



# basic education

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

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**ENGINEERING GRAPHICS AND DESIGN P1**

**FEBRUARY/MARCH 2018**

**MARKING GUIDELINES**

**MARKS: 200**

**These marking guidelines consist of 7 pages.**

<b>ANSWERS</b>		
1	2017-08-01	1
2	177 WEST PARK DRIVE	1
3	P1Q1-2017	1
4	MOVE SUBSTATION	1
5	ASPHALT	1
6	14	1
7	10	1
8	D	1
9	1 : 40	1
10	PAVEMENT	1
11	BUILDING LINE	1
12	BOUNDARY OF ADJACENT STAND	1
13	RODDING EYE (RE)	1
14	BLUE	1
15	GULLY	2
16	NORTH EAST	2
17	167 m	2
18	147 m (calculation 1, answer 1, metre 1)	3
19	2192 m <sup>2</sup> (calculation 1, answer 1, metre <sup>2</sup> 1)	3
20	<i>See below</i>	4

**TOTAL: 30**

**ANSWER 18**  
Show ALL calculations.

$$L+L+L+L+L+L+L+L$$

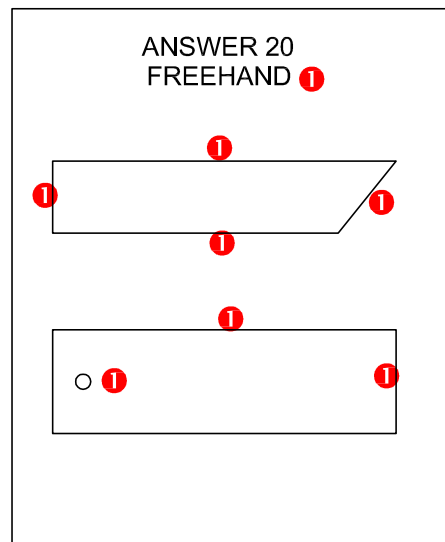
$$=14+17,75+4+11+10+16.75+28+45.5$$

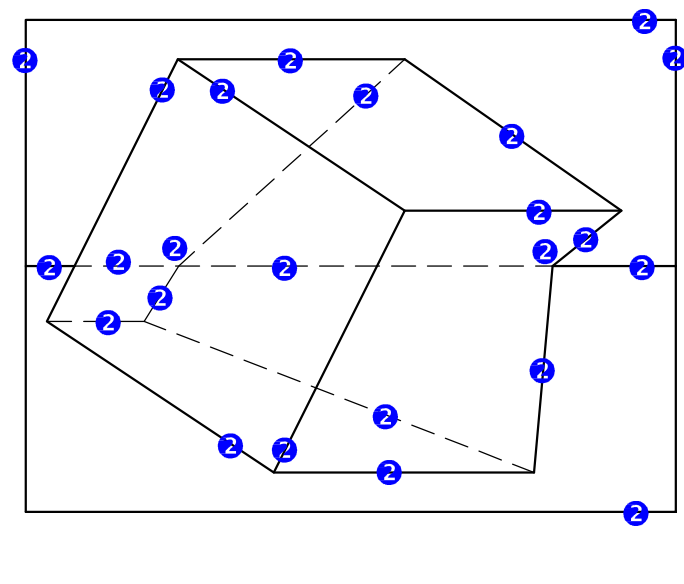
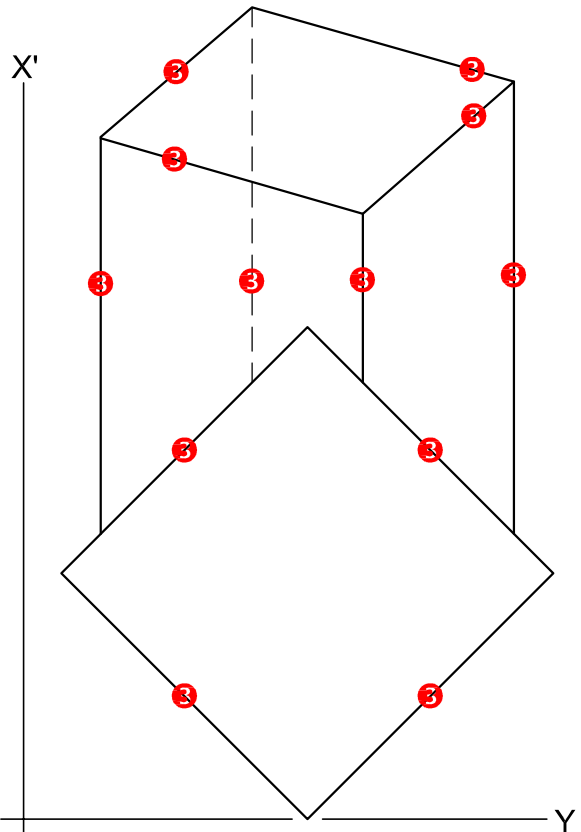
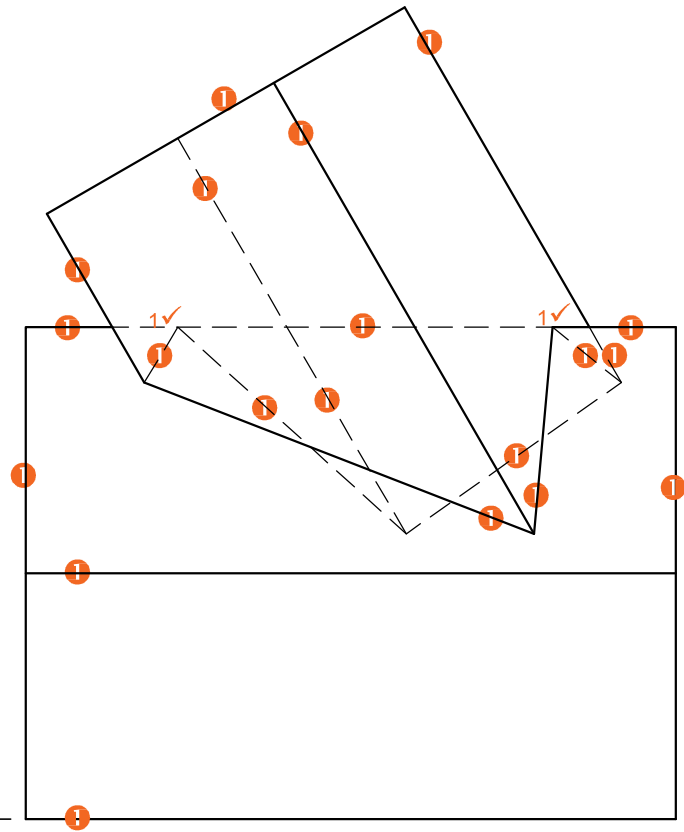
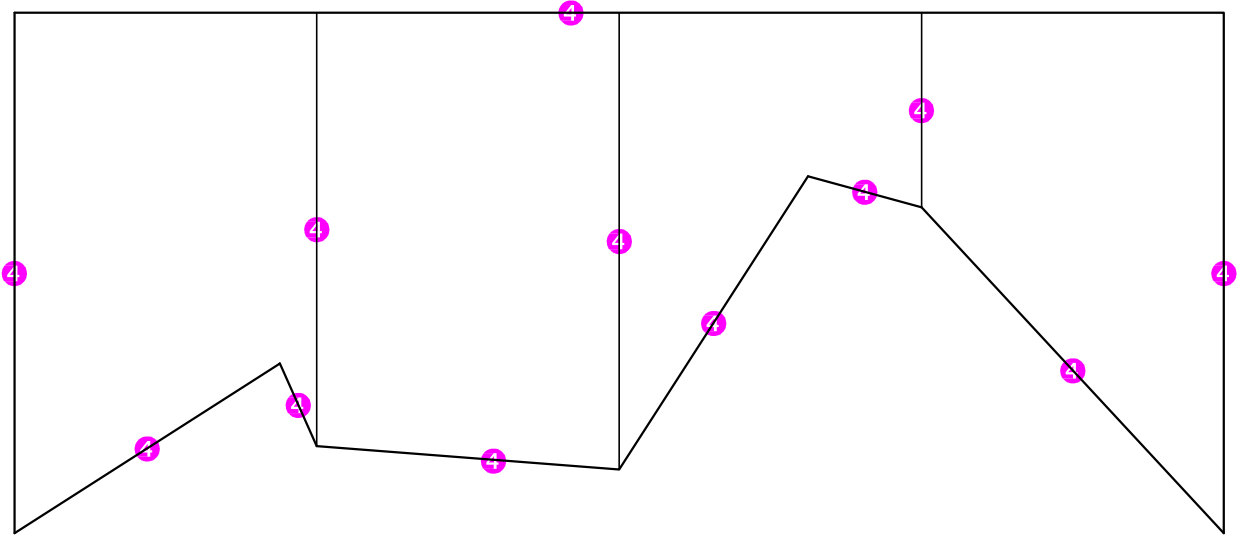
$$= 147 \text{ m}$$

**ANSWER 19**  
Show ALL calculations.

$$(LxB \times 5) + (LxB)$$

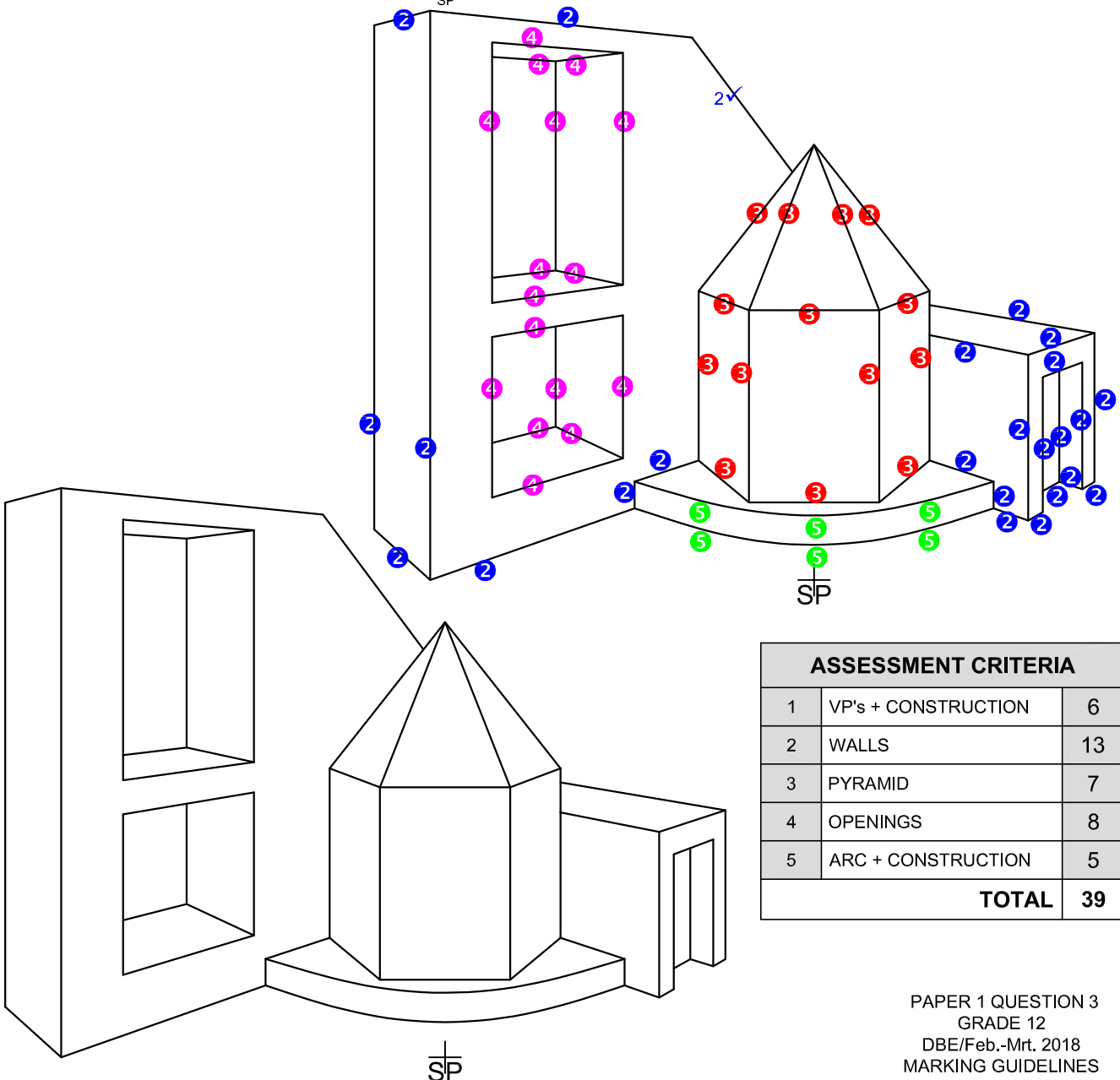
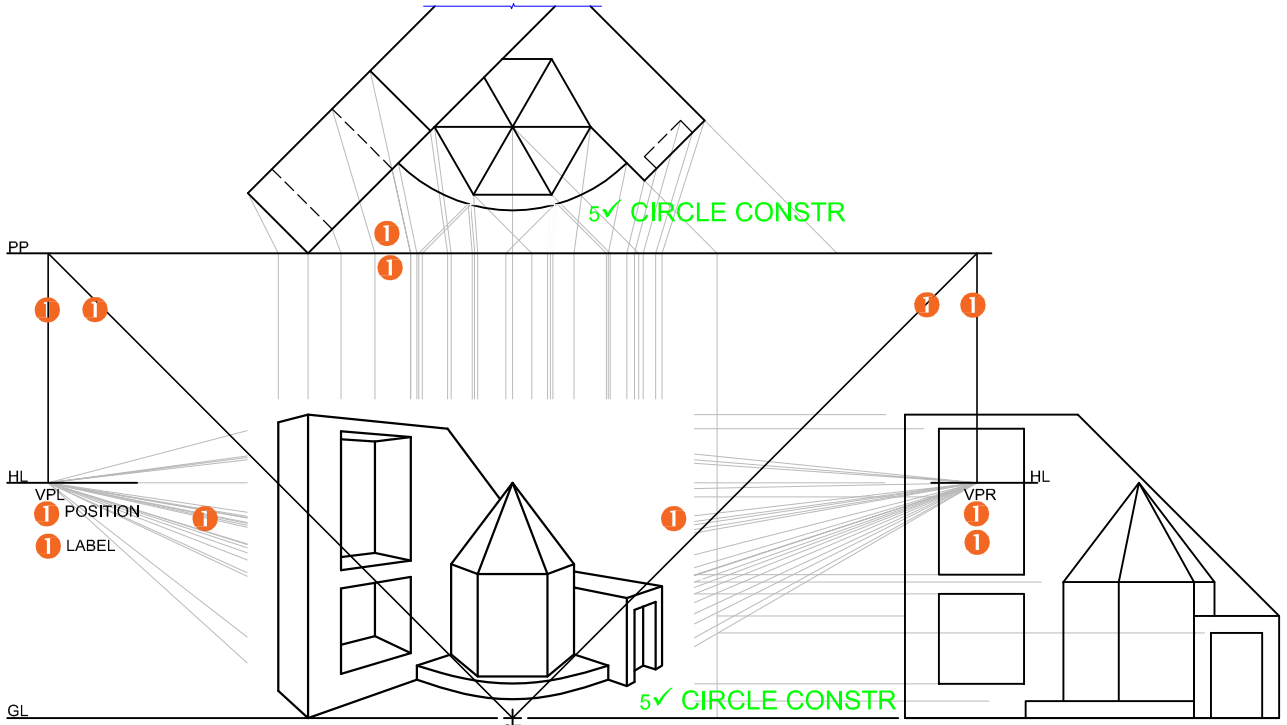
$$=(14 \times 32.5 \times 5) + (14 \times 45,5)$$

$$= 2192 \text{ m}^2$$




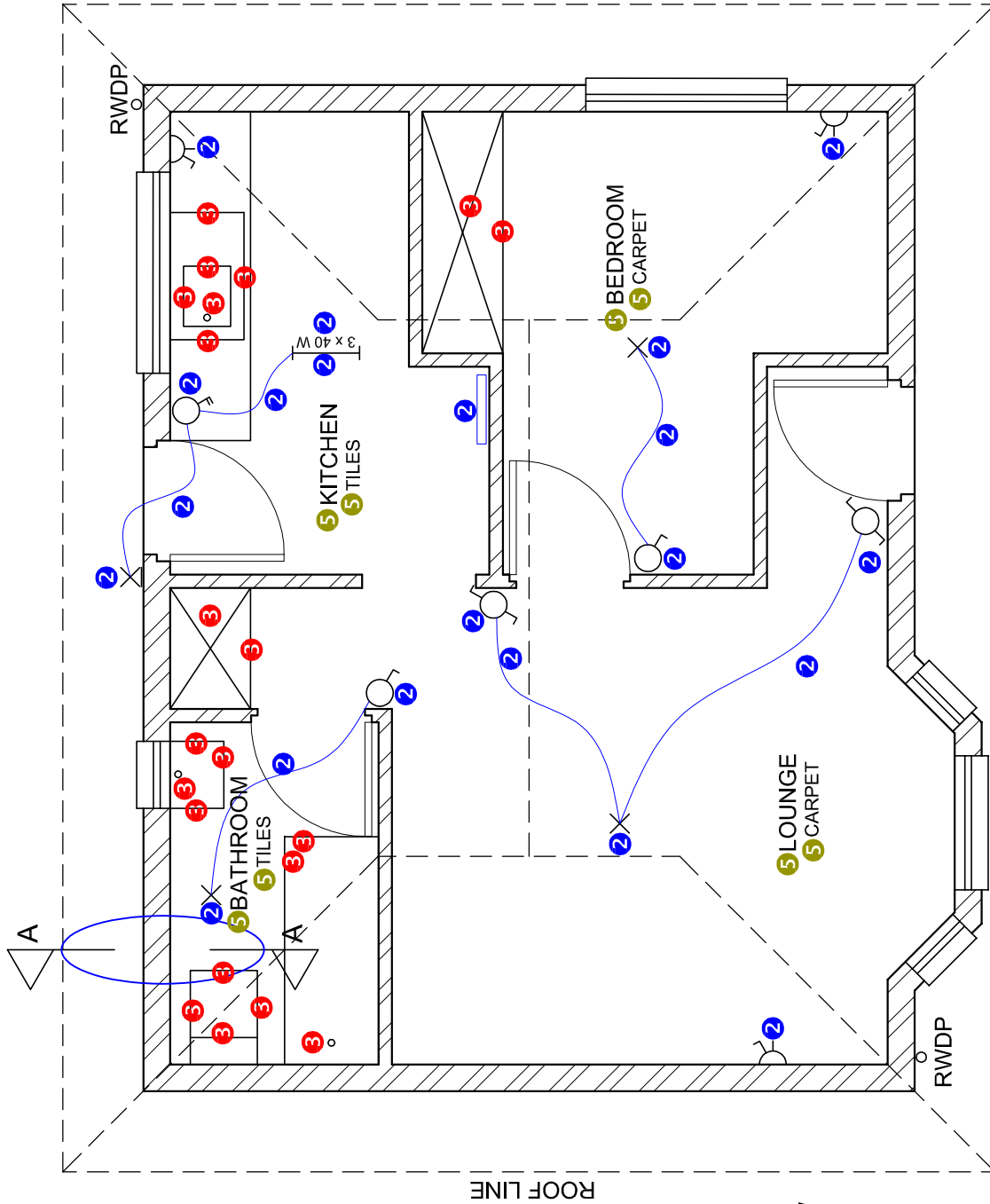
ASSESSMENT CRITERIA		
1	FRONT VIEW	12
2	TOP VIEW	12
3	LEFT VIEW	6
4	DEVELOPMENT	6
PENALTIES (-)		
<b>TOTAL</b>		<b>36</b>

PAPER 1 QUESTION 2  
 GRADE 12  
 DBE/Feb.-Mrt. 2018  
 MARKING GUIDELINES



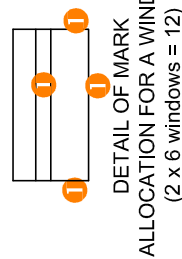
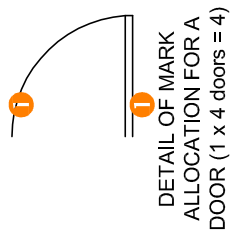
ASSESSMENT CRITERIA		
1	VP's + CONSTRUCTION	6
2	WALLS	13
3	PYRAMID	7
4	OPENINGS	8
5	ARC + CONSTRUCTION	5
<b>TOTAL</b>		<b>39</b>

PAPER 1 QUESTION 3  
 GRADE 12  
 DBE/Feb.-Mrt. 2018  
 MARKING GUIDELINES



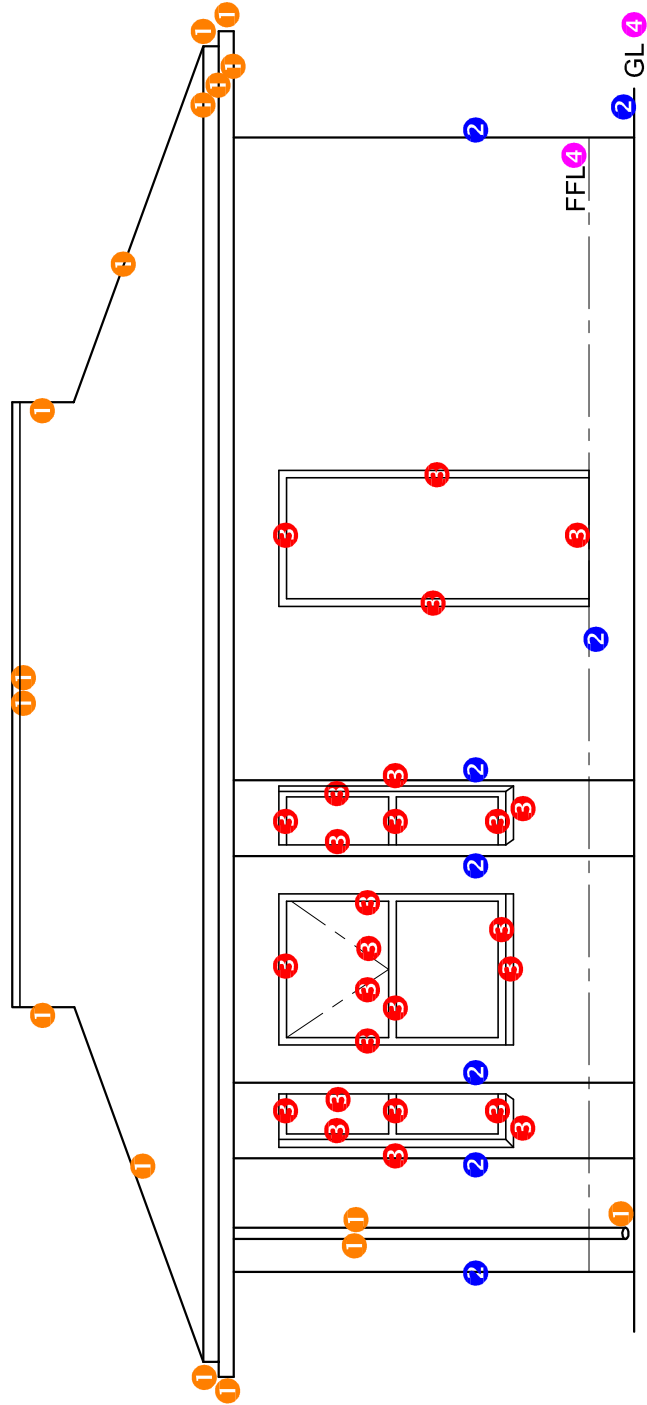
FLOOR PLAN		
1	DOORS + WINDOWS	16
2	ELECTRICAL	10½
3	FIXTURES	10½
4	HATCHING	3
5	LABELS	4
<b>SUBTOTAL</b>		<b>44</b>

FLOOR PLAN  
SCALE 1 : 50



**4 HATCHING ALLOCATION**

SANS COMPLIANT (TYPE)	1
HATCHING CORRECTLY APPLIED	2
<b>TOTAL</b>	<b>3</b>

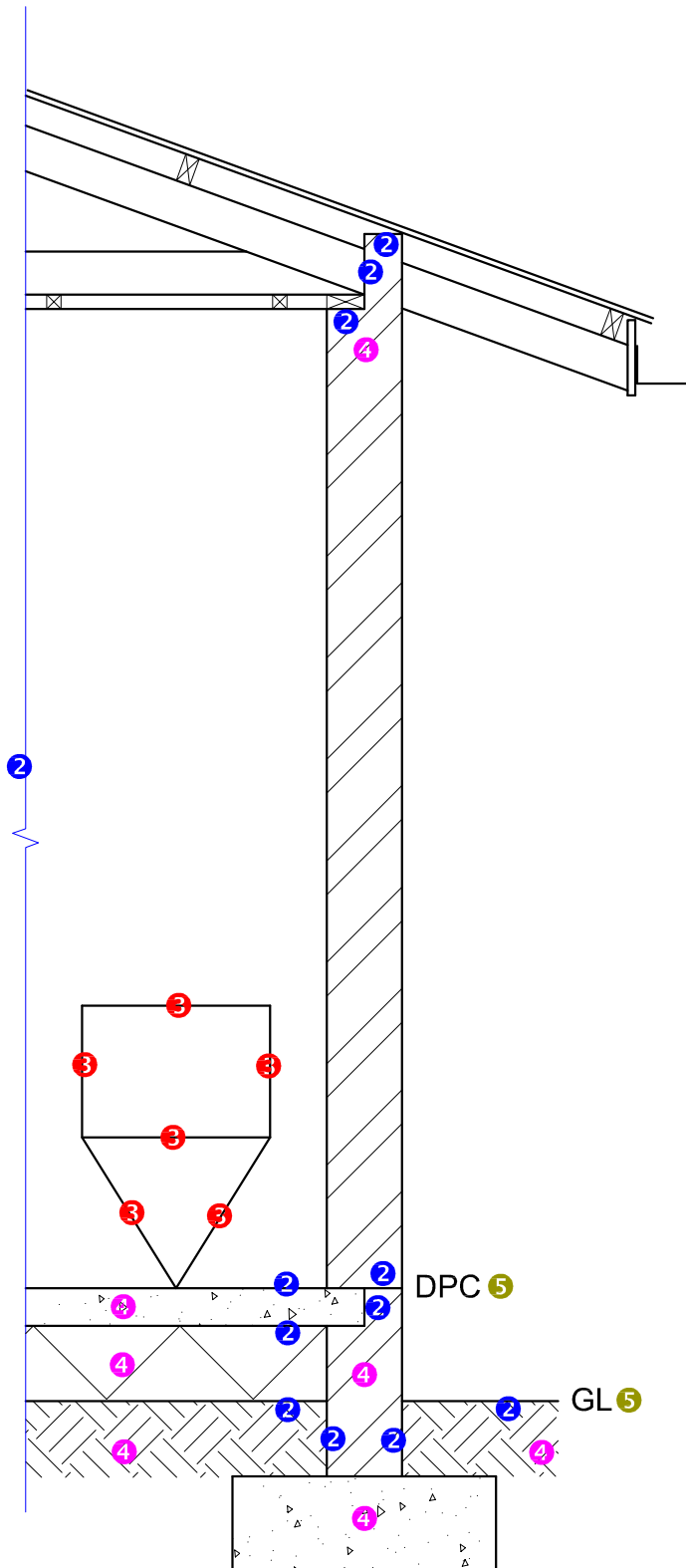


NORTH ELEVATION 4

NORTH ELEVATION	
1	ROOF + RWDP 8
2	WALLS + FFL 4
3	DOOR + WINDOW 13
4	LABELS 1 1/2
<b>SUBTOTAL</b> 26 1/2	

**MARK ALLOCATION FOR ROOF (1)**

A: ROOF ANGLE	1
B: ROOF SHEET	1
C: PURLIN	1
D: PURLIN SPACING	½
E: TRUSS	3
F: FASCIA BOARD	1
G: WALL PLATE	1
H: BRANDERING	1
I: CEILING BOARD	½
J: GUTTER	1
<b>TOTAL</b>	<b>11</b>



DETAILED SECTION		
1	ROOF DETAIL + RWDP	11
2	FOUNDATION + WALL + SLAB	6
3	WC	3
4	HATCHING	3½
5	LABELS	1
<b>SUBTOTAL</b>		<b>24½</b>

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

