

| Tender No.: 10401777   |                    | Devland Meter connection<br>SCHEDULE E: Civil  |                |     |      |        |
|--|--------------------|--|----------------|-----|------|--------|
| Description: Construction of a concrete valve chamber at Devland |                    |  |                |     |      |        |
| Item No  | Payment Refers     | Description  | Unit           | Qty | Rate | Amount |
| E1   | <b>SANS 1200 C</b> | <b>SECTION C: SITE CLEARANCE</b>   |                |     |      |        |
| E1.1   | 8.2.1              | Clear and grub   | m <sup>2</sup> | 60  |      | R -    |
| E1.2   | 8.2.4              | Reclear surfaces (only on instructions from the engineer)  | m <sup>2</sup> | 20  |      | R -    |
| E1.2.1   | 8.2.8              | <u>Demolish and remove structures/buildings and dismantle steelworks, etc</u>  |                |     |      |        |
| E1.2.3   |                    | Existing brick chamber with reinforced concrete base and roofslab  | Sum            | 0   |      | R -    |
| E1.3   | 8.2.10             | Remove topsoil to nominal depth of 150mm and stockpile   | m <sup>3</sup> | 20  |      | R -    |
| E2   | <b>SABS 1200DA</b> | <b>SECTION DA: EARTHWORKS</b>  |                |     |      |        |
| E2.1   | 8.3.1(b)           | Excavate in all materials and use for backfill (• In-situ backfill of selected suitable G7 material from excavations, compacted in layers not exceeding 150mm to 93% MOD AASHTO density at -1% to +2% OMC) or dispose as ordered. <b>All haul for this contract shall be regarded as freehaul. The cost of transportation of all materials will be deemed to be included in the rates and prices tendered.</b> | m <sup>3</sup> | 285 |      | R -    |
| E2.2   | 8.3.1 (c)          | Extra-over for:  |                |     |      | R -    |
| E2.2.1   |                    | 2) hard rock excavation (Provisional)  | m <sup>3</sup> | 22  |      | R -    |
| E2.3   | 8.3.4              | Importing of material from a commercial sources  |                |     |      |        |
| E2.4   | 8.3.4.1            | Importing of backfill G7 Material compacted in layers not exceeding 150mm in thickness compacted to 93% MOD AASHTO density AT -1% to +2% OMC   | m <sup>3</sup> | 100 |      | R -    |
| E2.5   | 8.3.4.2            | Extra over for 8.3.1(b)  | m <sup>3</sup> | 22  | R -  | R -    |
| E2.6   | 8.3.4.2            | G5 Material compacted in layers not exceeding 100 mm in thickness compacted to 95% MOD AASHTO density AT -1% to +2% OMC  | m <sup>3</sup> | 17  |      | R -    |
| E2.7   | 8.3.6              | Topsoiling from stockpile and planting of grass  | m <sup>2</sup> | 130 |      | R -    |
| E2.8   | 8.3.7              | Planting of grass from commercial sources to match what is on site   | m <sup>2</sup> | 0   |      | R -    |
| E2.9   | 8.8                | Shoring of excavations   | Sum            | 1   |      | R -    |
| E2.10  | PSDA 8.3.10        | Take and provide photographic records before and after construction  | sum            | 1   |      | R -    |
| <b>Carried Forward</b>   |                    |  |                |     |      | R -    |

| Brought Forward |                |   |                |       |   |          | R | -            |
|-----------------|----------------|---|----------------|-------|---|----------|---|--------------|
| E3              | SABS<br>1200GA | <b>SECTION GA: CONCRETE (SMALL WORKS)</b>                           |                |       |   |          |   |              |
| E3.1            | 8.2            | <b><u>SCHEDULED FORMWORK ITEMS</u></b>                              |                |       |   |          |   |              |
| E3.1.1          | 8.2.1          | Rough formwork (sides of base slab)                                 | m <sup>2</sup> | 13    | R | 512.00   | R | 6,656.00     |
| E3.1.2          | 8.2.2          | Smooth formwork<br>a) To sides of walls and soffit of roof slab     | m <sup>2</sup> | 260   | R | 680.00   | R | 176,800.00   |
| E3.2            | 8.2.3          | Narrow widths   |                |       |   |          | R | -            |
| E3.2.1          |                | Sides of roof slab (250mm high)                                     | m              | 25    | R | 165.00   | R | 4,125.00     |
| E3.2.2          |                | Sides of base slab (450mm high)                                     | m              | 28    | R | 165.00   | R | 4,620.00     |
| E3.2.3          |                | To form sides of sump below floor (200mm high)                      | m              | 2     | R | 165.00   | R | 330.00       |
| E3.3            | 8.2.4          | Box out Holes / Form Voids  |                |       |   |          |   |              |
| E3.3.1          |                | a) Box out hole for 500mm x 500mm x 200mm (deep) sump               | No.            | 1     | R | 2,800.00 | R | 2,800.00     |
| E3.3.2          |                | c) Box out hole for 350mm x 350mm x 400mm (deep)                    | No.            | 3     | R | 2,800.00 | R | 8,400.00     |
| E3.4            | 8.3            | <b><u>SCHEDULED REINFORCEMENT ITEMS</u></b>                         |                |       |   |          |   |              |
| E3.4.1          | 8.3.1          | <u>Steel bars</u>   |                |       |   |          |   |              |
| E3.4.1.1        |                | a) Mild steel reinforcement   | kg             | 1600  | R | 28.60    | R | 45,760.00    |
| E3.4.1.2        |                | b) High tensile steel reinforcement                                 | kg             | 16000 | R | 55.90    | R | 894,400.00   |
| E3.5            | 8.4            | <b><u>SCHEDULED CONCRETE ITEMS</u></b>                              |                |       |   |          |   |              |
| E3.5.1          | 8.4.2          | <u>Blinding Layer in ..... Concrete</u>                             |                |       |   |          |   |              |
| E3.5.1.1        |                | 50mm Class 15/19MPa Blinding Layer                                  | m <sup>2</sup> | 42    | R | 550.00   | R | 23,100.00    |
| E3.5.2          | 8.4.3          | <u>Strength Concrete</u>  |                |       |   |          |   |              |
| E3.5.2.1        |                | a) Grade 35MPa/19mm (Base and Walls)                                | m <sup>3</sup> | 71    | R | 2,800.00 | R | 198,800.00   |
| E3.5.2.2        |                | b) Grade 60MPa/19mm   | m <sup>3</sup> | 9     | R | 3,300.00 | R | 29,700.00    |
| E3.5.2.3        |                | c) Grade 15MPa mass concrete (access steps - external)              | m <sup>3</sup> | 3     | R | 1,658.12 | R | 4,974.35     |
| E5.5.3          | 8.4.4          | Unformed surface finishes   |                |       |   |          |   |              |
| E5.5.3.1        |                | Wood-floated finish to floor and roof slabs                         | m <sup>2</sup> | 73    | R | 45.00    | R | 3,285.00     |
| E6              | 8.8            | <b><u>MISCELLANEOUS</u></b>   |                |       |   |          |   |              |
| E6.1            |                | <u>Cast in PVC sleeves:</u>   |                |       |   |          |   |              |
| E6.1.1          |                | a) 110mm diameter x 400mm long including vermin proof mesh          | No.            | 6     | R | 350.00   | R | 2,100.00     |
| E6.1.2          |                | b) Cast in 200mm diameter x 280mm long PVC sleeves above valve caps | No.            | 3     | R | 200.00   | R | 600.00       |
| Carried Forward |                |   |                |       |   |          | R | 1,406,450.35 |

|   |                      |  |                |     |   |           |   |              |
|---|----------------------|--|----------------|-----|---|-----------|---|--------------|
| <b>Brought Forward</b>                                |                      |  |                |     |   |           | R | 1,406,450.35 |
| E6.1.3  |                      | c) 50mm diameter x 180mm long PVC sleeves on removable roof panel  | No.            | 8   | R | 280.00    | R | 2,240.00     |
| E6.2  |                      | Cast in standard Rand Water manhole frame and cover (supplied by Rand Water)   | No.            | 2   | R | 3,100.00  | R | 6,200.00     |
| E6.3  |                      | Supply and cast in standard Rand Water frame and sump cover (as per DGR No. A8879)   | No.            | 1   | R | 2,800.00  | R | -            |
| E6.4  | SANS 2001-CC1- 5.1.6 | Water tightness test of the concrete meter chamber   | Sum            | 1   | R | 48,000.00 | R | 2,800.00     |
| E6.5  |                      | Rigid polymer modified liquid waterproofing (Apply on both sides of the walls)   | m <sup>2</sup> | 225 | R | 310.00    | R | 48,000.00    |
| E6.6  |                      | Construction of 15MPa mass concrete platform with access steps inside chamber  | m <sup>3</sup> | 3   | R | 1,658.12  | R | 69,750.00    |
|   | 8.5                  | <u>JOINTS</u>  |                |     |   |           |   |              |
| E6.7  |                      | 2 Layers off gundle brickgrip DPC 375 Bond Breaker or similar approved all around  | m <sup>2</sup> | 4   | R | 25.00     | R | 4,974.35     |
| E6.8  | PSGA 8.9             | Hydrophilic waterbar "Sika swell 2507H" or similar approved for:   | m              | 20  | R | 750.00    | R | 100.00       |
| E6.9  | PSGA 8.10            | Apply "Sikadur-combiflex" and "Sikaflex - 11FC" or similar approved joint sealing agent as per manufacturers instructuions | m <sup>2</sup> | 10  | R | 350.00    | R | 15,000.00    |
| E7  | SABS 1200HA          | <b>SECTION HA: STRUCTURAL STEELWORK (SUNDRY ITEMS)</b>   |                |     |   |           |   |              |
|   | 8.3                  | <b>SCHEDULED ITEMS</b>   |                |     |   |           |   |              |
| E7.1  | 8.3.1                | <u>Structural Steel</u>  |                |     |   |           |   |              |
| E7.1.1  |                      | a) Supply all materials and install the Steel valve supports as detailed on Rand Water Detail Drg A12210:                  | No.            | 3   | R | 20,000.00 | R | 60,000.00    |
| E7.2  | 8.3.3                | <u>Ladders complete and installed</u>  |                |     |   |           |   |              |
| E7.2.1  |                      | Supply and Install Standard Rand Water Internal Catladder 4600mm high (as per DRG No. A7406)                               | No.            | 2   | R | 18,000.00 | R | 36,000.00    |
| E7.2.2  |                      | Supply and Install Standard Rand Water Grab Rail (as per DRG No: A9858)  | No.            | 2   | R | 2,000.00  | R | 4,000.00     |
| <b>SCHEDULE E SUBTOTAL CARRIED FORWARD TO SUMMARY</b> |                      |  |                |     |   |           | R | 1,659,014.69 |