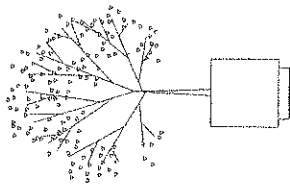


HILLCREST HIGH SCHOOL TRIAL EXAMINATIONS & DESIGN ENGINEERING, GRAPHICS & DESIGN

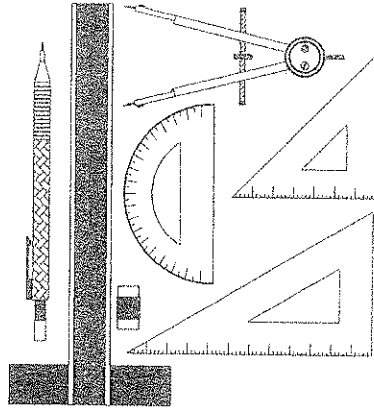
GRADE 12
2013
PAPER 1



MARKS: 200 TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 6 pages including the cover page and 4 questions.
2. All questions must be answered.
3. Unless specified otherwise, all questions are in First Angle Orthographic Projection.
4. Unless specified otherwise, all questions are to be completed to a scale of 1:1.
5. All answer sheets must be re-stapled in numerical order, even questions that are not attempted/blank.
6. All construction work must be shown, even if a stencil was used.
7. Print your examination number neatly on each page.
8. Use only the drawing sheets provided.
9. Your drawings should reflect neatness and accuracy.
10. All dimensions or detail not given may be assumed in good proportion.



QUESTION	SECTION	MARK	MAXIMUM
1	CIVIL ANALYTICAL		30
2	DEVELOPMENT		35
3	PERSPECTIVE		35
4	CIVIL ASSEMBLY		100
TOTAL			200
SYMBOL			100

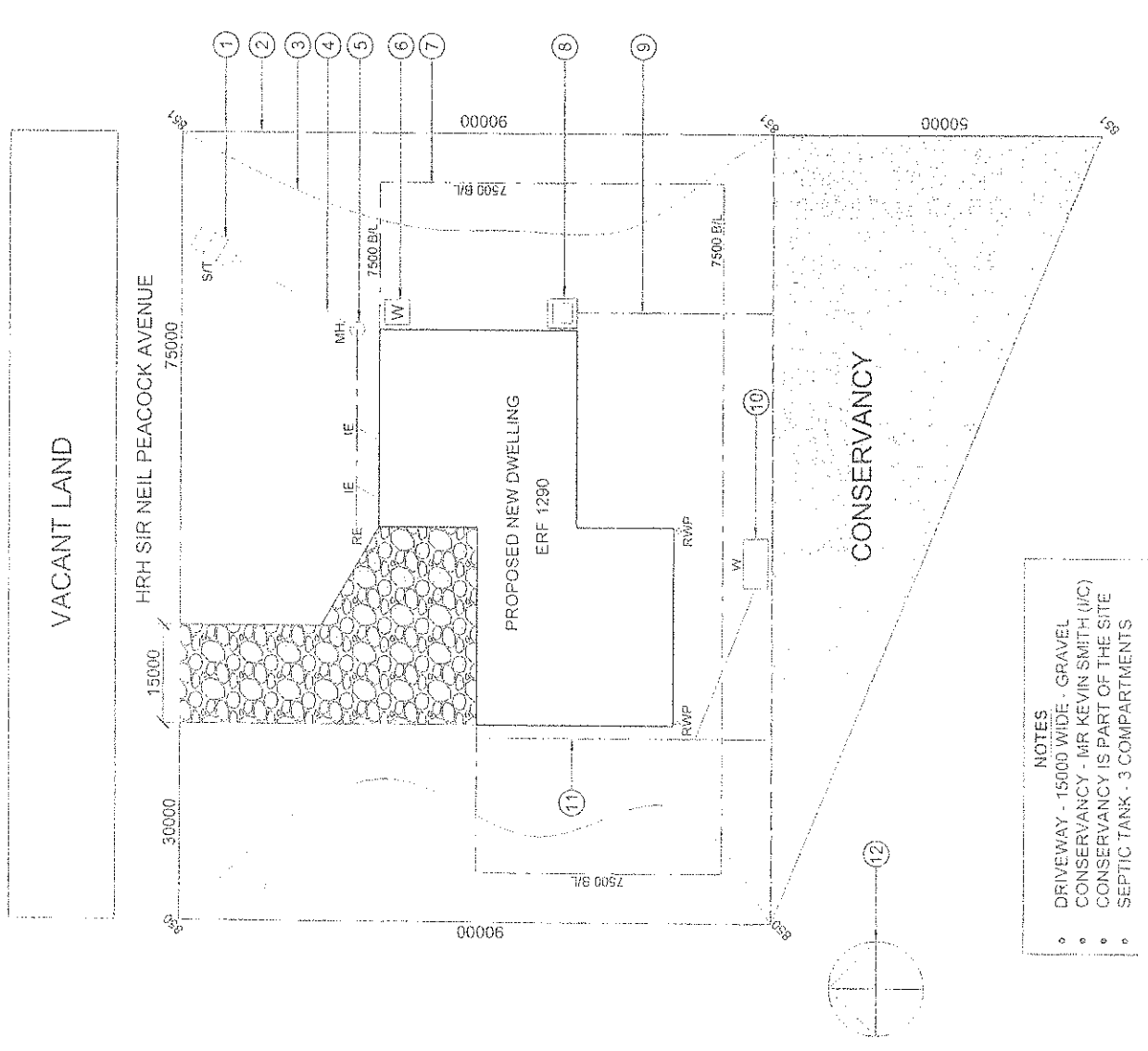
NAME

TRIALS 2013
GRADE 12 P.1
QUESTION 1
30 MARKS
CIVIL
ANALYTICAL

STUDY THE DRAWING AND INFORMATION GIVEN, THEN ANSWER THE QUESTIONS BELOW:

- 1.1. What is the feature at 1 called?
- 1.2. What is the feature at 2 called?
- 1.3. What is the feature at 3 called?
- 1.4. What is the feature at 4 called?
- 1.5. What is the feature at 5 called?
- 1.6. What is the feature at 6 called?
- 1.7. What is the feature at 7 called?
- 1.8. What is the feature at 8 called?
- 1.9. What is the feature at 9 called?
- 1.10. What is the feature at 10 called?
- 1.11. What is the feature at 11 called?
- 1.12. What is the feature at 12 called?
- 1.13. What type of civil drawing is shown?
- 1.14. What does RWP stand for?
- 1.15. What surface is used for the driveway?
- 1.16. Who is in charge of the conservancy?
- 1.17. Calculate the area of the conservancy in metres squared? (3)
- 1.18. Calculate the area of the entire site in metres squared? (3)
- 1.19. What is the perimeter of the conservancy in millimetres?
- 1.20. How far is the West building line from the West boundary line?
- 1.21. Draw a neat FREEHAND drawing of a Wall Mounted Urinal convention, according to the SABS Code of Drawing Practice 0143. Use the space below. (6)

VIEW IN PLAN	VIEW IN ELEVATION



- NOTES
- DRIVEWAY - 15000 WIDE - GRAVEL
 - CONSERVANCY - MR KEVIN SMITH (M/C)
 - CONSERVANCY IS PART OF THE SITE
 - SEPTIC TANK - 3 COMPARTMENTS

NAME

ANSWER SHEET 1

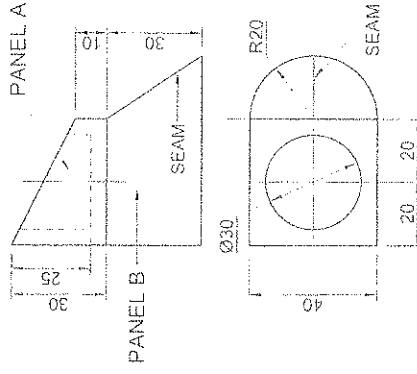
TRIALS 2013
GRADE 12 PT
QUESTION 2
35 MARKS
DEVELOPMENT

The figure below shows the front view and top view of a Pipe Socket.
 Draw the following:
 2.1 The front view.
 2.2 The top view.
 2.3 The right view.
 2.4 Develop the surface of PANEL B (Transition).
 2.5 Show all necessary construction and fold lines. Start with the Seam for the development of the Transition Piece.

ASSESSMENT CRITERIA

You will be assessed on your ability to do the following:

- draw the given views 4
- draw the complete right view 9
- develop the transition piece 13½
- start with the seam for the development 2
- show all constructions 3½
- show all centre lines 3



RV	4
TV	4
RV	13.5
RV	2
RV	3.5
RV	3
SEA	
EL	
CON	
TOTAL	39

NAME

ANSWER SHEET 2

TRIALS 2013
GRADE 12 P1

QUESTION 3
35 MARKS

TWO POINT
PERSPECTIVE

The figure below shows the views of a dwelling.
Draw a neat TWO POINT PERSPECTIVE drawing of the dwelling.

Show all construction.
Label the vanishing points LVP and RVP.
Do not show any hidden detail.

ASSESSMENT CRITERIA

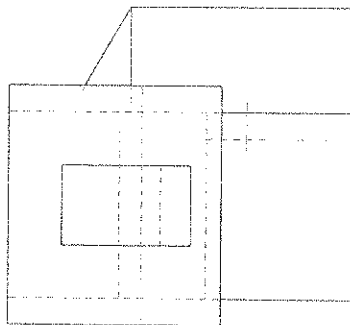
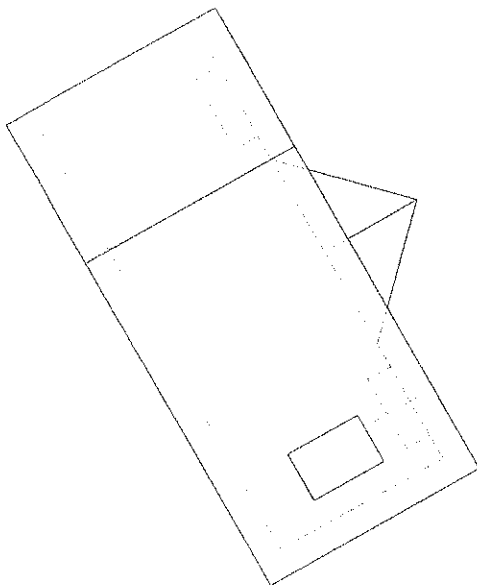
- You will be assessed on your ability to do the following:
- project from top view to station point 1
 - determine the vanishing points 2
 - project to the vanishing points 2
 - draw the two point perspective 30

PP

HL

PP

HL



GL

GL

SP

NAME

ANSWER SHEET 3

TRIALS 2013
GRADE 12 P1
QUESTION 4
100 MARKS
CIVIL
ASSEMBLY

ASSESSMENT CRITERIA

SECTIONAL ELEVATION

1	CEILING BATTENS	4
2	WALL PLATES	2
3	CEILING BOARD	2
4	TRUSS PLATES	4
5	ROOF TRUSS	4
6	PURLINS	6
7	ROOF	4
8	WALLS	13
9	SECTIONAL WINDOW	7
10	FASCIA + OVERHANG	4
11	FOUNDATION + FLOOR	13
12	DPC	2
13	LABELS	3
14	HATCHING	18
15	PLUMBING DETAIL	3

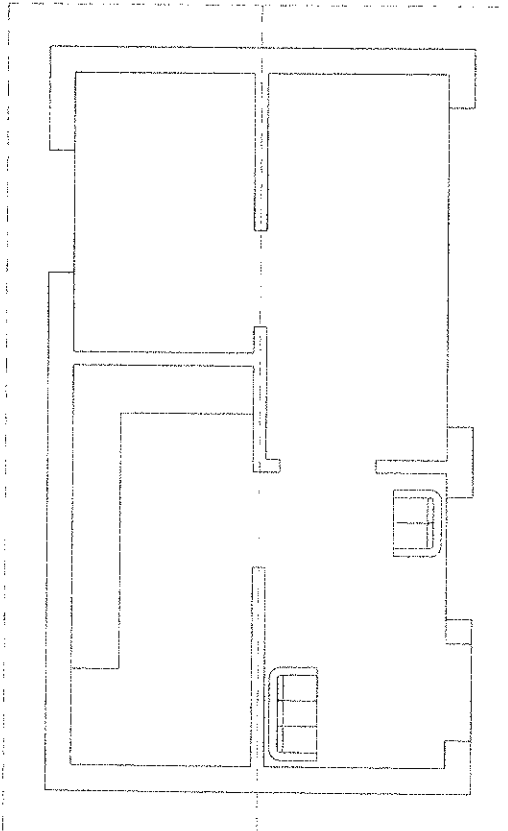
FLOORPLAN

16	WINDOWS	11
17	DOORS	8
18	CUTTING PLANE	4
19	LABELS	10
20	ELECTRICAL	8
21	PLUMBING FIXTURES	6
22	HATCHING	10
23	SEWER CONNECTION	10

NORTH ELEVATION

24	WINDOW 1	4
25	WINDOW 2	12
26	DOOR	9
27	WALLS	2
28	ROOF	8
29	FASCIA BOARD	4
30	LABELS	5

TOTAL	200
TOTAL	100



MUNICIPAL SEWER LINE

NAME