

**ISEBE LEMFUNDO LEMPUMA KOLONI  
EASTERN CAPE EDUCATION DEPARTMENT  
OOS-KAAP ONDERWYSDEPARTEMENT**

**NASIONALE  
SENIOR SERTIFIKAAT**

**GRAAD 12**

**INGENIEURSGRAFIKA EN -ONTWERP V2**

**SEPTEMBER 2015**

**MEMORANDUM**

**PUNTE: 200**

**TYD: 3 uur**

**Die memorandum bestaan uit 6 bladsye.**

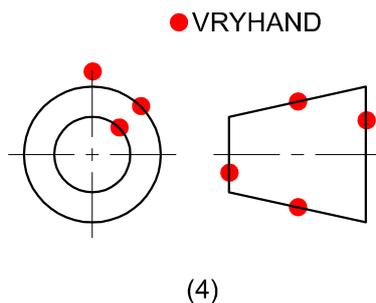
Kopiereg voorbehou

ANTWOORDE		
1	30/07/14	1
2	CENTAUR	1
3	CAD	1
4	3	1
5	0.25	1
6	1:2	1
7	6	1
8	S-BREEK	1
9	BLINDE GETAPTE GAT	1
10	WEB / RIB	1
11	HALF DEURSNEE	1
12	A) 104 ✓ B) Ø42 ✓ C) 14,4 ✓✓	4
13	SETSKROEF	1
14	1	1
15		3
16		4
17		3
	<b>TOTAAL</b>	<b>27</b>

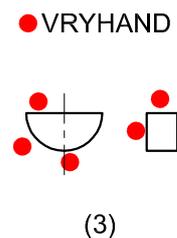
ANTWOORD 15



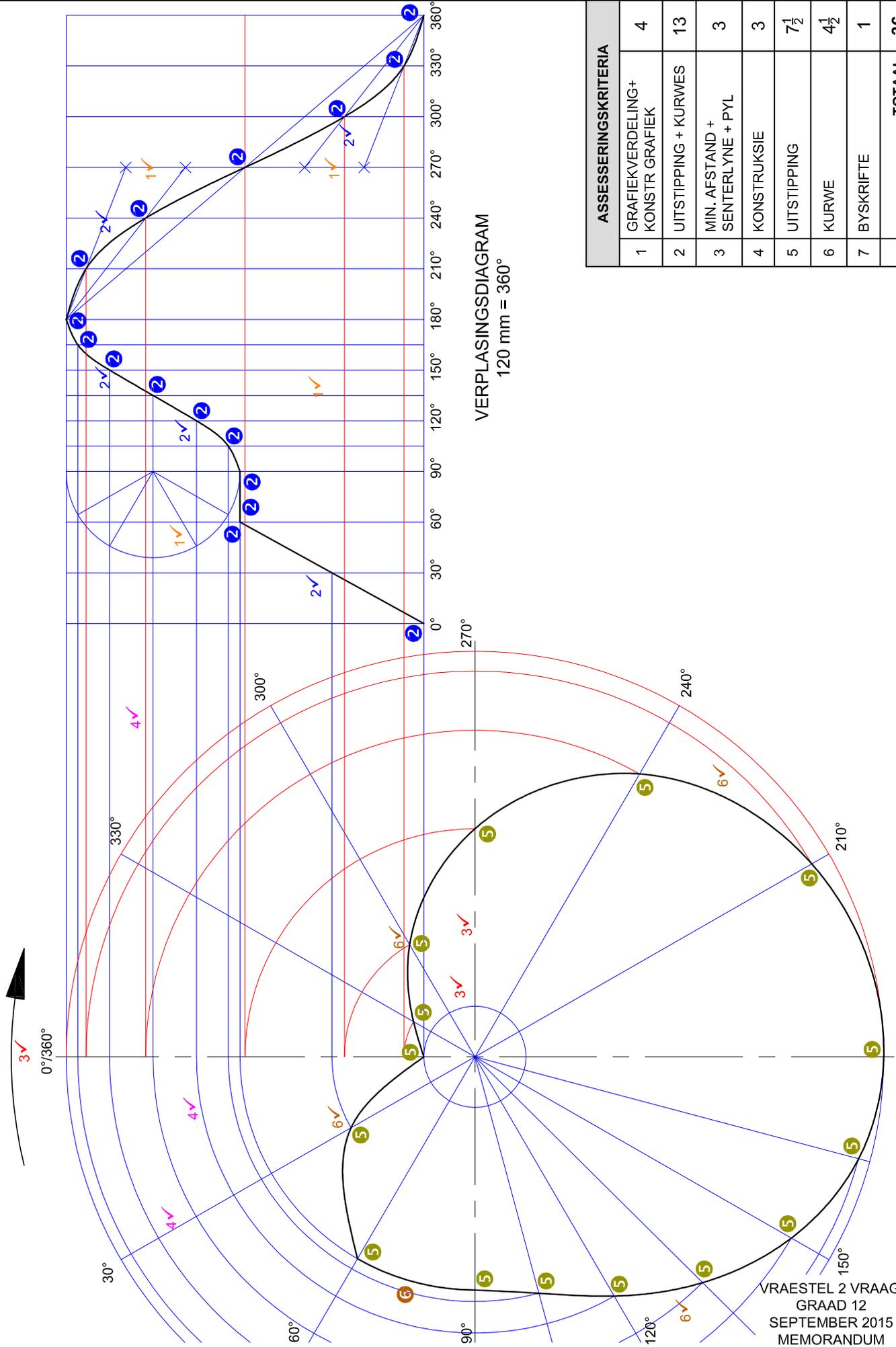
ANTWOORD 16



ANTWOORD 17



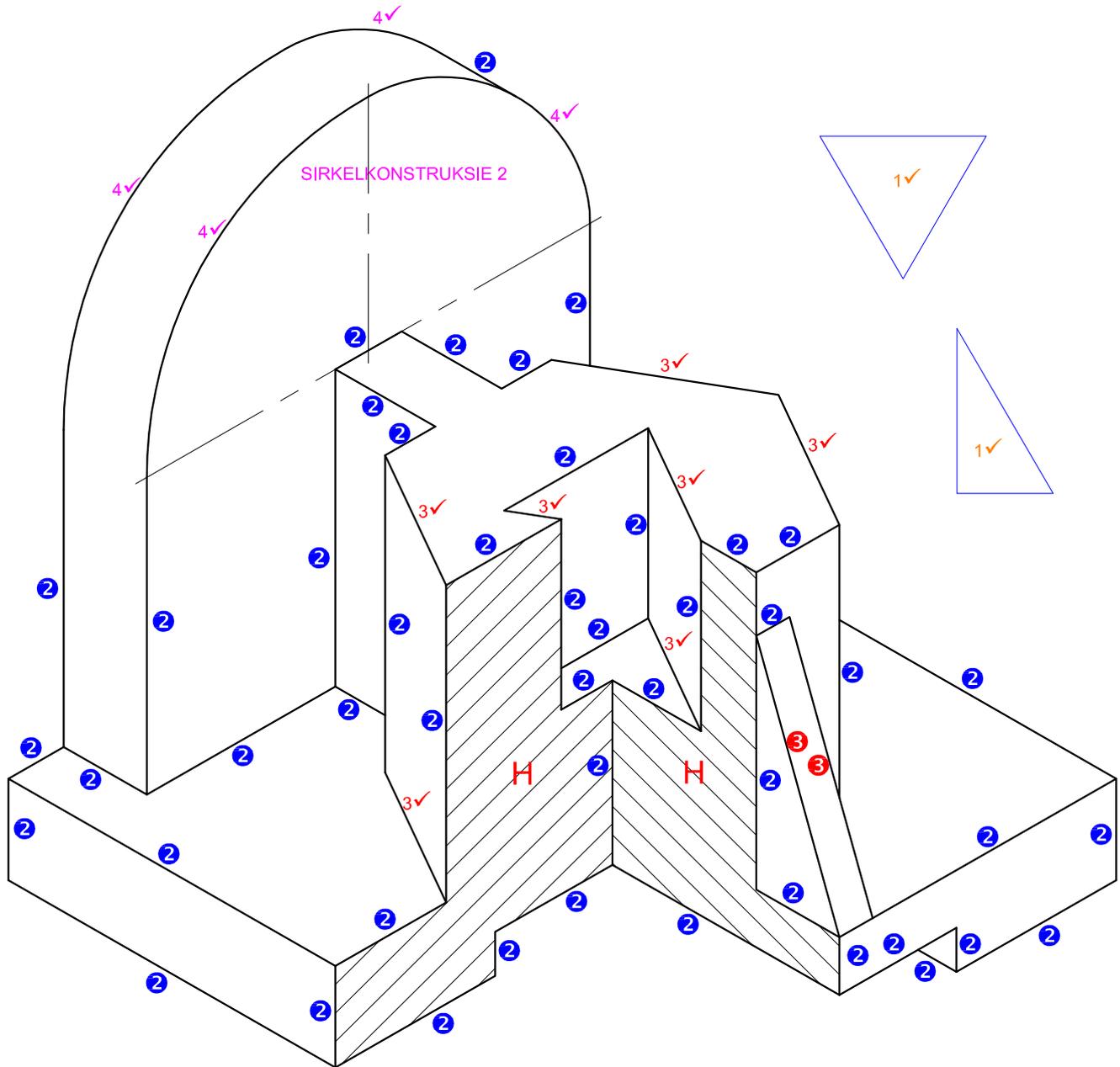
VRAESTEL 2 VRAAG 1  
 GRAAD 12  
 SEPTEMBER 2015  
 MEMORANDUM



VERPLASINGSDIAGRAM  
120 mm = 360°

ASSESSERINGSKRITERIA	
1	GRAFIEKVERDELING+ KONSTR GRAFIEK
2	UITSTIPPING + KURWES
3	MIN. AFSTAND + SENTERLYNE + PYL
4	KONSTRUKSIE
5	UITSTIPPING
6	KURWE
7	BYSKRIFTE
<b>TOTAAL 36</b>	

VRAESTEL 2 VRAAG 2  
GRAAD 12  
SEPTEMBER 2015  
MEMORANDUM

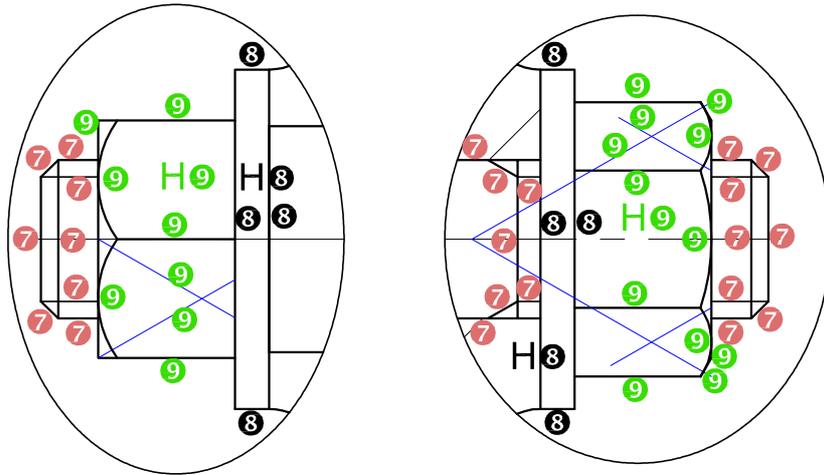


ASSESSERINGSKRITERIA		
1	HULPAANSIGTE + PLASING	3
2	ISO' LYNE	24
3	NIE ISO' LYNE	8
4	SIRKEL + KONSTR	6
H	ARSERING	3
<b>TOTAL</b>		<b>44</b>

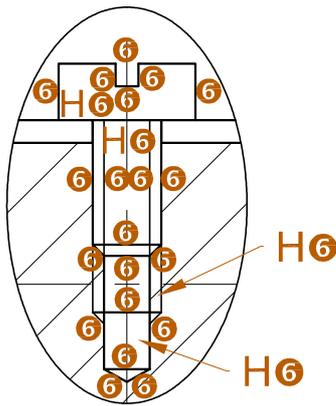
VRAESTEL 2 VRAAG 3  
 GRAAD 12  
 SEPTEMBER 2015  
 MEMORANDUM



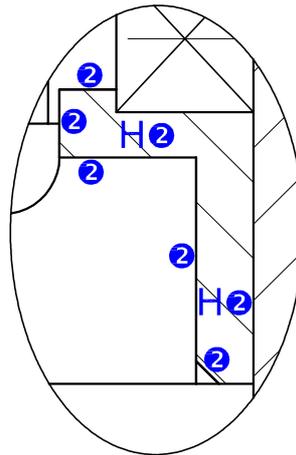
ASSESSERINGSKRITERIA		
SNITVOORAANSIG		
1	BASIS	19
2	BUS	7
3	KOEËLAAR	5
4	PEN	6
5	DEKSEL	7
6	SKROEF	12
7	AS	14
8	WASTERS	5
9	MOERE	11
10	SENERLYNE	2
SAMESTELLING		5
<b>TOTAAL</b>		<b>93</b>



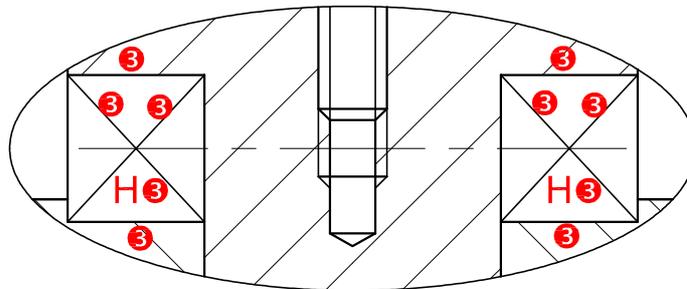
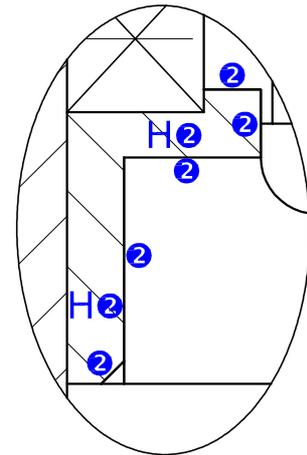
LINKER- EN REGTERKANT SE MOERE EN WASTERS EN AS EINDPUNTE



SKROEF



BUS



KOEËLAAR