



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**ENGINEERING GRAPHICS AND DESIGN P1**

**NOVEMBER 2019**

**MARKING GUIDELINES**

**MARKS: 100**

**These marking guidelines consist of 8 pages.**

ANSWERS		
1	CLARK	1
2	1818	1
3	KRYPTON PTY (LTD)	1
4	2018/12/20	1
5	VERIFY ALL DIMENSIONS AND LEVELS	1
6	GRAVEL	1
7	6 m	1
8	2044	1
9	BROWN	1
10	BUILD-IN CUPBOARD	1
11	TO BE REMOVED	1
12	NORTH	1
13	IE	1
14	SHRUBBERY	1
15	SEPTIC TANK and FRENCH DRAIN	2
16	SOUTH WEST	1
17	CLUBHOUSE, DECK, POOL	3
18	<i>See below</i>	3
19		3
20		4
<b>TOTAL</b>		<b>30</b>

**ANSWER 18**

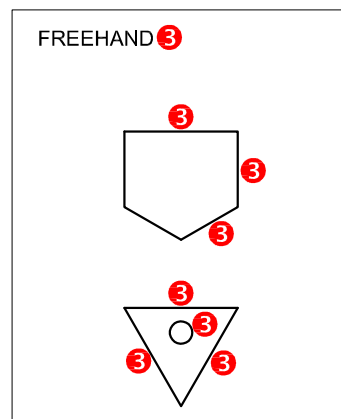
$$\begin{aligned}
 &AB + BC + CD + DE + EF + FG + GA \\
 &= 16.06 + 7.05 + 23.36 + 26.41 + \\
 &\quad 18.07 + 53.16 + 47.69 \quad \checkmark \\
 &= 191.80 \text{ m} \quad \checkmark\checkmark
 \end{aligned}$$

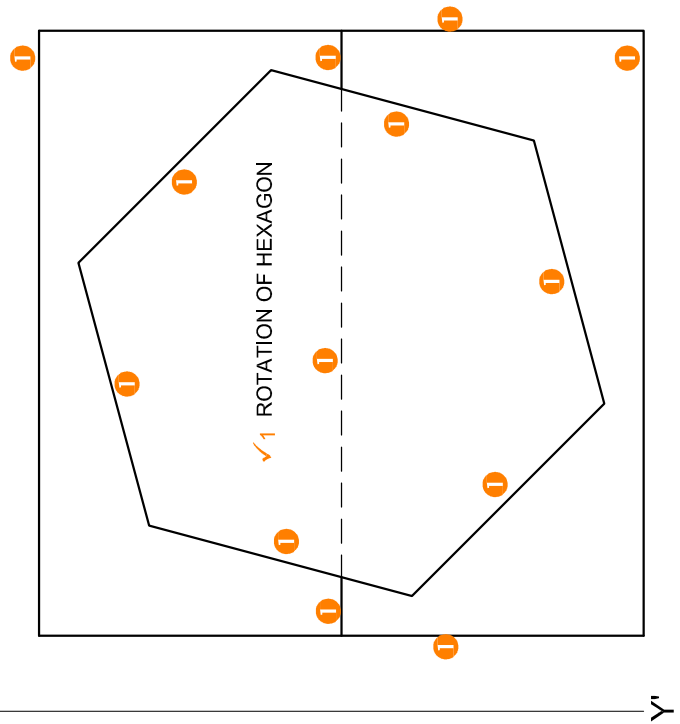
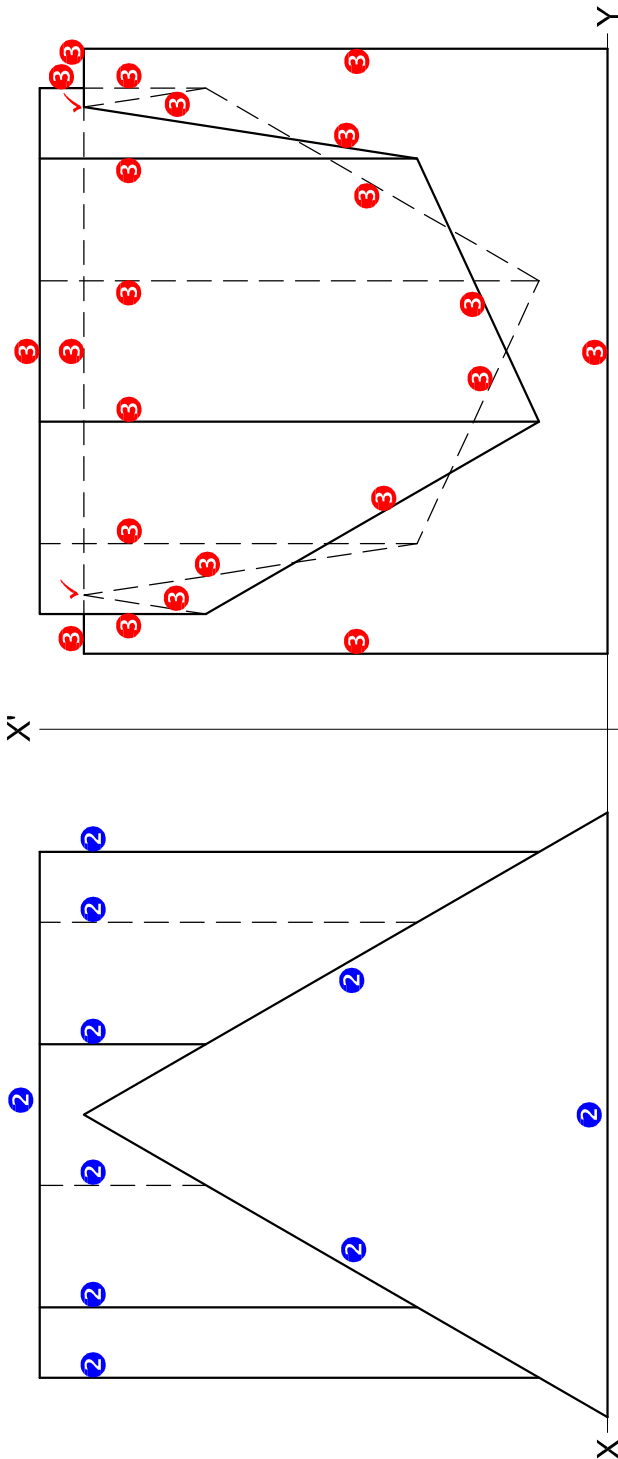
**ANSWER 19**

$$\begin{aligned}
 \text{AREA} &= (5 \times 6) + (7 \times 4) \quad \checkmark \\
 &= 30 + 28 \\
 &= 58\text{m}^2 \\
 &= 5.3 \times 5.95 \\
 &= 31.54\text{m}^2 \\
 &= 3 \times 5 \\
 &= 15\text{m}^2
 \end{aligned}$$

$$\begin{aligned}
 \text{AREA} &= 58 + 31.54 + 15 \\
 &= 104.54\text{m}^2 \quad \checkmark\checkmark
 \end{aligned}$$

**ANSWER 20**

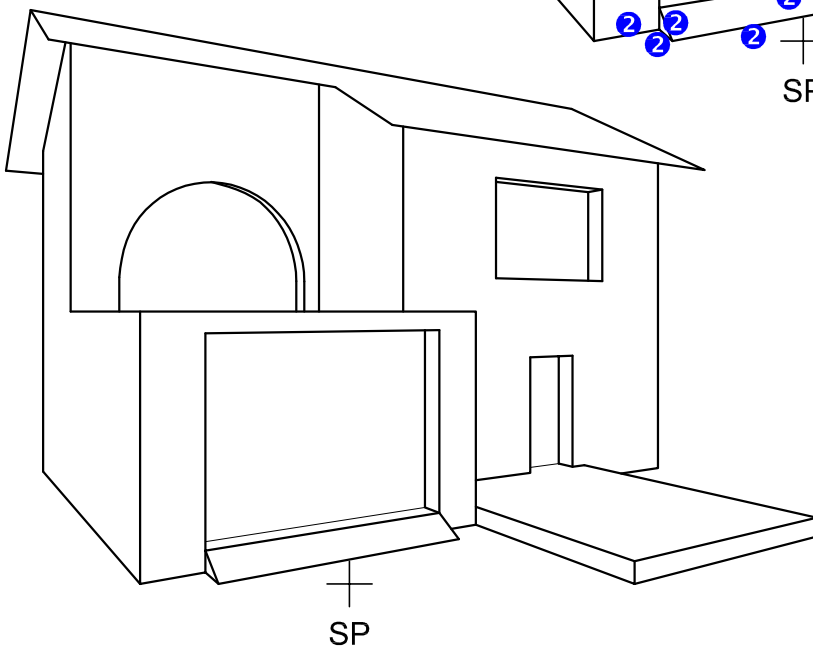
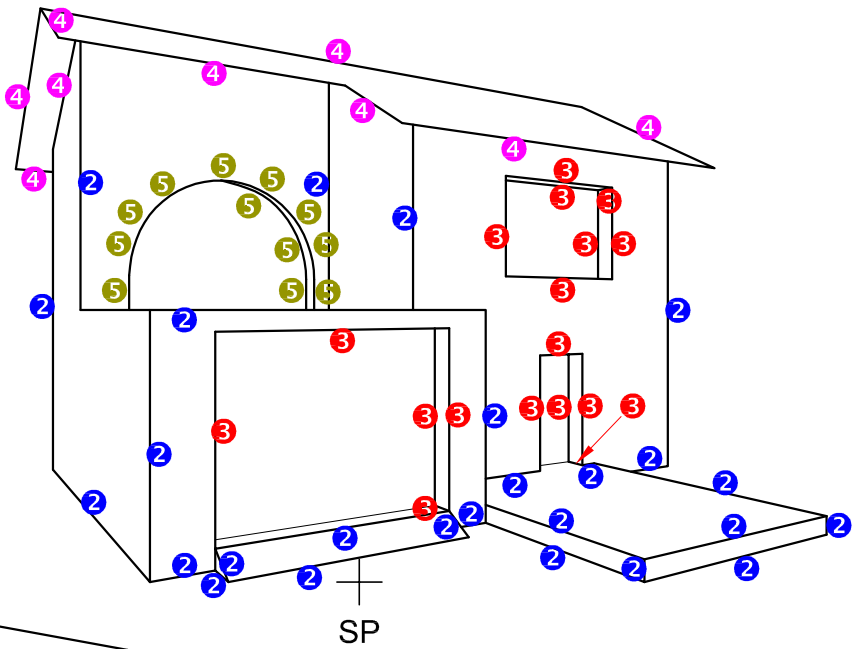
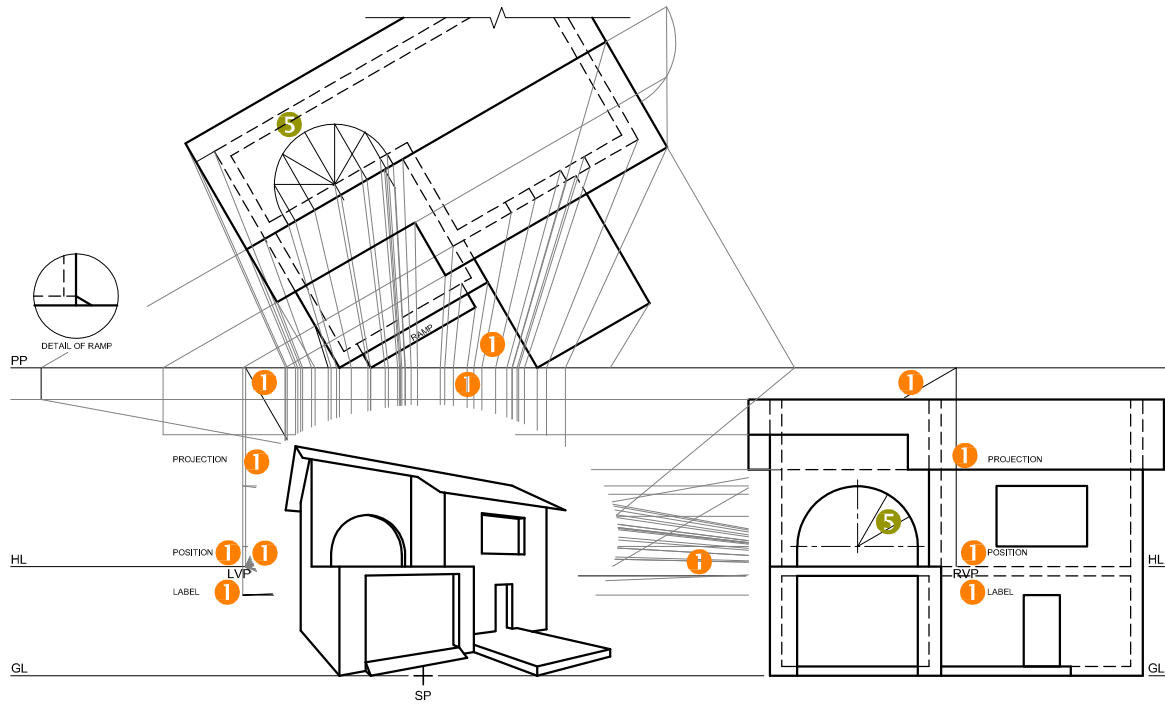




ASSESSMENT CRITERIA	
1	TOP VIEW
2	RIGHT VIEW
3	FRONT VIEW
4	DEVELOPMENT
<b>TOTAL</b>	

PAPER 1 QUESTION 2  
 GRADE 12  
 NOVEMBER 2019  
 MARKING GUIDELINES





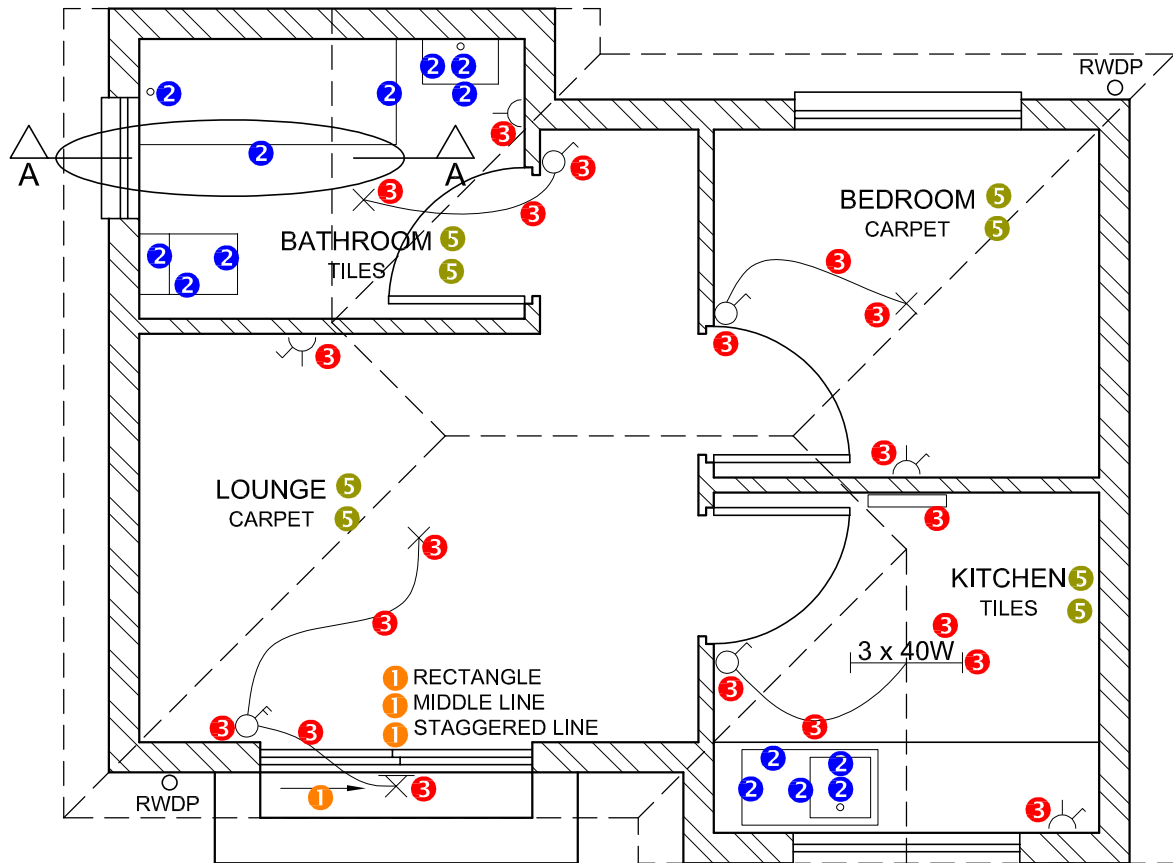
ASSESSMENT CRITERIA		
1	CONSTRUCTION	6
2	WALLS	13
3	DOORS + WINDOWS	8 1/2
4	ROOF	4 1/2
5	ARCS	7
<b>TOTAL</b>		<b>39</b>

PAPER 1 QUESTION 3  
 GRADE 12  
 NOVEMBER 2019  
 MARKING GUIDELINE

**FLOOR PLAN**

1	DOORS + WINDOWS	11
2	FIXTURES	7
3	ELECTRICAL	10
4	HATCHING	3
5	LABELS	4
<b>SUBTOTAL</b>		<b>35</b>

**4 HATCHING ALLOCATION**  
 SANS COMPLIANT (TYPE) 1  
 HATCHING CORRECTLY APPLIED 2  
 TOTAL 3

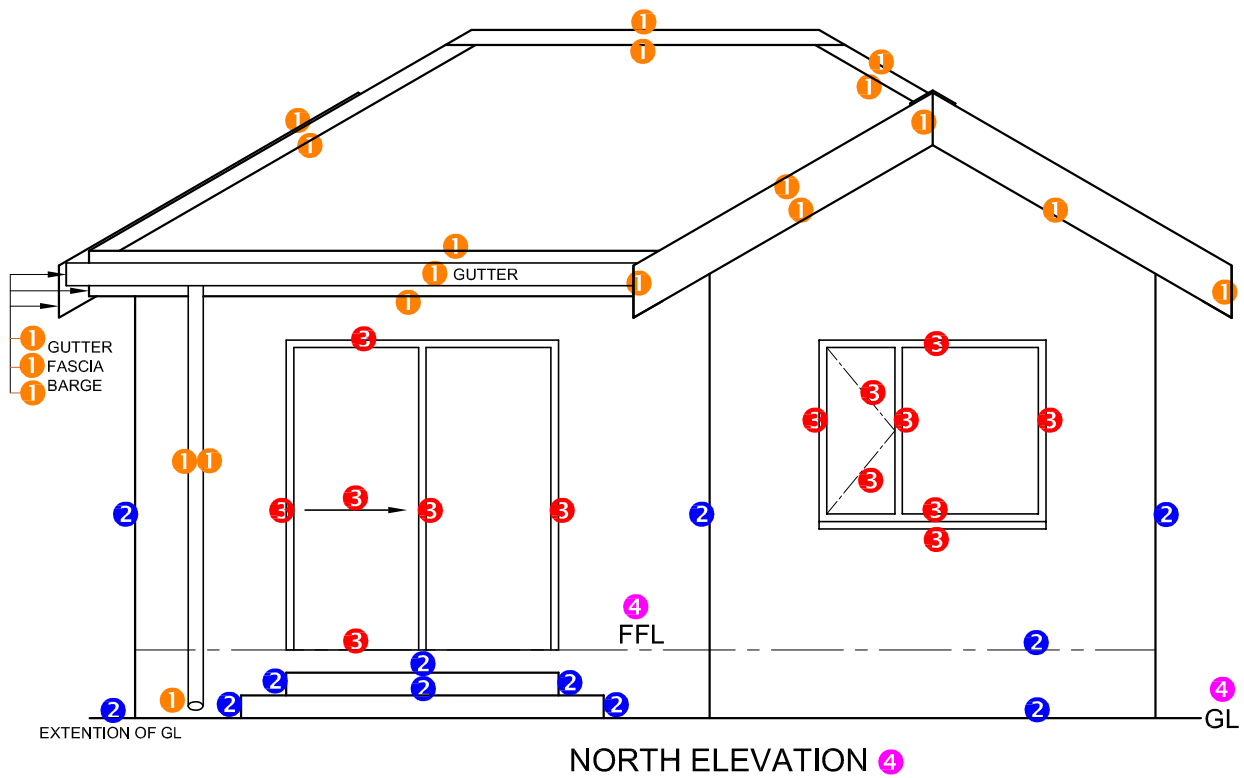


**FLOOR PLAN**  
 SCALE 1 : 50



PAPER 1 QUESTION 4  
 GRADE 12  
 NSC 2019  
 MARKING GUIDELINES

NORTH ELEVATION		
1	ROOF + RWDP	10 $\frac{1}{2}$
2	WALLS + STEP + FFL	6
3	DOOR + WINDOW	7
4	LABELS	1 $\frac{1}{2}$
<b>SUBTOTAL</b>		<b>25</b>

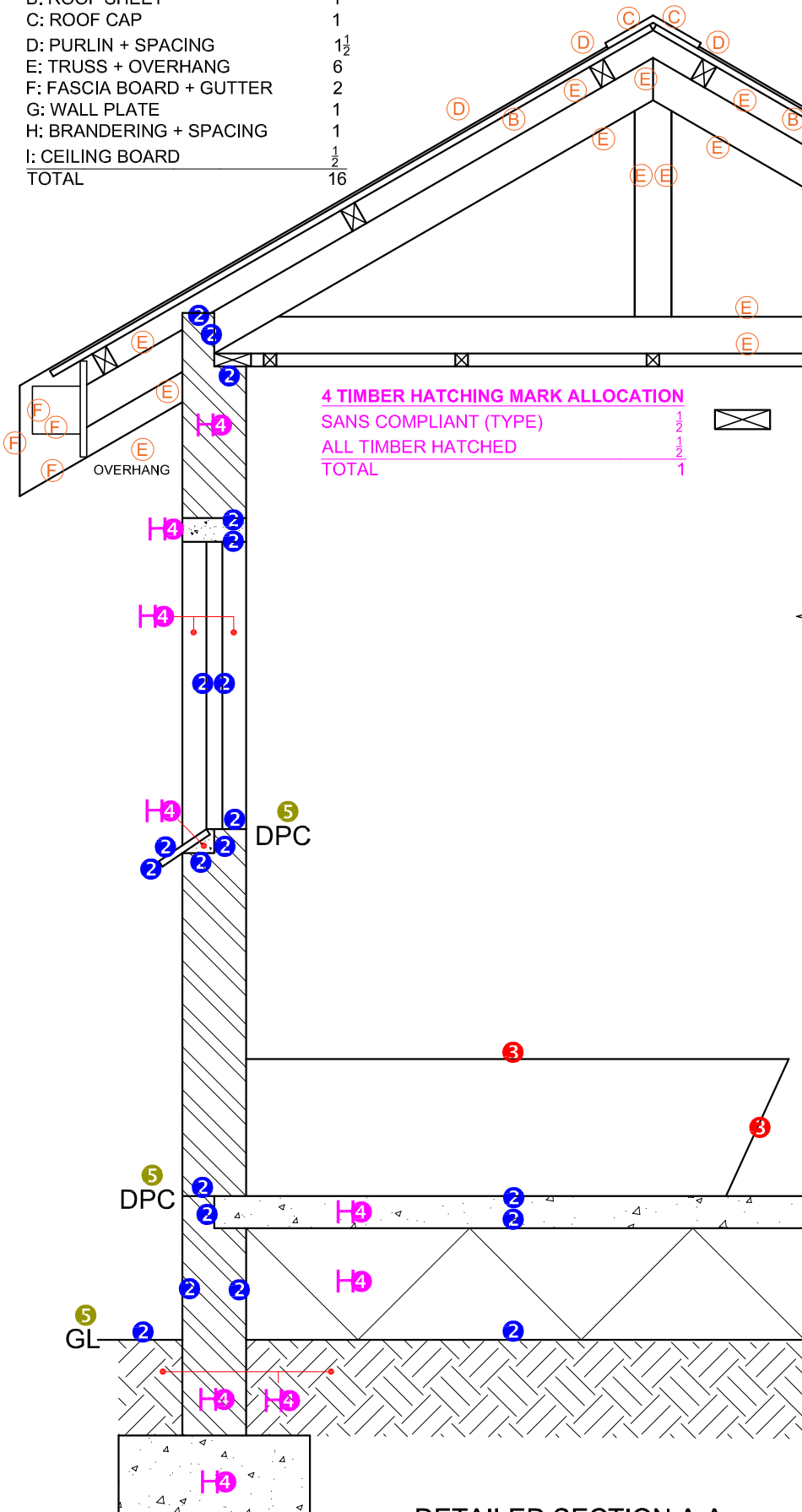


PAPER 1 QUESTION 4  
 GRADE 12  
 NSC 2019  
 MARKING GUIDELINES

**1. MARK ALLOCATION FOR ROOF**

A: ROOF ANGLE	1 + 1	2
B: ROOF SHEET		1
C: ROOF CAP		1
D: PURLIN + SPACING		1½
E: TRUSS + OVERHANG		6
F: FASCIA BOARD + GUTTER		2
G: WALL PLATE		1
H: BRANDERING + SPACING		1
I: CEILING BOARD		½
<b>TOTAL</b>		<b>16</b>

DETAILED SECTION		
1	ROOF DETAIL	16
2	FOUNDATION + WALL + WINDOW	10
3	BATH	1
4	HATCHING	5½
5	LABELS	1½
<b>SUBTOTAL</b>		<b>34</b>



4 TIMBER HATCHING MARK ALLOCATION  
 SANS COMPLIANT (TYPE) 1/2  
 ALL TIMBER HATCHED 1/2  
 TOTAL 1

**DETAILED SECTION A-A**  
**SCALE 1 : 20**

PAPER 1 QUESTION 4  
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