



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

ENGINEERING GRAPHICS AND DESIGN P1

NOVEMBER 2018

MARKING GUIDELINES

MARKS: 100

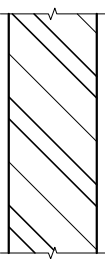
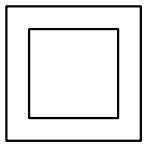
These marking guidelines consist of 7 pages.



ANSWERS

1	SITE PLAN	1
2	2018 - 04 - 05	1
3	1 : 500	1
4	FEROX STREET	1
5	3	1
6	8	1
7	RODDING EYE	1
8	2200	1
9	GATE SWING	1
10	ELECTRICAL METER/WATT METER	1
11	3	1
12	PALISADE	1
13	WALL/STRUCTURE/BUILDING	1
14	3290	2
15	MUST BE REMOVED	1
16	DIRECTION OF FLOW	1
17	1 : 40	1
18	GREEN	1
19	<i>See the title panel</i>	4
20	226,18 m (calculation 2, answer 1, converted to metre 1)	4
21	315.045 m ² (calculation 1, answer 1, metre ² 1)	3
TOTAL		30

ANSWER 19

a)  FACE BRICK hatching MARK ALLOCATION - DOUBLE-SINGLE-DOUBLE 1 - FREEHAND $\frac{1}{2}$ TOTAL $1\frac{1}{2}$	b)  FREEHAND $\frac{1}{2}$ GULLY MARK ALLOCATION 2 SQUARES or RECTANGLES TOTAL 2
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ANSWER 20

$$\begin{aligned}
 \text{Perimeter} &= (22,5 + 9,85 + 26,69 + 65,05 + 49,19 + 74,9) - (12 + 10) \\
 &= 248,18 \text{ m} - 22 \text{ m} \\
 &= 226,18 \text{ m}
 \end{aligned}$$

ANSWER 21

$$\begin{aligned}
 \text{Area} &= (7200 \times 24100) + (11100 \times 7200) + \frac{1}{2}(11100 \times 11100) \\
 &= 173,52 + 79,92 + 61,605 \\
 &= 315,045 \text{ m}^2
 \end{aligned}$$

PAPER 1 QUESTION 1
GRADE 12
NOVEMBER 2018
MARKING GUIDELINE

Handwritten signatures and initials on the right margin.

5. TRUE SHAPE
ANY
RECOGNISED
METHOD
TOTAL 1

1. CONSTRUCTION
- TRIANGLE 1
- HEXAGON 1
TOTAL 1

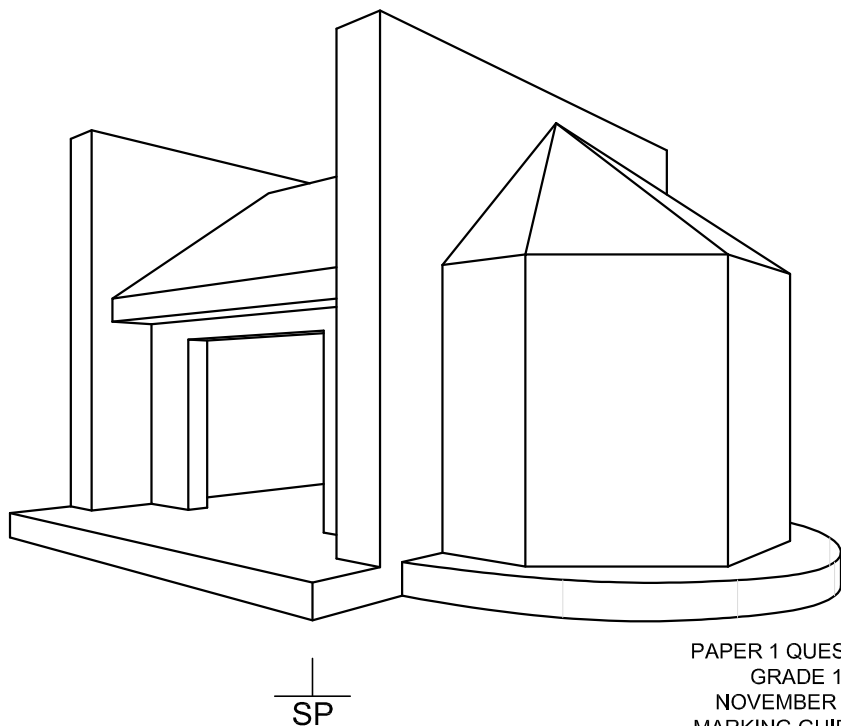
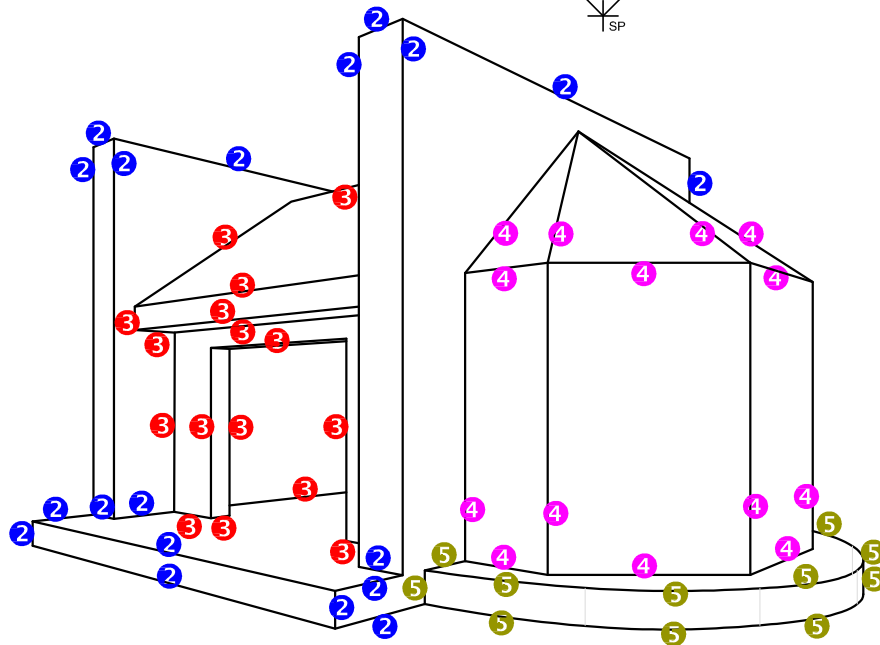
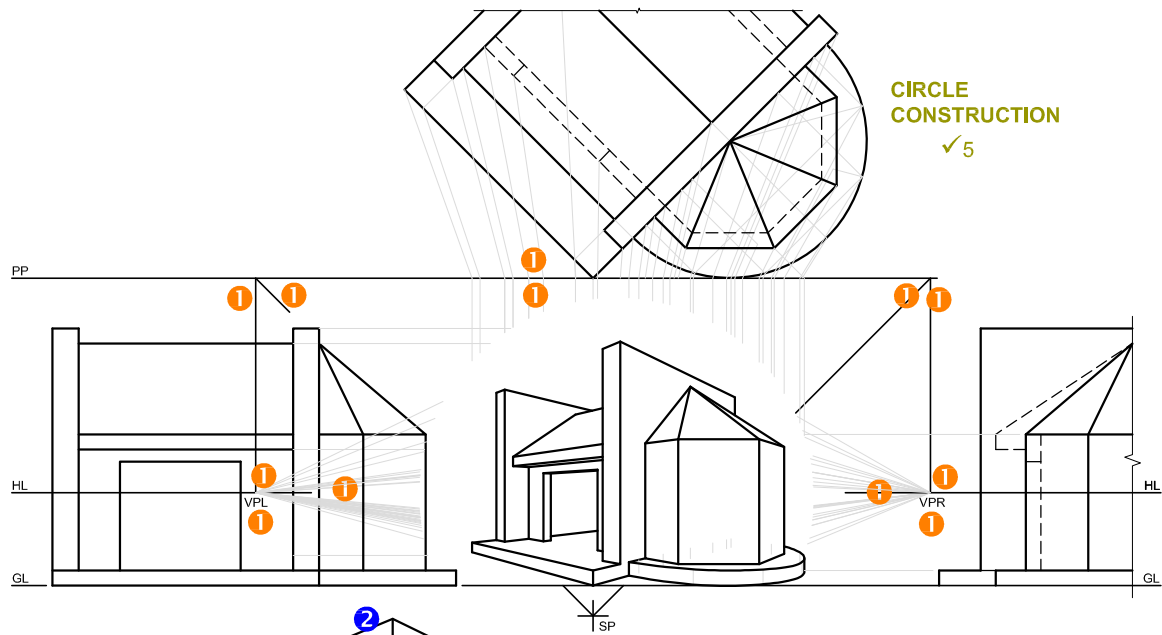
ASSESSMENT CRITERIA

1	CONSTRUCTION	1
2	FRONT VIEW	5 $\frac{1}{2}$
3	SECTIONAL TOP VIEW	14 $\frac{1}{2}$
4	SECTIONAL LEFT VIEW	12 $\frac{1}{2}$
5	TRUE SHAPE	6 $\frac{1}{2}$
TOTAL		40

PAPER 1 QUESTION 2
GRADE 12
NOVEMBER 2018
MARKING GUIDELINE

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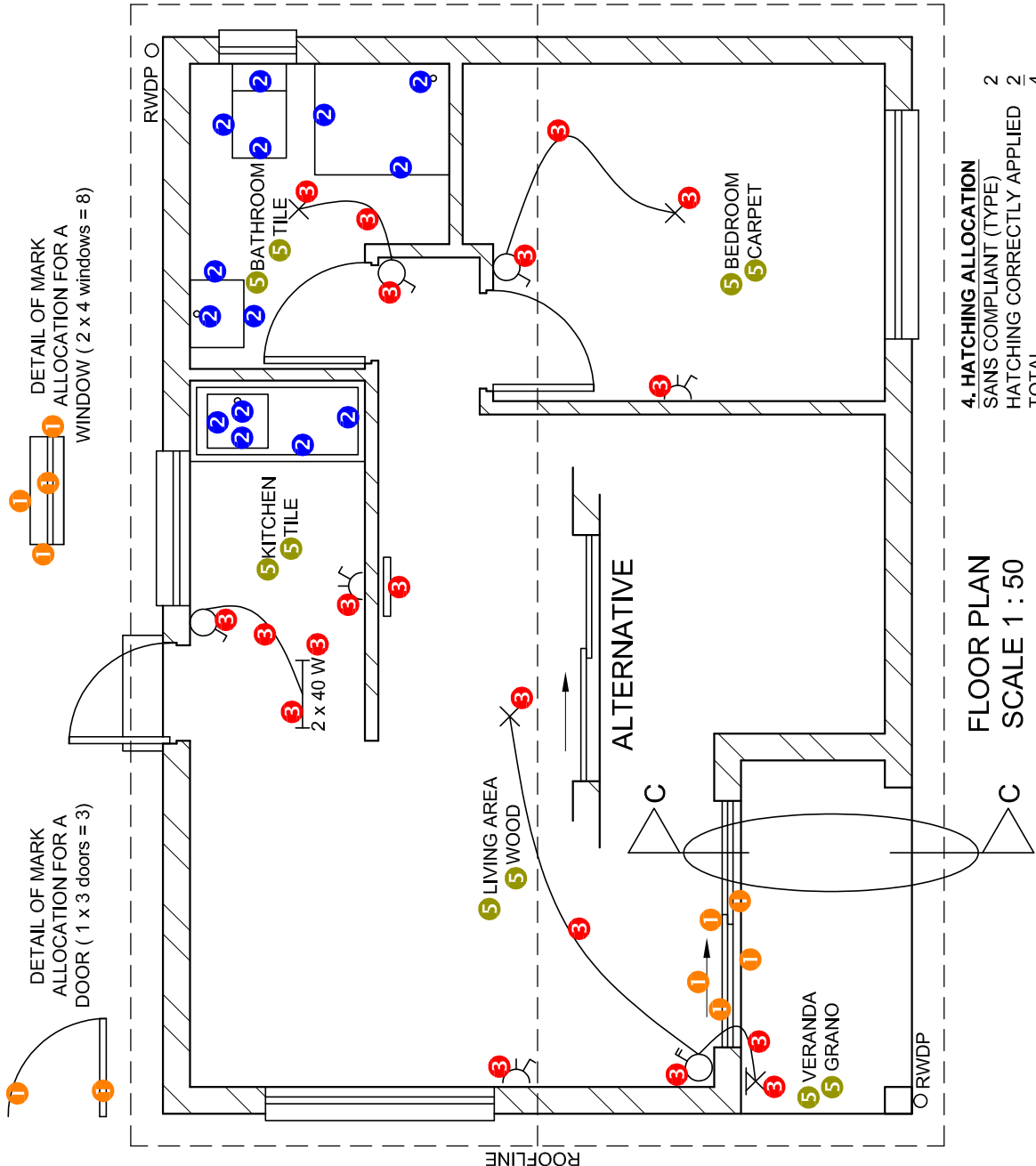
Please turn over



ASSESSMENT CRITERIA		
1	CONSTRUCTION	6
2	OUTER STRUCTURE	9 $\frac{1}{2}$
3	INNER STRUCTURE	8
4	SIDE STRUCTURE	7
5	ARCS	6 $\frac{1}{2}$
PENALTIES (-)		
TOTAL		37

PAPER 1 QUESTION 3
GRADE 12
NOVEMBER 2018
MARKING GUIDELINE

Handwritten signatures and initials, including 'AB' and 'WY'.



4. HATCHING ALLOCATION
SANS COMPLIANT (TYPE) 2
HATCHING CORRECTLY APPLIED 2
TOTAL 4

FLOOR PLAN
SCALE 1 : 50

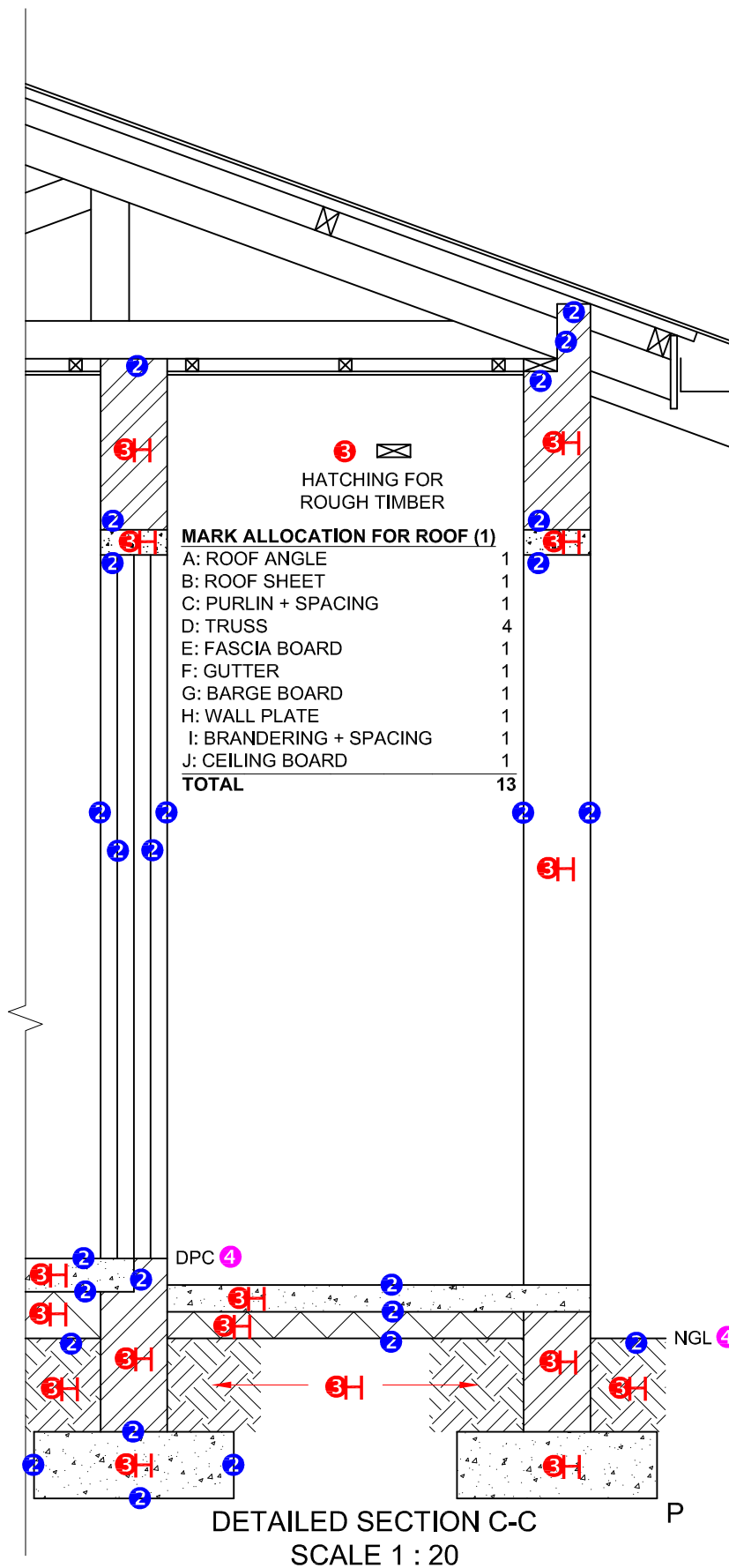
ASSESSMENT CRITERIA	
FLOOR PLAN	
1	DOORS + WINDOWS POSSIBLE 13 1/2
2	FIXTURES 7
3	ELECTRICAL 9 1/2
4	HATCHING 4
5	LABELS 5
SUBTOTAL	
39	

PAPER 1 QUESTION 4
GRADE 12
NOVEMBER 2018
MARKING GUIDELINE

WEST ELEVATION

PAPER 1 QUESTION 4
GRADE 12
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MARKING GUIDELINE

ASSESSMENT CRITERIA	
WEST ELEVATION	
1	ROOF + RWDP 5 $\frac{1}{2}$
2	WALLS + FFL + STEP 4
3	DOOR + WINDOW 7 $\frac{1}{2}$
4	LABELS 1 $\frac{1}{2}$
SUBTOTAL 18 $\frac{1}{2}$	

**ASSESSMENT CRITERIA****DETAILED SECTION**

1	ROOF	13
2	FOUNDATION + WALL + SLAB + DOOR + LINTEL	13
3	HATCHING	8 $\frac{1}{2}$
4	LABELS	1
SUBTOTAL		35 $\frac{1}{2}$

PAPER 1 QUESTION 4
GRADE 12
NOVEMBER 2018
MARKING GUIDELINE

AB
2/11/18
WJ