



education

**Department:
Education
KwaZulu - Natal**

**GRADE
12**

**ENGINEERING GRAPHICS AND DESIGN P1
TRIAL EXAMINATION 2012**

**MARKING
MEMO**

MARKING MEMO

1. WHAT IS THE SCALE OF THE DRAWING?	1:200	1
2. WHAT IS THE STREET ADDRESS OF THE PROPOSED DEVELOPMENT?	31 MANCHESTER STREET	1
3. WHAT IS THE ERF NUMBER OF THE PROPERTY ON THE SOUTH EAST SIDE?	LOT 244	1
4. WHICH ALPHABET REPRESENTS THE HIGHEST PART OF THE PROPERTY?	Q	1
5. WHAT IS THE HEIGHT DIFFERENCE OF THE PROPERTY?	2 metres/2000	1
6. WHAT ELEVATION CAN BE VIEWED FROM DIRECTION OF ARROW A?	NORTH WEST	1
7. WHAT ELEVATION CAN BE VIEWED FROM DIRECTION OF ARROW B?	SOUTH WEST	1
8. WHAT IS THE DISTANCE FROM THE FRONT OF THE HOUSE TO THE ROAD EDGE?	8 metres/8000	1
9. WHAT DO THE FOLLOWING ABBREVIATIONS STAND FOR?		
9.1. SH	SHOWER	1
9.2. WC	WATER CLOSET	1
9.3. S	SINK	1
10. WHAT FEATURES ARE REPRESENTED BY:		
10.1. C	TREE	1
10.2. D	BUILDING LINE	1
10.3. E	NORTH POINT	1
11. WHAT IS THE AREA OF THE PROPOSED DWELLING?(answer in metres)	$A = [\frac{1}{2}(40 + 25) \times 20]m^2$ $= 650m^2$	2
12. WHAT IS THE PERIMETER OF THE PROPERTY?(answer in metres)	$P = (25 + 25 + 20 + 40)m$ $= 110m$	2
13. DRAW THE SEWER PIPES FROM THE PROPOSED DWELLING TO THE MUNICIPAL PIPE.(INSERT ALL LABELS)		4
14. DRAW THE STORMWATER PIPES FROM THE PROPOSED DWELLING TO THE MUNICIPAL PIPE.(INSERT ALL LABELS)		3
TOTAL		25

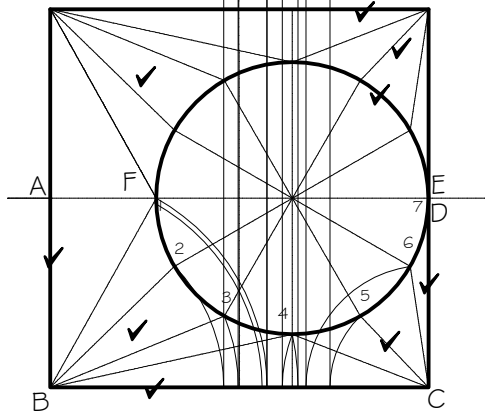
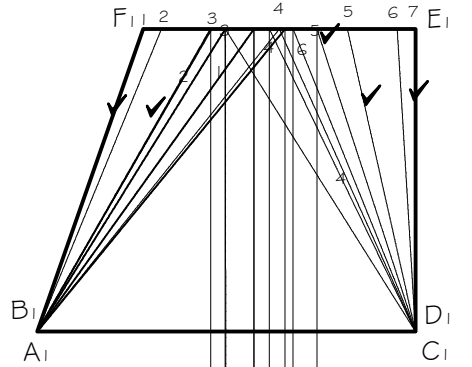
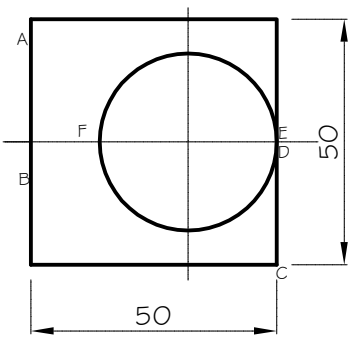
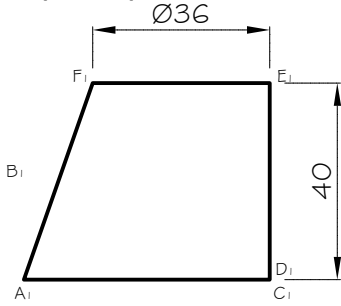
QUESTION 2 a

A top view and front view of a square to round transition piece is given.

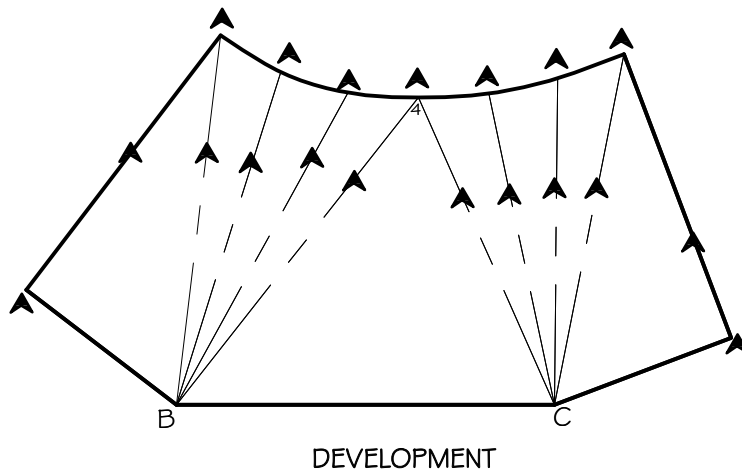
Draw:

2.1 the given views showing the fold lines.

2.2 the development of the surfaces labelled ABCDEFG which is half the of the given figure.



ASSESSMENT CRITERIA		
✓ CONSTRUCTIONS	7	
▲ DEVELOPMENT	19	
TOTAL	26	



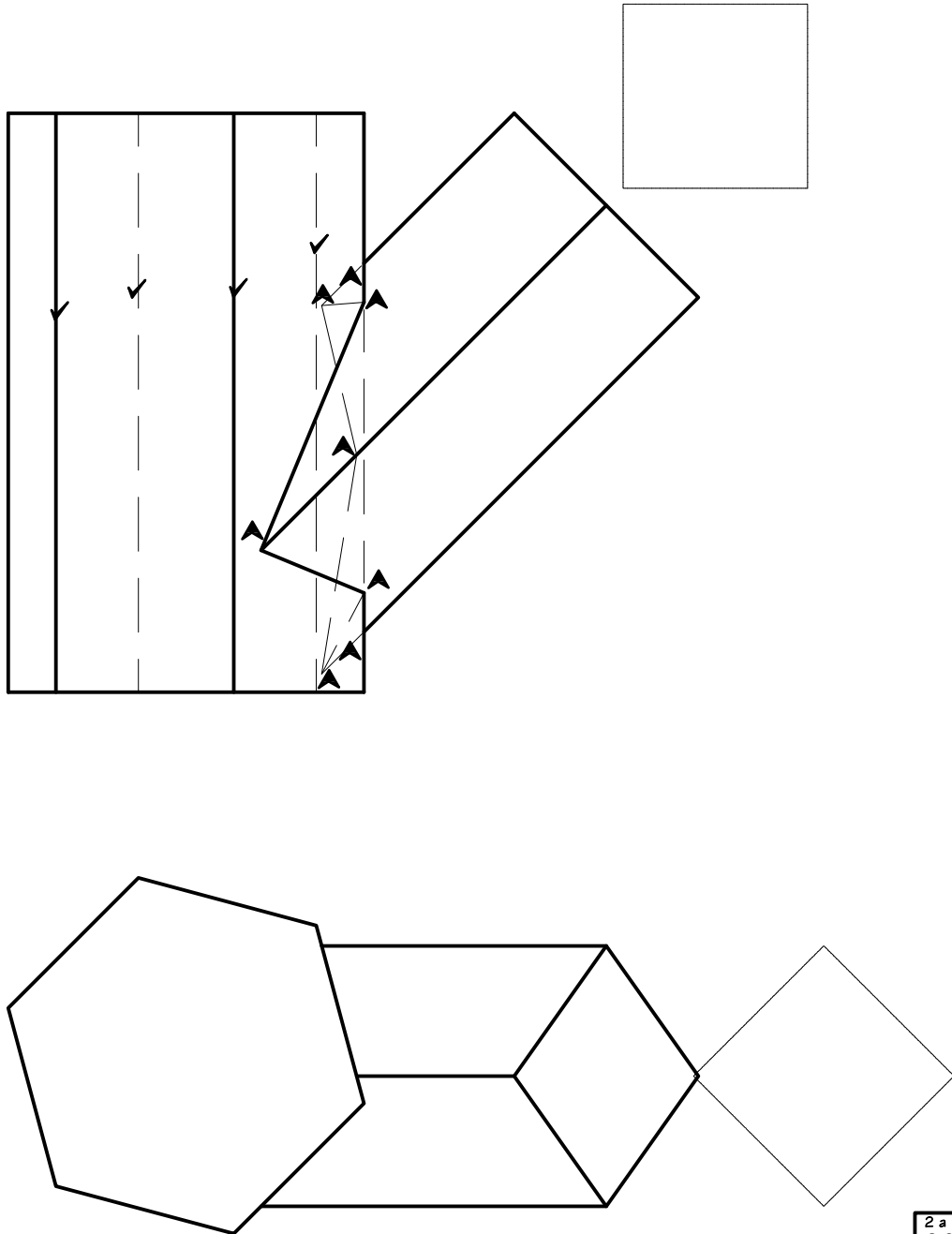
QUESTION 2 b

A top view and an incomplete front view of a hexagonal prism penetrated by a square prism is given.

ASSESSMENT CRITERIA	
✓ FRONT VIEW	4
▲ INTERPENETRATION	8
TOTAL	12

Draw:

Complete the given front view and draw the curve of interpenetration between the two solids.



2 a	2 b	TOTAL
26	12	38

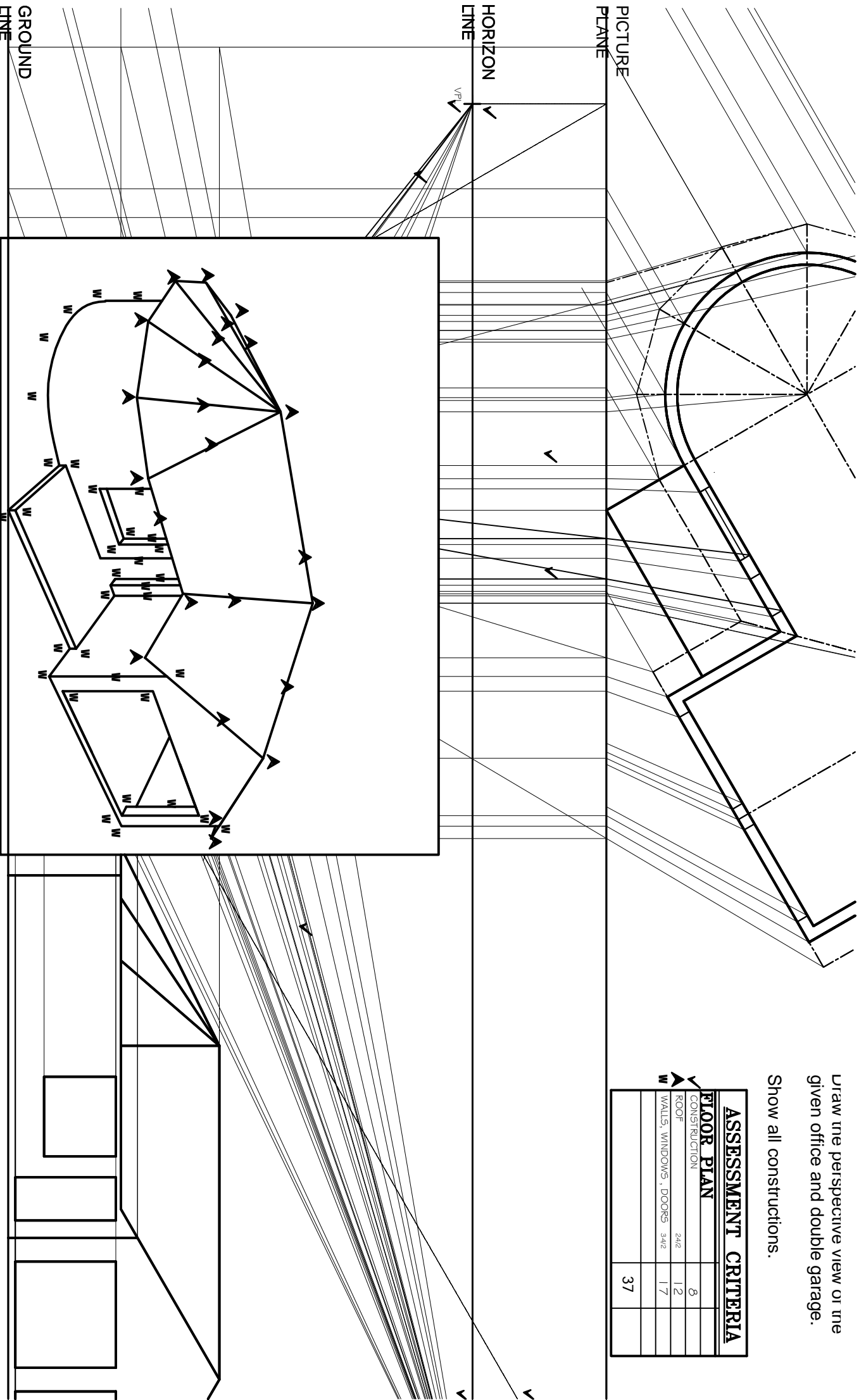
NAME: _____ GR/DIV: 12 _____

Draw the perspective view of the given office and double garage.

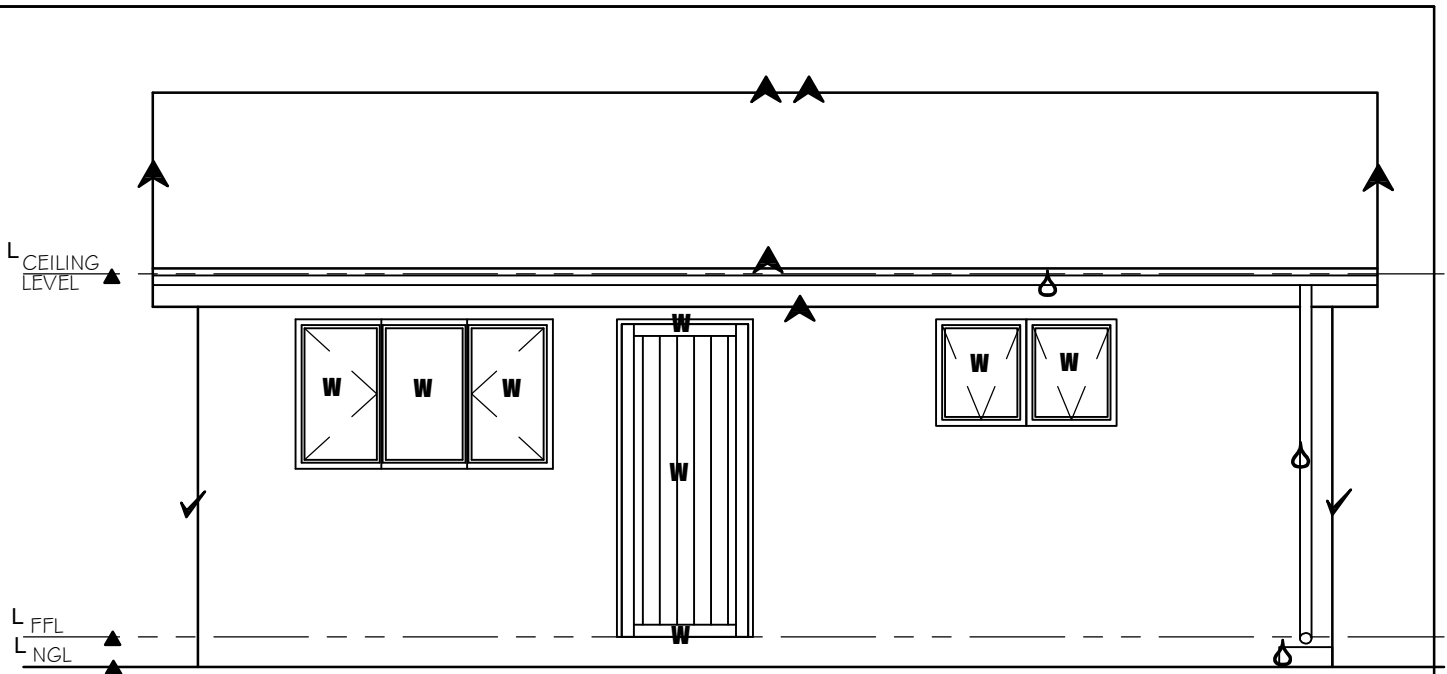
Show all constructions.

ASSESSMENT CRITERIA

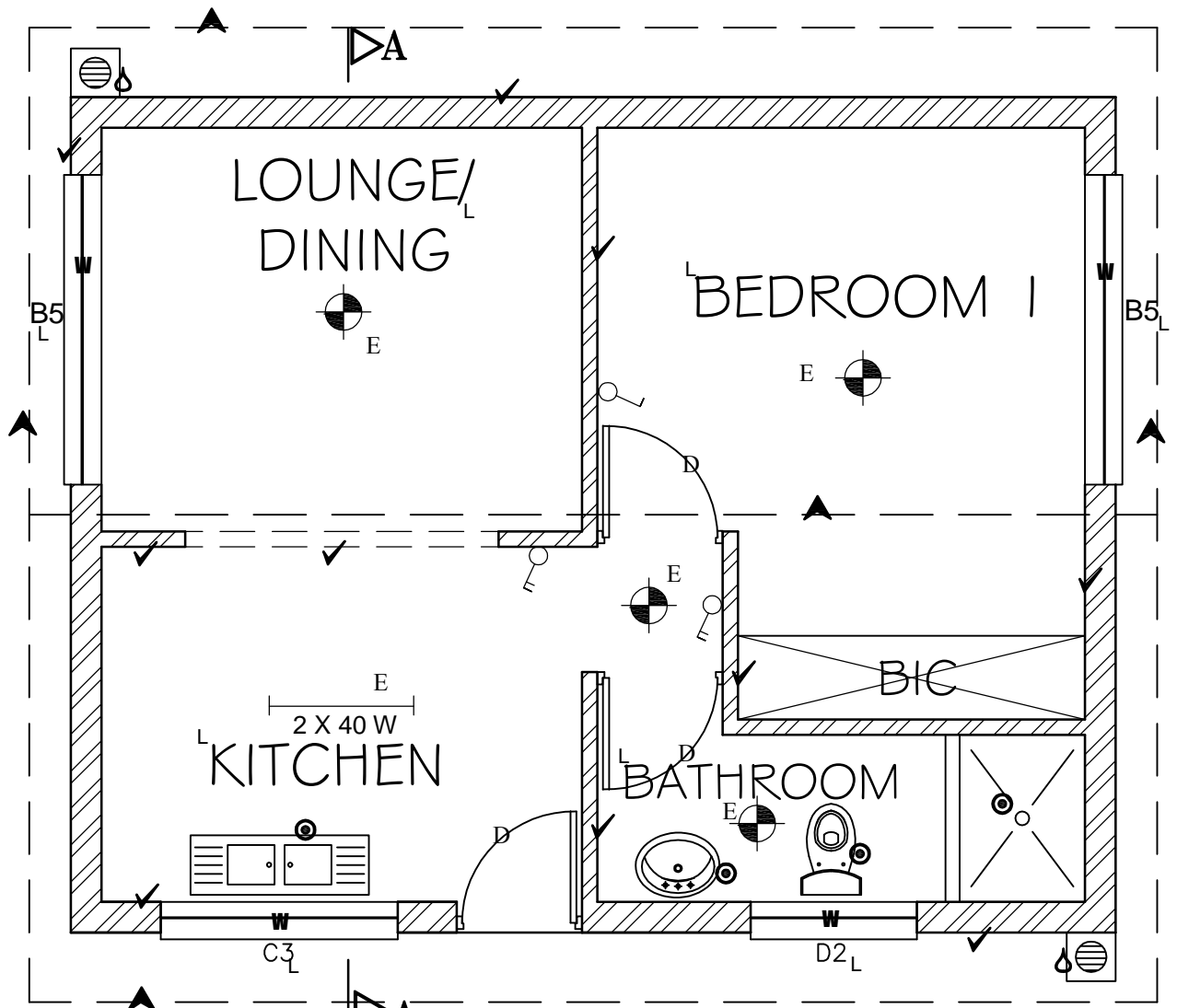
FLOOR PLAN		
CONSTRUCTION	24/2	8
ROOF	34/2	12
WALLS, WINDOWS, DOORS	34/2	17
		37



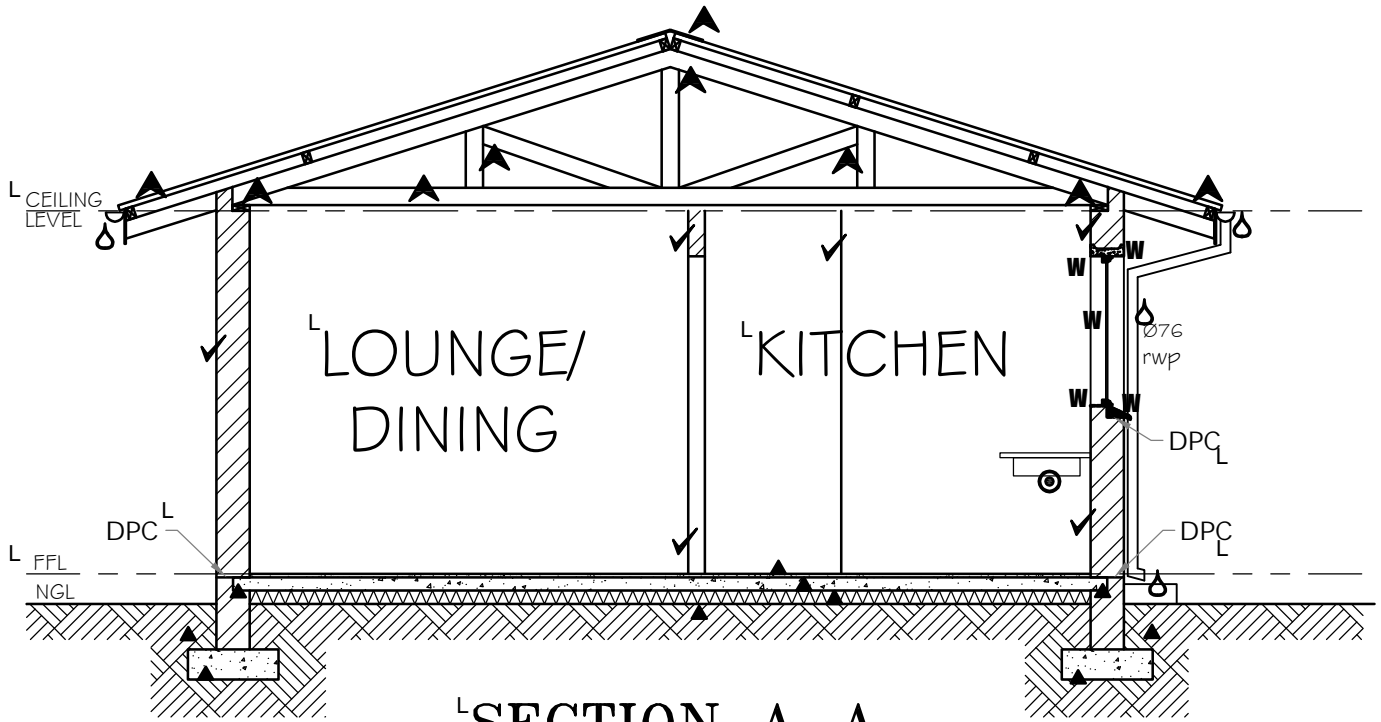
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SOUTH ELEVATION
SCALE 1:50



GROUND STOREY PLAN
SCALE 1:50



SECTION A-A
SCALE 1:50

MARKING MEMO



ASSESSMENT CRITERIA		
FLOOR PLAN		
✓	WALLS & HATCHING	10
▲	ROOFLINES	3
W	WINDOWS	4
D	DOORS	3
⊙	SANITARYWARE	4
E	ELECTRICAL	5
⊖	STORMWATERPIPES/GULLEYS	2
L	LABELS : ROOMDES./WINDOW CODES/FFLE - #	4
		35
SECTION A-A		
▲	SUBSTRUCTURE	10
✓	WALLS & SECTION	6
▲	ROOF & SECTION	9
W	WINDOW SECTION	5
⊖	RAINWATER GOODS	4
L	LABELS - $\frac{2}{2}$	4
⊙	SANITARYWARE	1
		39
SOUTH ELEVATION		
▲	LEVELS(ng/ffl/cl)	3
✓	WALLS	2
▲	ROOF	6
W	WINDOWS & DOOR	8
⊖	RAINWATER GOODS	3
L	LABELS	4
		26
	TOTAL	100