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basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P1

FEBRUARY/MARCH 2016

MEMORANDUM

MARKS: 100

This memorandum consists of 7 pages.

	ANSWERS	
1	2	1
2	031 5836092	1
3	REPLACE FUEL TANKS	1
4	5 500	1
5	IBR	1
6	4	1
7	3	1
8	DEMOLISH/REMOVE	1
9	RAMP	1
10	BLUE	1
11	NO COLOUR	1
12	GULLEY	1
13	ADJACENT BUILDING/STRUCTURE	1
14	EAST	2
15	SPEED UP DRAWING PROCESS/ STANDARDISATION OF PRESENTATION	2
16	SCALE	1
17	271,3 m	2
18	82,28 m [calculation 1, answer 1, converted to metres 1]	3
19	318,2179 m ² [calculation 1, answer 1, metres ² 1]	3
20	See below	4

TOTAL: 30

ANSWER 18
Show ALL calculations.

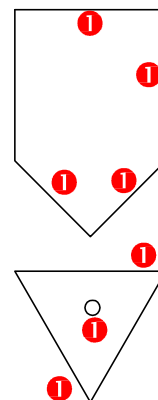
$$20,57 + 6,545 + 7,48 + 6,545 + 28,05 + 13,09 = 82,28 \text{ m}$$

ANSWER 19
Show ALL calculations.

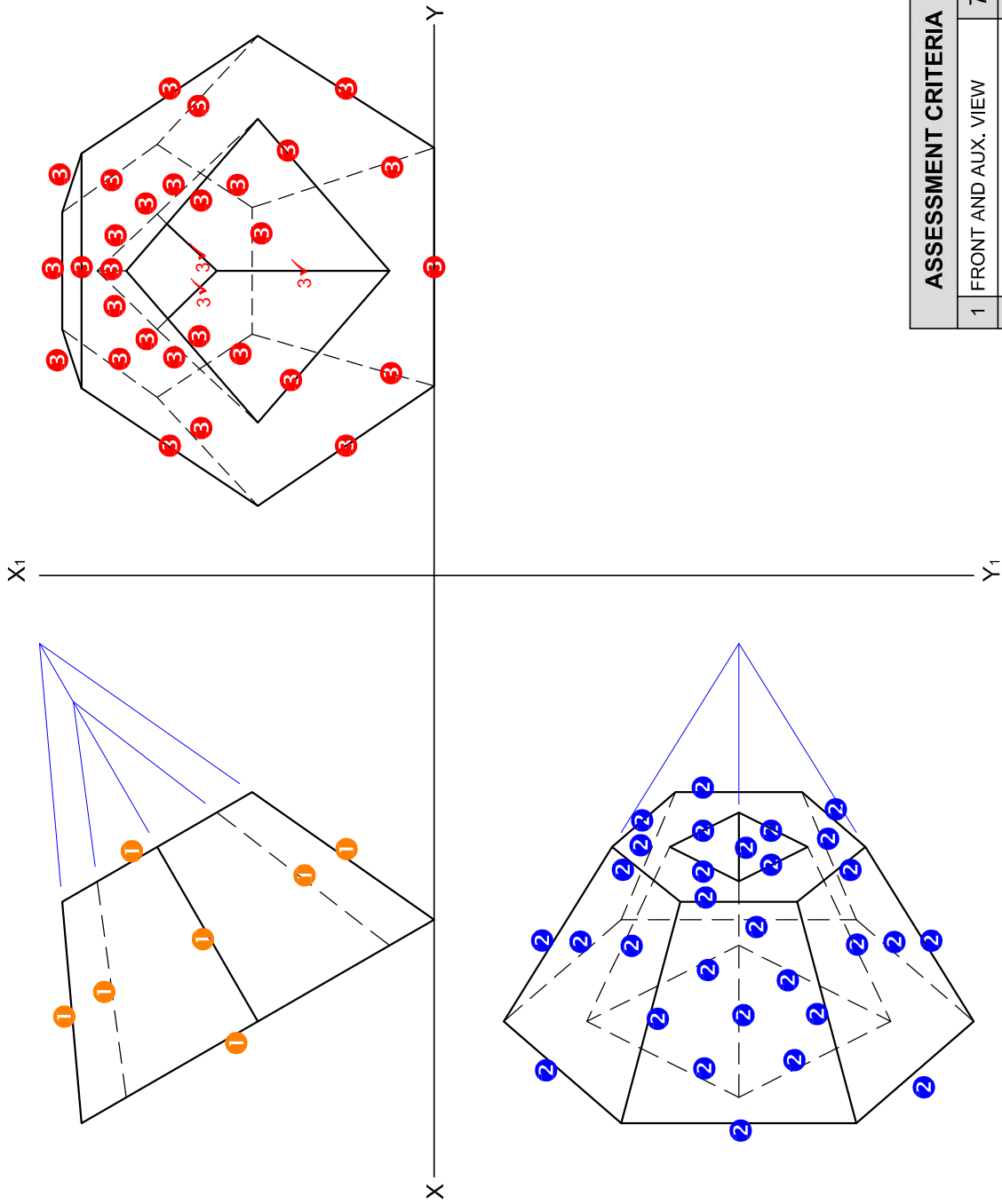
$$(20,57 \times 13,09) + (6,545 \times 7,48) \\ 269,2613 + 48,9566 \\ 318,2179 \text{ m}^2$$

20

FREEHAND ①

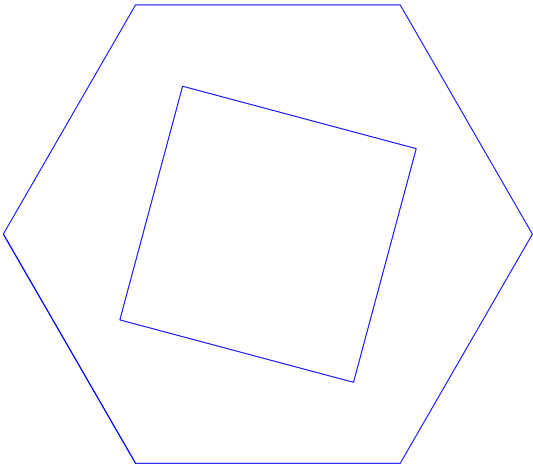


PAPER 1 QUESTION 1
GRADE 12
Feb.-Mar.
MEMORANDUM

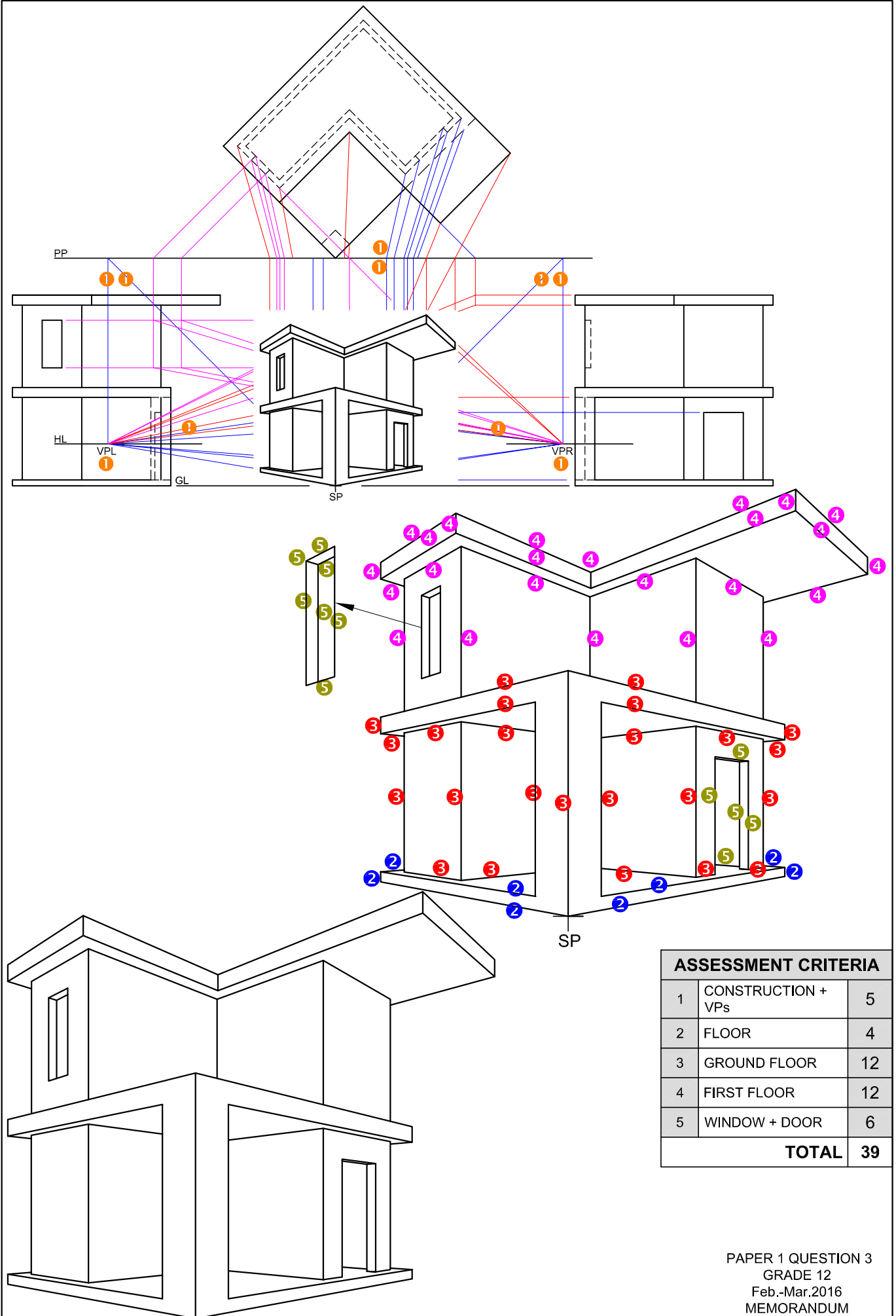


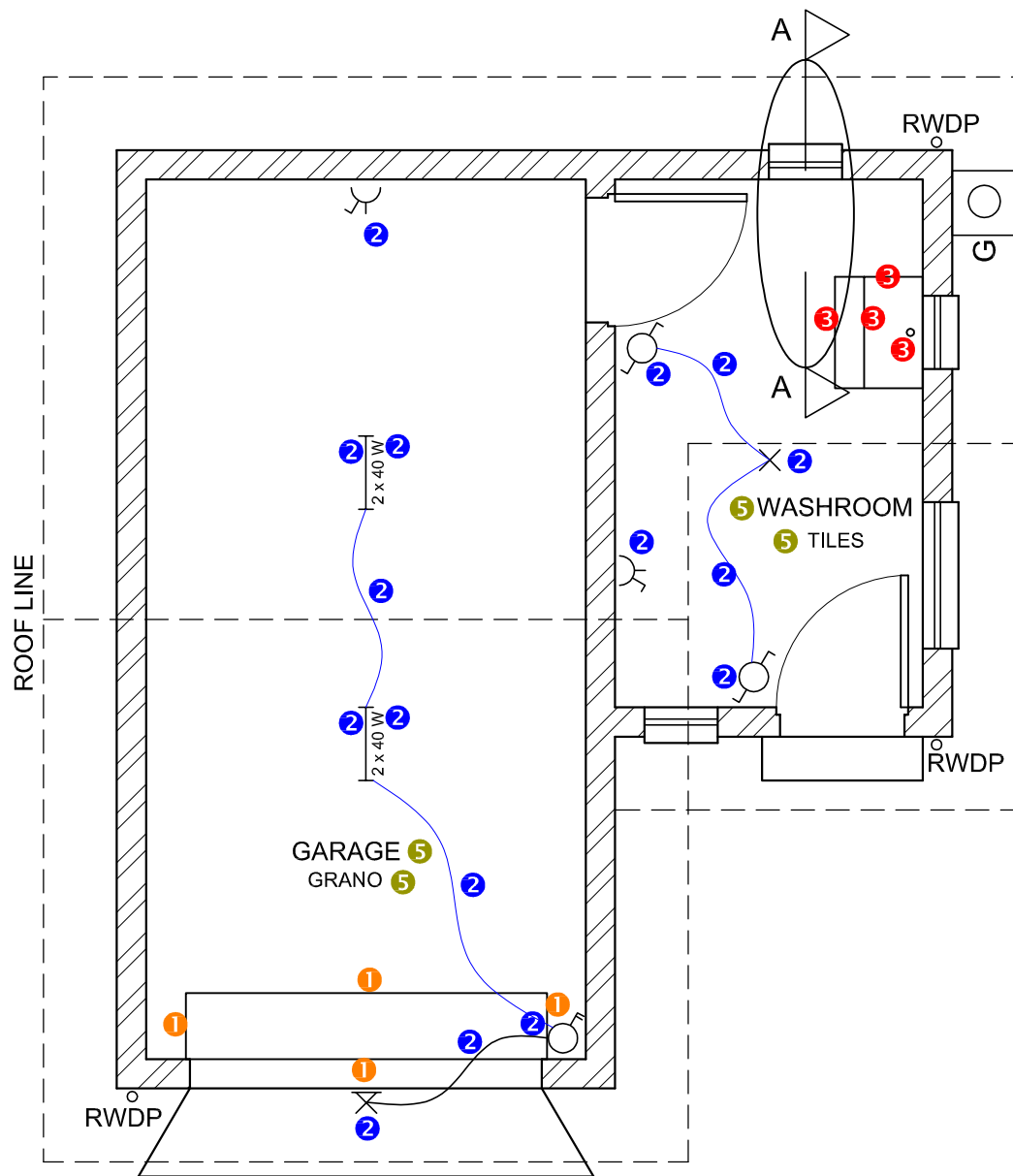
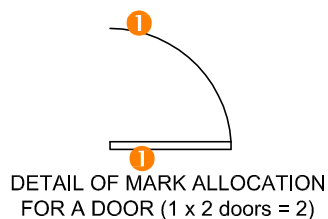
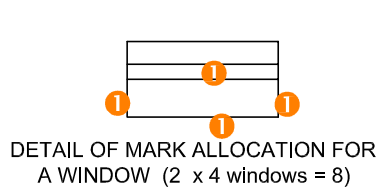
ASSESSMENT CRITERIA	
1	FRONT AND AUX. VIEW
2	TOP VIEW
3	LEFT VIEW
TOTAL	

7½
15
17½
40



ANY ACCEPTABLE
CONSTRUCTION METHOD
USED FOR THE
AUXILIARY VIEW
✓✓✓✓✓





FLOOR PLAN
SCALE 1 : 50

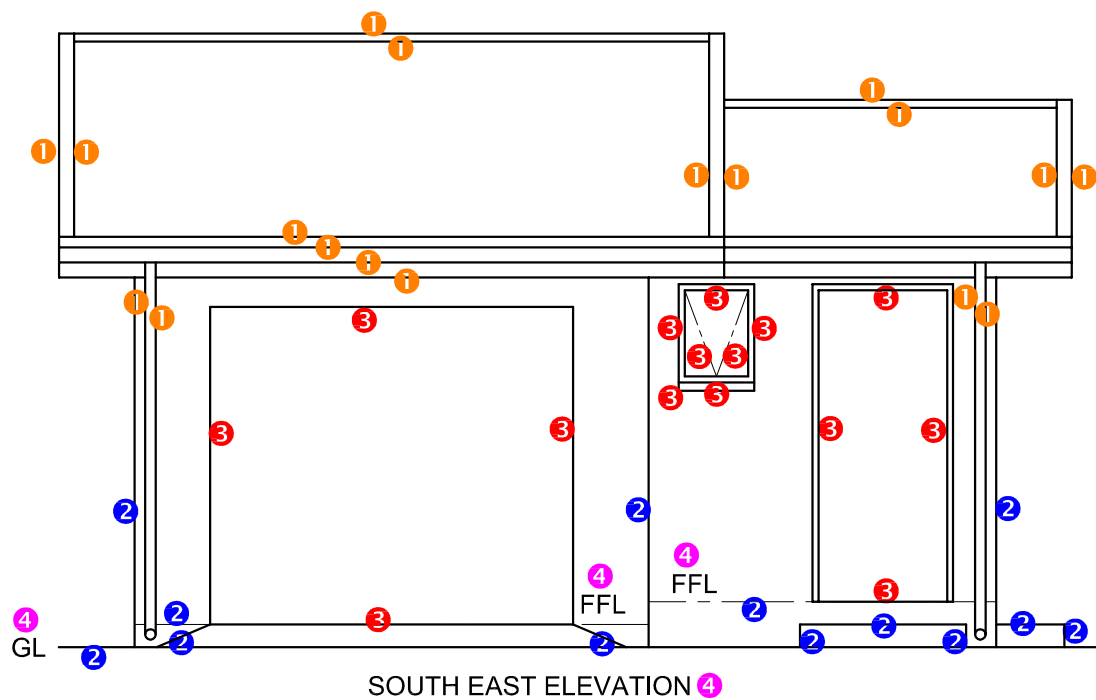
ASSESSMENT CRITERIA

FLOOR PLAN

1	DOORS + WINDOWS	12
2	ELECTRICAL	8
3	FIXTURES	2
4	HATCHING	4
5	LABELS	2
SUBTOTAL		28

4 HATCHING ALLOCATION

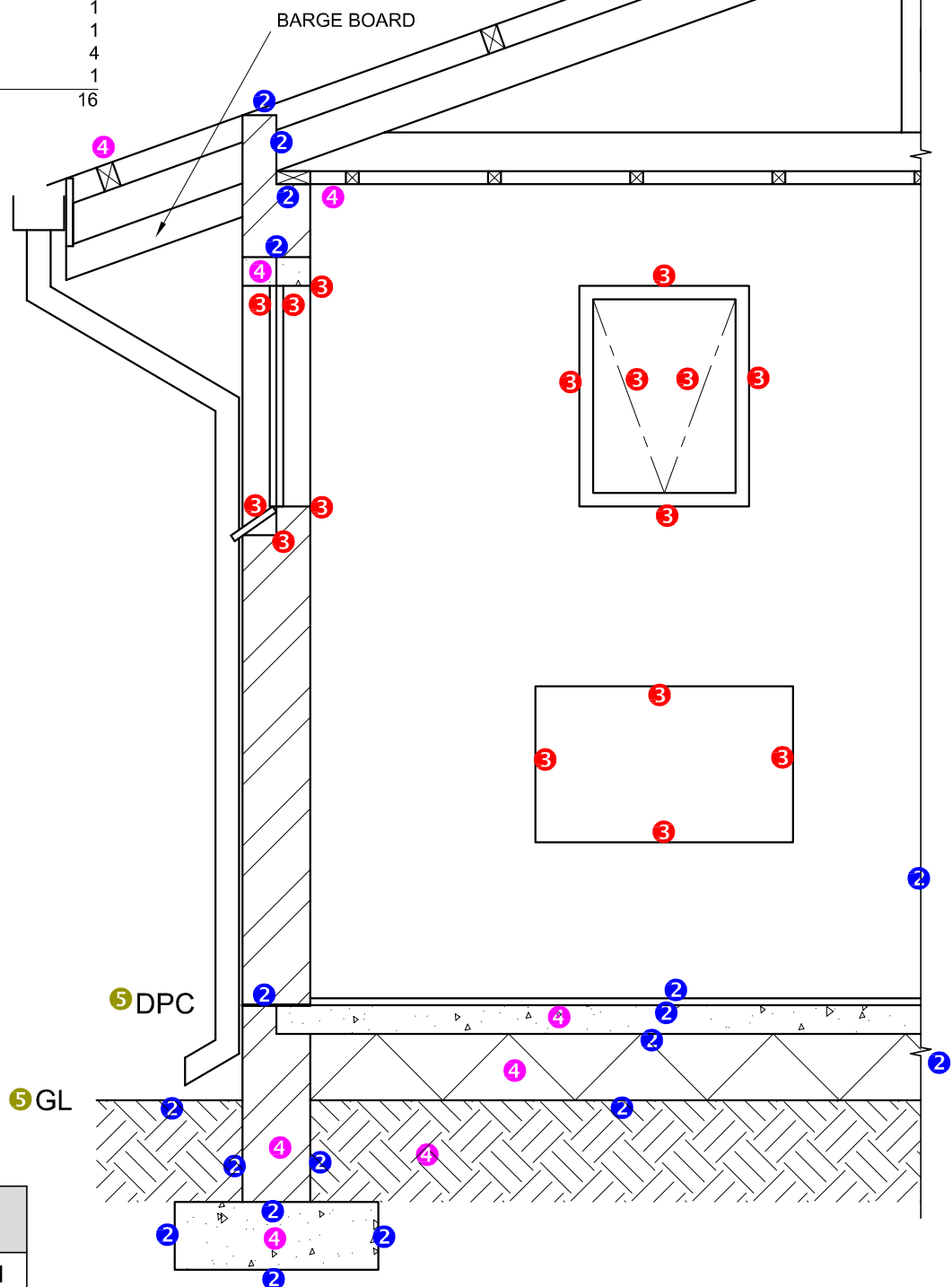
SANS COMPLIANT (TYPE)	2
HATCHING CORRECTLY APPLIED	2
TOTAL	4



ASSESSMENT CRITERIA		
SOUTH EAST ELEVATION		
1	ROOF + RWDP	9
2	WALLS + FFL + GULLEY + STEP + RAMP	6 $\frac{1}{2}$
3	DOOR + WINDOW	7 $\frac{1}{2}$
4	LABELS	2
SUBTOTAL		25

1. MARK ALLOCATION FOR ROOF

A: ROOF ANGLE	1
B: ROOF SHEET	1
C: PURLINS	1
D: PURLIN SPACING	1
E: TRUSS	2
F: FASCIA BOARD	1
G: BARGE BOARD	1
H: WALL PLATE	1
I: BRANDING	1
J: CEILING BOARD	1
K: RWDP	4
L: GUTTER	1
TOTAL	16

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

1	ROOF DETAIL + RWDP	16
2	FOUNDATION + WALL + LINE BREAK	9
3	WINDOW + WASHTUB	8
4	HATCHING	4
5	LABELS	1
SUBTOTAL		38

DETAILED SECTION ON A-A
SCALE 1 : 20

PAPER 1 QUESTION 4
GRADE 12
Feb.-Mar.2016
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