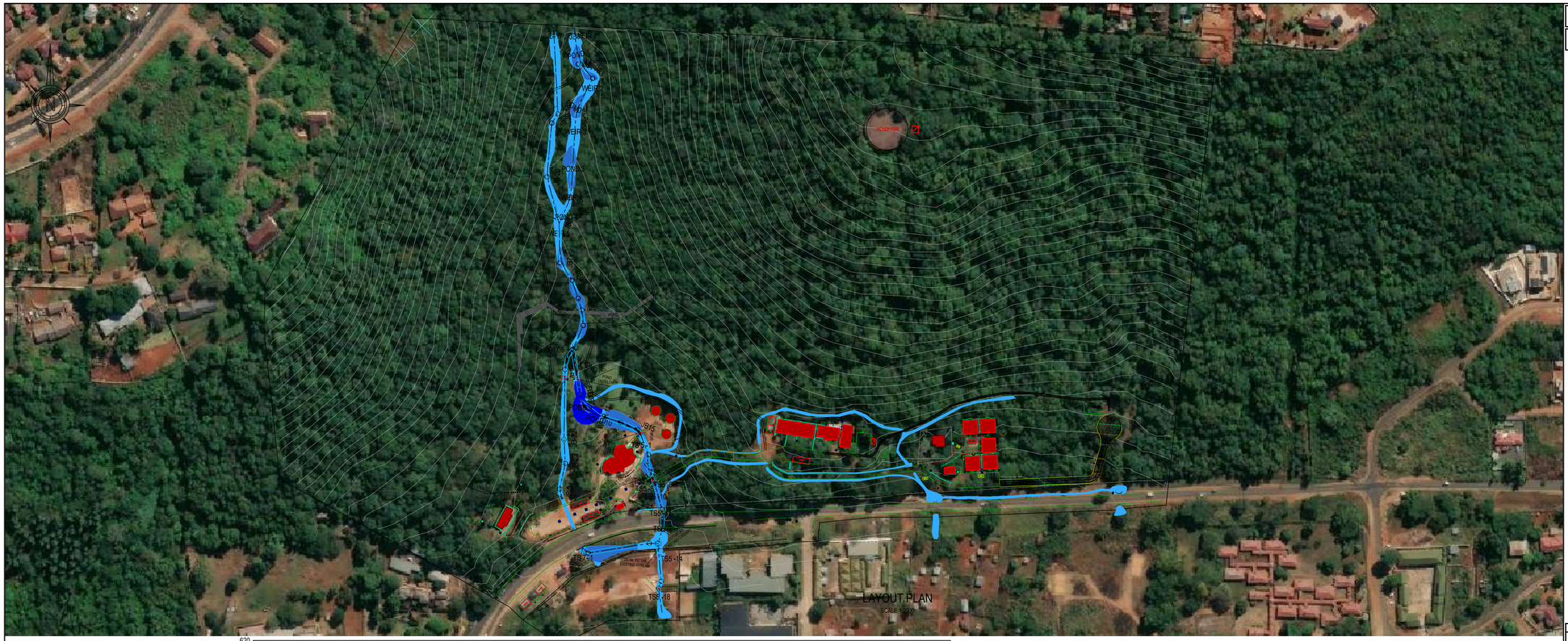
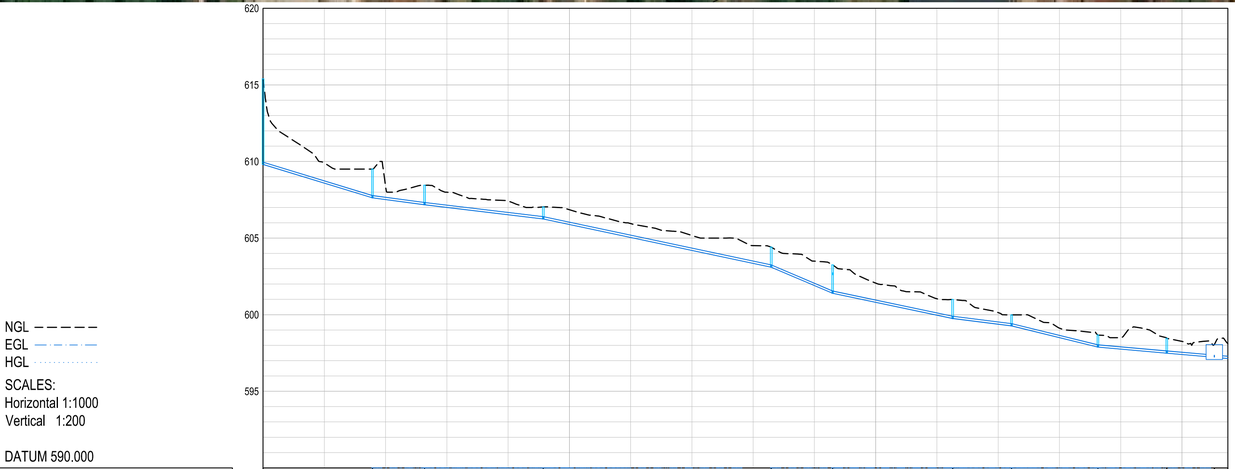



NGL – – – – –
EGL — · — · —
HGL · · · · · · · · ·

SCALES:
Horizontal 1:1000
Vertical 1:200

DATUM 590.000

| REFERENCE | JB1 | Ø160 450 | JB2 | Ø160 450 | JB3 | Ø160 450 | JB4 | Ø160 450 | JB5 | Ø160 450 | JB6 | Ø160 450 | JB7 | Ø160 450 | JB8 | Ø160 450 | JB9 | Ø160 450 | JB10 | Ø160 450 | MAIN POND | Ø160 450 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DISTANCE (m) | 0.000 | | 35.718 | | 52.726 | | 91.481 | | 165.902 | | 185.958 | | 225.131 | | 244.357 | | 272.555 | | 295.040 | | 310.570 | 351.210 |
| GROUND LEVEL | 615.397 | | 609.500 | | 608.449 | | 607.040 | | 604.411 | | 603.254 | | 600.993 | | 599.984 | | 598.673 | | 598.456 | | 598.052 | |
| PIPE INVERT LEVEL | 609.814 | | 607.634 | 607.634 | 607.182 | 607.182 | 606.256 | 606.256 | 603.106 | 603.106 | 601.401 | 601.401 | 599.756 | 599.756 | 599.275 | 599.275 | 597.889 | 597.889 | 597.493 | 597.493 | 597.223 | 597.223 |
| SLOPE / LENGTH | | 6.10% 1:16,4 35.72m | | 2.66% 1:37.6 17.01m | | 2.39% 1:41.9 38.76m | | 4.23% 1:23,6 74,42m | | 8.50% 1:11.8 20.06m | | 4.20% 1:23.8 39,17m | | 2.50% 1:40,0 19.23m | | 4.92% 1:20,3 28.20m | | 1.76% 1:56,7 22.49m | | 1.74% 1:57.6 15.53m | | 1.79% 1:55.8 40.64m |

LONGSECTION SUBSOIL INFLOW
FROM 0.000 TO 315.000

| CATCHMENT TABLE | |
|---|---|
| CATCHMENT | AREA (ha) |
| 1 | 29.304 |
| 3 | 3.781 |
| 4 | 4.010 |
| 5 | 1.246 |
| 6 | 2.963 |
| 7 | 0.527 |
| 8 | 1.800 |
| 10 | 6.567 |
| 11 | 2.438 |
| 14 | 1.834 |
| 16 | 1.743 |

## IF IN DOUBT ASK

## NOTES AND SPECIFICATIONS

### GENERAL

1. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
2. ALL DIMENSIONS ARE IN MILLIMETERS (UNLESS OTHERWISE SPECIFIED).
3. DO NOT SCALE FROM THIS DRAWING.
4. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
5. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS,
6. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE ARCHITECT DRAWING (IF APPLICABLE).
7. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE WATER AND SANITATION DEPARTMENT OF THE CITY OF TSHWANE ARE COMPLIED WITH.
8. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

### NOTES

1. ALL IMPORTED FILL TO CLASSIFY AS G7 OR BETTER.
2. ALL LEVELS SHOWN ARE BULK EARTHWORKS LEVELS UNLESS OTHERWISE AGREED.
3. BATTER SLOPES TO BE 2:1 UNLESS OTHERWISE AGREED
4. ALL FILL TO BE COMPACTED TO MINIMUM 93% MOD AASHTO UNLESS OTHERWISE NOTED.
5. SETTING OUT DIMENSIONS TO BE CONFIRMED ON SITE.
6. CONTRACTOR TO ENSURE THAT ALL SITE ACTIVITIES ARE IN ACCORDANCE WITH OSH ACT. 1993 CONSTRUCTION REGULATIONS 2003.
7. ALL WORKS TO COMPLY WITH THE REQUIREMENTS OF SABS 1200D.
8. ACCURACY OF WORK TO COMPLY WITH SABS 1200D DEGREE OF ACCURACY Ⅱ.
9. TESTING
   a) ONE MODIFIED AASHTO MAXIMUM DENSITY DETERMINATION TO BE CARRIED OUT FOR EACH SET OF TESTS ON HOMOGENEOUS MATERIAL
   b) SETS OF DENSITY TEST TO COMPRISE:
      ORDINARY FILL / SUBGRADE 4 TESTS PER 2000m²
      SELECTED LAYERS 4 TESTS PER 1500m²
      SUB - BASE 4 TESTS PER 1000m²
   c) ACCEPTANCE CRITERIA REFER TO TABLE 2 SABS 1200DM
10. NOTE EXISTING PAVING BLOCKS TO BE REMOVED AND BASE MATERIAL TO BE RIPPED AND RECOMPACTED TO 95% MOD. AASHTO

### LEGEND

STORMWATER FLOW DIRECTION

PROPOSED ROAD

PROPOSED CHANNEL

AMENDMENTS

ALPHABETICAL LETTERS (A,B,C..) - FOR INFORMATION ONLY.
NUMERIC NUMBERS (1,2,3..) - FOR CONSTRUCTION

| No. | DATE | ISSUED BY | DESCRIPTION |
|---|---|---|---|
| 0 | 09/10/2026 | S.M | ISSUED FOR INFORMATION |

ASSOCIATED DRAWINGS

| DRAWING NUMBER | DRAWING TITLE |
|---|---|

CLIENT

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PROJECT TITLE :

THOHOYANDOU BOTANICAL GARDEN

DRAWING TITLE

PROPOSED STORMWATER LAYOUT AND PIPE NETWORK

ENGINEER (CONSULTANT)

| INITIALS AND SURNAME | SIGNATURE | Pr. Reg No. | DATE |
|---|---|---|---|
| | | | 09/10/2026 |

CLIENT REPRESENTIVE

| INITIALS AND SURNAME | SIGNATURE | DESIGNATION | DATE |
|---|---|---|---|
| | | | 09/10/2026 |

| DESIGNED | DESIGN APPROVED | DRAWN | DRAWING CHECKED |
|---|---|---|---|
| S.M | A.B | S.M | A.B |

| DATE | SHEET NUMBER | SCALE |
|---|---|---|
| 09/10/2026 | SHEET 1 OF 1 | AS SHOWN |

| ISSUED FOR | PROJECT NUMBER | PAPER SIZE |
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