

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

**NATIONAL SENIOR CERTIFICATE
NASIONALE SENIOR SERTIFIKAAT**

**GRADE 12
GRAAD 12**

**ENGINEERING GRAPHICS AND DESIGN P1
INGENIEURSGRAFIKA EN -ONTWERP V1**

**SEPTEMBER 2017
MEMORANDUM**

MARKS / PUNTE: 200

TIME / TYD: 3 hours / uur

**This memorandum consists of 7 pages.
Hierdie memorandum bestaan uit 7 bladsye.**

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ANSWERS		
1	QU1-2017	1
2	KRUGER	1
3	2017-08-15	1
4	USE CORRECT COLOUR FOR OUTBUILDING	1
5	ARCHITECT AND CLIENT	2
6	BUILDING ON ADJACENT STAND	2
7	17,5 m	1
8	INSPECTION EYE	1
9	WATT METER	1
10	3	1
11	BUILDING LINE	1
12	GATE SWING / GATE	1
13	RED	1
14	YELLOW	1
15	0.6 m	2

ANSWER / ANTWOORD 16 (2)

$$\begin{aligned} \text{PERIMETER / OMTREK} &= AB + BC + CD + DE + EA \\ &= 23,5 + 20,0 + 26,0 + 17,5 + 3,35 \quad \checkmark_1 \\ &= 90,535 \text{ m} \quad \checkmark_1 \end{aligned}$$

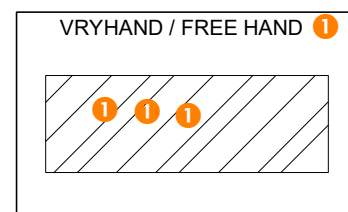
ANSWER / ANTWOORD 17 (5)

$$\begin{aligned} \text{AREA / OPPERVLAK (OUT BUILDING)} &= L \times B \quad \checkmark_1 \\ &= (4,5 \times 7) + (2,5 \times 1,5) \quad \checkmark_1 \\ &= 35,25 \text{ m}^2 \quad \checkmark_1 \end{aligned}$$

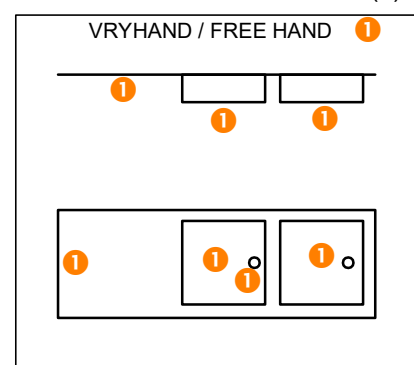
TOTAL: 29
TOTAAL: 29

ANTWOORDE		
1	QU1-2017	1
2	KRUGER	1
3	2017-08-15	1
4	GEBUIK KORREKTE KLEUR VIR BUITE GEBOU	1
5	ARGITEK EN KLIENT	2
6	GEBOU OP AANGRENSENDEPERSEEL	2
7	17,5 m	1
8	INSPEKSIE OOG	1
9	WATT METER	1
10	3	1
11	BOULYN	1
12	HEKSWAAI / HEK	1
13	ROOI	1
14	GEEL	1
15	0,6 m	2

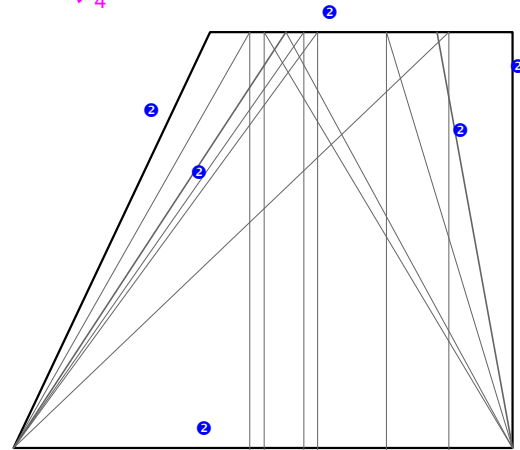
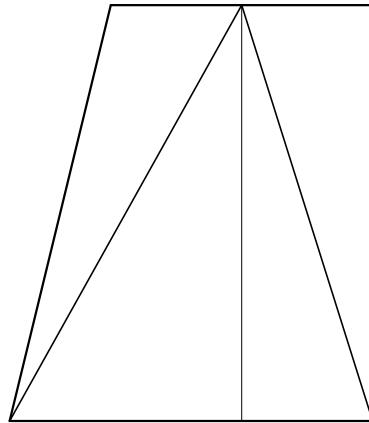
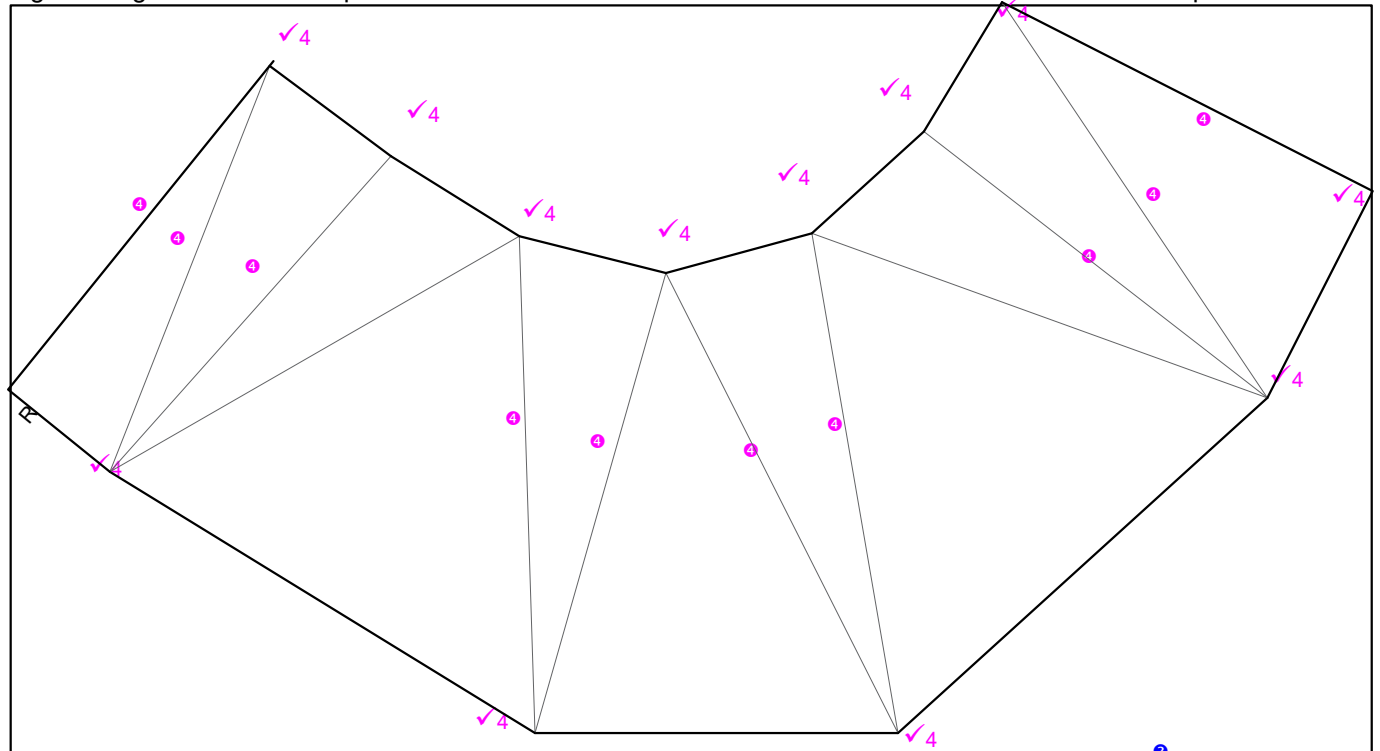
ANSWER / ANTWOORD 18 (2)



ANSWER / ANTWOORD 19 (4)

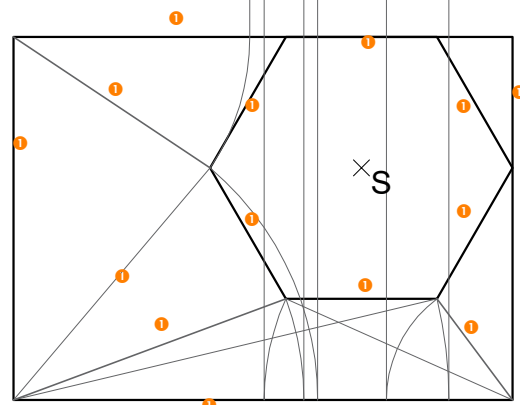


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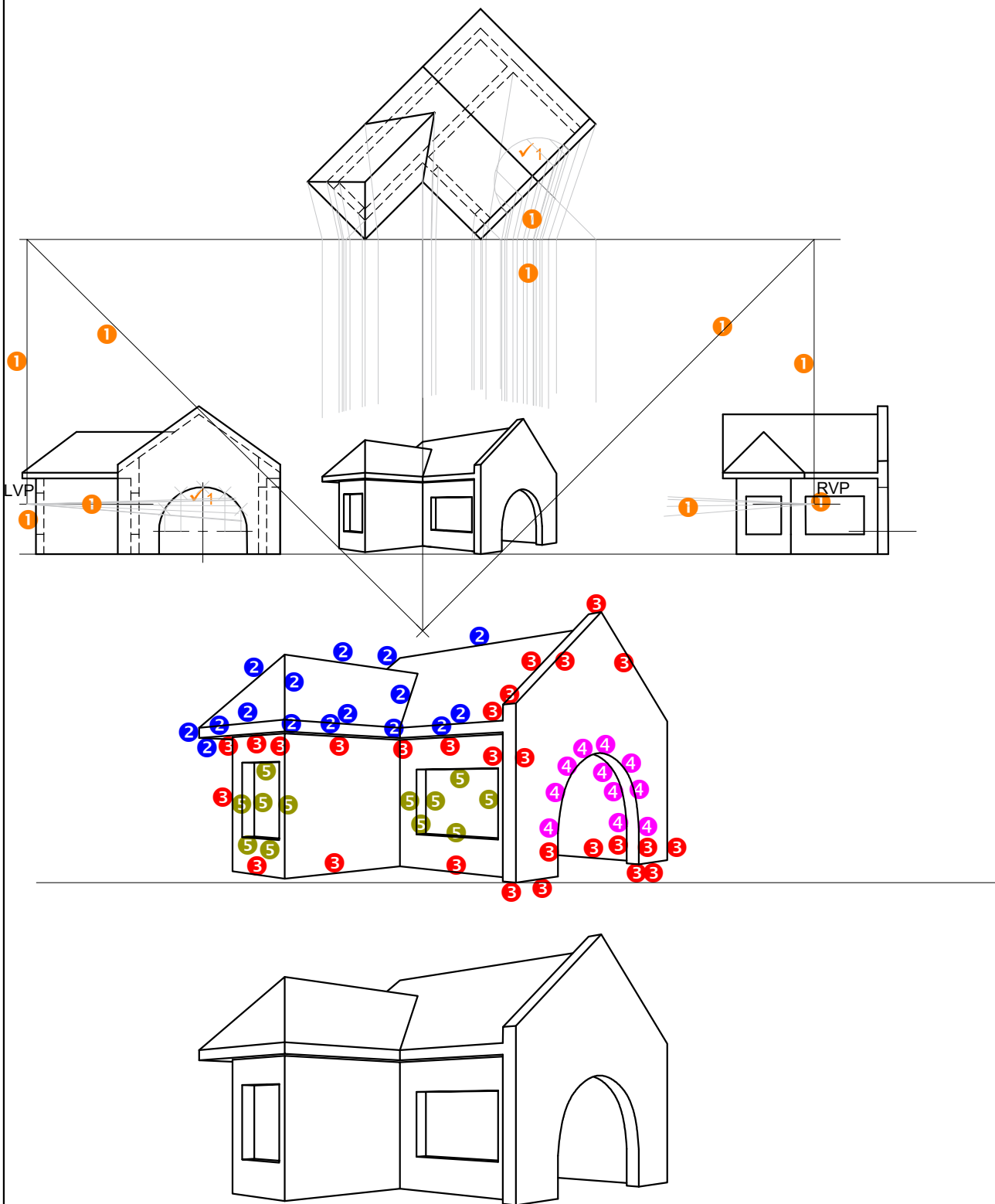
WARE LENGTES
TRUE LENGTHS
✓ 1 x 6 = 6

X ————— Y



ASSESSMENT CRITERIA			ASSESSERINGSKRITERIA		
1	HEXAGON CONSTRUCTION + TOP VIEW	7	1	SESKANT KONSTRUKSIE + BOAANSIG	7
2	FRONT VIEW	3	2	VOORAANSIG	3
3	TRUE LENGTHS	6	3	WARE LENGTES	6
4	DEVELOPMENT	17	4	ONTWIKKELING	17
TOTAL		33	TOTAAL		33

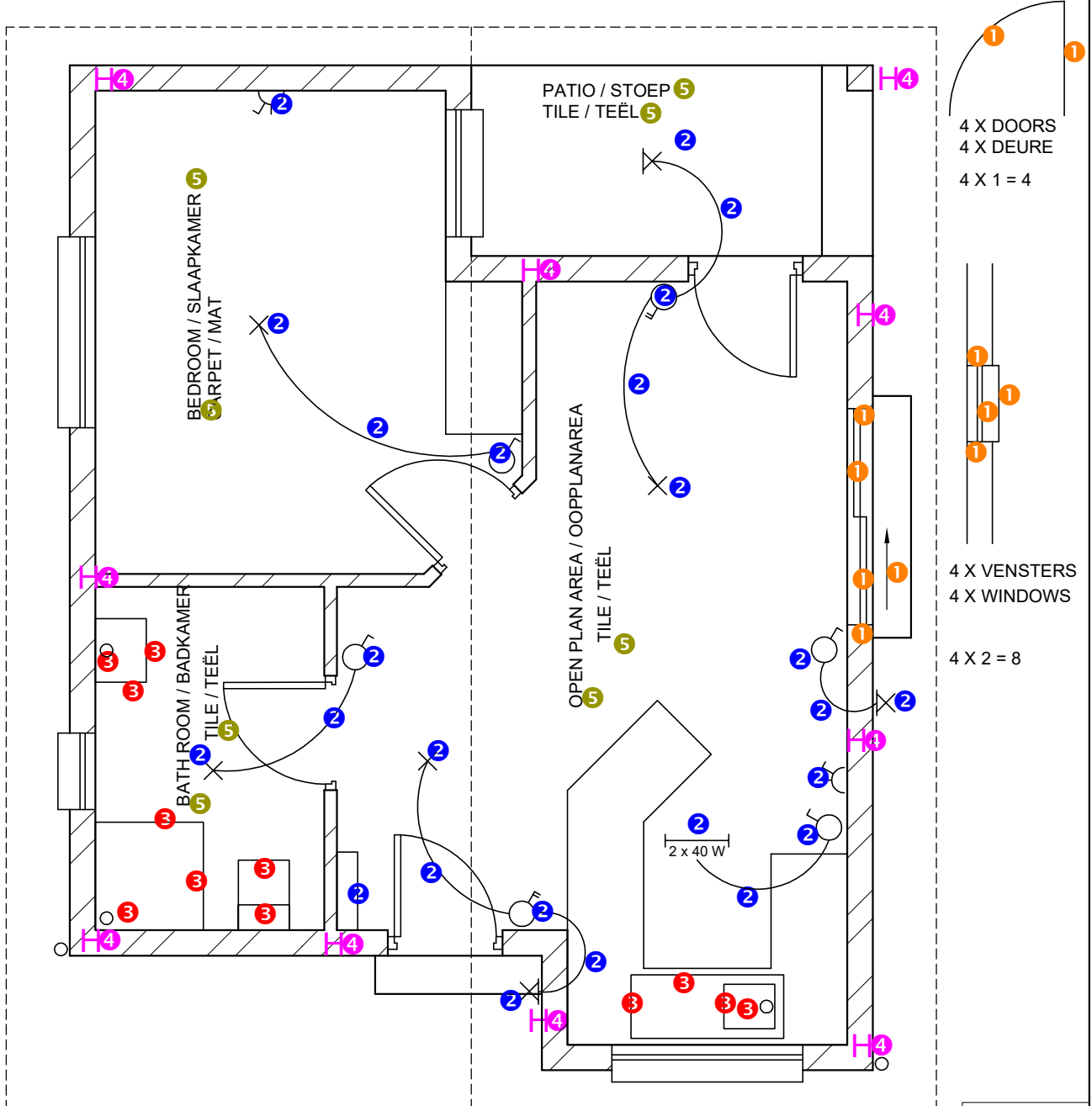
3



ASSESSMENT CRITERIA			ASSESSERINGSKRITERIA		
1	CONSTRUCTION + VPs	7	1	KONSTRUKSIES + VPs	7
2	ROOF	8	2	DAK	8
3	WALLS	13 $\frac{1}{2}$	3	MURE	13 $\frac{1}{2}$
4	SEMI-CIRCLE	5 $\frac{1}{2}$	4	HALFSIRKEL	5 $\frac{1}{2}$
5	DOOR + WINDOW	6	5	DEUR + VENSTER	6
TOTAL		40	TOTAAL		40

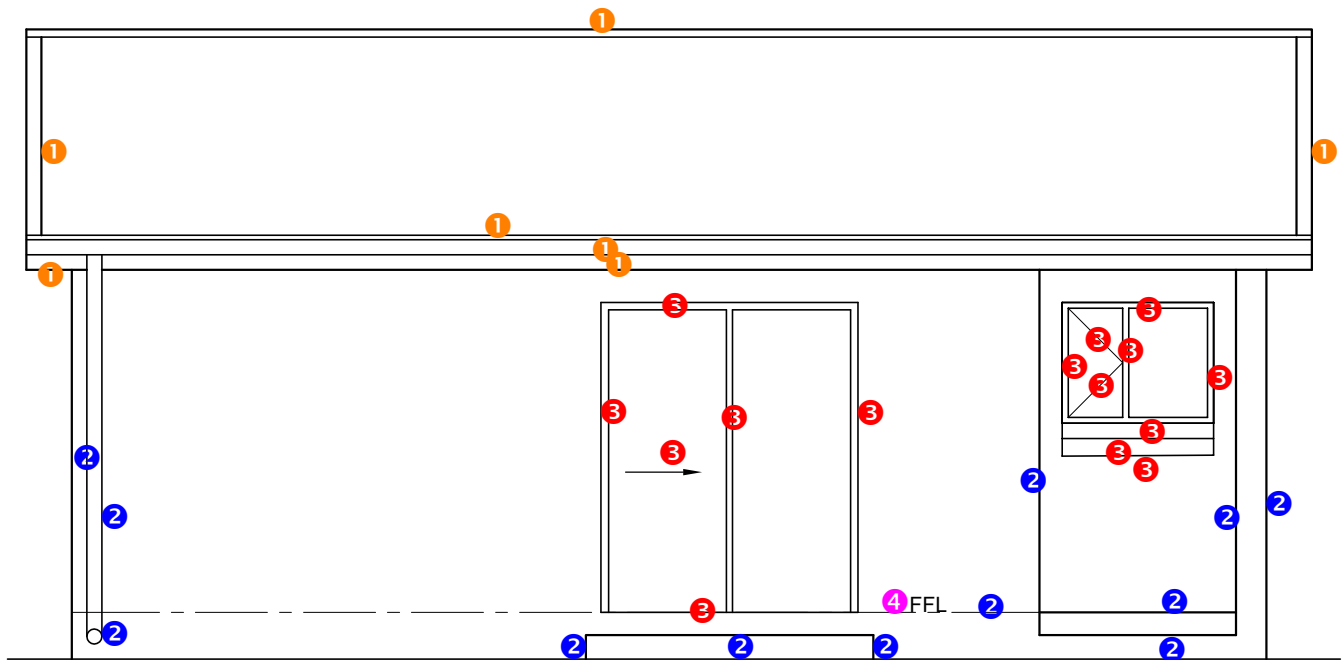
2. ELECTRICAL		
2.1	SWITCHES	3
2.2	CONDUCTERS	4 ½
2.3	LIGHTS	4
2.4	SWITCHED SOCKETS	1
TOTAL		12 ½
2. ELEKTRIES		
2.1	SKAKELAARS	3
2.2	GELEIERS	4 ½
2.3	LIGTE	4
2.4	MUURPROPPE	1
TOTAAL		12 ½

ASSESSMENT CRITERIA			ASSESSERINGS-KRITERIA		
FLOOR PLAN			VLOERPLAN		
1	DOORS + WINDOWS	14 ½	1	DEURE + VENSTERS	14 ½
2	ELECTRICAL	12 ½	2	ELEKTRIES	12 ½
3	FIXTURES	6	3	TOEBEHORE	6
4	HATCHING	5	4	ARSERING	5
5	LABELS	5	5	BYSKRIFTE	5
SUBTOTAL		43	SUBTOTAAL		43



FLOOR PLAN 5
SCALE 1 : 50 5

1. ROOF SOUTH WEST ELEV. MARK ALLOCATION			1. DAK SUIDWES-AANSIG PUNTETOEKENNING		
1.1	ROOF CAP	$\frac{1}{2}$	1.1	DAKNOK	$\frac{1}{2}$
1.2	BARGE BOARD	1	1.2	WINDVEER	1
1.3	FACIA	1	1.3	GEUTPLANK	1
1.4	GUTTER	1	1.4	GEUT	1
TOTAL		$3\frac{1}{2}$	TOTAAL		$3\frac{1}{2}$

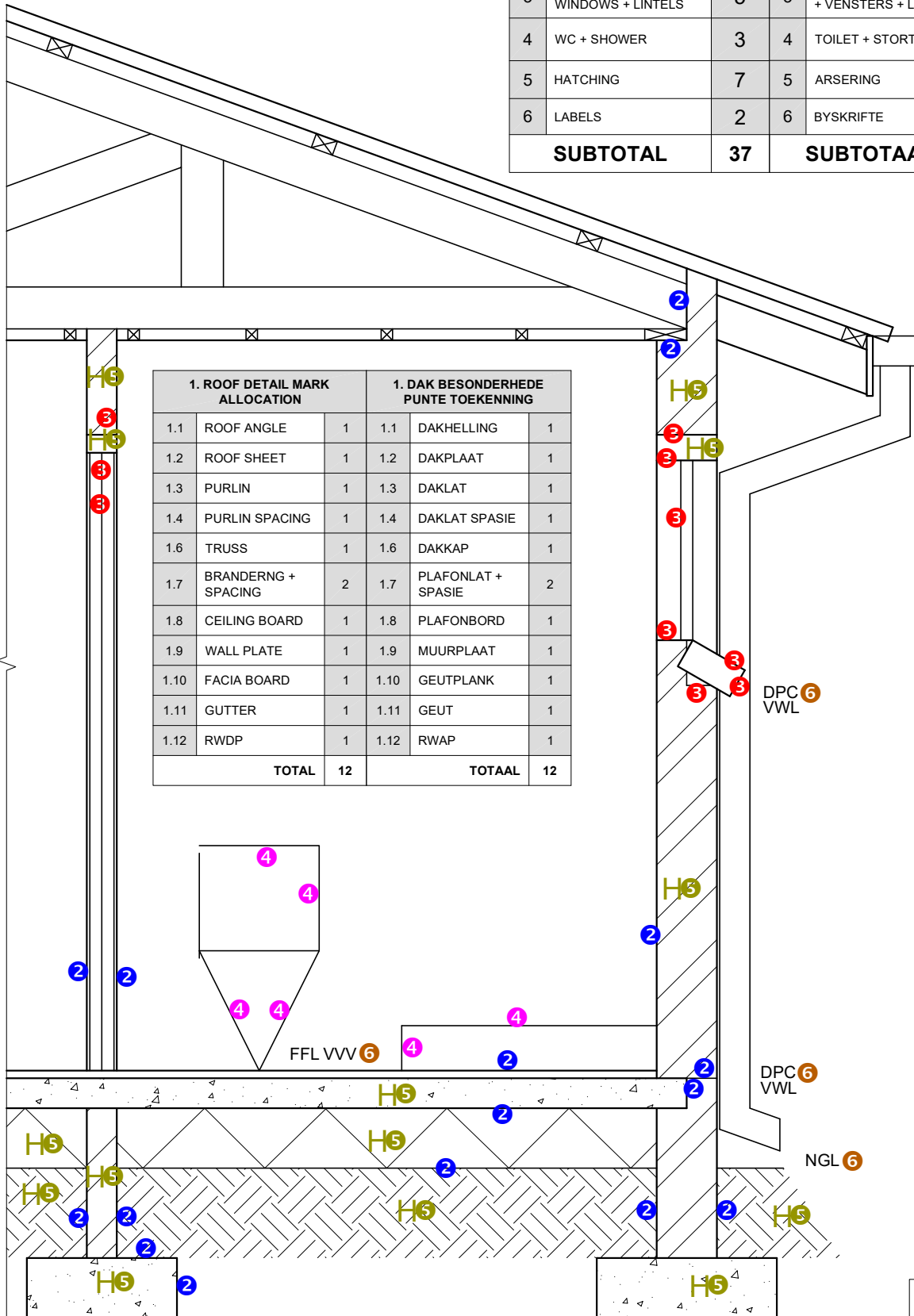


SOUTH WEST VIEW 4

ASSESSMENT CRITERIA			ASSESSERINGSKRITERIA		
SOUTH WEST ELEVATION			SUIDWES-AANSIG		
1	ROOF	$3\frac{1}{2}$	1	DAK	$3\frac{1}{2}$
2	WALLS + RWDP + FFL + STEP	6	2	MURE + RWAP + VVV + TRAP	6
3	DOOR + WINDOWS	$7\frac{1}{2}$	3	DEUR + VENSTERS	$7\frac{1}{2}$
4	LABELS	1	4	BYSKRIFTE	1
SUBTOTAL		18	SUBTOTAAL		18

6

ASSESSMENT CRITERIA			ASSESSERINGS-KRITERIA		
DETAILED SECTION			DEURSNEE-AANSIG		
1	ROOF DETAIL	12	1	DAKBESONDERHEDE	12
2	FOUNDATIONS + WALLS + SLAB	8	2	VONDASIES + MURE + VLOERBLAD	8
3	DOOR + SILL + WINDOWS + LINTELS	5	3	DEUR + VERSTERBANK + VENSTERS + LATEIE	5
4	WC + SHOWER	3	4	TOILET + STORT	3
5	HATCHING	7	5	ARSERING	7
6	LABELS	2	6	BYSKRIFTE	2
SUBTOTAL		37	SUBTOTAAL		37



SECTION A-A
SCALE 1 : 20

STARTING POINT FOR
DETAILED SECTION

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