlast 1.6 v fundering} \quad \frac{1}{2} \cdot 6.4 \cdot 6.9 [4.5]$$

| $G_v$ | $Q_v$ |                  |
|-------|-------|------------------|
| 4.7   |       |                  |
| 26.1  | 8.2   | $\gamma_0 = 0.4$ |
| 14.4  | 8.2   | $\gamma_0 = 0.4$ |
| 17.2  |       | +                |
| 62.5  | 16.4  | $\text{hN/m}^2$  |
| 61.6  | 16.4  | $\text{hN/m}^2$  |
| 26.1  | 8.2   | $\gamma_0 = 0.4$ |
| 14.4  | 8.2   | $\gamma_0 = 0.4$ |
| 40.5  | 16.4  | $\text{hN/m}^2$  |
| 29.8  | 32    | $\gamma_0 = 0.0$ |
| 14.4  | 8.2   | $\gamma_0 = 0.4$ |
| 15.6  |       | +                |
| 54.8  |       | $\text{hN/m}^2$  |
| 18.9  |       | $\text{hN/m}^2$  |
| 3.9   | 4.5   | $\gamma_0 = 0.0$ |
| 3.0   |       |                  |
| 6.2   | 4.5   | $\text{hN/m}^2$  |
| 22.1  | 14.4  | $\text{hN}$      |

|                              |                                   |                                                                                     |                |                |                      |
|------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|----------------|----------------|----------------------|
| <u>A<sub>s</sub> 3 t/m 7</u> |                                   |    | G <sub>v</sub> | Q <sub>v</sub> |                      |
| g <sub>1</sub> = Dak :       | 6.4                               | 7.75 [1.00]                                                                         | 49.6           | 12.4           | γ <sub>0</sub> = 0.0 |
| begg <sub>1</sub> :          | 6.4                               | 4.50 [2.55]                                                                         | 28.8           | 16.4           | γ <sub>0</sub> = 0.4 |
| wand :                       | 3.0                               | (2.20 + 2.20).                                                                      | 13.2           |                | +                    |
|                              |                                   |                                                                                     | 91.6           |                | kN/m'                |
| g <sub>2</sub> = Verd. :     | 6.4                               | 8.15 [2.55]                                                                         | 52.2           | 16.4           | γ <sub>0</sub> = 0.4 |
| begg <sub>2</sub> :          | 6.4                               | 4.50 [2.55]                                                                         | 28.8           | 16.4           | γ <sub>0</sub> = 0.4 |
| wand :                       | 3.0                               | (2.20 + 2.20).                                                                      | 13.2           |                |                      |
|                              |                                   |                                                                                     | 94.2           | 32.8           | kN/m'                |
| g <sub>3</sub> = Wand :      | 4.1                               | (2.20 + 2.20).                                                                      | 18.1           |                | kN/m'                |
| F <sub>1</sub> = begg :      | 2                                 | F <sub>1</sub> A <sub>s</sub> 2, dus 2 × 22.1 [14.4]                                | 44.2           | 28.8           | hN                   |
| <u>A<sub>s</sub> 8</u>       |                                   |  |                |                |                      |
| g <sub>1</sub> = Dak :       | $\frac{1}{2} \cdot 6.4$           | 7.75 [1.00]                                                                         | 24.8           | 3.2            |                      |
| begg <sub>1</sub> :          | $\frac{1}{2} \cdot 6.4$           | 4.50 [2.55]                                                                         | 14.4           | 8.2            |                      |
| wand :                       | 3.7                               | (2.00 + 2.20).                                                                      | 15.6           |                | +                    |
|                              |                                   |                                                                                     | 54.8           |                | kN/m'                |
| g <sub>2</sub> = Verd. :     | $\frac{1}{2} \cdot 6.4$           | 8.15 [2.55]                                                                         | 26.1           | 8.2            | γ <sub>0</sub> = 0.4 |
| begg <sub>2</sub> :          | $\frac{1}{2} \cdot 6.4$           | 4.50 [2.55]                                                                         | 14.4           | 8.2            | γ <sub>0</sub> = 0.4 |
| wand :                       | 4.1                               | (2.00 + 2.20).                                                                      | 17.3           |                | +                    |
|                              |                                   |                                                                                     | 57.8           | 16.4           | kN/m'                |
| F <sub>1</sub> :             | F <sub>1</sub> A <sub>s</sub> 2 : | 22.1 [14.4]                                                                         |                |                | hN                   |
| g <sub>3</sub> = Wand :      | 4.5                               | (2.00 + 2.80).                                                                      | 21.6           |                | kN/m'                |

hopperslagerij 2021-032

| As A en G                                          |               |        |                  |  | Gv Qv |      |                  |
|----------------------------------------------------|---------------|--------|------------------|--|-------|------|------------------|
| $q_1 = \text{Oakh} = 1.0$                          | 7.75          | [1.00] | $\gamma_0 = 0.0$ |  | 7.75  | 1.00 | $\gamma_0 = 0.0$ |
| Wand = 3.7                                         | (2.00 + 2.00) |        |                  |  | 14.8  |      | +                |
|                                                    |               |        |                  |  | 22.6  | 1.00 | kN/m'            |
| As C en E                                          |               |        |                  |  |       |      |                  |
| $q_1 = \text{hag} = 4.5$                           | 0.85          | [1.00] |                  |  | 3.9   | 4.5  | $\gamma_0 = 0.0$ |
| Verd. = 1.3                                        | 8.15          | [2.55] |                  |  | 10.6  | 3.4  | $\gamma_0 = 0.4$ |
| Wand = 4.1                                         | (2.00 + 2.00) |        |                  |  | 16.4  |      | +                |
|                                                    |               |        |                  |  | 30.9  |      | kN/m'            |
| As B en F                                          |               |        |                  |  |       |      |                  |
| $q_1 = \text{Verd.} = 1.0$                         | 8.15          | [2.55] |                  |  | 8.15  | 2.55 | $\gamma_0 = 0.4$ |
| Wand = 4.1                                         | (2.00 + 2.00) |        |                  |  | 16.4  |      | +                |
|                                                    |               |        |                  |  | 24.6  | 2.55 | kN/m'            |
| $q_2 = \text{Wand} = 4.5$                          | (2.00 + 2.80) |        |                  |  | 21.6  |      | kN/m             |
| As D                                               |               |        |                  |  |       |      |                  |
| $q_1 = \text{Verd.} = 2.0$                         | 8.15          | [2.55] |                  |  | 16.3  | 5.1  | $\gamma_0 = 0.4$ |
| Wand = 3.0                                         | (2.20 + 2.20) |        |                  |  | 13.2  |      | +                |
|                                                    |               |        |                  |  | 29.5  | 5.1  | kN/m'            |
| $q_2 = \text{Wand} = 5.0$                          | (2.20 + 2.20) |        |                  |  | 22.0  |      | kN/m'            |
| $q_3 = \text{hag} = \frac{1}{2} \cdot 0.7 \cdot 2$ | 0.85          | [1.00] | $\gamma_0 = 0.0$ |  | 4.9   | 5.7  | kN/m'            |



Ingenieursbureau voor bouwkundige en civiele bouwwerken

## Bijlage 4 TS: Ringbalkfundering

**Technosoft Balkroosters release 6.60**

**5 jul 2021**

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering  
Constructeur.: Goes Engineers  
Dimensies.....: kN/m/rad  
Datum.....: 28/06/2021  
Bestand.....: c:\users\oliviereshuisgoeseng\onedrive - goes engineers  
                  bv\goes engineers\d. project administratie\2021\2021-032  
                  koperslagerij te vlissingen\berekeningen\blok  
                  1\2021-032\_ts\_balkrooster.grw  
Torsiefac.....: 10 %

Betrouwbaarheidsklasse : 1      Referentieperiode : 50  
Ouderdom bij belasten : 28      Relatieve vochtigheid : 50%  
Doorbuigingen(beton) zijn dmv gecorrigeerde stijfheden berekend.

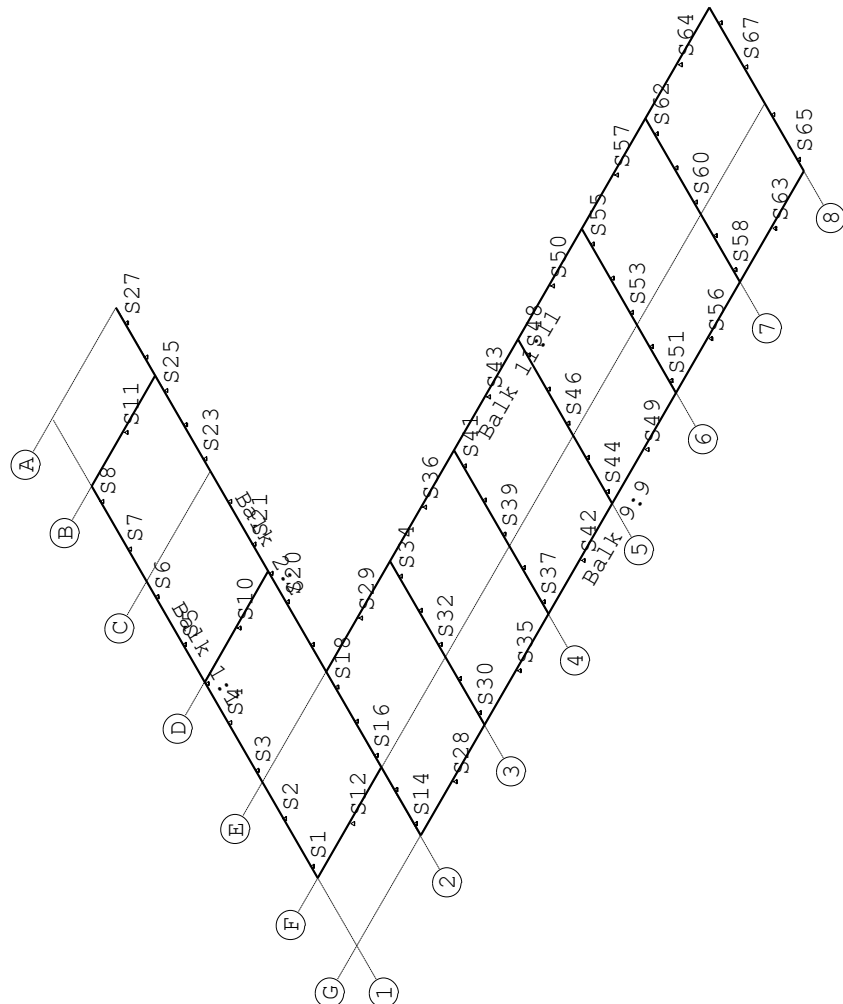
Fysisch lineair : Er is gerekend met de e-modulus uit de materiaaltabel.  
Fys.NLE.kort : Er is gerekend met een gecorrigeerde e-modulus (korte duur).  
Deze e-mod. is berekend mbv de krachten uit de fysisch lineair berekening.

### **Toegepaste normen volgens Eurocode met Nederlandse NB**

|             |                          |                |             |
|-------------|--------------------------|----------------|-------------|
| Belastingen | NEN-EN 1990:2002         | C2:2010        | NB:2011(nl) |
|             | NEN-EN 1991-1-1:2002     | C1:2009        | NB:2011(nl) |
| Beton       | NEN-EN 1992-1-1:2011(nl) | C2/A1:2015(nl) | NB:2016(nl) |

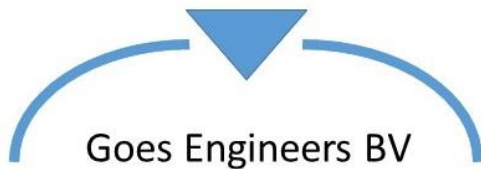
Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## GEOMETRIE



## MATERIALEN

| Mt | Omschrijving | E-modulus[N/mm <sup>2</sup> ] | S.G. | Pois. | Uitz. coëff |
|----|--------------|-------------------------------|------|-------|-------------|
| 1  | C20/25       | 7480                          | 25.0 | 0.20  | 1.0000e-05  |



**Goes Engineers BV**

Ingenieursbureau voor bouwkundige en civiele bouwwerken

Project.....: 2021-032 - Koperslagerij te Vlissingen

Onderdeel.....: Fundering

### **MATERIALEN vervolg**

| Mt | Omschrijving | Cement | Kruipfac. |
|----|--------------|--------|-----------|
| 1  | C20/25       |        | 3.01      |

### **PROFIELEN [mm]**

| Prof. | Omschrijving | Materiaal | Oppervlak | Torsietr. | Traagheid | Vormf. |
|-------|--------------|-----------|-----------|-----------|-----------|--------|
| 1     | B*H 400*500  | 1:C20/25  | 2.000e+05 | 5.577e+09 | 4.167e+09 | 0.00   |
| 2     | B*H 400*500  | 1:C20/25  | 2.000e+05 | 5.577e+09 | 4.167e+09 | 0.00   |

### **PROFIELEN vervolg [mm]**

| Prof. | Staaftype | Breedte | Hoogte | Zs  | Rek.As | Type | b1 | h1 | b2 | h2 |
|-------|-----------|---------|--------|-----|--------|------|----|----|----|----|
| 1     | 0:Normaal | 400     | 500    | 250 | 0.00   | 0:RH |    |    |    |    |
| 2     | 0:Normaal | 400     | 500    | 250 | 0.00   | 0:RH |    |    |    |    |

### **PROFIELVORMEN [mm]**

|   |             |                                                                                     |
|---|-------------|-------------------------------------------------------------------------------------|
| 1 | B*H 400*500 |    |
| 2 | B*H 400*500 |  |

### **STRAMIENLIJNEN**

| Nr. | Naam | X-begin | Y-begin | X-eind | Y-Eind |
|-----|------|---------|---------|--------|--------|
| 1   | 1    | 0.000   | 0.000   | 0.000  | 30.900 |
| 2   | 2    | 6.500   | 0.000   | 6.500  | 30.900 |
| 3   | 3    | 13.000  | 0.000   | 13.000 | 9.600  |
| 4   | 4    | 19.500  | 0.000   | 19.500 | 9.600  |
| 5   | 5    | 26.000  | 0.000   | 26.000 | 9.600  |
| 6   | 6    | 32.500  | 0.000   | 32.500 | 9.600  |
| 7   | 7    | 39.000  | 0.000   | 39.000 | 9.600  |
| 8   | 8    | 45.500  | 0.000   | 45.500 | 9.600  |
| 9   | G    | 0.000   | 0.000   | 45.500 | 0.000  |
| 10  | F    | 0.000   | 4.000   | 45.500 | 4.000  |
| 11  | E    | 0.000   | 9.600   | 45.500 | 9.600  |
| 12  | D    | 0.000   | 15.500  | 6.500  | 15.500 |
| 13  | C    | 0.000   | 21.400  | 6.500  | 21.400 |
| 14  | B    | 0.000   | 27.000  | 6.500  | 27.000 |
| 15  | A    | 0.000   | 31.000  | 6.500  | 31.000 |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### BALKEN

| Nr. | Naam | Begin | Eind | Profiel               |
|-----|------|-------|------|-----------------------|
| 1   | 1    | 1;F   | 1;B  | 1:B*H 400*500         |
| 2   | 2    | 2;G   | 2;A  | Zie Doorsnedesectoren |
| 3   | 3    | 3;G   | 3;E  | 2:B*H 400*500         |
| 4   | 4    | 4;G   | 4;E  | 2:B*H 400*500         |
| 5   | 5    | 5;G   | 5;E  | 2:B*H 400*500         |
| 6   | 6    | 6;G   | 6;E  | 2:B*H 400*500         |
| 7   | 7    | 7;G   | 7;E  | 2:B*H 400*500         |
| 8   | 8    | 8;G   | 8;E  | 1:B*H 400*500         |
| 9   | 9    | 2;G   | 8;G  | 1:B*H 400*500         |
| 10  | 10   | 1;F   | 2;F  | 1:B*H 400*500         |
| 11  | 11   | 2;E   | 8;E  | 1:B*H 400*500         |
| 12  | 12   | 1;D   | 2;D  | 1:B*H 400*500         |
| 13  | 13   | 1;B   | 2;B  | 1:B*H 400*500         |

### BALKEN vervolg

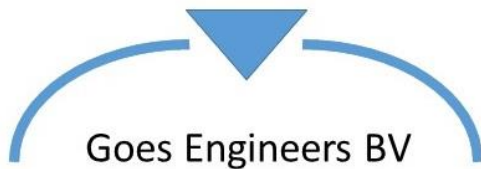
| Nr. | Naam | Aansl.begin | Aansl.eind | Excentr. | Pasm.begin | Pasm.eind | Opm. |
|-----|------|-------------|------------|----------|------------|-----------|------|
| 1   | 1    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 2   | 2    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 3   | 3    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 4   | 4    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 5   | 5    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 6   | 6    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 7   | 7    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 8   | 8    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 9   | 9    | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 10  | 10   | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 11  | 11   | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 12  | 12   | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |
| 13  | 13   | WDM         | WDM        | 0.000    | 0.000      | 0.000     |      |

Opmerkingen:

De torsie traagheid van alle balken is tot 10% gereduceerd

### DOORSNEDESECTOREN

| Balk     | Vanaf  | Tot    | Lengte | Profiel       | Eindcode | Bedding |
|----------|--------|--------|--------|---------------|----------|---------|
| Br. [mm] |        |        |        |               |          |         |
| Balk 2:2 | 0.000  | 9.600  | 9.600  | 1:B*H 400*500 | 1:Vast   |         |
| Balk 2:2 | 9.600  | 21.400 | 11.800 | 1:B*H 400*500 | 1:Vast   |         |
| Balk 2:2 | 21.400 | 31.000 | 9.600  | 1:B*H 400*500 | 1:Vast   |         |



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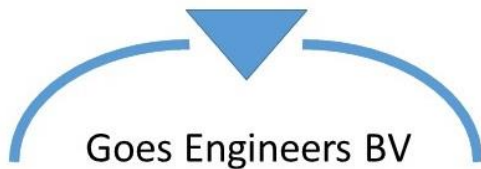
Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### STEUNPUNTYPEN

|            |              |              |              |          |          |
|------------|--------------|--------------|--------------|----------|----------|
| Nr.        | : 1          | Rotatie      | X:Vrij       |          |          |
| Afmeting   | : 220*220    | Verplaatsing | Z:Veerwaarde | Ondergr. | Bovengr. |
| FRd        | : 280.000000 | Type:Normaal | 90000.000    | -280.000 |          |
| Min.afst.: | 0.500        | Rotatie      | Y:Vrij       |          |          |
| Nr.        | : 2          | Rotatie      | X:Vrij       |          |          |
| Afmeting   | : 250*250    | Verplaatsing | Z:Veerwaarde | Ondergr. | Bovengr. |
| FRd        | : 330.000000 | Type:Normaal | 120000.000   | -330.000 |          |
| Min.afst.: | 0.500        | Rotatie      | Y:Vrij       |          |          |

### STEUNPUNTEN

| Nr. | Steunpunttype | Balk       | Positie | Excentr. | Opm: |
|-----|---------------|------------|---------|----------|------|
| 1   | 1:220*220     | Balk 1:1   | 0.800   | 0.000    |      |
| 2   | 1:220*220     | Balk 1:1   | 3.600   | 0.000    |      |
| 3   | 1:220*220     | Balk 1:1   | 6.400   | 0.000    |      |
| 4   | 1:220*220     | Balk 1:1   | 9.200   | 0.000    |      |
| 5   | 1:220*220     | Balk 1:1   | 13.800  | 0.000    |      |
| 6   | 1:220*220     | Balk 1:1   | 16.600  | 0.000    |      |
| 7   | 1:220*220     | Balk 1:1   | 19.400  | 0.000    |      |
| 8   | 1:220*220     | Balk 1:1   | 22.200  | 0.000    |      |
| 9   | 1:220*220     | Balk 12:12 | 0.000   | 0.000    |      |
| 10  | 1:220*220     | Balk 12:12 | 3.250   | 0.000    |      |
| 11  | 1:220*220     | Balk 13:13 | 3.250   | 0.000    |      |
| 12  | 1:220*220     | Balk 10:10 | 3.300   | 0.000    |      |
| 13  | 1:220*220     | Balk 12:12 | 6.500   | 0.000    |      |
| 14  | 1:220*220     | Balk 2:2   | 0.800   | 0.000    |      |
| 15  | 1:220*220     | Balk 2:2   | 2.800   | 0.000    |      |
| 16  | 2:250*250     | Balk 2:2   | 4.800   | 0.000    |      |
| 17  | 2:250*250     | Balk 2:2   | 6.800   | 0.000    |      |
| 18  | 2:250*250     | Balk 2:2   | 8.800   | 0.000    |      |
| 19  | 1:220*220     | Balk 2:2   | 11.300  | 0.000    |      |
| 20  | 1:220*220     | Balk 2:2   | 13.800  | 0.000    |      |
| 21  | 1:220*220     | Balk 2:2   | 17.200  | 0.000    |      |
| 22  | 1:220*220     | Balk 2:2   | 19.700  | 0.000    |      |
| 23  | 2:250*250     | Balk 2:2   | 22.200  | 0.000    |      |
| 24  | 2:250*250     | Balk 2:2   | 24.200  | 0.000    |      |
| 25  | 2:250*250     | Balk 2:2   | 26.200  | 0.000    |      |
| 26  | 1:220*220     | Balk 2:2   | 28.200  | 0.000    |      |
| 27  | 1:220*220     | Balk 2:2   | 30.200  | 0.000    |      |
| 28  | 1:220*220     | Balk 9:9   | 3.250   | 0.000    |      |
| 29  | 1:220*220     | Balk 11:11 | 3.250   | 0.000    |      |
| 30  | 1:220*220     | Balk 3:3   | 0.800   | 0.000    |      |
| 31  | 1:220*220     | Balk 3:3   | 2.800   | 0.000    |      |
| 32  | 2:250*250     | Balk 3:3   | 4.800   | 0.000    |      |

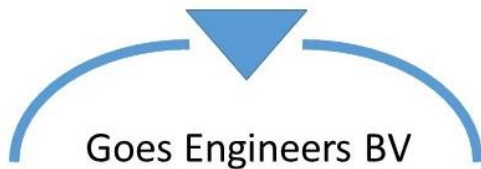


Ingenieursbureau voor bouwkundige en civiele bouwwerken

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### STEUNPUNTEN

| Nr. | Steunpunttype | Balk       | Positie | Excentr. Opm: |
|-----|---------------|------------|---------|---------------|
| 33  | 2:250*250     | Balk 3:3   | 6.800   | 0.000         |
| 34  | 2:250*250     | Balk 3:3   | 8.800   | 0.000         |
| 35  | 1:220*220     | Balk 9:9   | 9.750   | 0.000         |
| 36  | 1:220*220     | Balk 11:11 | 9.750   | 0.000         |
| 37  | 1:220*220     | Balk 4:4   | 0.800   | 0.000         |
| 38  | 1:220*220     | Balk 4:4   | 2.800   | 0.000         |
| 39  | 2:250*250     | Balk 4:4   | 4.800   | 0.000         |
| 40  | 2:250*250     | Balk 4:4   | 6.800   | 0.000         |
| 41  | 2:250*250     | Balk 4:4   | 8.800   | 0.000         |
| 42  | 1:220*220     | Balk 9:9   | 16.250  | 0.000         |
| 43  | 1:220*220     | Balk 11:11 | 16.250  | 0.000         |
| 44  | 1:220*220     | Balk 5:5   | 0.800   | 0.000         |
| 45  | 1:220*220     | Balk 5:5   | 2.800   | 0.000         |
| 46  | 2:250*250     | Balk 5:5   | 4.800   | 0.000         |
| 47  | 2:250*250     | Balk 5:5   | 6.800   | 0.000         |
| 48  | 2:250*250     | Balk 5:5   | 8.800   | 0.000         |
| 49  | 1:220*220     | Balk 9:9   | 22.750  | 0.000         |
| 50  | 1:220*220     | Balk 11:11 | 22.750  | 0.000         |
| 51  | 1:220*220     | Balk 6:6   | 0.800   | 0.000         |
| 52  | 1:220*220     | Balk 6:6   | 2.800   | 0.000         |
| 53  | 2:250*250     | Balk 6:6   | 4.800   | 0.000         |
| 54  | 2:250*250     | Balk 6:6   | 6.800   | 0.000         |
| 55  | 2:250*250     | Balk 6:6   | 8.800   | 0.000         |
| 56  | 1:220*220     | Balk 9:9   | 29.250  | 0.000         |
| 57  | 1:220*220     | Balk 11:11 | 29.250  | 0.000         |
| 58  | 1:220*220     | Balk 7:7   | 0.800   | 0.000         |
| 59  | 1:220*220     | Balk 7:7   | 2.800   | 0.000         |
| 60  | 2:250*250     | Balk 7:7   | 4.800   | 0.000         |
| 61  | 2:250*250     | Balk 7:7   | 6.800   | 0.000         |
| 62  | 2:250*250     | Balk 7:7   | 8.800   | 0.000         |
| 63  | 1:220*220     | Balk 9:9   | 35.750  | 0.000         |
| 64  | 1:220*220     | Balk 11:11 | 35.750  | 0.000         |
| 65  | 1:220*220     | Balk 8:8   | 0.800   | 0.000         |
| 66  | 1:220*220     | Balk 8:8   | 3.400   | 0.000         |
| 67  | 1:220*220     | Balk 8:8   | 6.200   | 0.000         |
| 68  | 1:220*220     | Balk 8:8   | 8.800   | 0.000         |



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### **BELASTINGGEVALLEN**

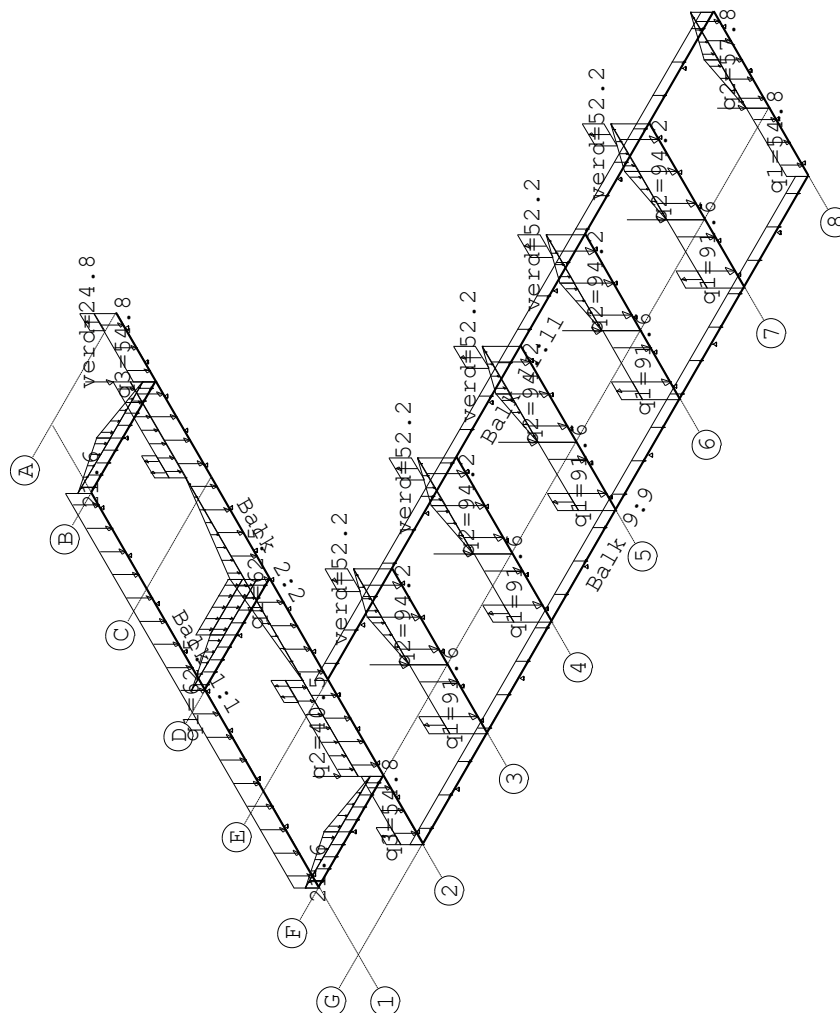
| B.G. Omschrijving | Belast/onbelast    | $\psi_0$ | $\psi_1$ | $\psi_2$ | e.g.  |
|-------------------|--------------------|----------|----------|----------|-------|
| 1 Permanent       | 2:Permanent EN1991 |          |          |          | -1.00 |
| 2 Veranderlijk    | 0:Alles tegelijk   | 0.40     | 0.50     | 0.30     | 0.00  |
| 3 Wind            | 0:Alles tegelijk   | 0.00     | 0.20     | 0.00     | 0.00  |

### **BELASTINGGEVALLEN**

| B.G. Omschrijving | Type                          |
|-------------------|-------------------------------|
| 1 Permanent       | 1 Permanente belasting        |
| 2 Veranderlijk    | 2 Ver. bel. pers. ed. (p_rep) |
| 3 Wind            | 7 Wind van links onderdruk A  |

## VELDBELASTINGEN

B.G:1 Permanent



## VELDBELASTINGEN

B.G:1 Permanent

| Balk     | Last Type    | q1/p/m  | q2      | Afstand | Lengte | Exc.  |
|----------|--------------|---------|---------|---------|--------|-------|
| Balk 1:1 | 1 1:q-last   | -62.500 | -62.500 | 0.000   | 23.000 | 0.000 |
| Balk 2:2 | 1 1:q-last   | -62.500 | -62.500 | 4.000   | 23.000 | 0.000 |
| Balk 2:2 | 2 1:q-last   | -54.800 | -54.800 | 0.000   | 4.000  | 0.000 |
| Balk 2:2 | 3 1:q-last   | -54.800 | -54.800 | 27.000  | 4.000  | 0.000 |
| Balk 2:2 | 4 1:q-last   | -40.500 | -40.500 | 4.000   | 5.600  | 0.000 |
| Balk 2:2 | 5 1:q-last   | -40.500 | -40.500 | 21.400  | 5.600  | 0.000 |
| Balk 2:2 | 6 8:Puntlast | -22.100 |         | 4.000   |        | 0.000 |
| Balk 2:2 | 7 8:Puntlast | -22.100 |         | 27.000  |        | 0.000 |
| Balk 2:2 | 8 1:q-last   | -0.000  | -18.900 | 9.600   | 5.900  | 0.000 |

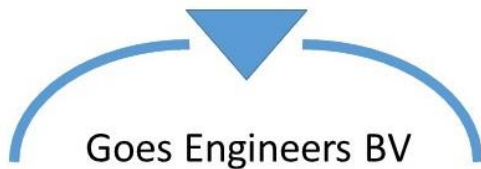
Project.....: 2021-032 - Koperslagerij te Vlissingen

Onderdeel.....: Fundering

# VELDBELASTINGEN

B.G:1 Permanent

| Balk       | Last Type    | q1/p/m  | q2      | Afstand | Lengte | Exc.  |
|------------|--------------|---------|---------|---------|--------|-------|
| Balk 2:2   | 9 1:q-last   | -18.900 | 0.000   | 15.500  | 5.900  | 0.000 |
| Balk 2:2   | 10 1:q-last  | 24.800  | 24.800  | 0.000   | 1.000  | 0.000 |
| Balk 2:2   | 11 1:q-last  | 24.800  | 24.800  | 30.000  | 1.000  | 0.000 |
| Balk 2:2   | 12 1:q-last  | 26.100  | 26.100  | 8.300   | 1.300  | 0.000 |
| Balk 2:2   | 13 1:q-last  | 26.100  | 26.100  | 21.400  | 1.300  | 0.000 |
| Balk 3:3   | 1 1:q-last   | -91.600 | -91.600 | 0.000   | 4.000  | 0.000 |
| Balk 3:3   | 2 1:q-last   | -94.200 | -94.200 | 4.000   | 5.600  | 0.000 |
| Balk 3:3   | 3 1:q-last   | 0.000   | -18.100 | 4.000   | 2.800  | 0.000 |
| Balk 3:3   | 4 1:q-last   | -18.100 | 0.000   | 6.800   | 2.800  | 0.000 |
| Balk 3:3   | 5 8:Puntlast | -44.200 |         | 4.000   |        | 0.000 |
| Balk 3:3   | 6 1:q-last   | 52.200  | 52.200  | 8.300   | 1.300  | 0.000 |
| Balk 3:3   | 7 1:q-last   | 49.600  | 49.600  | 0.000   | 1.000  | 0.000 |
| Balk 4:4   | 1 1:q-last   | -91.600 | -91.600 | 0.000   | 4.000  | 0.000 |
| Balk 4:4   | 2 1:q-last   | -94.200 | -94.200 | 4.000   | 5.600  | 0.000 |
| Balk 4:4   | 3 1:q-last   | 0.000   | -18.100 | 4.000   | 2.800  | 0.000 |
| Balk 4:4   | 4 1:q-last   | -18.100 | 0.000   | 6.800   | 2.800  | 0.000 |
| Balk 4:4   | 5 8:Puntlast | -44.200 |         | 4.000   |        | 0.000 |
| Balk 4:4   | 6 1:q-last   | 52.200  | 52.200  | 8.300   | 1.300  | 0.000 |
| Balk 4:4   | 7 1:q-last   | 49.600  | 49.600  | 0.000   | 1.000  | 0.000 |
| Balk 5:5   | 1 1:q-last   | -91.600 | -91.600 | 0.000   | 4.000  | 0.000 |
| Balk 5:5   | 2 1:q-last   | -94.200 | -94.200 | 4.000   | 5.600  | 0.000 |
| Balk 5:5   | 3 1:q-last   | 0.000   | -18.100 | 4.000   | 2.800  | 0.000 |
| Balk 5:5   | 4 1:q-last   | -18.100 | 0.000   | 6.800   | 2.800  | 0.000 |
| Balk 5:5   | 5 8:Puntlast | -44.200 |         | 4.000   |        | 0.000 |
| Balk 5:5   | 6 1:q-last   | 52.200  | 52.200  | 8.300   | 1.300  | 0.000 |
| Balk 5:5   | 7 1:q-last   | 49.600  | 49.600  | 0.000   | 1.000  | 0.000 |
| Balk 6:6   | 1 1:q-last   | -91.600 | -91.600 | 0.000   | 4.000  | 0.000 |
| Balk 6:6   | 2 1:q-last   | -94.200 | -94.200 | 4.000   | 5.600  | 0.000 |
| Balk 6:6   | 3 1:q-last   | 0.000   | -18.100 | 4.000   | 2.800  | 0.000 |
| Balk 6:6   | 4 1:q-last   | -18.100 | 0.000   | 6.800   | 2.800  | 0.000 |
| Balk 6:6   | 5 8:Puntlast | -44.200 |         | 4.000   |        | 0.000 |
| Balk 6:6   | 6 1:q-last   | 52.200  | 52.200  | 8.300   | 1.300  | 0.000 |
| Balk 6:6   | 7 1:q-last   | 49.600  | 49.600  | 0.000   | 1.000  | 0.000 |
| Balk 7:7   | 1 1:q-last   | -91.600 | -91.600 | 0.000   | 4.000  | 0.000 |
| Balk 7:7   | 2 1:q-last   | -94.200 | -94.200 | 4.000   | 5.600  | 0.000 |
| Balk 7:7   | 3 1:q-last   | 0.000   | -18.100 | 4.000   | 2.800  | 0.000 |
| Balk 7:7   | 4 1:q-last   | -18.100 | 0.000   | 6.800   | 2.800  | 0.000 |
| Balk 7:7   | 5 8:Puntlast | -44.200 |         | 4.000   |        | 0.000 |
| Balk 7:7   | 6 1:q-last   | 52.200  | 52.200  | 8.300   | 1.300  | 0.000 |
| Balk 7:7   | 7 1:q-last   | 49.600  | 49.600  | 0.000   | 1.000  | 0.000 |
| Balk 8:8   | 1 1:q-last   | -54.800 | -54.800 | 0.000   | 4.000  | 0.000 |
| Balk 8:8   | 2 1:q-last   | -57.800 | -57.800 | 4.000   | 5.600  | 0.000 |
| Balk 8:8   | 3 1:q-last   | 0.000   | -21.600 | 4.000   | 2.800  | 0.000 |
| Balk 8:8   | 4 1:q-last   | -21.600 | 0.000   | 6.800   | 2.800  | 0.000 |
| Balk 8:8   | 5 8:Puntlast | -22.100 |         | 4.000   |        | 0.000 |
| Balk 9:9   | 1 1:q-last   | -22.600 | -22.600 | 0.000   | 39.000 | 0.000 |
| Balk 10:10 | 1 1:q-last   | -24.600 | -24.600 | 0.000   | 6.500  | 0.000 |
| Balk 10:10 | 2 1:q-last   | 0.000   | -21.600 | 0.000   | 3.250  | 0.000 |



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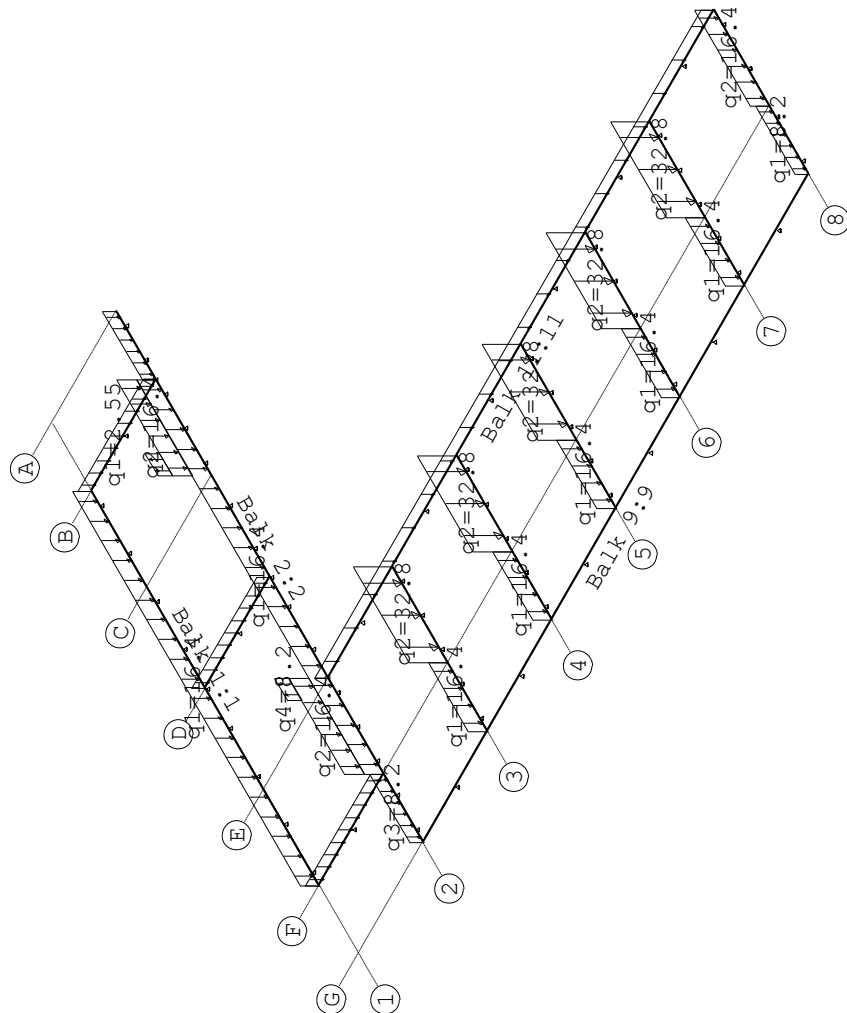
### VELDBELASTINGEN

B.G:1 Permanent

| Balk       | Last | Type     | q1/p/m  | q2      | Afstand | Lengte | Exc.  |
|------------|------|----------|---------|---------|---------|--------|-------|
| Balk 10:10 | 3    | 1:q-last | -21.600 | 0.000   | 3.250   | 3.250  | 0.000 |
| Balk 11:11 | 1    | 1:q-last | -30.900 | -30.900 | 0.000   | 39.000 | 0.000 |
| Balk 12:12 | 1    | 1:q-last | -29.500 | -29.500 | 0.000   | 6.500  | 0.000 |
| Balk 12:12 | 2    | 1:q-last | 0.000   | -22.000 | 0.000   | 3.250  | 0.000 |
| Balk 12:12 | 3    | 1:q-last | -22.000 | -22.000 | 3.250   | 3.250  | 0.000 |
| Balk 12:12 | 4    | 1:q-last | -4.900  | -4.900  | 3.250   | 3.250  | 0.000 |
| Balk 13:13 | 1    | 1:q-last | -24.600 | -24.600 | 0.000   | 6.500  | 0.000 |
| Balk 13:13 | 2    | 1:q-last | 0.000   | -21.600 | 0.000   | 3.250  | 0.000 |
| Balk 13:13 | 3    | 1:q-last | -21.600 | 0.000   | 3.250   | 3.250  | 0.000 |

## VELDBELASTINGEN

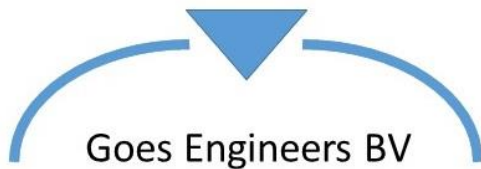
B.G:2 Veranderlijk



## VELDBELASTINGEN

B.G:2 Veranderlijk

| Balk     | Last Type  | $q_1/p/m$ | $q_2$   | Afstand | Lengte | Exc.  |
|----------|------------|-----------|---------|---------|--------|-------|
| Balk 1:1 | 1 1:q-last | -16.400   | -16.400 | 0.000   | 23.000 | 0.000 |
| Balk 2:2 | 1 1:q-last | -16.400   | -16.400 | 4.000   | 23.000 | 0.000 |
| Balk 2:2 | 2 1:q-last | -16.400   | -16.400 | 4.000   | 5.600  | 0.000 |
| Balk 2:2 | 3 1:q-last | -8.200    | -8.200  | 0.000   | 4.000  | 0.000 |
| Balk 2:2 | 4 1:q-last | -16.400   | -16.400 | 21.400  | 5.600  | 0.000 |
| Balk 2:2 | 5 1:q-last | -8.200    | -8.200  | 27.000  | 4.000  | 0.000 |
| Balk 2:2 | 6 1:q-last | 8.200     | 8.200   | 8.300   | 1.300  | 0.000 |
| Balk 2:2 | 7 1:q-last | 8.200     | 8.200   | 21.400  | 1.300  | 0.000 |
| Balk 3:3 | 1 1:q-last | -16.400   | -16.400 | 0.000   | 4.000  | 0.000 |



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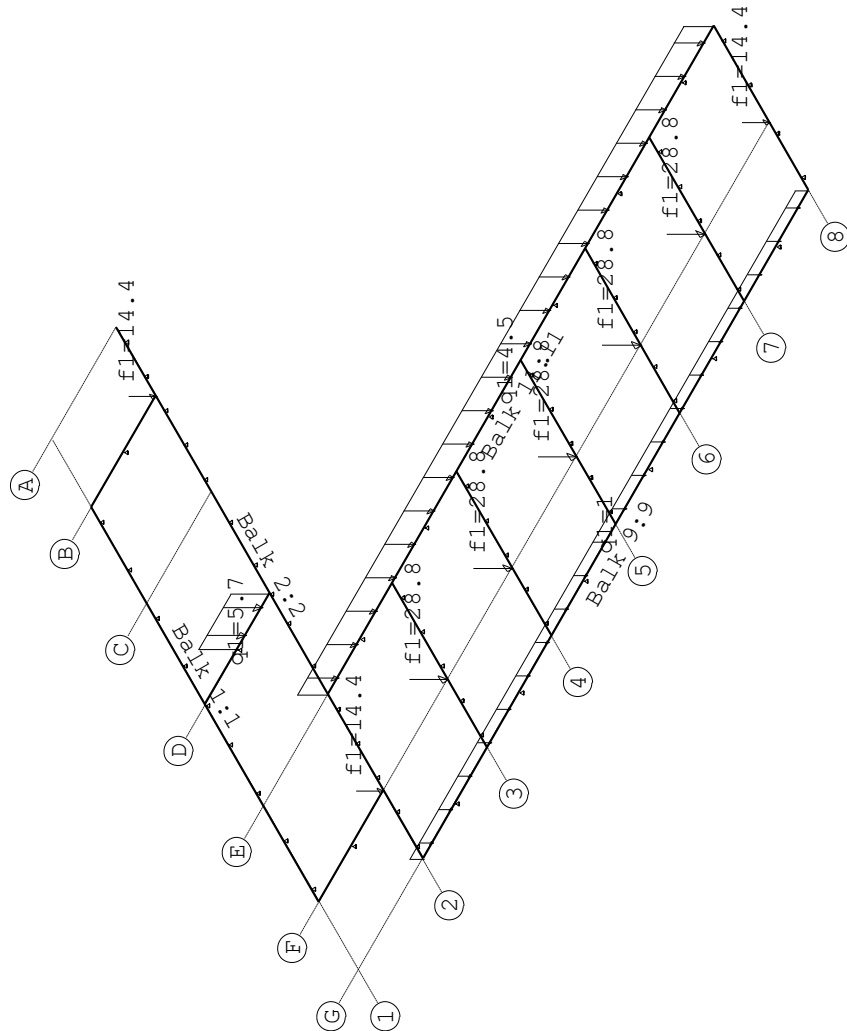
# VELDBELASTINGEN

B.G:2 Veranderlijk

| Balk       | Last | Type     | q1/p/m  | q2      | Afstand | Lengte | Exc.  |
|------------|------|----------|---------|---------|---------|--------|-------|
| Balk 3:3   | 2    | 1:q-last | -32.800 | -32.800 | 4.000   | 5.600  | 0.000 |
| Balk 4:4   | 1    | 1:q-last | -16.400 | -16.400 | 0.000   | 4.000  | 0.000 |
| Balk 4:4   | 2    | 1:q-last | -32.800 | -32.800 | 4.000   | 5.600  | 0.000 |
| Balk 5:5   | 1    | 1:q-last | -16.400 | -16.400 | 0.000   | 4.000  | 0.000 |
| Balk 5:5   | 2    | 1:q-last | -32.800 | -32.800 | 4.000   | 5.600  | 0.000 |
| Balk 6:6   | 1    | 1:q-last | -16.400 | -16.400 | 0.000   | 4.000  | 0.000 |
| Balk 6:6   | 2    | 1:q-last | -32.800 | -32.800 | 4.000   | 5.600  | 0.000 |
| Balk 7:7   | 1    | 1:q-last | -16.400 | -16.400 | 0.000   | 4.000  | 0.000 |
| Balk 7:7   | 2    | 1:q-last | -32.800 | -32.800 | 4.000   | 5.600  | 0.000 |
| Balk 8:8   | 1    | 1:q-last | -16.400 | -16.400 | 4.000   | 5.600  | 0.000 |
| Balk 8:8   | 2    | 1:q-last | -8.200  | -8.200  | 0.000   | 4.000  | 0.000 |
| Balk 10:10 | 1    | 1:q-last | -2.550  | -2.550  | 0.000   | 6.500  | 0.000 |
| Balk 11:11 | 1    | 1:q-last | -3.400  | -3.400  | 0.000   | 39.000 | 0.000 |
| Balk 12:12 | 1    | 1:q-last | -5.100  | -5.100  | 0.000   | 6.500  | 0.000 |
| Balk 13:13 | 1    | 1:q-last | -2.550  | -2.550  | 0.000   | 6.500  | 0.000 |

## VELDBELASTINGEN

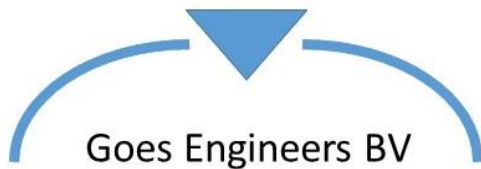
B.G:3 Wind



## VELDBELASTINGEN

B.G:3 Wind

| Balk     | Last Type    | q1/p/m  | q2 | Afstand | Lengte | Exc.  |
|----------|--------------|---------|----|---------|--------|-------|
| Balk 2:2 | 1 8:Puntlast | -14.400 |    | 4.000   |        | 0.000 |
| Balk 2:2 | 2 8:Puntlast | -14.400 |    | 27.000  |        | 0.000 |
| Balk 3:3 | 1 8:Puntlast | -28.800 |    | 4.000   |        | 0.000 |
| Balk 4:4 | 1 8:Puntlast | -28.800 |    | 4.000   |        | 0.000 |
| Balk 5:5 | 1 8:Puntlast | -28.800 |    | 4.000   |        | 0.000 |
| Balk 6:6 | 1 8:Puntlast | -28.800 |    | 4.000   |        | 0.000 |
| Balk 7:7 | 1 8:Puntlast | -28.800 |    | 4.000   |        | 0.000 |
| Balk 8:8 | 1 8:Puntlast | -14.400 |    | 4.000   |        | 0.000 |



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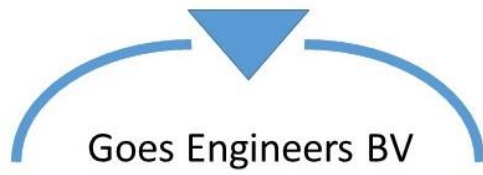
### VELDBELASTINGEN

B.G:3 Wind

| Balk       | Last Type  | q1/p/m | q2     | Afstand | Lengte | Exc.  |
|------------|------------|--------|--------|---------|--------|-------|
| Balk 9:9   | 1 1:q-last | -1.000 | -1.000 | 0.000   | 39.000 | 0.000 |
| Balk 11:11 | 1 1:q-last | -4.500 | -4.500 | 0.000   | 39.000 | 0.000 |
| Balk 12:12 | 1 1:q-last | -5.700 | -5.700 | 3.250   | 3.250  | 0.000 |

### BELASTINGCOMBINATIES

| BC Type  | BG Gen. | Factor | BG Gen. | Factor | BG Gen. | Factor | BG Gen. | Factor |
|----------|---------|--------|---------|--------|---------|--------|---------|--------|
| 1 Fund.  | 1 Perm  | 1.22   |         |        |         |        |         |        |
| 2 Fund.  | 1 Perm  | 1.22   | 2 psi0  | 1.35   |         |        |         |        |
| 3 Fund.  | 1 Perm  | 1.08   | 2 Extr  | 1.35   |         |        |         |        |
| 4 Fund.  | 1 Perm  | 1.08   | 3 Extr  | 1.35   |         |        |         |        |
| 5 Fund.  | 1 Perm  | 1.08   | 3 Extr  | 1.35   | 2 psi0  | 1.35   |         |        |
| 6 Fund.  | 1 Perm  | 0.90   |         |        |         |        |         |        |
| 7 Fund.  | 1 Perm  | 0.90   | 2 psi0  | 1.35   |         |        |         |        |
| 8 Fund.  | 1 Perm  | 0.90   | 2 Extr  | 1.35   |         |        |         |        |
| 9 Fund.  | 1 Perm  | 0.90   | 3 Extr  | 1.35   |         |        |         |        |
| 10 Fund. | 1 Perm  | 0.90   | 3 Extr  | 1.35   | 2 psi0  | 1.35   |         |        |
| 11 Kar.  | 1 Perm  | 1.00   | 2 Extr  | 1.00   |         |        |         |        |
| 12 Kar.  | 1 Perm  | 1.00   | 3 Extr  | 1.00   |         |        |         |        |
| 13 Kar.  | 1 Perm  | 1.00   | 3 Extr  | 1.00   | 2 psi0  | 1.00   |         |        |
| 14 Freq. | 1 Perm  | 1.00   |         |        |         |        |         |        |
| 15 Freq. | 1 Perm  | 1.00   | 2 psi1  | 1.00   |         |        |         |        |
| 16 Freq. | 1 Perm  | 1.00   | 3 psi1  | 1.00   |         |        |         |        |
| 17 Freq. | 1 Perm  | 1.00   | 3 psi1  | 1.00   | 2 psi2  | 1.00   |         |        |
| 18 Quas. | 1 Perm  | 1.00   |         |        |         |        |         |        |
| 19 Quas. | 1 Perm  | 1.00   | 2 psi2  | 1.00   |         |        |         |        |
| 20 Blij. | 1 Perm  | 1.00   |         |        |         |        |         |        |



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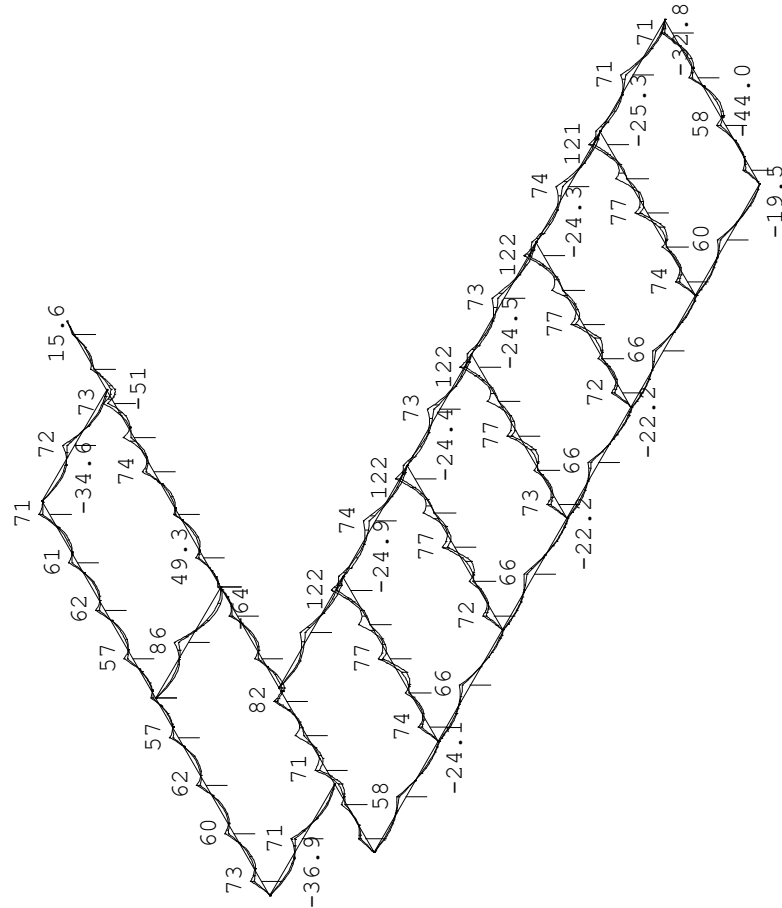
Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## **OMHULLENDE VAN DE FUNDAMENTELE COMBINATIES**

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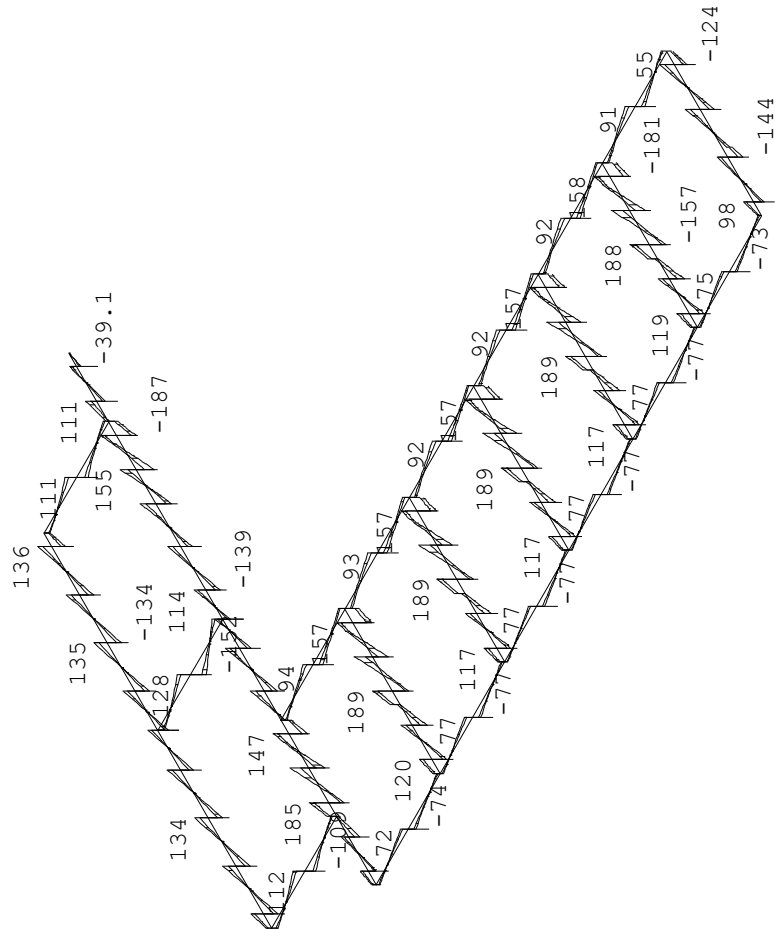
Fundamentele combinatie





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Onderdeel....: Fundering

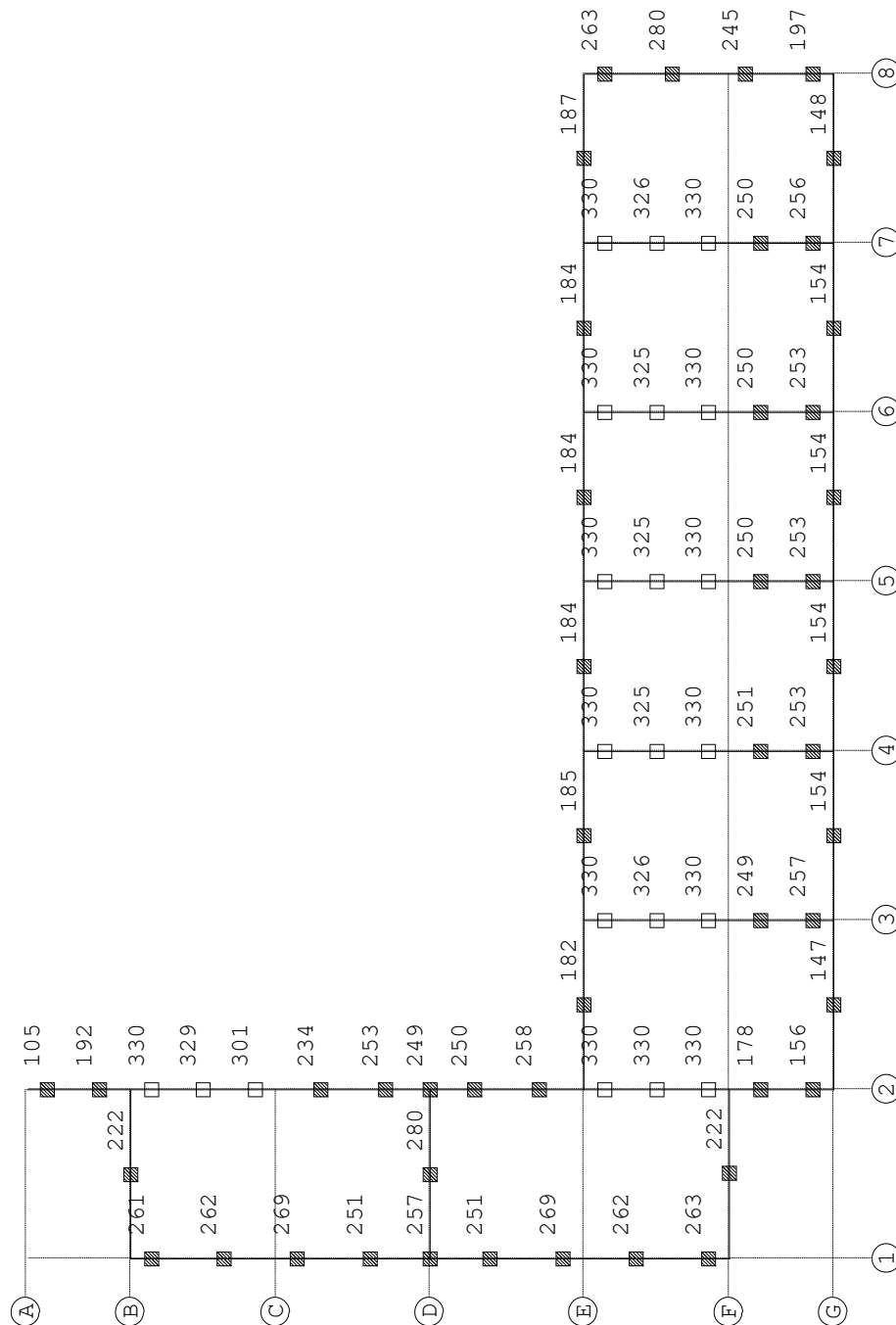
Fundamentele combinatie

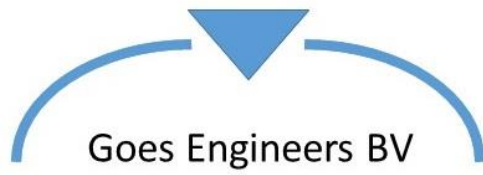


Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**REACTIES** Fysisch lineair

Fundamentele combinatie





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Ingenieursbureau voor bouwkundige en civiele bouwwerken

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

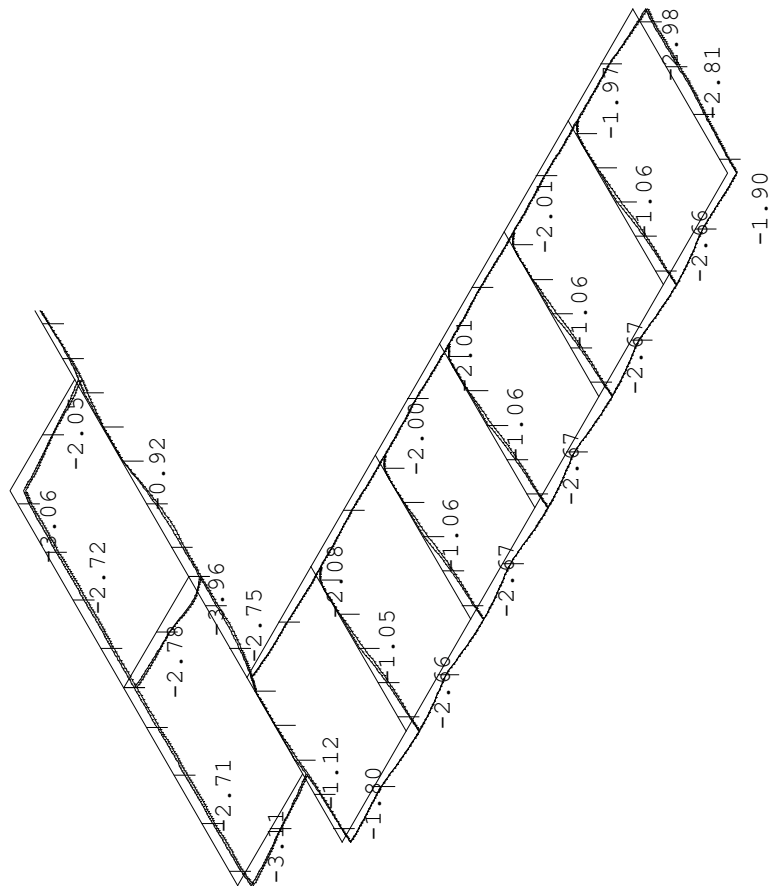
## **OMHULLENDE VAN DE KARAKTERISTIEKE COMBINATIES**

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Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**VERPLAATSINGEN** [mm] Fys.NLE.kort

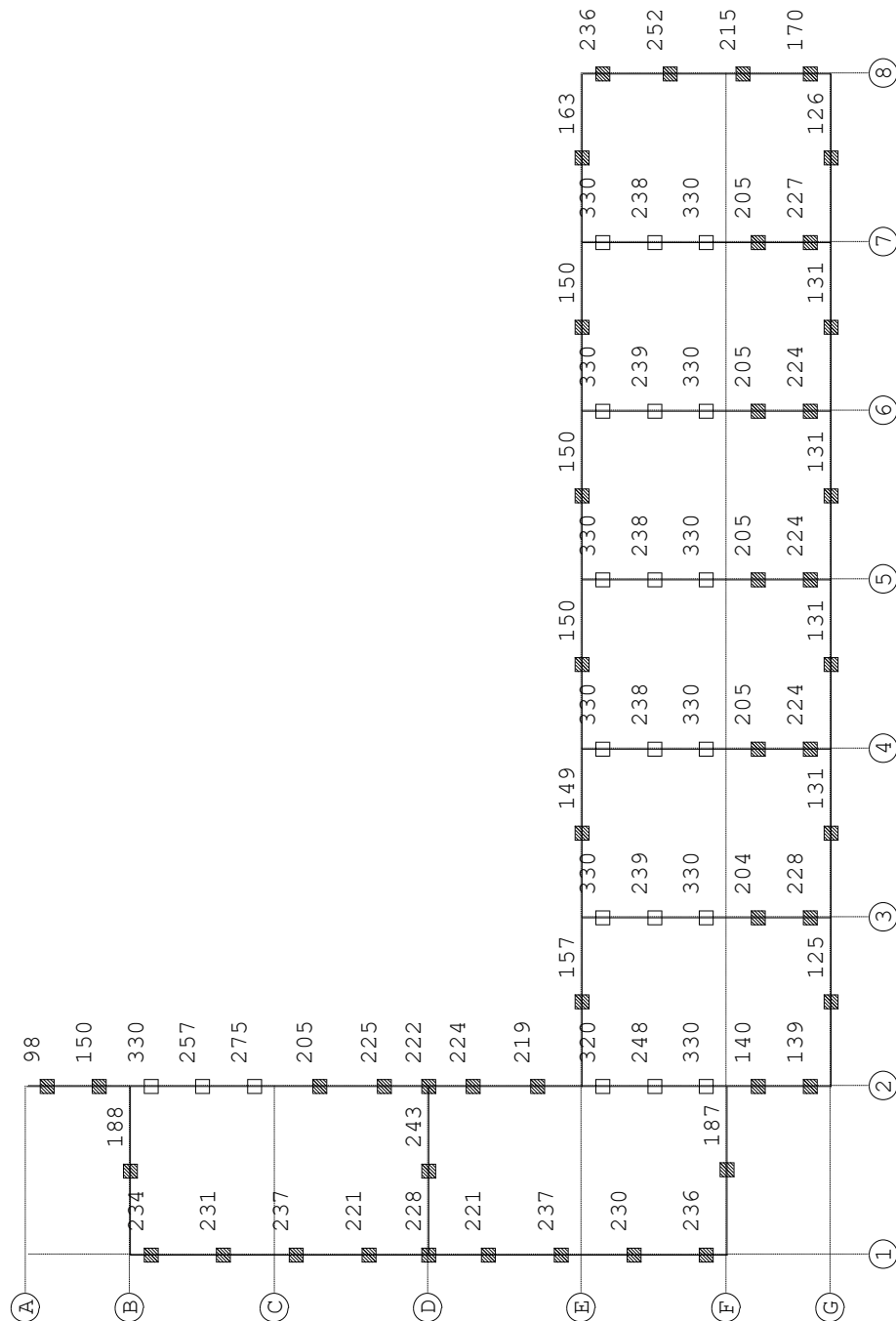
Karakteristieke combinatie



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**REACTIES** Fysisch lineair

Karakteristieke combinatie



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

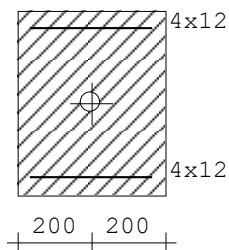
## PROFIELGEGEVENS Balk [N] [mm] t.b.v. profiel: 1B\*H400\*500

### Algemeen

Materiaal : C20/25  
Oppervlak : 2.000000e+05 Traagheid : 4.1667e+09  
Staaftype : 0: normaal Vormfactor : 0.00

### Doorsnede

breedte : 400 hoogte : 500 zwaartepunt tov onderkant : 250  
Referentie : Boven



Fictieve dikte : 222.2  
Gedrongen inwendige hefboomsarm : Automatisch berekend  
Breedte lastvlak  $a_b$  6.1(10) : 0

---

Betonkwaliteit element : C20/25 Kruipcoëf. : 3.010  
Treksterkte  $f_{ct, eff}$  art. 7.1(2) :  $f_{ctm, fl}$  ( 2.43 N/mm<sup>2</sup>)  
Soort spanningsrekdiagram : Parabolisch - rechthoekig diagram  
Doorbuiging volgens art.7.3.4(3): Ja  
Langeduur scheurmoment begrensd : Ja  
Staalkwaliteit hoofdwapening : 500  $\epsilon_{uk}$  : 2.50  
Soort spanningsrekdiagram : Bi-lineair diagram met klimmende tak  
Staalkwaliteit beugels : 500  
Beugelwapening boven steunpunten: Nee  
Bundels toepassen : Nee Breedte stort sleuf: 50  
Geprefabriceerd element : Nee

### Betondekking

|                                   | Boven         | Onder         |
|-----------------------------------|---------------|---------------|
| Milieu :                          | XC2           | XC2           |
| Gestort tegen bestaand beton :    | Nee           | Nee           |
| Element met plaatgeometrie :      | Nee           | Nee           |
| Specifieke kwaliteitsbeheersing : | Nee           | Nee           |
| Oneffen beton oppervlak :         | Nee           | Nee           |
| Ondergrond :                      | Glad / N.v.t. | Glad / N.v.t. |
| Constructieklasse :               | S4            | S4            |
| Grootste korrel :                 | 31.5          |               |

|                                                | 2de laag | 2de laag |
|------------------------------------------------|----------|----------|
| Hoofdwapening :                                |          |          |
| Nominale dekking :                             | 30       | 30       |
| Toegepaste dekking :                           | 43       | 43       |
| Toegepaste zijdekking :                        | 43       |          |
| Gelijkwaardige diameter :                      | 12       | 12       |
| $C_{min, b}$ $C_{min, dur}$ $\Delta C_{dur}$ : | 12 25 0  | 12 25 0  |
| $C_{min}$ $\Delta C_{dev}$ $C_{nom}$ :         | 25 5 30  | 25 5 30  |

Project.....: 2021-032 - Koperslagerij te Vlissingen

Onderdeel.....: Fundering

| Betondekking                               |   | Boven     |    |    | Onder     |    |    |
|--------------------------------------------|---|-----------|----|----|-----------|----|----|
| Beugel / Verdeelwapening                   | : | 1ste laag |    |    | 1ste laag |    |    |
| Nominale dekking                           | : | 30        |    |    | 30        |    |    |
| Toegepaste dekking                         | : | 35        |    |    | 35        |    |    |
| Toegepaste zijdekking                      | : | 35        |    |    |           |    |    |
| Gelijkwaardige diameter                    | : | 8         |    |    | 8         |    |    |
| $C_{min,b}$ $C_{min,dur}$ $\Delta C_{dur}$ | : | 8         | 25 | 0  | 8         | 25 | 0  |
| $C_{min}$ $\Delta C_{dev}$ $C_{nom}$       | : | 25        | 5  | 30 | 25        | 5  | 30 |

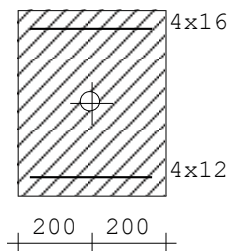
| Wapening                       |   | Boven       |  | Onder       |  |
|--------------------------------|---|-------------|--|-------------|--|
| Basiswapening buitenste laag   | : | 4x12        |  | 4x12        |  |
| H.o.h.afstand 2e laag          | : | 0           |  | 0           |  |
| Automatisch verhogen basiswap. | : | Nee         |  | Nee         |  |
| Art. 7.3.2 minimum wapening    | : | Ja          |  | Ja          |  |
| Bijlegdiameters                | : | 12;16       |  | 12;16       |  |
| Diameter nuttige hoogte        | : | 12.0        |  | 12.0        |  |
| Min.tussenruimte               | : | 50          |  | 50          |  |
| Aanhechting                    | : | Automatisch |  | Automatisch |  |

| Beugels                               |   |                      |                            |
|---------------------------------------|---|----------------------|----------------------------|
| Voorkeur h.o.h. afstand               | : | 300;150;100;75;60;50 |                            |
| Beugeldiameter                        | : | 8                    |                            |
| Betonkwaliteit                        | : | C20/25               |                            |
| Breedte t.b.v. dwarskracht            | : | 400                  | Hoogte t.b.v. dwarskr: 500 |
| Aantal beugelsneden per beugel        | : | 2 Ontwerpen          |                            |
| Min. hoek betondrukdiagonaal $\theta$ | : | 21.8                 | z berekenen via: MRd       |

## PROFIELGEGEVENS Balk [N] [mm] t.b.v.profiel:2B\*H400\*500

| Algemeen  |   |              |                        |
|-----------|---|--------------|------------------------|
| Materiaal | : | C20/25       |                        |
| Oppervlak | : | 2.000000e+05 | Traagheid : 4.1667e+09 |
| Staaftype | : | 0:normaal    | Vormfactor : 0.00      |

| Doorsnede  |     |                             |     |
|------------|-----|-----------------------------|-----|
| breedte :  | 400 | hoogte :                    | 500 |
| Referentie | :   | Boven                       |     |
|            |     | zwaartepunt tov onderkant : | 250 |



|                                      |   |                                         |                    |
|--------------------------------------|---|-----------------------------------------|--------------------|
| Fictieve dikte                       | : | 222.2                                   |                    |
| Gedrongen inwendige hefboomsarm      | : | Automatisch berekend                    |                    |
| Breedte lastvlak $a_b$ 6.1(10)       | : | 0                                       |                    |
| Betonkwaliteit element               | : | C20/25                                  | Kruipcoëf. : 3.010 |
| Treksterkte $f_{ct,eff}$ art. 7.1(2) | : | $f_{ctm,fl}$ ( 2.43 N/mm <sup>2</sup> ) |                    |
| Soort spanningsrekdiagram            | : | Parabolisch - rechthoekig diagram       |                    |
| Doorbuiging volgens art.7.3.4(3)     | : | Ja                                      |                    |
| Langeduur scheurmoment begrensd      | : | Ja                                      |                    |

Project.....: 2021-032 - Koperslagerij te Vlissingen

Onderdeel.....: Fundering

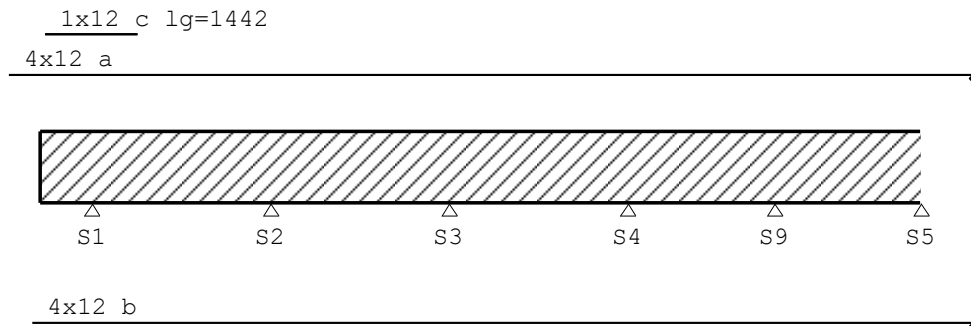
|                                            |   |                                      |                        |             |      |
|--------------------------------------------|---|--------------------------------------|------------------------|-------------|------|
| Staalkwaliteit hoofdwapening               | : | 500                                  | $\epsilon_{uk}$        | :           | 2.50 |
| Soort spanningsrekdiagram                  | : | Bi-lineair diagram met klimmende tak |                        |             |      |
| Staalkwaliteit beugels                     | : | 500                                  |                        |             |      |
| Beugelwapening boven steunpunten:          |   | Nee                                  |                        |             |      |
| Bundels toepassen                          | : | Nee                                  | Breedte stort sleuf:   | 50          |      |
| Geprefabriceerd element                    | : | Nee                                  |                        |             |      |
| <b>Betondekking</b>                        |   |                                      | Boven                  | Onder       |      |
| Milieu                                     | : |                                      | XC2                    | XC2         |      |
| Gestort tegen bestaand beton               | : |                                      | Nee                    | Nee         |      |
| Element met plaatgeometrie                 | : |                                      | Nee                    | Nee         |      |
| Specifieke kwaliteitsbeheersing            | : |                                      | Nee                    | Nee         |      |
| Oneffen beton oppervlak                    | : |                                      | Nee                    | Nee         |      |
| Ondergrond                                 | : | Glad / N.v.t.                        | Glad / N.v.t.          |             |      |
| Constructieklasse                          | : |                                      | S4                     | S4          |      |
| Grootste korrel                            | : |                                      | 31.5                   |             |      |
| Hoofdwapening                              | : |                                      | 2de laag               | 2de laag    |      |
| Nominale dekking                           | : |                                      | 30                     | 30          |      |
| Toegepaste dekking                         | : |                                      | 43                     | 43          |      |
| Toegepaste zijdekking                      | : |                                      | 43                     |             |      |
| Gelijkwaardige diameter                    | : |                                      | 16                     | 12          |      |
| $C_{min,b}$ $C_{min,dur}$ $\Delta C_{dur}$ | : | 16                                   | 25                     | 0           | 12   |
| $C_{min}$ $\Delta C_{dev}$ $C_{nom}$       | : | 25                                   | 5                      | 30          | 25   |
| Beugel / Verdeelwapening                   | : |                                      | 1ste laag              | 1ste laag   |      |
| Nominale dekking                           | : |                                      | 30                     | 30          |      |
| Toegepaste dekking                         | : |                                      | 35                     | 35          |      |
| Toegepaste zijdekking                      | : |                                      | 35                     |             |      |
| Gelijkwaardige diameter                    | : |                                      | 8                      | 8           |      |
| $C_{min,b}$ $C_{min,dur}$ $\Delta C_{dur}$ | : | 8                                    | 25                     | 0           | 8    |
| $C_{min}$ $\Delta C_{dev}$ $C_{nom}$       | : | 25                                   | 5                      | 30          | 25   |
| <b>Wapening</b>                            |   |                                      | Boven                  | Onder       |      |
| Basiswapening buitenste laag               | : |                                      | 4x16                   | 4x12        |      |
| H.o.h.afstand 2e laag                      | : |                                      | 0                      | 0           |      |
| Automatisch verhogen basiswap.             | : |                                      | Nee                    | Nee         |      |
| Art. 7.3.2 minimum wapening                | : |                                      | Ja                     | Ja          |      |
| Bijlegdiameters                            | : |                                      | 12;16                  | 12;16       |      |
| Diameter nuttige hoogte                    | : |                                      | 16.0                   | 12.0        |      |
| Min.tussenruimte                           | : |                                      | 50                     | 50          |      |
| Aanhechting                                | : |                                      | Automatisch            | Automatisch |      |
| <b>Beugels</b>                             |   |                                      |                        |             |      |
| Voorkeur h.o.h. afstand                    | : | 300;150;100;75;60;50                 |                        |             |      |
| Beugeldiameter                             | : | 8                                    |                        |             |      |
| Betonkwaliteit                             | : | C20/25                               |                        |             |      |
| Breedte t.b.v. dwarskracht                 | : | 400                                  | Hoogte t.b.v. dwarskr: | 500         |      |
| Aantal beugelsneden per beugel             | : | 2                                    | Ontwerpen              |             |      |
| Min. hoek betondrukdiagonaal $\theta$      | : | 21.8                                 | z berekenen via:       | MRd         |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**Hoofdwapening** Fysisch lineair

Balk 1:1

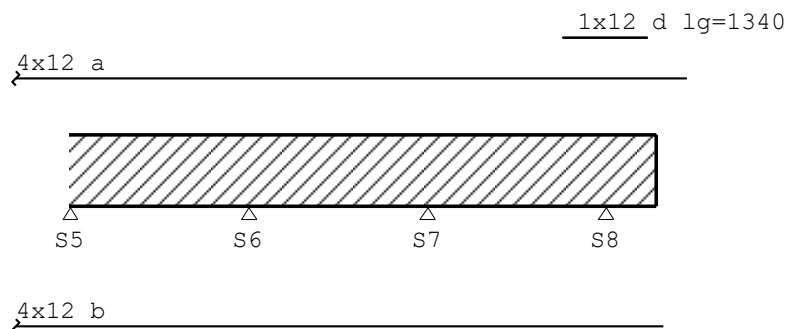
Velden: 1 t/m 6



**Hoofdwapening** Fysisch lineair

Balk 1:1

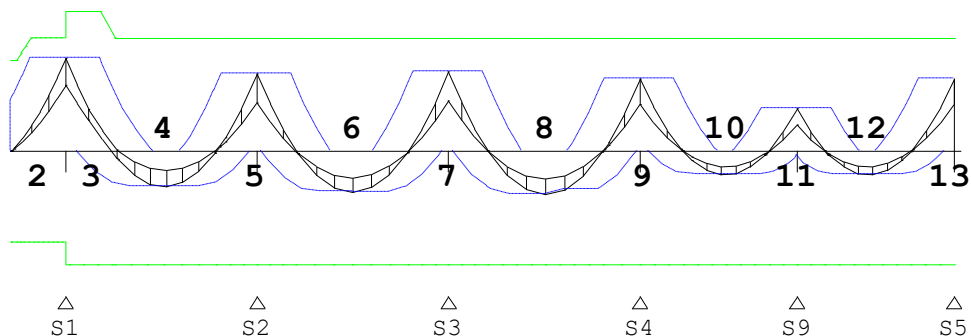
Velden: 7 t/m 10



**Med dekkingslijn** Fysisch lineair

Balk 1:1

Velden: 1 t/m 6

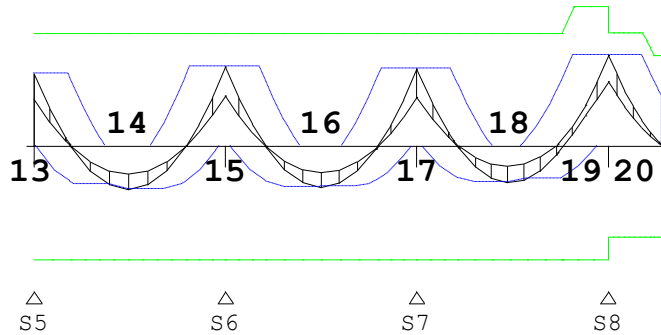


Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## MEd dekkingslijn Fysisch lineair

Balk 1:1

Velden: 7 t/m 10



## Scheurvorming volgens artikel 7.3.4

Balk 1:1

| Geb. | Pos.<br>[mm] | Zijde | $M_E, freq$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|----------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S1-507       | Bov   | 61.08                | 322                  | 0.865                                  | 0.279         | 1.17  | 0.350             | 0.80 |      |
| 1    | S1-542       | Ond   | -0.08                | 367                  | 0.001                                  | 0.000         | 1.17  | 0.350             | 0.00 |      |
| 1    | S1-860       | Ond   | -0.08                | 367                  | 0.001                                  | 0.000         | 1.17  | 0.350             | 0.00 |      |
| 2    | S1+0         | Bov   | 61.08                | 322                  | 0.865                                  | 0.279         | 1.17  | 0.350             | 0.80 |      |
| 2    | S2-853       | Ond   | -19.90               | 367                  | 0.310                                  | 0.114         | 1.17  | 0.350             | 0.33 |      |
| 3    | S3-392       | Bov   | 49.46                | 367                  | 0.778                                  | 0.286         | 1.17  | 0.350             | 0.82 |      |
| 3    | S2+1394      | Ond   | -25.58               | 367                  | 0.399                                  | 0.147         | 1.17  | 0.350             | 0.42 |      |
| 4    | S3+0         | Bov   | 49.46                | 367                  | 0.778                                  | 0.286         | 1.17  | 0.350             | 0.82 |      |
| 4    | S4-1380      | Ond   | -26.71               | 367                  | 0.417                                  | 0.153         | 1.17  | 0.350             | 0.44 |      |
| 5    | S4+0         | Bov   | 45.51                | 367                  | 0.710                                  | 0.261         | 1.17  | 0.350             | 0.74 |      |
| 5    | S9-1042      | Ond   | -14.82               | 367                  | 0.231                                  | 0.085         | 1.17  | 0.350             | 0.24 |      |
| 6    | S5-425       | Bov   | 45.51                | 367                  | 0.710                                  | 0.261         | 1.17  | 0.350             | 0.74 |      |
| 6    | S9+1042      | Ond   | -14.82               | 367                  | 0.231                                  | 0.085         | 1.17  | 0.350             | 0.24 |      |
| 7    | S6-386       | Bov   | 49.47                | 367                  | 0.778                                  | 0.286         | 1.17  | 0.350             | 0.82 |      |
| 7    | S5+1380      | Ond   | -26.71               | 367                  | 0.417                                  | 0.153         | 1.17  | 0.350             | 0.44 |      |
| 8    | S6+0         | Bov   | 49.47                | 367                  | 0.778                                  | 0.286         | 1.17  | 0.350             | 0.82 |      |
| 8    | S6+1406      | Ond   | -25.52               | 367                  | 0.398                                  | 0.146         | 1.17  | 0.350             | 0.42 |      |
| 9    | S7+0         | Bov   | 47.85                | 367                  | 0.747                                  | 0.274         | 1.17  | 0.350             | 0.78 |      |
| 9    | S8-507       | Bov   | 59.92                | 322                  | 0.841                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 9    | S7+853       | Ond   | -20.42               | 367                  | 0.319                                  | 0.117         | 1.17  | 0.350             | 0.33 |      |
| 10   | S8-0         | Bov   | 59.92                | 322                  | 0.841                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 10   | S8+535       | Ond   | -0.05                | 367                  | 0.001                                  | 0.000         | 1.17  | 0.350             | 0.00 |      |
| 10   | S8+306       | Ond   | -0.05                | 367                  | 0.001                                  | 0.000         | 1.17  | 0.350             | 0.00 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Verloop hoofdwapening

Balk 1:1

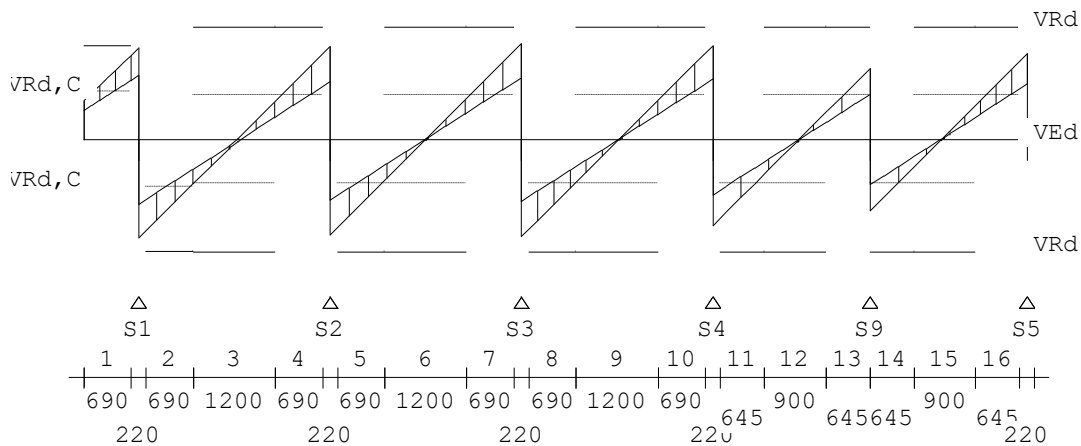
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x12     | S1-1285       | S8+1284     | 23969          | 485                     | 484                    |
| c    | Boven | 1x12     | S1-721        | S1+721      | 1442           | 214                     | 214                    |
| d    | Boven | 1x12     | S8-670        | S8+670      | 1340           | 163                     | 163                    |
| b    | Onder | 4x12     | S1-920        | S8+920      | 23240          | 120                     | 120                    |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

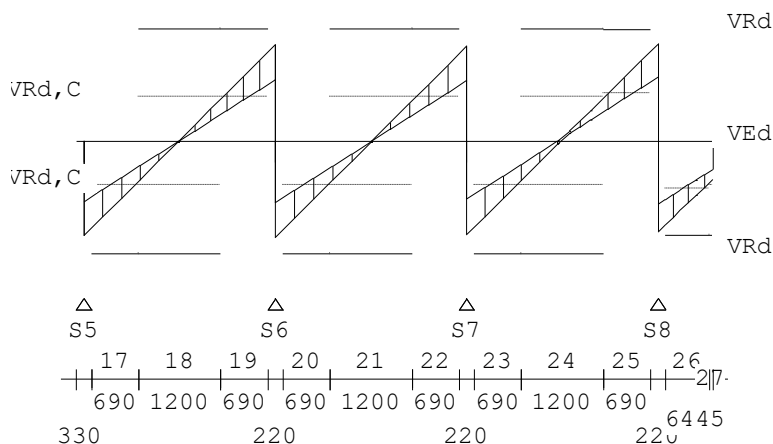
## DWARSKRACHTEN Fysisch lineair Balk 1:1 Fundamentele combinatie

Velden: 1 t/m 6



## DWARSKRACHTEN Fysisch lineair Balk 1:1 Fundamentele combinatie

Velden: 7 t/m 10



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Wring- en dwarskrachtwapening

Balk 1:1

| Geb. | Vanaf  | Tot    | Beugels | Lengte | <Wringing>                               |                                          | <Dwarskr.>                             |                                        |                  |                   |      |
|------|--------|--------|---------|--------|------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|------------------|-------------------|------|
|      | [mm]   | [mm]   |         | [mm]   | $A_{l\text{angs}}$<br>[mm <sup>2</sup> ] | $A_{b\text{gl}}$<br>[mm <sup>2</sup> /m] | $A_{b\text{gl}}$<br>[mm <sup>2</sup> ] | $A_{o\text{pg}}$<br>[mm <sup>2</sup> ] | $V_{Ed}$<br>[kN] | $T_{Ed}$<br>[kNm] | Opm. |
| 1    | S1-800 | S1-110 | Ø8-300  | 690    | 2                                        | 0                                        | 299                                    | 0                                      | 117.2            | 0                 | 6,59 |
| 2    | S1+110 | S1+800 | Ø8-300  | 690    | 2                                        | 0                                        | 286                                    | 0                                      | 126.0            | 0                 | 6    |
| 3    | S1+800 | S2-800 | Ø8-300  | 1200   | 0                                        | 0                                        | 286                                    | 0                                      | 60.4             | 0                 |      |
| 4    | S2-800 | S2-110 | Ø8-300  | 690    | 2                                        | 0                                        | 286                                    | 0                                      | 118.6            | 0                 | 6    |
| 5    | S2+110 | S2+800 | Ø8-300  | 690    | 2                                        | 0                                        | 286                                    | 0                                      | 121.7            | 0                 | 6    |
| 6    | S2+800 | S3-800 | Ø8-300  | 1200   | 0                                        | 0                                        | 286                                    | 0                                      | 57.4             | 0                 |      |
| 7    | S3-800 | S3-110 | Ø8-300  | 690    | 2                                        | 0                                        | 286                                    | 0                                      | 122.9            | 0                 | 6    |
| 8    | S3+110 | S3+800 | Ø8-300  | 690    | 2                                        | 0                                        | 286                                    | 0                                      | 124.2            | 0                 | 6    |
| 9    | S3+800 | S4-800 | Ø8-300  | 1200   | 0                                        | 0                                        | 286                                    | 0                                      | 58.7             | 0                 |      |
| 10   | S4-800 | S4-110 | Ø8-300  | 690    | 2                                        | 0                                        | 286                                    | 0                                      | 120.4            | 0                 | 6    |
| 11   | S4+110 | S4+755 | Ø8-300  | 645    | 2                                        | 0                                        | 286                                    | 0                                      | 108.8            | 0                 | 6    |
| 12   | S4+755 | S9-645 | Ø8-300  | 900    | 0                                        | 0                                        | 286                                    | 0                                      | 47.5             | 0                 |      |
| 13   | S9-645 | S9+0   | Ø8-300  | 645    | 2                                        | 0                                        | 286                                    | 0                                      | 98.8             | 0                 | 6    |
| 14   | S9+0   | S9+645 | Ø8-300  | 645    | 3                                        | 0                                        | 286                                    | 0                                      | 98.8             | 0                 | 6    |
| 15   | S9+645 | S5-755 | Ø8-300  | 900    | 0                                        | 0                                        | 286                                    | 0                                      | 47.5             | 0                 |      |
| 16   | S5-755 | S5-110 | Ø8-300  | 645    | 3                                        | 0                                        | 286                                    | 0                                      | 108.8            | 0                 | 6    |
| 17   | S5+110 | S5+800 | Ø8-300  | 690    | 3                                        | 0                                        | 286                                    | 0                                      | 120.4            | 0                 | 6    |
| 18   | S5+800 | S6-800 | Ø8-300  | 1200   | 0                                        | 0                                        | 286                                    | 0                                      | 58.7             | 0                 |      |
| 19   | S6-800 | S6-110 | Ø8-300  | 690    | 3                                        | 0                                        | 286                                    | 0                                      | 124.3            | 0                 | 6    |
| 20   | S6+110 | S6+800 | Ø8-300  | 690    | 3                                        | 0                                        | 286                                    | 0                                      | 122.9            | 0                 | 6    |
| 21   | S6+800 | S7-800 | Ø8-300  | 1200   | 0                                        | 0                                        | 286                                    | 0                                      | 57.3             | 0                 |      |
| 22   | S7-800 | S7-110 | Ø8-300  | 690    | 3                                        | 0                                        | 286                                    | 0                                      | 121.7            | 0                 | 6    |
| 23   | S7+110 | S7+800 | Ø8-300  | 690    | 3                                        | 0                                        | 286                                    | 0                                      | 119.2            | 0                 | 6    |
| 24   | S7+800 | S8-800 | Ø8-300  | 1200   | 0                                        | 0                                        | 286                                    | 0                                      | 59.9             | 0                 |      |
| 25   | S8-800 | S8-110 | Ø8-300  | 690    | 3                                        | 0                                        | 286                                    | 0                                      | 125.5            | 0                 | 6    |
| 26   | S8+110 | S8+755 | Ø8-300  | 645    | 3                                        | 0                                        | 295                                    | 0                                      | 115.3            | 0                 | 6,59 |
| 27   | S8+755 | S8+800 | Ø8-300  | 45     | 0                                        | 0                                        | 286                                    | 0                                      | 56.6             | 0                 | 59   |

Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

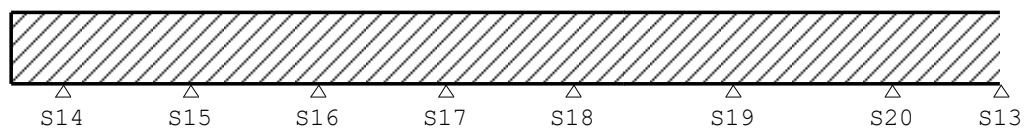
## Hoofdwapening Fysisch lineair

Balk 2:2

Velden: 1 t/m 8

1x12 c lg=2061 1x16 d lg=2521

4x12 a



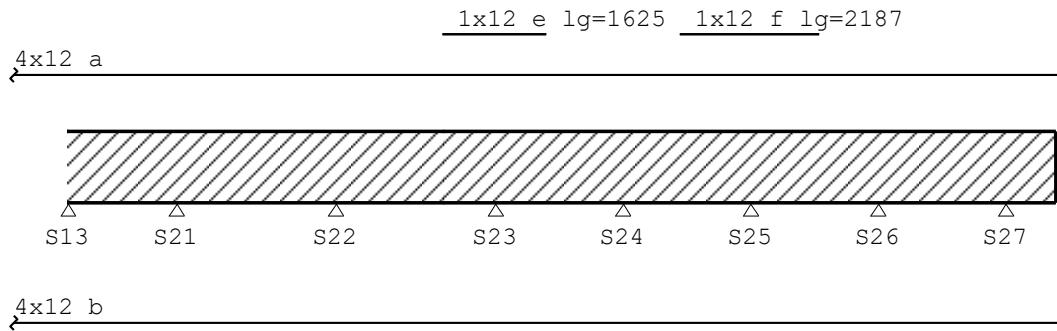
4x12 b

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**Hoofdwapening** Fysisch lineair

Balk 2:2

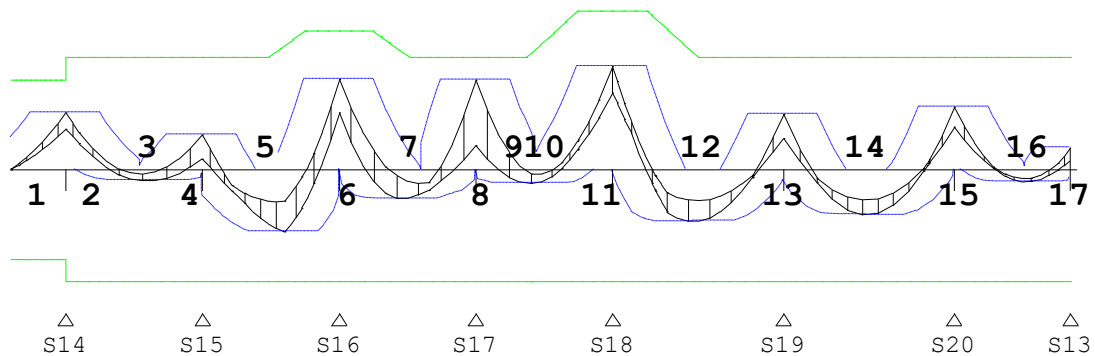
Velden: 9 t/m 16



**MEd dekkingslijn** Fysisch lineair

Balk 2:2

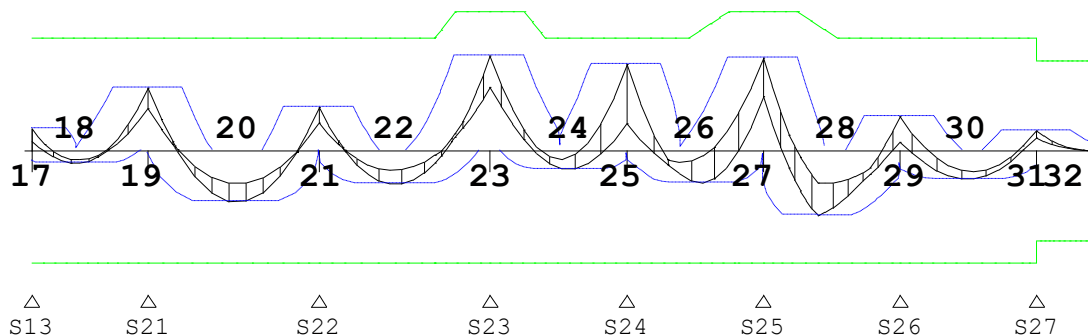
Velden: 1 t/m 8



**MEd dekkingslijn** Fysisch lineair

Balk 2:2

Velden: 9 t/m 16



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Scheurvorming volgens artikel 7.3.4

Balk 2:2

| Geb. | Pos.<br>[mm] | Zijde | $M_E; f_{req}$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|-------------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S14-449      | Bov   | 36.64                   | 367                  | 0.572                                  | 0.210         | 1.17  | 0.350             | 0.60 |      |
| 2    | S14+0        | Bov   | 36.64                   | 367                  | 0.572                                  | 0.210         | 1.17  | 0.350             | 0.60 |      |
| 2    | S15-790      | Ond   | -9.76                   | 367                  | 0.152                                  | 0.056         | 1.17  | 0.350             | 0.16 |      |
| 3    | S16-507      | Bov   | 68.12                   | 322                  | 1.013                                  | 0.327         | 1.17  | 0.350             | 0.93 |      |
| 3    | S15+641      | Ond   | -29.69                  | 367                  | 0.463                                  | 0.170         | 1.17  | 0.350             | 0.49 |      |
| 4    | S16+0        | Bov   | 68.12                   | 322                  | 1.013                                  | 0.327         | 1.17  | 0.350             | 0.93 |      |
| 4    | S17-311      | Ond   | -16.09                  | 367                  | 0.251                                  | 0.092         | 1.17  | 0.350             | 0.26 |      |
| 5    | S18-507      | Bov   | 75.41                   | 314                  | 1.010                                  | 0.317         | 1.17  | 0.350             | 0.91 |      |
| 5    | S17+794      | Ond   | -11.60                  | 367                  | 0.181                                  | 0.066         | 1.17  | 0.350             | 0.19 |      |
| 6    | S18+0        | Bov   | 75.41                   | 314                  | 1.010                                  | 0.317         | 1.17  | 0.350             | 0.91 |      |
| 6    | S19-1239     | Ond   | -29.89                  | 367                  | 0.466                                  | 0.171         | 1.17  | 0.350             | 0.49 |      |
| 7    | S20-463      | Bov   | 40.89                   | 367                  | 0.638                                  | 0.234         | 1.17  | 0.350             | 0.67 |      |
| 7    | S19+1219     | Ond   | -30.93                  | 367                  | 0.483                                  | 0.177         | 1.17  | 0.350             | 0.51 |      |
| 8    | S20+0        | Bov   | 40.89                   | 367                  | 0.638                                  | 0.234         | 1.17  | 0.350             | 0.67 |      |
| 8    | S13-665      | Ond   | -8.03                   | 367                  | 0.125                                  | 0.046         | 1.17  | 0.350             | 0.13 |      |
| 9    | S21-468      | Bov   | 40.39                   | 367                  | 0.630                                  | 0.231         | 1.17  | 0.350             | 0.66 |      |
| 9    | S13+667      | Ond   | -8.22                   | 367                  | 0.128                                  | 0.047         | 1.17  | 0.350             | 0.13 |      |
| 10   | S21+0        | Bov   | 40.39                   | 367                  | 0.630                                  | 0.231         | 1.17  | 0.350             | 0.66 |      |
| 10   | S22-1201     | Ond   | -32.99                  | 367                  | 0.515                                  | 0.189         | 1.17  | 0.350             | 0.54 |      |
| 11   | S23-507      | Bov   | 63.16                   | 322                  | 0.909                                  | 0.294         | 1.17  | 0.350             | 0.84 |      |
| 11   | S22+1110     | Ond   | -19.37                  | 367                  | 0.302                                  | 0.111         | 1.17  | 0.350             | 0.32 |      |
| 12   | S23+0        | Bov   | 63.16                   | 322                  | 0.909                                  | 0.294         | 1.17  | 0.350             | 0.84 |      |
| 12   | S23+649      | Ond   | -15.36                  | 367                  | 0.240                                  | 0.088         | 1.17  | 0.350             | 0.25 |      |
| 13   | S25-507      | Bov   | 69.55                   | 322                  | 1.043                                  | 0.337         | 1.17  | 0.350             | 0.96 |      |
| 13   | S24+357      | Ond   | -14.23                  | 367                  | 0.222                                  | 0.081         | 1.17  | 0.350             | 0.23 |      |
| 14   | S25+0        | Bov   | 69.55                   | 322                  | 1.043                                  | 0.337         | 1.17  | 0.350             | 0.96 |      |
| 14   | S25+947      | Ond   | -30.08                  | 367                  | 0.469                                  | 0.172         | 1.17  | 0.350             | 0.49 |      |
| 15   | S27-458      | Bov   | 12.51                   | 367                  | 0.195                                  | 0.072         | 1.17  | 0.350             | 0.20 |      |
| 15   | S26+481      | Ond   | -21.43                  | 367                  | 0.334                                  | 0.123         | 1.17  | 0.350             | 0.35 |      |
| 16   | S27+0        | Bov   | 12.51                   | 367                  | 0.195                                  | 0.072         | 1.17  | 0.350             | 0.20 |      |

### Verloop hoofdwapening

Balk 2:2

| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x12     | S14-1105      | S27+920     | 31425          | 305                     | 120                    |
| c    | Boven | 1x12     | S15+969       | S17-969     | 2061           | 523                     | 523                    |
| d    | Boven | 1x16     | S17+739       | S19-1239    | 2521           | 753                     | 753                    |
| e    | Boven | 1x12     | S23-813       | S23+813     | 1625           | 305                     | 305                    |
| f    | Boven | 1x12     | S24+907       | S26-907     | 2187           | 586                     | 586                    |
| b    | Onder | 4x12     | S14-920       | S27+920     | 31240          | 120                     | 120                    |

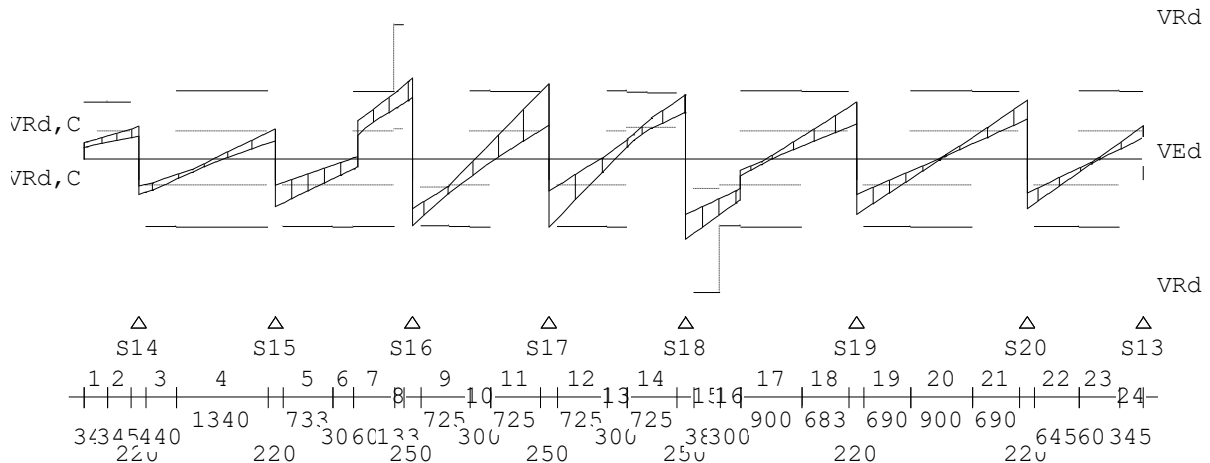
Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

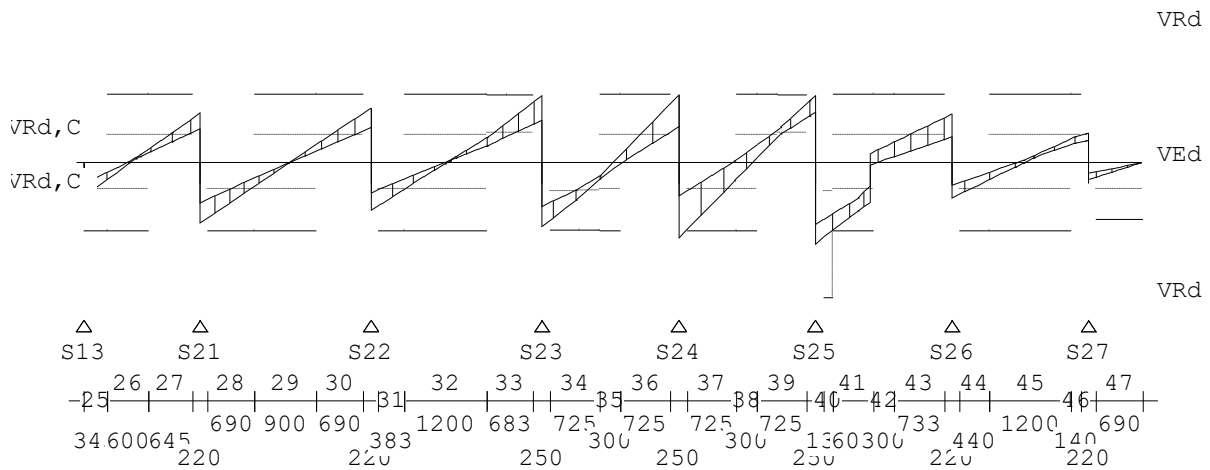
## DWARSKRACHTEN Fysisch lineair Balk 2:2 Fundamentele combinatie

Velden: 1 t/m 8



## DWARSKRACHTEN Fysisch lineair Balk 2:2 Fundamentele combinatie

Velden: 9 t/m 16



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Wring- en dwarskrachtwapening

Balk 2:2

| Geb. | Vanaf   | Tot     | Beugels | Lengte | <Wringing>                                   |                                            | <Dwarskr.>                               |                                          | V <sub>Ed</sub> | T <sub>Ed</sub> | Opm. |
|------|---------|---------|---------|--------|----------------------------------------------|--------------------------------------------|------------------------------------------|------------------------------------------|-----------------|-----------------|------|
|      | [mm]    | [mm]    |         | [mm]   | A <sub>l a n g s</sub><br>[mm <sup>2</sup> ] | A <sub>b g l</sub><br>[mm <sup>2</sup> /m] | A <sub>b g l</sub><br>[mm <sup>2</sup> ] | A <sub>o p g</sub><br>[mm <sup>2</sup> ] | [kN]            | [kNm]           |      |
| 1    | S14-800 | S14-455 | Ø8-300  | 345    | 0                                            | 0                                          | 286                                      | 0                                        | 52.8            | 1               | 59   |
| 2    | S14-455 | S14-110 | Ø8-300  | 345    | 24                                           | 3                                          | 286                                      | 0                                        | 69.0            | 1               | 6,59 |
| 3    | S14+110 | S14+550 | Ø8-300  | 440    | 24                                           | 3                                          | 286                                      | 0                                        | 76.2            | 1               | 6    |
| 4    | S14+550 | S15-110 | Ø8-300  | 1340   | 0                                            | 0                                          | 286                                      | 0                                        | 59.9            | 1               |      |
| 5    | S15+110 | S15+843 | Ø8-300  | 733    | 24                                           | 3                                          | 286                                      | 0                                        | 100.8           | 1               | 6    |
| 6    | S15+843 | S16-858 | Ø8-300  | 300    | 0                                            | 0                                          | 286                                      | 0                                        | 45.4            | 1               |      |
| 7    | S16-858 | S16-258 | Ø8-300  | 600    | 27                                           | 3                                          | 323                                      | 0                                        | 151.1           | 1               | 6    |
| 8    | S16-258 | S16-125 | Ø8-150  | 133    | 27                                           | 3                                          | 364                                      | 0                                        | 168.3           | 1               | 6    |
| 9    | S16+125 | S16+850 | Ø8-300  | 725    | 27                                           | 3                                          | 294                                      | 0                                        | 136.0           | 1               | 6    |
| 10   | S16+850 | S17-850 | Ø8-300  | 300    | 0                                            | 0                                          | 286                                      | 0                                        | 41.2            | 1               |      |
| 11   | S17-850 | S17-125 | Ø8-300  | 725    | 27                                           | 3                                          | 327                                      | 0                                        | 153.1           | 1               | 6    |
| 12   | S17+125 | S17+850 | Ø8-300  | 725    | 27                                           | 3                                          | 290                                      | 0                                        | 135.7           | 1               | 6    |
| 13   | S17+850 | S18-850 | Ø8-300  | 300    | 0                                            | 0                                          | 286                                      | 0                                        | 44.8            | 1               |      |
| 14   | S18-850 | S18-125 | Ø8-300  | 725    | 27                                           | 3                                          | 291                                      | 0                                        | 133.7           | 1               | 6    |
| 15   | S18+125 | S18+507 | Ø8-150  | 383    | 27                                           | 3                                          | 370                                      | 0                                        | 169.7           | 1               | 6    |
| 16   | S18+507 | S18+807 | Ø8-300  | 300    | 35                                           | 4                                          | 286                                      | 0                                        | 126.6           | 1               | 6    |
| 17   | S18+807 | S19-793 | Ø8-300  | 900    | 0                                            | 0                                          | 286                                      | 0                                        | 50.9            | 1               |      |
| 18   | S19-793 | S19-110 | Ø8-300  | 683    | 35                                           | 4                                          | 286                                      | 0                                        | 118.7           | 1               | 6    |
| 19   | S19+110 | S19+800 | Ø8-300  | 690    | 35                                           | 4                                          | 286                                      | 0                                        | 116.1           | 1               | 6    |
| 20   | S19+800 | S20-800 | Ø8-300  | 900    | 0                                            | 0                                          | 286                                      | 0                                        | 49.3            | 1               |      |
| 21   | S20-800 | S20-110 | Ø8-300  | 690    | 35                                           | 4                                          | 286                                      | 0                                        | 123.2           | 1               | 6    |
| 22   | S20+110 | S20+755 | Ø8-300  | 645    | 35                                           | 4                                          | 286                                      | 0                                        | 101.5           | 1               | 6    |
| 23   | S20+755 | S13-345 | Ø8-300  | 600    | 0                                            | 0                                          | 286                                      | 0                                        | 37.4            | 1               |      |
| 24   | S13-345 | S13+0   | Ø8-300  | 345    | 35                                           | 4                                          | 286                                      | 0                                        | 77.0            | 1               | 6    |
| 25   | S13+0   | S13+345 | Ø8-300  | 345    | 6                                            | 1                                          | 286                                      | 0                                        | 77.2            | 1               | 6    |
| 26   | S13+345 | S21-755 | Ø8-300  | 600    | 0                                            | 0                                          | 286                                      | 0                                        | 37.6            | 0               |      |
| 27   | S21-755 | S21-110 | Ø8-300  | 645    | 6                                            | 1                                          | 286                                      | 0                                        | 101.3           | 0               | 6    |
| 28   | S21+110 | S21+800 | Ø8-300  | 690    | 6                                            | 1                                          | 286                                      | 0                                        | 127.1           | 0               | 6    |
| 29   | S21+800 | S22-800 | Ø8-300  | 900    | 0                                            | 0                                          | 286                                      | 0                                        | 52.6            | 0               |      |
| 30   | S22-800 | S22-110 | Ø8-300  | 690    | 6                                            | 1                                          | 286                                      | 0                                        | 112.3           | 0               | 6    |
| 31   | S22+110 | S22+492 | Ø8-300  | 383    | 6                                            | 1                                          | 286                                      | 0                                        | 98.5            | 0               | 6    |
| 32   | S22+492 | S23-808 | Ø8-300  | 1200   | 0                                            | 0                                          | 286                                      | 0                                        | 60.3            | 0               |      |
| 33   | S23-808 | S23-125 | Ø8-300  | 683    | 6                                            | 1                                          | 299                                      | 0                                        | 138.4           | 0               | 6    |
| 34   | S23+125 | S23+850 | Ø8-300  | 725    | 6                                            | 1                                          | 286                                      | 0                                        | 131.3           | 0               | 6    |
| 35   | S23+850 | S24-850 | Ø8-300  | 300    | 0                                            | 0                                          | 286                                      | 0                                        | 36.6            | 0               |      |
| 36   | S24-850 | S24-125 | Ø8-300  | 725    | 6                                            | 1                                          | 288                                      | 0                                        | 134.7           | 0               | 6    |
| 37   | S24+125 | S24+850 | Ø8-300  | 725    | 6                                            | 1                                          | 327                                      | 0                                        | 153.0           | 0               | 6    |
| 38   | S24+850 | S25-850 | Ø8-300  | 300    | 0                                            | 0                                          | 286                                      | 0                                        | 40.7            | 0               |      |
| 39   | S25-850 | S25-125 | Ø8-300  | 725    | 6                                            | 1                                          | 291                                      | 0                                        | 134.7           | 0               | 6    |
| 40   | S25+125 | S25+257 | Ø8-150  | 133    | 6                                            | 1                                          | 367                                      | 0                                        | 169.9           | 0               | 6    |
| 41   | S25+257 | S25+858 | Ø8-300  | 600    | 6                                            | 1                                          | 328                                      | 0                                        | 153.5           | 0               | 6    |
| 42   | S25+858 | S26-843 | Ø8-300  | 300    | 0                                            | 0                                          | 286                                      | 0                                        | 46.6            | 0               |      |
| 43   | S26-843 | S26-110 | Ø8-300  | 733    | 0                                            | 0                                          | 286                                      | 0                                        | 102.0           | 0               | 6    |
| 44   | S26+110 | S26+550 | Ø8-300  | 440    | 0                                            | 0                                          | 286                                      | 0                                        | 72.5            | 0               | 6    |
| 45   | S26+550 | S27-250 | Ø8-300  | 1200   | 0                                            | 0                                          | 286                                      | 0                                        | 54.7            | 0               |      |
| 46   | S27-250 | S27-110 | Ø8-300  | 140    | 0                                            | 0                                          | 286                                      | 0                                        | 62.2            | 0               | 6    |
| 47   | S27+110 | S27+800 | Ø8-300  | 690    | 0                                            | 0                                          | 286                                      | 0                                        | 33.6            | 0               | 59   |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Dwarskrachtwapening

Balk 2:2

Opmerkingen

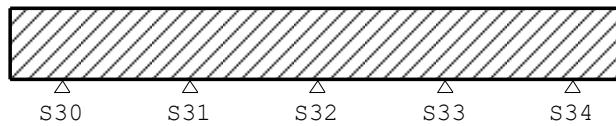
[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

## Hoofdwapening Fysisch lineair

Balk 3:3

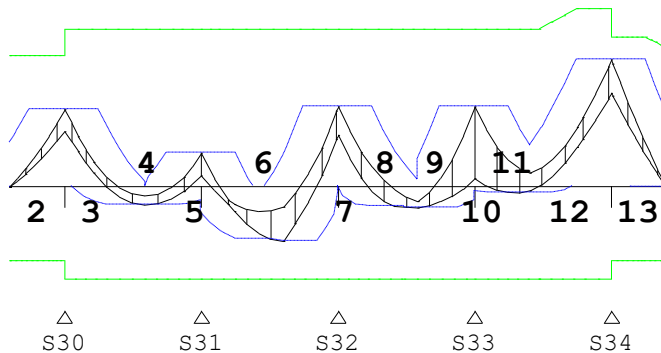
4x16 a 1x12 c lg=2109



4x12 b

## MEd dekkingslijn Fysisch lineair

Balk 3:3



## Scheurvorming volgens artikel 7.3.4

Balk 3:3

| Geb. | Pos.<br>[mm] | Zijde | $M_E, freq$<br>[kNm] | $s_r, max$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|----------------------|--------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S30-449      | Bov   | 60.46                | 318                | 0.593                                  | 0.189         | 1.17  | 0.350             | 0.54 |      |
| 1    | S30-860      | Ond   | -0.18                | 367                | 0.003                                  | 0.001         | 1.17  | 0.350             | 0.00 |      |
| 2    | S30+0        | Bov   | 60.46                | 318                | 0.593                                  | 0.189         | 1.17  | 0.350             | 0.54 |      |
| 2    | S31-823      | Ond   | -18.07               | 367                | 0.282                                  | 0.104         | 1.17  | 0.350             | 0.30 |      |
| 3    | S32-373      | Bov   | 77.71                | 318                | 0.850                                  | 0.271         | 1.17  | 0.350             | 0.77 |      |
| 3    | S31+847      | Ond   | -28.32               | 367                | 0.442                                  | 0.162         | 1.17  | 0.350             | 0.46 |      |
| 4    | S32+0        | Bov   | 77.71                | 318                | 0.850                                  | 0.271         | 1.17  | 0.350             | 0.77 |      |
| 4    | S33-302      | Ond   | -19.15               | 367                | 0.299                                  | 0.110         | 1.17  | 0.350             | 0.31 |      |
| 5    | S34-505      | Bov   | 108.65               | 290                | 1.160                                  | 0.337         | 1.17  | 0.350             | 0.96 |      |
| 5    | S33+621      | Ond   | -6.41                | 367                | 0.100                                  | 0.037         | 1.17  | 0.350             | 0.11 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Scheurvorming volgens artikel 7.3.4

Balk 3:3

| Geb. | Pos.<br>[mm] | Zijde | $M_E; freq$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|----------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 6    | S34+0        | Bov   | 108.65               | 290                  | 1.160                                  | 0.337         | 1.17  | 0.350             | 0.96 |      |
| 6    | S34+306      | Ond   | -0.38                | 367                  | 0.006                                  | 0.002         | 1.17  | 0.350             | 0.01 |      |

## Verloop hoofdwapening

Balk 3:3

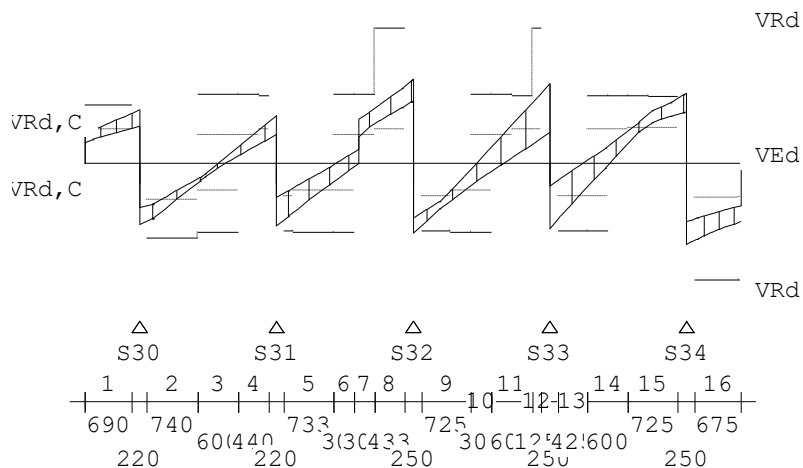
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x16     | S30-1221      | S34+1461    | 10682          | 421                     | 661                    |
| c    | Boven | 1x12     | S33+945       | S34+1054    | 2109           | 549                     | 549                    |
| b    | Onder | 4x12     | S30-920       | S34+920     | 9840           | 120                     | 120                    |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

## DWARSKRACHTEN Fysisch lineair

Balk 3:3 Fundamentele combinatie



## Wring- en dwarskrachtwapening

Balk 3:3

| Geb. | Vanaf<br>[mm] | Tot<br>[mm] | Beugels | Lengte<br>[mm] | $A_{lang}$<br>[mm <sup>2</sup> ] | $A_{bg1}$<br>[mm <sup>2</sup> /m] | $A_{bg2}$<br>[mm <sup>2</sup> ] | $A_{opg}$<br>[mm <sup>2</sup> ] | $V_{Ed}$<br>[kN] | $T_{Ed}$<br>[kNm] | Opm. |
|------|---------------|-------------|---------|----------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------------|-------------------|------|
| 1    | S30-800       | S30-110     | Ø8-300  | 690            | 0                                | 0                                 | 287                             | 0                               | 112.1            | 0                 | 6,59 |
| 2    | S30+110       | S30+850     | Ø8-300  | 740            | 0                                | 0                                 | 286                             | 0                               | 129.6            | 0                 | 6    |
| 3    | S30+850       | S31-550     | Ø8-300  | 600            | 0                                | 0                                 | 286                             | 0                               | 43.4             | 0                 |      |
| 4    | S31-550       | S31-110     | Ø8-300  | 440            | 0                                | 0                                 | 286                             | 0                               | 93.5             | 0                 | 6    |
| 5    | S31+110       | S31+843     | Ø8-300  | 733            | 0                                | 0                                 | 286                             | 0                               | 126.8            | 0                 | 6    |
| 6    | S31+843       | S32-858     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 39.8             | 0                 |      |
| 7    | S32-858       | S32-558     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 124.1            | 0                 | 6    |
| 8    | S32-558       | S32-125     | Ø8-150  | 433            | 0                                | 0                                 | 381                             | 0                               | 172.5            | 0                 | 6    |
| 9    | S32+125       | S32+850     | Ø8-300  | 725            | 0                                | 0                                 | 305                             | 0                               | 138.4            | 0                 | 6    |
| 10   | S32+850       | S33-850     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 49.5             | 0                 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Wring- en dwarskrachtwapening

Balk 3:3

| Geb. | Vanaf   | Tot     | Beugels | Lengte | <Wringing>         | <Dwarskr.>           |                    |                    |           |           |      |
|------|---------|---------|---------|--------|--------------------|----------------------|--------------------|--------------------|-----------|-----------|------|
|      |         |         |         |        | $A_{l a n g s}$    | $A_{b g l}$          | $A_{b g l}$        | $A_{o p g}$        | $V_{E d}$ | $T_{E d}$ | Opm. |
|      | [mm]    | [mm]    |         | [mm]   | [mm <sup>2</sup> ] | [mm <sup>2</sup> /m] | [mm <sup>2</sup> ] | [mm <sup>2</sup> ] | [kN]      | [kNm]     |      |
| 11   | S33-850 | S33-250 | Ø8-300  | 600    | 0                  | 0                    | 302                | 0                  | 136.7     | 0         | 6    |
| 12   | S33-250 | S33-125 | Ø8-150  | 125    | 0                  | 0                    | 348                | 0                  | 157.9     | 0         | 6    |
| 13   | S33+125 | S33+550 | Ø8-300  | 425    | 0                  | 0                    | 286                | 0                  | 124.7     | 0         | 6    |
| 14   | S33+550 | S34-850 | Ø8-300  | 600    | 0                  | 0                    | 286                | 0                  | 73.5      | 0         |      |
| 15   | S34-850 | S34-125 | Ø8-300  | 725    | 0                  | 0                    | 322                | 0                  | 145.2     | 0         | 6    |
| 16   | S34+125 | S34+800 | Ø8-150  | 675    | 0                  | 0                    | 441                | 0                  | 172.5     | 0         | 6,59 |

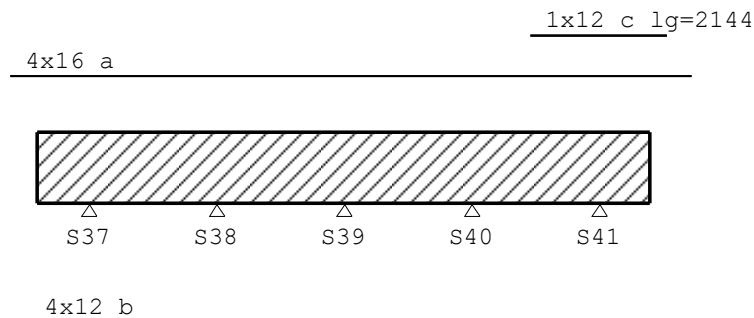
Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

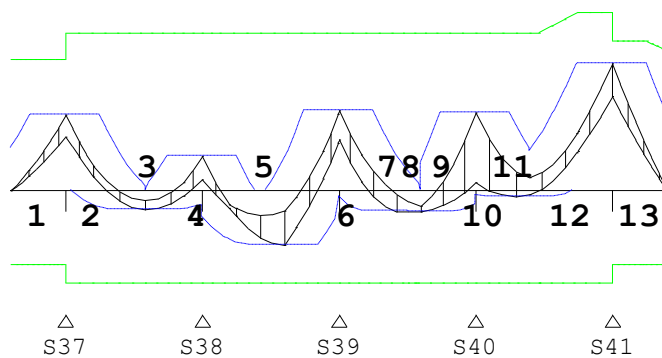
## Hoofdwapening Fysisch lineair

Balk 4:4



## Med dekkingslijn Fysisch lineair

Balk 4:4



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Scheurvorming volgens artikel 7.3.4

Balk 4:4

| Geb. | Pos.<br>[mm] | Zijde | $M_E; freq$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|----------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S37-449      | Bov   | 58.85                | 318                  | 0.569                                  | 0.181         | 1.17  | 0.350             | 0.52 |      |
| 2    | S37+0        | Bov   | 58.85                | 318                  | 0.569                                  | 0.181         | 1.17  | 0.350             | 0.52 |      |
| 2    | S38-830      | Ond   | -18.79               | 367                  | 0.294                                  | 0.108         | 1.17  | 0.350             | 0.31 |      |
| 3    | S39-373      | Bov   | 77.85                | 318                  | 0.853                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 3    | S38+848      | Ond   | -28.36               | 367                  | 0.443                                  | 0.163         | 1.17  | 0.350             | 0.46 |      |
| 4    | S39+0        | Bov   | 77.85                | 318                  | 0.853                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 4    | S40-301      | Ond   | -19.18               | 367                  | 0.300                                  | 0.110         | 1.17  | 0.350             | 0.31 |      |
| 5    | S41-505      | Bov   | 109.11               | 290                  | 1.166                                  | 0.339         | 1.17  | 0.350             | 0.97 |      |
| 5    | S40+619      | Ond   | -6.37                | 367                  | 0.099                                  | 0.037         | 1.17  | 0.350             | 0.10 |      |
| 6    | S41+0        | Bov   | 109.11               | 290                  | 1.166                                  | 0.339         | 1.17  | 0.350             | 0.97 |      |

## Verloop hoofdwapening

Balk 4:4

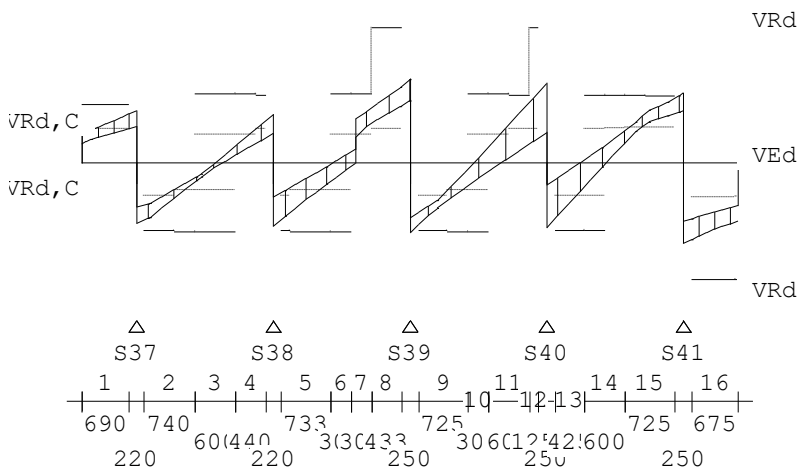
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x16     | S37-1221      | S41+1465    | 10687          | 421                     | 665                    |
| c    | Boven | 1x12     | S40+928       | S41+1072    | 2144           | 567                     | 567                    |
| b    | Onder | 4x12     | S37-920       | S41+920     | 9840           | 120                     | 120                    |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

## DWARSKRACHTEN Fysisch lineair

Balk 4:4 Fundamentele combinatie



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Wring- en dwarskrachtwapening

Balk 4:4

| Geb. | Vanaf   | Tot     | Beugels | Lengte | <Wringing >                           |                                     | <Dwarskr.>                        |                                   |                   |                    |      |
|------|---------|---------|---------|--------|---------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------|--------------------|------|
|      | [mm]    | [mm]    |         | [mm]   | $A_{l a n g s}$<br>[mm <sup>2</sup> ] | $A_{b g l}$<br>[mm <sup>2</sup> /m] | $A_{b g l}$<br>[mm <sup>2</sup> ] | $A_{o p g}$<br>[mm <sup>2</sup> ] | $V_{E d}$<br>[kN] | $T_{E d}$<br>[kNm] | Opm. |
| 1    | S37-800 | S37-110 | Ø8-300  | 690    | 0                                     | 0                                   | 286                               | 0                                 | 109.5             | 0                  | 6,59 |
| 2    | S37+110 | S37+850 | Ø8-300  | 740    | 0                                     | 0                                   | 286                               | 0                                 | 128.5             | 0                  | 6    |
| 3    | S37+850 | S38-550 | Ø8-300  | 600    | 0                                     | 0                                   | 286                               | 0                                 | 42.6              | 0                  |      |
| 4    | S38-550 | S38-110 | Ø8-300  | 440    | 0                                     | 0                                   | 286                               | 0                                 | 94.6              | 0                  | 6    |
| 5    | S38+110 | S38+843 | Ø8-300  | 733    | 0                                     | 0                                   | 286                               | 0                                 | 127.4             | 0                  | 6    |
| 6    | S38+843 | S39-858 | Ø8-300  | 300    | 0                                     | 0                                   | 286                               | 0                                 | 40.1              | 0                  |      |
| 7    | S39-858 | S39-558 | Ø8-300  | 300    | 0                                     | 0                                   | 286                               | 0                                 | 124.1             | 0                  | 6    |
| 8    | S39-558 | S39-125 | Ø8-150  | 433    | 0                                     | 0                                   | 380                               | 0                                 | 172.1             | 0                  | 6    |
| 9    | S39+125 | S39+850 | Ø8-300  | 725    | 0                                     | 0                                   | 306                               | 0                                 | 138.5             | 0                  | 6    |
| 10   | S39+850 | S40-850 | Ø8-300  | 300    | 0                                     | 0                                   | 286                               | 0                                 | 49.5              | 0                  |      |
| 11   | S40-850 | S40-250 | Ø8-300  | 600    | 0                                     | 0                                   | 300                               | 0                                 | 136.1             | 0                  | 6    |
| 12   | S40-250 | S40-125 | Ø8-150  | 125    | 0                                     | 0                                   | 347                               | 0                                 | 157.3             | 0                  | 6    |
| 13   | S40+125 | S40+550 | Ø8-300  | 425    | 0                                     | 0                                   | 286                               | 0                                 | 123.8             | 0                  | 6    |
| 14   | S40+550 | S41-850 | Ø8-300  | 600    | 0                                     | 0                                   | 286                               | 0                                 | 73.7              | 0                  |      |
| 15   | S41-850 | S41-125 | Ø8-300  | 725    | 0                                     | 0                                   | 323                               | 0                                 | 145.5             | 0                  | 6    |
| 16   | S41+125 | S41+800 | Ø8-150  | 675    | 0                                     | 0                                   | 439                               | 0                                 | 171.8             | 0                  | 6,59 |

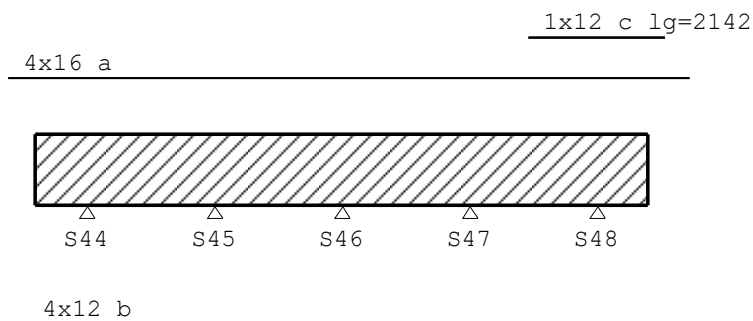
Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

## Hoofdwapening Fysisch lineair

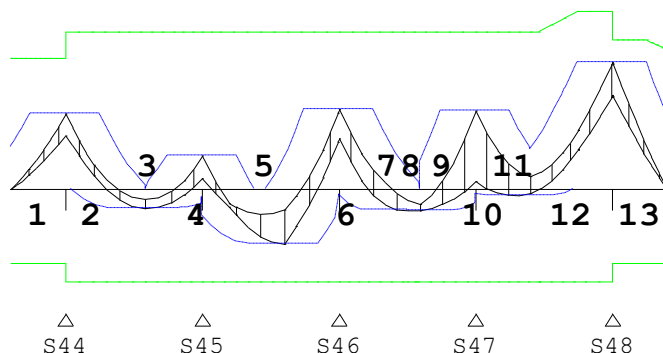
Balk 5:5



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### MEd dekkingslijn Fysisch lineair

Balk 5:5



### Scheurvorming volgens artikel 7.3.4

Balk 5:5

| Geb. | Pos.<br>[mm] | Zijde | $M_{E;freq}$<br>[kNm] | $S_{r,max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|-----------------------|---------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S44-449      | Bov   | 58.90                 | 318                 | 0.570                                  | 0.182         | 1.17  | 0.350             | 0.52 |      |
| 2    | S44+0        | Bov   | 58.90                 | 318                 | 0.570                                  | 0.182         | 1.17  | 0.350             | 0.52 |      |
| 2    | S45-830      | Ond   | -18.77                | 367                 | 0.293                                  | 0.108         | 1.17  | 0.350             | 0.31 |      |
| 3    | S46-373      | Bov   | 77.85                 | 318                 | 0.852                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 3    | S45+848      | Ond   | -28.36                | 367                 | 0.443                                  | 0.163         | 1.17  | 0.350             | 0.46 |      |
| 4    | S46+0        | Bov   | 77.85                 | 318                 | 0.852                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 4    | S47-301      | Ond   | -19.17                | 367                 | 0.300                                  | 0.110         | 1.17  | 0.350             | 0.31 |      |
| 5    | S48-505      | Bov   | 109.08                | 290                 | 1.166                                  | 0.339         | 1.17  | 0.350             | 0.97 |      |
| 5    | S47+619      | Ond   | -6.37                 | 367                 | 0.100                                  | 0.037         | 1.17  | 0.350             | 0.10 |      |
| 6    | S48+0        | Bov   | 109.08                | 290                 | 1.166                                  | 0.339         | 1.17  | 0.350             | 0.97 |      |

### Verloop hoofdwapening

Balk 5:5

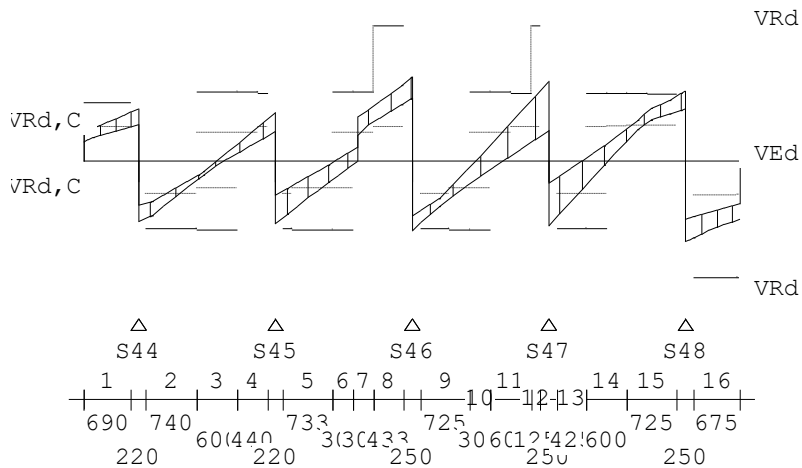
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd,begin}$<br>[mm] | $L_{bd,eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|------------------------|-----------------------|
| a    | Boven | 4x16     | S44-1221      | S48+1465    | 10687          | 421                    | 665                   |
| c    | Boven | 1x12     | S47+929       | S48+1071    | 2142           | 566                    | 566                   |
| b    | Onder | 4x12     | S44-920       | S48+920     | 9840           | 120                    | 120                   |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## DWARSKRACHTEN Fysisch lineair Balk 5:5 Fundamentele combinatie



## Wring- en dwarskrachtwapening

Balk 5:5

| Geb. | Vanaf   | Tot     | Beugels | Lengte | <Wringing>         |                      | <Dwarskr.>         |                    | V <sub>Ed</sub> | T <sub>Ed</sub> | Opm. |
|------|---------|---------|---------|--------|--------------------|----------------------|--------------------|--------------------|-----------------|-----------------|------|
|      | [mm]    | [mm]    |         | [mm]   | A <sub>lang</sub>  | A <sub>bg1</sub>     | A <sub>bg1</sub>   | A <sub>opg</sub>   | [kN]            | [kNm]           |      |
|      |         |         |         |        | [mm <sup>2</sup> ] | [mm <sup>2</sup> /m] | [mm <sup>2</sup> ] | [mm <sup>2</sup> ] |                 |                 |      |
| 1    | S44-800 | S44-110 | Ø8-300  | 690    | 0                  | 0                    | 286                | 0                  | 109.6           | 0               | 6,59 |
| 2    | S44+110 | S44+850 | Ø8-300  | 740    | 0                  | 0                    | 286                | 0                  | 128.6           | 0               | 6    |
| 3    | S44+850 | S45-550 | Ø8-300  | 600    | 0                  | 0                    | 286                | 0                  | 42.6            | 0               |      |
| 4    | S45-550 | S45-110 | Ø8-300  | 440    | 0                  | 0                    | 286                | 0                  | 94.6            | 0               | 6    |
| 5    | S45+110 | S45+843 | Ø8-300  | 733    | 0                  | 0                    | 286                | 0                  | 127.3           | 0               | 6    |
| 6    | S45+843 | S46-858 | Ø8-300  | 300    | 0                  | 0                    | 286                | 0                  | 40.0            | 0               |      |
| 7    | S46-858 | S46-558 | Ø8-300  | 300    | 0                  | 0                    | 286                | 0                  | 124.1           | 0               | 6    |
| 8    | S46-558 | S46-125 | Ø8-150  | 433    | 0                  | 0                    | 380                | 0                  | 172.2           | 0               | 6    |
| 9    | S46+125 | S46+850 | Ø8-300  | 725    | 0                  | 0                    | 306                | 0                  | 138.5           | 0               | 6    |
| 10   | S46+850 | S47-850 | Ø8-300  | 300    | 0                  | 0                    | 286                | 0                  | 49.5            | 0               |      |
| 11   | S47-850 | S47-250 | Ø8-300  | 600    | 0                  | 0                    | 301                | 0                  | 136.2           | 0               | 6    |
| 12   | S47-250 | S47-125 | Ø8-150  | 125    | 0                  | 0                    | 347                | 0                  | 157.4           | 0               | 6    |
| 13   | S47+125 | S47+550 | Ø8-300  | 425    | 0                  | 0                    | 286                | 0                  | 124.0           | 0               | 6    |
| 14   | S47+550 | S48-850 | Ø8-300  | 600    | 0                  | 0                    | 286                | 0                  | 73.6            | 0               |      |
| 15   | S48-850 | S48-125 | Ø8-300  | 725    | 0                  | 0                    | 323                | 0                  | 145.5           | 0               | 6    |
| 16   | S48+125 | S48+800 | Ø8-150  | 675    | 0                  | 0                    | 439                | 0                  | 171.9           | 0               | 6,59 |

Opmerkingen

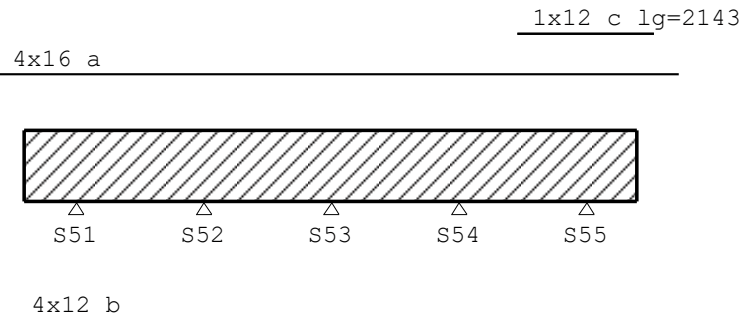
[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

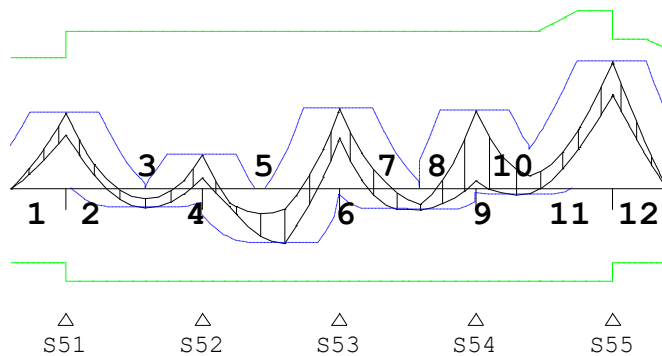
## Hoofdwapening Fysisch lineair

Balk 6:6



## MEd dekkingslijn Fysisch lineair

Balk 6:6



## Scheurvorming volgens artikel 7.3.4

Balk 6:6

| Geb. | Pos.<br>[mm] | Zijde | $M_{E, freq}$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|------------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S51-449      | Bov   | 58.86                  | 318                  | 0.569                                  | 0.181         | 1.17  | 0.350             | 0.52 |      |
| 2    | S51+0        | Bov   | 58.86                  | 318                  | 0.569                                  | 0.181         | 1.17  | 0.350             | 0.52 |      |
| 2    | S52-830      | Ond   | -18.79                 | 367                  | 0.294                                  | 0.108         | 1.17  | 0.350             | 0.31 |      |
| 3    | S53-373      | Bov   | 77.85                  | 318                  | 0.853                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 3    | S52+847      | Ond   | -28.36                 | 367                  | 0.443                                  | 0.163         | 1.17  | 0.350             | 0.46 |      |
| 4    | S53+0        | Bov   | 77.85                  | 318                  | 0.853                                  | 0.272         | 1.17  | 0.350             | 0.78 |      |
| 4    | S54-301      | Ond   | -19.18                 | 367                  | 0.300                                  | 0.110         | 1.17  | 0.350             | 0.31 |      |
| 5    | S55-505      | Bov   | 109.11                 | 290                  | 1.166                                  | 0.339         | 1.17  | 0.350             | 0.97 |      |
| 5    | S54+619      | Ond   | -6.37                  | 367                  | 0.099                                  | 0.037         | 1.17  | 0.350             | 0.10 |      |
| 6    | S55+0        | Bov   | 109.11                 | 290                  | 1.166                                  | 0.339         | 1.17  | 0.350             | 0.97 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Verloop hoofdwapening

Balk 6:6

| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x16     | S51-1221      | S55+1465    | 10687          | 421                     | 665                    |
| c    | Boven | 1x12     | S54+928       | S55+1072    | 2143           | 567                     | 567                    |
| b    | Onder | 4x12     | S51-920       | S55+920     | 9840           | 120                     | 120                    |

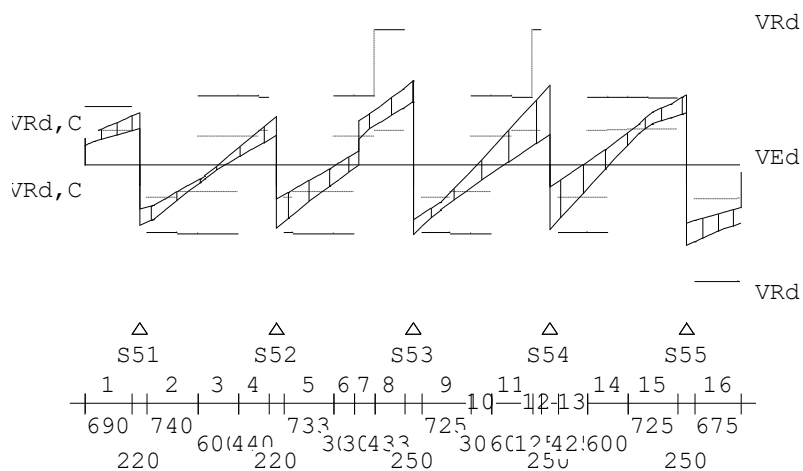
Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

## DWARSKRACHTEN

Fysisch lineair

Balk 6:6 Fundamentele combinatie



## Wring- en dwarskrachtwapening

Balk 6:6

| Geb. | Vanaf<br>[mm] | Tot<br>[mm] | Beugels | Lengte<br>[mm] | <Wringing> <Dwarskr.>            |                                   |                                 |                                 | $V_{Ed}$<br>[kN] | $T_{Ed}$<br>[kNm] | Opm. |
|------|---------------|-------------|---------|----------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------------|-------------------|------|
|      |               |             |         |                | $A_{lang}$<br>[mm <sup>2</sup> ] | $A_{bg1}$<br>[mm <sup>2</sup> /m] | $A_{bg1}$<br>[mm <sup>2</sup> ] | $A_{opg}$<br>[mm <sup>2</sup> ] |                  |                   |      |
| 1    | S51-800       | S51-110     | Ø8-300  | 690            | 0                                | 0                                 | 286                             | 0                               | 109.5            | 0                 | 6,59 |
| 2    | S51+110       | S51+850     | Ø8-300  | 740            | 0                                | 0                                 | 286                             | 0                               | 128.6            | 0                 | 6    |
| 3    | S51+850       | S52-550     | Ø8-300  | 600            | 0                                | 0                                 | 286                             | 0                               | 42.6             | 0                 |      |
| 4    | S52-550       | S52-110     | Ø8-300  | 440            | 0                                | 0                                 | 286                             | 0                               | 94.6             | 0                 | 6    |
| 5    | S52+110       | S52+843     | Ø8-300  | 733            | 0                                | 0                                 | 286                             | 0                               | 127.3            | 0                 | 6    |
| 6    | S52+843       | S53-858     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 40.0             | 0                 |      |
| 7    | S53-858       | S53-558     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 124.1            | 0                 | 6    |
| 8    | S53-558       | S53-125     | Ø8-150  | 433            | 0                                | 0                                 | 380                             | 0                               | 172.2            | 0                 | 6    |
| 9    | S53+125       | S53+850     | Ø8-300  | 725            | 0                                | 0                                 | 305                             | 0                               | 138.4            | 0                 | 6    |
| 10   | S53+850       | S54-850     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 49.5             | 0                 |      |
| 11   | S54-850       | S54-250     | Ø8-300  | 600            | 0                                | 0                                 | 301                             | 0                               | 136.2            | 0                 | 6    |
| 12   | S54-250       | S54-125     | Ø8-150  | 125            | 0                                | 0                                 | 347                             | 0                               | 157.4            | 0                 | 6    |
| 13   | S54+125       | S54+550     | Ø8-300  | 425            | 0                                | 0                                 | 286                             | 0                               | 123.9            | 0                 | 6    |
| 14   | S54+550       | S55-850     | Ø8-300  | 600            | 0                                | 0                                 | 286                             | 0                               | 73.7             | 0                 |      |
| 15   | S55-850       | S55-125     | Ø8-300  | 725            | 0                                | 0                                 | 323                             | 0                               | 145.4            | 0                 | 6    |
| 16   | S55+125       | S55+800     | Ø8-150  | 675            | 0                                | 0                                 | 439                             | 0                               | 172.0            | 0                 | 6,59 |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## Dwarskrachtwapening

Balk 6:6

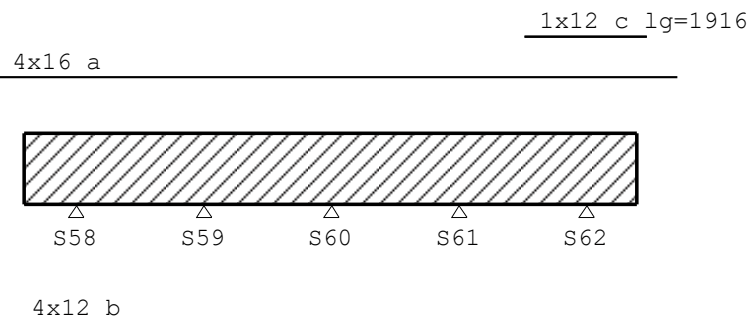
Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

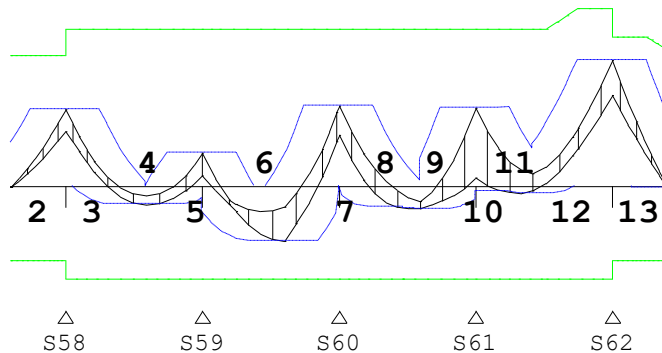
## Hoofdwapening Fysisch lineair

Balk 7:7



## MEd dekkingslijn Fysisch lineair

Balk 7:7



## Scheurvorming volgens artikel 7.3.4

Balk 7:7

| Geb. | Pos.<br>[mm] | Zijde | $M_E, freq$<br>[kNm] | $s_r, max$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|----------------------|--------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S58-449      | Bov   | 60.12                | 318                | 0.588                                  | 0.187         | 1.17  | 0.350             | 0.54 |      |
| 1    | S58-860      | Ond   | -0.17                | 367                | 0.003                                  | 0.001         | 1.17  | 0.350             | 0.00 |      |
| 2    | S58+0        | Bov   | 60.12                | 318                | 0.588                                  | 0.187         | 1.17  | 0.350             | 0.54 |      |
| 2    | S59-826      | Ond   | -18.21               | 367                | 0.285                                  | 0.104         | 1.17  | 0.350             | 0.30 |      |
| 3    | S60-372      | Bov   | 77.63                | 318                | 0.849                                  | 0.271         | 1.17  | 0.350             | 0.77 |      |
| 3    | S59+849      | Ond   | -28.38               | 367                | 0.443                                  | 0.163         | 1.17  | 0.350             | 0.47 |      |
| 4    | S60+0        | Bov   | 77.63                | 318                | 0.849                                  | 0.271         | 1.17  | 0.350             | 0.77 |      |
| 4    | S61-702      | Ond   | -18.76               | 367                | 0.293                                  | 0.108         | 1.17  | 0.350             | 0.31 |      |
| 5    | S62-505      | Bov   | 106.12               | 290                | 1.127                                  | 0.328         | 1.17  | 0.350             | 0.94 |      |
| 5    | S61+633      | Ond   | -6.81                | 367                | 0.106                                  | 0.039         | 1.17  | 0.350             | 0.11 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Scheurvorming volgens artikel 7.3.4

Balk 7:7

| Geb. | Pos.<br>[mm] | Zijde | $M_{E;freq}$<br>[kNm] | $S_{r,max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|-----------------------|---------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 6    | S62+0        | Bov   | 106.12                | 290                 | 1.127                                  | 0.328         | 1.17  | 0.350             | 0.94 |      |
| 6    | S62+345      | Ond   | -0.40                 | 367                 | 0.006                                  | 0.002         | 1.17  | 0.350             | 0.01 |      |

### Verloop hoofdwapening

Balk 7:7

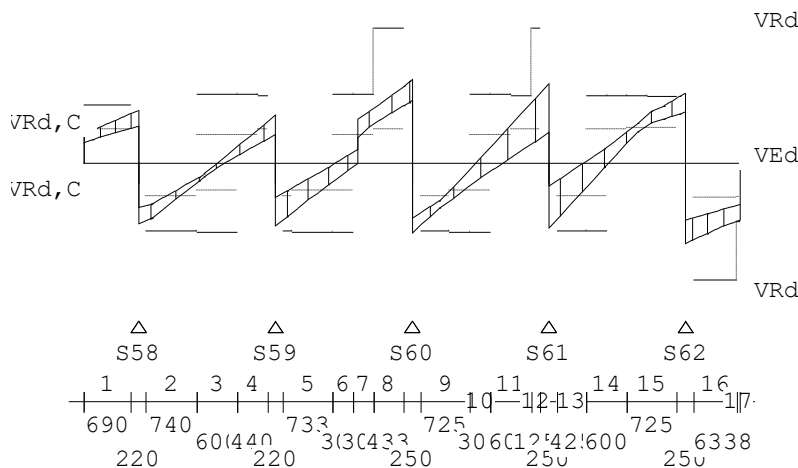
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd;begin}$<br>[mm] | $L_{bd;eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|------------------------|-----------------------|
| a    | Boven | 4x16     | S58-1221      | S62+1444    | 10666          | 421                    | 644                   |
| c    | Boven | 1x12     | S62-958       | S62+958     | 1916           | 453                    | 453                   |
| b    | Onder | 4x12     | S58-920       | S62+920     | 9840           | 120                    | 120                   |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

### DWARSKRACHTEN Fysisch lineair

Balk 7:7 Fundamentele combinatie



### Wring- en dwarskrachtwapening

Balk 7:7

| Geb. | Vanaf<br>[mm] | Tot<br>[mm] | Beugels | Lengte<br>[mm] | <Wringing>                       |                                   | <Dwarskr.>                      |                                 | $V_{Ed}$<br>[kN] | $T_{Ed}$<br>[kNm] | Opm. |
|------|---------------|-------------|---------|----------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------------|-------------------|------|
|      |               |             |         |                | $A_{lang}$<br>[mm <sup>2</sup> ] | $A_{bg1}$<br>[mm <sup>2</sup> /m] | $A_{bg1}$<br>[mm <sup>2</sup> ] | $A_{opg}$<br>[mm <sup>2</sup> ] |                  |                   |      |
| 1    | S58-800       | S58-110     | Ø8-300  | 690            | 0                                | 0                                 | 286                             | 0                               | 111.5            | 0                 | 6,59 |
| 2    | S58-110       | S58-850     | Ø8-300  | 740            | 0                                | 0                                 | 286                             | 0                               | 129.1            | 0                 | 6    |
| 3    | S58-850       | S59-550     | Ø8-300  | 600            | 0                                | 0                                 | 286                             | 0                               | 43.2             | 0                 |      |
| 4    | S59-550       | S59-110     | Ø8-300  | 440            | 0                                | 0                                 | 286                             | 0                               | 93.9             | 0                 | 6    |
| 5    | S59-110       | S59-843     | Ø8-300  | 733            | 0                                | 0                                 | 286                             | 0                               | 127.2            | 0                 | 6    |
| 6    | S59-843       | S60-858     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 40.4             | 0                 |      |
| 7    | S60-858       | S60-558     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 124.2            | 0                 | 6    |
| 8    | S60-558       | S60-125     | Ø8-150  | 433            | 0                                | 0                                 | 379                             | 0                               | 171.9            | 0                 | 6    |
| 9    | S60-125       | S60-850     | Ø8-300  | 725            | 0                                | 0                                 | 307                             | 0                               | 138.9            | 0                 | 6    |
| 10   | S60-850       | S61-850     | Ø8-300  | 300            | 0                                | 0                                 | 286                             | 0                               | 49.4             | 0                 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Wring- en dwarskrachtwapening

Balk 7:7

| Geb. | Vanaf   | Tot     | Beugels | Lengte | <Wringing>                            |                                     | <Dwarskr.>                        |                                   |                   |                    |      |
|------|---------|---------|---------|--------|---------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-------------------|--------------------|------|
|      | [mm]    | [mm]    |         | [mm]   | $A_{l a n g s}$<br>[mm <sup>2</sup> ] | $A_{b g l}$<br>[mm <sup>2</sup> /m] | $A_{b g l}$<br>[mm <sup>2</sup> ] | $A_{o p g}$<br>[mm <sup>2</sup> ] | $V_{E d}$<br>[kN] | $T_{E d}$<br>[kNm] | Opm. |
| 11   | S61-850 | S61-250 | Ø8-300  | 600    | 0                                     | 0                                   | 301                               | 0                                 | 136.3             | 0                  | 6    |
| 12   | S61-250 | S61-125 | Ø8-150  | 125    | 0                                     | 0                                   | 348                               | 0                                 | 157.6             | 0                  | 6    |
| 13   | S61+125 | S61+550 | Ø8-300  | 425    | 0                                     | 0                                   | 286                               | 0                                 | 124.4             | 0                  | 6    |
| 14   | S61+550 | S62-850 | Ø8-300  | 600    | 0                                     | 0                                   | 286                               | 0                                 | 71.9              | 0                  |      |
| 15   | S62-850 | S62-125 | Ø8-300  | 725    | 0                                     | 0                                   | 323                               | 0                                 | 145.8             | 0                  | 6    |
| 16   | S62+125 | S62+762 | Ø8-150  | 638    | 0                                     | 0                                   | 439                               | 0                                 | 171.8             | 0                  | 6,59 |
| 17   | S62+762 | S62+800 | Ø8-300  | 38     | 0                                     | 0                                   | 331                               | 0                                 | 129.7             | 0                  | 6,59 |

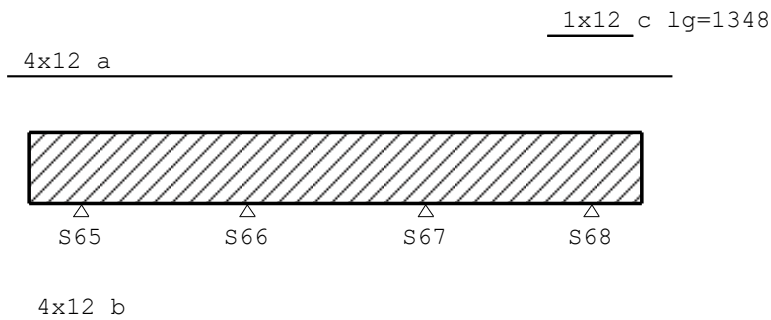
Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

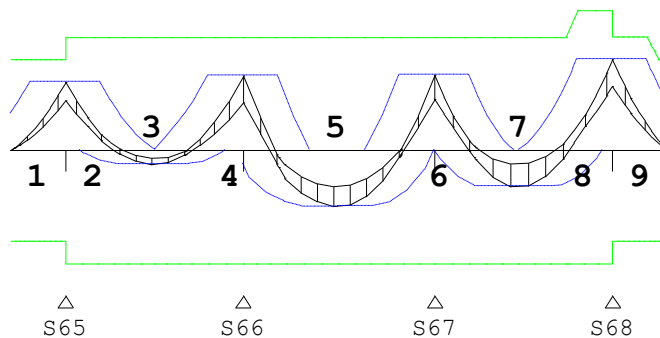
### Hoofdwapening Fysisch lineair

Balk 8:8



### MEd dekkingslijn Fysisch lineair

Balk 8:8



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Scheurvorming volgens artikel 7.3.4

Balk 8:8

| Geb. | Pos.<br>[mm] | Zijde | $M_E; freq$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. Opm. |
|------|--------------|-------|----------------------|----------------------|----------------------------------------|---------------|-------|-------------------|-----------|
| 1    | S65-449      | Bov   | 44.11                | 367                  | 0.688                                  | 0.253         | 1.17  | 0.350             | 0.72      |
| 2    | S66-415      | Bov   | 45.25                | 367                  | 0.706                                  | 0.259         | 1.17  | 0.350             | 0.74      |
| 2    | S65+1296     | Ond   | -9.32                | 367                  | 0.145                                  | 0.053         | 1.17  | 0.350             | 0.15      |
| 3    | S67-509      | Bov   | 49.01                | 367                  | 0.766                                  | 0.281         | 1.17  | 0.350             | 0.80      |
| 3    | S66+889      | Ond   | -34.65               | 367                  | 0.541                                  | 0.198         | 1.17  | 0.350             | 0.57      |
| 4    | S67+0        | Bov   | 49.01                | 367                  | 0.766                                  | 0.281         | 1.17  | 0.350             | 0.80      |
| 4    | S68-507      | Bov   | 60.01                | 322                  | 0.843                                  | 0.272         | 1.17  | 0.350             | 0.78      |
| 4    | S67+748      | Ond   | -19.11               | 367                  | 0.298                                  | 0.109         | 1.17  | 0.350             | 0.31      |
| 5    | S68+0        | Bov   | 60.01                | 322                  | 0.843                                  | 0.272         | 1.17  | 0.350             | 0.78      |

### Verloop hoofdwapening

Balk 8:8

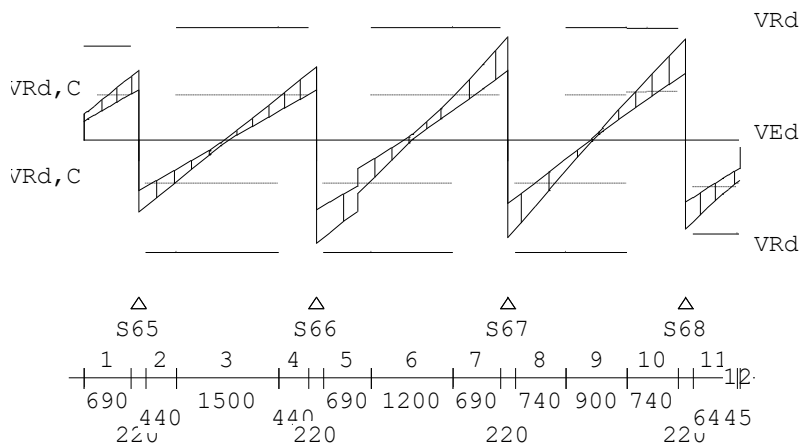
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x12     | S65-1148      | S68+1285    | 10433          | 348                     | 485                    |
| c    | Boven | 1x12     | S68-674       | S68+674     | 1348           | 167                     | 167                    |
| b    | Onder | 4x12     | S65-920       | S68+920     | 9840           | 120                     | 120                    |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

### DWARSKRACHTEN Fysisch lineair

Balk 8:8 Fundamentele combinatie



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Wring- en dwarskrachtwapening

Balk 8:8

| Geb. | Vanaf   | Tot     | Beugels | Lengte | <Wringing>                                |                                          | <Dwarskr.>                             |                                        |                   |                    |      |
|------|---------|---------|---------|--------|-------------------------------------------|------------------------------------------|----------------------------------------|----------------------------------------|-------------------|--------------------|------|
|      | [mm]    | [mm]    |         | [mm]   | $A_{l\text{ang s}}$<br>[mm <sup>2</sup> ] | $A_{b\text{gl}}$<br>[mm <sup>2</sup> /m] | $A_{b\text{gl}}$<br>[mm <sup>2</sup> ] | $A_{o\text{pg}}$<br>[mm <sup>2</sup> ] | $V_{E d}$<br>[kN] | $T_{E d}$<br>[kNm] | Opm. |
| 1    | S65-800 | S65-110 | Ø8-300  | 690    | 2                                         | 0                                        | 286                                    | 0                                      | 88.9              | 0                  | 6,59 |
| 2    | S65+110 | S65+550 | Ø8-300  | 440    | 2                                         | 0                                        | 286                                    | 0                                      | 91.2              | 0                  | 6    |
| 3    | S65+550 | S66-550 | Ø8-300  | 1500   | 0                                         | 0                                        | 286                                    | 0                                      | 59.9              | 0                  |      |
| 4    | S66-550 | S66-110 | Ø8-300  | 440    | 2                                         | 0                                        | 286                                    | 0                                      | 93.2              | 0                  | 6    |
| 5    | S66+110 | S66+800 | Ø8-300  | 690    | 2                                         | 0                                        | 288                                    | 0                                      | 135.0             | 0                  | 6    |
| 6    | S66+800 | S67-800 | Ø8-300  | 1200   | 0                                         | 0                                        | 286                                    | 0                                      | 60.9              | 0                  |      |
| 7    | S67-800 | S67-110 | Ø8-300  | 690    | 2                                         | 0                                        | 286                                    | 0                                      | 131.6             | 0                  | 6    |
| 8    | S67+110 | S67+850 | Ø8-300  | 740    | 2                                         | 0                                        | 286                                    | 0                                      | 123.9             | 0                  | 6    |
| 9    | S67+850 | S68-850 | Ø8-300  | 900    | 0                                         | 0                                        | 286                                    | 0                                      | 54.7              | 0                  |      |
| 10   | S68-850 | S68-110 | Ø8-300  | 740    | 2                                         | 0                                        | 286                                    | 0                                      | 129.2             | 0                  | 6    |
| 11   | S68+110 | S68+755 | Ø8-300  | 645    | 2                                         | 0                                        | 290                                    | 0                                      | 113.5             | 0                  | 6,59 |
| 12   | S68+755 | S68+800 | Ø8-300  | 45     | 0                                         | 0                                        | 286                                    | 0                                      | 58.4              | 0                  | 59   |

Opmerkingen

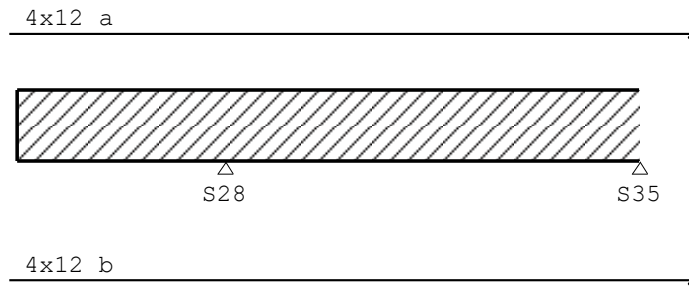
[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

[59] 6.2.3: Z is berekend m.b.v. de gedrongen ligger berekening art 6.1 (10)

### Hoofdwapening Fysisch lineair

Balk 9:9

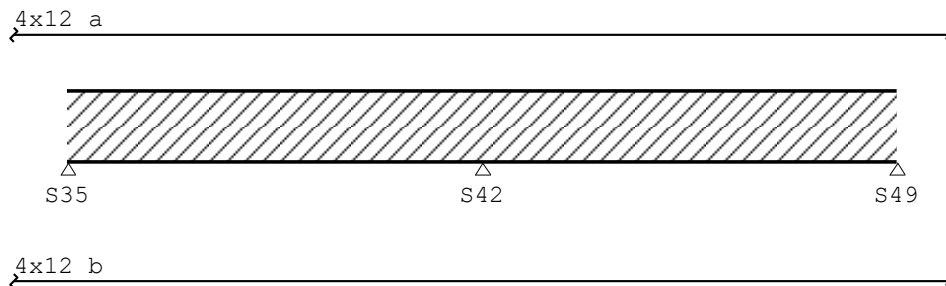
Velden: 1 t/m 2



### Hoofdwapening Fysisch lineair

Balk 9:9

Velden: 3 t/m 4

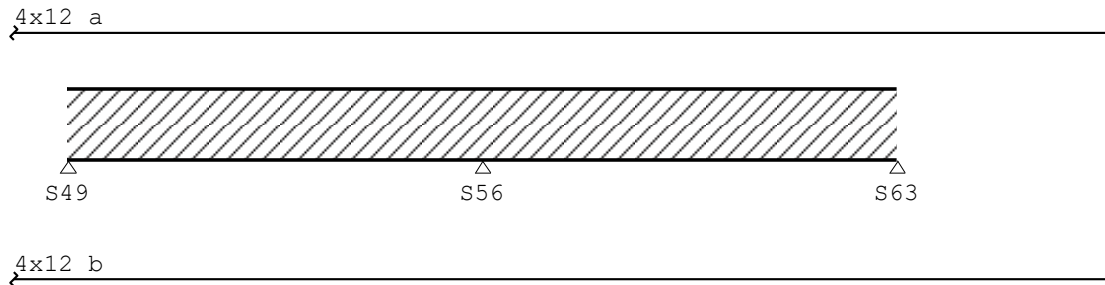


Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**Hoofdwapening** Fysisch lineair

Balk 9:9

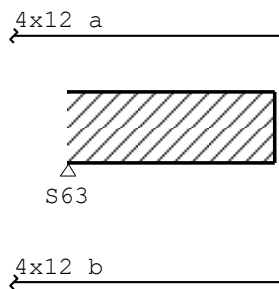
Velden: 5 t/m 6



**Hoofdwapening** Fysisch lineair

Balk 9:9

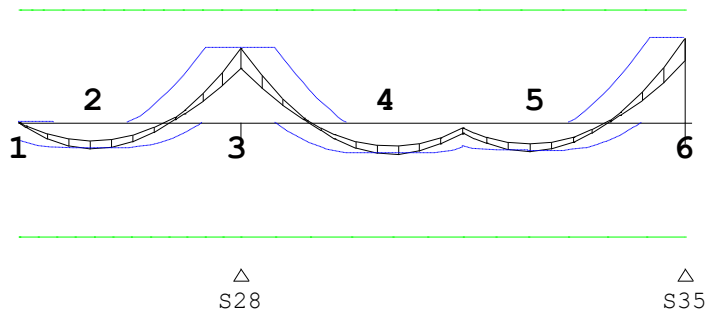
Velden: 7 t/m 7



**MEd dekkingslijn** Fysisch lineair

Balk 9:9

Velden: 1 t/m 2

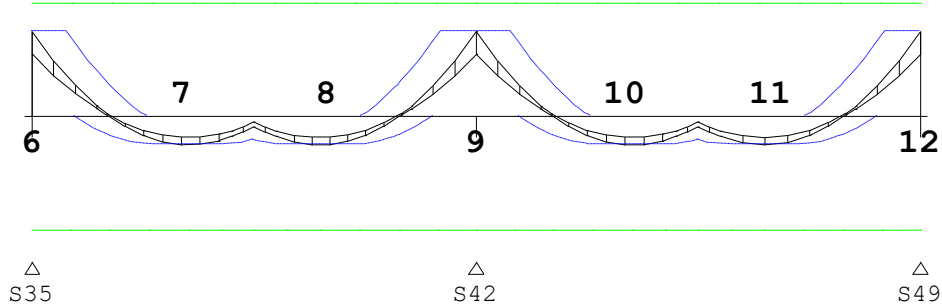


Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**MEd dekkingslijn** Fysisch lineair

Balk 9:9

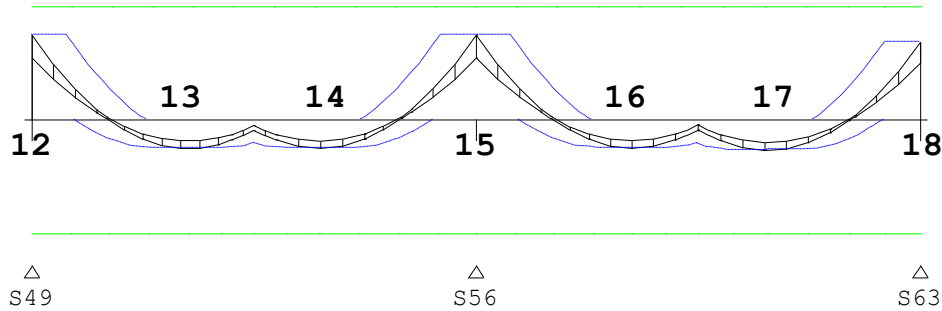
Velden: 3 t/m 4



**MEd dekkingslijn** Fysisch lineair

Balk 9:9

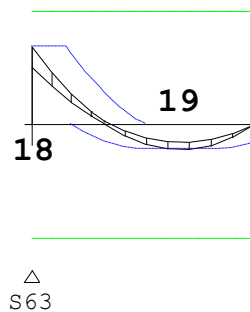
Velden: 5 t/m 6



**MEd dekkingslijn** Fysisch lineair

Balk 9:9

Velden: 7 t/m 7



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Scheurvorming volgens artikel 7.3.4

Balk 9:9

| Geb. | Pos.<br>[mm] | Zijde | $M_E; f_{req}$<br>[kNm] | $S_{r,max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|-------------------------|---------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S28-284      | Bov   | 48.92                   | 367                 | 0.764                                  | 0.280         | 1.17  | 0.350             | 0.80 |      |
| 1    | S28-2149     | Ond   | -16.19                  | 367                 | 0.253                                  | 0.093         | 1.17  | 0.350             | 0.26 |      |
| 2    | S35+0        | Bov   | 55.55                   | 367                 | 0.936                                  | 0.344         | 1.17  | 0.350             | 0.98 |      |
| 2    | S28+2734     | Ond   | -20.31                  | 367                 | 0.317                                  | 0.116         | 1.17  | 0.350             | 0.33 |      |
| 3    | S35+0        | Bov   | 55.55                   | 367                 | 0.936                                  | 0.344         | 1.17  | 0.350             | 0.98 |      |
| 3    | S42-2292     | Ond   | -18.76                  | 367                 | 0.293                                  | 0.107         | 1.17  | 0.350             | 0.31 |      |
| 4    | S49+0        | Bov   | 55.29                   | 367                 | 0.929                                  | 0.341         | 1.17  | 0.350             | 0.97 |      |
| 4    | S42+2292     | Ond   | -18.73                  | 367                 | 0.292                                  | 0.107         | 1.17  | 0.350             | 0.31 |      |
| 5    | S56+0        | Bov   | 55.49                   | 367                 | 0.934                                  | 0.343         | 1.17  | 0.350             | 0.98 |      |
| 5    | S49+2292     | Ond   | -18.75                  | 367                 | 0.293                                  | 0.107         | 1.17  | 0.350             | 0.31 |      |
| 6    | S56+0        | Bov   | 55.49                   | 367                 | 0.934                                  | 0.343         | 1.17  | 0.350             | 0.98 |      |
| 6    | S63-2237     | Ond   | -19.98                  | 367                 | 0.312                                  | 0.114         | 1.17  | 0.350             | 0.33 |      |
| 7    | S63+0        | Bov   | 50.21                   | 367                 | 0.797                                  | 0.293         | 1.17  | 0.350             | 0.84 |      |
| 7    | S63+1899     | Ond   | -16.15                  | 367                 | 0.252                                  | 0.093         | 1.17  | 0.350             | 0.26 |      |

### Verloop hoofdwapening

Balk 9:9

| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd;begin}$<br>[mm] | $L_{bd;eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|------------------------|-----------------------|
| a    | Boven | 4x12     | S28-3370      | S63+3370    | 39240          | 120                    | 120                   |
| b    | Onder | 4x12     | S28-3370      | S63+3372    | 39242          | 120                    | 122                   |

Opmerkingen

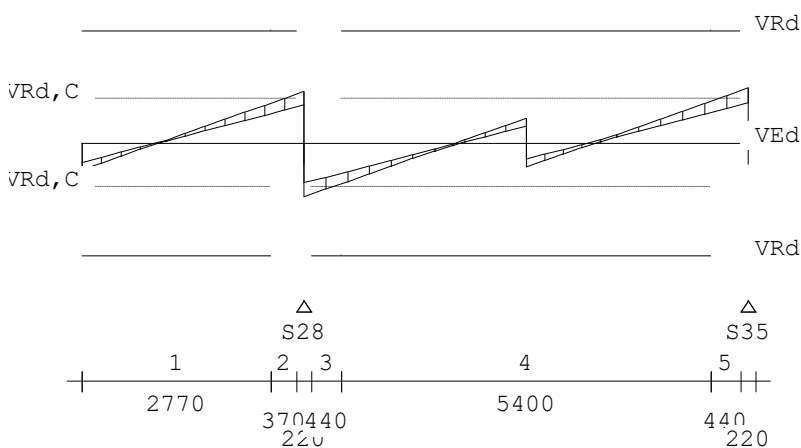
Alle maten zijn inclusief verschuiving van de m-lijn en verankering

### DWARSKRACHTEN

Fysisch lineair

Balk 9:9 Fundamentele combinatie

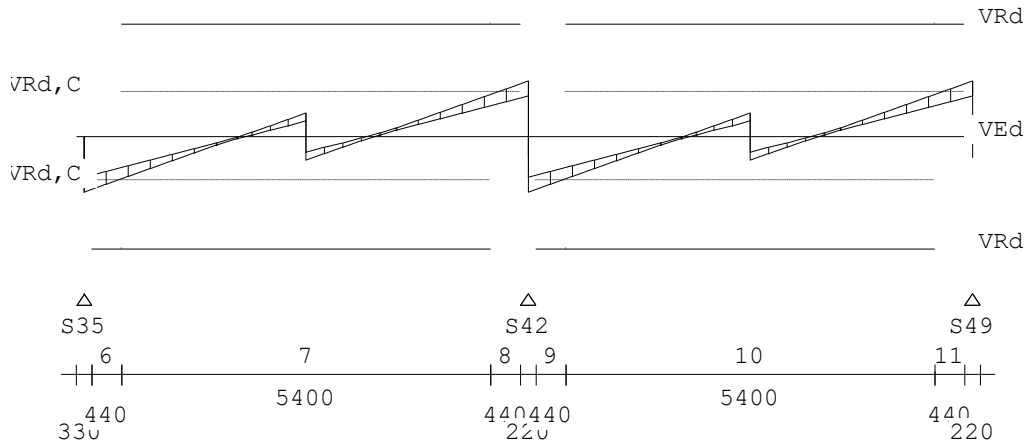
Velden: 1 t/m 2



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Onderdeel.....: Fundering

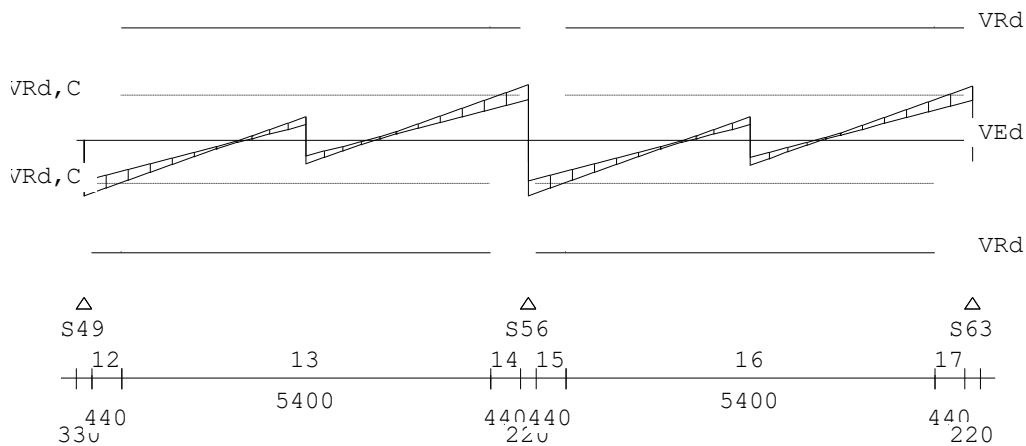
**DWARSKRACHTEN** Fysisch lineair Balk 9:9 Fundamentele combinatie

Velden: 3 t/m 4



**DWARSKRACHTEN** Fysisch lineair Balk 9:9 Fundamentele combinatie

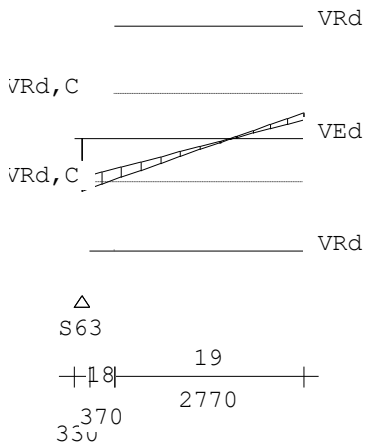
Velden: 5 t/m 6



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## DWARSKRACHTEN Fysisch lineair Balk 9:9 Fundamentele combinatie

Velden: 7 t/m 7



## Wring- en dwarskrachtwapening

Balk 9:9

| Geb. | Vanaf    | Tot      | Beugels | Lengte | <Wringing>             |                    | <Dwarskr.>         |                    | V <sub>Ed</sub> | T <sub>Ed</sub> | Opm. |
|------|----------|----------|---------|--------|------------------------|--------------------|--------------------|--------------------|-----------------|-----------------|------|
|      | [mm]     | [mm]     |         | [mm]   | A <sub>l a n g s</sub> | A <sub>b g l</sub> | A <sub>b g l</sub> | A <sub>o p g</sub> | [kN]            | [kNm]           |      |
| 1    | S28-3250 | S28-480  | Ø8-300  | 2770   | 0                      | 0                  | 286                | 0                  | 56.1            | 0               |      |
| 2    | S28-480  | S28-110  | Ø8-300  | 370    | 7                      | 1                  | 286                | 0                  | 68.5            | 0               | 6    |
| 3    | S28+110  | S28+550  | Ø8-300  | 440    | 7                      | 1                  | 286                | 0                  | 70.6            | 0               | 6    |
| 4    | S28+550  | S35-550  | Ø8-300  | 5400   | 0                      | 0                  | 286                | 0                  | 58.2            | 0               |      |
| 5    | S35-550  | S35-110  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.0            | 0               | 6    |
| 6    | S35+110  | S35+550  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.2            | 0               | 6    |
| 7    | S35+550  | S42-550  | Ø8-300  | 5400   | 0                      | 0                  | 286                | 0                  | 58.4            | 0               |      |
| 8    | S42-550  | S42-110  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.1            | 0               | 6    |
| 9    | S42+110  | S42+550  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.1            | 0               | 6    |
| 10   | S42+550  | S49-550  | Ø8-300  | 5400   | 0                      | 0                  | 286                | 0                  | 58.3            | 0               |      |
| 11   | S49-550  | S49-110  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.1            | 0               | 6    |
| 12   | S49+110  | S49+550  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.1            | 0               | 6    |
| 13   | S49+550  | S56-550  | Ø8-300  | 5400   | 0                      | 0                  | 286                | 0                  | 58.4            | 0               |      |
| 14   | S56-550  | S56-110  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.1            | 0               | 6    |
| 15   | S56+110  | S56+550  | Ø8-300  | 440    | 0                      | 0                  | 286                | 0                  | 73.0            | 0               | 6    |
| 16   | S56+550  | S63-550  | Ø8-300  | 5400   | 0                      | 0                  | 286                | 0                  | 58.2            | 0               |      |
| 17   | S63-550  | S63-110  | Ø8-300  | 440    | 7                      | 1                  | 286                | 0                  | 71.2            | 0               | 6    |
| 18   | S63+110  | S63+480  | Ø8-300  | 370    | 7                      | 1                  | 286                | 0                  | 69.3            | 0               | 6    |
| 19   | S63+480  | S63+3250 | Ø8-300  | 2770   | 0                      | 0                  | 286                | 0                  | 56.9            | 0               |      |

Opmerkingen

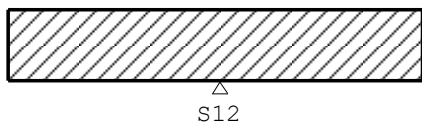
[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Hoofdwapening Fysisch lineair

Balk 10:10

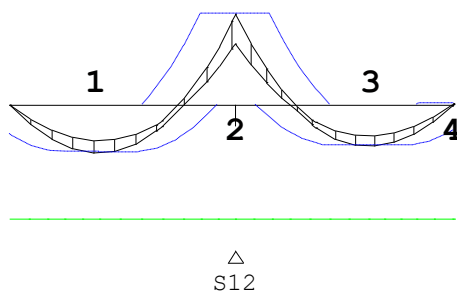
4x12 a



4x12 b

### MEd dekkingslijn Fysisch lineair

Balk 10:10



### Scheurvorming volgens artikel 7.3.4

Balk 10:10

| Geb. | Pos.<br>[mm] | Zijde | $M_E; freq$<br>[kNm] | $S_r, max$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. Opm. |
|------|--------------|-------|----------------------|--------------------|----------------------------------------|---------------|-------|-------------------|-----------|
| 1    | S12-281      | Bov   | 55.58                | 367                | 0.937                                  | 0.344         | 1.17  | 0.350             | 0.98      |
| 1    | S12-2496     | Ond   | -31.52               | 367                | 0.492                                  | 0.181         | 1.17  | 0.350             | 0.52      |
| 2    | S12+0        | Bov   | 55.58                | 367                | 0.937                                  | 0.344         | 1.17  | 0.350             | 0.98      |
| 2    | S12+1952     | Ond   | -27.17               | 367                | 0.424                                  | 0.156         | 1.17  | 0.350             | 0.44      |

### Verloop hoofdwapening

Balk 10:10

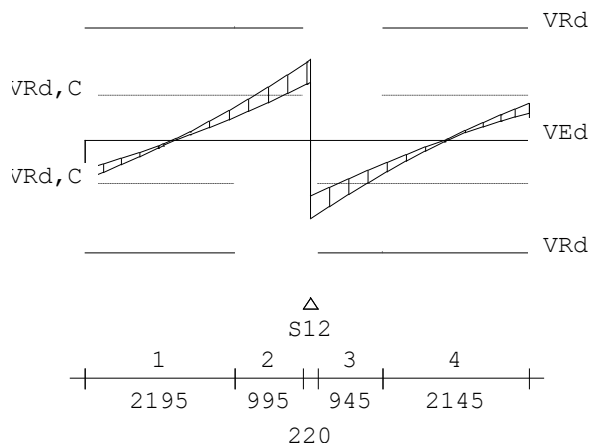
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd; begin}$<br>[mm] | $L_{bd; eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x12     | S12-3420      | S12+3320    | 6740           | 120                     | 120                    |
| b    | Onder | 4x12     | S12-3502      | S12+3376    | 6879           | 202                     | 176                    |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

## DWARSKRACHTEN Fysisch lineair Balk 10:10 Fundamentele combinatie



## Wring- en dwarskrachtwapening

Balk 10:10

| Geb. Vanaf | Tot      | Beugels  | Lengte | <Wringing>                               | <Dwarskr.>                               |                                        |                                 |                  |                   |      |
|------------|----------|----------|--------|------------------------------------------|------------------------------------------|----------------------------------------|---------------------------------|------------------|-------------------|------|
| [mm]       | [mm]     |          | [mm]   | $A_{l\text{angs}}$<br>[mm <sup>2</sup> ] | $A_{bg\text{l}}$<br>[mm <sup>2</sup> /m] | $A_{bg\text{l}}$<br>[mm <sup>2</sup> ] | $A_{opg}$<br>[mm <sup>2</sup> ] | $V_{Ed}$<br>[kN] | $T_{Ed}$<br>[kNm] | Opm. |
| 1          | S12-3300 | S12-1105 | Ø8-300 | 2195                                     | 0                                        | 0                                      | 286                             | 0                | 54.6              | 0    |
| 2          | S12-1105 | S12-110  | Ø8-300 | 995                                      | 6                                        | 1                                      | 286                             | 0                | 105.3             | 0 6  |
| 3          | S12+110  | S12+1055 | Ø8-300 | 945                                      | 6                                        | 1                                      | 286                             | 0                | 102.0             | 0 6  |
| 4          | S12+1055 | S12+3200 | Ø8-300 | 2145                                     | 0                                        | 0                                      | 286                             | 0                | 51.6              | 0    |

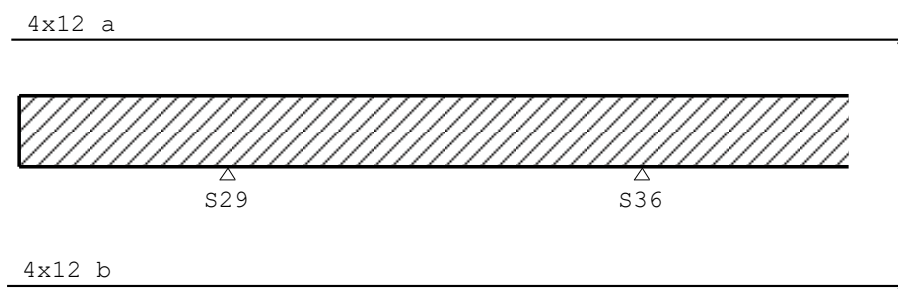
Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

## Hoofdwapening Fysisch lineair

Balk 11:11

Velden: 1 t/m 4

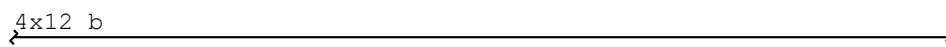
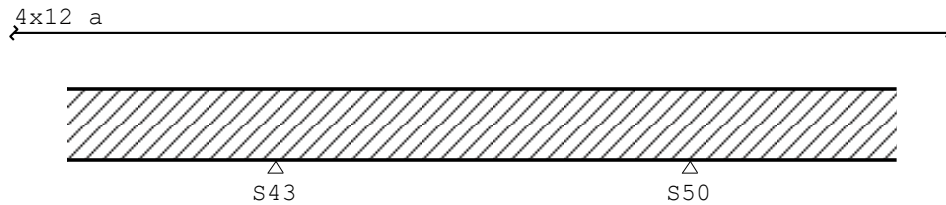


Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**Hoofdwapening** Fysisch lineair

Balk 11:11

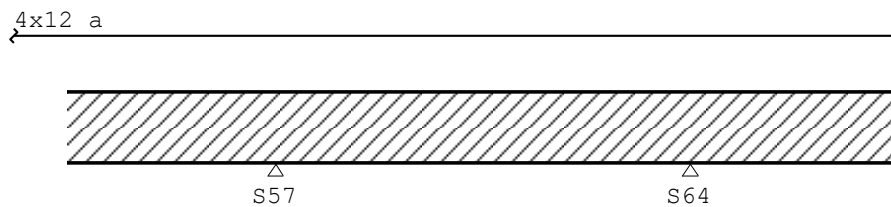
Velden: 5 t/m 8



**Hoofdwapening** Fysisch lineair

Balk 11:11

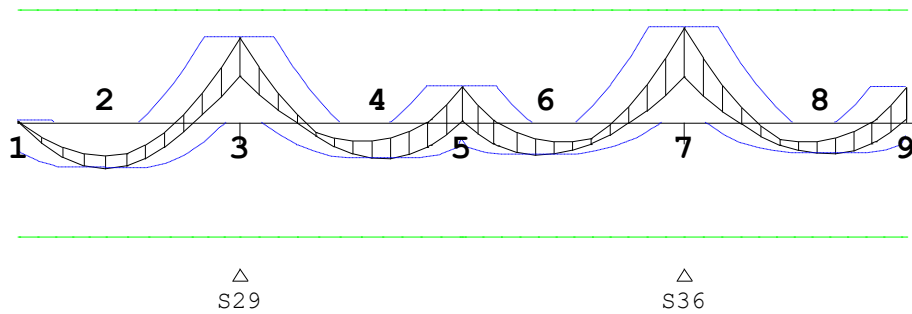
Velden: 9 t/m 12



**MEd dekkingslijn** Fysisch lineair

Balk 11:11

Velden: 1 t/m 4

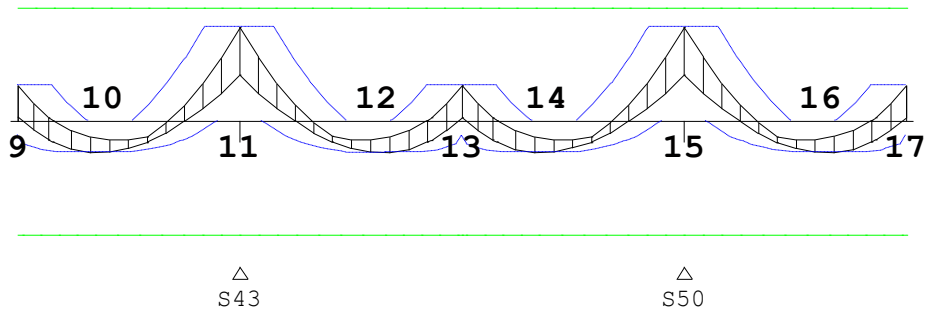


Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**MEd dekkingslijn** Fysisch lineair

Balk 11:11

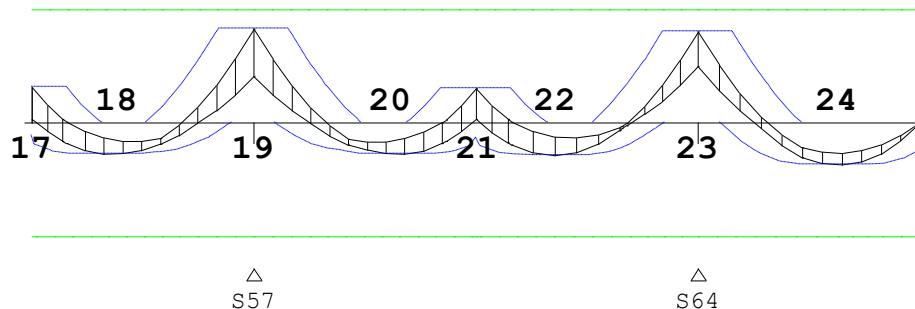
Velden: 5 t/m 8



**MEd dekkingslijn** Fysisch lineair

Balk 11:11

Velden: 9 t/m 12



**Scheurvorming volgens artikel 7.3.4**

Balk 11:11

| Geb. | Pos.     | Zijde | $M_{E, freq}$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|----------|-------|------------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S29-319  | Bov   | 43.62                  | 367                  | 0.681                                  | 0.250         | 1.17  | 0.350             | 0.71 |      |
| 1    | S29-1964 | Ond   | -29.60                 | 367                  | 0.462                                  | 0.170         | 1.17  | 0.350             | 0.48 |      |
| 2    | S29+0    | Bov   | 43.62                  | 367                  | 0.681                                  | 0.250         | 1.17  | 0.350             | 0.71 |      |
| 2    | S29+1774 | Ond   | -16.60                 | 367                  | 0.259                                  | 0.095         | 1.17  | 0.350             | 0.27 |      |
| 3    | S36-267  | Bov   | 42.71                  | 367                  | 0.666                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 3    | S36-1351 | Ond   | -16.88                 | 367                  | 0.263                                  | 0.097         | 1.17  | 0.350             | 0.28 |      |
| 4    | S36+0    | Bov   | 42.71                  | 367                  | 0.666                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 4    | S36+1345 | Ond   | -17.04                 | 367                  | 0.266                                  | 0.098         | 1.17  | 0.350             | 0.28 |      |
| 5    | S43-265  | Bov   | 42.82                  | 367                  | 0.668                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 5    | S43-1796 | Ond   | -17.09                 | 367                  | 0.267                                  | 0.098         | 1.17  | 0.350             | 0.28 |      |
| 6    | S43+0    | Bov   | 42.82                  | 367                  | 0.668                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 6    | S43+1798 | Ond   | -17.09                 | 367                  | 0.267                                  | 0.098         | 1.17  | 0.350             | 0.28 |      |
| 7    | S50-265  | Bov   | 42.81                  | 367                  | 0.668                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 7    | S50-1799 | Ond   | -17.10                 | 367                  | 0.267                                  | 0.098         | 1.17  | 0.350             | 0.28 |      |
| 8    | S50+0    | Bov   | 42.81                  | 367                  | 0.668                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 8    | S50+1798 | Ond   | -17.08                 | 367                  | 0.266                                  | 0.098         | 1.17  | 0.350             | 0.28 |      |
| 9    | S57-266  | Bov   | 42.69                  | 367                  | 0.666                                  | 0.245         | 1.17  | 0.350             | 0.70 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Scheurvorming volgens artikel 7.3.4

Balk 11:11

| Geb. | Pos.<br>[mm] | Zijde | $M_{E,freq}$<br>[kNm] | $S_{r,max}$<br>[mm] | $\epsilon_{sm}-\epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|-----------------------|---------------------|--------------------------------------|---------------|-------|-------------------|------|------|
| 9    | S57-1343     | Ond   | -17.05                | 367                 | 0.266                                | 0.098         | 1.17  | 0.350             | 0.28 |      |
| 10   | S57+0        | Bov   | 42.69                 | 367                 | 0.666                                | 0.245         | 1.17  | 0.350             | 0.70 |      |
| 10   | S57+1340     | Ond   | -17.56                | 367                 | 0.274                                | 0.101         | 1.17  | 0.350             | 0.29 |      |
| 11   | S64-257      | Bov   | 51.54                 | 367                 | 0.832                                | 0.305         | 1.17  | 0.350             | 0.87 |      |
| 11   | S64-1830     | Ond   | -13.74                | 367                 | 0.214                                | 0.079         | 1.17  | 0.350             | 0.22 |      |
| 12   | S64+0        | Bov   | 51.54                 | 367                 | 0.832                                | 0.305         | 1.17  | 0.350             | 0.87 |      |
| 12   | S64+2040     | Ond   | -27.47                | 367                 | 0.429                                | 0.157         | 1.17  | 0.350             | 0.45 |      |

### Verloop hoofdwapening

Balk 11:11

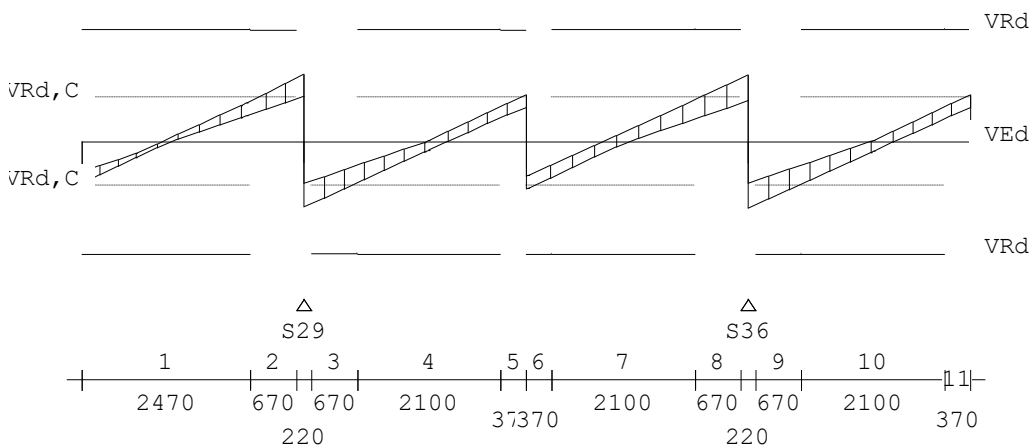
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd,begin}$<br>[mm] | $L_{bd,eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|------------------------|-----------------------|
| a    | Boven | 4x12     | S29-3370      | S64+3370    | 39240          | 120                    | 120                   |
| b    | Onder | 4x12     | S29-3441      | S64+3441    | 39382          | 191                    | 191                   |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

### DWARSKRACHTEN Fysisch lineair Balk 11:11 Fundamentele combinatie

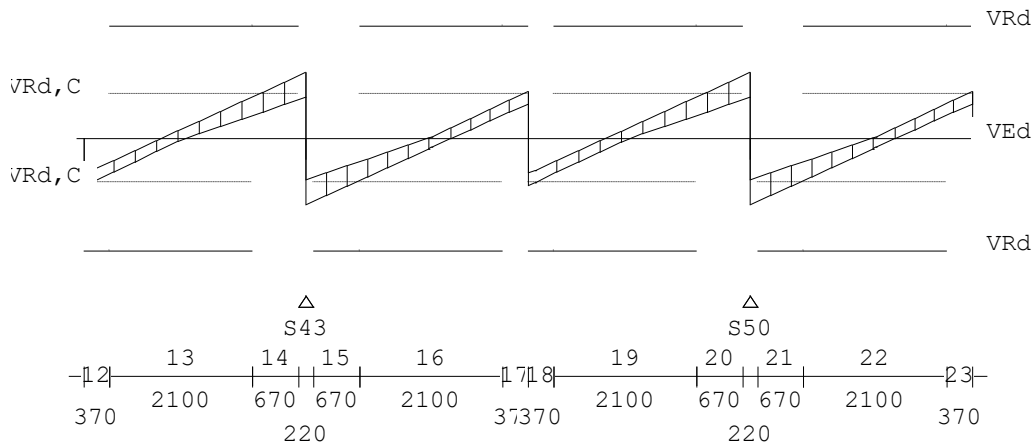
Velden: 1 t/m 4



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

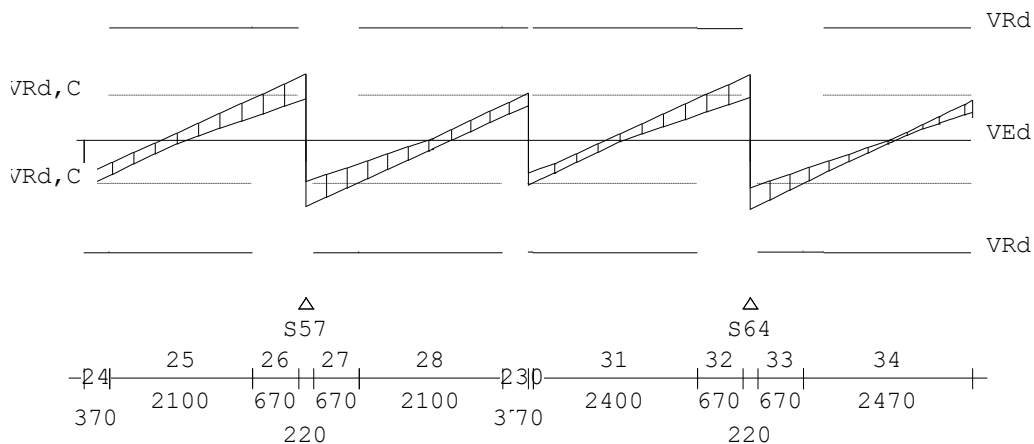
## DWARSKRACHTEN Fysisch lineair Balk 11:11 Fundamentele combinatie

Velden: 5 t/m 8



## DWARSKRACHTEN Fysisch lineair Balk 11:11 Fundamentele combinatie

Velden: 9 t/m 12



## Wring- en dwarskrachtwapening

Balk 11:11

| Geb. | Vanaf    | Tot      | Beugels | Lengte | <Wringing> <Dwarskr.> |                      |                    |           |          |          |
|------|----------|----------|---------|--------|-----------------------|----------------------|--------------------|-----------|----------|----------|
|      | [mm]     | [mm]     |         | [mm]   | $A_{lang}$            | $A_{bg1}$            | $A_{bg1}$          | $A_{opg}$ | $V_{Ed}$ | $T_{Ed}$ |
|      |          |          |         |        | [mm <sup>2</sup> ]    | [mm <sup>2</sup> /m] | [mm <sup>2</sup> ] |           | [kN]     | [kNm]    |
| 1    | S29-3250 | S29-780  | Ø8-300  | 2470   | 0                     | 0                    | 286                | 0         | 57.9     | 1        |
| 2    | S29-780  | S29-110  | Ø8-300  | 670    | 20                    | 2                    | 286                | 0         | 88.4     | 1 6      |
| 3    | S29+110  | S29+780  | Ø8-300  | 670    | 20                    | 2                    | 286                | 0         | 85.6     | 1 6      |
| 4    | S29+780  | S29+2880 | Ø8-300  | 2100   | 0                     | 0                    | 286                | 0         | 56.6     | 1        |

Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Wring- en dwarskrachtwapening

Balk 11:11

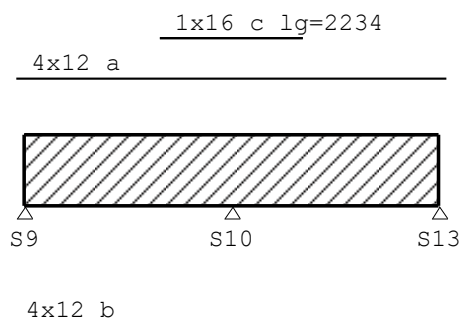
| Geb. | Vanaf    | Tot      | Beugels | Lengte | <Wringing >                                  |                                            |                    |                                          | <Dwarskr.>               |                           |      |  |
|------|----------|----------|---------|--------|----------------------------------------------|--------------------------------------------|--------------------|------------------------------------------|--------------------------|---------------------------|------|--|
|      | [mm]     | [mm]     |         | [mm]   | A <sub>l a n g s</sub><br>[mm <sup>2</sup> ] | A <sub>b g l</sub><br>[mm <sup>2</sup> /m] | A <sub>b g l</sub> | A <sub>o p g</sub><br>[mm <sup>2</sup> ] | V <sub>E d</sub><br>[kN] | T <sub>E d</sub><br>[kNm] | Opm. |  |
| 5    | S29+2880 | S29+3250 | Ø8-300  | 370    | 20                                           | 2                                          | 286                | 0                                        | 65.7                     | 1                         | 6    |  |
| 6    | S29+3250 | S36-2880 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.7                     | 1                         | 6    |  |
| 7    | S36-2880 | S36-780  | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.9                     | 0                         |      |  |
| 8    | S36-780  | S36-110  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.9                     | 0                         | 6    |  |
| 9    | S36+110  | S36+780  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.4                     | 0                         | 6    |  |
| 10   | S36+780  | S36+2880 | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.4                     | 0                         |      |  |
| 11   | S36+2880 | S36+3250 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.6                     | 0                         | 6    |  |
| 12   | S36+3250 | S43-2880 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.5                     | 0                         | 6    |  |
| 13   | S43-2880 | S43-780  | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.0                     | 0                         |      |  |
| 14   | S43-780  | S43-110  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.0                     | 0                         | 6    |  |
| 15   | S43+110  | S43+780  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.1                     | 0                         | 6    |  |
| 16   | S43+780  | S43+2880 | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.1                     | 0                         |      |  |
| 17   | S43+2880 | S43+3250 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.5                     | 0                         | 6    |  |
| 18   | S43+3250 | S50-2880 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.5                     | 0                         | 6    |  |
| 19   | S50-2880 | S50-780  | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.1                     | 0                         |      |  |
| 20   | S50-780  | S50-110  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.2                     | 0                         | 6    |  |
| 21   | S50+110  | S50+780  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.1                     | 0                         | 6    |  |
| 22   | S50+780  | S50+2880 | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.1                     | 0                         |      |  |
| 23   | S50+2880 | S50+3250 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.5                     | 0                         | 6    |  |
| 24   | S50+3250 | S57-2880 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.6                     | 0                         | 6    |  |
| 25   | S57-2880 | S57-780  | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.2                     | 0                         |      |  |
| 26   | S57-780  | S57-110  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.2                     | 0                         | 6    |  |
| 27   | S57+110  | S57+780  | Ø8-300  | 670    | 0                                            | 0                                          | 286                | 0                                        | 87.3                     | 0                         | 6    |  |
| 28   | S57+780  | S57+2880 | Ø8-300  | 2100   | 0                                            | 0                                          | 286                | 0                                        | 58.2                     | 0                         |      |  |
| 29   | S57+2880 | S57+3250 | Ø8-300  | 370    | 0                                            | 0                                          | 286                | 0                                        | 65.3                     | 0                         | 6    |  |
| 30   | S57+3250 | S64-3180 | Ø8-300  | 70     | 25                                           | 3                                          | 286                | 0                                        | 62.4                     | 1                         | 6    |  |
| 31   | S64-3180 | S64-780  | Ø8-300  | 2400   | 0                                            | 0                                          | 286                | 0                                        | 59.2                     | 1                         |      |  |
| 32   | S64-780  | S64-110  | Ø8-300  | 670    | 25                                           | 3                                          | 286                | 0                                        | 86.6                     | 1                         | 6    |  |
| 33   | S64+110  | S64+780  | Ø8-300  | 670    | 25                                           | 3                                          | 286                | 0                                        | 91.3                     | 1                         | 6    |  |
| 34   | S64+780  | S64+3250 | Ø8-300  | 2470   | 25                                           | 3                                          | 286                | 0                                        | 60.0                     | 1                         |      |  |

Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

### Hoofdwapening Fysisch lineair

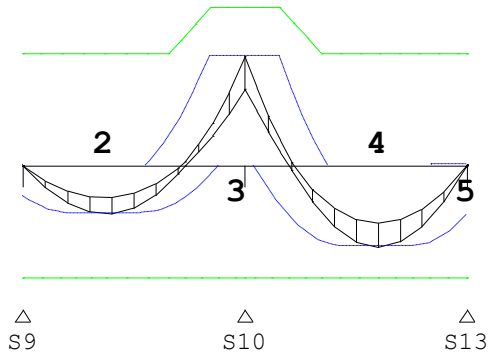
Balk 12:12



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

**MEd dekkingslijn** Fysisch lineair

Balk 12:12



**Scheurvorming volgens artikel 7.3.4**

Balk 12:12

| Geb. | Pos.<br>[mm] | Zijde | $M_{E, freq}$<br>[kNm] | $S_{r, max}$<br>[mm] | $\epsilon_{sm} - \epsilon_{cm}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{max}$<br>[mm] | U.C. | Opm. |
|------|--------------|-------|------------------------|----------------------|----------------------------------------|---------------|-------|-------------------|------|------|
| 1    | S10-507      | Bov   | 71.74                  | 314                  | 0.943                                  | 0.296         | 1.17  | 0.350             | 0.85 |      |
| 1    | S9+1219      | Ond   | -31.37                 | 367                  | 0.489                                  | 0.180         | 1.17  | 0.350             | 0.51 |      |
| 2    | S10+0        | Bov   | 71.74                  | 314                  | 0.943                                  | 0.296         | 1.17  | 0.350             | 0.85 |      |
| 2    | S13-1304     | Ond   | -52.38                 | 367                  | 0.854                                  | 0.313         | 1.17  | 0.350             | 0.90 |      |

**Verloop hoofdwapening**

Balk 12:12

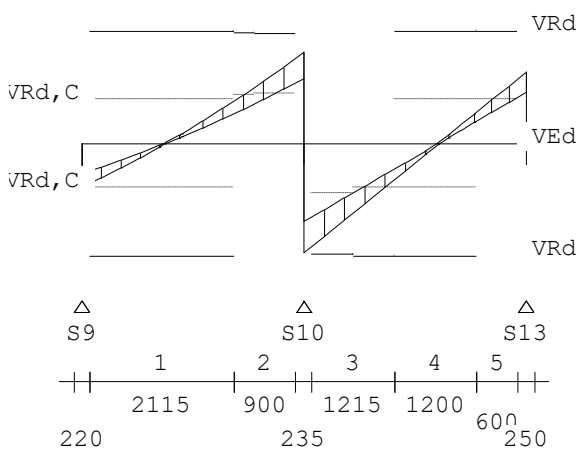
| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x12     | S9-120        | S13+120     | 6740           | 120                     | 120                    |
| c    | Boven | 1x16     | S10-1117      | S10+1117    | 2234           | 609                     | 609                    |
| b    | Onder | 4x12     | S9-213        | S13+339     | 7053           | 213                     | 339                    |

Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

**DWARSKRACHTEN** Fysisch lineair

Balk 12:12 Fundamentele combinatie



Project.....: 2021-032 - Koperslagerij te Vlissingen  
Onderdeel.....: Fundering

### Wring- en dwarskrachtwapening

Balk 12:12

| Geb. | Vanaf    | Tot      | Beugels | Lengte | <Wringing>             | <Dwarskr.>           |                    |                    |                  |                  |      |
|------|----------|----------|---------|--------|------------------------|----------------------|--------------------|--------------------|------------------|------------------|------|
|      |          |          |         |        | A <sub>l a n g s</sub> | A <sub>b g l</sub>   | A <sub>b g l</sub> | A <sub>o p g</sub> | V <sub>E d</sub> | T <sub>E d</sub> | Opm. |
|      | [mm]     | [mm]     |         | [mm]   | [mm <sup>2</sup> ]     | [mm <sup>2</sup> /m] | [mm <sup>2</sup> ] |                    | [kN]             | [kNm]            |      |
| 1    | S9+110   | S10-1025 | Ø8-300  | 2115   | 0                      | 0                    | 286                | 0                  | 59.0             | 0                |      |
| 2    | S10-1025 | S10-125  | Ø8-300  | 900    | 0                      | 0                    | 286                | 0                  | 119.0            | 0                | 6    |
| 3    | S10+110  | S10+1325 | Ø8-300  | 1215   | 0                      | 0                    | 312                | 0                  | 143.2            | 0                | 6    |
| 4    | S10+1325 | S13-725  | Ø8-300  | 1200   | 0                      | 0                    | 286                | 0                  | 49.2             | 0                |      |
| 5    | S13-725  | S13-125  | Ø8-300  | 600    | 0                      | 0                    | 286                | 0                  | 90.2             | 0                | 6    |

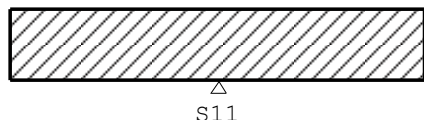
Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

### Hoofdwapening Fysisch lineair

Balk 13:13

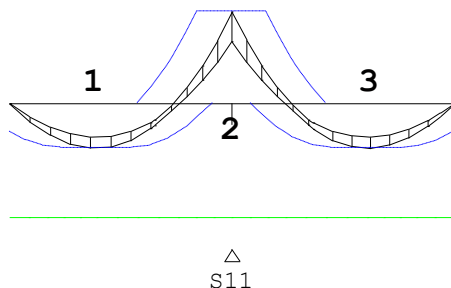
4x12 a



4x12 b

### MEd dekkingslijn Fysisch lineair

Balk 13:13



### Scheurvorming volgens artikel 7.3.4

Balk 13:13

| Geb. | Pos.     | Zijde | $M_{E, f r e q}$<br>[kNm] | $S_{r, m a x}$<br>[mm] | $\epsilon_{s m} - \epsilon_{c m}$<br>[%] | $w_k$<br>[mm] | $k_x$ | $w_{m a x}$<br>[mm] | U.C. | Opm. |
|------|----------|-------|---------------------------|------------------------|------------------------------------------|---------------|-------|---------------------|------|------|
| 1    | S11-289  | Bov   | 55.89                     | 367                    | 0.945                                    | 0.347         | 1.17  | 0.350               | 0.99 |      |
| 1    | S11-1981 | Ond   | -29.61                    | 367                    | 0.462                                    | 0.170         | 1.17  | 0.350               | 0.48 |      |
| 2    | S11+0    | Bov   | 55.89                     | 367                    | 0.945                                    | 0.347         | 1.17  | 0.350               | 0.99 |      |
| 2    | S11+1981 | Ond   | -29.62                    | 367                    | 0.462                                    | 0.170         | 1.17  | 0.350               | 0.48 |      |

Project.....: 2021-032 - Koperslagerij te Vlissingen

Onderdeel.....: Fundering

### Verloop hoofdwapening

Balk 13:13

| Merk | B/O   | Wapening | Vanaf<br>[mm] | Tot<br>[mm] | Lengte<br>[mm] | $L_{bd, begin}$<br>[mm] | $L_{bd, eind}$<br>[mm] |
|------|-------|----------|---------------|-------------|----------------|-------------------------|------------------------|
| a    | Boven | 4x12     | S11-3370      | S11+3370    | 6740           | 120                     | 120                    |
| b    | Onder | 4x12     | S11-3445      | S11+3445    | 6889           | 195                     | 195                    |

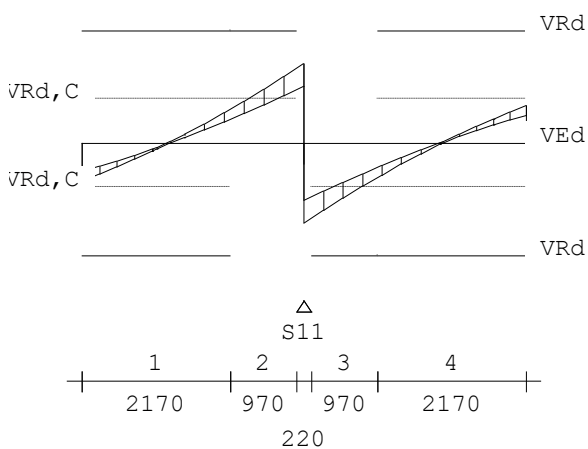
Opmerkingen

Alle maten zijn inclusief verschuiving van de m-lijn en verankering

### DWARSKRACHTEN

Fysisch lineair

Balk 13:13 Fundamentele combinatie



### Wring- en dwarskrachtwapening

Balk 13:13

| Geb. | Vanaf<br>[mm] | Tot<br>[mm] | Beugels | Lengte<br>[mm] | <Wringing>                       |                                   | <Dwarskr.>                      |                                 | $V_{Ed}$<br>[kN] | $T_{Ed}$<br>[kNm] | Opm. |
|------|---------------|-------------|---------|----------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------------|-------------------|------|
|      |               |             |         |                | $A_{lang}$<br>[mm <sup>2</sup> ] | $A_{bg1}$<br>[mm <sup>2</sup> /m] | $A_{bg1}$<br>[mm <sup>2</sup> ] | $A_{opg}$<br>[mm <sup>2</sup> ] |                  |                   |      |
| 1    | S11-3250      | S11-1080    | Ø8-300  | 2170           | 0                                | 0                                 | 286                             | 0                               | 52.7             | 0                 |      |
| 2    | S11-1080      | S11-110     | Ø8-300  | 970            | 5                                | 1                                 | 286                             | 0                               | 104.0            | 0                 | 6    |
| 3    | S11+110       | S11+1080    | Ø8-300  | 970            | 5                                | 1                                 | 286                             | 0                               | 104.1            | 0                 | 6    |
| 4    | S11+1080      | S11+3250    | Ø8-300  | 2170           | 0                                | 0                                 | 286                             | 0                               | 52.7             | 0                 |      |

Opmerkingen

[6] 9.2.2 (4) 50% van de dwarskrachtwapening moet uit beugels bestaan.

**Bijlage 5 TS: Paal draagvermogen**  
**Technosoft Paalfunderingen release 6.16a**

13 jul 2021

**ALGEMENE GEGEVENS**

Project : 2021-032 Koperslagerij  
 Onderdeel : Paal draagvermogen  
 Datum : 28-06-2021  
 Bestand : C:\Users\OlivierEshuisGoesEng\OneDrive - Goes Engineers BV\Goes Engineers\D. Project administratie\2021\2021-032 Koperslagerij te Vlissingen\Berekeningen\Blok 1\2021-032\_TS\_Paal draagvermogen.pvw  
 Berekeningstype : Verticaal belaste paal  
 Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

**Toegepaste normen volgens Eurocode met Nederlandse NB**

|             |                    |            |         |
|-------------|--------------------|------------|---------|
| Geotechniek | EN 1997-1:2004     | AC:2009    |         |
|             | NEN-EN 1997-1:2005 | C1+A1:2013 | NB:2016 |
|             | NEN 9997-1:2016    | C2:2017    |         |

**GRONDSOORTEN**

| Nr. Omschrijving                  | $\gamma_{k;1}$<br>[kN/m <sup>3</sup> ] | $\gamma_{sat;k;1}$<br>[kN/m <sup>3</sup> ] | $\phi'_{k;1}$<br>[°] | $\gamma_{k;2}$<br>[kN/m <sup>3</sup> ] | $\gamma_{sat;k;2}$<br>[kN/m <sup>3</sup> ] | $\phi'_{k;2}$<br>[°] |
|-----------------------------------|----------------------------------------|--------------------------------------------|----------------------|----------------------------------------|--------------------------------------------|----------------------|
| 1 Grind - Zwak siltig - Vast      | 19.00                                  | 21.00                                      | 37.50                | 20.00                                  | 22.00                                      | 40.00                |
| 2 Zand - Schoon - Vast            | 19.00                                  | 21.00                                      | 35.00                | 20.00                                  | 22.00                                      | 40.00                |
| 3 Zand - Sterk siltig - Kleiig    | 18.00                                  | 20.00                                      | 25.00                | 19.00                                  | 21.00                                      | 30.00                |
| 4 Klei - Zwak zandig - Vast       | 20.00                                  | 20.00                                      | 22.50                | 21.00                                  | 21.00                                      | 27.50                |
| 5 Klei - Organisch - Matig        | 15.00                                  | 15.00                                      | 15.00                | 16.00                                  | 16.00                                      | 15.00                |
| 6 Veen - Matig voorbelast - Matig | 12.00                                  | 12.00                                      | 15.00                | 13.00                                  | 13.00                                      | 15.00                |

**BODEMPROFIELGEGEVENS: 2**

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.72 Grondwaterstand [m] : 2.72

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | d <sub>50</sub><br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|-------------------------|
| 1    | 3.72       | 3.57       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                         |
| 2    | 3.57       | 3.37       | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                         |
| 3    | 3.37       | 3.17       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |
| 4    | 3.17       | 2.97       | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                         |
| 5    | 2.97       | 2.47       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |
| 6    | 2.47       | 2.27       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                         |
| 7    | 2.27       | 2.07       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |
| 8    | 2.07       | 1.47       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                         |
| 9    | 1.47       | 1.27       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                         |
| 10   | 1.27       | -1.13      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                         |
| 11   | -1.13      | -1.43      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                         |
| 12   | -1.43      | -1.93      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |
| 13   | -1.93      | -2.22      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                         |
| 14   | -2.22      | -2.42      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |
| 15   | -2.42      | -3.42      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                         |
| 16   | -3.42      | -3.62      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |
| 17   | -3.62      | -3.82      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                         |
| 18   | -3.82      | -8.00      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                         |
| 19   | -8.00      | -8.20      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                         |
| 20   | -8.20      | -8.40      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                         |
| 21   | -8.40      | -9.02      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                         |

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 22   | -9.02      | -9.32      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 23   | -9.32      | -12.40     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 24   | -12.40     | -12.60     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 25   | -12.60     | -14.00     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 26   | -14.00     | -14.13     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

### BODEMPROFIELGEGEVENS: 3

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.74 Grondwaterstand [m] : 2.74

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.74       | 3.59       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 2    | 3.59       | 2.19       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 3    | 2.19       | 1.99       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 4    | 1.99       | -0.91      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 5    | -0.91      | -1.21      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 6    | -1.21      | -1.51      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 7    | -1.51      | -2.11      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 8    | -2.11      | -2.31      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 9    | -2.31      | -3.21      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 10   | -3.21      | -3.41      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 11   | -3.41      | -3.61      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 12   | -3.61      | -5.61      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 13   | -5.61      | -6.80      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 14   | -6.80      | -7.00      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 15   | -7.00      | -8.60      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 16   | -8.60      | -9.51      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 17   | -9.51      | -9.72      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 18   | -9.72      | -11.62     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 19   | -11.62     | -11.82     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 20   | -11.82     | -12.32     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 21   | -12.32     | -12.52     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 22   | -12.52     | -15.01     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 23   | -15.01     | -15.41     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 24   | -15.41     | -15.61     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 25   | -15.61     | -15.81     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 26   | -15.81     | -16.22     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 27   | -16.22     | -16.43     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 28   | -16.43     | -16.64     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 29   | -16.64     | -17.24     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 30   | -17.24     | -17.44     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 31   | -17.44     | -17.76     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 32   | -17.76     | -17.98     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 33   | -17.98     | -18.38     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 34   | -18.38     | -18.98     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 35   | -18.98     | -19.18     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 36   | -19.18     | -19.38     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 37   | -19.38     | -19.59     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 38   | -19.59     | -20.10     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 39   | -20.10     | -20.32     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 40   | -20.32     | -20.83     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 41   | -20.83     | -21.04     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 42   | -21.04     | -21.26     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 43   | -21.26     | -21.42     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

#### **BODEMPROFIELGEGEVENS : 4**

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.65 Grondwaterstand [m] : 2.65

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.65       | 3.50       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 2    | 3.50       | 3.00       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 3    | 3.00       | 2.60       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 4    | 2.60       | 2.40       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 5    | 2.40       | 2.10       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 6    | 2.10       | 1.20       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 7    | 1.20       | 1.00       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 8    | 1.00       | -1.10      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 9    | -1.10      | -1.30      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 10   | -1.30      | -1.50      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 11   | -1.50      | -1.90      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 12   | -1.90      | -2.40      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 13   | -2.40      | -3.30      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 14   | -3.30      | -3.90      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 15   | -3.90      | -4.10      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 16   | -4.10      | -4.40      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 17   | -4.40      | -4.60      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 18   | -4.60      | -6.50      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 19   | -6.50      | -6.70      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 20   | -6.70      | -8.60      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 21   | -8.60      | -8.80      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 22   | -8.80      | -9.50      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 23   | -9.50      | -9.79      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 24   | -9.79      | -15.28     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 25   | -15.28     | -15.48     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 26   | -15.48     | -15.68     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 27   | -15.68     | -15.98     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 28   | -15.98     | -16.18     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 29   | -16.18     | -16.38     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 30   | -16.38     | -16.58     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 31   | -16.58     | -16.78     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 32   | -16.78     | -18.67     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 33   | -18.67     | -18.87     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 34   | -18.87     | -19.16     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 35   | -19.16     | -19.36     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 36   | -19.36     | -20.38     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 37   | -20.38     | -20.68     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 38   | -20.68     | -20.87     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 39   | -20.87     | -21.20     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 40   | -21.20     | -21.41     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 41   | -21.41     | -21.70     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

## BODEMPROFIELGEGEVENS : 5

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.79 Grondwaterstand [m] : 2.79

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.79       | 3.64       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 2    | 3.64       | 2.44       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 3    | 2.44       | 2.24       | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 4    | 2.24       | 0.54       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 5    | 0.54       | 0.24       | Grind - Zwak siltig - Vast   | 1.0 | 0.0                       |            |                  |
| 6    | 0.24       | -0.86      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 7    | -0.86      | -1.16      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 8    | -1.16      | -1.76      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 9    | -1.76      | -2.16      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 10   | -2.16      | -2.36      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 11   | -2.36      | -3.16      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 12   | -3.16      | -3.36      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 13   | -3.36      | -3.56      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 14   | -3.56      | -4.36      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 15   | -4.36      | -8.46      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 16   | -8.46      | -8.66      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 17   | -8.66      | -9.55      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 18   | -9.55      | -9.75      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 19   | -9.75      | -12.05     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 20   | -12.05     | -12.25     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 21   | -12.25     | -15.06     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 22   | -15.06     | -15.26     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 23   | -15.26     | -15.46     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 24   | -15.46     | -15.66     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 25   | -15.66     | -15.86     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 26   | -15.86     | -16.06     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 27   | -16.06     | -16.26     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 28   | -16.26     | -16.46     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 29   | -16.46     | -16.66     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 30   | -16.66     | -17.05     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 31   | -17.05     | -17.25     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 32   | -17.25     | -17.45     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 33   | -17.45     | -17.95     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 34   | -17.95     | -18.27     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 35   | -18.27     | -18.47     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 36   | -18.47     | -18.66     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 37   | -18.66     | -19.26     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 38   | -19.26     | -19.66     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 39   | -19.66     | -19.96     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 40   | -19.96     | -20.15     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 41   | -20.15     | -20.67     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 42   | -20.67     | -20.99     | Grind - Zwak siltig - Vast   | 1.0 | 0.0                       |            |                  |
| 43   | -20.99     | -21.21     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 44   | -21.21     | -21.37     | Grind - Zwak siltig - Vast   | 1.0 | 0.0                       |            |                  |

### **BODEMPROFIELGEGEVENS : 6**

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.62 Grondwaterstand [m] : 2.62

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.62       | 3.47       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 2    | 3.47       | 2.47       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 3    | 2.47       | 2.07       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 4    | 2.07       | -1.23      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 5    | -1.23      | -1.43      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 6    | -1.43      | -1.63      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 7    | -1.63      | -1.83      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 8    | -1.83      | -2.43      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 9    | -2.43      | -3.33      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 10   | -3.33      | -3.83      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 11   | -3.83      | -4.03      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 12   | -4.03      | -4.22      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 13   | -4.22      | -4.72      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 14   | -4.72      | -4.92      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 15   | -4.92      | -5.12      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 16   | -5.12      | -9.02      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 17   | -9.02      | -9.21      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 18   | -9.21      | -9.41      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 19   | -9.41      | -9.61      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 20   | -9.61      | -12.05     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 21   | -12.05     | -12.24     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 22   | -12.24     | -14.85     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 23   | -14.85     | -15.65     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 24   | -15.65     | -15.95     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 25   | -15.95     | -16.25     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 26   | -16.25     | -16.45     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 27   | -16.45     | -16.64     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 28   | -16.64     | -17.06     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 29   | -17.06     | -17.28     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 30   | -17.28     | -17.48     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 31   | -17.48     | -17.68     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 32   | -17.68     | -17.88     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 33   | -17.88     | -18.64     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 34   | -18.64     | -18.97     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 35   | -18.97     | -19.39     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 36   | -19.39     | -19.61     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 37   | -19.61     | -19.84     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 38   | -19.84     | -20.03     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 39   | -20.03     | -21.06     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 40   | -21.06     | -21.49     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

### **BODEMPROFIELGEGEVENS : 7**

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.71 Grondwaterstand [m] : 2.71

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.71       | 3.56       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 2    | 3.56       | 3.36       | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 3    | 3.36       | 3.16       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 4    | 3.16       | 2.96       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 5    | 2.96       | 2.56       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 6    | 2.56       | 2.26       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 7    | 2.26       | 2.06       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 8    | 2.06       | -1.04      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 9    | -1.04      | -1.34      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 10   | -1.34      | -1.74      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 11   | -1.74      | -2.24      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 12   | -2.24      | -2.44      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 13   | -2.44      | -3.34      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 14   | -3.34      | -3.64      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 15   | -3.64      | -4.13      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 16   | -4.13      | -4.43      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 17   | -4.43      | -4.63      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 18   | -4.63      | -4.93      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 19   | -4.93      | -5.13      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 20   | -5.13      | -8.32      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 21   | -8.32      | -8.62      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 22   | -8.62      | -8.82      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 23   | -8.82      | -9.02      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 24   | -9.02      | -10.72     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 25   | -10.72     | -10.93     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 26   | -10.93     | -11.43     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 27   | -11.43     | -11.63     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 28   | -11.63     | -14.71     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 29   | -14.71     | -14.84     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

## BODEMPROFIELGEGEVENS : 8

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.77 Grondwaterstand [m] : 2.77

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.77       | 3.62       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 2    | 3.62       | 3.32       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 3    | 3.32       | 3.12       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 4    | 3.12       | 2.92       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 5    | 2.92       | 2.42       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 6    | 2.42       | 2.22       | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 7    | 2.22       | 0.92       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 8    | 0.92       | 0.72       | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 9    | 0.72       | -0.88      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 10   | -0.88      | -1.08      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 11   | -1.08      | -1.28      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 12   | -1.28      | -1.68      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 13   | -1.68      | -1.88      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 14   | -1.88      | -2.18      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 15   | -2.18      | -2.38      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 16   | -2.38      | -3.28      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 17   | -3.28      | -3.48      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 18   | -3.48      | -4.68      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 19   | -4.68      | -4.88      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 20   | -4.88      | -5.08      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 21   | -5.08      | -8.18      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 22   | -8.18      | -8.38      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 23   | -8.38      | -11.87     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 24   | -11.87     | -12.07     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 25   | -12.07     | -12.28     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 26   | -12.28     | -12.49     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 27   | -12.49     | -15.29     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 28   | -15.29     | -15.48     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 29   | -15.48     | -15.68     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 30   | -15.68     | -15.88     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 31   | -15.88     | -16.08     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 32   | -16.08     | -16.28     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 33   | -16.28     | -16.48     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 34   | -16.48     | -16.68     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 35   | -16.68     | -17.18     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 36   | -17.18     | -18.97     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 37   | -18.97     | -19.47     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 38   | -19.47     | -19.97     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 39   | -19.97     | -20.26     | Grind - Zwak siltig - Vast   | 1.0 | 0.0                       |            |                  |
| 40   | -20.26     | -20.66     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 41   | -20.66     | -20.86     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 42   | -20.86     | -21.06     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 43   | -21.06     | -21.47     | Grind - Zwak siltig - Vast   | 1.0 | 0.0                       |            |                  |

#### BODEMPROFIELGEGEVENS: 9

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.68 Grondwaterstand [m] : 2.68

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.68       | 3.43       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 2    | 3.43       | 3.13       | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 3    | 3.13       | 2.03       | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 4    | 2.03       | 1.83       | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 5    | 1.83       | -1.27      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 6    | -1.27      | -1.47      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 7    | -1.47      | -1.77      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 8    | -1.77      | -2.37      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 9    | -2.37      | -3.07      | Klei - Organisch - Matig     | 1.0 | 0.0                       |            |                  |
| 10   | -3.07      | -3.27      | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 11   | -3.27      | -4.77      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 12   | -4.77      | -4.97      | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 13   | -4.97      | -5.17      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 14   | -5.17      | -10.06     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 15   | -10.06     | -10.26     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 16   | -10.26     | -11.47     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 17   | -11.47     | -11.67     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 18   | -11.67     | -15.58     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 19   | -15.58     | -15.88     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 20   | -15.88     | -16.07     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 21   | -16.07     | -16.58     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 22   | -16.58     | -16.79     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 23   | -16.79     | -16.99     | Klei - Zwak zandig - Vast    | 1.0 | 0.0                       |            |                  |
| 24   | -16.99     | -17.39     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 25   | -17.39     | -17.59     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 26   | -17.59     | -17.88     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 27   | -17.88     | -18.48     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 28   | -18.48     | -18.78     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 29   | -18.78     | -19.37     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 30   | -19.37     | -20.02     | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 31   | -20.02     | -20.88     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 32   | -20.88     | -21.10     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 33   | -21.10     | -21.32     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 34   | -21.32     | -21.44     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

## BODEMPROFIELGEGEVENS: 1

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

d50-reductie is meegenomen overeenkomstig NEN-EN 9997 art. 7.6.2.3 (i)

Hoogte maaiveld [m] : 3.75 Grondwaterstand [m] : 2.75

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                    | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|---------------------------------|-----|---------------------------|------------|------------------|
| 1    | 3.75       | 3.64       | Veen - Matig voorbelast - Matig | 1.0 | 0.0                       |            |                  |
| 2    | 3.64       | 3.52       | Klei - Organisch - Matig        | 1.0 | 0.0                       |            |                  |
| 3    | 3.52       | 3.14       | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 4    | 3.14       | 2.98       | Klei - Organisch - Matig        | 1.0 | 0.0                       |            |                  |
| 5    | 2.98       | 2.86       | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 6    | 2.86       | 2.72       | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 7    | 2.72       | 2.46       | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 8    | 2.46       | 2.20       | Klei - Organisch - Matig        | 1.0 | 0.0                       |            |                  |
| 9    | 2.20       | 2.08       | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 10   | 2.08       | 1.96       | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 11   | 1.96       | -1.18      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 12   | -1.18      | -1.36      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 13   | -1.36      | -1.62      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 14   | -1.62      | -1.92      | Klei - Organisch - Matig        | 1.0 | 0.0                       |            |                  |
| 15   | -1.92      | -2.04      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 16   | -2.04      | -2.16      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 17   | -2.16      | -2.30      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 18   | -2.30      | -2.52      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 19   | -2.52      | -2.64      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 20   | -2.64      | -3.42      | Klei - Organisch - Matig        | 1.0 | 0.0                       |            |                  |
| 21   | -3.42      | -3.94      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 22   | -3.94      | -4.06      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 23   | -4.06      | -5.18      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 24   | -5.18      | -5.36      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 25   | -5.36      | -6.46      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 26   | -6.46      | -6.67      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 27   | -6.67      | -6.88      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 28   | -6.88      | -7.00      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 29   | -7.00      | -7.67      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 30   | -7.67      | -7.81      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 31   | -7.81      | -7.97      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 32   | -7.97      | -8.12      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 33   | -8.12      | -8.25      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |
| 34   | -8.25      | -8.50      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 35   | -8.50      | -8.68      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 36   | -8.68      | -8.88      | Klei - Zwak zandig - Vast       | 1.0 | 0.0                       |            |                  |
| 37   | -8.88      | -9.00      | Zand - Sterk siltig - Kleiig    | 1.0 | 100.0                     |            |                  |
| 38   | -9.00      | -9.13      | Zand - Schoon - Vast            | 1.0 | 100.0                     |            |                  |

| Laag | Van<br>[m] | Tot<br>[m] | Omschrijving                 | OCR | Aandeel pos.<br>kleef [%] | $\alpha_s$ | $d_{50}$<br>[mm] |
|------|------------|------------|------------------------------|-----|---------------------------|------------|------------------|
| 39   | -9.13      | -9.28      | Zand - Sterk siltig - Kleiig | 1.0 | 100.0                     |            |                  |
| 40   | -9.28      | -14.47     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |
| 41   | -14.47     | -14.57     | Zand - Schoon - Vast         | 1.0 | 100.0                     |            |                  |

## SONDERINGSGEGEVENS ALGEMEEN: 1

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.75 Bodemprofiel: 1

Traject negatieve kleef : 3.75 tot 3.75 [m]

Traject positieve kleef : 2.00 tot -14.58 [m]

## SONDERINGSGEGEVENS TABEL: 1

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.75          | 0.00           | 0.000             | 460   | -5.42         | 3.48           | 0.033             |
| 2     | 3.74          | 0.02           | 0.003             | 461   | -5.44         | 3.65           | 0.033             |
| 3     | 3.72          | 0.04           | 0.005             | 462   | -5.46         | 3.94           | 0.034             |
| 4     | 3.70          | 0.14           | 0.007             | 463   | -5.48         | 4.43           | 0.042             |
| 5     | 3.68          | 0.25           | 0.009             | 464   | -5.50         | 5.10           | 0.051             |
| 6     | 3.66          | 0.28           | 0.009             | 465   | -5.52         | 5.86           | 0.056             |
| 7     | 3.64          | 0.31           | 0.010             | 466   | -5.54         | 6.59           | 0.059             |
| 8     | 3.62          | 0.35           | 0.014             | 467   | -5.56         | 7.22           | 0.062             |
| 9     | 3.60          | 0.39           | 0.016             | 468   | -5.58         | 7.80           | 0.063             |
| 10    | 3.58          | 0.40           | 0.018             | 469   | -5.60         | 8.37           | 0.063             |
| 11    | 3.56          | 0.40           | 0.021             | 470   | -5.62         | 9.03           | 0.066             |
| 12    | 3.54          | 0.52           | 0.027             | 471   | -5.64         | 9.60           | 0.070             |
| 13    | 3.52          | 0.99           | 0.032             | 472   | -5.66         | 9.96           | 0.074             |
| 14    | 3.50          | 1.48           | 0.037             | 473   | -5.68         | 10.18          | 0.076             |
| 15    | 3.48          | 1.87           | 0.041             | 474   | -5.70         | 10.28          | 0.077             |
| 16    | 3.46          | 1.97           | 0.046             | 475   | -5.72         | 10.34          | 0.075             |
| 17    | 3.44          | 1.97           | 0.051             | 476   | -5.74         | 10.39          | 0.072             |
| 18    | 3.42          | 2.10           | 0.055             | 477   | -5.76         | 10.43          | 0.073             |
| 19    | 3.40          | 2.03           | 0.058             | 478   | -5.78         | 10.44          | 0.073             |
| 20    | 3.38          | 1.98           | 0.058             | 479   | -5.80         | 10.41          | 0.074             |
| 21    | 3.36          | 2.01           | 0.062             | 480   | -5.82         | 10.36          | 0.073             |
| 22    | 3.34          | 2.04           | 0.063             | 481   | -5.84         | 10.35          | 0.073             |
| 23    | 3.32          | 2.04           | 0.067             | 482   | -5.86         | 10.49          | 0.073             |
| 24    | 3.30          | 2.26           | 0.066             | 483   | -5.88         | 10.71          | 0.071             |
| 25    | 3.28          | 2.29           | 0.066             | 484   | -5.90         | 10.88          | 0.070             |
| 26    | 3.26          | 2.45           | 0.071             | 485   | -5.92         | 10.82          | 0.070             |
| 27    | 3.24          | 2.53           | 0.073             | 486   | -5.94         | 10.62          | 0.072             |
| 28    | 3.22          | 2.55           | 0.077             | 487   | -5.96         | 10.54          | 0.074             |
| 29    | 3.20          | 2.54           | 0.076             | 488   | -5.98         | 10.63          | 0.079             |
| 30    | 3.18          | 2.30           | 0.069             | 489   | -6.00         | 11.03          | 0.087             |
| 31    | 3.16          | 1.97           | 0.064             | 490   | -6.02         | 11.49          | 0.090             |
| 32    | 3.14          | 1.64           | 0.061             | 491   | -6.04         | 11.98          | 0.092             |
| 33    | 3.12          | 1.28           | 0.060             | 492   | -6.06         | 12.39          | 0.095             |
| 34    | 3.10          | 1.02           | 0.055             | 493   | -6.08         | 12.51          | 0.098             |
| 35    | 3.08          | 1.00           | 0.051             | 494   | -6.10         | 12.53          | 0.099             |
| 36    | 3.06          | 0.98           | 0.048             | 495   | -6.12         | 12.49          | 0.100             |
| 37    | 3.04          | 0.96           | 0.047             | 496   | -6.14         | 12.43          | 0.101             |
| 38    | 3.02          | 1.06           | 0.045             | 497   | -6.16         | 12.44          | 0.101             |
| 39    | 3.00          | 1.09           | 0.044             | 498   | -6.18         | 12.60          | 0.101             |
| 40    | 2.98          | 1.03           | 0.042             | 499   | -6.20         | 12.77          | 0.101             |
| 41    | 2.96          | 1.01           | 0.039             | 500   | -6.22         | 12.78          | 0.101             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 42    | 2.94          | 1.02           | 0.038             | 501   | -6.24         | 12.55          | 0.102             |
| 43    | 2.92          | 1.23           | 0.035             | 502   | -6.26         | 12.33          | 0.103             |
| 44    | 2.90          | 1.39           | 0.033             | 503   | -6.28         | 12.08          | 0.103             |
| 45    | 2.88          | 1.44           | 0.032             | 504   | -6.29         | 11.80          | 0.103             |
| 46    | 2.86          | 1.46           | 0.029             | 505   | -6.31         | 11.54          | 0.102             |
| 47    | 2.84          | 1.40           | 0.029             | 506   | -6.33         | 11.31          | 0.100             |
| 48    | 2.82          | 1.38           | 0.029             | 507   | -6.36         | 10.94          | 0.099             |
| 49    | 2.80          | 1.31           | 0.029             | 508   | -6.38         | 10.37          | 0.097             |
| 50    | 2.78          | 1.26           | 0.029             | 509   | -6.39         | 9.81           | 0.094             |
| 51    | 2.76          | 1.23           | 0.030             | 510   | -6.42         | 9.32           | 0.091             |
| 52    | 2.74          | 1.18           | 0.030             | 511   | -6.44         | 8.79           | 0.087             |
| 53    | 2.72          | 1.13           | 0.031             | 512   | -6.46         | 8.08           | 0.083             |
| 54    | 2.70          | 1.03           | 0.032             | 513   | -6.47         | 7.24           | 0.081             |
| 55    | 2.68          | 0.96           | 0.033             | 514   | -6.50         | 6.50           | 0.078             |
| 56    | 2.66          | 0.85           | 0.032             | 515   | -6.52         | 5.98           | 0.073             |
| 57    | 2.64          | 0.80           | 0.029             | 516   | -6.54         | 5.59           | 0.066             |
| 58    | 2.62          | 0.76           | 0.025             | 517   | -6.55         | 5.43           | 0.063             |
| 59    | 2.60          | 0.66           | 0.022             | 518   | -6.58         | 5.34           | 0.061             |
| 60    | 2.58          | 0.56           | 0.021             | 519   | -6.60         | 5.21           | 0.063             |
| 61    | 2.56          | 0.55           | 0.021             | 520   | -6.62         | 4.97           | 0.064             |
| 62    | 2.54          | 0.54           | 0.021             | 521   | -6.63         | 4.68           | 0.065             |
| 63    | 2.52          | 0.52           | 0.021             | 522   | -6.65         | 4.44           | 0.060             |
| 64    | 2.50          | 0.56           | 0.021             | 523   | -6.67         | 4.48           | 0.057             |
| 65    | 2.48          | 0.60           | 0.021             | 524   | -6.70         | 4.96           | 0.053             |
| 66    | 2.46          | 0.55           | 0.022             | 525   | -6.71         | 5.77           | 0.052             |
| 67    | 2.44          | 0.50           | 0.023             | 526   | -6.73         | 6.54           | 0.050             |
| 68    | 2.42          | 0.47           | 0.022             | 527   | -6.75         | 6.95           | 0.050             |
| 69    | 2.40          | 0.46           | 0.022             | 528   | -6.78         | 6.92           | 0.048             |
| 70    | 2.38          | 0.45           | 0.022             | 529   | -6.79         | 6.90           | 0.049             |
| 71    | 2.36          | 0.44           | 0.021             | 530   | -6.81         | 6.89           | 0.056             |
| 72    | 2.34          | 0.37           | 0.019             | 531   | -6.83         | 7.03           | 0.063             |
| 73    | 2.32          | 0.35           | 0.018             | 532   | -6.86         | 7.38           | 0.070             |
| 74    | 2.30          | 0.33           | 0.017             | 533   | -6.88         | 7.89           | 0.086             |
| 75    | 2.28          | 0.30           | 0.016             | 534   | -6.89         | 8.32           | 0.105             |
| 76    | 2.26          | 0.30           | 0.015             | 535   | -6.92         | 8.58           | 0.117             |
| 77    | 2.24          | 0.29           | 0.014             | 536   | -6.94         | 8.59           | 0.117             |
| 78    | 2.22          | 0.29           | 0.013             | 537   | -6.96         | 8.00           | 0.105             |
| 79    | 2.20          | 0.30           | 0.013             | 538   | -6.97         | 7.98           | 0.094             |
| 80    | 2.18          | 0.34           | 0.012             | 539   | -7.00         | 7.96           | 0.086             |
| 81    | 2.16          | 0.39           | 0.015             | 540   | -7.02         | 7.98           | 0.083             |
| 82    | 2.14          | 0.43           | 0.016             | 541   | -7.04         | 8.38           | 0.080             |
| 83    | 2.12          | 0.53           | 0.020             | 542   | -7.05         | 9.03           | 0.077             |
| 84    | 2.10          | 0.97           | 0.024             | 543   | -7.08         | 9.46           | 0.080             |
| 85    | 2.08          | 1.56           | 0.029             | 544   | -7.10         | 9.89           | 0.082             |
| 86    | 2.06          | 1.97           | 0.034             | 545   | -7.12         | 10.41          | 0.086             |
| 87    | 2.04          | 2.15           | 0.035             | 546   | -7.13         | 10.91          | 0.090             |
| 88    | 2.02          | 2.71           | 0.035             | 547   | -7.15         | 11.43          | 0.094             |
| 89    | 2.00          | 3.33           | 0.035             | 548   | -7.17         | 11.76          | 0.096             |
| 90    | 1.98          | 3.98           | 0.035             | 549   | -7.20         | 12.08          | 0.096             |
| 91    | 1.96          | 4.98           | 0.034             | 550   | -7.21         | 12.42          | 0.099             |
| 92    | 1.94          | 5.78           | 0.033             | 551   | -7.23         | 12.72          | 0.098             |
| 93    | 1.92          | 6.35           | 0.034             | 552   | -7.25         | 12.88          | 0.092             |
| 94    | 1.90          | 6.85           | 0.034             | 553   | -7.28         | 12.80          | 0.089             |
| 95    | 1.88          | 7.34           | 0.037             | 554   | -7.29         | 12.51          | 0.089             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 96    | 1.86          | 7.64           | 0.040             | 555   | -7.31         | 12.01          | 0.093             |
| 97    | 1.84          | 7.84           | 0.040             | 556   | -7.33         | 11.42          | 0.096             |
| 98    | 1.82          | 8.01           | 0.039             | 557   | -7.36         | 10.70          | 0.094             |
| 99    | 1.80          | 8.23           | 0.039             | 558   | -7.38         | 10.18          | 0.092             |
| 100   | 1.78          | 8.54           | 0.043             | 559   | -7.39         | 9.66           | 0.088             |
| 101   | 1.76          | 8.93           | 0.046             | 560   | -7.42         | 9.15           | 0.083             |
| 102   | 1.74          | 9.38           | 0.046             | 561   | -7.44         | 8.69           | 0.075             |
| 103   | 1.72          | 10.04          | 0.046             | 562   | -7.46         | 8.41           | 0.070             |
| 104   | 1.70          | 10.36          | 0.048             | 563   | -7.47         | 8.42           | 0.067             |
| 105   | 1.68          | 10.37          | 0.050             | 564   | -7.50         | 8.67           | 0.064             |
| 106   | 1.66          | 10.43          | 0.051             | 565   | -7.52         | 9.00           | 0.061             |
| 107   | 1.64          | 10.52          | 0.053             | 566   | -7.54         | 9.26           | 0.061             |
| 108   | 1.62          | 10.46          | 0.054             | 567   | -7.55         | 9.25           | 0.061             |
| 109   | 1.60          | 10.44          | 0.054             | 568   | -7.58         | 8.97           | 0.060             |
| 110   | 1.58          | 10.34          | 0.053             | 569   | -7.60         | 8.66           | 0.061             |
| 111   | 1.56          | 10.21          | 0.054             | 570   | -7.62         | 8.27           | 0.063             |
| 112   | 1.54          | 10.09          | 0.056             | 571   | -7.63         | 7.77           | 0.065             |
| 113   | 1.52          | 10.03          | 0.056             | 572   | -7.65         | 7.25           | 0.071             |
| 114   | 1.50          | 10.01          | 0.056             | 573   | -7.67         | 6.72           | 0.073             |
| 115   | 1.48          | 10.01          | 0.057             | 574   | -7.70         | 6.22           | 0.080             |
| 116   | 1.46          | 9.99           | 0.058             | 575   | -7.71         | 5.71           | 0.088             |
| 117   | 1.44          | 9.97           | 0.060             | 576   | -7.73         | 5.20           | 0.091             |
| 118   | 1.42          | 9.97           | 0.059             | 577   | -7.75         | 4.79           | 0.089             |
| 119   | 1.40          | 9.94           | 0.058             | 578   | -7.78         | 4.40           | 0.097             |
| 120   | 1.38          | 9.92           | 0.056             | 579   | -7.79         | 3.94           | 0.109             |
| 121   | 1.36          | 9.93           | 0.054             | 580   | -7.81         | 3.38           | 0.127             |
| 122   | 1.34          | 9.93           | 0.051             | 581   | -7.83         | 3.33           | 0.128             |
| 123   | 1.32          | 10.05          | 0.050             | 582   | -7.86         | 3.29           | 0.125             |
| 124   | 1.30          | 10.16          | 0.049             | 583   | -7.88         | 3.25           | 0.122             |
| 125   | 1.28          | 10.17          | 0.050             | 584   | -7.89         | 3.47           | 0.131             |
| 126   | 1.26          | 10.10          | 0.052             | 585   | -7.92         | 3.68           | 0.153             |
| 127   | 1.24          | 10.12          | 0.052             | 586   | -7.94         | 4.16           | 0.159             |
| 128   | 1.22          | 10.25          | 0.053             | 587   | -7.96         | 4.68           | 0.146             |
| 129   | 1.20          | 10.31          | 0.055             | 588   | -7.97         | 5.52           | 0.138             |
| 130   | 1.18          | 10.22          | 0.056             | 589   | -8.00         | 6.93           | 0.134             |
| 131   | 1.16          | 10.09          | 0.057             | 590   | -8.02         | 10.12          | 0.131             |
| 132   | 1.14          | 9.99           | 0.058             | 591   | -8.04         | 13.73          | 0.127             |
| 133   | 1.12          | 9.98           | 0.058             | 592   | -8.05         | 15.48          | 0.123             |
| 134   | 1.10          | 10.06          | 0.058             | 593   | -8.07         | 15.11          | 0.095             |
| 135   | 1.08          | 10.13          | 0.058             | 594   | -8.10         | 13.71          | 0.086             |
| 136   | 1.06          | 10.23          | 0.058             | 595   | -8.12         | 12.05          | 0.087             |
| 137   | 1.04          | 10.28          | 0.058             | 596   | -8.13         | 10.35          | 0.085             |
| 138   | 1.02          | 10.26          | 0.057             | 597   | -8.15         | 8.67           | 0.089             |
| 139   | 1.00          | 10.19          | 0.058             | 598   | -8.18         | 7.00           | 0.094             |
| 140   | 0.98          | 10.06          | 0.059             | 599   | -8.20         | 6.06           | 0.095             |
| 141   | 0.96          | 9.88           | 0.060             | 600   | -8.21         | 4.82           | 0.098             |
| 142   | 0.94          | 9.67           | 0.060             | 601   | -8.23         | 4.12           | 0.103             |
| 143   | 0.92          | 9.42           | 0.060             | 602   | -8.25         | 3.62           | 0.102             |
| 144   | 0.90          | 9.17           | 0.059             | 603   | -8.28         | 3.19           | 0.102             |
| 145   | 0.88          | 8.92           | 0.057             | 604   | -8.29         | 2.87           | 0.101             |
| 146   | 0.86          | 8.76           | 0.054             | 605   | -8.31         | 2.82           | 0.099             |
| 147   | 0.84          | 8.57           | 0.052             | 606   | -8.34         | 2.77           | 0.099             |
| 148   | 0.82          | 8.40           | 0.050             | 607   | -8.36         | 2.73           | 0.099             |
| 149   | 0.80          | 8.30           | 0.050             | 608   | -8.38         | 3.19           | 0.092             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 150   | 0.78          | 8.24           | 0.049             | 609   | -8.39         | 3.47           | 0.090             |
| 151   | 0.76          | 8.13           | 0.049             | 610   | -8.41         | 3.59           | 0.088             |
| 152   | 0.74          | 7.95           | 0.050             | 611   | -8.44         | 3.83           | 0.086             |
| 153   | 0.72          | 7.88           | 0.050             | 612   | -8.46         | 4.10           | 0.091             |
| 154   | 0.70          | 7.70           | 0.049             | 613   | -8.47         | 4.15           | 0.098             |
| 155   | 0.68          | 7.54           | 0.048             | 614   | -8.50         | 4.16           | 0.100             |
| 156   | 0.66          | 7.49           | 0.048             | 615   | -8.52         | 4.31           | 0.085             |
| 157   | 0.64          | 7.49           | 0.048             | 616   | -8.54         | 5.01           | 0.069             |
| 158   | 0.62          | 7.49           | 0.048             | 617   | -8.55         | 5.91           | 0.064             |
| 159   | 0.60          | 7.45           | 0.048             | 618   | -8.57         | 6.14           | 0.065             |
| 160   | 0.58          | 7.38           | 0.048             | 619   | -8.60         | 5.70           | 0.062             |
| 161   | 0.56          | 7.30           | 0.048             | 620   | -8.62         | 5.05           | 0.065             |
| 162   | 0.54          | 7.26           | 0.048             | 621   | -8.63         | 4.24           | 0.071             |
| 163   | 0.52          | 7.28           | 0.048             | 622   | -8.65         | 3.68           | 0.073             |
| 164   | 0.50          | 7.36           | 0.052             | 623   | -8.68         | 3.21           | 0.069             |
| 165   | 0.48          | 7.51           | 0.054             | 624   | -8.70         | 2.86           | 0.068             |
| 166   | 0.46          | 7.78           | 0.053             | 625   | -8.71         | 2.57           | 0.066             |
| 167   | 0.44          | 8.14           | 0.053             | 626   | -8.73         | 2.44           | 0.065             |
| 168   | 0.42          | 8.54           | 0.053             | 627   | -8.75         | 2.42           | 0.065             |
| 169   | 0.40          | 9.05           | 0.057             | 628   | -8.78         | 2.41           | 0.070             |
| 170   | 0.38          | 9.78           | 0.065             | 629   | -8.79         | 2.39           | 0.083             |
| 171   | 0.36          | 10.62          | 0.070             | 630   | -8.81         | 2.45           | 0.092             |
| 172   | 0.34          | 11.25          | 0.073             | 631   | -8.84         | 2.87           | 0.092             |
| 173   | 0.32          | 11.56          | 0.076             | 632   | -8.86         | 3.36           | 0.093             |
| 174   | 0.30          | 11.49          | 0.077             | 633   | -8.88         | 4.08           | 0.092             |
| 175   | 0.28          | 11.34          | 0.078             | 634   | -8.89         | 4.99           | 0.096             |
| 176   | 0.26          | 11.27          | 0.077             | 635   | -8.91         | 6.39           | 0.078             |
| 177   | 0.24          | 11.21          | 0.076             | 636   | -8.94         | 6.55           | 0.060             |
| 178   | 0.22          | 11.19          | 0.075             | 637   | -8.96         | 7.05           | 0.055             |
| 179   | 0.20          | 11.31          | 0.075             | 638   | -8.97         | 7.32           | 0.055             |
| 180   | 0.18          | 11.58          | 0.076             | 639   | -9.00         | 7.34           | 0.055             |
| 181   | 0.16          | 11.78          | 0.077             | 640   | -9.02         | 7.26           | 0.055             |
| 182   | 0.14          | 11.87          | 0.079             | 641   | -9.04         | 7.09           | 0.058             |
| 183   | 0.12          | 11.84          | 0.080             | 642   | -9.05         | 6.82           | 0.059             |
| 184   | 0.10          | 11.88          | 0.081             | 643   | -9.07         | 6.60           | 0.063             |
| 185   | 0.08          | 11.94          | 0.081             | 644   | -9.10         | 6.28           | 0.063             |
| 186   | 0.06          | 11.92          | 0.081             | 645   | -9.12         | 5.89           | 0.065             |
| 187   | 0.04          | 11.93          | 0.081             | 646   | -9.13         | 5.45           | 0.065             |
| 188   | 0.02          | 12.02          | 0.082             | 647   | -9.15         | 5.05           | 0.075             |
| 189   | 0.00          | 12.06          | 0.083             | 648   | -9.18         | 4.59           | 0.097             |
| 190   | -0.02         | 12.06          | 0.083             | 649   | -9.20         | 4.09           | 0.096             |
| 191   | -0.04         | 12.07          | 0.084             | 650   | -9.21         | 4.04           | 0.098             |
| 192   | -0.06         | 12.12          | 0.085             | 651   | -9.23         | 3.99           | 0.101             |
| 193   | -0.08         | 12.16          | 0.086             | 652   | -9.25         | 3.94           | 0.103             |
| 194   | -0.10         | 12.23          | 0.087             | 653   | -9.28         | 5.74           | 0.099             |
| 195   | -0.12         | 12.30          | 0.089             | 654   | -9.29         | 8.70           | 0.095             |
| 196   | -0.14         | 12.31          | 0.088             | 655   | -9.31         | 11.84          | 0.091             |
| 197   | -0.16         | 12.37          | 0.088             | 656   | -9.34         | 14.20          | 0.096             |
| 198   | -0.18         | 12.42          | 0.086             | 657   | -9.36         | 16.26          | 0.102             |
| 199   | -0.20         | 12.52          | 0.086             | 658   | -9.38         | 18.09          | 0.110             |
| 200   | -0.22         | 12.65          | 0.086             | 659   | -9.39         | 19.96          | 0.119             |
| 201   | -0.24         | 12.73          | 0.087             | 660   | -9.41         | 20.98          | 0.129             |
| 202   | -0.26         | 12.69          | 0.088             | 661   | -9.44         | 22.12          | 0.142             |
| 203   | -0.28         | 12.63          | 0.089             | 662   | -9.46         | 23.23          | 0.155             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 204   | -0.30         | 12.62          | 0.090             | 663   | -9.47         | 23.92          | 0.166             |
| 205   | -0.32         | 12.65          | 0.090             | 664   | -9.50         | 24.53          | 0.175             |
| 206   | -0.34         | 12.67          | 0.091             | 665   | -9.52         | 25.02          | 0.185             |
| 207   | -0.36         | 12.70          | 0.091             | 666   | -9.54         | 25.42          | 0.193             |
| 208   | -0.38         | 12.63          | 0.091             | 667   | -9.55         | 25.80          | 0.198             |
| 209   | -0.40         | 12.47          | 0.091             | 668   | -9.57         | 26.44          | 0.204             |
| 210   | -0.42         | 12.32          | 0.090             | 669   | -9.60         | 27.13          | 0.209             |
| 211   | -0.44         | 12.24          | 0.089             | 670   | -9.62         | 27.82          | 0.213             |
| 212   | -0.46         | 12.07          | 0.086             | 671   | -9.63         | 28.35          | 0.217             |
| 213   | -0.48         | 11.82          | 0.085             | 672   | -9.65         | 28.69          | 0.220             |
| 214   | -0.50         | 11.47          | 0.084             | 673   | -9.68         | 28.91          | 0.223             |
| 215   | -0.52         | 11.21          | 0.084             | 674   | -9.69         | 29.12          | 0.227             |
| 216   | -0.54         | 11.24          | 0.083             | 675   | -9.71         | 29.46          | 0.228             |
| 217   | -0.56         | 11.38          | 0.083             | 676   | -9.73         | 30.10          | 0.231             |
| 218   | -0.58         | 11.41          | 0.083             | 677   | -9.75         | 30.74          | 0.238             |
| 219   | -0.60         | 11.29          | 0.084             | 678   | -9.77         | 30.97          | 0.243             |
| 220   | -0.62         | 11.11          | 0.085             | 679   | -9.79         | 31.05          | 0.243             |
| 221   | -0.64         | 10.76          | 0.085             | 680   | -9.81         | 31.17          | 0.248             |
| 222   | -0.66         | 10.29          | 0.084             | 681   | -9.83         | 31.27          | 0.250             |
| 223   | -0.68         | 9.75           | 0.081             | 682   | -9.85         | 31.25          | 0.252             |
| 224   | -0.70         | 9.07           | 0.079             | 683   | -9.87         | 31.21          | 0.254             |
| 225   | -0.72         | 8.65           | 0.079             | 684   | -9.89         | 31.30          | 0.256             |
| 226   | -0.74         | 8.44           | 0.079             | 685   | -9.91         | 31.15          | 0.254             |
| 227   | -0.76         | 8.35           | 0.077             | 686   | -9.93         | 31.22          | 0.253             |
| 228   | -0.78         | 8.17           | 0.074             | 687   | -9.95         | 31.17          | 0.252             |
| 229   | -0.80         | 8.07           | 0.070             | 688   | -9.97         | 31.10          | 0.255             |
| 230   | -0.82         | 8.53           | 0.071             | 689   | -9.99         | 30.89          | 0.254             |
| 231   | -0.84         | 9.60           | 0.070             | 690   | -10.01        | 30.60          | 0.248             |
| 232   | -0.86         | 10.15          | 0.070             | 691   | -10.03        | 30.56          | 0.244             |
| 233   | -0.88         | 10.29          | 0.071             | 692   | -10.05        | 30.44          | 0.239             |
| 234   | -0.90         | 10.28          | 0.073             | 693   | -10.07        | 29.93          | 0.243             |
| 235   | -0.92         | 10.28          | 0.075             | 694   | -10.09        | 29.54          | 0.251             |
| 236   | -0.94         | 10.24          | 0.073             | 695   | -10.11        | 29.63          | 0.256             |
| 237   | -0.96         | 10.14          | 0.072             | 696   | -10.13        | 29.70          | 0.257             |
| 238   | -0.98         | 10.03          | 0.070             | 697   | -10.15        | 29.86          | 0.249             |
| 239   | -1.00         | 9.95           | 0.070             | 698   | -10.17        | 30.25          | 0.247             |
| 240   | -1.02         | 9.97           | 0.071             | 699   | -10.19        | 30.59          | 0.249             |
| 241   | -1.04         | 10.01          | 0.073             | 700   | -10.21        | 30.55          | 0.256             |
| 242   | -1.06         | 9.95           | 0.074             | 701   | -10.23        | 30.41          | 0.261             |
| 243   | -1.08         | 9.62           | 0.075             | 702   | -10.25        | 30.33          | 0.263             |
| 244   | -1.10         | 9.06           | 0.074             | 703   | -10.27        | 30.15          | 0.258             |
| 245   | -1.12         | 8.40           | 0.072             | 704   | -10.29        | 30.02          | 0.251             |
| 246   | -1.14         | 7.54           | 0.070             | 705   | -10.31        | 29.61          | 0.251             |
| 247   | -1.16         | 6.88           | 0.069             | 706   | -10.33        | 29.00          | 0.252             |
| 248   | -1.18         | 6.29           | 0.068             | 707   | -10.35        | 28.35          | 0.263             |
| 249   | -1.20         | 5.64           | 0.064             | 708   | -10.37        | 27.75          | 0.276             |
| 250   | -1.22         | 5.61           | 0.058             | 709   | -10.39        | 27.38          | 0.273             |
| 251   | -1.24         | 5.58           | 0.057             | 710   | -10.41        | 27.50          | 0.266             |
| 252   | -1.26         | 5.54           | 0.056             | 711   | -10.43        | 28.13          | 0.259             |
| 253   | -1.28         | 5.45           | 0.055             | 712   | -10.45        | 29.10          | 0.251             |
| 254   | -1.30         | 4.86           | 0.055             | 713   | -10.47        | 30.02          | 0.240             |
| 255   | -1.32         | 4.30           | 0.056             | 714   | -10.49        | 31.11          | 0.241             |
| 256   | -1.34         | 3.72           | 0.059             | 715   | -10.51        | 32.10          | 0.244             |
| 257   | -1.36         | 3.14           | 0.058             | 716   | -10.53        | 33.04          | 0.238             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 258   | -1.38         | 2.53           | 0.058             | 717   | -10.55        | 34.00          | 0.239             |
| 259   | -1.40         | 2.04           | 0.057             | 718   | -10.57        | 34.85          | 0.242             |
| 260   | -1.42         | 1.70           | 0.051             | 719   | -10.59        | 35.45          | 0.253             |
| 261   | -1.44         | 1.40           | 0.047             | 720   | -10.61        | 35.78          | 0.268             |
| 262   | -1.46         | 1.23           | 0.040             | 721   | -10.63        | 36.30          | 0.279             |
| 263   | -1.48         | 1.01           | 0.035             | 722   | -10.65        | 36.83          | 0.293             |
| 264   | -1.50         | 1.00           | 0.035             | 723   | -10.67        | 37.55          | 0.293             |
| 265   | -1.52         | 0.98           | 0.035             | 724   | -10.69        | 38.24          | 0.296             |
| 266   | -1.54         | 0.97           | 0.034             | 725   | -10.71        | 38.73          | 0.299             |
| 267   | -1.56         | 1.15           | 0.038             | 726   | -10.73        | 39.10          | 0.303             |
| 268   | -1.58         | 1.21           | 0.041             | 727   | -10.75        | 39.52          | 0.306             |
| 269   | -1.60         | 1.24           | 0.044             | 728   | -10.77        | 39.69          | 0.304             |
| 270   | -1.62         | 1.24           | 0.049             | 729   | -10.79        | 40.00          | 0.302             |
| 271   | -1.64         | 1.27           | 0.052             | 730   | -10.81        | 40.35          | 0.299             |
| 272   | -1.66         | 1.23           | 0.052             | 731   | -10.83        | 40.32          | 0.297             |
| 273   | -1.68         | 1.17           | 0.051             | 732   | -10.85        | 40.46          | 0.298             |
| 274   | -1.70         | 1.11           | 0.049             | 733   | -10.87        | 40.43          | 0.304             |
| 275   | -1.72         | 1.06           | 0.047             | 734   | -10.89        | 40.31          | 0.307             |
| 276   | -1.74         | 1.01           | 0.043             | 735   | -10.91        | 40.12          | 0.310             |
| 277   | -1.76         | 0.96           | 0.041             | 736   | -10.93        | 39.76          | 0.308             |
| 278   | -1.78         | 0.90           | 0.038             | 737   | -10.95        | 39.38          | 0.303             |
| 279   | -1.80         | 0.88           | 0.037             | 738   | -10.97        | 38.88          | 0.307             |
| 280   | -1.82         | 0.83           | 0.035             | 739   | -10.99        | 38.51          | 0.310             |
| 281   | -1.84         | 0.80           | 0.032             | 740   | -11.01        | 37.87          | 0.312             |
| 282   | -1.86         | 0.75           | 0.031             | 741   | -11.03        | 37.21          | 0.310             |
| 283   | -1.88         | 0.70           | 0.029             | 742   | -11.05        | 36.34          | 0.305             |
| 284   | -1.90         | 0.68           | 0.028             | 743   | -11.07        | 35.19          | 0.300             |
| 285   | -1.92         | 0.65           | 0.026             | 744   | -11.09        | 33.94          | 0.291             |
| 286   | -1.94         | 0.62           | 0.024             | 745   | -11.11        | 32.61          | 0.284             |
| 287   | -1.96         | 0.60           | 0.022             | 746   | -11.13        | 31.24          | 0.281             |
| 288   | -1.98         | 0.60           | 0.021             | 747   | -11.15        | 29.64          | 0.270             |
| 289   | -2.00         | 0.60           | 0.019             | 748   | -11.17        | 28.67          | 0.257             |
| 290   | -2.02         | 0.60           | 0.017             | 749   | -11.19        | 27.52          | 0.246             |
| 291   | -2.04         | 0.60           | 0.014             | 750   | -11.21        | 26.71          | 0.235             |
| 292   | -2.06         | 0.59           | 0.011             | 751   | -11.23        | 26.28          | 0.227             |
| 293   | -2.08         | 0.59           | 0.010             | 752   | -11.25        | 26.28          | 0.223             |
| 294   | -2.10         | 0.57           | 0.007             | 753   | -11.27        | 26.87          | 0.219             |
| 295   | -2.12         | 0.56           | 0.005             | 754   | -11.29        | 27.66          | 0.218             |
| 296   | -2.14         | 0.55           | 0.005             | 755   | -11.31        | 28.44          | 0.220             |
| 297   | -2.16         | 0.55           | 0.004             | 756   | -11.33        | 29.58          | 0.220             |
| 298   | -2.18         | 0.54           | 0.004             | 757   | -11.35        | 30.59          | 0.224             |
| 299   | -2.20         | 0.54           | 0.004             | 758   | -11.37        | 31.44          | 0.226             |
| 300   | -2.22         | 0.54           | 0.004             | 759   | -11.39        | 31.83          | 0.231             |
| 301   | -2.24         | 0.55           | 0.005             | 760   | -11.41        | 32.15          | 0.242             |
| 302   | -2.26         | 0.53           | 0.006             | 761   | -11.43        | 32.79          | 0.247             |
| 303   | -2.28         | 0.53           | 0.008             | 762   | -11.45        | 33.95          | 0.246             |
| 304   | -2.30         | 0.58           | 0.008             | 763   | -11.47        | 35.53          | 0.246             |
| 305   | -2.32         | 0.66           | 0.008             | 764   | -11.49        | 37.19          | 0.248             |
| 306   | -2.34         | 0.73           | 0.007             | 765   | -11.51        | 38.69          | 0.257             |
| 307   | -2.36         | 0.71           | 0.007             | 766   | -11.53        | 39.91          | 0.269             |
| 308   | -2.38         | 0.63           | 0.007             | 767   | -11.55        | 40.57          | 0.286             |
| 309   | -2.40         | 0.58           | 0.007             | 768   | -11.57        | 40.78          | 0.286             |
| 310   | -2.42         | 0.57           | 0.008             | 769   | -11.59        | 40.73          | 0.284             |
| 311   | -2.44         | 0.57           | 0.009             | 770   | -11.61        | 40.20          | 0.286             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 312   | -2.46         | 0.60           | 0.009             | 771   | -11.63        | 39.35          | 0.290             |
| 313   | -2.48         | 0.71           | 0.010             | 772   | -11.65        | 37.93          | 0.292             |
| 314   | -2.50         | 0.80           | 0.013             | 773   | -11.67        | 37.00          | 0.290             |
| 315   | -2.52         | 0.78           | 0.015             | 774   | -11.69        | 36.15          | 0.284             |
| 316   | -2.54         | 0.82           | 0.022             | 775   | -11.71        | 35.60          | 0.278             |
| 317   | -2.56         | 0.86           | 0.033             | 776   | -11.73        | 34.90          | 0.277             |
| 318   | -2.58         | 0.90           | 0.044             | 777   | -11.75        | 34.28          | 0.274             |
| 319   | -2.60         | 1.00           | 0.054             | 778   | -11.77        | 33.70          | 0.271             |
| 320   | -2.62         | 1.06           | 0.062             | 779   | -11.79        | 32.94          | 0.269             |
| 321   | -2.64         | 1.11           | 0.070             | 780   | -11.81        | 32.00          | 0.266             |
| 322   | -2.66         | 1.11           | 0.076             | 781   | -11.83        | 31.07          | 0.263             |
| 323   | -2.68         | 1.10           | 0.081             | 782   | -11.85        | 30.32          | 0.259             |
| 324   | -2.70         | 1.10           | 0.083             | 783   | -11.87        | 29.48          | 0.257             |
| 325   | -2.72         | 1.11           | 0.082             | 784   | -11.89        | 28.61          | 0.252             |
| 326   | -2.74         | 1.13           | 0.077             | 785   | -11.91        | 27.45          | 0.248             |
| 327   | -2.76         | 1.17           | 0.076             | 786   | -11.93        | 26.16          | 0.241             |
| 328   | -2.78         | 1.21           | 0.075             | 787   | -11.95        | 25.28          | 0.236             |
| 329   | -2.80         | 1.17           | 0.076             | 788   | -11.97        | 24.86          | 0.223             |
| 330   | -2.82         | 1.11           | 0.076             | 789   | -11.99        | 24.58          | 0.209             |
| 331   | -2.84         | 1.06           | 0.077             | 790   | -12.01        | 24.01          | 0.202             |
| 332   | -2.86         | 1.03           | 0.079             | 791   | -12.03        | 23.41          | 0.202             |
| 333   | -2.88         | 1.05           | 0.081             | 792   | -12.05        | 22.50          | 0.199             |
| 334   | -2.90         | 1.07           | 0.085             | 793   | -12.07        | 21.85          | 0.189             |
| 335   | -2.92         | 1.08           | 0.088             | 794   | -12.09        | 21.40          | 0.181             |
| 336   | -2.94         | 1.09           | 0.090             | 795   | -12.11        | 20.87          | 0.179             |
| 337   | -2.96         | 1.10           | 0.092             | 796   | -12.13        | 20.55          | 0.181             |
| 338   | -2.98         | 1.11           | 0.093             | 797   | -12.15        | 20.23          | 0.187             |
| 339   | -3.00         | 1.12           | 0.094             | 798   | -12.17        | 19.90          | 0.188             |
| 340   | -3.02         | 1.16           | 0.094             | 799   | -12.19        | 19.56          | 0.180             |
| 341   | -3.04         | 1.17           | 0.094             | 800   | -12.21        | 19.23          | 0.174             |
| 342   | -3.06         | 1.16           | 0.093             | 801   | -12.23        | 18.99          | 0.170             |
| 343   | -3.08         | 1.13           | 0.093             | 802   | -12.25        | 18.85          | 0.172             |
| 344   | -3.10         | 1.10           | 0.092             | 803   | -12.27        | 18.79          | 0.175             |
| 345   | -3.12         | 1.09           | 0.094             | 804   | -12.29        | 18.78          | 0.174             |
| 346   | -3.14         | 1.09           | 0.094             | 805   | -12.31        | 18.79          | 0.172             |
| 347   | -3.16         | 1.14           | 0.095             | 806   | -12.33        | 18.79          | 0.170             |
| 348   | -3.18         | 1.19           | 0.095             | 807   | -12.35        | 18.74          | 0.167             |
| 349   | -3.20         | 1.23           | 0.095             | 808   | -12.37        | 18.78          | 0.166             |
| 350   | -3.22         | 1.25           | 0.096             | 809   | -12.39        | 18.84          | 0.166             |
| 351   | -3.24         | 1.25           | 0.096             | 810   | -12.41        | 19.09          | 0.165             |
| 352   | -3.26         | 1.24           | 0.094             | 811   | -12.43        | 19.51          | 0.165             |
| 353   | -3.28         | 1.19           | 0.091             | 812   | -12.45        | 20.10          | 0.165             |
| 354   | -3.30         | 1.13           | 0.086             | 813   | -12.47        | 20.86          | 0.165             |
| 355   | -3.32         | 1.06           | 0.081             | 814   | -12.49        | 21.73          | 0.171             |
| 356   | -3.34         | 0.94           | 0.074             | 815   | -12.51        | 22.47          | 0.180             |
| 357   | -3.36         | 0.86           | 0.067             | 816   | -12.53        | 23.10          | 0.185             |
| 358   | -3.38         | 0.78           | 0.059             | 817   | -12.55        | 23.61          | 0.187             |
| 359   | -3.40         | 0.73           | 0.051             | 818   | -12.57        | 23.99          | 0.190             |
| 360   | -3.42         | 0.68           | 0.038             | 819   | -12.59        | 24.38          | 0.194             |
| 361   | -3.44         | 0.66           | 0.024             | 820   | -12.61        | 24.83          | 0.198             |
| 362   | -3.46         | 0.64           | 0.021             | 821   | -12.63        | 25.16          | 0.201             |
| 363   | -3.48         | 0.63           | 0.018             | 822   | -12.65        | 25.14          | 0.199             |
| 364   | -3.50         | 0.63           | 0.018             | 823   | -12.67        | 24.97          | 0.199             |
| 365   | -3.52         | 0.62           | 0.018             | 824   | -12.69        | 24.64          | 0.201             |

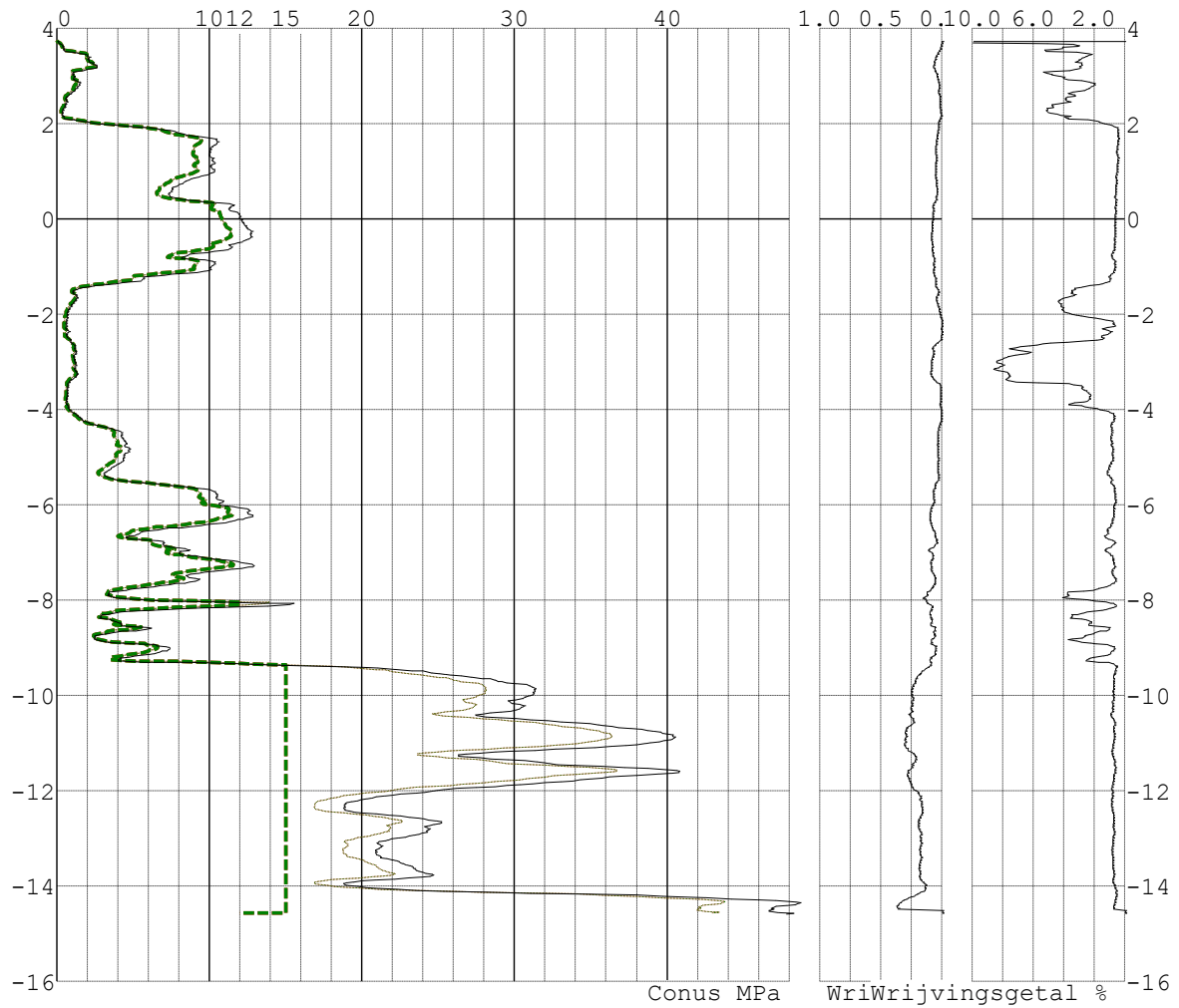
**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 366   | -3.54         | 0.61           | 0.017             | 825   | -12.71        | 24.25          | 0.197             |
| 367   | -3.56         | 0.61           | 0.017             | 826   | -12.73        | 24.02          | 0.200             |
| 368   | -3.58         | 0.60           | 0.016             | 827   | -12.75        | 24.17          | 0.198             |
| 369   | -3.60         | 0.59           | 0.015             | 828   | -12.77        | 24.34          | 0.195             |
| 370   | -3.62         | 0.59           | 0.015             | 829   | -12.79        | 24.35          | 0.192             |
| 371   | -3.64         | 0.59           | 0.014             | 830   | -12.81        | 24.24          | 0.189             |
| 372   | -3.66         | 0.60           | 0.014             | 831   | -12.83        | 24.16          | 0.185             |
| 373   | -3.68         | 0.60           | 0.014             | 832   | -12.85        | 24.21          | 0.178             |
| 374   | -3.70         | 0.59           | 0.014             | 833   | -12.87        | 23.91          | 0.173             |
| 375   | -3.72         | 0.59           | 0.014             | 834   | -12.89        | 23.62          | 0.174             |
| 376   | -3.74         | 0.58           | 0.014             | 835   | -12.91        | 23.34          | 0.180             |
| 377   | -3.76         | 0.58           | 0.014             | 836   | -12.93        | 23.06          | 0.185             |
| 378   | -3.78         | 0.57           | 0.014             | 837   | -12.95        | 22.75          | 0.187             |
| 379   | -3.80         | 0.57           | 0.014             | 838   | -12.97        | 22.32          | 0.181             |
| 380   | -3.82         | 0.56           | 0.016             | 839   | -12.99        | 21.90          | 0.180             |
| 381   | -3.84         | 0.55           | 0.018             | 840   | -13.01        | 21.63          | 0.182             |
| 382   | -3.86         | 0.55           | 0.020             | 841   | -13.03        | 21.42          | 0.183             |
| 383   | -3.88         | 0.61           | 0.022             | 842   | -13.05        | 21.07          | 0.180             |
| 384   | -3.90         | 0.70           | 0.020             | 843   | -13.07        | 20.94          | 0.174             |
| 385   | -3.92         | 0.70           | 0.018             | 844   | -13.09        | 21.03          | 0.174             |
| 386   | -3.94         | 0.67           | 0.015             | 845   | -13.11        | 21.11          | 0.177             |
| 387   | -3.96         | 0.72           | 0.013             | 846   | -13.13        | 21.22          | 0.182             |
| 388   | -3.98         | 0.76           | 0.012             | 847   | -13.15        | 21.25          | 0.184             |
| 389   | -4.00         | 0.83           | 0.011             | 848   | -13.17        | 21.16          | 0.184             |
| 390   | -4.02         | 0.90           | 0.010             | 849   | -13.19        | 21.04          | 0.187             |
| 391   | -4.04         | 0.97           | 0.010             | 850   | -13.21        | 20.90          | 0.189             |
| 392   | -4.06         | 1.11           | 0.009             | 851   | -13.23        | 20.83          | 0.190             |
| 393   | -4.08         | 1.18           | 0.009             | 852   | -13.25        | 20.84          | 0.187             |
| 394   | -4.10         | 1.25           | 0.010             | 853   | -13.27        | 20.87          | 0.186             |
| 395   | -4.12         | 1.32           | 0.010             | 854   | -13.29        | 20.85          | 0.185             |
| 396   | -4.14         | 1.46           | 0.011             | 855   | -13.31        | 20.87          | 0.184             |
| 397   | -4.16         | 1.50           | 0.011             | 856   | -13.33        | 20.96          | 0.182             |
| 398   | -4.18         | 1.55           | 0.012             | 857   | -13.35        | 21.11          | 0.177             |
| 399   | -4.20         | 1.59           | 0.013             | 858   | -13.37        | 21.14          | 0.175             |
| 400   | -4.22         | 1.74           | 0.013             | 859   | -13.39        | 21.15          | 0.176             |
| 401   | -4.24         | 1.94           | 0.016             | 860   | -13.41        | 21.58          | 0.178             |
| 402   | -4.26         | 2.03           | 0.018             | 861   | -13.43        | 21.98          | 0.180             |
| 403   | -4.28         | 2.17           | 0.021             | 862   | -13.45        | 22.23          | 0.182             |
| 404   | -4.30         | 2.42           | 0.024             | 863   | -13.47        | 22.34          | 0.182             |
| 405   | -4.32         | 2.72           | 0.027             | 864   | -13.49        | 22.47          | 0.185             |
| 406   | -4.34         | 3.02           | 0.029             | 865   | -13.51        | 22.62          | 0.188             |
| 407   | -4.36         | 3.29           | 0.031             | 866   | -13.53        | 22.87          | 0.191             |
| 408   | -4.38         | 3.51           | 0.032             | 867   | -13.55        | 23.10          | 0.191             |
| 409   | -4.40         | 3.73           | 0.034             | 868   | -13.57        | 23.24          | 0.191             |
| 410   | -4.42         | 3.94           | 0.036             | 869   | -13.59        | 23.30          | 0.192             |
| 411   | -4.44         | 4.10           | 0.037             | 870   | -13.61        | 23.39          | 0.194             |
| 412   | -4.46         | 4.19           | 0.037             | 871   | -13.63        | 23.45          | 0.193             |
| 413   | -4.48         | 4.21           | 0.039             | 872   | -13.65        | 23.58          | 0.189             |
| 414   | -4.50         | 4.18           | 0.039             | 873   | -13.67        | 23.72          | 0.187             |
| 415   | -4.52         | 4.14           | 0.038             | 874   | -13.69        | 23.91          | 0.187             |
| 416   | -4.54         | 4.14           | 0.040             | 875   | -13.71        | 24.19          | 0.186             |
| 417   | -4.56         | 4.18           | 0.042             | 876   | -13.73        | 24.55          | 0.185             |
| 418   | -4.58         | 4.21           | 0.042             | 877   | -13.75        | 24.62          | 0.187             |
| 419   | -4.60         | 4.27           | 0.042             | 878   | -13.77        | 24.34          | 0.189             |

**SONDERINGSGEGEVENS TABEL: 1**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 420   | -4.62         | 4.34           | 0.041             | 879   | -13.79        | 23.79          | 0.189             |
| 421   | -4.64         | 4.39           | 0.041             | 880   | -13.81        | 23.04          | 0.187             |
| 422   | -4.66         | 4.42           | 0.041             | 881   | -13.83        | 22.01          | 0.183             |
| 423   | -4.68         | 4.44           | 0.040             | 882   | -13.85        | 20.89          | 0.178             |
| 424   | -4.70         | 4.46           | 0.041             | 883   | -13.87        | 19.99          | 0.171             |
| 425   | -4.72         | 4.41           | 0.043             | 884   | -13.89        | 19.34          | 0.164             |
| 426   | -4.74         | 4.36           | 0.041             | 885   | -13.91        | 18.93          | 0.155             |
| 427   | -4.76         | 4.48           | 0.040             | 886   | -13.93        | 18.74          | 0.145             |
| 428   | -4.78         | 4.65           | 0.039             | 887   | -13.95        | 18.82          | 0.141             |
| 429   | -4.80         | 4.68           | 0.039             | 888   | -13.97        | 19.16          | 0.139             |
| 430   | -4.82         | 4.63           | 0.039             | 889   | -13.99        | 19.66          | 0.141             |
| 431   | -4.84         | 4.62           | 0.040             | 890   | -14.01        | 20.31          | 0.144             |
| 432   | -4.86         | 4.67           | 0.040             | 891   | -14.03        | 21.12          | 0.143             |
| 433   | -4.88         | 4.61           | 0.040             | 892   | -14.05        | 22.20          | 0.141             |
| 434   | -4.90         | 4.44           | 0.039             | 893   | -14.07        | 23.64          | 0.145             |
| 435   | -4.92         | 4.34           | 0.038             | 894   | -14.09        | 25.35          | 0.155             |
| 436   | -4.94         | 4.32           | 0.038             | 895   | -14.11        | 27.79          | 0.177             |
| 437   | -4.96         | 4.34           | 0.037             | 896   | -14.13        | 31.05          | 0.195             |
| 438   | -4.98         | 4.35           | 0.037             | 897   | -14.15        | 34.96          | 0.206             |
| 439   | -5.00         | 4.30           | 0.036             | 898   | -14.17        | 37.95          | 0.219             |
| 440   | -5.02         | 4.28           | 0.036             | 899   | -14.19        | 39.69          | 0.234             |
| 441   | -5.04         | 4.29           | 0.036             | 900   | -14.21        | 40.95          | 0.262             |
| 442   | -5.06         | 4.27           | 0.037             | 901   | -14.23        | 42.47          | 0.277             |
| 443   | -5.08         | 4.18           | 0.039             | 902   | -14.25        | 44.21          | 0.295             |
| 444   | -5.10         | 4.05           | 0.039             | 903   | -14.27        | 45.86          | 0.314             |
| 445   | -5.12         | 3.94           | 0.039             | 904   | -14.29        | 47.10          | 0.324             |
| 446   | -5.14         | 3.84           | 0.039             | 905   | -14.31        | 48.40          | 0.336             |
| 447   | -5.16         | 3.74           | 0.040             | 906   | -14.33        | 48.73          | 0.346             |
| 448   | -5.18         | 3.63           | 0.040             | 907   | -14.35        | 48.54          | 0.354             |
| 449   | -5.20         | 3.55           | 0.039             | 908   | -14.37        | 48.32          | 0.360             |
| 450   | -5.22         | 3.48           | 0.039             | 909   | -14.39        | 47.75          | 0.370             |
| 451   | -5.24         | 3.41           | 0.038             | 910   | -14.41        | 47.09          | 0.374             |
| 452   | -5.26         | 3.32           | 0.038             | 911   | -14.43        | 46.84          | 0.369             |
| 453   | -5.28         | 3.16           | 0.038             | 912   | -14.45        | 46.74          | 0.361             |
| 454   | -5.30         | 3.06           | 0.037             | 913   | -14.47        | 46.95          | 0.367             |
| 455   | -5.32         | 3.01           | 0.037             | 914   | -14.49        | 46.62          | 0.000             |
| 456   | -5.34         | 3.01           | 0.036             | 915   | -14.51        | 46.62          | 0.000             |
| 457   | -5.36         | 3.06           | 0.034             | 916   | -14.53        | 47.28          | 0.000             |
| 458   | -5.38         | 3.17           | 0.033             | 917   | -14.55        | 48.26          | 0.000             |
| 459   | -5.40         | 3.32           | 0.033             | 918   | -14.57        | 47.73          | 0.000             |

## SONDERINGSGEGEVENS GRAFIEK: 1



Na reductie en afsnuiten

rekengegevens

paal

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250

250

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220

220

## SONDERINGSGEGEVENS ALGEMEEN: 2

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.72 Bodemprofiel: 2

Traject negatieve kleef : 3.72 tot 3.72 [m]

Traject positieve kleef : 2.00 tot -14.13 [m]

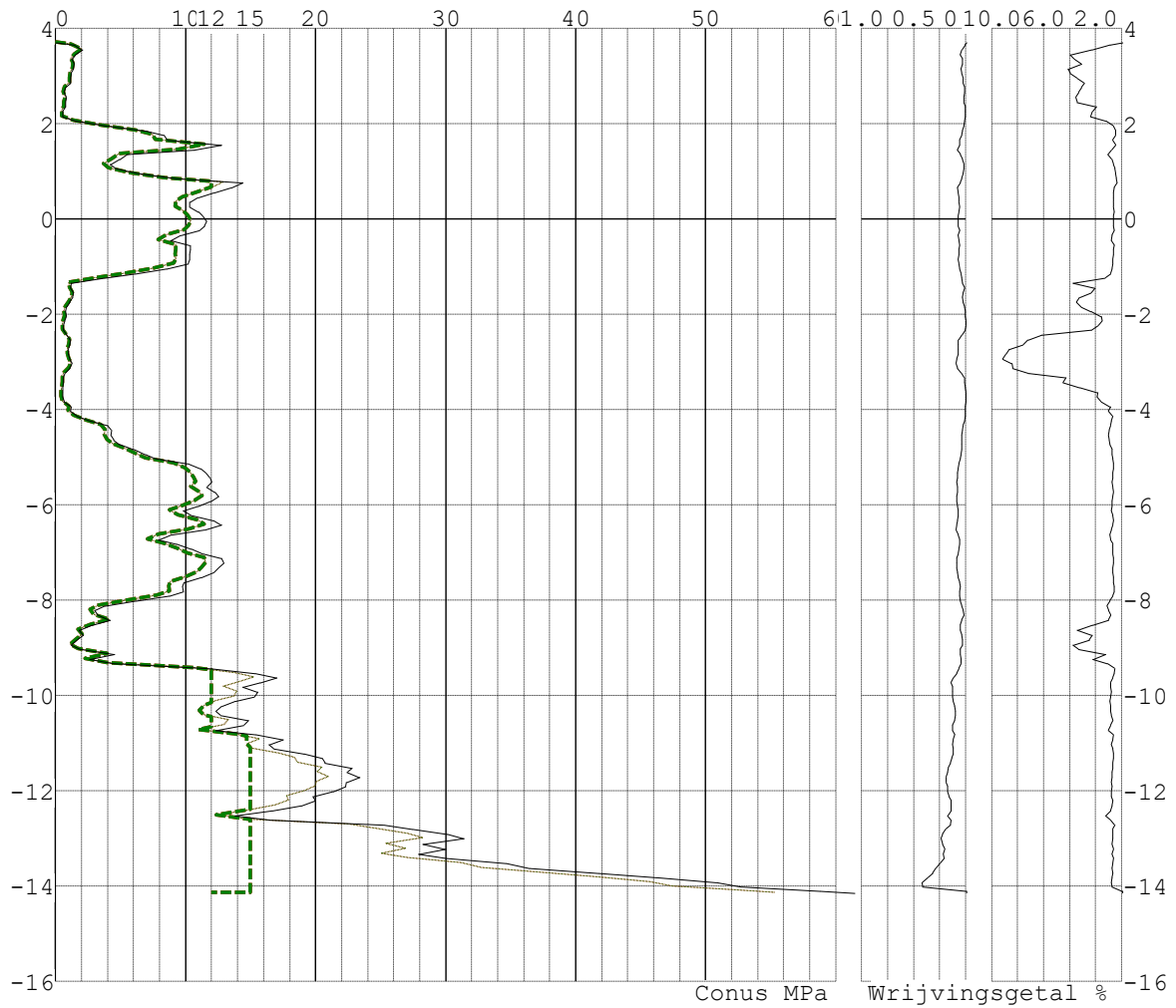
## SONDERINGSGEGEVENS TABEL: 2

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.72          | 0.00           | 0.000             | 92    | -5.32         | 11.51          | 0.086             |
| 2     | 3.67          | 1.33           | 0.013             | 93    | -5.42         | 11.81          | 0.090             |
| 3     | 3.57          | 1.99           | 0.048             | 94    | -5.51         | 11.94          | 0.095             |
| 4     | 3.47          | 1.46           | 0.059             | 95    | -5.61         | 11.56          | 0.089             |
| 5     | 3.37          | 1.18           | 0.043             | 96    | -5.71         | 12.18          | 0.087             |
| 6     | 3.27          | 1.32           | 0.042             | 97    | -5.81         | 12.49          | 0.096             |
| 7     | 3.17          | 1.28           | 0.054             | 98    | -5.91         | 11.83          | 0.095             |
| 8     | 3.07          | 1.10           | 0.045             | 99    | -6.01         | 10.83          | 0.088             |
| 9     | 2.97          | 1.06           | 0.037             | 100   | -6.11         | 9.73           | 0.082             |
| 10    | 2.87          | 1.09           | 0.032             | 101   | -6.21         | 10.47          | 0.080             |
| 11    | 2.77          | 0.71           | 0.022             | 102   | -6.31         | 12.11          | 0.088             |
| 12    | 2.67          | 0.58           | 0.020             | 103   | -6.41         | 12.67          | 0.098             |
| 13    | 2.57          | 0.72           | 0.026             | 104   | -6.51         | 11.37          | 0.099             |
| 14    | 2.47          | 0.69           | 0.024             | 105   | -6.61         | 8.79           | 0.085             |
| 15    | 2.37          | 0.68           | 0.014             | 106   | -6.71         | 7.82           | 0.071             |
| 16    | 2.27          | 0.46           | 0.011             | 107   | -6.81         | 9.25           | 0.068             |
| 17    | 2.17          | 0.49           | 0.012             | 108   | -6.91         | 10.40          | 0.077             |
| 18    | 2.07          | 1.48           | 0.018             | 109   | -7.01         | 11.32          | 0.085             |
| 19    | 1.97          | 3.88           | 0.028             | 110   | -7.11         | 12.71          | 0.093             |
| 20    | 1.87          | 6.84           | 0.037             | 111   | -7.21         | 12.85          | 0.093             |
| 21    | 1.77          | 8.28           | 0.044             | 112   | -7.31         | 12.43          | 0.097             |
| 22    | 1.67          | 8.52           | 0.065             | 113   | -7.41         | 12.07          | 0.091             |
| 23    | 1.57          | 12.68          | 0.069             | 114   | -7.51         | 11.12          | 0.079             |
| 24    | 1.47          | 10.53          | 0.091             | 115   | -7.61         | 9.79           | 0.069             |
| 25    | 1.37          | 5.43           | 0.061             | 116   | -7.70         | 9.67           | 0.064             |
| 26    | 1.27          | 4.83           | 0.040             | 117   | -7.80         | 9.76           | 0.066             |
| 27    | 1.17          | 4.12           | 0.030             | 118   | -7.90         | 8.65           | 0.068             |
| 28    | 1.07          | 4.53           | 0.027             | 119   | -8.00         | 6.07           | 0.059             |
| 29    | 0.97          | 6.33           | 0.035             | 120   | -8.10         | 3.68           | 0.045             |
| 30    | 0.87          | 9.28           | 0.048             | 121   | -8.20         | 2.92           | 0.031             |
| 31    | 0.77          | 14.31          | 0.064             | 122   | -8.30         | 3.22           | 0.030             |
| 32    | 0.67          | 13.40          | 0.086             | 123   | -8.40         | 4.10           | 0.046             |
| 33    | 0.57          | 12.09          | 0.084             | 124   | -8.50         | 2.70           | 0.063             |
| 34    | 0.47          | 10.81          | 0.076             | 125   | -8.61         | 1.69           | 0.059             |
| 35    | 0.37          | 10.25          | 0.075             | 126   | -8.72         | 2.02           | 0.047             |
| 36    | 0.27          | 10.22          | 0.071             | 127   | -8.82         | 1.55           | 0.039             |
| 37    | 0.17          | 10.92          | 0.072             | 128   | -8.92         | 1.13           | 0.043             |
| 38    | 0.07          | 11.29          | 0.079             | 129   | -9.02         | 1.90           | 0.065             |
| 39    | -0.03         | 11.56          | 0.081             | 130   | -9.12         | 4.42           | 0.058             |
| 40    | -0.13         | 11.37          | 0.083             | 131   | -9.22         | 2.53           | 0.057             |
| 41    | -0.23         | 10.98          | 0.071             | 132   | -9.32         | 4.47           | 0.052             |
| 42    | -0.33         | 9.51           | 0.079             | 133   | -9.42         | 11.83          | 0.073             |
| 43    | -0.43         | 8.75           | 0.076             | 134   | -9.52         | 15.28          | 0.098             |
| 44    | -0.53         | 10.27          | 0.068             | 135   | -9.61         | 16.93          | 0.130             |
| 45    | -0.63         | 10.30          | 0.072             | 136   | -9.71         | 15.60          | 0.147             |
| 46    | -0.73         | 10.22          | 0.072             | 137   | -9.81         | 14.32          | 0.135             |
| 47    | -0.83         | 10.24          | 0.079             | 138   | -9.91         | 15.48          | 0.134             |

**SONDERINGSGEGEVENS TABEL: 2**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -0.93         | 10.09          | 0.076             | 139   | -10.01        | 15.22          | 0.139             |
| 49    | -1.03         | 8.43           | 0.069             | 140   | -10.11        | 13.73          | 0.132             |
| 50    | -1.13         | 6.03           | 0.057             | 141   | -10.21        | 12.69          | 0.118             |
| 51    | -1.23         | 3.65           | 0.050             | 142   | -10.31        | 12.25          | 0.110             |
| 52    | -1.33         | 1.14           | 0.044             | 143   | -10.41        | 12.64          | 0.108             |
| 53    | -1.43         | 1.08           | 0.023             | 144   | -10.51        | 14.75          | 0.114             |
| 54    | -1.53         | 1.30           | 0.032             | 145   | -10.61        | 14.38          | 0.134             |
| 55    | -1.63         | 1.23           | 0.041             | 146   | -10.71        | 12.23          | 0.133             |
| 56    | -1.73         | 1.01           | 0.036             | 147   | -10.81        | 15.33          | 0.113             |
| 57    | -1.83         | 0.74           | 0.023             | 148   | -10.91        | 17.43          | 0.131             |
| 58    | -1.93         | 0.70           | 0.017             | 149   | -11.01        | 16.32          | 0.138             |
| 59    | -2.03         | 0.76           | 0.013             | 150   | -11.11        | 16.73          | 0.130             |
| 60    | -2.12         | 0.63           | 0.010             | 151   | -11.21        | 19.07          | 0.133             |
| 61    | -2.22         | 0.50           | 0.009             | 152   | -11.30        | 20.41          | 0.140             |
| 62    | -2.32         | 0.54           | 0.013             | 153   | -11.40        | 20.67          | 0.160             |
| 63    | -2.42         | 0.80           | 0.050             | 154   | -11.50        | 22.73          | 0.174             |
| 64    | -2.52         | 1.08           | 0.079             | 155   | -11.60        | 22.31          | 0.187             |
| 65    | -2.62         | 1.03           | 0.079             | 156   | -11.70        | 23.32          | 0.196             |
| 66    | -2.72         | 0.91           | 0.080             | 157   | -11.80        | 22.26          | 0.195             |
| 67    | -2.82         | 0.92           | 0.083             | 158   | -11.90        | 22.24          | 0.187             |
| 68    | -2.92         | 1.00           | 0.093             | 159   | -12.00        | 21.23          | 0.181             |
| 69    | -3.02         | 1.17           | 0.100             | 160   | -12.10        | 19.70          | 0.170             |
| 70    | -3.12         | 1.01           | 0.086             | 161   | -12.20        | 19.88          | 0.152             |
| 71    | -3.22         | 0.64           | 0.045             | 162   | -12.30        | 18.79          | 0.153             |
| 72    | -3.32         | 0.50           | 0.022             | 163   | -12.40        | 16.54          | 0.152             |
| 73    | -3.42         | 0.51           | 0.023             | 164   | -12.50        | 13.72          | 0.183             |
| 74    | -3.52         | 0.49           | 0.016             | 165   | -12.60        | 16.48          | 0.150             |
| 75    | -3.62         | 0.48           | 0.009             | 166   | -12.70        | 25.14          | 0.156             |
| 76    | -3.72         | 0.48           | 0.009             | 167   | -12.79        | 27.41          | 0.205             |
| 77    | -3.82         | 0.58           | 0.010             | 168   | -12.89        | 30.08          | 0.232             |
| 78    | -3.92         | 1.12           | 0.010             | 169   | -12.99        | 31.34          | 0.243             |
| 79    | -4.02         | 1.05           | 0.012             | 170   | -13.10        | 28.19          | 0.232             |
| 80    | -4.12         | 1.54           | 0.012             | 171   | -13.21        | 29.92          | 0.213             |
| 81    | -4.22         | 2.64           | 0.023             | 172   | -13.31        | 27.87          | 0.228             |
| 82    | -4.32         | 3.88           | 0.036             | 173   | -13.41        | 30.07          | 0.221             |
| 83    | -4.42         | 4.24           | 0.044             | 174   | -13.51        | 34.61          | 0.257             |
| 84    | -4.52         | 4.18           | 0.045             | 175   | -13.61        | 36.39          | 0.301             |
| 85    | -4.62         | 4.40           | 0.047             | 176   | -13.71        | 41.74          | 0.328             |
| 86    | -4.72         | 4.86           | 0.046             | 177   | -13.81        | 46.21          | 0.376             |
| 87    | -4.82         | 5.99           | 0.049             | 178   | -13.91        | 50.80          | 0.430             |
| 88    | -4.92         | 6.86           | 0.057             | 179   | -14.00        | 52.69          | 0.425             |
| 89    | -5.02         | 7.68           | 0.060             | 180   | -14.09        | 58.77          | 0.000             |
| 90    | -5.12         | 10.10          | 0.072             | 181   | -14.13        | 61.45          | 0.000             |
| 91    | -5.22         | 11.09          | 0.080             |       |               |                |                   |

## SONDERINGSGEGEVENS GRAFIEK: 2



### SONDERINGSGEGEVENS ALGEMEEN: 3

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.74 Bodemprofiel: 3

Traject negatieve kleef : 3.74 tot 3.74 [m]

Traject positieve kleef : 1.90 tot -21.42 [m]

### SONDERINGSGEGEVENS TABEL: 3

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.74          | 0.00           | 0.000             | 127   | -8.80         | 1.16           | 0.043             |
| 2     | 3.69          | 1.89           | 0.012             | 128   | -8.90         | 0.93           | 0.015             |
| 3     | 3.59          | 3.01           | 0.053             | 129   | -9.00         | 1.09           | 0.016             |
| 4     | 3.49          | 2.39           | 0.071             | 130   | -9.10         | 1.85           | 0.024             |
| 5     | 3.39          | 1.42           | 0.045             | 131   | -9.20         | 2.52           | 0.029             |
| 6     | 3.29          | 1.79           | 0.048             | 132   | -9.30         | 1.91           | 0.031             |
| 7     | 3.19          | 1.60           | 0.043             | 133   | -9.40         | 1.62           | 0.025             |
| 8     | 3.09          | 1.32           | 0.034             | 134   | -9.51         | 1.67           | 0.030             |
| 9     | 2.99          | 0.84           | 0.026             | 135   | -9.62         | 1.34           | 0.040             |
| 10    | 2.89          | 0.79           | 0.025             | 136   | -9.72         | 2.92           | 0.038             |
| 11    | 2.79          | 0.67           | 0.025             | 137   | -9.82         | 10.59          | 0.060             |
| 12    | 2.69          | 0.57           | 0.021             | 138   | -9.92         | 13.48          | 0.092             |
| 13    | 2.59          | 0.82           | 0.022             | 139   | -10.02        | 14.29          | 0.110             |
| 14    | 2.49          | 0.70           | 0.024             | 140   | -10.12        | 14.59          | 0.117             |
| 15    | 2.39          | 0.59           | 0.022             | 141   | -10.22        | 16.14          | 0.124             |
| 16    | 2.29          | 0.48           | 0.018             | 142   | -10.32        | 20.62          | 0.162             |
| 17    | 2.19          | 0.46           | 0.018             | 143   | -10.42        | 22.06          | 0.185             |
| 18    | 2.09          | 0.56           | 0.012             | 144   | -10.52        | 21.43          | 0.191             |
| 19    | 1.99          | 0.69           | 0.002             | 145   | -10.62        | 18.88          | 0.190             |
| 20    | 1.89          | 0.92           | 0.005             | 146   | -10.72        | 16.45          | 0.171             |
| 21    | 1.79          | 2.44           | 0.013             | 147   | -10.82        | 19.06          | 0.153             |
| 22    | 1.69          | 2.43           | 0.020             | 148   | -10.92        | 22.32          | 0.176             |
| 23    | 1.59          | 2.63           | 0.019             | 149   | -11.02        | 22.04          | 0.199             |
| 24    | 1.49          | 3.69           | 0.021             | 150   | -11.12        | 20.65          | 0.189             |
| 25    | 1.39          | 4.70           | 0.030             | 151   | -11.22        | 18.36          | 0.179             |
| 26    | 1.29          | 8.88           | 0.041             | 152   | -11.32        | 17.10          | 0.146             |
| 27    | 1.19          | 12.38          | 0.064             | 153   | -11.42        | 15.64          | 0.150             |
| 28    | 1.09          | 12.14          | 0.072             | 154   | -11.52        | 14.34          | 0.150             |
| 29    | 0.99          | 11.82          | 0.078             | 155   | -11.62        | 13.62          | 0.141             |
| 30    | 0.89          | 10.91          | 0.075             | 156   | -11.72        | 12.28          | 0.140             |
| 31    | 0.79          | 9.58           | 0.065             | 157   | -11.82        | 11.33          | 0.107             |
| 32    | 0.69          | 8.36           | 0.060             | 158   | -11.92        | 9.75           | 0.097             |
| 33    | 0.59          | 9.48           | 0.059             | 159   | -12.02        | 8.57           | 0.103             |
| 34    | 0.49          | 9.84           | 0.066             | 160   | -12.12        | 11.25          | 0.097             |
| 35    | 0.39          | 10.21          | 0.069             | 161   | -12.22        | 14.82          | 0.103             |
| 36    | 0.29          | 10.04          | 0.069             | 162   | -12.32        | 17.25          | 0.142             |
| 37    | 0.19          | 10.46          | 0.072             | 163   | -12.42        | 16.12          | 0.178             |
| 38    | 0.09          | 9.77           | 0.072             | 164   | -12.52        | 18.76          | 0.131             |
| 39    | -0.01         | 9.37           | 0.066             | 165   | -12.62        | 19.11          | 0.154             |
| 40    | -0.11         | 9.03           | 0.066             | 166   | -12.72        | 17.70          | 0.179             |
| 41    | -0.21         | 8.31           | 0.058             | 167   | -12.82        | 16.93          | 0.164             |
| 42    | -0.31         | 9.51           | 0.061             | 168   | -12.92        | 17.76          | 0.172             |
| 43    | -0.41         | 9.31           | 0.064             | 169   | -13.02        | 21.61          | 0.142             |
| 44    | -0.51         | 9.06           | 0.063             | 170   | -13.12        | 22.11          | 0.158             |
| 45    | -0.61         | 8.00           | 0.062             | 171   | -13.22        | 21.50          | 0.169             |
| 46    | -0.71         | 5.55           | 0.050             | 172   | -13.32        | 23.25          | 0.178             |
| 47    | -0.81         | 3.94           | 0.035             | 173   | -13.41        | 26.08          | 0.200             |

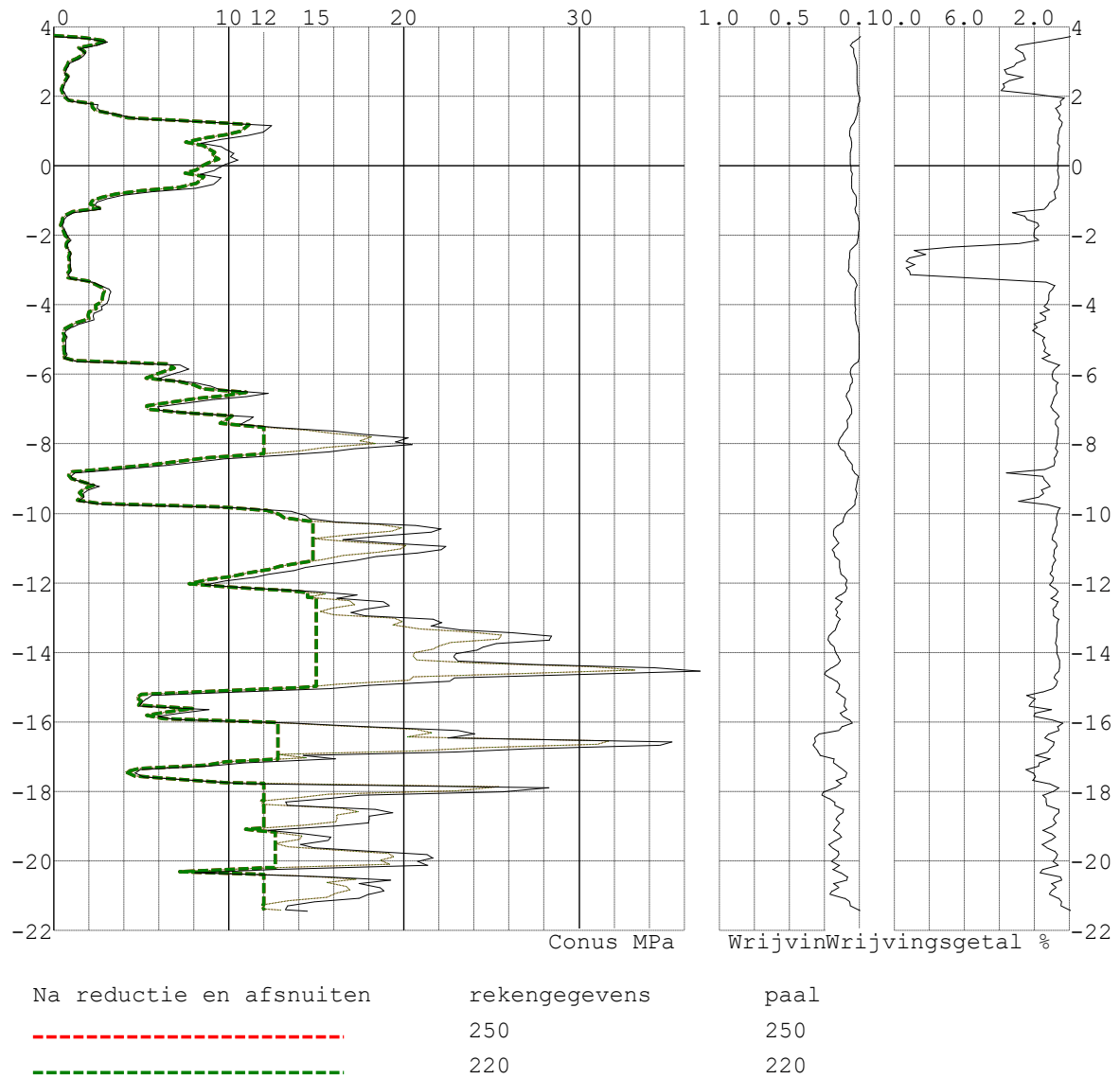
**SONDERINGSGEGEVENS TABEL: 3**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -0.91         | 3.03           | 0.026             | 174   | -13.51        | 28.38          | 0.223             |
| 49    | -1.01         | 2.43           | 0.028             | 175   | -13.61        | 28.25          | 0.231             |
| 50    | -1.11         | 2.29           | 0.029             | 176   | -13.71        | 25.20          | 0.218             |
| 51    | -1.21         | 2.60           | 0.039             | 177   | -13.81        | 24.47          | 0.186             |
| 52    | -1.31         | 1.06           | 0.035             | 178   | -13.91        | 24.05          | 0.183             |
| 53    | -1.41         | 0.70           | 0.018             | 179   | -14.01        | 22.90          | 0.172             |
| 54    | -1.51         | 0.55           | 0.014             | 180   | -14.11        | 22.80          | 0.157             |
| 55    | -1.61         | 0.50           | 0.009             | 181   | -14.21        | 23.04          | 0.145             |
| 56    | -1.71         | 0.44           | 0.008             | 182   | -14.31        | 27.16          | 0.164             |
| 57    | -1.81         | 0.54           | 0.011             | 183   | -14.41        | 34.23          | 0.206             |
| 58    | -1.91         | 0.64           | 0.013             | 184   | -14.51        | 36.85          | 0.245             |
| 59    | -2.01         | 0.72           | 0.015             | 185   | -14.61        | 29.89          | 0.255             |
| 60    | -2.11         | 0.91           | 0.017             | 186   | -14.71        | 22.81          | 0.211             |
| 61    | -2.21         | 0.71           | 0.021             | 187   | -14.81        | 22.55          | 0.166             |
| 62    | -2.31         | 0.69           | 0.046             | 188   | -14.91        | 18.00          | 0.149             |
| 63    | -2.41         | 0.81           | 0.072             | 189   | -15.01        | 15.64          | 0.155             |
| 64    | -2.51         | 0.92           | 0.076             | 190   | -15.11        | 10.41          | 0.170             |
| 65    | -2.61         | 0.83           | 0.077             | 191   | -15.21        | 5.55           | 0.138             |
| 66    | -2.71         | 0.87           | 0.082             | 192   | -15.31        | 5.24           | 0.104             |
| 67    | -2.81         | 0.90           | 0.080             | 193   | -15.41        | 4.99           | 0.109             |
| 68    | -2.91         | 0.87           | 0.081             | 194   | -15.51        | 4.85           | 0.114             |
| 69    | -3.01         | 0.91           | 0.083             | 195   | -15.61        | 8.82           | 0.095             |
| 70    | -3.11         | 0.78           | 0.071             | 196   | -15.71        | 7.22           | 0.143             |
| 71    | -3.21         | 0.88           | 0.043             | 197   | -15.81        | 5.88           | 0.122             |
| 72    | -3.31         | 2.16           | 0.030             | 198   | -15.90        | 6.97           | 0.076             |
| 73    | -3.41         | 2.63           | 0.023             | 199   | -16.00        | 13.55          | 0.057             |
| 74    | -3.51         | 3.09           | 0.030             | 200   | -16.11        | 17.49          | 0.129             |
| 75    | -3.61         | 3.21           | 0.038             | 201   | -16.22        | 23.00          | 0.153             |
| 76    | -3.71         | 3.13           | 0.038             | 202   | -16.32        | 24.00          | 0.293             |
| 77    | -3.81         | 3.06           | 0.037             | 203   | -16.43        | 22.43          | 0.326             |
| 78    | -3.91         | 3.01           | 0.040             | 204   | -16.54        | 35.23          | 0.321             |
| 79    | -4.01         | 2.63           | 0.039             | 205   | -16.64        | 34.51          | 0.337             |
| 80    | -4.11         | 2.67           | 0.032             | 206   | -16.74        | 27.18          | 0.318             |
| 81    | -4.21         | 2.21           | 0.038             | 207   | -16.84        | 22.80          | 0.302             |
| 82    | -4.31         | 2.20           | 0.031             | 208   | -16.94        | 14.20          | 0.285             |
| 83    | -4.41         | 2.23           | 0.032             | 209   | -17.04        | 16.02          | 0.184             |
| 84    | -4.51         | 1.41           | 0.029             | 210   | -17.14        | 10.89          | 0.193             |
| 85    | -4.61         | 0.98           | 0.019             | 211   | -17.24        | 8.71           | 0.156             |
| 86    | -4.71         | 0.61           | 0.013             | 212   | -17.34        | 4.90           | 0.124             |
| 87    | -4.81         | 0.58           | 0.011             | 213   | -17.44        | 4.55           | 0.096             |
| 88    | -4.91         | 0.70           | 0.010             | 214   | -17.55        | 5.11           | 0.103             |
| 89    | -5.01         | 0.61           | 0.009             | 215   | -17.66        | 7.92           | 0.172             |
| 90    | -5.11         | 0.60           | 0.009             | 216   | -17.76        | 10.91          | 0.132             |
| 91    | -5.21         | 0.62           | 0.009             | 217   | -17.87        | 28.22          | 0.182             |
| 92    | -5.31         | 0.63           | 0.009             | 218   | -17.98        | 25.58          | 0.263             |
| 93    | -5.41         | 0.68           | 0.008             | 219   | -18.08        | 17.40          | 0.274             |
| 94    | -5.51         | 0.54           | 0.009             | 220   | -18.18        | 15.57          | 0.218             |
| 95    | -5.61         | 1.29           | 0.015             | 221   | -18.28        | 13.19          | 0.183             |
| 96    | -5.71         | 7.16           | 0.045             | 222   | -18.38        | 13.24          | 0.180             |
| 97    | -5.81         | 7.66           | 0.067             | 223   | -18.48        | 18.29          | 0.118             |
| 98    | -5.91         | 7.02           | 0.071             | 224   | -18.58        | 19.30          | 0.123             |
| 99    | -6.01         | 6.39           | 0.067             | 225   | -18.68        | 17.96          | 0.156             |
| 100   | -6.11         | 5.86           | 0.058             | 226   | -18.78        | 17.96          | 0.174             |
| 101   | -6.21         | 7.96           | 0.057             | 227   | -18.88        | 17.90          | 0.148             |

**SONDERINGSGEGEVENS TABEL: 3**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 102   | -6.31         | 8.87           | 0.072             | 228   | -18.98        | 15.89          | 0.168             |
| 103   | -6.41         | 9.49           | 0.078             | 229   | -19.08        | 12.16          | 0.190             |
| 104   | -6.51         | 12.20          | 0.094             | 230   | -19.18        | 14.14          | 0.153             |
| 105   | -6.61         | 10.89          | 0.099             | 231   | -19.28        | 15.76          | 0.132             |
| 106   | -6.70         | 9.09           | 0.088             | 232   | -19.38        | 15.61          | 0.179             |
| 107   | -6.80         | 7.36           | 0.075             | 233   | -19.49        | 14.04          | 0.225             |
| 108   | -6.91         | 5.89           | 0.066             | 234   | -19.59        | 14.85          | 0.201             |
| 109   | -7.00         | 5.96           | 0.060             | 235   | -19.69        | 17.96          | 0.158             |
| 110   | -7.10         | 8.05           | 0.063             | 236   | -19.79        | 21.27          | 0.153             |
| 111   | -7.20         | 11.34          | 0.074             | 237   | -19.89        | 21.58          | 0.171             |
| 112   | -7.30         | 11.02          | 0.095             | 238   | -19.99        | 20.72          | 0.206             |
| 113   | -7.41         | 10.57          | 0.088             | 239   | -20.10        | 21.29          | 0.148             |
| 114   | -7.50         | 12.81          | 0.090             | 240   | -20.21        | 12.67          | 0.198             |
| 115   | -7.60         | 15.95          | 0.108             | 241   | -20.32        | 8.00           | 0.138             |
| 116   | -7.70         | 17.71          | 0.123             | 242   | -20.43        | 15.46          | 0.090             |
| 117   | -7.80         | 20.17          | 0.145             | 243   | -20.53        | 19.18          | 0.097             |
| 118   | -7.91         | 19.45          | 0.152             | 244   | -20.63        | 17.36          | 0.189             |
| 119   | -8.00         | 20.40          | 0.157             | 245   | -20.73        | 18.56          | 0.153             |
| 120   | -8.11         | 17.15          | 0.144             | 246   | -20.83        | 18.81          | 0.200             |
| 121   | -8.20         | 15.58          | 0.112             | 247   | -20.93        | 17.90          | 0.214             |
| 122   | -8.30         | 12.86          | 0.105             | 248   | -21.04        | 17.35          | 0.111             |
| 123   | -8.40         | 9.74           | 0.090             | 249   | -21.15        | 14.89          | 0.074             |
| 124   | -8.50         | 8.04           | 0.072             | 250   | -21.26        | 13.29          | 0.070             |
| 125   | -8.60         | 6.32           | 0.058             | 251   | -21.37        | 13.18          | 0.007             |
| 126   | -8.70         | 3.63           | 0.054             | 252   | -21.42        | 14.45          | 0.000             |

### SONDERINGSGEGEVENS GRAFIEK: 3



#### SONDERINGSGEGEVENS ALGEMEEN: 4

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.65 Bodemprofiel: 4

Traject negatieve kleef : 3.65 tot 3.65 [m]

Traject positieve kleef : 2.00 tot -21.70 [m]

#### SONDERINGSGEGEVENS TABEL: 4

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.65          | 0.00           | 0.000             | 129   | -9.10         | 5.73           | 0.050             |
| 2     | 3.60          | 1.18           | 0.010             | 130   | -9.20         | 7.21           | 0.055             |
| 3     | 3.50          | 1.81           | 0.028             | 131   | -9.30         | 10.53          | 0.067             |
| 4     | 3.40          | 1.85           | 0.037             | 132   | -9.40         | 10.40          | 0.085             |
| 5     | 3.30          | 2.70           | 0.053             | 133   | -9.50         | 8.50           | 0.087             |
| 6     | 3.20          | 3.69           | 0.063             | 134   | -9.59         | 5.87           | 0.071             |
| 7     | 3.10          | 4.92           | 0.084             | 135   | -9.70         | 4.66           | 0.059             |
| 8     | 3.00          | 4.72           | 0.090             | 136   | -9.79         | 5.09           | 0.057             |
| 9     | 2.90          | 1.48           | 0.053             | 137   | -9.89         | 10.15          | 0.067             |
| 10    | 2.80          | 1.02           | 0.032             | 138   | -10.00        | 16.97          | 0.103             |
| 11    | 2.70          | 0.90           | 0.026             | 139   | -10.09        | 24.48          | 0.139             |
| 12    | 2.60          | 0.88           | 0.021             | 140   | -10.19        | 32.82          | 0.200             |
| 13    | 2.50          | 0.88           | 0.017             | 141   | -10.29        | 34.41          | 0.237             |
| 14    | 2.40          | 0.67           | 0.018             | 142   | -10.39        | 34.09          | 0.273             |
| 15    | 2.30          | 0.47           | 0.012             | 143   | -10.49        | 30.16          | 0.278             |
| 16    | 2.20          | 0.41           | 0.010             | 144   | -10.59        | 22.22          | 0.244             |
| 17    | 2.10          | 0.44           | 0.014             | 145   | -10.69        | 17.60          | 0.176             |
| 18    | 2.00          | 2.65           | 0.015             | 146   | -10.79        | 15.98          | 0.124             |
| 19    | 1.90          | 4.17           | 0.018             | 147   | -10.89        | 20.05          | 0.111             |
| 20    | 1.80          | 4.26           | 0.025             | 148   | -10.99        | 21.36          | 0.154             |
| 21    | 1.70          | 4.13           | 0.026             | 149   | -11.09        | 18.63          | 0.171             |
| 22    | 1.60          | 3.81           | 0.021             | 150   | -11.19        | 20.21          | 0.151             |
| 23    | 1.50          | 3.13           | 0.018             | 151   | -11.29        | 22.05          | 0.145             |
| 24    | 1.40          | 2.96           | 0.030             | 152   | -11.39        | 24.48          | 0.169             |
| 25    | 1.30          | 2.79           | 0.023             | 153   | -11.49        | 24.97          | 0.199             |
| 26    | 1.20          | 2.10           | 0.011             | 154   | -11.59        | 22.96          | 0.203             |
| 27    | 1.10          | 2.18           | 0.008             | 155   | -11.69        | 21.95          | 0.192             |
| 28    | 1.00          | 2.22           | 0.009             | 156   | -11.79        | 23.76          | 0.178             |
| 29    | 0.90          | 2.03           | 0.009             | 157   | -11.89        | 24.14          | 0.194             |
| 30    | 0.80          | 2.00           | 0.016             | 158   | -11.99        | 22.60          | 0.199             |
| 31    | 0.70          | 2.59           | 0.014             | 159   | -12.09        | 20.80          | 0.188             |
| 32    | 0.60          | 2.54           | 0.015             | 160   | -12.19        | 19.48          | 0.169             |
| 33    | 0.50          | 3.03           | 0.016             | 161   | -12.29        | 19.26          | 0.154             |
| 34    | 0.40          | 3.54           | 0.017             | 162   | -12.39        | 19.90          | 0.162             |
| 35    | 0.30          | 3.91           | 0.021             | 163   | -12.49        | 20.09          | 0.168             |
| 36    | 0.20          | 4.08           | 0.025             | 164   | -12.59        | 20.88          | 0.166             |
| 37    | 0.10          | 4.67           | 0.026             | 165   | -12.69        | 21.85          | 0.154             |
| 38    | 0.00          | 6.19           | 0.032             | 166   | -12.79        | 26.72          | 0.190             |
| 39    | -0.10         | 7.50           | 0.044             | 167   | -12.89        | 29.46          | 0.216             |
| 40    | -0.20         | 7.44           | 0.048             | 168   | -12.99        | 29.91          | 0.227             |
| 41    | -0.30         | 7.81           | 0.047             | 169   | -13.09        | 29.70          | 0.227             |
| 42    | -0.40         | 8.43           | 0.052             | 170   | -13.19        | 29.39          | 0.222             |
| 43    | -0.50         | 8.63           | 0.055             | 171   | -13.29        | 28.98          | 0.210             |
| 44    | -0.60         | 8.73           | 0.056             | 172   | -13.39        | 28.52          | 0.217             |
| 45    | -0.70         | 8.26           | 0.056             | 173   | -13.49        | 26.77          | 0.205             |
| 46    | -0.80         | 7.50           | 0.048             | 174   | -13.59        | 27.79          | 0.206             |
| 47    | -0.90         | 8.58           | 0.053             | 175   | -13.69        | 32.32          | 0.238             |

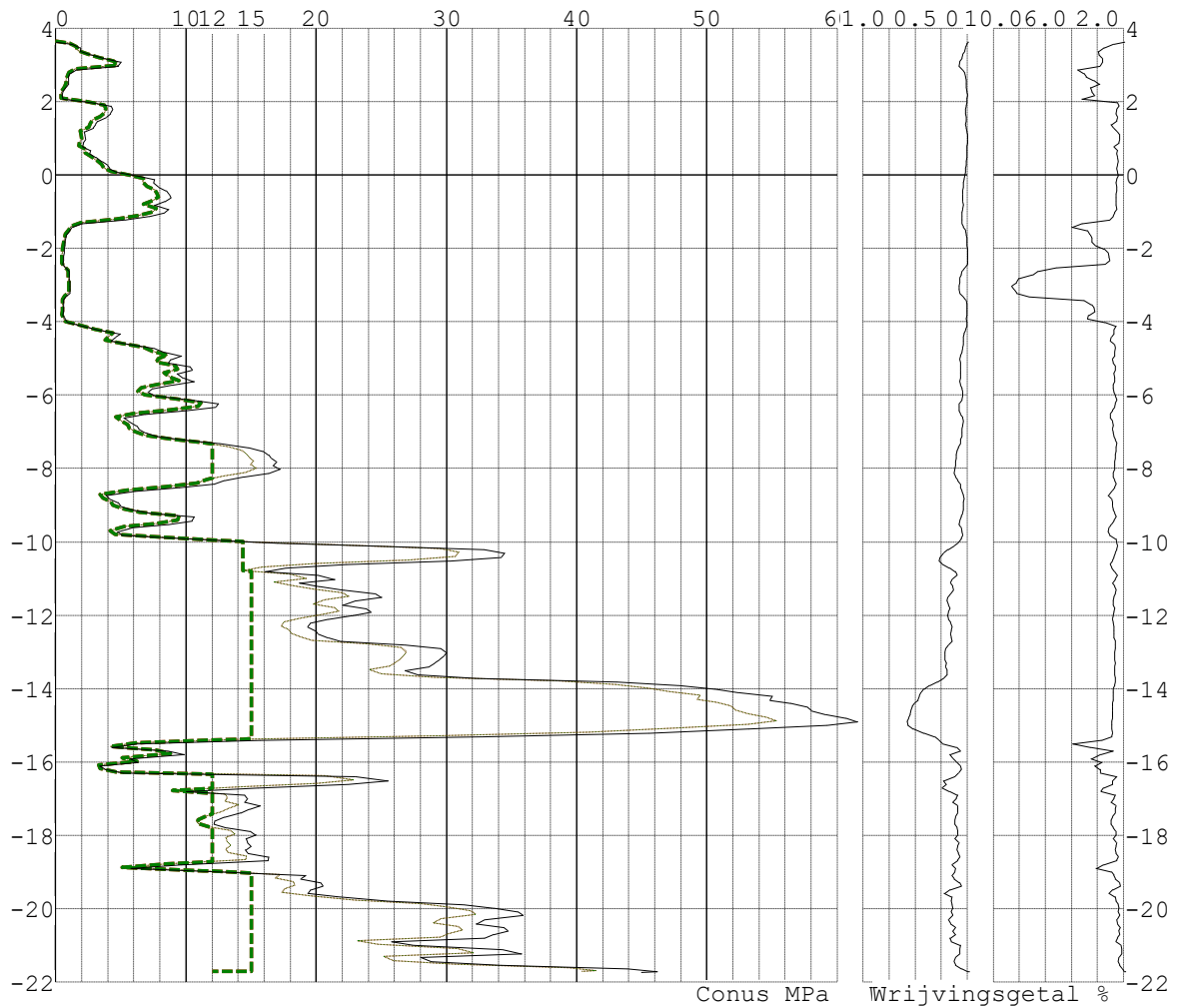
**SONDERINGSGEGEVENS TABEL: 4**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -1.00         | 8.26           | 0.062             | 176   | -13.79        | 42.98          | 0.296             |
| 49    | -1.10         | 7.08           | 0.060             | 177   | -13.89        | 47.79          | 0.377             |
| 50    | -1.20         | 5.16           | 0.060             | 178   | -13.99        | 50.51          | 0.428             |
| 51    | -1.30         | 1.95           | 0.064             | 179   | -14.09        | 52.41          | 0.454             |
| 52    | -1.40         | 1.16           | 0.047             | 180   | -14.19        | 54.97          | 0.473             |
| 53    | -1.50         | 1.02           | 0.029             | 181   | -14.29        | 54.76          | 0.485             |
| 54    | -1.60         | 0.76           | 0.020             | 182   | -14.38        | 56.39          | 0.515             |
| 55    | -1.70         | 0.66           | 0.017             | 183   | -14.48        | 57.63          | 0.538             |
| 56    | -1.80         | 0.65           | 0.016             | 184   | -14.58        | 58.03          | 0.550             |
| 57    | -1.90         | 0.62           | 0.014             | 185   | -14.68        | 59.08          | 0.561             |
| 58    | -2.00         | 0.58           | 0.009             | 186   | -14.78        | 60.64          | 0.573             |
| 59    | -2.10         | 0.55           | 0.007             | 187   | -14.88        | 61.48          | 0.588             |
| 60    | -2.20         | 0.54           | 0.007             | 188   | -14.98        | 59.07          | 0.578             |
| 61    | -2.30         | 0.53           | 0.006             | 189   | -15.08        | 53.09          | 0.528             |
| 62    | -2.40         | 0.49           | 0.007             | 190   | -15.18        | 45.44          | 0.420             |
| 63    | -2.50         | 0.68           | 0.035             | 191   | -15.28        | 32.63          | 0.321             |
| 64    | -2.60         | 0.96           | 0.064             | 192   | -15.38        | 15.55          | 0.279             |
| 65    | -2.70         | 0.96           | 0.068             | 193   | -15.48        | 6.13           | 0.245             |
| 66    | -2.80         | 0.96           | 0.078             | 194   | -15.58        | 4.20           | 0.108             |
| 67    | -2.90         | 1.00           | 0.083             | 195   | -15.68        | 8.52           | 0.073             |
| 68    | -3.00         | 0.99           | 0.086             | 196   | -15.78        | 9.77           | 0.179             |
| 69    | -3.10         | 1.04           | 0.088             | 197   | -15.88        | 5.67           | 0.145             |
| 70    | -3.20         | 1.01           | 0.084             | 198   | -15.98        | 6.26           | 0.110             |
| 71    | -3.30         | 0.68           | 0.050             | 199   | -16.08        | 3.32           | 0.076             |
| 72    | -3.40         | 0.54           | 0.017             | 200   | -16.18        | 3.76           | 0.070             |
| 73    | -3.50         | 0.52           | 0.013             | 201   | -16.28        | 5.17           | 0.096             |
| 74    | -3.60         | 0.54           | 0.013             | 202   | -16.38        | 22.92          | 0.132             |
| 75    | -3.70         | 0.52           | 0.012             | 203   | -16.48        | 25.45          | 0.237             |
| 76    | -3.80         | 0.48           | 0.014             | 204   | -16.58        | 22.29          | 0.212             |
| 77    | -3.90         | 0.61           | 0.017             | 205   | -16.68        | 15.46          | 0.255             |
| 78    | -4.00         | 0.84           | 0.012             | 206   | -16.78        | 9.95           | 0.176             |
| 79    | -4.10         | 2.02           | 0.013             | 207   | -16.88        | 14.43          | 0.100             |
| 80    | -4.20         | 3.35           | 0.027             | 208   | -16.98        | 14.66          | 0.116             |
| 81    | -4.30         | 4.89           | 0.039             | 209   | -17.08        | 14.43          | 0.152             |
| 82    | -4.40         | 4.51           | 0.046             | 210   | -17.17        | 15.63          | 0.100             |
| 83    | -4.50         | 4.18           | 0.046             | 211   | -17.27        | 14.76          | 0.101             |
| 84    | -4.60         | 5.72           | 0.045             | 212   | -17.37        | 14.10          | 0.103             |
| 85    | -4.70         | 7.46           | 0.055             | 213   | -17.47        | 12.83          | 0.120             |
| 86    | -4.80         | 8.30           | 0.065             | 214   | -17.57        | 12.15          | 0.129             |
| 87    | -4.90         | 9.57           | 0.075             | 215   | -17.67        | 12.11          | 0.126             |
| 88    | -5.00         | 8.77           | 0.079             | 216   | -17.77        | 13.05          | 0.111             |
| 89    | -5.10         | 8.57           | 0.073             | 217   | -17.87        | 14.85          | 0.099             |
| 90    | -5.20         | 10.21          | 0.072             | 218   | -17.97        | 15.28          | 0.103             |
| 91    | -5.30         | 10.40          | 0.073             | 219   | -18.07        | 14.53          | 0.130             |
| 92    | -5.40         | 9.26           | 0.074             | 220   | -18.17        | 14.65          | 0.091             |
| 93    | -5.50         | 9.75           | 0.072             | 221   | -18.27        | 14.93          | 0.102             |
| 94    | -5.60         | 10.54          | 0.080             | 222   | -18.37        | 14.49          | 0.106             |
| 95    | -5.70         | 8.83           | 0.078             | 223   | -18.47        | 14.67          | 0.093             |
| 96    | -5.80         | 7.33           | 0.064             | 224   | -18.57        | 16.29          | 0.081             |
| 97    | -5.90         | 7.00           | 0.056             | 225   | -18.67        | 16.24          | 0.101             |
| 98    | -6.00         | 7.62           | 0.055             | 226   | -18.77        | 9.54           | 0.154             |
| 99    | -6.10         | 10.37          | 0.065             | 227   | -18.87        | 5.67           | 0.124             |
| 100   | -6.20         | 12.39          | 0.086             | 228   | -18.97        | 12.62          | 0.127             |
| 101   | -6.30         | 12.17          | 0.090             | 229   | -19.07        | 19.13          | 0.157             |

**SONDERINGSGEGEVENS TABEL: 4**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 102   | -6.40         | 9.78           | 0.090             | 230   | -19.16        | 18.73          | 0.137             |
| 103   | -6.50         | 6.71           | 0.071             | 231   | -19.26        | 20.28          | 0.078             |
| 104   | -6.60         | 5.15           | 0.057             | 232   | -19.36        | 20.42          | 0.071             |
| 105   | -6.70         | 5.52           | 0.050             | 233   | -19.46        | 19.52          | 0.179             |
| 106   | -6.80         | 6.13           | 0.054             | 234   | -19.56        | 19.29          | 0.233             |
| 107   | -6.90         | 6.30           | 0.058             | 235   | -19.66        | 21.77          | 0.156             |
| 108   | -7.00         | 6.82           | 0.061             | 236   | -19.76        | 25.53          | 0.165             |
| 109   | -7.10         | 7.70           | 0.064             | 237   | -19.86        | 31.21          | 0.155             |
| 110   | -7.20         | 9.80           | 0.072             | 238   | -19.96        | 33.63          | 0.148             |
| 111   | -7.30         | 12.51          | 0.076             | 239   | -20.06        | 35.41          | 0.164             |
| 112   | -7.40         | 14.77          | 0.094             | 240   | -20.16        | 35.82          | 0.146             |
| 113   | -7.50         | 15.84          | 0.106             | 241   | -20.27        | 32.88          | 0.191             |
| 114   | -7.60         | 16.29          | 0.115             | 242   | -20.38        | 32.19          | 0.172             |
| 115   | -7.70         | 16.51          | 0.117             | 243   | -20.48        | 34.33          | 0.120             |
| 116   | -7.80         | 16.90          | 0.126             | 244   | -20.58        | 34.67          | 0.151             |
| 117   | -7.90         | 16.62          | 0.126             | 245   | -20.68        | 33.52          | 0.126             |
| 118   | -8.00         | 17.14          | 0.130             | 246   | -20.78        | 32.83          | 0.180             |
| 119   | -8.10         | 16.20          | 0.138             | 247   | -20.87        | 25.71          | 0.163             |
| 120   | -8.20         | 14.32          | 0.125             | 248   | -20.98        | 27.48          | 0.077             |
| 121   | -8.30         | 12.85          | 0.100             | 249   | -21.09        | 34.24          | 0.079             |
| 122   | -8.40         | 12.05          | 0.078             | 250   | -21.20        | 35.68          | 0.079             |
| 123   | -8.50         | 9.34           | 0.073             | 251   | -21.31        | 27.96          | 0.122             |
| 124   | -8.60         | 6.03           | 0.060             | 252   | -21.41        | 28.83          | 0.138             |
| 125   | -8.70         | 3.77           | 0.048             | 253   | -21.51        | 34.14          | 0.124             |
| 126   | -8.80         | 4.04           | 0.040             | 254   | -21.61        | 43.82          | 0.064             |
| 127   | -8.90         | 4.70           | 0.044             | 255   | -21.68        | 46.10          | 0.000             |
| 128   | -9.00         | 4.89           | 0.045             | 256   | -21.70        | 44.87          | 0.000             |

# SONDERINGSGEGEVENS GRAFIEK: 4



| Na reductie en afsnuiten | rekengegevens | paal |
|--------------------------|---------------|------|
| -----                    | 250           | 250  |
| -----                    | 220           | 220  |

## SONDERINGSGEGEVENS ALGEMEEN: 5

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.79 Bodemprofiel: 5

Traject negatieve kleef : 3.79 tot 3.79 [m]

Traject positieve kleef : 2.00 tot -21.37 [m]

## SONDERINGSGEGEVENS TABEL: 5

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.79          | 0.00           | 0.000             | 128   | -8.86         | 10.08          | 0.083             |
| 2     | 3.74          | 1.96           | 0.015             | 129   | -8.96         | 11.52          | 0.099             |
| 3     | 3.64          | 4.30           | 0.065             | 130   | -9.06         | 10.82          | 0.101             |
| 4     | 3.54          | 3.31           | 0.103             | 131   | -9.16         | 9.66           | 0.093             |
| 5     | 3.44          | 2.51           | 0.085             | 132   | -9.26         | 8.19           | 0.085             |
| 6     | 3.34          | 2.05           | 0.054             | 133   | -9.36         | 7.04           | 0.077             |
| 7     | 3.24          | 1.59           | 0.043             | 134   | -9.46         | 7.85           | 0.072             |
| 8     | 3.14          | 1.29           | 0.037             | 135   | -9.55         | 8.50           | 0.078             |
| 9     | 3.04          | 1.10           | 0.035             | 136   | -9.65         | 6.95           | 0.079             |
| 10    | 2.94          | 0.95           | 0.029             | 137   | -9.75         | 6.00           | 0.072             |
| 11    | 2.84          | 0.83           | 0.024             | 138   | -9.86         | 7.50           | 0.065             |
| 12    | 2.74          | 0.86           | 0.022             | 139   | -9.96         | 8.21           | 0.064             |
| 13    | 2.64          | 0.69           | 0.020             | 140   | -10.05        | 7.11           | 0.063             |
| 14    | 2.54          | 0.69           | 0.020             | 141   | -10.15        | 14.54          | 0.082             |
| 15    | 2.44          | 0.59           | 0.022             | 142   | -10.25        | 21.63          | 0.131             |
| 16    | 2.34          | 0.42           | 0.022             | 143   | -10.35        | 23.32          | 0.180             |
| 17    | 2.24          | 0.55           | 0.019             | 144   | -10.45        | 21.96          | 0.201             |
| 18    | 2.14          | 1.63           | 0.017             | 145   | -10.55        | 20.59          | 0.198             |
| 19    | 2.04          | 5.40           | 0.023             | 146   | -10.65        | 20.02          | 0.182             |
| 20    | 1.94          | 5.74           | 0.033             | 147   | -10.75        | 20.51          | 0.182             |
| 21    | 1.84          | 5.04           | 0.032             | 148   | -10.85        | 19.65          | 0.181             |
| 22    | 1.74          | 4.17           | 0.032             | 149   | -10.95        | 20.01          | 0.173             |
| 23    | 1.64          | 3.71           | 0.026             | 150   | -11.05        | 18.85          | 0.173             |
| 24    | 1.54          | 3.34           | 0.021             | 151   | -11.15        | 18.34          | 0.163             |
| 25    | 1.44          | 2.97           | 0.021             | 152   | -11.25        | 19.17          | 0.158             |
| 26    | 1.34          | 2.69           | 0.018             | 153   | -11.35        | 21.06          | 0.173             |
| 27    | 1.24          | 2.33           | 0.016             | 154   | -11.45        | 20.93          | 0.185             |
| 28    | 1.14          | 2.15           | 0.014             | 155   | -11.55        | 18.87          | 0.181             |
| 29    | 1.04          | 2.02           | 0.012             | 156   | -11.65        | 17.31          | 0.160             |
| 30    | 0.94          | 1.73           | 0.011             | 157   | -11.75        | 17.68          | 0.147             |
| 31    | 0.84          | 1.59           | 0.010             | 158   | -11.85        | 18.02          | 0.155             |
| 32    | 0.74          | 1.66           | 0.009             | 159   | -11.95        | 16.65          | 0.164             |
| 33    | 0.64          | 1.69           | 0.010             | 160   | -12.05        | 13.84          | 0.147             |
| 34    | 0.54          | 1.96           | 0.009             | 161   | -12.15        | 11.85          | 0.154             |
| 35    | 0.44          | 2.64           | 0.009             | 162   | -12.25        | 10.71          | 0.120             |
| 36    | 0.34          | 3.70           | 0.011             | 163   | -12.35        | 13.61          | 0.125             |
| 37    | 0.24          | 4.62           | 0.018             | 164   | -12.45        | 12.14          | 0.147             |
| 38    | 0.14          | 5.15           | 0.029             | 165   | -12.55        | 19.39          | 0.137             |
| 39    | 0.04          | 4.96           | 0.025             | 166   | -12.65        | 27.36          | 0.159             |
| 40    | -0.06         | 5.69           | 0.028             | 167   | -12.75        | 29.64          | 0.204             |
| 41    | -0.16         | 5.99           | 0.031             | 168   | -12.85        | 27.85          | 0.218             |
| 42    | -0.26         | 6.42           | 0.034             | 169   | -12.95        | 25.92          | 0.208             |
| 43    | -0.36         | 7.14           | 0.038             | 170   | -13.05        | 27.59          | 0.205             |
| 44    | -0.46         | 7.70           | 0.046             | 171   | -13.15        | 26.81          | 0.192             |
| 45    | -0.56         | 7.90           | 0.052             | 172   | -13.25        | 27.81          | 0.200             |
| 46    | -0.66         | 7.62           | 0.053             | 173   | -13.35        | 29.40          | 0.219             |
| 47    | -0.76         | 6.86           | 0.051             | 174   | -13.45        | 27.74          | 0.222             |

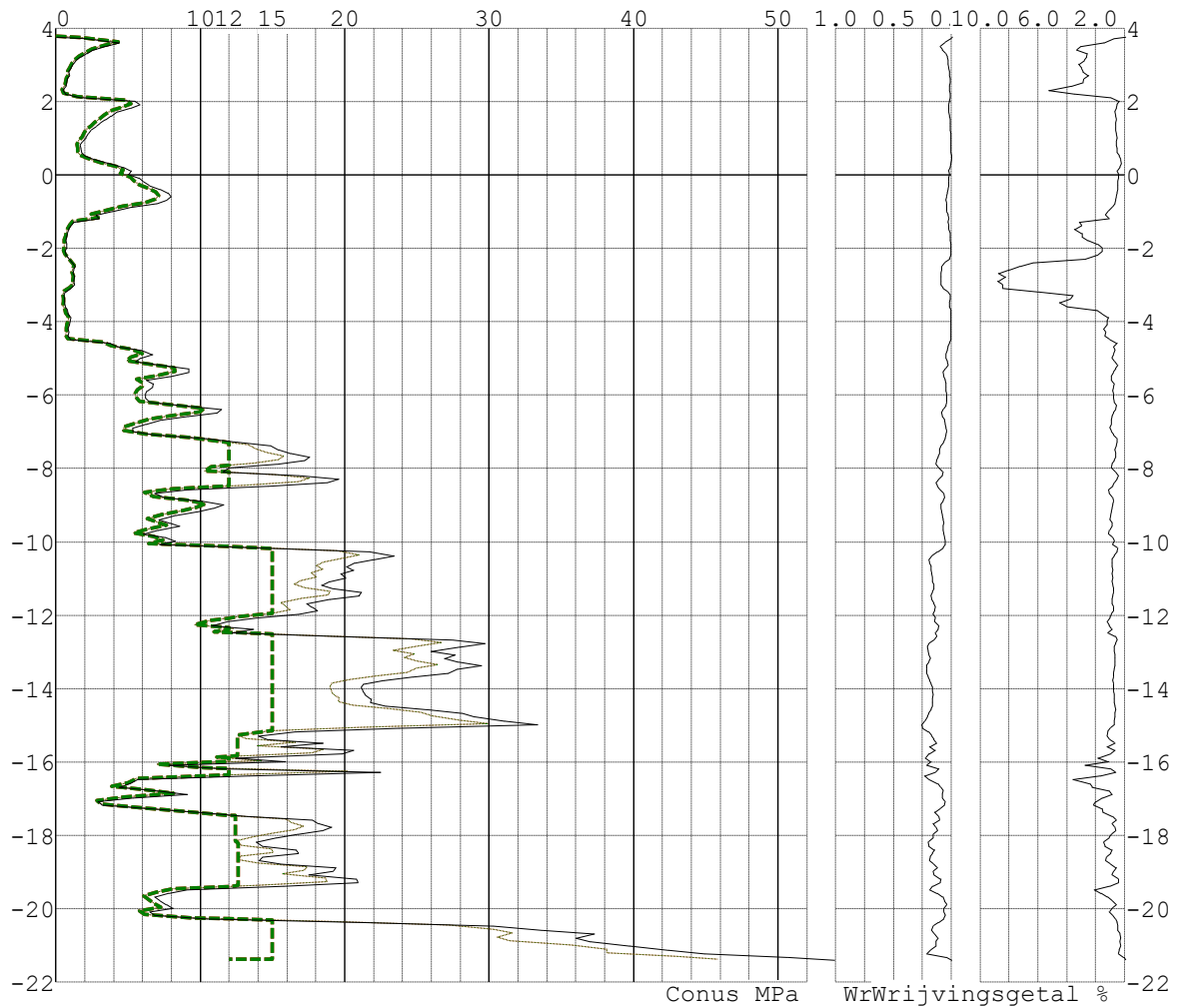
**SONDERINGSGEGEVENS TABEL: 5**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -0.86         | 5.12           | 0.048             | 175   | -13.55        | 27.01          | 0.221             |
| 49    | -0.96         | 3.81           | 0.046             | 176   | -13.65        | 24.63          | 0.209             |
| 50    | -1.06         | 2.69           | 0.036             | 177   | -13.75        | 22.59          | 0.197             |
| 51    | -1.16         | 2.93           | 0.034             | 178   | -13.85        | 21.22          | 0.182             |
| 52    | -1.26         | 1.16           | 0.037             | 179   | -13.95        | 21.10          | 0.175             |
| 53    | -1.36         | 0.95           | 0.029             | 180   | -14.05        | 21.19          | 0.173             |
| 54    | -1.46         | 0.80           | 0.028             | 181   | -14.15        | 21.31          | 0.165             |
| 55    | -1.56         | 0.71           | 0.021             | 182   | -14.25        | 21.76          | 0.172             |
| 56    | -1.66         | 0.64           | 0.019             | 183   | -14.35        | 21.74          | 0.171             |
| 57    | -1.76         | 0.62           | 0.016             | 184   | -14.45        | 22.80          | 0.170             |
| 58    | -1.86         | 0.65           | 0.013             | 185   | -14.54        | 25.70          | 0.183             |
| 59    | -1.96         | 0.64           | 0.010             | 186   | -14.64        | 28.07          | 0.203             |
| 60    | -2.06         | 0.58           | 0.009             | 187   | -14.75        | 28.95          | 0.217             |
| 61    | -2.16         | 0.64           | 0.012             | 188   | -14.86        | 31.01          | 0.237             |
| 62    | -2.26         | 0.85           | 0.024             | 189   | -14.96        | 33.26          | 0.265             |
| 63    | -2.36         | 1.07           | 0.068             | 190   | -15.06        | 23.62          | 0.257             |
| 64    | -2.46         | 1.28           | 0.094             | 191   | -15.16        | 16.50          | 0.201             |
| 65    | -2.56         | 1.16           | 0.094             | 192   | -15.26        | 13.96          | 0.179             |
| 66    | -2.66         | 1.11           | 0.097             | 193   | -15.36        | 14.64          | 0.158             |
| 67    | -2.76         | 1.20           | 0.099             | 194   | -15.46        | 18.44          | 0.137             |
| 68    | -2.86         | 1.14           | 0.101             | 195   | -15.56        | 15.50          | 0.197             |
| 69    | -2.96         | 1.18           | 0.101             | 196   | -15.66        | 20.56          | 0.149             |
| 70    | -3.06         | 0.94           | 0.081             | 197   | -15.76        | 19.68          | 0.204             |
| 71    | -3.16         | 0.57           | 0.034             | 198   | -15.86        | 12.36          | 0.235             |
| 72    | -3.26         | 0.48           | 0.018             | 199   | -15.96        | 15.82          | 0.186             |
| 73    | -3.36         | 0.51           | 0.020             | 200   | -16.06        | 7.76           | 0.220             |
| 74    | -3.46         | 0.52           | 0.024             | 201   | -16.16        | 11.45          | 0.117             |
| 75    | -3.56         | 0.54           | 0.022             | 202   | -16.26        | 22.42          | 0.149             |
| 76    | -3.66         | 0.71           | 0.014             | 203   | -16.36        | 13.30          | 0.237             |
| 77    | -3.76         | 0.76           | 0.013             | 204   | -16.46        | 5.61           | 0.204             |
| 78    | -3.86         | 0.95           | 0.011             | 205   | -16.56        | 4.98           | 0.123             |
| 79    | -3.96         | 0.94           | 0.012             | 206   | -16.66        | 4.29           | 0.100             |
| 80    | -4.06         | 0.87           | 0.011             | 207   | -16.76        | 6.96           | 0.079             |
| 81    | -4.16         | 0.78           | 0.012             | 208   | -16.85        | 9.03           | 0.086             |
| 82    | -4.26         | 0.81           | 0.011             | 209   | -16.95        | 5.25           | 0.086             |
| 83    | -4.36         | 0.75           | 0.011             | 210   | -17.05        | 2.85           | 0.059             |
| 84    | -4.46         | 0.89           | 0.010             | 211   | -17.15        | 3.13           | 0.070             |
| 85    | -4.56         | 3.65           | 0.022             | 212   | -17.25        | 6.38           | 0.104             |
| 86    | -4.66         | 4.22           | 0.036             | 213   | -17.35        | 9.67           | 0.154             |
| 87    | -4.76         | 5.81           | 0.042             | 214   | -17.45        | 13.24          | 0.116             |
| 88    | -4.86         | 6.62           | 0.055             | 215   | -17.55        | 17.70          | 0.114             |
| 89    | -4.96         | 5.76           | 0.053             | 216   | -17.65        | 18.12          | 0.169             |
| 90    | -5.06         | 5.42           | 0.040             | 217   | -17.75        | 19.03          | 0.139             |
| 91    | -5.16         | 7.25           | 0.038             | 218   | -17.85        | 18.32          | 0.130             |
| 92    | -5.26         | 9.12           | 0.063             | 219   | -17.95        | 16.63          | 0.168             |
| 93    | -5.36         | 9.14           | 0.078             | 220   | -18.05        | 15.19          | 0.169             |
| 94    | -5.46         | 7.79           | 0.076             | 221   | -18.16        | 13.78          | 0.209             |
| 95    | -5.56         | 6.20           | 0.061             | 222   | -18.27        | 14.27          | 0.204             |
| 96    | -5.66         | 6.66           | 0.053             | 223   | -18.37        | 16.57          | 0.154             |
| 97    | -5.76         | 6.64           | 0.056             | 224   | -18.47        | 16.72          | 0.173             |
| 98    | -5.86         | 6.25           | 0.054             | 225   | -18.57        | 14.25          | 0.192             |
| 99    | -5.96         | 6.11           | 0.051             | 226   | -18.66        | 14.00          | 0.194             |
| 100   | -6.06         | 6.14           | 0.052             | 227   | -18.76        | 15.60          | 0.162             |
| 101   | -6.16         | 6.42           | 0.051             | 228   | -18.86        | 19.33          | 0.128             |

**SONDERINGSGEGEVENS TABEL: 5**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 102   | -6.26         | 8.86           | 0.057             | 229   | -18.96        | 19.11          | 0.163             |
| 103   | -6.36         | 11.38          | 0.080             | 230   | -19.06        | 17.43          | 0.160             |
| 104   | -6.46         | 11.09          | 0.090             | 231   | -19.16        | 20.72          | 0.100             |
| 105   | -6.56         | 9.01           | 0.085             | 232   | -19.26        | 20.85          | 0.103             |
| 106   | -6.66         | 7.21           | 0.071             | 233   | -19.36        | 15.64          | 0.174             |
| 107   | -6.76         | 6.11           | 0.061             | 234   | -19.46        | 9.00           | 0.195             |
| 108   | -6.86         | 5.22           | 0.056             | 235   | -19.56        | 7.68           | 0.129             |
| 109   | -6.96         | 5.24           | 0.051             | 236   | -19.66        | 6.78           | 0.083             |
| 110   | -7.06         | 6.88           | 0.056             | 237   | -19.76        | 7.17           | 0.065             |
| 111   | -7.16         | 10.38          | 0.061             | 238   | -19.86        | 7.58           | 0.050             |
| 112   | -7.26         | 12.45          | 0.071             | 239   | -19.96        | 8.04           | 0.076             |
| 113   | -7.36         | 14.80          | 0.098             | 240   | -20.06        | 6.43           | 0.073             |
| 114   | -7.46         | 15.38          | 0.112             | 241   | -20.15        | 6.80           | 0.060             |
| 115   | -7.56         | 16.20          | 0.111             | 242   | -20.25        | 10.41          | 0.073             |
| 116   | -7.66         | 17.51          | 0.122             | 243   | -20.35        | 21.34          | 0.126             |
| 117   | -7.76         | 17.11          | 0.137             | 244   | -20.45        | 30.24          | 0.167             |
| 118   | -7.86         | 15.21          | 0.140             | 245   | -20.56        | 33.68          | 0.179             |
| 119   | -7.96         | 11.95          | 0.118             | 246   | -20.67        | 37.20          | 0.154             |
| 120   | -8.06         | 11.46          | 0.080             | 247   | -20.77        | 35.95          | 0.123             |
| 121   | -8.16         | 16.76          | 0.086             | 248   | -20.88        | 36.96          | 0.142             |
| 122   | -8.26         | 19.49          | 0.117             | 249   | -20.99        | 39.66          | 0.139             |
| 123   | -8.36         | 18.69          | 0.144             | 250   | -21.10        | 42.36          | 0.188             |
| 124   | -8.46         | 14.60          | 0.132             | 251   | -21.21        | 44.89          | 0.220             |
| 125   | -8.56         | 9.01           | 0.104             | 252   | -21.31        | 50.62          | 0.052             |
| 126   | -8.66         | 6.78           | 0.076             | 253   | -21.37        | 53.90          | 0.000             |
| 127   | -8.76         | 7.51           | 0.065             |       |               |                |                   |

## SONDERINGSGEGEVENS GRAFIEK: 5



| Na reductie en afsnuiten | rekengegevens | paal |
|--------------------------|---------------|------|
| -----                    | 250           | 250  |
| -----                    | 220           | 220  |

## SONDERINGSGEGEVENS ALGEMEEN: 6

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.62 Bodemprofiel: 6

Traject negatieve kleef : 3.62 tot 3.62 [m]

Traject positieve kleef : 1.40 tot -21.49 [m]

## SONDERINGSGEGEVENS TABEL: 6

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.62          | 0.00           | 0.000             | 127   | -8.91         | 6.11           | 0.038             |
| 2     | 3.57          | 1.02           | 0.020             | 128   | -9.02         | 5.52           | 0.045             |
| 3     | 3.47          | 2.34           | 0.061             | 129   | -9.11         | 3.57           | 0.041             |
| 4     | 3.37          | 1.72           | 0.065             | 130   | -9.21         | 2.33           | 0.028             |
| 5     | 3.27          | 1.42           | 0.048             | 131   | -9.31         | 2.37           | 0.021             |
| 6     | 3.17          | 1.70           | 0.049             | 132   | -9.41         | 2.85           | 0.025             |
| 7     | 3.07          | 1.59           | 0.039             | 133   | -9.51         | 1.04           | 0.029             |
| 8     | 2.97          | 1.17           | 0.028             | 134   | -9.61         | 0.53           | 0.014             |
| 9     | 2.87          | 0.86           | 0.022             | 135   | -9.71         | 4.01           | 0.019             |
| 10    | 2.77          | 0.77           | 0.019             | 136   | -9.81         | 13.40          | 0.075             |
| 11    | 2.67          | 0.72           | 0.021             | 137   | -9.91         | 16.07          | 0.121             |
| 12    | 2.57          | 0.97           | 0.024             | 138   | -10.01        | 14.02          | 0.141             |
| 13    | 2.47          | 0.88           | 0.020             | 139   | -10.11        | 11.75          | 0.118             |
| 14    | 2.37          | 0.85           | 0.017             | 140   | -10.21        | 11.89          | 0.084             |
| 15    | 2.27          | 0.78           | 0.016             | 141   | -10.31        | 14.07          | 0.089             |
| 16    | 2.17          | 0.98           | 0.017             | 142   | -10.41        | 19.04          | 0.131             |
| 17    | 2.07          | 1.10           | 0.023             | 143   | -10.51        | 21.65          | 0.190             |
| 18    | 1.97          | 2.47           | 0.023             | 144   | -10.61        | 26.58          | 0.195             |
| 19    | 1.87          | 2.81           | 0.020             | 145   | -10.71        | 33.50          | 0.241             |
| 20    | 1.77          | 2.67           | 0.018             | 146   | -10.82        | 37.01          | 0.290             |
| 21    | 1.67          | 2.66           | 0.014             | 147   | -10.93        | 36.99          | 0.302             |
| 22    | 1.57          | 2.69           | 0.017             | 148   | -11.03        | 35.04          | 0.304             |
| 23    | 1.47          | 2.77           | 0.019             | 149   | -11.13        | 30.03          | 0.279             |
| 24    | 1.37          | 3.46           | 0.023             | 150   | -11.23        | 26.93          | 0.238             |
| 25    | 1.27          | 5.02           | 0.027             | 151   | -11.33        | 23.72          | 0.218             |
| 26    | 1.17          | 7.65           | 0.043             | 152   | -11.43        | 21.94          | 0.213             |
| 27    | 1.07          | 9.58           | 0.077             | 153   | -11.54        | 20.72          | 0.197             |
| 28    | 0.97          | 15.99          | 0.090             | 154   | -11.65        | 22.39          | 0.153             |
| 29    | 0.87          | 16.78          | 0.111             | 155   | -11.75        | 22.14          | 0.174             |
| 30    | 0.77          | 15.24          | 0.117             | 156   | -11.85        | 23.00          | 0.191             |
| 31    | 0.67          | 13.97          | 0.102             | 157   | -11.95        | 21.13          | 0.189             |
| 32    | 0.57          | 12.26          | 0.095             | 158   | -12.05        | 18.02          | 0.170             |
| 33    | 0.47          | 12.13          | 0.086             | 159   | -12.15        | 14.18          | 0.158             |
| 34    | 0.37          | 12.62          | 0.088             | 160   | -12.24        | 9.36           | 0.146             |
| 35    | 0.27          | 12.51          | 0.090             | 161   | -12.34        | 12.72          | 0.103             |
| 36    | 0.17          | 12.18          | 0.089             | 162   | -12.44        | 17.13          | 0.115             |
| 37    | 0.07          | 11.65          | 0.085             | 163   | -12.54        | 17.37          | 0.144             |
| 38    | -0.03         | 11.94          | 0.082             | 164   | -12.64        | 19.86          | 0.145             |
| 39    | -0.13         | 12.16          | 0.081             | 165   | -12.74        | 22.50          | 0.151             |
| 40    | -0.23         | 11.94          | 0.081             | 166   | -12.84        | 22.57          | 0.182             |
| 41    | -0.33         | 10.92          | 0.075             | 167   | -12.95        | 21.46          | 0.177             |
| 42    | -0.43         | 10.21          | 0.072             | 168   | -13.06        | 22.02          | 0.172             |
| 43    | -0.53         | 10.22          | 0.071             | 169   | -13.16        | 21.01          | 0.172             |
| 44    | -0.63         | 10.15          | 0.069             | 170   | -13.26        | 17.79          | 0.151             |
| 45    | -0.73         | 9.81           | 0.070             | 171   | -13.36        | 15.67          | 0.136             |
| 46    | -0.83         | 9.98           | 0.067             | 172   | -13.46        | 17.61          | 0.136             |
| 47    | -0.93         | 9.74           | 0.065             | 173   | -13.56        | 22.16          | 0.151             |

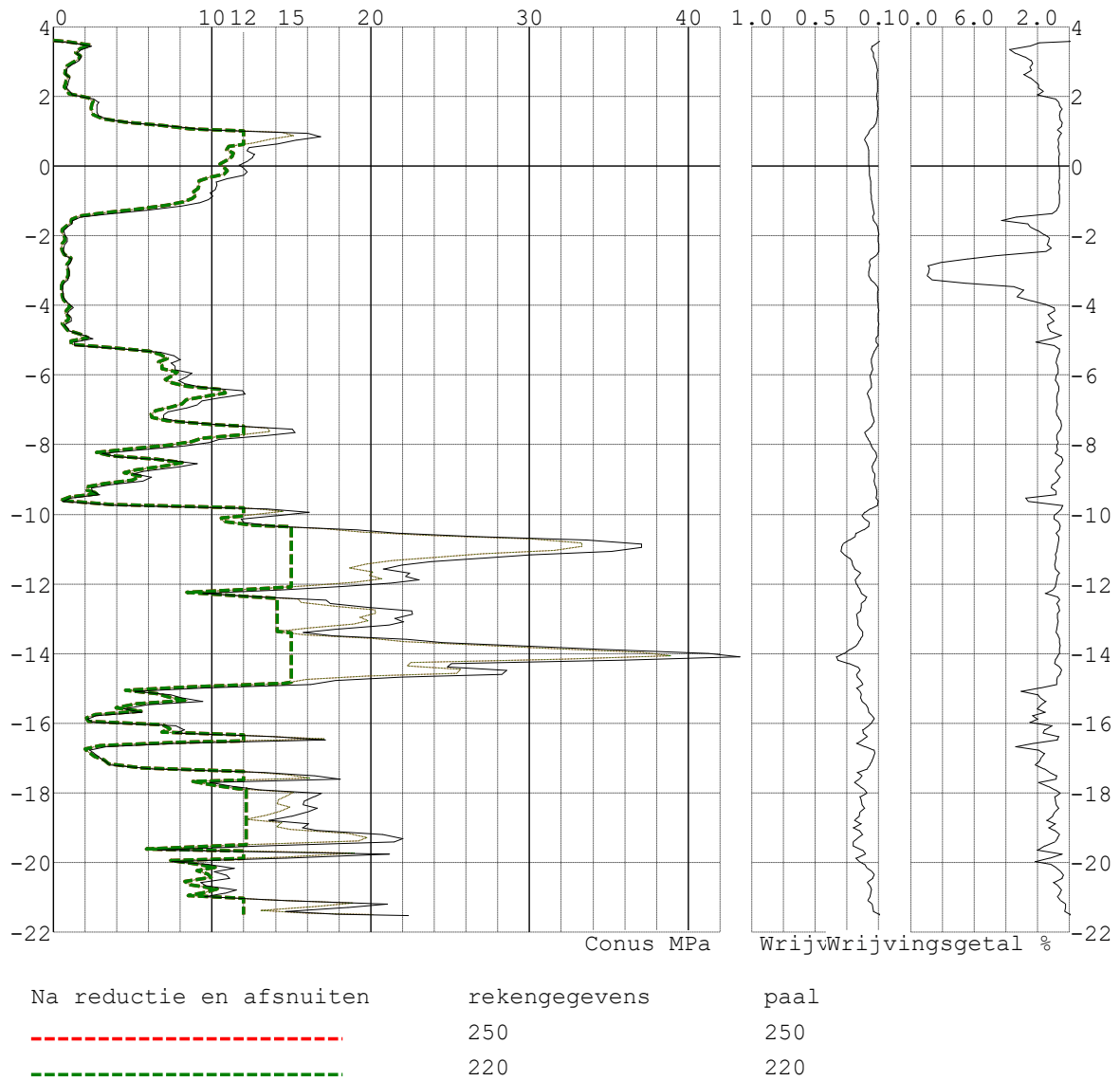
**SONDERINGSGEGEVENS TABEL: 6**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -1.03         | 9.11           | 0.061             | 174   | -13.66        | 24.55          | 0.166             |
| 49    | -1.13         | 7.91           | 0.057             | 175   | -13.76        | 29.64          | 0.188             |
| 50    | -1.23         | 5.80           | 0.048             | 176   | -13.86        | 34.58          | 0.233             |
| 51    | -1.33         | 3.62           | 0.043             | 177   | -13.96        | 41.22          | 0.285             |
| 52    | -1.43         | 1.67           | 0.057             | 178   | -14.06        | 43.21          | 0.341             |
| 53    | -1.53         | 1.15           | 0.050             | 179   | -14.16        | 35.70          | 0.333             |
| 54    | -1.63         | 1.12           | 0.030             | 180   | -14.26        | 25.00          | 0.241             |
| 55    | -1.73         | 0.81           | 0.020             | 181   | -14.36        | 24.77          | 0.170             |
| 56    | -1.83         | 0.61           | 0.013             | 182   | -14.46        | 28.50          | 0.154             |
| 57    | -1.93         | 0.64           | 0.010             | 183   | -14.56        | 28.21          | 0.181             |
| 58    | -2.03         | 0.81           | 0.011             | 184   | -14.65        | 21.94          | 0.176             |
| 59    | -2.13         | 0.79           | 0.011             | 185   | -14.75        | 17.72          | 0.151             |
| 60    | -2.23         | 0.62           | 0.009             | 186   | -14.85        | 16.11          | 0.136             |
| 61    | -2.33         | 0.59           | 0.007             | 187   | -14.95        | 9.53           | 0.183             |
| 62    | -2.43         | 0.55           | 0.009             | 188   | -15.05        | 5.06           | 0.156             |
| 63    | -2.53         | 0.68           | 0.031             | 189   | -15.15        | 7.29           | 0.148             |
| 64    | -2.63         | 1.10           | 0.071             | 190   | -15.25        | 8.09           | 0.150             |
| 65    | -2.73         | 1.01           | 0.082             | 191   | -15.35        | 9.34           | 0.142             |
| 66    | -2.83         | 0.86           | 0.077             | 192   | -15.45        | 5.86           | 0.108             |
| 67    | -2.93         | 0.90           | 0.080             | 193   | -15.55        | 4.39           | 0.092             |
| 68    | -3.03         | 0.96           | 0.085             | 194   | -15.65        | 5.51           | 0.086             |
| 69    | -3.13         | 0.95           | 0.086             | 195   | -15.75        | 2.63           | 0.062             |
| 70    | -3.23         | 0.85           | 0.073             | 196   | -15.85        | 2.08           | 0.043             |
| 71    | -3.33         | 0.59           | 0.038             | 197   | -15.95        | 2.46           | 0.063             |
| 72    | -3.43         | 0.52           | 0.019             | 198   | -16.05        | 7.63           | 0.088             |
| 73    | -3.53         | 0.51           | 0.015             | 199   | -16.15        | 8.18           | 0.133             |
| 74    | -3.63         | 0.57           | 0.018             | 200   | -16.25        | 7.59           | 0.129             |
| 75    | -3.73         | 0.55           | 0.018             | 201   | -16.35        | 13.71          | 0.098             |
| 76    | -3.83         | 0.72           | 0.017             | 202   | -16.45        | 17.08          | 0.137             |
| 77    | -3.93         | 0.95           | 0.015             | 203   | -16.54        | 7.91           | 0.183             |
| 78    | -4.03         | 1.18           | 0.012             | 204   | -16.64        | 3.26           | 0.111             |
| 79    | -4.13         | 0.95           | 0.009             | 205   | -16.74        | 2.22           | 0.045             |
| 80    | -4.22         | 0.79           | 0.011             | 206   | -16.84        | 2.50           | 0.041             |
| 81    | -4.32         | 1.07           | 0.013             | 207   | -16.95        | 2.86           | 0.052             |
| 82    | -4.42         | 1.06           | 0.011             | 208   | -17.06        | 3.20           | 0.061             |
| 83    | -4.52         | 0.64           | 0.009             | 209   | -17.17        | 3.49           | 0.078             |
| 84    | -4.62         | 0.81           | 0.011             | 210   | -17.28        | 6.20           | 0.100             |
| 85    | -4.72         | 0.98           | 0.013             | 211   | -17.38        | 13.13          | 0.175             |
| 86    | -4.82         | 1.87           | 0.011             | 212   | -17.48        | 16.40          | 0.139             |
| 87    | -4.92         | 2.40           | 0.030             | 213   | -17.58        | 18.00          | 0.163             |
| 88    | -5.02         | 1.22           | 0.027             | 214   | -17.68        | 9.78           | 0.197             |
| 89    | -5.12         | 1.28           | 0.013             | 215   | -17.78        | 11.34          | 0.154             |
| 90    | -5.22         | 4.18           | 0.029             | 216   | -17.88        | 12.98          | 0.122             |
| 91    | -5.32         | 6.68           | 0.044             | 217   | -17.98        | 16.82          | 0.104             |
| 92    | -5.42         | 7.52           | 0.057             | 218   | -18.09        | 16.36          | 0.156             |
| 93    | -5.52         | 7.96           | 0.066             | 219   | -18.20        | 15.75          | 0.145             |
| 94    | -5.62         | 7.35           | 0.067             | 220   | -18.31        | 15.68          | 0.141             |
| 95    | -5.72         | 7.58           | 0.061             | 221   | -18.42        | 16.55          | 0.119             |
| 96    | -5.82         | 7.59           | 0.057             | 222   | -18.53        | 15.88          | 0.155             |
| 97    | -5.92         | 8.68           | 0.068             | 223   | -18.64        | 14.93          | 0.164             |
| 98    | -6.02         | 8.38           | 0.076             | 224   | -18.75        | 13.52          | 0.200             |
| 99    | -6.12         | 7.81           | 0.072             | 225   | -18.86        | 16.01          | 0.148             |
| 100   | -6.22         | 8.30           | 0.068             | 226   | -18.97        | 15.64          | 0.210             |
| 101   | -6.32         | 9.30           | 0.068             | 227   | -19.06        | 16.55          | 0.163             |

**SONDERINGSGEGEVENS TABEL: 6**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 102   | -6.42         | 11.87          | 0.085             | 228   | -19.17        | 20.69          | 0.137             |
| 103   | -6.52         | 12.03          | 0.096             | 229   | -19.28        | 21.96          | 0.178             |
| 104   | -6.62         | 10.60          | 0.090             | 230   | -19.39        | 21.36          | 0.208             |
| 105   | -6.72         | 9.30           | 0.079             | 231   | -19.50        | 12.95          | 0.211             |
| 106   | -6.82         | 9.01           | 0.072             | 232   | -19.61        | 6.51           | 0.136             |
| 107   | -6.92         | 8.23           | 0.071             | 233   | -19.73        | 21.09          | 0.111             |
| 108   | -7.02         | 7.18           | 0.065             | 234   | -19.84        | 14.59          | 0.190             |
| 109   | -7.12         | 6.86           | 0.060             | 235   | -19.94        | 7.38           | 0.163             |
| 110   | -7.22         | 6.88           | 0.051             | 236   | -20.03        | 9.62           | 0.117             |
| 111   | -7.32         | 7.92           | 0.047             | 237   | -20.13        | 11.33          | 0.096             |
| 112   | -7.42         | 11.30          | 0.061             | 238   | -20.23        | 10.07          | 0.060             |
| 113   | -7.52         | 15.01          | 0.089             | 239   | -20.33        | 10.82          | 0.044             |
| 114   | -7.62         | 15.15          | 0.118             | 240   | -20.43        | 11.06          | 0.055             |
| 115   | -7.72         | 13.07          | 0.111             | 241   | -20.54        | 9.22           | 0.097             |
| 116   | -7.82         | 10.41          | 0.090             | 242   | -20.65        | 9.59           | 0.075             |
| 117   | -7.92         | 9.69           | 0.076             | 243   | -20.75        | 11.46          | 0.065             |
| 118   | -8.02         | 8.12           | 0.068             | 244   | -20.85        | 10.69          | 0.070             |
| 119   | -8.12         | 5.22           | 0.042             | 245   | -20.95        | 9.46           | 0.077             |
| 120   | -8.22         | 3.00           | 0.028             | 246   | -21.06        | 14.73          | 0.091             |
| 121   | -8.32         | 4.04           | 0.023             | 247   | -21.16        | 20.96          | 0.062             |
| 122   | -8.42         | 7.21           | 0.033             | 248   | -21.26        | 18.46          | 0.055             |
| 123   | -8.52         | 9.01           | 0.051             | 249   | -21.37        | 14.55          | 0.049             |
| 124   | -8.62         | 7.77           | 0.062             | 250   | -21.46        | 17.80          | 0.000             |
| 125   | -8.72         | 5.70           | 0.053             | 251   | -21.49        | 22.35          | 0.000             |
| 126   | -8.81         | 4.96           | 0.040             |       |               |                |                   |

## SONDERINGSGEGEVENS GRAFIEK: 6



### SONDERINGSGEGEVENS ALGEMEEN: 7

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.71 Bodemprofiel: 7

Traject negatieve kleef : 3.71 tot 3.71 [m]

Traject positieve kleef : 2.10 tot -14.84 [m]

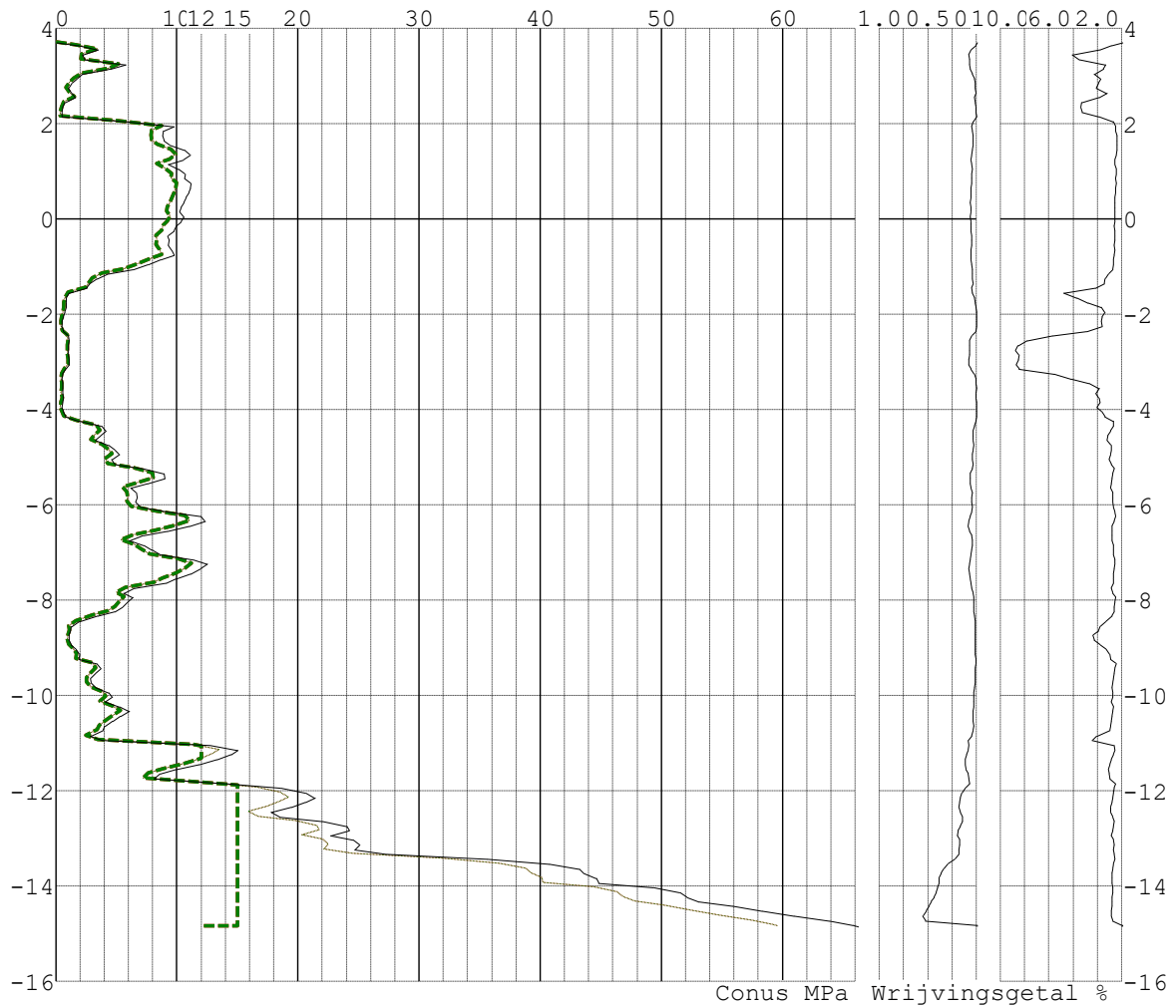
### SONDERINGSGEGEVENS TABEL: 7

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.71          | 0.00           | 0.000             | 95    | -5.63         | 6.14           | 0.063             |
| 2     | 3.66          | 1.80           | 0.017             | 96    | -5.73         | 6.56           | 0.055             |
| 3     | 3.56          | 3.40           | 0.065             | 97    | -5.83         | 6.62           | 0.056             |
| 4     | 3.46          | 2.13           | 0.089             | 98    | -5.93         | 6.52           | 0.055             |
| 5     | 3.36          | 2.29           | 0.081             | 99    | -6.03         | 6.91           | 0.053             |
| 6     | 3.26          | 5.72           | 0.081             | 100   | -6.13         | 9.31           | 0.058             |
| 7     | 3.16          | 4.38           | 0.070             | 101   | -6.23         | 11.89          | 0.071             |
| 8     | 3.06          | 2.16           | 0.050             | 102   | -6.33         | 12.26          | 0.089             |
| 9     | 2.96          | 1.65           | 0.030             | 103   | -6.43         | 10.89          | 0.097             |
| 10    | 2.86          | 1.26           | 0.025             | 104   | -6.53         | 9.07           | 0.078             |
| 11    | 2.76          | 0.96           | 0.021             | 105   | -6.63         | 7.12           | 0.061             |
| 12    | 2.66          | 1.26           | 0.016             | 106   | -6.73         | 6.01           | 0.051             |
| 13    | 2.56          | 1.52           | 0.030             | 107   | -6.83         | 7.23           | 0.054             |
| 14    | 2.46          | 0.65           | 0.022             | 108   | -6.93         | 7.85           | 0.061             |
| 15    | 2.36          | 0.49           | 0.017             | 109   | -7.03         | 8.63           | 0.065             |
| 16    | 2.26          | 0.42           | 0.014             | 110   | -7.13         | 11.26          | 0.073             |
| 17    | 2.16          | 0.42           | 0.008             | 111   | -7.23         | 12.44          | 0.081             |
| 18    | 2.06          | 5.76           | 0.045             | 112   | -7.33         | 11.88          | 0.087             |
| 19    | 1.96          | 9.69           | 0.057             | 113   | -7.43         | 11.03          | 0.082             |
| 20    | 1.86          | 8.78           | 0.051             | 114   | -7.53         | 9.78           | 0.073             |
| 21    | 1.76          | 8.72           | 0.042             | 115   | -7.63         | 8.98           | 0.067             |
| 22    | 1.66          | 8.84           | 0.043             | 116   | -7.73         | 6.42           | 0.060             |
| 23    | 1.56          | 9.30           | 0.046             | 117   | -7.83         | 5.53           | 0.044             |
| 24    | 1.46          | 10.54          | 0.050             | 118   | -7.93         | 6.26           | 0.038             |
| 25    | 1.36          | 11.01          | 0.059             | 119   | -8.03         | 5.84           | 0.038             |
| 26    | 1.26          | 10.43          | 0.066             | 120   | -8.13         | 5.41           | 0.037             |
| 27    | 1.16          | 9.24           | 0.060             | 121   | -8.23         | 4.79           | 0.034             |
| 28    | 1.06          | 10.07          | 0.053             | 122   | -8.32         | 3.35           | 0.029             |
| 29    | 0.96          | 10.60          | 0.058             | 123   | -8.43         | 1.82           | 0.025             |
| 30    | 0.86          | 10.56          | 0.060             | 124   | -8.53         | 1.19           | 0.022             |
| 31    | 0.76          | 11.08          | 0.059             | 125   | -8.62         | 1.11           | 0.022             |
| 32    | 0.66          | 11.01          | 0.064             | 126   | -8.72         | 1.00           | 0.025             |
| 33    | 0.56          | 10.91          | 0.066             | 127   | -8.82         | 1.04           | 0.025             |
| 34    | 0.46          | 10.67          | 0.066             | 128   | -8.92         | 1.22           | 0.022             |
| 35    | 0.36          | 10.52          | 0.070             | 129   | -9.02         | 1.58           | 0.021             |
| 36    | 0.26          | 10.25          | 0.066             | 130   | -9.12         | 1.88           | 0.019             |
| 37    | 0.16          | 10.15          | 0.063             | 131   | -9.22         | 1.86           | 0.018             |
| 38    | 0.06          | 10.47          | 0.070             | 132   | -9.32         | 3.33           | 0.018             |
| 39    | -0.04         | 10.24          | 0.069             | 133   | -9.42         | 3.68           | 0.023             |
| 40    | -0.14         | 9.87           | 0.069             | 134   | -9.52         | 3.20           | 0.023             |
| 41    | -0.24         | 9.69           | 0.063             | 135   | -9.62         | 2.79           | 0.021             |
| 42    | -0.34         | 9.17           | 0.059             | 136   | -9.72         | 2.84           | 0.024             |
| 43    | -0.44         | 9.28           | 0.061             | 137   | -9.82         | 3.23           | 0.028             |
| 44    | -0.54         | 9.21           | 0.062             | 138   | -9.92         | 4.30           | 0.034             |
| 45    | -0.64         | 9.49           | 0.062             | 139   | -10.02        | 4.58           | 0.036             |
| 46    | -0.74         | 9.69           | 0.066             | 140   | -10.12        | 4.03           | 0.039             |
| 47    | -0.84         | 8.59           | 0.064             | 141   | -10.22        | 5.23           | 0.040             |

**SONDERINGSGEGEVENS TABEL: 7**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -0.94         | 7.51           | 0.058             | 142   | -10.32        | 5.97           | 0.047             |
| 49    | -1.04         | 6.30           | 0.052             | 143   | -10.42        | 5.25           | 0.047             |
| 50    | -1.14         | 4.26           | 0.049             | 144   | -10.52        | 4.59           | 0.044             |
| 51    | -1.24         | 3.31           | 0.049             | 145   | -10.62        | 3.97           | 0.039             |
| 52    | -1.34         | 2.73           | 0.042             | 146   | -10.72        | 3.80           | 0.041             |
| 53    | -1.44         | 2.48           | 0.056             | 147   | -10.83        | 2.78           | 0.061             |
| 54    | -1.54         | 0.99           | 0.048             | 148   | -10.93        | 3.84           | 0.096             |
| 55    | -1.64         | 0.80           | 0.030             | 149   | -11.03        | 12.64          | 0.088             |
| 56    | -1.74         | 0.76           | 0.022             | 150   | -11.13        | 14.96          | 0.096             |
| 57    | -1.84         | 0.76           | 0.013             | 151   | -11.23        | 14.35          | 0.111             |
| 58    | -1.94         | 0.66           | 0.009             | 152   | -11.33        | 13.21          | 0.124             |
| 59    | -2.04         | 0.53           | 0.009             | 153   | -11.43        | 11.72          | 0.123             |
| 60    | -2.14         | 0.45           | 0.008             | 154   | -11.53        | 9.82           | 0.116             |
| 61    | -2.24         | 0.41           | 0.007             | 155   | -11.63        | 8.49           | 0.095             |
| 62    | -2.34         | 0.52           | 0.016             | 156   | -11.73        | 8.02           | 0.087             |
| 63    | -2.44         | 0.95           | 0.055             | 157   | -11.83        | 14.13          | 0.082             |
| 64    | -2.54         | 1.00           | 0.079             | 158   | -11.93        | 18.51          | 0.126             |
| 65    | -2.64         | 0.97           | 0.084             | 159   | -12.03        | 20.57          | 0.160             |
| 66    | -2.74         | 0.95           | 0.084             | 160   | -12.13        | 21.36          | 0.178             |
| 67    | -2.84         | 0.98           | 0.084             | 161   | -12.23        | 20.52          | 0.184             |
| 68    | -2.94         | 1.03           | 0.089             | 162   | -12.33        | 19.33          | 0.189             |
| 69    | -3.04         | 1.04           | 0.091             | 163   | -12.43        | 17.68          | 0.176             |
| 70    | -3.14         | 0.74           | 0.063             | 164   | -12.53        | 18.54          | 0.155             |
| 71    | -3.24         | 0.47           | 0.027             | 165   | -12.63        | 22.00          | 0.156             |
| 72    | -3.34         | 0.43           | 0.018             | 166   | -12.73        | 23.95          | 0.176             |
| 73    | -3.44         | 0.48           | 0.013             | 167   | -12.82        | 24.15          | 0.194             |
| 74    | -3.54         | 0.48           | 0.009             | 168   | -12.92        | 22.61          | 0.208             |
| 75    | -3.64         | 0.50           | 0.011             | 169   | -13.02        | 24.51          | 0.182             |
| 76    | -3.74         | 0.58           | 0.011             | 170   | -13.12        | 25.03          | 0.181             |
| 77    | -3.84         | 0.49           | 0.009             | 171   | -13.22        | 24.59          | 0.189             |
| 78    | -3.94         | 0.44           | 0.009             | 172   | -13.32        | 27.21          | 0.193             |
| 79    | -4.03         | 0.57           | 0.009             | 173   | -13.42        | 35.55          | 0.231             |
| 80    | -4.13         | 0.73           | 0.011             | 174   | -13.52        | 40.70          | 0.306             |
| 81    | -4.23         | 1.85           | 0.014             | 175   | -13.62        | 43.15          | 0.353             |
| 82    | -4.33         | 3.73           | 0.029             | 176   | -13.72        | 43.53          | 0.375             |
| 83    | -4.43         | 4.04           | 0.041             | 177   | -13.82        | 44.58          | 0.399             |
| 84    | -4.53         | 3.57           | 0.043             | 178   | -13.92        | 44.73          | 0.393             |
| 85    | -4.63         | 3.18           | 0.040             | 179   | -14.02        | 49.31          | 0.409             |
| 86    | -4.73         | 4.27           | 0.040             | 180   | -14.12        | 51.48          | 0.427             |
| 87    | -4.83         | 4.85           | 0.047             | 181   | -14.22        | 52.07          | 0.446             |
| 88    | -4.93         | 5.16           | 0.050             | 182   | -14.32        | 53.07          | 0.474             |
| 89    | -5.03         | 4.51           | 0.051             | 183   | -14.41        | 55.83          | 0.496             |
| 90    | -5.13         | 4.80           | 0.046             | 184   | -14.51        | 58.28          | 0.530             |
| 91    | -5.23         | 7.19           | 0.052             | 185   | -14.61        | 60.90          | 0.560             |
| 92    | -5.33         | 8.89           | 0.072             | 186   | -14.71        | 63.82          | 0.535             |
| 93    | -5.43         | 8.92           | 0.076             | 187   | -14.80        | 65.75          | 0.000             |
| 94    | -5.53         | 7.43           | 0.070             | 188   | -14.84        | 66.25          | 0.000             |

## SONDERINGSGEGEVENS GRAFIEK: 7



| Na reductie en afsnuiten | rekengegevens | paal |
|--------------------------|---------------|------|
| -----                    | 250           | 250  |
| -----                    | 220           | 220  |

### SONDERINGSGEGEVENS ALGEMEEN: 8

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.77 Bodemprofiel: 8

Traject negatieve kleef : 3.77 tot 3.77 [m]

Traject positieve kleef : 0.90 tot -21.47 [m]

### SONDERINGSGEGEVENS TABEL: 8

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.77          | 0.00           | 0.000             | 129   | -8.98         | 9.30           | 0.075             |
| 2     | 3.72          | 1.36           | 0.010             | 130   | -9.08         | 8.37           | 0.068             |
| 3     | 3.62          | 2.19           | 0.021             | 131   | -9.18         | 7.69           | 0.059             |
| 4     | 3.52          | 1.65           | 0.024             | 132   | -9.28         | 7.55           | 0.059             |
| 5     | 3.42          | 1.38           | 0.021             | 133   | -9.38         | 7.84           | 0.061             |
| 6     | 3.32          | 0.92           | 0.020             | 134   | -9.48         | 8.62           | 0.064             |
| 7     | 3.22          | 0.64           | 0.018             | 135   | -9.58         | 9.62           | 0.069             |
| 8     | 3.12          | 0.61           | 0.016             | 136   | -9.68         | 10.09          | 0.074             |
| 9     | 3.02          | 0.75           | 0.015             | 137   | -9.78         | 9.46           | 0.076             |
| 10    | 2.92          | 0.71           | 0.018             | 138   | -9.88         | 10.71          | 0.076             |
| 11    | 2.82          | 0.59           | 0.019             | 139   | -9.98         | 9.24           | 0.075             |
| 12    | 2.72          | 0.46           | 0.016             | 140   | -10.08        | 8.08           | 0.067             |
| 13    | 2.62          | 0.42           | 0.013             | 141   | -10.18        | 6.69           | 0.057             |
| 14    | 2.52          | 0.40           | 0.014             | 142   | -10.28        | 6.30           | 0.049             |
| 15    | 2.42          | 0.39           | 0.013             | 143   | -10.38        | 6.83           | 0.046             |
| 16    | 2.32          | 0.38           | 0.017             | 144   | -10.48        | 6.25           | 0.052             |
| 17    | 2.22          | 0.31           | 0.012             | 145   | -10.57        | 5.63           | 0.049             |
| 18    | 2.12          | 1.17           | 0.007             | 146   | -10.68        | 4.36           | 0.044             |
| 19    | 2.02          | 2.28           | 0.011             | 147   | -10.78        | 4.04           | 0.041             |
| 20    | 1.92          | 2.40           | 0.015             | 148   | -10.88        | 3.87           | 0.042             |
| 21    | 1.82          | 2.11           | 0.013             | 149   | -10.98        | 4.65           | 0.041             |
| 22    | 1.72          | 1.86           | 0.010             | 150   | -11.07        | 4.11           | 0.044             |
| 23    | 1.62          | 1.72           | 0.009             | 151   | -11.17        | 4.28           | 0.041             |
| 24    | 1.52          | 1.86           | 0.019             | 152   | -11.27        | 6.92           | 0.034             |
| 25    | 1.42          | 2.00           | 0.013             | 153   | -11.37        | 11.34          | 0.045             |
| 26    | 1.32          | 3.34           | 0.014             | 154   | -11.47        | 16.55          | 0.086             |
| 27    | 1.22          | 3.52           | 0.020             | 155   | -11.57        | 18.81          | 0.120             |
| 28    | 1.12          | 3.22           | 0.021             | 156   | -11.67        | 19.49          | 0.140             |
| 29    | 1.02          | 2.78           | 0.017             | 157   | -11.77        | 18.75          | 0.154             |
| 30    | 0.92          | 2.78           | 0.013             | 158   | -11.87        | 16.22          | 0.154             |
| 31    | 0.82          | 6.68           | 0.025             | 159   | -11.97        | 12.78          | 0.150             |
| 32    | 0.72          | 9.47           | 0.046             | 160   | -12.07        | 13.54          | 0.128             |
| 33    | 0.62          | 10.53          | 0.060             | 161   | -12.17        | 16.18          | 0.112             |
| 34    | 0.52          | 10.96          | 0.066             | 162   | -12.28        | 15.74          | 0.136             |
| 35    | 0.42          | 11.00          | 0.070             | 163   | -12.39        | 12.74          | 0.153             |
| 36    | 0.32          | 10.93          | 0.073             | 164   | -12.49        | 11.25          | 0.149             |
| 37    | 0.22          | 10.81          | 0.069             | 165   | -12.59        | 15.22          | 0.114             |
| 38    | 0.12          | 11.10          | 0.069             | 166   | -12.69        | 18.02          | 0.121             |
| 39    | 0.02          | 10.93          | 0.070             | 167   | -12.79        | 20.42          | 0.151             |
| 40    | -0.08         | 10.76          | 0.070             | 168   | -12.89        | 20.12          | 0.170             |
| 41    | -0.18         | 10.43          | 0.067             | 169   | -12.99        | 21.33          | 0.165             |
| 42    | -0.28         | 9.84           | 0.064             | 170   | -13.09        | 24.62          | 0.165             |
| 43    | -0.38         | 9.64           | 0.064             | 171   | -13.19        | 25.41          | 0.175             |
| 44    | -0.48         | 9.02           | 0.062             | 172   | -13.29        | 25.44          | 0.193             |
| 45    | -0.58         | 8.62           | 0.059             | 173   | -13.39        | 24.72          | 0.184             |
| 46    | -0.68         | 7.83           | 0.058             | 174   | -13.49        | 30.11          | 0.197             |
| 47    | -0.78         | 6.17           | 0.052             | 175   | -13.59        | 31.50          | 0.228             |

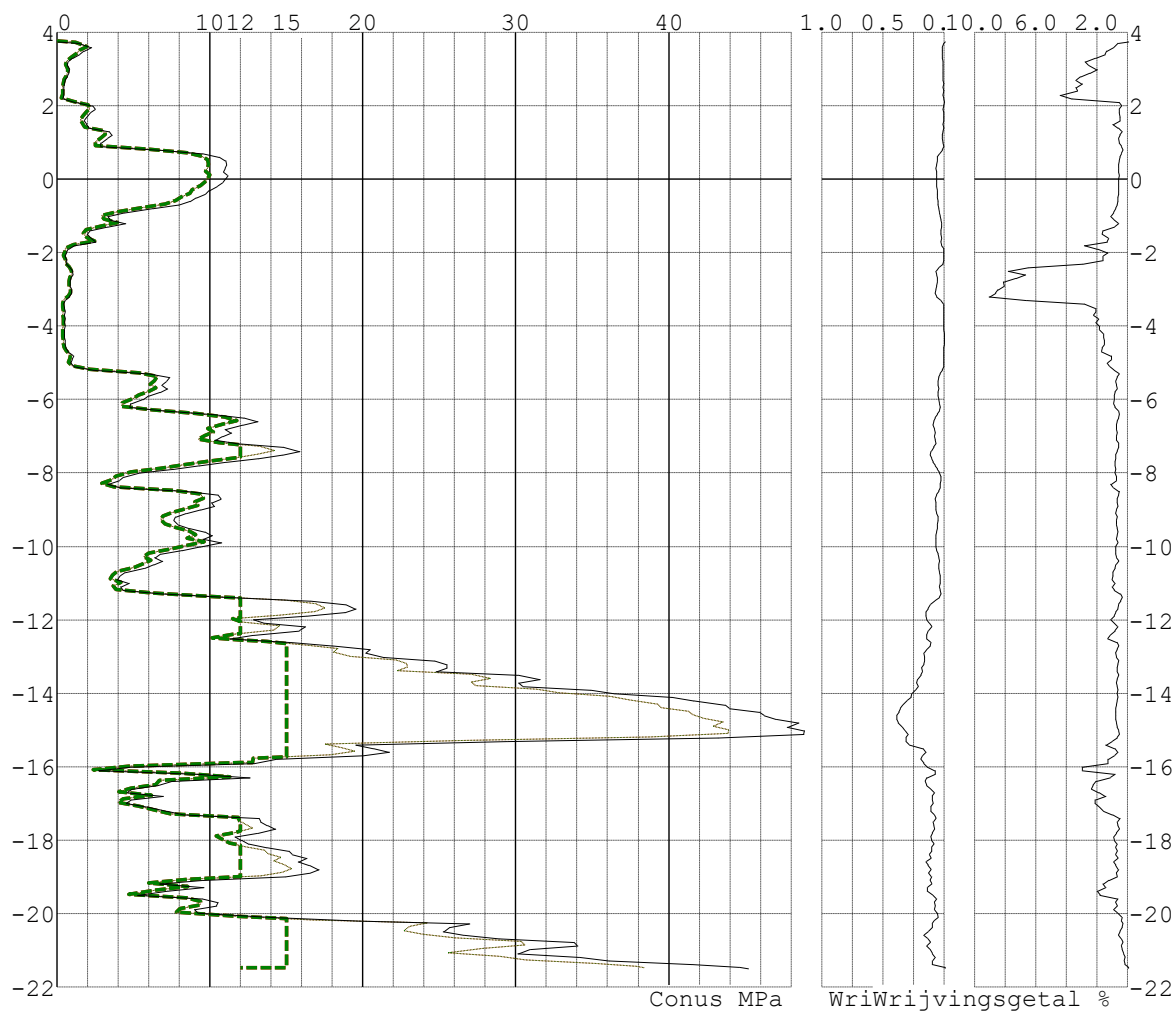
**SONDERINGSGEGEVENS TABEL: 8**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -0.88         | 4.34           | 0.043             | 176   | -13.69        | 30.11          | 0.234             |
| 49    | -0.98         | 3.23           | 0.038             | 177   | -13.79        | 30.41          | 0.220             |
| 50    | -1.08         | 3.40           | 0.031             | 178   | -13.89        | 34.85          | 0.241             |
| 51    | -1.18         | 4.40           | 0.029             | 179   | -13.99        | 36.45          | 0.270             |
| 52    | -1.28         | 3.21           | 0.030             | 180   | -14.09        | 40.17          | 0.277             |
| 53    | -1.38         | 2.12           | 0.035             | 181   | -14.19        | 41.59          | 0.312             |
| 54    | -1.48         | 1.92           | 0.033             | 182   | -14.29        | 43.64          | 0.348             |
| 55    | -1.58         | 2.20           | 0.029             | 183   | -14.39        | 43.92          | 0.366             |
| 56    | -1.68         | 2.49           | 0.035             | 184   | -14.49        | 45.86          | 0.379             |
| 57    | -1.78         | 1.06           | 0.030             | 185   | -14.59        | 46.22          | 0.395             |
| 58    | -1.88         | 0.65           | 0.013             | 186   | -14.69        | 47.00          | 0.392             |
| 59    | -1.98         | 0.58           | 0.008             | 187   | -14.79        | 48.42          | 0.381             |
| 60    | -2.08         | 0.48           | 0.008             | 188   | -14.89        | 47.67          | 0.349             |
| 61    | -2.18         | 0.57           | 0.010             | 189   | -14.99        | 48.80          | 0.326             |
| 62    | -2.28         | 0.58           | 0.017             | 190   | -15.09        | 48.77          | 0.302             |
| 63    | -2.38         | 0.81           | 0.053             | 191   | -15.19        | 43.14          | 0.321             |
| 64    | -2.48         | 0.94           | 0.073             | 192   | -15.29        | 29.40          | 0.321             |
| 65    | -2.58         | 0.99           | 0.067             | 193   | -15.38        | 19.49          | 0.288             |
| 66    | -2.68         | 0.84           | 0.062             | 194   | -15.48        | 20.64          | 0.178             |
| 67    | -2.78         | 0.79           | 0.065             | 195   | -15.58        | 21.66          | 0.154             |
| 68    | -2.88         | 0.81           | 0.066             | 196   | -15.68        | 19.90          | 0.186             |
| 69    | -2.98         | 0.86           | 0.074             | 197   | -15.78        | 14.26          | 0.194             |
| 70    | -3.08         | 0.91           | 0.079             | 198   | -15.88        | 12.77          | 0.171             |
| 71    | -3.18         | 0.74           | 0.067             | 199   | -15.98        | 4.73           | 0.142             |
| 72    | -3.28         | 0.48           | 0.032             | 200   | -16.08        | 2.64           | 0.080             |
| 73    | -3.38         | 0.39           | 0.011             | 201   | -16.18        | 9.16           | 0.080             |
| 74    | -3.48         | 0.40           | 0.009             | 202   | -16.28        | 12.55          | 0.152             |
| 75    | -3.58         | 0.45           | 0.010             | 203   | -16.38        | 7.45           | 0.159             |
| 76    | -3.68         | 0.44           | 0.010             | 204   | -16.48        | 6.45           | 0.151             |
| 77    | -3.78         | 0.48           | 0.009             | 205   | -16.58        | 4.83           | 0.118             |
| 78    | -3.88         | 0.44           | 0.009             | 206   | -16.68        | 4.52           | 0.086             |
| 79    | -3.98         | 0.47           | 0.009             | 207   | -16.78        | 6.88           | 0.102             |
| 80    | -4.08         | 0.43           | 0.008             | 208   | -16.88        | 4.81           | 0.106             |
| 81    | -4.18         | 0.43           | 0.007             | 209   | -16.98        | 4.45           | 0.098             |
| 82    | -4.28         | 0.43           | 0.007             | 210   | -17.08        | 5.87           | 0.113             |
| 83    | -4.38         | 0.45           | 0.007             | 211   | -17.18        | 7.17           | 0.117             |
| 84    | -4.48         | 0.45           | 0.007             | 212   | -17.28        | 8.28           | 0.083             |
| 85    | -4.58         | 0.49           | 0.008             | 213   | -17.38        | 13.15          | 0.074             |
| 86    | -4.68         | 0.67           | 0.012             | 214   | -17.48        | 13.27          | 0.100             |
| 87    | -4.78         | 1.00           | 0.011             | 215   | -17.58        | 13.73          | 0.094             |
| 88    | -4.88         | 0.92           | 0.010             | 216   | -17.68        | 14.21          | 0.088             |
| 89    | -4.98         | 0.81           | 0.011             | 217   | -17.78        | 13.01          | 0.101             |
| 90    | -5.08         | 1.08           | 0.013             | 218   | -17.88        | 11.58          | 0.113             |
| 91    | -5.18         | 2.38           | 0.022             | 219   | -17.98        | 12.05          | 0.110             |
| 92    | -5.28         | 5.96           | 0.037             | 220   | -18.08        | 12.53          | 0.094             |
| 93    | -5.38         | 7.29           | 0.053             | 221   | -18.17        | 13.65          | 0.112             |
| 94    | -5.48         | 7.07           | 0.060             | 222   | -18.27        | 15.10          | 0.110             |
| 95    | -5.58         | 6.78           | 0.054             | 223   | -18.37        | 15.33          | 0.126             |
| 96    | -5.68         | 7.17           | 0.054             | 224   | -18.47        | 16.26          | 0.115             |
| 97    | -5.78         | 6.65           | 0.059             | 225   | -18.57        | 15.73          | 0.157             |
| 98    | -5.88         | 5.92           | 0.055             | 226   | -18.67        | 16.46          | 0.136             |
| 99    | -5.98         | 5.53           | 0.051             | 227   | -18.77        | 17.06          | 0.115             |
| 100   | -6.08         | 4.75           | 0.047             | 228   | -18.87        | 16.39          | 0.131             |
| 101   | -6.18         | 4.71           | 0.041             | 229   | -18.97        | 14.84          | 0.107             |

**SONDERINGSGEGEVENS TABEL: 8**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 102   | -6.28         | 6.98           | 0.046             | 230   | -19.07        | 9.43           | 0.121             |
| 103   | -6.38         | 10.13          | 0.060             | 231   | -19.17        | 6.66           | 0.111             |
| 104   | -6.48         | 12.20          | 0.080             | 232   | -19.27        | 9.51           | 0.143             |
| 105   | -6.58         | 13.05          | 0.095             | 233   | -19.37        | 7.17           | 0.147             |
| 106   | -6.68         | 12.03          | 0.097             | 234   | -19.47        | 5.19           | 0.096             |
| 107   | -6.78         | 10.93          | 0.086             | 235   | -19.57        | 9.44           | 0.066             |
| 108   | -6.88         | 11.35          | 0.083             | 236   | -19.67        | 10.45          | 0.087             |
| 109   | -6.98         | 10.73          | 0.086             | 237   | -19.77        | 10.36          | 0.078             |
| 110   | -7.08         | 10.26          | 0.081             | 238   | -19.87        | 8.93           | 0.087             |
| 111   | -7.18         | 11.76          | 0.076             | 239   | -19.97        | 9.18           | 0.062             |
| 112   | -7.28         | 14.74          | 0.093             | 240   | -20.07        | 14.08          | 0.056             |
| 113   | -7.38         | 15.80          | 0.118             | 241   | -20.17        | 19.70          | 0.089             |
| 114   | -7.48         | 14.63          | 0.123             | 242   | -20.26        | 26.92          | 0.102             |
| 115   | -7.58         | 13.06          | 0.112             | 243   | -20.36        | 25.60          | 0.106             |
| 116   | -7.68         | 10.98          | 0.098             | 244   | -20.46        | 25.21          | 0.140             |
| 117   | -7.78         | 9.21           | 0.081             | 245   | -20.56        | 26.59          | 0.171             |
| 118   | -7.88         | 7.47           | 0.064             | 246   | -20.66        | 28.93          | 0.138             |
| 119   | -7.98         | 5.35           | 0.047             | 247   | -20.76        | 33.75          | 0.123             |
| 120   | -8.08         | 4.29           | 0.034             | 248   | -20.86        | 33.99          | 0.151             |
| 121   | -8.18         | 3.98           | 0.031             | 249   | -20.96        | 30.86          | 0.124             |
| 122   | -8.28         | 3.25           | 0.037             | 250   | -21.06        | 30.08          | 0.101             |
| 123   | -8.38         | 4.14           | 0.040             | 251   | -21.16        | 34.09          | 0.082             |
| 124   | -8.48         | 8.46           | 0.051             | 252   | -21.26        | 36.05          | 0.101             |
| 125   | -8.58         | 10.45          | 0.069             | 253   | -21.36        | 41.46          | 0.105             |
| 126   | -8.68         | 10.66          | 0.078             | 254   | -21.44        | 44.59          | 0.000             |
| 127   | -8.78         | 10.02          | 0.075             | 255   | -21.47        | 45.17          | 0.000             |
| 128   | -8.88         | 10.21          | 0.073             |       |               |                |                   |

## SONDERINGSGEGEVENS GRAFIEK: 8



Na reductie en afsnuiten

rekengegevens

paal

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250

250

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220

220

## SONDERINGSGEGEVENS ALGEMEEN: 9

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

Hoogte maaiveld [m] : 3.68 Bodemprofiel: 9

Traject negatieve kleef : 3.68 tot 3.68 [m]

Traject positieve kleef : 1.40 tot -21.44 [m]

## SONDERINGSGEGEVENS TABEL: 9

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 1     | 3.68          | 0.00           | 0.000             | 127   | -8.86         | 6.55           | 0.045             |
| 2     | 3.63          | 1.65           | 0.026             | 128   | -8.96         | 6.78           | 0.051             |
| 3     | 3.53          | 2.76           | 0.033             | 129   | -9.06         | 6.95           | 0.052             |
| 4     | 3.43          | 2.77           | 0.051             | 130   | -9.16         | 6.89           | 0.053             |
| 5     | 3.33          | 1.41           | 0.059             | 131   | -9.26         | 6.58           | 0.048             |
| 6     | 3.23          | 1.11           | 0.050             | 132   | -9.36         | 7.07           | 0.048             |
| 7     | 3.13          | 1.11           | 0.052             | 133   | -9.46         | 7.90           | 0.056             |
| 8     | 3.03          | 1.56           | 0.056             | 134   | -9.56         | 7.58           | 0.069             |
| 9     | 2.93          | 1.81           | 0.050             | 135   | -9.66         | 8.21           | 0.060             |
| 10    | 2.83          | 1.84           | 0.051             | 136   | -9.76         | 7.79           | 0.059             |
| 11    | 2.73          | 1.13           | 0.040             | 137   | -9.86         | 7.05           | 0.057             |
| 12    | 2.63          | 0.71           | 0.025             | 138   | -9.96         | 6.61           | 0.050             |
| 13    | 2.53          | 0.61           | 0.023             | 139   | -10.06        | 4.62           | 0.040             |
| 14    | 2.43          | 0.58           | 0.022             | 140   | -10.16        | 3.53           | 0.040             |
| 15    | 2.33          | 0.58           | 0.017             | 141   | -10.26        | 5.21           | 0.037             |
| 16    | 2.23          | 0.57           | 0.015             | 142   | -10.36        | 5.42           | 0.043             |
| 17    | 2.13          | 0.53           | 0.020             | 143   | -10.46        | 5.42           | 0.052             |
| 18    | 2.03          | 1.40           | 0.032             | 144   | -10.56        | 5.44           | 0.051             |
| 19    | 1.93          | 1.77           | 0.028             | 145   | -10.67        | 6.82           | 0.048             |
| 20    | 1.83          | 2.62           | 0.019             | 146   | -10.78        | 7.64           | 0.054             |
| 21    | 1.73          | 2.81           | 0.017             | 147   | -10.88        | 6.88           | 0.057             |
| 22    | 1.63          | 3.00           | 0.021             | 148   | -10.98        | 6.66           | 0.051             |
| 23    | 1.53          | 3.68           | 0.024             | 149   | -11.07        | 6.79           | 0.047             |
| 24    | 1.43          | 3.75           | 0.026             | 150   | -11.18        | 6.54           | 0.045             |
| 25    | 1.33          | 4.74           | 0.030             | 151   | -11.27        | 5.13           | 0.040             |
| 26    | 1.23          | 7.15           | 0.040             | 152   | -11.37        | 3.76           | 0.032             |
| 27    | 1.13          | 10.51          | 0.058             | 153   | -11.47        | 2.41           | 0.024             |
| 28    | 1.03          | 10.28          | 0.071             | 154   | -11.57        | 1.57           | 0.022             |
| 29    | 0.93          | 9.03           | 0.072             | 155   | -11.67        | 1.35           | 0.032             |
| 30    | 0.83          | 8.21           | 0.061             | 156   | -11.77        | 2.83           | 0.031             |
| 31    | 0.73          | 8.72           | 0.055             | 157   | -11.87        | 7.19           | 0.049             |
| 32    | 0.63          | 9.20           | 0.057             | 158   | -11.97        | 9.24           | 0.055             |
| 33    | 0.53          | 9.05           | 0.061             | 159   | -12.07        | 16.03          | 0.079             |
| 34    | 0.43          | 8.03           | 0.059             | 160   | -12.17        | 18.86          | 0.114             |
| 35    | 0.33          | 8.36           | 0.051             | 161   | -12.27        | 20.81          | 0.135             |
| 36    | 0.23          | 9.41           | 0.052             | 162   | -12.37        | 25.05          | 0.155             |
| 37    | 0.13          | 10.54          | 0.060             | 163   | -12.47        | 32.87          | 0.195             |
| 38    | 0.03          | 10.75          | 0.066             | 164   | -12.57        | 36.47          | 0.251             |
| 39    | -0.07         | 10.38          | 0.068             | 165   | -12.67        | 38.07          | 0.284             |
| 40    | -0.17         | 10.02          | 0.067             | 166   | -12.77        | 39.30          | 0.301             |
| 41    | -0.27         | 9.56           | 0.057             | 167   | -12.87        | 40.28          | 0.312             |
| 42    | -0.37         | 9.56           | 0.056             | 168   | -12.97        | 38.25          | 0.306             |
| 43    | -0.47         | 9.49           | 0.058             | 169   | -13.07        | 35.77          | 0.275             |
| 44    | -0.57         | 9.49           | 0.056             | 170   | -13.17        | 39.52          | 0.276             |
| 45    | -0.67         | 9.62           | 0.057             | 171   | -13.27        | 41.37          | 0.308             |
| 46    | -0.77         | 9.92           | 0.059             | 172   | -13.37        | 43.50          | 0.344             |
| 47    | -0.87         | 9.69           | 0.063             | 173   | -13.47        | 45.37          | 0.373             |

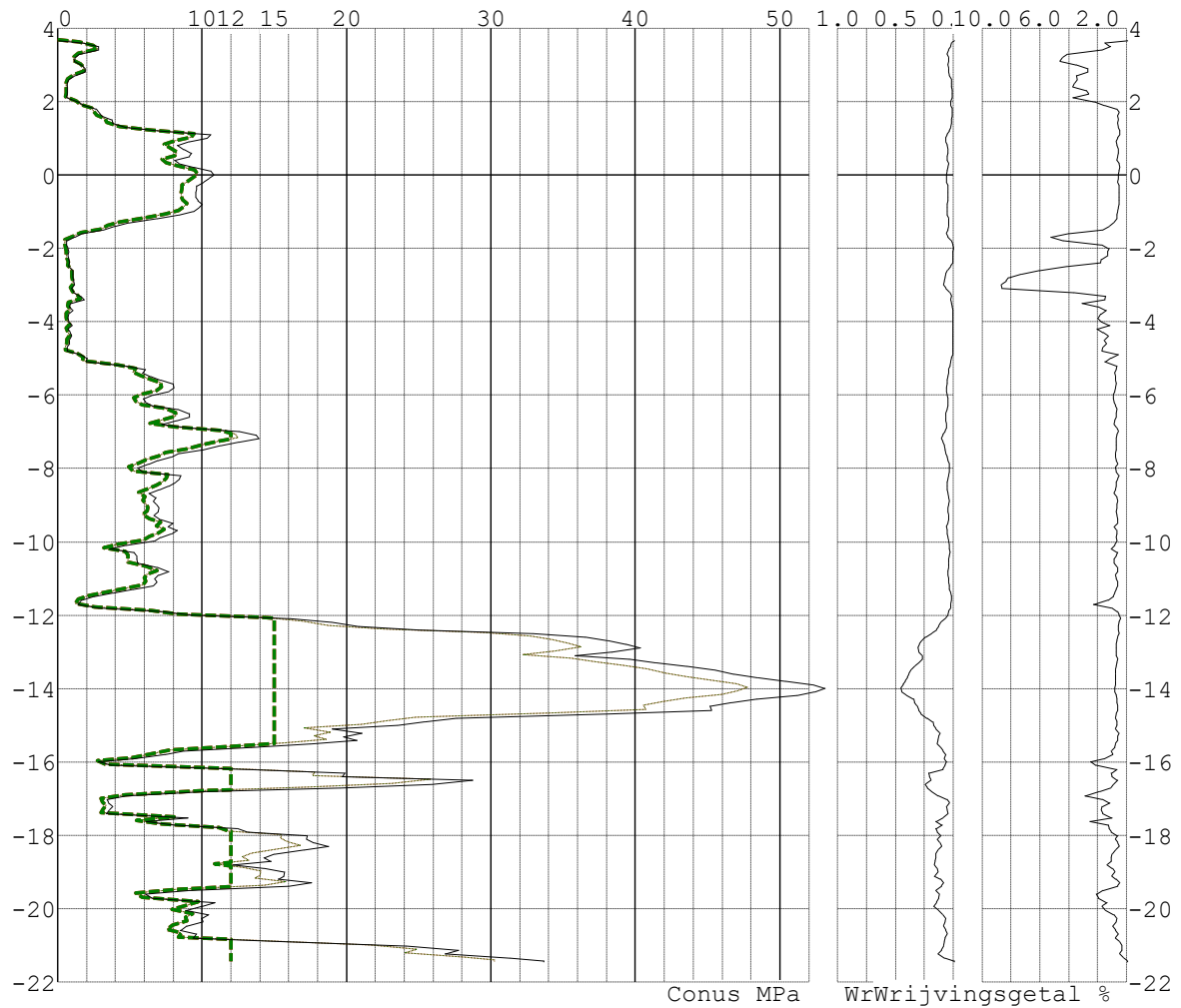
**SONDERINGSGEGEVENS TABEL: 9**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 48    | -0.97         | 9.32           | 0.064             | 174   | -13.57        | 46.76          | 0.390             |
| 49    | -1.07         | 8.28           | 0.059             | 175   | -13.67        | 48.42          | 0.406             |
| 50    | -1.17         | 6.78           | 0.050             | 176   | -13.77        | 50.34          | 0.421             |
| 51    | -1.27         | 4.83           | 0.047             | 177   | -13.87        | 52.22          | 0.444             |
| 52    | -1.37         | 3.83           | 0.050             | 178   | -13.96        | 53.03          | 0.462             |
| 53    | -1.47         | 3.08           | 0.054             | 179   | -14.06        | 52.31          | 0.457             |
| 54    | -1.57         | 1.64           | 0.067             | 180   | -14.16        | 51.08          | 0.412             |
| 55    | -1.67         | 1.08           | 0.057             | 181   | -14.26        | 48.32          | 0.347             |
| 56    | -1.77         | 0.56           | 0.025             | 182   | -14.36        | 46.54          | 0.341             |
| 57    | -1.87         | 0.55           | 0.010             | 183   | -14.46        | 45.10          | 0.320             |
| 58    | -1.97         | 0.63           | 0.008             | 184   | -14.56        | 45.21          | 0.306             |
| 59    | -2.07         | 0.67           | 0.009             | 185   | -14.67        | 37.86          | 0.290             |
| 60    | -2.17         | 0.65           | 0.009             | 186   | -14.78        | 27.52          | 0.236             |
| 61    | -2.27         | 0.70           | 0.013             | 187   | -14.88        | 25.30          | 0.185             |
| 62    | -2.37         | 0.75           | 0.014             | 188   | -14.98        | 23.39          | 0.175             |
| 63    | -2.47         | 0.70           | 0.029             | 189   | -15.08        | 18.95          | 0.157             |
| 64    | -2.57         | 0.98           | 0.060             | 190   | -15.18        | 20.99          | 0.124             |
| 65    | -2.67         | 1.00           | 0.074             | 191   | -15.28        | 19.73          | 0.133             |
| 66    | -2.77         | 0.98           | 0.081             | 192   | -15.38        | 20.66          | 0.143             |
| 67    | -2.87         | 1.03           | 0.087             | 193   | -15.48        | 17.41          | 0.146             |
| 68    | -2.97         | 1.07           | 0.094             | 194   | -15.58        | 13.29          | 0.114             |
| 69    | -3.07         | 0.87           | 0.076             | 195   | -15.68        | 8.63           | 0.097             |
| 70    | -3.17         | 1.03           | 0.038             | 196   | -15.78        | 7.31           | 0.074             |
| 71    | -3.27         | 1.55           | 0.024             | 197   | -15.88        | 5.11           | 0.087             |
| 72    | -3.37         | 1.76           | 0.028             | 198   | -15.97        | 2.74           | 0.070             |
| 73    | -3.47         | 0.85           | 0.027             | 199   | -16.07        | 3.68           | 0.079             |
| 74    | -3.57         | 0.77           | 0.015             | 200   | -16.17        | 13.21          | 0.099             |
| 75    | -3.67         | 0.97           | 0.014             | 201   | -16.27        | 19.80          | 0.222             |
| 76    | -3.77         | 0.68           | 0.013             | 202   | -16.37        | 19.60          | 0.214             |
| 77    | -3.87         | 0.67           | 0.014             | 203   | -16.47        | 28.68          | 0.203             |
| 78    | -3.97         | 0.72           | 0.013             | 204   | -16.58        | 25.75          | 0.252             |
| 79    | -4.07         | 0.94           | 0.012             | 205   | -16.69        | 19.46          | 0.230             |
| 80    | -4.17         | 0.64           | 0.014             | 206   | -16.79        | 10.16          | 0.198             |
| 81    | -4.27         | 0.78           | 0.013             | 207   | -16.89        | 4.66           | 0.137             |
| 82    | -4.37         | 0.91           | 0.012             | 208   | -16.99        | 3.36           | 0.058             |
| 83    | -4.47         | 0.74           | 0.012             | 209   | -17.09        | 3.46           | 0.043             |
| 84    | -4.57         | 0.72           | 0.011             | 210   | -17.19        | 3.73           | 0.065             |
| 85    | -4.67         | 0.60           | 0.010             | 211   | -17.29        | 3.50           | 0.063             |
| 86    | -4.77         | 0.61           | 0.011             | 212   | -17.39        | 3.31           | 0.056             |
| 87    | -4.87         | 1.51           | 0.010             | 213   | -17.49        | 8.96           | 0.098             |
| 88    | -4.97         | 1.95           | 0.023             | 214   | -17.59        | 6.04           | 0.158             |
| 89    | -5.07         | 1.92           | 0.031             | 215   | -17.69        | 8.04           | 0.106             |
| 90    | -5.17         | 4.64           | 0.034             | 216   | -17.78        | 12.38          | 0.158             |
| 91    | -5.27         | 6.02           | 0.046             | 217   | -17.88        | 13.15          | 0.147             |
| 92    | -5.37         | 5.82           | 0.051             | 218   | -17.98        | 17.24          | 0.118             |
| 93    | -5.47         | 6.40           | 0.054             | 219   | -18.08        | 17.18          | 0.144             |
| 94    | -5.57         | 7.08           | 0.059             | 220   | -18.18        | 17.70          | 0.123             |
| 95    | -5.67         | 7.90           | 0.063             | 221   | -18.28        | 18.67          | 0.111             |
| 96    | -5.77         | 7.97           | 0.066             | 222   | -18.38        | 16.95          | 0.141             |
| 97    | -5.87         | 7.61           | 0.066             | 223   | -18.48        | 14.89          | 0.162             |
| 98    | -5.97         | 6.48           | 0.063             | 224   | -18.58        | 14.22          | 0.161             |
| 99    | -6.07         | 5.85           | 0.058             | 225   | -18.68        | 14.69          | 0.167             |
| 100   | -6.17         | 6.00           | 0.056             | 226   | -18.78        | 12.05          | 0.171             |
| 101   | -6.27         | 6.53           | 0.054             | 227   | -18.88        | 14.28          | 0.150             |

**SONDERINGSGEGEVENS TABEL: 9**

| Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] | Regel | Niveau<br>[m] | Conus<br>[MPa] | Wrijving<br>[MPa] |
|-------|---------------|----------------|-------------------|-------|---------------|----------------|-------------------|
| 102   | -6.37         | 8.29           | 0.063             | 228   | -18.98        | 15.63          | 0.139             |
| 103   | -6.47         | 9.06           | 0.071             | 229   | -19.08        | 15.58          | 0.169             |
| 104   | -6.57         | 9.07           | 0.073             | 230   | -19.17        | 15.18          | 0.117             |
| 105   | -6.67         | 8.11           | 0.072             | 231   | -19.27        | 17.53          | 0.091             |
| 106   | -6.76         | 7.12           | 0.067             | 232   | -19.37        | 15.90          | 0.112             |
| 107   | -6.87         | 9.04           | 0.065             | 233   | -19.47        | 9.07           | 0.157             |
| 108   | -6.97         | 12.50          | 0.082             | 234   | -19.58        | 6.01           | 0.130             |
| 109   | -7.06         | 13.67          | 0.099             | 235   | -19.69        | 6.53           | 0.133             |
| 110   | -7.16         | 13.85          | 0.107             | 236   | -19.80        | 10.83          | 0.156             |
| 111   | -7.26         | 12.43          | 0.095             | 237   | -19.91        | 9.96           | 0.175             |
| 112   | -7.36         | 11.17          | 0.086             | 238   | -20.02        | 8.81           | 0.134             |
| 113   | -7.46         | 9.92           | 0.078             | 239   | -20.13        | 10.40          | 0.096             |
| 114   | -7.56         | 8.31           | 0.070             | 240   | -20.24        | 9.86           | 0.074             |
| 115   | -7.66         | 7.77           | 0.063             | 241   | -20.34        | 9.97           | 0.079             |
| 116   | -7.76         | 6.85           | 0.052             | 242   | -20.45        | 8.85           | 0.090             |
| 117   | -7.86         | 6.21           | 0.044             | 243   | -20.56        | 8.43           | 0.072             |
| 118   | -7.96         | 5.46           | 0.045             | 244   | -20.67        | 9.54           | 0.059             |
| 119   | -8.06         | 5.78           | 0.045             | 245   | -20.78        | 9.32           | 0.078             |
| 120   | -8.16         | 8.45           | 0.050             | 246   | -20.88        | 15.86          | 0.086             |
| 121   | -8.26         | 8.38           | 0.056             | 247   | -20.99        | 24.08          | 0.090             |
| 122   | -8.36         | 8.09           | 0.063             | 248   | -21.10        | 27.67          | 0.113             |
| 123   | -8.46         | 7.58           | 0.060             | 249   | -21.21        | 26.73          | 0.141             |
| 124   | -8.56         | 6.96           | 0.059             | 250   | -21.32        | 31.28          | 0.077             |
| 125   | -8.66         | 6.26           | 0.058             | 251   | -21.40        | 33.58          | 0.000             |
| 126   | -8.76         | 6.74           | 0.048             | 252   | -21.44        | 33.59          | 0.000             |

**SONDERINGSGEGEVENS GRAFIEK: 9**



Na reductie en afsnuiten

rekengegevens

paal

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250

250

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220

220

### PAALGEGEVENS 220

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|                                      |                        |                                                  |
|--------------------------------------|------------------------|--------------------------------------------------|
| Type                                 | :                      | Geheide paal (beton)                             |
| Wijze van installeren                | :                      | Heien                                            |
| Afmeting a                           | [m] :                  | 0.220                                            |
| Afmeting b                           | [m] :                  | 0.220                                            |
| Elasticiteitsmodulus                 | [N/mm <sup>2</sup> ] : | 20000                                            |
| Factor $\alpha_s$ (tabel 7.c EC 7.1) | :                      | 0.010 (zandlagen; voor kleilagen zie tabel 7.d)  |
| Factor $\alpha_t$ (tabel 7.c EC 7.1) | :                      | 0.0070 (zandlagen; voor kleilagen zie tabel 7.d) |
| Paalklassefactor $\alpha_p$          | :                      | 0.70                                             |
| Paalvoetvormfactor $\beta$           | :                      | 1.00                                             |
| Type lastzakingsdiagram              | :                      | Grondverdringende paal                           |
| Verm.factor * $\phi'_{j,k}$          | :                      | 0.75                                             |

### PAALGEGEVENS 250

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|                                      |                        |                                                  |
|--------------------------------------|------------------------|--------------------------------------------------|
| Type                                 | :                      | Geheide paal (beton)                             |
| Wijze van installeren                | :                      | Heien                                            |
| Afmeting a                           | [m] :                  | 0.250                                            |
| Afmeting b                           | [m] :                  | 0.250                                            |
| Elasticiteitsmodulus                 | [N/mm <sup>2</sup> ] : | 20000                                            |
| Factor $\alpha_s$ (tabel 7.c EC 7.1) | :                      | 0.010 (zandlagen; voor kleilagen zie tabel 7.d)  |
| Factor $\alpha_t$ (tabel 7.c EC 7.1) | :                      | 0.0070 (zandlagen; voor kleilagen zie tabel 7.d) |
| Paalklassefactor $\alpha_p$          | :                      | 0.70                                             |
| Paalvoetvormfactor $\beta$           | :                      | 1.00                                             |
| Type lastzakingsdiagram              | :                      | Grondverdringende paal                           |
| Verm.factor * $\phi'_{j,k}$          | :                      | 0.75                                             |

### REKENGEGEVENS 250

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|                                                         |                        |                                             |
|---------------------------------------------------------|------------------------|---------------------------------------------|
| Berekening                                              | :                      | Controlerend                                |
| Rekenmethode                                            | :                      | Drukpalen volgens NEN-EN 1997-1, art. 7.6.2 |
| Sondering(en)                                           | :                      | 1, 2, 3, 4, 5, 6, 7, 8, 9                   |
| Stijf bouwwerk                                          | :                      | NEE                                         |
| Paalgroep                                               | :                      | NEE                                         |
| Aantal sonderingen                                      | :                      | 9                                           |
| Factor $\xi_3$ (n=1)                                    | :                      | 1.39                                        |
| Factor $\xi_3$ (gem)                                    | :                      | 1.27                                        |
| Factor $\xi_4$ (min)                                    | :                      | 1.01                                        |
| Weerstandsfactor $\gamma_R$                             | :                      | 1.20                                        |
| $\gamma_{f,nk}$                                         | :                      | 1.0                                         |
| $R_{s,cal,max,i}$ begrenzen op $0.75 * R_{b,cal,max,i}$ | :                      | NEE                                         |
| UGT draagvermogen zonder negatieve kleef                | :                      | JA                                          |
| Paal                                                    | :                      | 250                                         |
| Niveau paalkop                                          | [m] :                  | N.A.P. 3.00                                 |
| $E_{d,1}$                                               | [kN] :                 | -330.00                                     |
| $S_{req,1}$                                             | [m] :                  | 0.15                                        |
| Bovenbel.                                               | [kN/m <sup>2</sup> ] : | 0.00                                        |
| $E_{d,2}$                                               | [kN] :                 | -290.00                                     |
| $S_{req,2}$                                             | [m] :                  | 0.05                                        |

## PAALPUNTNIVEAUS 250

Alle niveaus/hoogtes/peilmaten zijn t.o.v. : N.A.P.

| Nr | Beginniveau<br>[m] | Eindniveau<br>[m] | Stapgrootte<br>[m] |
|----|--------------------|-------------------|--------------------|
| 1  | -7.00              | -8.00             | 0.25               |

## TUSSENRESULTATEN 250 (n=1)

### Tussenresultaten punt en schacht (Sondering : 1)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk; k</sub><br>[kN] | F <sub>c; tot1</sub><br>[kN] | F <sub>c; tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | -8.00       | 8.2                       | 3.4                        | 3.2                         | 3.1                         | 3.1                              | 5.4                        | 0.0                        | -330.0                       | -290.0                       |
| -7.25         | -8.36       | 7.5                       | 2.7                        | 2.7                         | 2.7                         | 2.7                              | 5.5                        | 0.0                        | -330.0                       | -290.0                       |
| -7.50         | -8.36       | 6.6                       | 2.7                        | 2.7                         | 2.6                         | 2.6                              | 5.6                        | 0.0                        | -330.0                       | -290.0                       |
| -7.75         | -8.79       | 5.3                       | 2.4                        | 2.4                         | 2.2                         | 2.2                              | 5.6                        | 0.0                        | -330.0                       | -290.0                       |
| -8.00         | -8.89       | 5.3                       | 2.5                        | 2.4                         | 2.2                         | 2.2                              | 5.6                        | 0.0                        | -330.0                       | -290.0                       |

### Tussenresultaten zakking 1 (Sondering : 1)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b; 1</sub><br>[kN] | R <sub>s; 1</sub><br>[kN] | R <sub>b c; 1</sub><br>[kN] | R <sub>s c; 1</sub><br>[kN] | R <sub>b; 2</sub><br>[kN] | R <sub>s; 2</sub><br>[kN] | R <sub>b c; 2</sub><br>[kN] | R <sub>s c; 2</sub><br>[kN] |
|---------------|---------------------------|---------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | 128.8                     | 305.4                     | 73.1                        | 256.9                       | 154.6                     | 366.5                     | 60.5                        | 229.9                       |
| -7.25         | 112.4                     | 320.9                     | 62.9                        | 267.0                       | 134.9                     | 385.1                     | 51.8                        | 238.3                       |
| -7.50         | 106.3                     | 336.3                     | 57.3                        | 272.8                       | 127.6                     | 403.6                     | 47.1                        | 242.7                       |
| -7.75         | 89.2                      | 347.6                     | 48.1                        | 281.9                       | 107.1                     | 417.1                     | 39.6                        | 250.9                       |
| -8.00         | 90.4                      | 350.2                     | 48.1                        | 281.8                       | 108.4                     | 420.2                     | 39.7                        | 250.8                       |

### Tussenresultaten zakking 2 (Sondering : 1)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b; 1</sub><br>[mm] | S <sub>e l; 1</sub><br>[mm] | S <sub>l; 1</sub><br>[mm] | S <sub>b; 2</sub><br>[mm] | S <sub>e l; 2</sub><br>[mm] | S <sub>l; 2</sub><br>[mm] |
|---------------|----------|----------|---------------------------|-----------------------------|---------------------------|---------------------------|-----------------------------|---------------------------|
| -7.00         | 10.00    | 1.00     | -5.2                      | -1.7                        | -6.9                      | -2.3                      | -1.5                        | -3.8                      |
| -7.25         | 10.25    | 1.00     | -5.0                      | -1.7                        | -6.7                      | -2.2                      | -1.5                        | -3.7                      |
| -7.50         | 10.50    | 1.00     | -4.6                      | -1.7                        | -6.4                      | -2.1                      | -1.5                        | -3.6                      |
| -7.75         | 10.75    | 1.00     | -4.6                      | -1.7                        | -6.4                      | -2.1                      | -1.5                        | -3.6                      |
| -8.00         | 11.00    | 1.00     | -4.5                      | -1.8                        | -6.3                      | -2.1                      | -1.6                        | -3.6                      |

### Tussenresultaten punt en schacht (Sondering : 2)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk; k</sub><br>[kN] | F <sub>c; tot1</sub><br>[kN] | F <sub>c; tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | -8.13       | 10.1                      | 3.5                        | 3.5                         | 3.6                         | 3.6                              | 5.8                        | 0.0                        | -330.0                       | -290.0                       |
| -7.25         | -8.38       | 8.1                       | 3.0                        | 2.9                         | 3.0                         | 3.0                              | 6.0                        | 0.0                        | -330.0                       | -290.0                       |
| -7.50         | -8.63       | 6.0                       | 1.7                        | 1.7                         | 1.9                         | 1.9                              | 6.1                        | 0.0                        | -330.0                       | -290.0                       |
| -7.75         | -8.88       | 4.1                       | 1.3                        | 1.3                         | 1.4                         | 1.4                              | 6.2                        | 0.0                        | -330.0                       | -290.0                       |
| -8.00         | -9.02       | 2.7                       | 1.2                        | 1.1                         | 1.1                         | 1.1                              | 6.2                        | 0.0                        | -330.0                       | -290.0                       |

### Tussenresultaten zakking 1 (Sondering : 2)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 146.9                      | 332.6                      | 73.9                         | 256.3                        | 176.3                      | 399.1                      | 61.3                         | 228.4                        |
| -7.25         | 121.0                      | 350.9                      | 60.6                         | 269.3                        | 145.2                      | 421.1                      | 50.2                         | 239.9                        |
| -7.50         | 79.5                       | 368.8                      | 40.9                         | 289.1                        | 95.4                       | 442.5                      | 33.7                         | 256.5                        |
| -7.75         | 57.9                       | 383.7                      | 29.7                         | 300.3                        | 69.4                       | 460.4                      | 24.4                         | 265.7                        |
| -8.00         | 43.9                       | 396.3                      | 22.3                         | 307.6                        | 52.7                       | 475.6                      | 18.3                         | 272.1                        |

### Tussenresultaten zakking 2 (Sondering : 2)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 1.00     | -4.0                       | -1.7                         | -5.7                       | -1.9                       | -1.5                         | -3.4                       |
| -7.25         | 10.25    | 1.00     | -3.9                       | -1.7                         | -5.6                       | -1.9                       | -1.5                         | -3.4                       |
| -7.50         | 10.50    | 1.00     | -4.2                       | -1.7                         | -5.8                       | -1.9                       | -1.5                         | -3.4                       |
| -7.75         | 10.75    | 1.00     | -4.1                       | -1.7                         | -5.8                       | -1.9                       | -1.5                         | -3.4                       |
| -8.00         | 11.00    | 1.00     | -4.0                       | -1.7                         | -5.7                       | -1.9                       | -1.5                         | -3.4                       |

### Tussenresultaten punt en schacht (Sondering : 3)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max ; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk ; k</sub><br>[kN] | F <sub>c ; tot1</sub><br>[kN] | F <sub>c ; tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------------|
| -7.00         | -7.20       | 8.3                       | 8.3                        | 3.8                         | 4.2                         | 4.2                               | 4.0                        | 0.0                         | -330.0                        | -290.0                        |
| -7.25         | -7.45       | 10.9                      | 10.7                       | 4.7                         | 5.4                         | 5.4                               | 4.1                        | 0.0                         | -330.0                        | -290.0                        |
| -7.50         | -8.63       | 14.9                      | 5.6                        | 4.7                         | 5.2                         | 5.2                               | 4.3                        | 0.0                         | -330.0                        | -290.0                        |
| -7.75         | -8.88       | 11.9                      | 1.0                        | 1.0                         | 2.6                         | 2.6                               | 4.5                        | 0.0                         | -330.0                        | -290.0                        |
| -8.00         | -9.13       | 7.8                       | 1.0                        | 0.9                         | 1.9                         | 1.9                               | 4.7                        | 0.0                         | -330.0                        | -290.0                        |

### Tussenresultaten zakking 1 (Sondering : 3)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 173.4                      | 227.4                      | 117.0                        | 213.1                        | 208.1                      | 272.9                      | 94.9                         | 195.1                        |
| -7.25         | 222.0                      | 240.6                      | 126.7                        | 203.2                        | 266.4                      | 288.7                      | 106.2                        | 183.6                        |
| -7.50         | 214.3                      | 257.1                      | 118.3                        | 211.8                        | 257.1                      | 308.5                      | 98.8                         | 190.9                        |
| -7.75         | 106.5                      | 276.7                      | 71.5                         | 258.5                        | 127.8                      | 332.1                      | 56.9                         | 233.1                        |
| -8.00         | 76.7                       | 296.4                      | 51.8                         | 278.1                        | 92.1                       | 355.7                      | 40.9                         | 249.2                        |

### Tussenresultaten zakking 2 (Sondering : 3)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 1.10     | -7.9                       | -1.9                         | -9.8                       | -3.2                       | -1.6                         | -4.8                       |
| -7.25         | 10.25    | 1.10     | -5.3                       | -2.0                         | -7.2                       | -2.4                       | -1.7                         | -4.1                       |
| -7.50         | 10.50    | 1.10     | -4.9                       | -2.0                         | -6.8                       | -2.2                       | -1.7                         | -3.9                       |
| -7.75         | 10.75    | 1.10     | -7.8                       | -1.8                         | -9.6                       | -3.0                       | -1.6                         | -4.6                       |
| -8.00         | 11.00    | 1.10     | -7.9                       | -1.8                         | -9.7                       | -3.0                       | -1.6                         | -4.6                       |

#### Tussenresultaten punt en schacht (Sondering : 4)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>bmax</sub><br>[MPa] | Q <sub>bmax;red</sub><br>[MPa] | Q <sub>cza</sub><br>[MPa] | F <sub>nk;k</sub><br>[kN] | F <sub>c;tot1</sub><br>[kN] | F <sub>c;tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|----------------------------|--------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | -7.20       | 8.0                       | 8.0                        | 5.3                         | 4.6                        | 4.6                            | 4.1                       | 0.0                       | -330.0                      | -290.0                      |
| -7.25         | -7.45       | 13.5                      | 13.5                       | 5.7                         | 6.7                        | 6.7                            | 4.2                       | 0.0                       | -330.0                      | -290.0                      |
| -7.50         | -8.63       | 14.2                      | 5.4                        | 5.2                         | 5.3                        | 5.3                            | 4.4                       | 0.0                       | -330.0                      | -290.0                      |
| -7.75         | -8.88       | 11.6                      | 3.8                        | 3.8                         | 4.0                        | 4.0                            | 4.6                       | 0.0                       | -330.0                      | -290.0                      |
| -8.00         | -9.13       | 9.0                       | 4.1                        | 3.8                         | 3.6                        | 3.6                            | 4.8                       | 0.0                       | -330.0                      | -290.0                      |

#### Tussenresultaten zakking 1 (Sondering : 4)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b;1</sub><br>[kN] | R <sub>s;1</sub><br>[kN] | R <sub>b;c;1</sub><br>[kN] | R <sub>s;c;1</sub><br>[kN] | R <sub>b;2</sub><br>[kN] | R <sub>s;2</sub><br>[kN] | R <sub>b;c;2</sub><br>[kN] | R <sub>s;c;2</sub><br>[kN] |
|---------------|--------------------------|--------------------------|----------------------------|----------------------------|--------------------------|--------------------------|----------------------------|----------------------------|
| -7.00         | 190.6                    | 231.7                    | 121.1                      | 209.0                      | 228.8                    | 278.0                    | 99.5                       | 190.5                      |
| -7.25         | 275.4                    | 244.2                    | 140.1                      | 189.8                      | 330.4                    | 293.1                    | 118.5                      | 172.0                      |
| -7.50         | 216.2                    | 263.4                    | 116.6                      | 213.7                      | 259.4                    | 316.1                    | 97.7                       | 192.8                      |
| -7.75         | 164.6                    | 283.1                    | 92.9                       | 237.1                      | 197.6                    | 339.7                    | 77.3                       | 213.1                      |
| -8.00         | 148.2                    | 302.8                    | 81.4                       | 248.6                      | 177.8                    | 363.3                    | 67.3                       | 222.4                      |

#### Tussenresultaten zakking 2 (Sondering : 4)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b;1</sub><br>[mm] | S <sub>e1;1</sub><br>[mm] | S <sub>1;1</sub><br>[mm] | S <sub>b;2</sub><br>[mm] | S <sub>e1;2</sub><br>[mm] | S <sub>1;2</sub><br>[mm] |
|---------------|----------|----------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
| -7.00         | 10.00    | 1.00     | -6.7                     | -1.9                      | -8.6                     | -2.8                     | -1.6                      | -4.5                     |
| -7.25         | 10.25    | 1.00     | -4.1                     | -2.0                      | -6.1                     | -2.0                     | -1.7                      | -3.7                     |
| -7.50         | 10.50    | 1.00     | -4.6                     | -2.0                      | -6.6                     | -2.2                     | -1.7                      | -3.9                     |
| -7.75         | 10.75    | 1.00     | -5.1                     | -1.9                      | -7.0                     | -2.3                     | -1.7                      | -4.0                     |
| -8.00         | 11.00    | 1.00     | -4.8                     | -1.9                      | -6.7                     | -2.2                     | -1.7                      | -3.8                     |

#### Tussenresultaten punt en schacht (Sondering : 5)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>bmax</sub><br>[MPa] | Q <sub>bmax;red</sub><br>[MPa] | Q <sub>cza</sub><br>[MPa] | F <sub>nk;k</sub><br>[kN] | F <sub>c;tot1</sub><br>[kN] | F <sub>c;tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|----------------------------|--------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | -7.20       | 8.4                       | 8.4                        | 5.2                         | 4.8                        | 4.8                            | 3.4                       | 0.0                       | -330.0                      | -290.0                      |
| -7.25         | -8.06       | 15.0                      | 11.5                       | 5.6                         | 6.6                        | 6.6                            | 3.5                       | 0.0                       | -330.0                      | -290.0                      |
| -7.50         | -8.63       | 15.1                      | 7.5                        | 5.7                         | 6.0                        | 6.0                            | 3.7                       | 0.0                       | -330.0                      | -290.0                      |
| -7.75         | -8.88       | 13.2                      | 7.1                        | 5.7                         | 5.5                        | 5.5                            | 3.9                       | 0.0                       | -330.0                      | -290.0                      |
| -8.00         | -9.13       | 12.4                      | 7.8                        | 5.9                         | 5.6                        | 5.6                            | 4.1                       | 0.0                       | -330.0                      | -290.0                      |

#### Tussenresultaten zakking 1 (Sondering : 5)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b;1</sub><br>[kN] | R <sub>s;1</sub><br>[kN] | R <sub>b;c;1</sub><br>[kN] | R <sub>s;c;1</sub><br>[kN] | R <sub>b;2</sub><br>[kN] | R <sub>s;2</sub><br>[kN] | R <sub>b;c;2</sub><br>[kN] | R <sub>s;c;2</sub><br>[kN] |
|---------------|--------------------------|--------------------------|----------------------------|----------------------------|--------------------------|--------------------------|----------------------------|----------------------------|
| -7.00         | 195.0                    | 181.0                    | 149.0                      | 181.0                      | 234.0                    | 217.2                    | 120.1                      | 170.0                      |
| -7.25         | 270.9                    | 194.3                    | 161.6                      | 168.4                      | 325.0                    | 233.2                    | 136.2                      | 153.8                      |
| -7.50         | 244.0                    | 213.9                    | 145.0                      | 184.9                      | 292.9                    | 256.6                    | 122.0                      | 168.3                      |
| -7.75         | 227.5                    | 233.6                    | 131.2                      | 198.7                      | 273.0                    | 280.3                    | 110.3                      | 180.0                      |
| -8.00         | 229.4                    | 252.7                    | 124.3                      | 205.7                      | 275.3                    | 303.3                    | 104.2                      | 185.7                      |

#### Tussenresultaten zakking 2 (Sondering : 5)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b;1</sub><br>[mm] | S <sub>e1;1</sub><br>[mm] | S <sub>1;1</sub><br>[mm] | S <sub>b;2</sub><br>[mm] | S <sub>e1;2</sub><br>[mm] | S <sub>1;2</sub><br>[mm] |
|---------------|----------|----------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
| -7.00         | 10.00    | 1.00     | -11.1                    | -2.0                      | -13.1                    | -4.1                     | -1.7                      | -5.8                     |
| -7.25         | 10.25    | 1.00     | -5.8                     | -2.1                      | -7.9                     | -2.6                     | -1.8                      | -4.4                     |
| -7.50         | 10.50    | 1.00     | -5.7                     | -2.1                      | -7.8                     | -2.5                     | -1.8                      | -4.3                     |
| -7.75         | 10.75    | 1.00     | -5.4                     | -2.1                      | -7.4                     | -2.4                     | -1.8                      | -4.2                     |
| -8.00         | 11.00    | 1.00     | -4.7                     | -2.1                      | -6.8                     | -2.2                     | -1.8                      | -4.0                     |

#### Tussenresultaten punt en schacht (Sondering : 6)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>cI</sub><br>[MPa] | Q <sub>cII</sub><br>[MPa] | Q <sub>cIII</sub><br>[MPa] | Q <sub>bmax</sub><br>[MPa] | Q <sub>bmax;red</sub><br>[MPa] | Q <sub>cza</sub><br>[MPa] | F <sub>nk;k</sub><br>[kN] | F <sub>c;tot1</sub><br>[kN] | F <sub>c;tot2</sub><br>[kN] |
|---------------|-------------|--------------------------|---------------------------|----------------------------|----------------------------|--------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | -8.13       | 10.0                     | 5.0                       | 4.3                        | 4.1                        | 4.1                            | 5.1                       | 0.0                       | -330.0                      | -290.0                      |
| -7.25         | -8.22       | 10.2                     | 3.0                       | 2.9                        | 3.3                        | 3.3                            | 5.2                       | 0.0                       | -330.0                      | -290.0                      |
| -7.50         | -8.63       | 8.9                      | 4.1                       | 3.0                        | 3.3                        | 3.3                            | 5.3                       | 0.0                       | -330.0                      | -290.0                      |
| -7.75         | -8.88       | 7.0                      | 4.0                       | 3.0                        | 3.0                        | 3.0                            | 5.4                       | 0.0                       | -330.0                      | -290.0                      |
| -8.00         | -8.32       | 5.0                      | 3.2                       | 3.0                        | 2.5                        | 2.5                            | 5.5                       | 0.0                       | -330.0                      | -290.0                      |

#### Tussenresultaten zakking 1 (Sondering : 6)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b;1</sub><br>[kN] | R <sub>s;1</sub><br>[kN] | R <sub>b;1</sub><br>[kN] | R <sub>s;1</sub><br>[kN] | R <sub>b;2</sub><br>[kN] | R <sub>s;2</sub><br>[kN] | R <sub>b;2</sub><br>[kN] | R <sub>s;2</sub><br>[kN] |
|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| -7.00         | 169.3                    | 272.3                    | 97.9                     | 232.1                    | 203.1                    | 326.8                    | 81.3                     | 208.5                    |
| -7.25         | 135.9                    | 282.6                    | 82.5                     | 247.6                    | 163.1                    | 339.2                    | 67.7                     | 221.9                    |
| -7.50         | 136.2                    | 297.4                    | 78.1                     | 252.0                    | 163.5                    | 356.9                    | 64.6                     | 225.4                    |
| -7.75         | 121.9                    | 317.0                    | 67.7                     | 262.3                    | 146.3                    | 380.4                    | 55.9                     | 234.5                    |
| -8.00         | 101.6                    | 331.9                    | 56.1                     | 273.7                    | 121.9                    | 398.3                    | 46.1                     | 243.8                    |

#### Tussenresultaten zakking 2 (Sondering : 6)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b;1</sub><br>[mm] | S <sub>e1;1</sub><br>[mm] | S <sub>1;1</sub><br>[mm] | S <sub>b;2</sub><br>[mm] | S <sub>e1;2</sub><br>[mm] | S <sub>1;2</sub><br>[mm] |
|---------------|----------|----------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
| -7.00         | 10.00    | 1.60     | -5.4                     | -1.9                      | -7.3                     | -2.4                     | -1.6                      | -4.0                     |
| -7.25         | 10.25    | 1.60     | -6.0                     | -1.8                      | -7.9                     | -2.5                     | -1.6                      | -4.1                     |
| -7.50         | 10.50    | 1.60     | -5.3                     | -1.9                      | -7.2                     | -2.3                     | -1.6                      | -4.0                     |
| -7.75         | 10.75    | 1.60     | -4.9                     | -1.9                      | -6.8                     | -2.2                     | -1.6                      | -3.8                     |
| -8.00         | 11.00    | 1.60     | -4.9                     | -1.9                      | -6.8                     | -2.2                     | -1.6                      | -3.8                     |

#### Tussenresultaten punt en schacht (Sondering : 7)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>cI</sub><br>[MPa] | Q <sub>cII</sub><br>[MPa] | Q <sub>cIII</sub><br>[MPa] | Q <sub>bmax</sub><br>[MPa] | Q <sub>bmax;red</sub><br>[MPa] | Q <sub>cza</sub><br>[MPa] | F <sub>nk;k</sub><br>[kN] | F <sub>c;tot1</sub><br>[kN] | F <sub>c;tot2</sub><br>[kN] |
|---------------|-------------|--------------------------|---------------------------|----------------------------|----------------------------|--------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | -8.13       | 8.8                      | 5.4                       | 5.3                        | 4.3                        | 4.3                            | 5.2                       | 0.0                       | -330.0                      | -290.0                      |
| -7.25         | -8.38       | 7.3                      | 2.5                       | 2.5                        | 2.6                        | 2.6                            | 5.3                       | 0.0                       | -330.0                      | -290.0                      |
| -7.50         | -8.63       | 5.1                      | 1.1                       | 1.1                        | 1.5                        | 1.5                            | 5.5                       | 0.0                       | -330.0                      | -290.0                      |
| -7.75         | -8.88       | 3.5                      | 1.0                       | 1.0                        | 1.1                        | 1.1                            | 5.5                       | 0.0                       | -330.0                      | -290.0                      |
| -8.00         | -9.13       | 2.5                      | 1.1                       | 1.0                        | 1.0                        | 1.0                            | 5.5                       | 0.0                       | -330.0                      | -290.0                      |

#### Tussenresultaten zakking 1 (Sondering : 7)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 177.4                      | 301.3                      | 92.0                         | 237.9                        | 212.8                      | 361.6                      | 76.7                         | 213.1                        |
| -7.25         | 107.3                      | 317.2                      | 61.4                         | 268.5                        | 128.7                      | 380.6                      | 50.6                         | 239.6                        |
| -7.50         | 60.4                       | 334.0                      | 36.8                         | 293.3                        | 72.5                       | 400.8                      | 29.7                         | 260.1                        |
| -7.75         | 46.6                       | 346.6                      | 28.0                         | 302.0                        | 55.9                       | 416.0                      | 22.6                         | 267.2                        |
| -8.00         | 40.3                       | 355.4                      | 23.8                         | 306.2                        | 48.4                       | 426.5                      | 19.2                         | 270.3                        |

#### Tussenresultaten zakking 2 (Sondering : 7)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 0.90     | -4.2                       | -1.8                         | -6.0                       | -2.0                       | -1.5                         | -3.5                       |
| -7.25         | 10.25    | 0.90     | -5.3                       | -1.7                         | -7.0                       | -2.3                       | -1.5                         | -3.8                       |
| -7.50         | 10.50    | 0.90     | -6.1                       | -1.6                         | -7.7                       | -2.5                       | -1.4                         | -3.9                       |
| -7.75         | 10.75    | 0.90     | -5.9                       | -1.6                         | -7.6                       | -2.4                       | -1.4                         | -3.9                       |
| -8.00         | 11.00    | 0.90     | -5.7                       | -1.7                         | -7.3                       | -2.4                       | -1.5                         | -3.8                       |

#### Tussenresultaten punt en schacht (Sondering : 8)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max ; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk ; k</sub><br>[kN] | F <sub>c ; tot 1</sub><br>[kN] | F <sub>c ; tot 2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------------|-----------------------------|--------------------------------|--------------------------------|
| -7.00         | -8.13       | 10.7                      | 4.1                        | 3.5                         | 3.8                         | 3.8                               | 4.2                        | 0.0                         | -330.0                         | -290.0                         |
| -7.25         | -8.38       | 9.0                       | 3.3                        | 3.1                         | 3.2                         | 3.2                               | 4.3                        | 0.0                         | -330.0                         | -290.0                         |
| -7.50         | -8.48       | 7.2                       | 3.6                        | 3.3                         | 3.0                         | 3.0                               | 4.6                        | 0.0                         | -330.0                         | -290.0                         |
| -7.75         | -8.38       | 5.4                       | 3.3                        | 3.3                         | 2.7                         | 2.7                               | 4.7                        | 0.0                         | -330.0                         | -290.0                         |
| -8.00         | -8.28       | 4.1                       | 3.3                        | 3.3                         | 2.4                         | 2.4                               | 4.8                        | 0.0                         | -330.0                         | -290.0                         |

#### Tussenresultaten zakking 1 (Sondering : 8)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 157.1                      | 207.5                      | 122.5                        | 207.5                        | 188.5                      | 249.0                      | 96.1                         | 193.8                        |
| -7.25         | 132.7                      | 224.2                      | 105.7                        | 224.2                        | 159.2                      | 269.1                      | 81.0                         | 209.1                        |
| -7.50         | 124.1                      | 243.9                      | 90.4                         | 239.7                        | 149.0                      | 292.7                      | 71.5                         | 218.2                        |
| -7.75         | 109.1                      | 261.6                      | 77.2                         | 252.7                        | 130.9                      | 313.9                      | 61.1                         | 228.6                        |
| -8.00         | 99.6                       | 272.6                      | 69.3                         | 260.7                        | 119.5                      | 327.1                      | 54.9                         | 235.2                        |

#### Tussenresultaten zakking 2 (Sondering : 8)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 2.10     | -11.8                      | -2.0                         | -13.8                      | -4.1                       | -1.7                         | -5.8                       |
| -7.25         | 10.25    | 2.10     | -12.6                      | -2.0                         | -14.6                      | -4.1                       | -1.7                         | -5.8                       |
| -7.50         | 10.50    | 2.10     | -9.7                       | -2.0                         | -11.7                      | -3.6                       | -1.7                         | -5.3                       |
| -7.75         | 10.75    | 2.10     | -9.0                       | -2.0                         | -11.0                      | -3.3                       | -1.7                         | -5.1                       |
| -8.00         | 11.00    | 2.10     | -8.6                       | -2.0                         | -10.6                      | -3.2                       | -1.7                         | -4.9                       |

### Tussenresultaten punt en schacht (Sondering : 9)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk; k</sub><br>[kN] | F <sub>c; tot 1</sub><br>[kN] | F <sub>c; tot 2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------------|----------------------------|----------------------------|-------------------------------|-------------------------------|
| -7.00         | -8.13       | 9.2                       | 5.5                        | 4.8                         | 4.3                         | 4.3                              | 4.5                        | 0.0                        | -330.0                        | -290.0                        |
| -7.25         | -8.16       | 8.0                       | 5.7                        | 5.2                         | 4.2                         | 4.2                              | 4.7                        | 0.0                        | -330.0                        | -290.0                        |
| -7.50         | -8.06       | 6.9                       | 5.5                        | 5.5                         | 4.1                         | 4.1                              | 4.9                        | 0.0                        | -330.0                        | -290.0                        |
| -7.75         | -8.06       | 6.0                       | 5.5                        | 5.5                         | 3.9                         | 3.9                              | 5.0                        | 0.0                        | -330.0                        | -290.0                        |
| -8.00         | -8.66       | 7.4                       | 6.2                        | 5.5                         | 4.3                         | 4.3                              | 5.0                        | 0.0                        | -330.0                        | -290.0                        |

### Tussenresultaten zakking 1 (Sondering : 9)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b; 1</sub><br>[kN] | R <sub>s; 1</sub><br>[kN] | R <sub>b c; 1</sub><br>[kN] | R <sub>s c; 1</sub><br>[kN] | R <sub>b; 2</sub><br>[kN] | R <sub>s; 2</sub><br>[kN] | R <sub>b c; 2</sub><br>[kN] | R <sub>s c; 2</sub><br>[kN] |
|---------------|---------------------------|---------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | 174.6                     | 241.3                     | 111.7                       | 218.4                       | 209.6                     | 289.6                     | 91.3                        | 198.9                       |
| -7.25         | 173.3                     | 260.8                     | 103.7                       | 226.4                       | 208.0                     | 313.0                     | 85.9                        | 204.2                       |
| -7.50         | 167.2                     | 277.0                     | 95.6                        | 234.3                       | 200.6                     | 332.5                     | 79.6                        | 210.7                       |
| -7.75         | 161.1                     | 288.8                     | 90.0                        | 240.1                       | 193.3                     | 346.6                     | 74.6                        | 215.2                       |
| -8.00         | 176.0                     | 297.8                     | 92.5                        | 237.4                       | 211.2                     | 357.4                     | 77.3                        | 213.3                       |

### Tussenresultaten zakking 2 (Sondering : 9)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b; 1</sub><br>[mm] | S <sub>e l; 1</sub><br>[mm] | S <sub>l; 1</sub><br>[mm] | S <sub>b; 2</sub><br>[mm] | S <sub>e l; 2</sub><br>[mm] | S <sub>l; 2</sub><br>[mm] |
|---------------|----------|----------|---------------------------|-----------------------------|---------------------------|---------------------------|-----------------------------|---------------------------|
| -7.00         | 10.00    | 1.60     | -6.8                      | -1.9                        | -8.7                      | -2.8                      | -1.7                        | -4.5                      |
| -7.25         | 10.25    | 1.60     | -5.8                      | -1.9                        | -7.8                      | -2.5                      | -1.7                        | -4.2                      |
| -7.50         | 10.50    | 1.60     | -5.3                      | -1.9                        | -7.2                      | -2.4                      | -1.7                        | -4.0                      |
| -7.75         | 10.75    | 1.60     | -5.0                      | -2.0                        | -7.0                      | -2.2                      | -1.7                        | -4.0                      |
| -8.00         | 11.00    | 1.60     | -4.4                      | -2.0                        | -6.4                      | -2.1                      | -1.8                        | -3.8                      |

## RESULTATEN 250 (n=1)

### Sondering : 1

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b</sub><br>[kN] | R <sub>s</sub><br>[kN] | R <sub>c; cal</sub><br>[kN] | R <sub>c; k</sub><br>[kN] | R <sub>c; d</sub><br>[kN] | F <sub>nk; d</sub><br>[kN] | R <sub>cnd</sub><br>[kN] | F <sub>c; tot; 1</sub><br>[kN] | U.C. | S <sub>l; 1</sub><br>[mm] | S <sub>l; 2</sub><br>[mm] |
|---------------|------------------------|------------------------|-----------------------------|---------------------------|---------------------------|----------------------------|--------------------------|--------------------------------|------|---------------------------|---------------------------|
| -7.00         | 196.3                  | 465.4                  | 661.7                       | 476.0                     | 396.7                     | 0.0                        | 396.7                    | -330.0                         | 0.83 | -6.9                      | -3.8                      |
| -7.25         | 171.3                  | 489.1                  | 660.4                       | 475.1                     | 395.9                     | 0.0                        | 395.9                    | -330.0                         | 0.83 | -6.7                      | -3.7                      |
| -7.50         | 162.0                  | 512.5                  | 674.6                       | 485.3                     | 404.4                     | 0.0                        | 404.4                    | -330.0                         | 0.82 | -6.4                      | -3.6                      |
| -7.75         | 136.0                  | 529.7                  | 665.7                       | 478.9                     | 399.1                     | 0.0                        | 399.1                    | -330.0                         | 0.83 | -6.4                      | -3.6                      |
| -8.00         | 137.7                  | 533.7                  | 671.4                       | 483.0                     | 402.5                     | 0.0                        | 402.5                    | -330.0                         | 0.82 | -6.3                      | -3.6                      |

### Sondering : 2

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b</sub><br>[kN] | R <sub>s</sub><br>[kN] | R <sub>c; cal</sub><br>[kN] | R <sub>c; k</sub><br>[kN] | R <sub>c; d</sub><br>[kN] | F <sub>nk; d</sub><br>[kN] | R <sub>cnd</sub><br>[kN] | F <sub>c; tot; 1</sub><br>[kN] | U.C. | S <sub>l; 1</sub><br>[mm] | S <sub>l; 2</sub><br>[mm] |
|---------------|------------------------|------------------------|-----------------------------|---------------------------|---------------------------|----------------------------|--------------------------|--------------------------------|------|---------------------------|---------------------------|
| -7.00         | 223.9                  | 506.9                  | 730.8                       | 525.8                     | 438.1                     | 0.0                        | 438.1                    | -330.0                         | 0.75 | -5.7                      | -3.4                      |
| -7.25         | 184.5                  | 534.8                  | 719.3                       | 517.4                     | 431.2                     | 0.0                        | 431.2                    | -330.0                         | 0.77 | -5.6                      | -3.4                      |
| -7.50         | 121.2                  | 562.0                  | 683.2                       | 491.5                     | 409.6                     | 0.0                        | 409.6                    | -330.0                         | 0.81 | -5.8                      | -3.4                      |
| -7.75         | 88.2                   | 584.7                  | 672.9                       | 484.1                     | 403.4                     | 0.0                        | 403.4                    | -330.0                         | 0.82 | -5.8                      | -3.4                      |
| -8.00         | 66.9                   | 604.0                  | 670.9                       | 482.7                     | 402.2                     | 0.0                        | 402.2                    | -330.0                         | 0.82 | -5.7                      | -3.4                      |

### Sondering : 3

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 264.3          | 346.5          | 610.8              | 439.4            | 366.2            | 0.0               | 366.2            | -330.0               | 0.90 | -9.8             | -4.8             |
| -7.25  | 338.3          | 366.6          | 704.9              | 507.1            | 422.6            | 0.0               | 422.6            | -330.0               | 0.78 | -7.2             | -4.1             |
| -7.50  | 326.6          | 391.8          | 718.3              | 516.8            | 430.7            | 0.0               | 430.7            | -330.0               | 0.77 | -6.8             | -3.9             |
| -7.75  | 162.4          | 421.7          | 584.1              | 420.2            | 350.2            | 0.0               | 350.2            | -330.0               | 0.94 | -9.6             | -4.6             |
| -8.00  | 116.9          | 451.7          | 568.7              | 409.1            | 340.9            | 0.0               | 340.9            | -330.0               | 0.97 | -9.7             | -4.6             |

### Sondering : 4

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 290.5          | 353.1          | 643.6              | 463.0            | 385.9            | 0.0               | 385.9            | -330.0               | 0.86 | -8.6             | -4.5             |
| -7.25  | 419.6          | 372.2          | 791.9              | 569.7            | 474.7            | 0.0               | 474.7            | -330.0               | 0.70 | -6.1             | -3.7             |
| -7.50  | 329.4          | 401.4          | 730.8              | 525.8            | 438.1            | 0.0               | 438.1            | -330.0               | 0.75 | -6.6             | -3.9             |
| -7.75  | 250.9          | 431.4          | 682.3              | 490.9            | 409.1            | 0.0               | 409.1            | -330.0               | 0.81 | -7.0             | -4.0             |
| -8.00  | 225.8          | 461.4          | 687.2              | 494.4            | 412.0            | 0.0               | 412.0            | -330.0               | 0.80 | -6.7             | -3.8             |

### Sondering : 5

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 297.1          | 275.8          | 572.9              | 412.2            | 343.5            | 0.0               | 343.5            | -330.0               | 0.96 | -13.1            | -5.8             |
| -7.25  | 412.8          | 296.2          | 709.0              | 510.1            | 425.1            | 0.0               | 425.1            | -330.0               | 0.78 | -7.9             | -4.4             |
| -7.50  | 371.9          | 325.9          | 697.9              | 502.1            | 418.4            | 0.0               | 418.4            | -330.0               | 0.79 | -7.8             | -4.3             |
| -7.75  | 346.7          | 355.9          | 702.6              | 505.5            | 421.3            | 0.0               | 421.3            | -330.0               | 0.78 | -7.4             | -4.2             |
| -8.00  | 349.6          | 385.1          | 734.7              | 528.6            | 440.5            | 0.0               | 440.5            | -330.0               | 0.75 | -6.8             | -4.0             |

### Sondering : 6

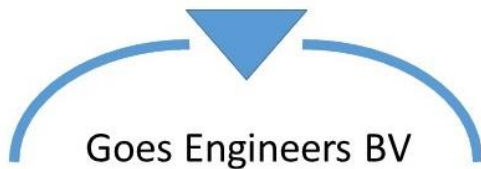
Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 257.9          | 415.0          | 673.0              | 484.1            | 403.5            | 0.0               | 403.5            | -330.0               | 0.82 | -7.3             | -4.0             |
| -7.25  | 207.2          | 430.7          | 637.9              | 458.9            | 382.4            | 0.0               | 382.4            | -330.0               | 0.86 | -7.9             | -4.1             |
| -7.50  | 207.6          | 453.3          | 660.9              | 475.4            | 396.2            | 0.0               | 396.2            | -330.0               | 0.83 | -7.2             | -4.0             |
| -7.75  | 185.8          | 483.1          | 668.9              | 481.2            | 401.0            | 0.0               | 401.0            | -330.0               | 0.82 | -6.8             | -3.8             |
| -8.00  | 154.8          | 505.8          | 660.6              | 475.2            | 396.0            | 0.0               | 396.0            | -330.0               | 0.83 | -6.8             | -3.8             |

### Sondering : 7

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 270.3          | 459.2          | 729.5              | 524.8            | 437.4            | 0.0               | 437.4            | -330.0               | 0.75 | -6.0             | -3.5             |
| -7.25  | 163.5          | 483.4          | 646.9              | 465.4            | 387.8            | 0.0               | 387.8            | -330.0               | 0.85 | -7.0             | -3.8             |
| -7.50  | 92.1           | 509.1          | 601.2              | 432.5            | 360.4            | 0.0               | 360.4            | -330.0               | 0.92 | -7.7             | -3.9             |
| -7.75  | 71.0           | 528.3          | 599.3              | 431.1            | 359.3            | 0.0               | 359.3            | -330.0               | 0.92 | -7.6             | -3.9             |
| -8.00  | 61.5           | 541.7          | 603.2              | 433.9            | 361.6            | 0.0               | 361.6            | -330.0               | 0.91 | -7.3             | -3.8             |



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### Sondering : 8

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 239.4          | 316.3          | 555.6              | 399.7            | 333.1            | 0.0               | 333.1            | -330.0               | 0.99 | -13.8            | -5.8             |
| -7.25  | 202.2          | 341.7          | 543.9              | 391.3            | 326.1            | 0.0               | 326.1            | -330.0               | 1.01 | -14.6            | -5.8             |
| -7.50  | 189.2          | 371.7          | 560.9              | 403.5            | 336.3            | 0.0               | 336.3            | -330.0               | 0.98 | -11.7            | -5.3             |
| -7.75  | 166.3          | 398.7          | 564.9              | 406.4            | 338.7            | 0.0               | 338.7            | -330.0               | 0.97 | -11.0            | -5.1             |
| -8.00  | 151.8          | 415.4          | 567.2              | 408.1            | 340.0            | 0.0               | 340.0            | -330.0               | 0.97 | -10.6            | -4.9             |

### Sondering : 9

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 266.2          | 367.8          | 633.9              | 456.1            | 380.1            | 0.0               | 380.1            | -330.0               | 0.87 | -8.7             | -4.5             |
| -7.25  | 264.2          | 397.5          | 661.7              | 476.0            | 396.7            | 0.0               | 396.7            | -330.0               | 0.83 | -7.8             | -4.2             |
| -7.50  | 254.8          | 422.2          | 677.0              | 487.0            | 405.9            | 0.0               | 405.9            | -330.0               | 0.81 | -7.2             | -4.0             |
| -7.75  | 245.5          | 440.2          | 685.6              | 493.3            | 411.1            | 0.0               | 411.1            | -330.0               | 0.80 | -7.0             | -4.0             |
| -8.00  | 268.2          | 453.9          | 722.1              | 519.5            | 432.9            | 0.0               | 432.9            | -330.0               | 0.76 | -6.4             | -3.8             |

## **SAMENVATTINGSTABEL 250 (n=1)**

### **Uitgangspunten**

- paal : 250
- paaltype : Geheide paal (beton)
- schachtafmeting : 250 x 250
- Paalklassefactor  $\alpha_p$  : 0.70
- Factor  $\alpha_s$  (tabel 7.c EC 7.1) : 0.010 (zandlagen; voor kleilagen zie tabel 7.d)
- Correlatiefactor  $\xi_3 (n=1)$  : 1.39

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| sondering       | maaiveld paalpunt |        | Bezwijkdraagvermogen |             |             | Rekenwaarden |            |       |
|-----------------|-------------------|--------|----------------------|-------------|-------------|--------------|------------|-------|
|                 | niveau            | niveau | $R_{b;cal}$          | $R_{s;cal}$ | $R_{c;cal}$ | $R_{c;d}$    | $F_{nk;d}$ |       |
| $R_{c;netto;d}$ |                   |        | [kN]                 | [kN]        | [kN]        | [kN]         | [kN]       | [kN]  |
| 1               | 3.75              | -7.00  | 196.3                | 465.4       | 661.7       | 396.7        | 0.0        | 396.7 |
|                 |                   | -7.25  | 171.3                | 489.1       | 660.4       | 395.9        | 0.0        | 395.9 |
|                 |                   | -7.50  | 162.0                | 512.5       | 674.6       | 404.4        | 0.0        | 404.4 |
|                 |                   | -7.75  | 136.0                | 529.7       | 665.7       | 399.1        | 0.0        | 399.1 |
|                 |                   | -8.00  | 137.7                | 533.7       | 671.4       | 402.5        | 0.0        | 402.5 |
| 2               | 3.72              | -7.00  | 223.9                | 506.9       | 730.8       | 438.1        | 0.0        | 438.1 |
|                 |                   | -7.25  | 184.5                | 534.8       | 719.3       | 431.2        | 0.0        | 431.2 |
|                 |                   | -7.50  | 121.2                | 562.0       | 683.2       | 409.6        | 0.0        | 409.6 |
|                 |                   | -7.75  | 88.2                 | 584.7       | 672.9       | 403.4        | 0.0        | 403.4 |
|                 |                   | -8.00  | 66.9                 | 604.0       | 670.9       | 402.2        | 0.0        | 402.2 |
| 3               | 3.74              | -7.00  | 264.3                | 346.5       | 610.8       | 366.2        | 0.0        | 366.2 |
|                 |                   | -7.25  | 338.3                | 366.6       | 704.9       | 422.6        | 0.0        | 422.6 |
|                 |                   | -7.50  | 326.6                | 391.8       | 718.3       | 430.7        | 0.0        | 430.7 |
|                 |                   | -7.75  | 162.4                | 421.7       | 584.1       | 350.2        | 0.0        | 350.2 |
|                 |                   | -8.00  | 116.9                | 451.7       | 568.7       | 340.9        | 0.0        | 340.9 |
| 4               | 3.65              | -7.00  | 290.5                | 353.1       | 643.6       | 385.9        | 0.0        | 385.9 |
|                 |                   | -7.25  | 419.6                | 372.2       | 791.9       | 474.7        | 0.0        | 474.7 |
|                 |                   | -7.50  | 329.4                | 401.4       | 730.8       | 438.1        | 0.0        | 438.1 |
|                 |                   | -7.75  | 250.9                | 431.4       | 682.3       | 409.1        | 0.0        | 409.1 |
|                 |                   | -8.00  | 225.8                | 461.4       | 687.2       | 412.0        | 0.0        | 412.0 |
| 5               | 3.79              | -7.00  | 297.1                | 275.8       | 572.9       | 343.5        | 0.0        | 343.5 |
|                 |                   | -7.25  | 412.8                | 296.2       | 709.0       | 425.1        | 0.0        | 425.1 |
|                 |                   | -7.50  | 371.9                | 325.9       | 697.9       | 418.4        | 0.0        | 418.4 |
|                 |                   | -7.75  | 346.7                | 355.9       | 702.6       | 421.3        | 0.0        | 421.3 |
|                 |                   | -8.00  | 349.6                | 385.1       | 734.7       | 440.5        | 0.0        | 440.5 |
| 6               | 3.62              | -7.00  | 257.9                | 415.0       | 673.0       | 403.5        | 0.0        | 403.5 |
|                 |                   | -7.25  | 207.2                | 430.7       | 637.9       | 382.4        | 0.0        | 382.4 |
|                 |                   | -7.50  | 207.6                | 453.3       | 660.9       | 396.2        | 0.0        | 396.2 |
|                 |                   | -7.75  | 185.8                | 483.1       | 668.9       | 401.0        | 0.0        | 401.0 |
|                 |                   | -8.00  | 154.8                | 505.8       | 660.6       | 396.0        | 0.0        | 396.0 |
| 7               | 3.71              | -7.00  | 270.3                | 459.2       | 729.5       | 437.4        | 0.0        | 437.4 |
|                 |                   | -7.25  | 163.5                | 483.4       | 646.9       | 387.8        | 0.0        | 387.8 |
|                 |                   | -7.50  | 92.1                 | 509.1       | 601.2       | 360.4        | 0.0        | 360.4 |
|                 |                   | -7.75  | 71.0                 | 528.3       | 599.3       | 359.3        | 0.0        | 359.3 |
|                 |                   | -8.00  | 61.5                 | 541.7       | 603.2       | 361.6        | 0.0        | 361.6 |
| 8               | 3.77              | -7.00  | 239.4                | 316.3       | 555.6       | 333.1        | 0.0        | 333.1 |
|                 |                   | -7.25  | 202.2                | 341.7       | 543.9       | 326.1        | 0.0        | 326.1 |
|                 |                   | -7.50  | 189.2                | 371.7       | 560.9       | 336.3        | 0.0        | 336.3 |
|                 |                   | -7.75  | 166.3                | 398.7       | 564.9       | 338.7        | 0.0        | 338.7 |
|                 |                   | -8.00  | 151.8                | 415.4       | 567.2       | 340.0        | 0.0        | 340.0 |

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| sondering<br>$R_{c; netto; d}$ | maaiveld<br>niveau | paalpunt<br>niveau | Bezwijkdraagvermogen |              |              | Rekenwaarden |             |       |
|--------------------------------|--------------------|--------------------|----------------------|--------------|--------------|--------------|-------------|-------|
|                                |                    |                    | $R_{b; cal}$         | $R_{s; cal}$ | $R_{c; cal}$ | $R_{c; d}$   | $F_{nk; d}$ |       |
|                                |                    |                    | [kN]                 | [kN]         | [kN]         | [kN]         | [kN]        | [kN]  |
| 9                              | 3.68               | -7.00              | 266.2                | 367.8        | 633.9        | 380.1        | 0.0         | 380.1 |
|                                |                    | -7.25              | 264.2                | 397.5        | 661.7        | 396.7        | 0.0         | 396.7 |
|                                |                    | -7.50              | 254.8                | 422.2        | 677.0        | 405.9        | 0.0         | 405.9 |
|                                |                    | -7.75              | 245.5                | 440.2        | 685.6        | 411.1        | 0.0         | 411.1 |
|                                |                    | -8.00              | 268.2                | 453.9        | 722.1        | 432.9        | 0.0         | 432.9 |

## Totaal resultaten 250 (van 9 sonderingen)

Uitgangspunten

Correlatiefactor  $\xi_{3; gem}$  (n= 9) : 1.27

Correlatiefactor  $\xi_{4; min}$  (n= 9) : 1.01

gebaseerd op sonderingen:

1 2 3 4 5 6 7 8 9

$$R_{c; k} = \min.\{ R_{c; cal; gem} / \xi_3; R_{c; cal; min} / \xi_4 \} \quad (7.8)$$

Inheinniveau

|       |                                                          | [m]   |  |
|-------|----------------------------------------------------------|-------|--|
| -7.00 | $R_{c; k} = \min.\{ (645.8 / 1.27); (555.6 / 1.01) \} =$ | 508.5 |  |
| -7.25 | $R_{c; k} = \min.\{ (675.1 / 1.27); (543.9 / 1.01) \} =$ | 531.6 |  |
| -7.50 | $R_{c; k} = \min.\{ (667.2 / 1.27); (560.9 / 1.01) \} =$ | 525.3 |  |
| -7.75 | $R_{c; k} = \min.\{ (647.4 / 1.27); (564.9 / 1.01) \} =$ | 509.7 |  |
| -8.00 | $R_{c; k} = \min.\{ (654.0 / 1.27); (567.2 / 1.01) \} =$ | 515.0 |  |

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Inheinniveau<br>[m] | $R_{c; k}$<br>[kN] | $R_{c; d}$<br>[kN] | $F_{c; tot; 1}$<br>[kN] | $F_{nk; d}$<br>[kN] | $R_{c; netto; d}$<br>[kN] | U.C. | $S_{1; 1}$<br>[mm] | $S_{1; 2}$<br>[mm] |
|---------------------|--------------------|--------------------|-------------------------|---------------------|---------------------------|------|--------------------|--------------------|
| -7.00               | 508.5              | 423.7              | -330.0                  | 0.0                 | 423.7                     | 0.78 | -13.8              | -5.8               |
| -7.25               | 531.6              | 443.0              | -330.0                  | 0.0                 | 443.0                     | 0.74 | -14.6              | -5.8               |
| -7.50               | 525.3              | 437.8              | -330.0                  | 0.0                 | 437.8                     | 0.75 | -11.7              | -5.3               |
| -7.75               | 509.7              | 424.8              | -330.0                  | 0.0                 | 424.8                     | 0.78 | -11.0              | -5.1               |
| -8.00               | 515.0              | 429.1              | -330.0                  | 0.0                 | 429.1                     | 0.77 | -10.6              | -4.9               |

## REKENGEGEVENS 220

Berekening : Controlerend  
 Rekenmethode : Drukpalen volgens NEN-EN 1997-1, art. 7.6.2  
 Sondering(en) : 1, 2, 3, 4, 5, 6, 7, 8, 9

Stijf bouwwerk : NEE  
 Paalgroep : NEE  
 Aantal sonderingen : 9  
 Factor  $\xi_3$  (n=1) : 1.39  
 Factor  $\xi_3$  (gem) : 1.27  
 Factor  $\xi_4$  (min) : 1.01  
 Weerstandsfactor  $\gamma_R$  : 1.20  
 $\gamma_{f,nk}$  : 1.0  
 $R_{s,cal,max,i}$  begrenzen op  $0.75 * R_{b,cal,max,i}$  : NEE  
 UGT draagvermogen zonder negatieve kleef : JA

Paal : 220  
 Niveau paalkop [m] : N.A.P. 3.00  
 $E_{d,1}$  [kN] : -280.00  $E_{d,2}$  [kN] : -240.00  
 $S_{req,1}$  [m] : 0.15  $S_{req,2}$  [m] : 0.05  
 Bovenbel. [kN/m<sup>2</sup>] : 0.00

## PAALPUNTNIVEAUS 220

Alle niveaus/hogtes/peilmaten zijn t.o.v. : N.A.P.

| Nr | Beginniveau [m] | Eindniveau [m] | Stapgrootte [m] |
|----|-----------------|----------------|-----------------|
| 1  | -7.00           | -8.00          | 0.25            |

## TUSSENRESULTATEN 220 (n=1)

Tussenresultaten punt en schacht (Sondering : 1)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau [m] | Trj2 [m] | $Q_{cI}$ [MPa] | $Q_{cII}$ [MPa] | $Q_{cIII}$ [MPa] | $Q_{bmax}$ [MPa] | $Q_{bmax,red}$ [MPa] | $Q_{cza}$ [MPa] | $F_{nk,k}$ [kN] | $F_{c,tot1}$ [kN] | $F_{c,tot2}$ [kN] |
|------------|----------|----------------|-----------------|------------------|------------------|----------------------|-----------------|-----------------|-------------------|-------------------|
| -7.00      | -7.99    | 8.2            | 3.4             | 3.2              | 3.1              | 3.1                  | 5.4             | 0.0             | -280.0            | -240.0            |
| -7.25      | -8.00    | 7.4            | 3.5             | 3.2              | 3.0              | 3.0                  | 5.5             | 0.0             | -280.0            | -240.0            |
| -7.50      | -8.36    | 6.6            | 2.7             | 2.7              | 2.6              | 2.6                  | 5.6             | 0.0             | -280.0            | -240.0            |
| -7.75      | -8.74    | 5.4            | 2.4             | 2.4              | 2.2              | 2.2                  | 5.6             | 0.0             | -280.0            | -240.0            |
| -8.00      | -8.89    | 5.3            | 2.5             | 2.4              | 2.2              | 2.2                  | 5.6             | 0.0             | -280.0            | -240.0            |

## Tussenresultaten zakkings 1 (Sondering : 1)

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau [m] | $R_{b,1}$ [kN] | $R_{s,1}$ [kN] | $R_{bc,1}$ [kN] | $R_{sc,1}$ [kN] | $R_{b,2}$ [kN] | $R_{s,2}$ [kN] | $R_{bc,2}$ [kN] | $R_{sc,2}$ [kN] |
|------------|----------------|----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|
| -7.00      | 99.9           | 268.7          | 58.4            | 221.5           | 119.9          | 322.5          | 47.4            | 192.3           |
| -7.25      | 96.3           | 282.4          | 53.8            | 226.0           | 115.5          | 338.9          | 43.9            | 196.2           |
| -7.50      | 82.3           | 296.0          | 45.5            | 234.6           | 98.8           | 355.1          | 37.0            | 203.3           |
| -7.75      | 70.4           | 305.8          | 38.7            | 241.2           | 84.5           | 367.0          | 31.4            | 208.5           |
| -8.00      | 70.0           | 308.1          | 38.2            | 241.9           | 84.0           | 369.8          | 31.0            | 209.2           |

### Tussenresultaten zakking 2 (Sondering : 1)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | L     | l    | S <sub>b;1</sub> | S <sub>e1;1</sub> | S <sub>1;1</sub> | S <sub>b;2</sub> | S <sub>e1;2</sub> | S <sub>1;2</sub> |
|--------|-------|------|------------------|-------------------|------------------|------------------|-------------------|------------------|
| [m]    | [m]   | [m]  | [mm]             | [mm]              | [mm]             | [mm]             | [mm]              | [mm]             |
| -7.00  | 10.00 | 1.00 | -4.9             | -1.9              | -6.7             | -2.1             | -1.6              | -3.6             |
| -7.25  | 10.25 | 1.00 | -4.4             | -1.9              | -6.3             | -1.9             | -1.6              | -3.5             |
| -7.50  | 10.50 | 1.00 | -4.3             | -1.9              | -6.2             | -1.9             | -1.6              | -3.5             |
| -7.75  | 10.75 | 1.00 | -4.2             | -1.9              | -6.1             | -1.9             | -1.6              | -3.5             |
| -8.00  | 11.00 | 1.00 | -4.2             | -1.9              | -6.1             | -1.8             | -1.6              | -3.5             |

### Tussenresultaten punt en schacht (Sondering : 2)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | Trj2  | Q <sub>cI</sub> | Q <sub>cII</sub> | Q <sub>cIII</sub> | Q <sub>bmax</sub> | Q <sub>bmax;red</sub> | Q <sub>cza</sub> | F <sub>nk;k</sub> | F <sub>c;tot1</sub> | F <sub>c;tot2</sub> |
|--------|-------|-----------------|------------------|-------------------|-------------------|-----------------------|------------------|-------------------|---------------------|---------------------|
| [m]    | [m]   | [MPa]           | [MPa]            | [MPa]             | [MPa]             | [MPa]                 | [MPa]            | [kN]              | [kN]                | [kN]                |
| -7.00  | -7.99 | 10.8            | 6.3              | 6.3               | 5.2               | 5.2                   | 5.8              | 0.0               | -280.0              | -240.0              |
| -7.25  | -8.24 | 8.7             | 2.9              | 2.9               | 3.1               | 3.1                   | 6.0              | 0.0               | -280.0              | -240.0              |
| -7.50  | -8.49 | 6.5             | 2.8              | 2.8               | 2.6               | 2.6                   | 6.1              | 0.0               | -280.0              | -240.0              |
| -7.75  | -8.74 | 4.5             | 1.7              | 1.7               | 1.7               | 1.7                   | 6.2              | 0.0               | -280.0              | -240.0              |
| -8.00  | -8.99 | 2.7             | 1.2              | 1.1               | 1.1               | 1.1                   | 6.2              | 0.0               | -280.0              | -240.0              |

### Tussenresultaten zakking 1 (Sondering : 2)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b;1</sub> | R <sub>s;1</sub> | R <sub>b;1</sub> | R <sub>s;1</sub> | R <sub>b;2</sub> | R <sub>s;2</sub> | R <sub>b;2</sub> | R <sub>s;2</sub> |
|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| [m]    | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             |
| -7.00  | 164.4            | 292.7            | 76.5             | 203.5            | 197.2            | 351.2            | 63.2             | 177.1            |
| -7.25  | 97.0             | 308.8            | 49.4             | 230.5            | 116.4            | 370.6            | 40.5             | 199.6            |
| -7.50  | 82.9             | 324.5            | 41.5             | 238.5            | 99.5             | 389.4            | 33.9             | 205.9            |
| -7.75  | 53.4             | 337.6            | 27.3             | 252.8            | 64.0             | 405.1            | 22.3             | 218.2            |
| -8.00  | 34.1             | 348.7            | 17.5             | 262.6            | 40.9             | 418.5            | 14.2             | 225.4            |

### Tussenresultaten zakking 2 (Sondering : 2)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | L     | l    | S <sub>b;1</sub> | S <sub>e1;1</sub> | S <sub>1;1</sub> | S <sub>b;2</sub> | S <sub>e1;2</sub> | S <sub>1;2</sub> |
|--------|-------|------|------------------|-------------------|------------------|------------------|-------------------|------------------|
| [m]    | [m]   | [m]  | [mm]             | [mm]              | [mm]             | [mm]             | [mm]              | [mm]             |
| -7.00  | 10.00 | 1.00 | -2.9             | -1.9              | -4.9             | -1.4             | -1.7              | -3.1             |
| -7.25  | 10.25 | 1.00 | -3.6             | -1.9              | -5.4             | -1.7             | -1.6              | -3.2             |
| -7.50  | 10.50 | 1.00 | -3.4             | -1.9              | -5.3             | -1.6             | -1.6              | -3.2             |
| -7.75  | 10.75 | 1.00 | -3.6             | -1.8              | -5.5             | -1.7             | -1.6              | -3.2             |
| -8.00  | 11.00 | 1.00 | -3.7             | -1.8              | -5.5             | -1.7             | -1.6              | -3.2             |

### Tussenresultaten punt en schacht (Sondering : 3)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | Trj2  | Q <sub>cI</sub> | Q <sub>cII</sub> | Q <sub>cIII</sub> | Q <sub>bmax</sub> | Q <sub>bmax;red</sub> | Q <sub>cza</sub> | F <sub>nk;k</sub> | F <sub>c;tot1</sub> | F <sub>c;tot2</sub> |
|--------|-------|-----------------|------------------|-------------------|-------------------|-----------------------|------------------|-------------------|---------------------|---------------------|
| [m]    | [m]   | [MPa]           | [MPa]            | [MPa]             | [MPa]             | [MPa]                 | [MPa]            | [kN]              | [kN]                | [kN]                |
| -7.00  | -7.17 | 8.0             | 8.0              | 4.2               | 4.3               | 4.3                   | 4.0              | 0.0               | -280.0              | -240.0              |
| -7.25  | -7.42 | 10.9            | 10.6             | 5.2               | 5.6               | 5.6                   | 4.1              | 0.0               | -280.0              | -240.0              |
| -7.50  | -8.49 | 16.0            | 8.2              | 6.1               | 6.4               | 6.4                   | 4.3              | 0.0               | -280.0              | -240.0              |
| -7.75  | -8.74 | 13.4            | 2.6              | 2.6               | 3.7               | 3.7                   | 4.5              | 0.0               | -280.0              | -240.0              |
| -8.00  | -8.99 | 8.7             | 0.9              | 0.9               | 2.0               | 2.0                   | 4.7              | 0.0               | -280.0              | -240.0              |

#### Tussenresultaten zakkings 1 (Sondering : 3)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 135.3                      | 200.1                      | 94.2                         | 185.8                        | 162.4                      | 240.1                      | 74.7                         | 165.1                        |
| -7.25         | 177.5                      | 211.7                      | 104.6                        | 175.5                        | 213.0                      | 254.0                      | 86.1                         | 154.0                        |
| -7.50         | 201.9                      | 226.2                      | 106.6                        | 173.4                        | 242.2                      | 271.5                      | 88.2                         | 151.8                        |
| -7.75         | 117.1                      | 243.5                      | 72.0                         | 208.1                        | 140.5                      | 292.2                      | 58.7                         | 181.5                        |
| -8.00         | 63.8                       | 260.8                      | 43.0                         | 237.0                        | 76.5                       | 313.0                      | 33.7                         | 206.2                        |

#### Tussenresultaten zakkings 2 (Sondering : 3)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 1.10     | -7.6                       | -2.0                         | -9.7                       | -2.9                       | -1.7                         | -4.6                       |
| -7.25         | 10.25    | 1.10     | -5.0                       | -2.1                         | -7.1                       | -2.1                       | -1.8                         | -3.9                       |
| -7.50         | 10.50    | 1.10     | -3.9                       | -2.2                         | -6.1                       | -1.8                       | -1.9                         | -3.7                       |
| -7.75         | 10.75    | 1.10     | -5.5                       | -2.1                         | -7.5                       | -2.3                       | -1.8                         | -4.0                       |
| -8.00         | 11.00    | 1.10     | -6.9                       | -2.0                         | -8.9                       | -2.6                       | -1.7                         | -4.2                       |

#### Tussenresultaten punt en schacht (Sondering : 4)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max ; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk ; k</sub><br>[kN] | F <sub>c ; tot 1</sub><br>[kN] | F <sub>c ; tot 2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------------|-----------------------------|--------------------------------|--------------------------------|
| -7.00         | -7.17       | 7.8                       | 7.8                        | 5.3                         | 4.6                         | 4.6                               | 4.1                        | 0.0                         | -280.0                         | -240.0                         |
| -7.25         | -7.42       | 13.3                      | 13.3                       | 5.7                         | 6.7                         | 6.7                               | 4.2                        | 0.0                         | -280.0                         | -240.0                         |
| -7.50         | -8.49       | 15.2                      | 9.5                        | 6.3                         | 6.5                         | 6.5                               | 4.4                        | 0.0                         | -280.0                         | -240.0                         |
| -7.75         | -8.74       | 12.6                      | 3.8                        | 3.8                         | 4.2                         | 4.2                               | 4.6                        | 0.0                         | -280.0                         | -240.0                         |
| -8.00         | -8.99       | 9.5                       | 3.9                        | 3.8                         | 3.7                         | 3.7                               | 4.8                        | 0.0                         | -280.0                         | -240.0                         |

#### Tussenresultaten zakkings 1 (Sondering : 4)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 145.6                      | 203.9                      | 96.6                         | 183.4                        | 174.7                      | 244.7                      | 77.6                         | 162.7                        |
| -7.25         | 211.5                      | 214.9                      | 113.5                        | 166.6                        | 253.9                      | 257.9                      | 93.8                         | 145.9                        |
| -7.50         | 207.1                      | 231.8                      | 106.1                        | 173.8                        | 248.5                      | 278.1                      | 87.8                         | 151.8                        |
| -7.75         | 132.9                      | 249.1                      | 76.5                         | 203.3                        | 159.4                      | 298.9                      | 62.7                         | 177.6                        |
| -8.00         | 116.5                      | 266.4                      | 65.6                         | 214.3                        | 139.8                      | 319.7                      | 53.7                         | 186.4                        |

#### Tussenresultaten zakkings 2 (Sondering : 4)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 1.00     | -6.6                       | -2.0                         | -8.7                       | -2.6                       | -1.7                         | -4.4                       |
| -7.25         | 10.25    | 1.00     | -4.0                       | -2.2                         | -6.2                       | -1.8                       | -1.8                         | -3.7                       |
| -7.50         | 10.50    | 1.00     | -3.6                       | -2.2                         | -5.8                       | -1.7                       | -1.9                         | -3.6                       |
| -7.75         | 10.75    | 1.00     | -4.7                       | -2.1                         | -6.8                       | -2.0                       | -1.8                         | -3.8                       |
| -8.00         | 11.00    | 1.00     | -4.5                       | -2.1                         | -6.6                       | -2.0                       | -1.8                         | -3.7                       |

**Tussenresultaten punt en schacht (Sondering : 5)**

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>bmax</sub><br>[MPa] | Q <sub>bmax;red</sub><br>[MPa] | Q <sub>cza</sub><br>[MPa] | F <sub>nk;k</sub><br>[kN] | F <sub>c;tot1</sub><br>[kN] | F <sub>c;tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|----------------------------|--------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | -7.17       | 8.0                       | 8.0                        | 5.2                         | 4.6                        | 4.6                            | 3.4                       | 0.0                       | -280.0                      | -240.0                      |
| -7.25         | -8.06       | 15.0                      | 11.5                       | 5.7                         | 6.6                        | 6.6                            | 3.5                       | 0.0                       | -280.0                      | -240.0                      |
| -7.50         | -8.06       | 15.2                      | 11.5                       | 6.5                         | 6.9                        | 6.9                            | 3.7                       | 0.0                       | -280.0                      | -240.0                      |
| -7.75         | -8.74       | 13.8                      | 6.8                        | 5.8                         | 5.6                        | 5.6                            | 3.9                       | 0.0                       | -280.0                      | -240.0                      |
| -8.00         | -8.99       | 12.6                      | 7.6                        | 6.0                         | 5.6                        | 5.6                            | 4.1                       | 0.0                       | -280.0                      | -240.0                      |

**Tussenresultaten zakking 1 (Sondering : 5)**

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b;1</sub><br>[kN] | R <sub>s;1</sub><br>[kN] | R <sub>b;c;1</sub><br>[kN] | R <sub>s;c;1</sub><br>[kN] | R <sub>b;2</sub><br>[kN] | R <sub>s;2</sub><br>[kN] | R <sub>b;c;2</sub><br>[kN] | R <sub>s;c;2</sub><br>[kN] |
|---------------|--------------------------|--------------------------|----------------------------|----------------------------|--------------------------|--------------------------|----------------------------|----------------------------|
| -7.00         | 147.1                    | 159.3                    | 120.7                      | 159.3                      | 176.5                    | 191.1                    | 93.4                       | 146.7                      |
| -7.25         | 210.4                    | 171.0                    | 132.0                      | 147.9                      | 252.5                    | 205.2                    | 108.4                      | 131.8                      |
| -7.50         | 220.4                    | 188.2                    | 126.6                      | 153.3                      | 264.5                    | 225.8                    | 104.9                      | 135.1                      |
| -7.75         | 178.9                    | 205.5                    | 107.4                      | 172.7                      | 214.7                    | 246.6                    | 88.3                       | 151.4                      |
| -8.00         | 178.9                    | 222.4                    | 100.9                      | 179.1                      | 214.7                    | 266.9                    | 83.2                       | 156.8                      |

**Tussenresultaten zakking 2 (Sondering : 5)**

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b;1</sub><br>[mm] | S <sub>e1;1</sub><br>[mm] | S <sub>1;1</sub><br>[mm] | S <sub>b;2</sub><br>[mm] | S <sub>e1;2</sub><br>[mm] | S <sub>1;2</sub><br>[mm] |
|---------------|----------|----------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
| -7.00         | 10.00    | 1.00     | -12.2                    | -2.2                      | -14.3                    | -3.9                     | -1.8                      | -5.7                     |
| -7.25         | 10.25    | 1.00     | -5.8                     | -2.3                      | -8.0                     | -2.4                     | -1.9                      | -4.3                     |
| -7.50         | 10.50    | 1.00     | -4.7                     | -2.3                      | -7.0                     | -2.1                     | -1.9                      | -4.0                     |
| -7.75         | 10.75    | 1.00     | -5.2                     | -2.2                      | -7.4                     | -2.2                     | -1.9                      | -4.1                     |
| -8.00         | 11.00    | 1.00     | -4.5                     | -2.3                      | -6.8                     | -2.0                     | -1.9                      | -3.9                     |

**Tussenresultaten punt en schacht (Sondering : 6)**

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>bmax</sub><br>[MPa] | Q <sub>bmax;red</sub><br>[MPa] | Q <sub>cza</sub><br>[MPa] | F <sub>nk;k</sub><br>[kN] | F <sub>c;tot1</sub><br>[kN] | F <sub>c;tot2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|----------------------------|--------------------------------|---------------------------|---------------------------|-----------------------------|-----------------------------|
| -7.00         | -7.22       | 7.0                       | 6.9                        | 6.3                         | 4.6                        | 4.6                            | 5.1                       | 0.0                       | -280.0                      | -240.0                      |
| -7.25         | -8.22       | 10.2                      | 3.0                        | 3.0                         | 3.4                        | 3.4                            | 5.2                       | 0.0                       | -280.0                      | -240.0                      |
| -7.50         | -8.49       | 8.9                       | 3.7                        | 3.0                         | 3.3                        | 3.3                            | 5.3                       | 0.0                       | -280.0                      | -240.0                      |
| -7.75         | -8.42       | 7.0                       | 3.5                        | 3.0                         | 2.9                        | 2.9                            | 5.4                       | 0.0                       | -280.0                      | -240.0                      |
| -8.00         | -8.32       | 5.0                       | 3.2                        | 3.0                         | 2.5                        | 2.5                            | 5.5                       | 0.0                       | -280.0                      | -240.0                      |

**Tussenresultaten zakking 1 (Sondering : 6)**

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b;1</sub><br>[kN] | R <sub>s;1</sub><br>[kN] | R <sub>b;c;1</sub><br>[kN] | R <sub>s;c;1</sub><br>[kN] | R <sub>b;2</sub><br>[kN] | R <sub>s;2</sub><br>[kN] | R <sub>b;c;2</sub><br>[kN] | R <sub>s;c;2</sub><br>[kN] |
|---------------|--------------------------|--------------------------|----------------------------|----------------------------|--------------------------|--------------------------|----------------------------|----------------------------|
| -7.00         | 146.8                    | 239.6                    | 84.5                       | 195.6                      | 176.2                    | 287.6                    | 69.3                       | 170.8                      |
| -7.25         | 106.6                    | 248.7                    | 66.2                       | 213.8                      | 127.9                    | 298.5                    | 53.7                       | 186.6                      |
| -7.50         | 103.3                    | 261.7                    | 61.5                       | 218.4                      | 124.0                    | 314.1                    | 49.9                       | 189.8                      |
| -7.75         | 91.5                     | 278.9                    | 52.6                       | 227.5                      | 109.8                    | 334.7                    | 42.8                       | 197.4                      |
| -8.00         | 78.6                     | 292.1                    | 44.5                       | 235.6                      | 94.4                     | 350.5                    | 36.1                       | 203.6                      |

#### Tussenresultaten zakking 2 (Sondering : 6)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | L     | l    | S <sub>b;1</sub> | S <sub>e1;1</sub> | S <sub>1;1</sub> | S <sub>b;2</sub> | S <sub>e1;2</sub> | S <sub>1;2</sub> |
|--------|-------|------|------------------|-------------------|------------------|------------------|-------------------|------------------|
| [m]    | [m]   | [m]  | [mm]             | [mm]              | [mm]             | [mm]             | [mm]              | [mm]             |
| -7.00  | 10.00 | 1.60 | -4.7             | -2.0              | -6.8             | -2.0             | -1.7              | -3.8             |
| -7.25  | 10.25 | 1.60 | -5.6             | -2.0              | -7.6             | -2.3             | -1.7              | -4.0             |
| -7.50  | 10.50 | 1.60 | -5.1             | -2.0              | -7.1             | -2.1             | -1.7              | -3.8             |
| -7.75  | 10.75 | 1.60 | -4.7             | -2.0              | -6.7             | -2.0             | -1.7              | -3.7             |
| -8.00  | 11.00 | 1.60 | -4.5             | -2.0              | -6.6             | -1.9             | -1.7              | -3.7             |

#### Tussenresultaten punt en schacht (Sondering : 7)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | Trj2  | Q <sub>cI</sub> | Q <sub>cII</sub> | Q <sub>cIII</sub> | Q <sub>bmax</sub> | Q <sub>bmax;red</sub> | Q <sub>cza</sub> | F <sub>nk;k</sub> | F <sub>c;tot1</sub> | F <sub>c;tot2</sub> |
|--------|-------|-----------------|------------------|-------------------|-------------------|-----------------------|------------------|-------------------|---------------------|---------------------|
| [m]    | [m]   | [MPa]           | [MPa]            | [MPa]             | [MPa]             | [MPa]                 | [MPa]            | [kN]              | [kN]                | [kN]                |
| -7.00  | -7.99 | 9.2             | 5.6              | 5.5               | 4.5               | 4.5                   | 5.2              | 0.0               | -280.0              | -240.0              |
| -7.25  | -8.24 | 7.8             | 4.6              | 4.6               | 3.8               | 3.8                   | 5.3              | 0.0               | -280.0              | -240.0              |
| -7.50  | -8.49 | 5.7             | 1.4              | 1.4               | 1.7               | 1.7                   | 5.5              | 0.0               | -280.0              | -240.0              |
| -7.75  | -8.74 | 3.8             | 1.0              | 1.0               | 1.2               | 1.2                   | 5.5              | 0.0               | -280.0              | -240.0              |
| -8.00  | -8.99 | 2.6             | 1.0              | 1.0               | 1.0               | 1.0                   | 5.5              | 0.0               | -280.0              | -240.0              |

#### Tussenresultaten zakking 1 (Sondering : 7)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b;1</sub> | R <sub>s;1</sub> | R <sub>b;1</sub> | R <sub>s;1</sub> | R <sub>b;2</sub> | R <sub>s;2</sub> | R <sub>b;2</sub> | R <sub>s;2</sub> |
|--------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| [m]    | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             | [kN]             |
| -7.00  | 142.9            | 265.2            | 75.9             | 204.0            | 171.5            | 318.2            | 62.4             | 178.0            |
| -7.25  | 119.9            | 279.1            | 64.1             | 215.8            | 143.9            | 334.9            | 52.4             | 187.4            |
| -7.50  | 55.2             | 294.0            | 33.1             | 246.8            | 66.3             | 352.7            | 26.7             | 213.1            |
| -7.75  | 37.9             | 305.0            | 22.8             | 257.3            | 45.4             | 366.1            | 18.4             | 221.9            |
| -8.00  | 31.4             | 312.8            | 18.7             | 261.3            | 37.7             | 375.3            | 15.0             | 225.4            |

#### Tussenresultaten zakking 2 (Sondering : 7)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | L     | l    | S <sub>b;1</sub> | S <sub>e1;1</sub> | S <sub>1;1</sub> | S <sub>b;2</sub> | S <sub>e1;2</sub> | S <sub>1;2</sub> |
|--------|-------|------|------------------|-------------------|------------------|------------------|-------------------|------------------|
| [m]    | [m]   | [m]  | [mm]             | [mm]              | [mm]             | [mm]             | [mm]              | [mm]             |
| -7.00  | 10.00 | 0.90 | -3.9             | -1.9              | -5.9             | -1.8             | -1.6              | -3.4             |
| -7.25  | 10.25 | 0.90 | -4.0             | -1.9              | -5.9             | -1.8             | -1.6              | -3.4             |
| -7.50  | 10.50 | 0.90 | -5.2             | -1.8              | -7.0             | -2.1             | -1.5              | -3.7             |
| -7.75  | 10.75 | 0.90 | -5.2             | -1.8              | -7.0             | -2.1             | -1.5              | -3.7             |
| -8.00  | 11.00 | 0.90 | -5.1             | -1.8              | -6.9             | -2.1             | -1.6              | -3.6             |

#### Tussenresultaten punt en schacht (Sondering : 8)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | Trj2  | Q <sub>cI</sub> | Q <sub>cII</sub> | Q <sub>cIII</sub> | Q <sub>bmax</sub> | Q <sub>bmax;red</sub> | Q <sub>cza</sub> | F <sub>nk;k</sub> | F <sub>c;tot1</sub> | F <sub>c;tot2</sub> |
|--------|-------|-----------------|------------------|-------------------|-------------------|-----------------------|------------------|-------------------|---------------------|---------------------|
| [m]    | [m]   | [MPa]           | [MPa]            | [MPa]             | [MPa]             | [MPa]                 | [MPa]            | [kN]              | [kN]                | [kN]                |
| -7.00  | -7.99 | 11.5            | 5.2              | 4.6               | 4.5               | 4.5                   | 4.2              | 0.0               | -280.0              | -240.0              |
| -7.25  | -8.24 | 9.7             | 3.5              | 3.5               | 3.6               | 3.6                   | 4.3              | 0.0               | -280.0              | -240.0              |
| -7.50  | -8.48 | 7.2             | 3.6              | 3.3               | 3.0               | 3.0                   | 4.6              | 0.0               | -280.0              | -240.0              |
| -7.75  | -8.38 | 5.4             | 3.3              | 3.3               | 2.7               | 2.7                   | 4.7              | 0.0               | -280.0              | -240.0              |
| -8.00  | -8.28 | 4.1             | 3.3              | 3.3               | 2.4               | 2.4                   | 4.8              | 0.0               | -280.0              | -240.0              |

#### Tussenresultaten zakking 1 (Sondering : 8)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 144.3                      | 182.6                      | 105.3                        | 174.7                        | 173.1                      | 219.2                      | 83.5                         | 156.7                        |
| -7.25         | 112.9                      | 197.3                      | 86.1                         | 193.9                        | 135.5                      | 236.8                      | 67.2                         | 172.9                        |
| -7.50         | 96.1                       | 214.6                      | 71.9                         | 208.1                        | 115.4                      | 257.6                      | 55.6                         | 184.2                        |
| -7.75         | 84.5                       | 230.2                      | 61.0                         | 218.9                        | 101.4                      | 276.2                      | 47.3                         | 192.4                        |
| -8.00         | 77.1                       | 239.9                      | 54.6                         | 225.3                        | 92.5                       | 287.9                      | 42.5                         | 197.5                        |

#### Tussenresultaten zakking 2 (Sondering : 8)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 2.10     | -8.6                       | -2.2                         | -10.8                      | -3.2                       | -1.8                         | -5.0                       |
| -7.25         | 10.25    | 2.10     | -9.7                       | -2.1                         | -11.9                      | -3.4                       | -1.8                         | -5.2                       |
| -7.50         | 10.50    | 2.10     | -9.2                       | -2.1                         | -11.3                      | -3.2                       | -1.8                         | -5.0                       |
| -7.75         | 10.75    | 2.10     | -8.4                       | -2.1                         | -10.5                      | -2.9                       | -1.8                         | -4.8                       |
| -8.00         | 11.00    | 2.10     | -8.0                       | -2.1                         | -10.1                      | -2.8                       | -1.8                         | -4.7                       |

#### Tussenresultaten punt en schacht (Sondering : 9)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | Trj2<br>[m] | Q <sub>c I</sub><br>[MPa] | Q <sub>c II</sub><br>[MPa] | Q <sub>c III</sub><br>[MPa] | Q <sub>b max</sub><br>[MPa] | Q <sub>b max ; red</sub><br>[MPa] | Q <sub>c za</sub><br>[MPa] | F <sub>nk ; k</sub><br>[kN] | F <sub>c ; tot 1</sub><br>[kN] | F <sub>c ; tot 2</sub><br>[kN] |
|---------------|-------------|---------------------------|----------------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------------|-----------------------------|--------------------------------|--------------------------------|
| -7.00         | -7.99       | 9.7                       | 5.5                        | 5.2                         | 4.5                         | 4.5                               | 4.5                        | 0.0                         | -280.0                         | -240.0                         |
| -7.25         | -8.16       | 8.0                       | 5.7                        | 5.5                         | 4.3                         | 4.3                               | 4.7                        | 0.0                         | -280.0                         | -240.0                         |
| -7.50         | -8.06       | 6.9                       | 5.5                        | 5.5                         | 4.1                         | 4.1                               | 4.9                        | 0.0                         | -280.0                         | -240.0                         |
| -7.75         | -8.06       | 6.0                       | 5.5                        | 5.5                         | 3.9                         | 3.9                               | 5.0                        | 0.0                         | -280.0                         | -240.0                         |
| -8.00         | -8.17       | 6.7                       | 6.7                        | 5.5                         | 4.3                         | 4.3                               | 5.0                        | 0.0                         | -280.0                         | -240.0                         |

#### Tussenresultaten zakking 1 (Sondering : 9)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | R <sub>b ; 1</sub><br>[kN] | R <sub>s ; 1</sub><br>[kN] | R <sub>b c ; 1</sub><br>[kN] | R <sub>s c ; 1</sub><br>[kN] | R <sub>b ; 2</sub><br>[kN] | R <sub>s ; 2</sub><br>[kN] | R <sub>b c ; 2</sub><br>[kN] | R <sub>s c ; 2</sub><br>[kN] |
|---------------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|----------------------------|------------------------------|------------------------------|
| -7.00         | 142.2                      | 212.4                      | 92.4                         | 187.7                        | 170.6                      | 254.8                      | 74.2                         | 166.0                        |
| -7.25         | 136.8                      | 229.5                      | 84.0                         | 196.0                        | 164.1                      | 275.5                      | 68.6                         | 171.1                        |
| -7.50         | 129.5                      | 243.8                      | 76.8                         | 203.1                        | 155.3                      | 292.6                      | 62.8                         | 177.3                        |
| -7.75         | 124.7                      | 254.2                      | 72.0                         | 207.9                        | 149.7                      | 305.0                      | 58.8                         | 181.2                        |
| -8.00         | 135.4                      | 262.1                      | 74.0                         | 206.0                        | 162.5                      | 314.5                      | 60.6                         | 179.3                        |

#### Tussenresultaten zakking 2 (Sondering : 9)

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau<br>[m] | L<br>[m] | l<br>[m] | S <sub>b ; 1</sub><br>[mm] | S <sub>e 1 ; 1</sub><br>[mm] | S <sub>1 ; 1</sub><br>[mm] | S <sub>b ; 2</sub><br>[mm] | S <sub>e 1 ; 2</sub><br>[mm] | S <sub>1 ; 2</sub><br>[mm] |
|---------------|----------|----------|----------------------------|------------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| -7.00         | 10.00    | 1.60     | -6.2                       | -2.1                         | -8.3                       | -2.5                       | -1.8                         | -4.3                       |
| -7.25         | 10.25    | 1.60     | -5.5                       | -2.1                         | -7.6                       | -2.3                       | -1.8                         | -4.0                       |
| -7.50         | 10.50    | 1.60     | -5.0                       | -2.1                         | -7.1                       | -2.1                       | -1.8                         | -3.9                       |
| -7.75         | 10.75    | 1.60     | -4.8                       | -2.1                         | -6.9                       | -2.0                       | -1.8                         | -3.8                       |
| -8.00         | 11.00    | 1.60     | -4.2                       | -2.2                         | -6.4                       | -1.9                       | -1.9                         | -3.7                       |

#### RESULTATEN 220 (n=1)

### Sondering : 1

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 152.3          | 409.6          | 561.9              | 404.2            | 336.8            | 0.0               | 336.8            | -280.0               | 0.83 | -6.7             | -3.6             |
| -7.25  | 146.7          | 430.4          | 577.1              | 415.2            | 346.0            | 0.0               | 346.0            | -280.0               | 0.81 | -6.3             | -3.5             |
| -7.50  | 125.5          | 451.0          | 576.5              | 414.7            | 345.6            | 0.0               | 345.6            | -280.0               | 0.81 | -6.2             | -3.5             |
| -7.75  | 107.3          | 466.1          | 573.4              | 412.5            | 343.8            | 0.0               | 343.8            | -280.0               | 0.81 | -6.1             | -3.5             |
| -8.00  | 106.6          | 469.6          | 576.3              | 414.6            | 345.5            | 0.0               | 345.5            | -280.0               | 0.81 | -6.1             | -3.5             |

### Sondering : 2

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 250.5          | 446.0          | 696.5              | 501.1            | 417.6            | 0.0               | 417.6            | -280.0               | 0.67 | -4.9             | -3.1             |
| -7.25  | 147.8          | 470.6          | 618.4              | 444.9            | 370.7            | 0.0               | 370.7            | -280.0               | 0.76 | -5.4             | -3.2             |
| -7.50  | 126.4          | 494.6          | 621.0              | 446.8            | 372.3            | 0.0               | 372.3            | -280.0               | 0.75 | -5.3             | -3.2             |
| -7.75  | 81.3           | 514.5          | 595.8              | 428.7            | 357.2            | 0.0               | 357.2            | -280.0               | 0.78 | -5.5             | -3.2             |
| -8.00  | 51.9           | 531.5          | 583.4              | 419.7            | 349.8            | 0.0               | 349.8            | -280.0               | 0.80 | -5.5             | -3.2             |

### Sondering : 3

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 206.2          | 304.9          | 511.1              | 367.7            | 306.4            | 0.0               | 306.4            | -280.0               | 0.91 | -9.7             | -4.6             |
| -7.25  | 270.6          | 322.6          | 593.2              | 426.7            | 355.6            | 0.0               | 355.6            | -280.0               | 0.79 | -7.1             | -3.9             |
| -7.50  | 307.6          | 344.7          | 652.4              | 469.3            | 391.1            | 0.0               | 391.1            | -280.0               | 0.72 | -6.1             | -3.7             |
| -7.75  | 178.4          | 371.1          | 549.5              | 395.4            | 329.5            | 0.0               | 329.5            | -280.0               | 0.85 | -7.5             | -4.0             |
| -8.00  | 97.2           | 397.5          | 494.7              | 355.9            | 296.6            | 0.0               | 296.6            | -280.0               | 0.94 | -8.9             | -4.2             |

### Sondering : 4

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 221.8          | 310.7          | 532.5              | 383.1            | 319.3            | 0.0               | 319.3            | -280.0               | 0.88 | -8.7             | -4.4             |
| -7.25  | 322.4          | 327.5          | 649.9              | 467.6            | 389.6            | 0.0               | 389.6            | -280.0               | 0.72 | -6.2             | -3.7             |
| -7.50  | 315.6          | 353.2          | 668.8              | 481.2            | 401.0            | 0.0               | 401.0            | -280.0               | 0.70 | -5.8             | -3.6             |
| -7.75  | 202.5          | 379.6          | 582.1              | 418.8            | 349.0            | 0.0               | 349.0            | -280.0               | 0.80 | -6.8             | -3.8             |
| -8.00  | 177.5          | 406.0          | 583.5              | 419.8            | 349.8            | 0.0               | 349.8            | -280.0               | 0.80 | -6.6             | -3.7             |

### Sondering : 5

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 224.2          | 242.7          | 466.9              | 335.9            | 279.9            | 0.0               | 279.9            | -280.0               | 1.00 | -14.3            | -5.7             |
| -7.25  | 320.7          | 260.6          | 581.3              | 418.2            | 348.5            | 0.0               | 348.5            | -280.0               | 0.80 | -8.0             | -4.3             |
| -7.50  | 335.9          | 286.8          | 622.7              | 448.0            | 373.3            | 0.0               | 373.3            | -280.0               | 0.75 | -7.0             | -4.0             |
| -7.75  | 272.7          | 313.2          | 585.9              | 421.5            | 351.3            | 0.0               | 351.3            | -280.0               | 0.80 | -7.4             | -4.1             |
| -8.00  | 272.6          | 338.9          | 611.5              | 440.0            | 366.6            | 0.0               | 366.6            | -280.0               | 0.76 | -6.8             | -3.9             |

### Sondering : 6

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 223.7          | 365.2          | 588.9              | 423.7            | 353.1            | 0.0               | 353.1            | -280.0               | 0.79 | -6.8             | -3.8             |
| -7.25  | 162.5          | 379.1          | 541.5              | 389.6            | 324.7            | 0.0               | 324.7            | -280.0               | 0.86 | -7.6             | -4.0             |
| -7.50  | 157.5          | 398.9          | 556.3              | 400.2            | 333.5            | 0.0               | 333.5            | -280.0               | 0.84 | -7.1             | -3.8             |
| -7.75  | 139.4          | 425.1          | 564.5              | 406.1            | 338.4            | 0.0               | 338.4            | -280.0               | 0.83 | -6.7             | -3.7             |
| -8.00  | 119.9          | 445.1          | 564.9              | 406.4            | 338.7            | 0.0               | 338.7            | -280.0               | 0.83 | -6.6             | -3.7             |

### Sondering : 7

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 217.7          | 404.1          | 621.9              | 447.4            | 372.8            | 0.0               | 372.8            | -280.0               | 0.75 | -5.9             | -3.4             |
| -7.25  | 182.8          | 425.4          | 608.2              | 437.5            | 364.6            | 0.0               | 364.6            | -280.0               | 0.77 | -5.9             | -3.4             |
| -7.50  | 84.2           | 448.0          | 532.2              | 382.9            | 319.1            | 0.0               | 319.1            | -280.0               | 0.88 | -7.0             | -3.7             |
| -7.75  | 57.7           | 464.9          | 522.6              | 376.0            | 313.3            | 0.0               | 313.3            | -280.0               | 0.89 | -7.0             | -3.7             |
| -8.00  | 47.8           | 476.7          | 524.5              | 377.4            | 314.5            | 0.0               | 314.5            | -280.0               | 0.89 | -6.9             | -3.6             |

### Sondering : 8

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 219.9          | 278.3          | 498.2              | 358.4            | 298.7            | 0.0               | 298.7            | -280.0               | 0.94 | -10.8            | -5.0             |
| -7.25  | 172.1          | 300.7          | 472.8              | 340.2            | 283.5            | 0.0               | 283.5            | -280.0               | 0.99 | -11.9            | -5.2             |
| -7.50  | 146.5          | 327.1          | 473.6              | 340.7            | 283.9            | 0.0               | 283.9            | -280.0               | 0.99 | -11.3            | -5.0             |
| -7.75  | 128.8          | 350.8          | 479.6              | 345.0            | 287.5            | 0.0               | 287.5            | -280.0               | 0.97 | -10.5            | -4.8             |
| -8.00  | 117.5          | 365.6          | 483.1              | 347.6            | 289.6            | 0.0               | 289.6            | -280.0               | 0.97 | -10.1            | -4.7             |

### Sondering : 9

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Niveau | R <sub>b</sub> | R <sub>s</sub> | R <sub>c;cal</sub> | R <sub>c;k</sub> | R <sub>c;d</sub> | F <sub>nk;d</sub> | R <sub>cnd</sub> | F <sub>c;tot;1</sub> | U.C. | S <sub>1;1</sub> | S <sub>1;2</sub> |
|--------|----------------|----------------|--------------------|------------------|------------------|-------------------|------------------|----------------------|------|------------------|------------------|
| [m]    | [kN]           | [kN]           | [kN]               | [kN]             | [kN]             | [kN]              | [kN]             | [kN]                 |      | [mm]             | [mm]             |
| -7.00  | 216.7          | 323.6          | 540.3              | 388.7            | 323.9            | 0.0               | 323.9            | -280.0               | 0.86 | -8.3             | -4.3             |
| -7.25  | 208.4          | 349.8          | 558.3              | 401.6            | 334.7            | 0.0               | 334.7            | -280.0               | 0.84 | -7.6             | -4.0             |
| -7.50  | 197.3          | 371.5          | 568.8              | 409.2            | 341.0            | 0.0               | 341.0            | -280.0               | 0.82 | -7.1             | -3.9             |
| -7.75  | 190.1          | 387.3          | 577.4              | 415.4            | 346.2            | 0.0               | 346.2            | -280.0               | 0.81 | -6.9             | -3.8             |
| -8.00  | 206.4          | 399.4          | 605.8              | 435.9            | 363.2            | 0.0               | 363.2            | -280.0               | 0.77 | -6.4             | -3.7             |

## **SAMENVATTINGSTABEL 220 (n=1)**

### **Uitgangspunten**

- paal : 220
- paaltype : Geheide paal (beton)
- schachtafmeting : 220 x 220
- Paalklassefactor  $\alpha_p$  : 0.70
- Factor  $\alpha_s$  (tabel 7.c EC 7.1) : 0.010 (zandlagen; voor kleilagen zie tabel 7.d)
- Correlatiefactor  $\xi_3 (n=1)$  : 1.39

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| sondering       | maaiveld paalpunt |        | Bezwijkdraagvermogen |             |             | Rekenwaarden |            |       |
|-----------------|-------------------|--------|----------------------|-------------|-------------|--------------|------------|-------|
|                 | niveau            | niveau | $R_{b;cal}$          | $R_{s;cal}$ | $R_{c;cal}$ | $R_{c;d}$    | $F_{nk;d}$ |       |
| $R_{c;netto;d}$ |                   |        | [kN]                 | [kN]        | [kN]        | [kN]         | [kN]       | [kN]  |
| 1               | 3.75              | -7.00  | 152.3                | 409.6       | 561.9       | 336.8        | 0.0        | 336.8 |
|                 |                   | -7.25  | 146.7                | 430.4       | 577.1       | 346.0        | 0.0        | 346.0 |
|                 |                   | -7.50  | 125.5                | 451.0       | 576.5       | 345.6        | 0.0        | 345.6 |
|                 |                   | -7.75  | 107.3                | 466.1       | 573.4       | 343.8        | 0.0        | 343.8 |
|                 |                   | -8.00  | 106.6                | 469.6       | 576.3       | 345.5        | 0.0        | 345.5 |
| 2               | 3.72              | -7.00  | 250.5                | 446.0       | 696.5       | 417.6        | 0.0        | 417.6 |
|                 |                   | -7.25  | 147.8                | 470.6       | 618.4       | 370.7        | 0.0        | 370.7 |
|                 |                   | -7.50  | 126.4                | 494.6       | 621.0       | 372.3        | 0.0        | 372.3 |
|                 |                   | -7.75  | 81.3                 | 514.5       | 595.8       | 357.2        | 0.0        | 357.2 |
|                 |                   | -8.00  | 51.9                 | 531.5       | 583.4       | 349.8        | 0.0        | 349.8 |
| 3               | 3.74              | -7.00  | 206.2                | 304.9       | 511.1       | 306.4        | 0.0        | 306.4 |
|                 |                   | -7.25  | 270.6                | 322.6       | 593.2       | 355.6        | 0.0        | 355.6 |
|                 |                   | -7.50  | 307.6                | 344.7       | 652.4       | 391.1        | 0.0        | 391.1 |
|                 |                   | -7.75  | 178.4                | 371.1       | 549.5       | 329.5        | 0.0        | 329.5 |
|                 |                   | -8.00  | 97.2                 | 397.5       | 494.7       | 296.6        | 0.0        | 296.6 |
| 4               | 3.65              | -7.00  | 221.8                | 310.7       | 532.5       | 319.3        | 0.0        | 319.3 |
|                 |                   | -7.25  | 322.4                | 327.5       | 649.9       | 389.6        | 0.0        | 389.6 |
|                 |                   | -7.50  | 315.6                | 353.2       | 668.8       | 401.0        | 0.0        | 401.0 |
|                 |                   | -7.75  | 202.5                | 379.6       | 582.1       | 349.0        | 0.0        | 349.0 |
|                 |                   | -8.00  | 177.5                | 406.0       | 583.5       | 349.8        | 0.0        | 349.8 |
| 5               | 3.79              | -7.00  | 224.2                | 242.7       | 466.9       | 279.9        | 0.0        | 279.9 |
|                 |                   | -7.25  | 320.7                | 260.6       | 581.3       | 348.5        | 0.0        | 348.5 |
|                 |                   | -7.50  | 335.9                | 286.8       | 622.7       | 373.3        | 0.0        | 373.3 |
|                 |                   | -7.75  | 272.7                | 313.2       | 585.9       | 351.3        | 0.0        | 351.3 |
|                 |                   | -8.00  | 272.6                | 338.9       | 611.5       | 366.6        | 0.0        | 366.6 |
| 6               | 3.62              | -7.00  | 223.7                | 365.2       | 588.9       | 353.1        | 0.0        | 353.1 |
|                 |                   | -7.25  | 162.5                | 379.1       | 541.5       | 324.7        | 0.0        | 324.7 |
|                 |                   | -7.50  | 157.5                | 398.9       | 556.3       | 333.5        | 0.0        | 333.5 |
|                 |                   | -7.75  | 139.4                | 425.1       | 564.5       | 338.4        | 0.0        | 338.4 |
|                 |                   | -8.00  | 119.9                | 445.1       | 564.9       | 338.7        | 0.0        | 338.7 |
| 7               | 3.71              | -7.00  | 217.7                | 404.1       | 621.9       | 372.8        | 0.0        | 372.8 |
|                 |                   | -7.25  | 182.8                | 425.4       | 608.2       | 364.6        | 0.0        | 364.6 |
|                 |                   | -7.50  | 84.2                 | 448.0       | 532.2       | 319.1        | 0.0        | 319.1 |
|                 |                   | -7.75  | 57.7                 | 464.9       | 522.6       | 313.3        | 0.0        | 313.3 |
|                 |                   | -8.00  | 47.8                 | 476.7       | 524.5       | 314.5        | 0.0        | 314.5 |
| 8               | 3.77              | -7.00  | 219.9                | 278.3       | 498.2       | 298.7        | 0.0        | 298.7 |
|                 |                   | -7.25  | 172.1                | 300.7       | 472.8       | 283.5        | 0.0        | 283.5 |
|                 |                   | -7.50  | 146.5                | 327.1       | 473.6       | 283.9        | 0.0        | 283.9 |
|                 |                   | -7.75  | 128.8                | 350.8       | 479.6       | 287.5        | 0.0        | 287.5 |
|                 |                   | -8.00  | 117.5                | 365.6       | 483.1       | 289.6        | 0.0        | 289.6 |

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| sondering<br>$R_{c; netto; d}$ | maaiveld paalpunt |        | Bezuigdraagvermogen |              |              | Rekenwaarden |             |       |
|--------------------------------|-------------------|--------|---------------------|--------------|--------------|--------------|-------------|-------|
|                                | niveau            | niveau | $R_{b; cal}$        | $R_{s; cal}$ | $R_{c; cal}$ | $R_{c; d}$   | $F_{nk; d}$ |       |
|                                |                   |        | [kN]                | [kN]         | [kN]         | [kN]         | [kN]        | [kN]  |
| 9                              | 3.68              | -7.00  | 216.7               | 323.6        | 540.3        | 323.9        | 0.0         | 323.9 |
|                                |                   | -7.25  | 208.4               | 349.8        | 558.3        | 334.7        | 0.0         | 334.7 |
|                                |                   | -7.50  | 197.3               | 371.5        | 568.8        | 341.0        | 0.0         | 341.0 |
|                                |                   | -7.75  | 190.1               | 387.3        | 577.4        | 346.2        | 0.0         | 346.2 |
|                                |                   | -8.00  | 206.4               | 399.4        | 605.8        | 363.2        | 0.0         | 363.2 |

## Totaal resultaten 220 (van 9 sonderingen)

Uitgangspunten

Correlatiefactor  $\xi_{3; gem}$  (n= 9) : 1.27

Correlatiefactor  $\xi_{4; min}$  (n= 9) : 1.01

gebaseerd op sonderingen:

1 2 3 4 5 6 7 8 9

$$R_{c; k} = \min.\{ R_{c; cal; gem} / \xi_3; R_{c; cal; min} / \xi_4 \} \quad (7.8)$$

Inheinniveau

| [m]   |            |   |                                      |   |       |  |  |  |
|-------|------------|---|--------------------------------------|---|-------|--|--|--|
| -7.00 | $R_{c; k}$ | = | min.{( 557.6/ 1.27); ( 466.9/ 1.01)} | = | 439.0 |  |  |  |
| -7.25 | $R_{c; k}$ | = | min.{( 577.9/ 1.27); ( 472.8/ 1.01)} | = | 455.0 |  |  |  |
| -7.50 | $R_{c; k}$ | = | min.{( 585.8/ 1.27); ( 473.6/ 1.01)} | = | 461.3 |  |  |  |
| -7.75 | $R_{c; k}$ | = | min.{( 559.0/ 1.27); ( 479.6/ 1.01)} | = | 440.2 |  |  |  |
| -8.00 | $R_{c; k}$ | = | min.{( 558.6/ 1.27); ( 483.1/ 1.01)} | = | 439.9 |  |  |  |

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| Inheinniveau<br>[m] | $R_{c; k}$<br>[kN] | $R_{c; d}$<br>[kN] | $F_{c; tot; 1}$<br>[kN] | $F_{nk; d}$<br>[kN] | $R_{c; netto; d}$<br>[kN] | U.C. | $S_{1; 1}$<br>[mm] | $S_{1; 2}$<br>[mm] |
|---------------------|--------------------|--------------------|-------------------------|---------------------|---------------------------|------|--------------------|--------------------|
| -7.00               | 439.0              | 365.9              | -280.0                  | 0.0                 | 365.9                     | 0.77 | -14.3              | -5.7 *             |
| -7.25               | 455.0              | 379.2              | -280.0                  | 0.0                 | 379.2                     | 0.74 | -11.9              | -5.2               |
| -7.50               | 461.3              | 384.4              | -280.0                  | 0.0                 | 384.4                     | 0.73 | -11.3              | -5.0               |
| -7.75               | 440.2              | 366.8              | -280.0                  | 0.0                 | 366.8                     | 0.76 | -10.5              | -4.8               |
| -8.00               | 439.9              | 366.6              | -280.0                  | 0.0                 | 366.6                     | 0.76 | -10.1              | -4.7               |

## \* WAARSCHUWING n.a.v. NEN-NA 1997-1 art. A.3.3.3 1)

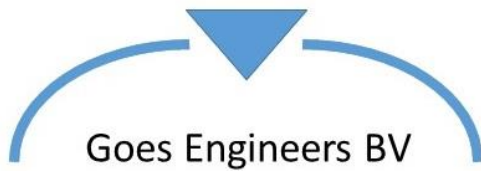
Bij toepassing van de waarden van  $\xi_1$ ,  $\xi_2$ ,  $\xi_3$  en  $\xi_4$  van de tabellen A.9 en A.10 mag de variatiecoëfficiënt van de draagkracht van palen in een groep, bepaald volgens de verschillende voor deze groep geldende sonderingen, niet groter zijn dan 12%. Deze variatiecoëfficiënt van 12% geeft bij een kans van onderschrijding van 5% een minimumdraagkracht groter dan 80% van het gemiddelde.

| Inheinniveau<br>[m] | Aantal<br>[-] | $R_{c; cal; gem}$<br>[kN] | Var.coëff.<br>[%] |
|---------------------|---------------|---------------------------|-------------------|
| -7.00               | 9             | 557.59                    | 12.6              |

## OVERZICHT NETTO DRAAGVERMOGEN DRUKPALEN

Alle niveaus/hoogtes/peilmaten zijn t.o.v.: N.A.P.

| sondering | maaiveld<br>niveau | paalpunt<br>niveau | $R_{c; netto; d}$ [kN] |       |
|-----------|--------------------|--------------------|------------------------|-------|
|           |                    |                    | 250                    | 220   |
| 1         | 3.75               | -7.00              | 396.7                  | 336.8 |
|           |                    | -7.25              | 395.9                  | 346.0 |
|           |                    | -7.50              | 404.4                  | 345.6 |
|           |                    | -7.75              | 399.1                  | 343.8 |
|           |                    | -8.00              | 402.5                  | 345.5 |
| 2         | 3.72               | -7.00              | 438.1                  | 417.6 |
|           |                    | -7.25              | 431.2                  | 370.7 |
|           |                    | -7.50              | 409.6                  | 372.3 |
|           |                    | -7.75              | 403.4                  | 357.2 |
|           |                    | -8.00              | 402.2                  | 349.8 |
| 3         | 3.74               | -7.00              | 366.2                  | 306.4 |
|           |                    | -7.25              | 422.6                  | 355.6 |
|           |                    | -7.50              | 430.7                  | 391.1 |
|           |                    | -7.75              | 350.2                  | 329.5 |
|           |                    | -8.00              | 340.9                  | 296.6 |
| 4         | 3.65               | -7.00              | 385.9                  | 319.3 |
|           |                    | -7.25              | 474.7                  | 389.6 |
|           |                    | -7.50              | 438.1                  | 401.0 |
|           |                    | -7.75              | 409.1                  | 349.0 |
|           |                    | -8.00              | 412.0                  | 349.8 |
| 5         | 3.79               | -7.00              | 343.5                  | 279.9 |
|           |                    | -7.25              | 425.1                  | 348.5 |
|           |                    | -7.50              | 418.4                  | 373.3 |
|           |                    | -7.75              | 421.3                  | 351.3 |
|           |                    | -8.00              | 440.5                  | 366.6 |
| 6         | 3.62               | -7.00              | 403.5                  | 353.1 |
|           |                    | -7.25              | 382.4                  | 324.7 |
|           |                    | -7.50              | 396.2                  | 333.5 |
|           |                    | -7.75              | 401.0                  | 338.4 |
|           |                    | -8.00              | 396.0                  | 338.7 |
| 7         | 3.71               | -7.00              | 437.4                  | 372.8 |
|           |                    | -7.25              | 387.8                  | 364.6 |
|           |                    | -7.50              | 360.4                  | 319.1 |
|           |                    | -7.75              | 359.3                  | 313.3 |
|           |                    | -8.00              | 361.6                  | 314.5 |
| 8         | 3.77               | -7.00              | 333.1                  | 298.7 |
|           |                    | -7.25              | 326.1                  | 283.5 |
|           |                    | -7.50              | 336.3                  | 283.9 |
|           |                    | -7.75              | 338.7                  | 287.5 |
|           |                    | -8.00              | 340.0                  | 289.6 |



Ingenieursbureau voor bouwkundige en civiele bouwwerken

Alle niveaus/hogtes/peilmaten zijn t.o.v.: N.A.P.

| sondering | maaiveld<br>niveau | paalpunt<br>niveau | $R_{c; netto; d}$<br>250 | [kN]<br>220 |
|-----------|--------------------|--------------------|--------------------------|-------------|
| 9         | 3.68               | -7.00              | 380.1                    | 323.9       |
|           |                    | -7.25              | 396.7                    | 334.7       |
|           |                    | -7.50              | 405.9                    | 341.0       |
|           |                    | -7.75              | 411.1                    | 346.2       |
|           |                    | -8.00              | 432.9                    | 363.2       |