ENGINEERING GRAPHICS AND DESIGN P1

NOVEMBER 2016

MEMORANDUM

MARKS: 100

This memorandum consists of 7 pages.
## ANSWERS

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>WILLIAM / &quot;ON THE DOT ARCHITECTS&quot;</td>
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<tr>
<td>3</td>
<td>1 : 800</td>
<td>1</td>
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<tr>
<td>4</td>
<td>VERNON</td>
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<td>1</td>
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<tr>
<td>8</td>
<td>2 / 3</td>
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<tr>
<td>9</td>
<td>INSPECTION CHAMBER</td>
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<tr>
<td>10</td>
<td>BLACK</td>
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<tr>
<td>11</td>
<td>CONTOUR LINE</td>
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<tr>
<td>12</td>
<td>MILLIMETRE / mm / METRIC</td>
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<tr>
<td>13</td>
<td>COMPACTED HARD CORE</td>
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<tr>
<td>14</td>
<td>ELECTRIC SECURITY FENCE</td>
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<tr>
<td>15</td>
<td>GATE OPENING DIRECTION</td>
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<tr>
<td>16</td>
<td>SERVITUDE</td>
<td>2</td>
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<tr>
<td>17</td>
<td>STOREROOM OVER BUILDING LINE</td>
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<tr>
<td>18</td>
<td>369,14 m [calculations 1, answer 1, metres 1]</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>2184 m² [calculations 2, answer 1, metres² 1]</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>3</td>
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<td>TOTAL</td>
<td>30</td>
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### ANSWER 18
Show ALL calculations.

\[
L = 2(L + B) \\
= (2 \times 74569) + (2 \times 116000) \checkmark_1 \\
= 149,138 + 232,000 \\
= 381,138 \\
= 381,138 - GATE \\
= 381,138 - 12,000 \\
= 369,138 of 369,14 \checkmark_1 \checkmark_1
\]

### ANSWER 19
Show ALL calculations.

\[
B A = 9[(12.4 \times 20) - (4 \times 4)] + (12 \times 8) \checkmark_1 \checkmark_1 \\
= 9(248 - 16) + 96 \\
= 2088 + 96 \\
= 2184 m^2 \checkmark_1 \checkmark_1
\]

### ANSWER 20
FREEHAND 1

![Diagram](Image)

PAPER 1 QUESTION 1
GRADE 12
NOVEMBER 2016
MEMORANDUM
4 CURVE QUALITY

MARK ALLOCATION FOR THE CIRCULAR ARC

4 CIRCULAR ARC CONSTRUCTION

ASSESSMENT CRITERIA
1. CONSTRUCTION + VPs 7
2. WALLS + DOORS 22
3. ROOF 5
4. CIRCULAR ARC 6

TOTAL 40

PAPER 1 QUESTION 3
GRADE 12
NOVEMBER 2016
MEMORANDUM
1. MARK ALLOCATION FOR SECTION OF ROOF

A. ROOF ANGLE 1
B. ROOF SHEET 1
C. PURLIN 1
D. TRUSS 2
E. FASCIA BOARD 1
F. WALL PLATE 1
G. BRANDING + SPACING 1
H. CEILING BOARD 1
I. BARGE BOARD 2
TOTAL 11

SECTION A-A
SCALE 1 : 20

PAPER 1 QUESTION 4.2
GRADE 12
NOVEMBER 2016
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