

## TABLA DE DESCRIPCIÓN DE RUBROS, UNIDADES, CANTIDADES Y PRECIOS

**PROYECTO:** OBJETO DE CONTRATACIÓN: CONSTRUCCIÓN DEL SISTEMA DE ALCANTARILLADO SANITARIO Y AGUA POTABLE DE LA LOTIZACIÓN VALLE ALTO, PAMPA 1, PAMPA 2 Y HERMANOS HERDOIZA, CANTÓN CUMANDÁ, PROVINCIA DE CHIMBORAZO.

**CONSULTOR:** ING. CRISTIAN VELASCO

**PROVINCIA:** CHIMBORAZO

**CANTON:** CUMANDÁ

| RUBRO No. | DESCRIPCIÓN                                                            | UNIDAD | CANTIDAD  | PRECIO UNITARIO | PRECIO TOTAL        |
|-----------|------------------------------------------------------------------------|--------|-----------|-----------------|---------------------|
|           | <b>ALCANTARILLADO</b>                                                  |        |           |                 | <b>1,327,182.09</b> |
|           | <b>A. PRELIMINARES</b>                                                 |        |           |                 | <b>773,591.47</b>   |
| 1         | REPLANTEO Y NIVELACION (KM-E. TOTAL)                                   | KM     | 15.72     | 175.33          | 2,756.19            |
| 2         | LEVANTAMIENTO E INSTALACIÓN DE ADOQUIN DE CEMENTO (MATERIAL EXISTENTE) | M2     | 3,326.80  | 8.78            | 29,209.30           |
| 3         | EXCAVACION MANUAL DE ZANJAS EN TIERRA H= 0-2M                          | M3     | 1,886.70  | 8.04            | 15,169.07           |
| 4         | EXCAVACION A MAQUINA EN TIERRA H=0-2 M                                 | M3     | 4,716.77  | 2.45            | 11,556.09           |
| 5         | EXCAVACION A MAQUINA EN TIERRA H=2-4 M                                 | M3     | 2,830.06  | 4.20            | 11,886.25           |
| 6         | EXCAVACION DE ZANJAS A MAQUINA EN CONGLOMERADO H= 0-2 M                | M3     | 7,075.15  | 4.52            | 31,979.68           |
| 7         | EXCAVACION DE ZANJAS A MAQUINA EN CONGLOMERADO H=2-4 M                 | M3     | 2,358.39  | 4.73            | 11,155.18           |
| 8         | EXCAVACION DE ZANJAS A MAQUINA EN ROCA                                 | M3     | 4,716.77  | 13.16           | 62,072.69           |
| 9         | PREPARACION DE FONDO DE ZANJA                                          | M2     | 11,099.56 | 1.58            | 17,537.30           |
| 10        | ENCAMADO DE ARENA (E=10 CM)                                            | M3     | 1,109.96  | 2.51            | 2,786.00            |
| 11        | PROVISION, INSTALACION Y PRUEBA DE TUBERIA PVC 200MM                   | M      | 13,760.13 | 25.55           | 351,571.32          |
| 12        | PROVISION, INSTALACION Y PRUEBA DE TUBERIA PVC 250MM                   | M      | 1,956.63  | 30.30           | 59,285.89           |
| 13        | ENTIBADO DE ZANJA (2 USOS)                                             | M2     | 4,898.91  | 10.04           | 49,185.06           |
| 14        | RELLENO COMPACTADO CON MAT. EXCAVACION                                 | M3     | 21,470.51 | 5.15            | 110,573.13          |
| 15        | DESALOJO DE MATERIAL SOBRANTE                                          | M3     | 2,113.33  | 3.25            | 6,868.32            |
|           | <b>B. POZOS DE REVISION</b>                                            |        |           |                 | <b>186,783.10</b>   |
| 16        | POZOS DE REVISION H=0-2.00 M, INCLUIDO HF (INC. TAPA Y CERCO)          | U      | 179.00    | 697.33          | 124,822.07          |
| 17        | POZOS DE REVISION H=2.01 - 4.00 M, INCLUIDO HF (INC. TAPA Y CERCO)     | U      | 45.00     | 1,007.15        | 45,321.75           |
| 18        | POZOS DE REVISION H=4.01 - 6.00 M, INCLUIDO HF (INC. TAPA Y CERCO)     | U      | 8.00      | 1,203.05        | 9,624.40            |
| 19        | POZO DE REVISION H=7.00M, INCLUIDO H.F (INC. TAPA Y CERCO)             | U      | 4.00      | 1,753.72        | 7,014.88            |

|    |                                                                    |    |          |          |                     |
|----|--------------------------------------------------------------------|----|----------|----------|---------------------|
|    | <b>C. CONEXIONES DOMICILIARIAS</b>                                 |    |          |          | <b>323,165.04</b>   |
| 20 | EXCAVACION MANUAL DE ZANJAS EN TIERRA                              | M3 | 2,176.00 | 8.04     | 17,495.04           |
| 21 | EXCAVACION DE ZANJAS A MAQUINA EN TIERRA                           | M3 | 108.08   | 5.00     | 540.40              |
| 22 | CAJA DE REVISION DE AGUAS SERVIDAS 60X60 H=0.9, CON TAPA DE H.A.   | U  | 1,360.00 | 112.26   | 152,673.60          |
| 23 | PROVISION, INSTALACION Y PRUEBA DE TUBERIA PVC 160MM               | M  | 8,160.00 | 14.05    | 114,648.00          |
| 24 | PROVISION E INSTALACION DE SILLA YEE PVC 250X160MM                 | U  | 1,360.00 | 19.56    | 26,601.60           |
| 25 | RELLENO COMPACTADO CON MAT. EXCAVACION                             | M3 | 2,176.00 | 5.15     | 11,206.40           |
|    | <b>D. DESCARGA</b>                                                 |    |          |          | <b>24,461.38</b>    |
| 26 | DESALOJO DE MATERIAL SOBRANTE                                      | M3 | 137.00   | 3.25     | 445.25              |
| 27 | EXCAVACION DE ZANJAS A MAQUINA EN CONGLOMERADO H= 0-2 M            | M3 | 136.89   | 4.52     | 618.74              |
| 28 | EXCAVACION DE ZANJAS A MAQUINA EN ROCA                             | M3 | 68.45    | 13.16    | 900.80              |
| 29 | PREPARACION DE FONDO DE ZANJA                                      | M2 | 199.76   | 1.58     | 315.62              |
| 30 | ENCAMADO DE ARENA (E=10 CM)                                        | M3 | 19.98    | 2.51     | 50.15               |
| 31 | ENTIBADO DE ZANJA (2 USOS)                                         | M2 | 10.08    | 10.04    | 101.20              |
| 32 | PROVISION, INSTALACION Y PRUEBA DE TUBERIA PVC 250MM               | M  | 266.34   | 30.30    | 8,070.10            |
| 33 | RELLENO COMPACTADO CON MAT. EXCAVACION                             | M3 | 289.94   | 5.15     | 1,493.19            |
| 34 | DESALOJO DE MATERIAL SOBRANTE                                      | M3 | 52.30    | 3.25     | 169.98              |
| 35 | POZOS DE REVISION H=2.01 - 4.00 M, INCLUIDO HF (INC. TAPA Y CERCO) | U  | 7.00     | 1,007.15 | 7,050.05            |
| 36 | ROTURA DE PAVIMENTO ASFÁLTICO E=2"                                 | M2 | 230.00   | 7.08     | 1,628.40            |
| 37 | REPOSICIÓN DE CARPETA ASFÁLTICA 2"                                 | M2 | 230.00   | 15.73    | 3,617.90            |
|    | <b>I. PLATAFORMA</b>                                               |    |          |          | <b>19,181.10</b>    |
| 38 | EXCAVACION A MAQUINA DE 0-2 M                                      | M3 | 2,044.52 | 4.33     | 8,852.77            |
| 39 | RELLENO COMPACTADO CON MAT. EXCAVACION                             | M3 | 2,005.50 | 5.15     | 10,328.33           |
|    | <b>PLANTA DE TRATAMIENTO</b>                                       |    |          |          | <b>1,077,068.72</b> |
|    | <b>OBRA CIVIL</b>                                                  |    |          |          | <b>69,795.77</b>    |
|    | <b>PLATAFORMA</b>                                                  |    |          |          | <b>69,795.77</b>    |
| 40 | LIMPIEZA Y DESBROCE                                                | M2 | 4,273.00 | 2.44     | 10,426.12           |
| 41 | DESALOJO DE MATERIAL HASTA 5 KM                                    | M3 | 2,136.50 | 3.72     | 7,947.78            |
| 42 | REPLANTEO Y NIVELACIÓN                                             | M2 | 4,273.00 | 0.82     | 3,503.86            |
| 43 | EXCAVACIÓN A MÁQUINA EN TIERRA                                     | M3 | 6,754.91 | 2.93     | 19,791.89           |
| 44 | RELLENO COMPACTADO (MATERIAL MEJORAMIENTO SUB BASE CLASE 2)        | M3 | 2,134.00 | 13.18    | 28,126.12           |
|    | <b>ESTRUCTURAS DE PRETRATAMIENTO</b>                               |    |          |          | <b>49,665.13</b>    |

|    | DESARENADOR                                                     |    |          |        | 28,131.65        |
|----|-----------------------------------------------------------------|----|----------|--------|------------------|
| 45 | REPLANTEO Y NIVELACIÓN                                          | M  | 30.00    | 0.78   | 23.40            |
| 46 | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2                     | M3 | 1.34     | 172.34 | 230.94           |
| 47 | EXCAVACIÓN A MÁQUINA EN TIERRA                                  | M3 | 60.00    | 2.93   | 175.80           |
| 48 | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%              | M3 | 17.00    | 19.56  | 332.52           |
| 49 | ACERO DE REFUERZO FY=4200 KG/CM2                                | KG | 2,822.80 | 2.30   | 6,492.44         |
| 50 | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE                    | M2 | 125.00   | 15.53  | 1,941.25         |
| 51 | ENCOFRADO/DESENCOFRADO                                          | M2 | 125.00   | 18.49  | 2,311.25         |
| 52 | COMPUERTA DE VOLANTE (SUM/INST/PRUEBA) C=2U                     | U  | 2.00     | 722.57 | 1,445.14         |
| 53 | VERTEDERO DE TOOL NEGRO E=3MM (0.40*0.85M)                      | U  | 2.00     | 209.82 | 419.64           |
| 54 | REJILLA DESARENADOR (0.90*0.7M)                                 | U  | 2.00     | 248.22 | 496.44           |
| 55 | HORMIGON SIMPLE FC=210KG/CM2                                    | M3 | 49.36    | 186.95 | 9,227.85         |
| 56 | MALLA ELECTROSOLDADA 6*10 (TAPAS)                               | M2 | 60.00    | 6.40   | 384.00           |
| 57 | ACERO DE REFUERZO FY=4200 KG/CM2                                | KG | 84.83    | 2.30   | 195.11           |
| 58 | TUBERÍA PVC 160MM (MAT/TRAN/INST) DESAGUE NORMA INEN 1374       | M  | 15.00    | 10.50  | 157.50           |
| 59 | TUBERIA PVC 200MM (MAT/TRANS/INST) DESAGUE                      | M  | 5.00     | 18.72  | 93.60            |
| 60 | CODO PVC D=200 MM X 90 DESAGUE NORMA INEN 1374                  | U  | 6.00     | 30.06  | 180.36           |
| 61 | TEE PVC D=200 MM DESAGUE NORMA INEN 1374                        | U  | 1.00     | 39.85  | 39.85            |
| 62 | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE                | M3 | 22.34    | 178.36 | 3,984.56         |
|    | <b>CANAL TAMIZ MECANICO (CÁMARA DE ENTRADA)</b>                 |    |          |        | <b>21,533.48</b> |
| 64 | REPLANTEO Y NIVELACIÓN                                          | M2 | 24.00    | 0.82   | 19.68            |
| 63 | REPLANTEO Y NIVELACIÓN                                          | M  | 12.60    | 0.78   | 9.83             |
| 65 | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2                     | M3 | 1.85     | 172.34 | 318.83           |
| 66 | EXCAVACIÓN A MÁQUINA EN TIERRA                                  | M3 | 25.00    | 2.93   | 73.25            |
| 67 | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%              | M3 | 6.30     | 19.56  | 123.23           |
| 68 | ACERO DE REFUERZO FY=4200 KG/CM2                                | KG | 561.03   | 2.30   | 1,290.37         |
| 69 | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE                    | M2 | 34.63    | 15.53  | 537.80           |
| 70 | ENCOFRADO/DESENCOFRADO                                          | M2 | 50.10    | 18.49  | 926.35           |
| 71 | SUM.INST.TUBERÍA PVC ALCANT. CORRUGADO DI=200MM                 | M  | 6.00     | 42.94  | 257.64           |
| 72 | SUM.INST.TUBERÍA PVC ALCANT. CORRUGADO DI=300MM NORMA INEN 2059 | M  | 18.00    | 42.94  | 772.92           |
| 73 | TAPA SANITARIA DE TOL GALV. 80X80CM                             | U  | 23.44    | 118.75 | 2,783.50         |

|                                                            |                                                           |    |           |        |                   |
|------------------------------------------------------------|-----------------------------------------------------------|----|-----------|--------|-------------------|
| 74                                                         | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE          | M3 | 79.71     | 178.36 | 14,217.08         |
| 75                                                         | SUM. INST. REJILLA EMERGENTE PARA TORNILLO (0,72 X 0,74M) | KG | 25.00     | 8.12   | 203.00            |
| <b>REACTOR BIOLOGICO</b>                                   |                                                           |    |           |        | <b>63,229.35</b>  |
| <b>FOSA</b>                                                |                                                           |    |           |        | <b>28,848.26</b>  |
| 76                                                         | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%        | M3 | 285.20    | 19.56  | 5,578.51          |
| 77                                                         | SUELO CEMENTO (ARENA 95% - CEMENTO 5%)                    | M3 | 85.27     | 29.33  | 2,500.97          |
| 78                                                         | SUM. E INST. DE GEOMEMBRANA HDPE E=1.00MM                 | M2 | 1,432.33  | 14.50  | 20,768.78         |
| <b>MURO CENTRAL</b>                                        |                                                           |    |           |        | <b>19,624.70</b>  |
| 79                                                         | REPLANTEO Y NIVELACIÓN                                    | M  | 31.20     | 0.78   | 24.34             |
| 80                                                         | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%        | M3 | 17.16     | 19.56  | 335.65            |
| 81                                                         | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2               | M3 | 8.38      | 172.34 | 1,444.21          |
| 82                                                         | ENCOFRADO/DESENCOFRADO                                    | M2 | 209.80    | 18.49  | 3,879.20          |
| 83                                                         | ACERO DE REFUERZO FY=4200 KG/CM2                          | KG | 4,662.44  | 2.30   | 10,723.61         |
| 84                                                         | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE              | M2 | 189.60    | 15.53  | 2,944.49          |
| 85                                                         | TUBO HG 2" (PROVISION E INSTALACION)                      | U  | 8.17      | 33.44  | 273.20            |
| <b>PUNTES PEATONALES L=12M (CANTIDAD PARA 2 UNIDADES)</b>  |                                                           |    |           |        | <b>14,756.39</b>  |
| 86                                                         | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE          | M3 | 2.50      | 178.36 | 445.90            |
| 87                                                         | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2               | M3 | 7.20      | 172.34 | 1,240.85          |
| 88                                                         | ACERO DE REFUERZO FY=4200 KG/CM2                          | KG | 1,180.38  | 2.30   | 2,714.87          |
| 89                                                         | HORMIGON SIMPLE FC=210KG/CM2                              | M3 | 7.20      | 186.95 | 1,346.04          |
| 90                                                         | SUM. E INST. DE APOYO DE NEOPRENO DE 100X150X10MM         | U  | 8.00      | 8.93   | 71.44             |
| 91                                                         | ACERO ESTRUCTURAL (INCLUYE INSTALACION Y PINTURA)         | KG | 2,078.04  | 3.78   | 7,854.99          |
| 92                                                         | SUM. E INST. DE ECOPISO PLASTICO (REGATON)                | M2 | 28.80     | 37.58  | 1,082.30          |
| <b>CLARIFICADORES</b>                                      |                                                           |    |           |        | <b>137,146.87</b> |
| <b>CAMARAS DE CLARIFICACION (CANTIDAD PARA 2 UNIDADES)</b> |                                                           |    |           |        | <b>109,320.25</b> |
| 93                                                         | REPLANTEO Y NIVELACIÓN                                    | M  | 215.91    | 0.78   | 168.41            |
| 94                                                         | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%        | M3 | 105.75    | 19.56  | 2,068.47          |
| 95                                                         | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2               | M3 | 1.44      | 172.34 | 248.17            |
| 96                                                         | ENCOFRADO/DESENCOFRADO                                    | M2 | 1,319.24  | 18.49  | 24,392.75         |
| 97                                                         | ACERO DE REFUERZO FY=4200 KG/CM2                          | KG | 30,829.90 | 2.30   | 70,908.77         |

|                                                                      |                                                    |    |          |        |                   |
|----------------------------------------------------------------------|----------------------------------------------------|----|----------|--------|-------------------|
| 98                                                                   | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE       | M2 | 637.01   | 15.53  | 9,892.77          |
| 99                                                                   | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE   | M3 | 9.20     | 178.36 | 1,640.91          |
| <b>PUENTES PEATONALES</b>                                            |                                                    |    |          |        | <b>18,804.00</b>  |
| 100                                                                  | SUM. E INST. DE APOYO DE NEOPRENO DE 100X150X10MM  | U  | 16.00    | 8.93   | 142.88            |
| 101                                                                  | ACERO ESTRUCTURAL (INCLUYE INSTALACION Y PINTURA)  | KG | 4,337.91 | 3.78   | 16,397.30         |
| 102                                                                  | SUM. E INST. DE ECOPISO PLASTICO (REGATON)         | M2 | 60.24    | 37.58  | 2,263.82          |
| <b>CAMARAS LATERALES DE RECOLECCION (CANTIDADES PARA 4 UNIDADES)</b> |                                                    |    |          |        | <b>9,022.62</b>   |
| 103                                                                  | REPLANTEO Y NIVELACIÓN                             | M  | 16.00    | 0.78   | 12.48             |
| 104                                                                  | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95% | M3 | 8.36     | 19.56  | 163.52            |
| 105                                                                  | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2        | M3 | 1.56     | 172.34 | 268.85            |
| 106                                                                  | ENCOFRADO/DESENCOFRADO                             | M2 | 94.64    | 18.49  | 1,749.89          |
| 107                                                                  | ACERO DE REFUERZO FY=4200 KG/CM2                   | KG | 1,146.88 | 2.30   | 2,637.82          |
| 108                                                                  | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE       | M2 | 98.45    | 15.53  | 1,528.93          |
| 109                                                                  | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE   | M3 | 14.92    | 178.36 | 2,661.13          |
| <b>DIGESTOR DE LODOS</b>                                             |                                                    |    |          |        | <b>329,925.68</b> |
| <b>FOSA</b>                                                          |                                                    |    |          |        | <b>9,497.73</b>   |
| 110                                                                  | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95% | M3 | 52.66    | 19.56  | 1,030.03          |
| 111                                                                  | SUELO CEMENTO (ARENA 95% - CEMENTO 5%)             | M3 | 28.10    | 29.33  | 824.17            |
| 112                                                                  | SUM. E INST. DE GEOMEMBRANA HDPE E=1.00MM          | M2 | 527.14   | 14.50  | 7,643.53          |
| <b>MURO CENTRAL</b>                                                  |                                                    |    |          |        | <b>14,954.71</b>  |
| 113                                                                  | REPLANTEO Y NIVELACIÓN                             | M  | 18.72    | 0.78   | 14.60             |
| 114                                                                  | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95% | M3 | 9.36     | 19.56  | 183.08            |
| 115                                                                  | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2        | M3 | 9.37     | 172.34 | 1,614.83          |
| 116                                                                  | ENCOFRADO/DESENCOFRADO                             | M2 | 114.64   | 18.49  | 2,119.69          |
| 117                                                                  | ACERO DE REFUERZO FY=4200 KG/CM2                   | KG | 2,518.81 | 2.30   | 5,793.26          |
| 118                                                                  | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE       | M2 | 96.60    | 15.53  | 1,500.20          |
| 119                                                                  | TUBO HG 2" (PROVISION E INSTALACION)               | U  | 4.84     | 33.44  | 161.85            |
| 120                                                                  | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE   | M3 | 20.00    | 178.36 | 3,567.20          |
| <b>PUENTES PEATONALES L=7M (CANTIDAD PARA 2 UNIDADES)</b>            |                                                    |    |          |        | <b>97,205.00</b>  |

|                                  |                                                           |    |          |        |                  |
|----------------------------------|-----------------------------------------------------------|----|----------|--------|------------------|
| 121                              | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE          | M3 | 7.65     | 178.36 | 1,364.45         |
| 122                              | ACERO DE REFUERZO FY=4200 KG/CM2                          | KG | 1,180.38 | 2.30   | 2,714.87         |
| 123                              | HORMIGON SIMPLE FC=210KG/CM2                              | M3 | 37.56    | 186.95 | 7,021.84         |
| 124                              | SUM. E INST. DE APOYO DE NEOPRENO DE 100X150X10MM         | U  | 8.00     | 8.93   | 71.44            |
| 125                              | ACERO ESTRUCTURAL (INCLUYE INSTALACION Y PINTURA)         | KG | 1,258.72 | 3.78   | 4,757.96         |
| 126                              | SUM. E INST. DE ECOPISO PLASTICO (REGATON)                | M2 | 16.80    | 37.58  | 631.34           |
| 127                              | REPLANTEO Y NIVELACIÓN                                    | M  | 116.72   | 0.78   | 91.04            |
| 128                              | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%        | M3 | 60.50    | 19.56  | 1,183.38         |
| 129                              | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2               | M3 | 283.08   | 172.34 | 48,786.01        |
| 130                              | ENCOFRADO/DESENCOFRADO                                    | M2 | 466.90   | 18.49  | 8,632.98         |
| 131                              | ACERO DE REFUERZO FY=4200 KG/CM2                          | KG | 5,603.21 | 2.30   | 12,887.38        |
| 132                              | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE              | M2 | 459.04   | 15.53  | 7,128.89         |
| 133                              | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE          | M3 | 10.84    | 178.36 | 1,933.42         |
| <b>DESHIDRATADOR</b>             |                                                           |    |          |        | <b>46,986.88</b> |
| 134                              | REPLANTEO Y NIVELACIÓN                                    | M  | 178.80   | 0.78   | 139.46           |
| 135                              | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%        | M3 | 19.03    | 19.56  | 372.23           |
| 136                              | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2               | M3 | 19.91    | 172.34 | 3,431.29         |
| 137                              | HORMIGON SIMPLE FC=210KG/CM2                              | M3 | 52.79    | 186.95 | 9,869.09         |
| 138                              | ENCOFRADO/DESENCOFRADO                                    | M2 | 364.35   | 18.49  | 6,736.83         |
| 139                              | ACERO DE REFUERZO FY=4200 KG/CM2                          | KG | 6,526.69 | 2.30   | 15,011.39        |
| 140                              | ENLUCIDO DE PARED Y PISO + IMPERMEABILIZANTE              | M2 | 225.00   | 15.53  | 3,494.25         |
| 141                              | EMPACADO DE ARENA                                         | M3 | 25.35    | 25.62  | 649.47           |
| 142                              | GRAVA 3/4 (MATERIAL FILTRANTE)                            | M3 | 84.50    | 56.02  | 4,733.69         |
| 143                              | TUBERÍA PVC 160MM (MAT/TRAN/INST) DESAGUE NORMA INEN 1374 | M  | 78.00    | 10.50  | 819.00           |
| 144                              | ADOQUINADO VEHICULAR 350KG/CM2 + CAMA DE ARENA            | M2 | 36.29    | 24.67  | 895.27           |
| 145                              | HORMIGON SIMPLE FC=280KG/CM2 + IMPERMEABILIZANTE          | M3 | 2.00     | 178.36 | 356.72           |
| 146                              | SUM. E INST. DE GEOTEXTIL NO TEJIDO 1600                  | M2 | 28.60    | 16.72  | 478.19           |
| <b>CASA DE MAQUINAS Y BODEGA</b> |                                                           |    |          |        | <b>13,292.82</b> |
| 147                              | REPLANTEO Y NIVELACIÓN                                    | M2 | 37.00    | 0.82   | 30.34            |
| 148                              | MEJORAMIENTO DE SUELO PIEDRA+SUBBASE COMPACTADO95%        | M3 | 3.63     | 19.56  | 71.00            |



|                         |                                                                                            |    |          |        |                   |
|-------------------------|--------------------------------------------------------------------------------------------|----|----------|--------|-------------------|
| 149                     | REPLANTILLO DE HORMIGON SIMPLE FC 140KG/CM2                                                | M3 | 0.63     | 172.34 | 108.57            |
| 150                     | ENCOFRADO/DESENCOFRADO                                                                     | M2 | 82.25    | 18.49  | 1,520.80          |
| 151                     | ACERO DE REFUERZO FY=4200 KG/CM2                                                           | KG | 1,500.00 | 2.30   | 3,450.00          |
| 152                     | HORMIGON SIMPLE FC=210KG/CM2                                                               | M3 | 2.19     | 186.95 | 409.42            |
| 153                     | MAMPOSTERIA DE BLOQUE ALIVIANADO E=10CM                                                    | M2 | 12.60    | 22.73  | 286.40            |
| 154                     | MAMPOSTERIA DE BLOQUE ALIVIANADO E=15CM                                                    | M2 | 130.00   | 21.54  | 2,800.20          |
| 155                     | ENLUCIDO INTERIOR Y EXTERIOR                                                               | M2 | 260.00   | 12.65  | 3,289.00          |
| 156                     | PUERTA METALICA TOL - CORRUGADO 0.80X2.10                                                  | M2 | 4.00     | 151.36 | 605.44            |
| 157                     | VENTANA DE HIERRO CON PROTECCIÓN (INCLUYE INSTALACIÓN Y PINTURA)                           | M2 | 3.60     | 65.88  | 237.17            |
| 158                     | SUM. INS. INODORO, INC. ACCESORIOS, TUBOS DE ABASTO, VALVULAS DE CIERRE Y LLAVES (CLASE A) | U  | 1.00     | 114.79 | 114.79            |
| 159                     | SUM. INS. LAVABO, INC. ACCESORIOS, TUBOS DE ABASTO, VALVULAS DE CIERRE Y LLAVES (CLASE A)  | U  | 1.00     | 72.79  | 72.79             |
| 160                     | SUM. INS. DUCHA DE EMERGENCIA ,INC. ACCESORIOS, VALVULAS Y LLAVES (CLASE A)                | U  | 1.00     | 296.90 | 296.90            |
| <b>ZONAS EXTERIORES</b> |                                                                                            |    |          |        | <b>11,555.37</b>  |
| 161                     | REPLANTEO Y NIVELACIÓN                                                                     | M2 | 867.43   | 0.82   | 711.29            |
| 162                     | EXCAVACIÓN A MÁQUINA EN TIERRA                                                             | M3 | 737.25   | 2.93   | 2,160.14          |
| 163                     | ENCOFRADO METALICO                                                                         | M2 | 9.60     | 16.74  | 160.70            |
| 164                     | HORMIGON SIMPLE FC=210KG/CM2                                                               | M3 | 0.38     | 186.95 | 71.04             |
| 165                     | GRAVA 3/4 E=15CM (CAMINERIA DE 1M DE ANCHO EN ESTRUCTURAS D-TG-FS)                         | M3 | 65.59    | 39.64  | 2,599.99          |
| 166                     | RELLENO COMPACTADO (MATERIAL MEJORAMIENTO SUB BASE CLASE 2)                                | M3 | 433.72   | 13.18  | 5,716.43          |
| 167                     | ACERO ESTRUCTURAL (INCLUYE INSTALACION Y PINTURA)                                          | KG | 35.92    | 3.78   | 135.78            |
| <b>CERRAMIENTO</b>      |                                                                                            |    |          |        | <b>136,433.17</b> |
| 168                     | REPLANTEO Y NIVELACIÓN                                                                     | M  | 400.00   | 0.78   | 312.00            |
| 169                     | EXCAVACIÓN A MANO                                                                          | M3 | 83.41    | 8.16   | 680.63            |
| 170                     | ACERO DE REFUERZO FY=4200 KG/CM2                                                           | KG | 2,263.97 | 2.30   | 5,207.13          |
| 171                     | PUERTA DE TOOL CERRAMIENTO (0.8*2.00M) PUERTA DE ACCESO PEATONAL                           | U  | 1.00     | 272.24 | 272.24            |
| 172                     | PUERTA DE TOOL CERRAMIENTO (4X2.00M) PUERTA DE ACCESO VEHICULAR                            | U  | 1.00     | 516.32 | 516.32            |
| 173                     | HORMIGON SIMPLE FC=210KG/CM2 EN PLINTOS                                                    | M3 | 15.12    | 211.92 | 3,204.23          |
| 174                     | HORMIGON SIMPLE FC=210KG/CM2 EN COLUMNAS                                                   | M3 | 0.76     | 231.19 | 175.70            |

|                                            |                                                                                           |    |          |           |                   |
|--------------------------------------------|-------------------------------------------------------------------------------------------|----|----------|-----------|-------------------|
| 175                                        | HORMIGON SIMPLE FC=210 KG/CM2 EN CADENAS                                                  | M3 | 1.31     | 200.40    | 262.52            |
| 176                                        | HORMIGON CICLOPEO 40%P 60% HS. F C=180KG/CM2                                              | M3 | 0.38     | 166.00    | 63.08             |
| 177                                        | MAMPOSTERIA DE BLOQUE ALIVIANADO E=15CM                                                   | M2 | 798.00   | 21.54     | 17,188.92         |
| 178                                        | ENLUCIDO ACABADO FINO                                                                     | M2 | 4,480.00 | 13.13     | 58,822.40         |
| 179                                        | EMPASTE EXTERIOR                                                                          | M2 | 4,480.00 | 4.99      | 22,355.20         |
| 180                                        | PINTURA CAUCHO EXTERIOR                                                                   | M2 | 4,480.00 | 6.11      | 27,372.80         |
| <b>SUMINISTRO E INSTALACION DE EQUIPOS</b> |                                                                                           |    |          |           | <b>427,305.92</b> |
| <b>CANAL TAMIZ MECANICO</b>                |                                                                                           |    |          |           | <b>56,700.00</b>  |
| 181                                        | SUMINISTRO E INSTALACION DE PRE - TRATAMIENTO TAMIZ MECANICO RO9/500/600                  | U  | 1.00     | 56,700.00 | 56,700.00         |
| <b>REACTOR BIOLOGICO</b>                   |                                                                                           |    |          |           | <b>118,440.00</b> |
| 182                                        | SUMINISTRO E INSTALACION DE DOSIFICADOR DE AIRE 30 HP _3PH                                | U  | 2.00     | 59,220.00 | 118,440.00        |
| <b>DIGESTOR DE LODOS</b>                   |                                                                                           |    |          |           | <b>45,360.00</b>  |
| 183                                        | SUMINISTRO E INSTALACION DE DOSIFICADOR DE AIRE 15 HP _3PH                                | U  | 2.00     | 22,680.00 | 45,360.00         |
| <b>CLARIFICADOR</b>                        |                                                                                           |    |          |           | <b>55,440.00</b>  |
| 184                                        | SUMINISTRO E INSTALACION DE SISTEMA DE DISTRIBUCION PRINCIPAL DE AIRE PARA CLARIFICADORES | U  | 1.00     | 10,080.00 | 10,080.00         |
| 185                                        | SUMINISTRO E INSTALACION DE COMPONENTES DE LOS CLARIFICADORES                             | U  | 2.00     | 22,680.00 | 45,360.00         |
| <b>CUARTO DE MAQUINAS</b>                  |                                                                                           |    |          |           | <b>72,745.10</b>  |
| 186                                        | SUMINISTRO E INSTALACION DE DOSIFICADOR DE AIRE PARA CLARIFICADORES                       | U  | 2.00     | 22,680.00 | 45,360.00         |
| 187                                        | SUMINISTRO DE TABLERO DE CONTROL ELECTRICO                                                | U  | 1.00     | 20,160.00 | 20,160.00         |
| 188                                        | INSTALACION ELECTRICA DE LOS EQUIPOS                                                      | U  | 1.00     | 7,225.10  | 7,225.10          |
| <b>SALIDA DE LA PTAR</b>                   |                                                                                           |    |          |           | <b>9,450.00</b>   |
| 189                                        | SUMINISTRO E INSTALACION DE SISTEMA DE DESINFECCION POR CLORACION                         | U  | 1.00     | 9,450.00  | 9,450.00          |
| <b>COMPONENTE ELECTRICO</b>                |                                                                                           |    |          |           | <b>42,555.40</b>  |
| 190                                        | ACOMETIDA 13,8KV P1                                                                       | U  | 1.00     | 3,817.62  | 3,817.62          |
| 191                                        | ACOMETIDA 13,8KV P2                                                                       | U  | 1.00     | 8,581.88  | 8,581.88          |
| 192                                        | ACOMETIDA 13,8KV P3                                                                       | U  | 1.00     | 2,113.13  | 2,113.13          |
| 193                                        | SUMINISTRO Y MONTAJE DE TABLERO DE FUERZA Y CONTROL P1                                    | U  | 1.00     | 13,612.28 | 13,612.28         |
| 194                                        | SUMINISTRO Y MONTAJE DE TABLERO DE FUERZA Y CONTROL P2                                    | U  | 1.00     | 2,120.33  | 2,120.33          |



|                                    |                                                                                                        |    |        |          |                     |
|------------------------------------|--------------------------------------------------------------------------------------------------------|----|--------|----------|---------------------|
| 195                                | SUMINISTRO Y MONTAJE DE MODULO METALICO PARA MEDIDOR Y ACCESORIOS                                      | U  | 1.00   | 2,856.88 | 2,856.88            |
| 196                                | ACOMETIDAS DE FUERZA Y ALUMBRADO P1                                                                    | U  | 1.00   | 9,212.68 | 9,212.68            |
| 197                                | ACOMETIDAS DE FUERZA Y ALUMBRADO P2                                                                    | U  | 1.00   | 240.60   | 240.60              |
| <b>EQUIPAMIENTO CLARIFICADORES</b> |                                                                                                        |    |        |          | <b>26,615.42</b>    |
| 198                                | SUM. INS. TUBERIAS Y ACCESORIOS LINEA DE LODOS, D = 200 MM                                             | U  | 1.00   | 3,826.42 | 3,826.42            |
| 199                                | SUM. INS. TUBERIAS Y ACCESORIOS LINEA DE NATAS Y SOBRENADANTES D = 100 MM                              | U  | 1.00   | 1,806.80 | 1,806.80            |
| 200                                | SUM. INS. TUBERIAS Y ACCESORIOS ESTACION DE BOMBEO DE RECIRCULACION, PVC, D=2"                         | U  | 1.00   | 1,195.61 | 1,195.61            |
| 201                                | SUM. INS. BOMBA SUMERGIBLE (Q=3.50L/S, THD=7.93M, 1HP), INC. CABLE Y FLOTADORES PARA CONTROL DE NIVEL. | U  | 2.00   | 2,484.30 | 4,968.60            |
| 202                                | SUM. INS. TUBERIAS Y ACCESORIOS DE SALIDA DEL DESARENADOR D = 110 MM                                   | U  | 1.00   | 734.84   | 734.84              |
| 203                                | SUM. INS. TUBERIAS Y ACCESORIOS DE INGRESO A LECHOS DE SECADO D = 160 MM                               | U  | 1.00   | 2,580.68 | 2,580.68            |
| 204                                | SUM. INS. TUBERIAS Y ACCESORIOS DE LIMPIEZA DESINFECCION D = 110 MM                                    | U  | 1.00   | 222.84   | 222.84              |
| 205                                | SUM.INS. TUBERÍA PVC U/Z D = 315 MM. 1,0 MPA                                                           | M  | 15.00  | 71.71    | 1,075.65            |
| 206                                | SUM.INS. TUBERÍA PVC U/Z D = 315 MM. 1,0 MPA (PERFORADA)                                               | M  | 24.00  | 91.32    | 2,191.68            |
| 207                                | SUM.INS. VALVULA TIPO WAFER D = 300 MM, (INC. ADAPTADORES PARA TUB PVC D = 315                         | U  | 2.00   | 578.23   | 1,156.46            |
| 208                                | SUM.INS. BAFLE D = 24" Y PASAMURO D = 12", LAMINA DE ACERO E = 6 MM, SEGÚN PLANOS DE DETALLE           | U  | 2.00   | 1,988.33 | 3,976.66            |
| 209                                | UM. INS. TUBERIAS PVC U/Z, D = 63 MM, 10 MPA                                                           | M  | 75.00  | 4.07     | 305.25              |
| 210                                | SUM. INS. CODO 45° PVC U/Z, RL, D = 63 MM, 1 MPA                                                       | U  | 3.00   | 9.89     | 29.67               |
| 211                                | SUM. INS. REJA DE ACERO INOXIDABLE VARILLA D=12MM, E=20MM (SEGÚN PLANO DE DETALLE)                     | M2 | 3.00   | 354.89   | 1,064.67            |
| 212                                | PROVISION E INSTALACION DE EMBED CHANNEL REACTOR BIOLOGICO Y DIGESTOR DE LODOS                         | M  | 112.26 | 13.18    | 1,479.59            |
| <b>AGUA POTABLE</b>                |                                                                                                        |    |        |          | <b>1,375,000.37</b> |
| <b>A. CAPTACION</b>                |                                                                                                        |    |        |          | <b>18,150.02</b>    |
| 213                                | REPLANTEO Y NIVELACIÓN                                                                                 | M2 | 122.65 | 0.82     | 100.57              |
| 214                                | LIMPIEZA Y DESBROCE                                                                                    | M2 | 122.65 | 2.44     | 299.27              |
| 215                                | EXCAVACION MANUAL DE ZANJAS EN TIERRA H= 0-2M                                                          | M3 | 245.30 | 8.04     | 1,972.21            |
| 216                                | REPLANTILLO H.S 140 KG/CM2 E=5 CM                                                                      | M2 | 12.26  | 155.35   | 1,904.59            |

|                                                     |                                                                  |    |          |        |                   |
|-----------------------------------------------------|------------------------------------------------------------------|----|----------|--------|-------------------|
| 217                                                 | ACERO DE REFUERZO FY=4200 KG/CM2                                 | KG | 2,822.80 | 2.30   | 6,492.44          |
| 218                                                 | HORMIGON SIMPLE FC=210KG/CM2                                     | M3 | 23.80    | 186.95 | 4,449.41          |
| 219                                                 | ENLUCIDOS INTERIOR + IMPERMEABILIZANTE                           | M2 | 19.00    | 13.50  | 256.50            |
| 220                                                 | COMPUERTA DE VOLANTE (SUM/INST/PRUEBA) C=2U                      | U  | 2.00     | 722.57 | 1,445.14          |
| 221                                                 | VERTEDERO DE TOOL NEGRO E=3MM (0.40*0.85M)                       | U  | 2.00     | 209.82 | 419.64            |
| 222                                                 | REJILLA DESARENADOR (0.90*0.7M)                                  | U  | 2.00     | 248.22 | 496.44            |
| 223                                                 | TUBERIA PVC 200MM (MAT/TRANS/INST) DESAGUE                       | M  | 5.00     | 18.72  | 93.60             |
| 224                                                 | CODO PVC D=200 MM X 90 DESAGUE NORMA INEN 1374                   | U  | 6.00     | 30.06  | 180.36            |
| 225                                                 | TEE PVC D=200 MM DESAGUE NORMA INEN 1374                         | U  | 1.00     | 39.85  | 39.85             |
| <b>B. CONDUCCIÓN</b>                                |                                                                  |    |          |        | <b>149,267.28</b> |
| 226                                                 | REPLANTEO Y NIVELACION (KM-E. TOTAL)                             | KM | 5.93     | 175.33 | 1,039.71          |
| 227                                                 | EXCAVACION MANUAL DE ZANJAS EN TIERRA H= 0-2M                    | M3 | 465.37   | 8.04   | 3,741.57          |
| 228                                                 | RELLENO COMPACTADO CON MAT. EXCAVACION                           | M3 | 5,937.21 | 5.15   | 30,576.63         |
| 229                                                 | SUMINISTRO, INSTALACION Y PRUEBA TUB. PVC 150 MM; 0.8 MPA U/E    | M  | 5,059.00 | 13.74  | 69,510.66         |
| 230                                                 | EXCAVACION A MAQUINA DE 0-2 M                                    | M3 | 6,049.81 | 4.33   | 26,195.68         |
| 231                                                 | RASANTEO DE FONDO DE ZANJA                                       | M2 | 4,653.70 | 2.18   | 10,145.07         |
| 232                                                 | SUMINISTRO, INSTALACION Y PRUEBA DE TUB. PVC 110 MM; 0.8 MPA U/E | M  | 788.45   | 10.22  | 8,057.96          |
| <b>C. ACCESORIOS CONDUCCION</b>                     |                                                                  |    |          |        | <b>7,056.86</b>   |
| 233                                                 | SUM. INST. CODO 90° D=160MM                                      | U  | 1.00     | 26.16  | 26.16             |
| 234                                                 | SUM. INST. CODO 45° D=160M                                       | U  | 10.00    | 26.16  | 261.60            |
| 235                                                 | SUM. INST. CODO 22.5° D=160MM                                    | U  | 18.00    | 26.16  | 470.88            |
| 236                                                 | SUM. INST. CODO 11.25° D=160MM                                   | U  | 36.00    | 26.16  | 941.76            |
| 237                                                 | SUM. INST. VALVULA DE SECCIONAMIENTO D=160MM                     | U  | 5.00     | 422.16 | 2,110.80          |
| 238                                                 | SUM. INST. VALVULA DE AIRE PVC 160MM                             | U  | 6.00     | 209.21 | 1,255.26          |
| 239                                                 | SUM. INST. VALVULA DE DESAGUE D=160 MM                           | U  | 4.00     | 282.05 | 1,128.20          |
| 240                                                 | SUM. INST. UNION GIBault H.F. SIMETRICA                          | U  | 10.00    | 86.22  | 862.20            |
| <b>D. TANQUE ROMPE PRESIONES EN CONDUCCION (5U)</b> |                                                                  |    |          |        | <b>8,869.75</b>   |
| 241                                                 | REPLANTEO Y NIVELACIÓN                                           | M2 | 5.85     | 0.82   | 4.80              |
| 242                                                 | EXCAVACION MANUAL DE ZANJAS EN TIERRA                            | M3 | 6.65     | 8.04   | 53.47             |
| 243                                                 | ENCOFRADO/DESENCOFRADO                                           | M2 | 46.50    | 18.49  | 859.78            |
| 244                                                 | HORMIGON SIMPLE FC=210KG/CM2                                     | M3 | 11.90    | 186.95 | 2,224.70          |
| 245                                                 | ENLUCIDOS INTERIOR + IMPERMEABILIZANTE                           | M2 | 19.00    | 13.50  | 256.50            |

|                                     |                                                  |     |          |          |                  |
|-------------------------------------|--------------------------------------------------|-----|----------|----------|------------------|
| 246                                 | ENLUCIDO EXTERIOR                                | U   | 31.55    | 15.13    | 477.35           |
| 247                                 | ACERO DE REFUERZO FY=4200 KG/CM2                 | KG  | 1,236.95 | 2.30     | 2,844.98         |
| 248                                 | TAPA SANITARIA METALICA 0.6*0.6                  | U   | 5.00     | 63.44    | 317.20           |
| 249                                 | PINTURA CAUCHO EXTERIOR                          | M2  | 31.55    | 6.11     | 192.77           |
| 250                                 | ACCESORIO ROMPEPRESION EN RED                    | U   | 5.00     | 145.88   | 729.40           |
| 251                                 | REPLANTILLO H.S 140 KG/CM2 E=5 CM                | M2  | 5.85     | 155.35   | 908.80           |
| <b>E. TANQUE DE RESERVA</b>         |                                                  |     |          |          | <b>80,502.99</b> |
| 252                                 | LIMPIEZA Y DESBROCE                              | M2  | 175.77   | 2.44     | 428.88           |
| 253                                 | REPLANTEO Y NIVELACIÓN                           | M2  | 175.77   | 0.82     | 144.13           |
| 254                                 | EXCAVACION MANUAL DE ZANJAS EN TIERRA            | M3  | 91.94    | 8.04     | 739.20           |
| 255                                 | ENCOFRADO ESPECIAL PARA PARED                    | M2  | 343.54   | 35.62    | 12,236.89        |
| 256                                 | ENCOFRADO Y DESENCOFRADO CUPULA                  | U   | 158.90   | 16.08    | 2,555.11         |
| 257                                 | EMPEDRADO BASE Y ZOCALO PERIMETRAL               | M2  | 170.00   | 6.68     | 1,135.60         |
| 258                                 | DRENES TUBERIA PVC PERFORADA PARA DRENAJE 110 MM | U   | 92.80    | 10.92    | 1,013.38         |
| 259                                 | DRENES TUBERIA PVC PERFORADA PARA DRENAJE 160 MM | ML  | 24.20    | 13.32    | 322.34           |
| 260                                 | HORMIGON SIMPLE FC=210KG/CM2                     | M3  | 84.52    | 186.95   | 15,801.01        |
| 261                                 | REPLANTILLO H.S 140 KG/CM2 E=5 CM                | M2  | 8.78     | 155.35   | 1,363.97         |
| 262                                 | ACERO DE REFUERZO FY=4200 KG/CM2                 | KG  | 7,210.71 | 2.30     | 16,584.63        |
| 263                                 | ENLUCIDOS INTERIOR + IMPERMEABILIZANTE           | M2  | 493.02   | 13.50    | 6,655.77         |
| 264                                 | ENLUCIDO EXTERIOR                                | U   | 164.46   | 15.13    | 2,488.28         |
| 265                                 | PINTURA CAUCHO EXTERIOR                          | M2  | 329.56   | 6.11     | 2,013.61         |
| 266                                 | REPLANTEO Y NIVELACION ( CERRAMIENTOS )          | ML  | 120.00   | 0.89     | 106.80           |
| 267                                 | CERRAMIENTO MALLA DE ALAMBRE                     | ML  | 120.00   | 54.70    | 6,564.00         |
| 268                                 | PUERTA DE MALLA                                  | M2  | 13.44    | 75.80    | 1,018.75         |
| 269                                 | ACCESORIOS DESAGUE Y DESBORDE                    | GBL | 1.00     | 3,124.78 | 3,124.78         |
| 270                                 | ACCESORIOS DE ENTRADA                            | U   | 1.00     | 279.22   | 279.22           |
| 271                                 | ACCESORIOS AEREACION Y VENTILACION               | U   | 8.00     | 15.53    | 124.24           |
| 272                                 | PINTURA INTERNA Y EXTERNA DE PARED               | M2  | 503.18   | 6.73     | 3,386.40         |
| 273                                 | GRAVA 3/4 (MATERIAL FILTRANTE PARA DRENAJE)      | M3  | 9.22     | 56.02    | 516.50           |
| 274                                 | SUM. E INST. DE GEOTEXTIL NO TEJIDO 1600         | M2  | 105.30   | 16.72    | 1,760.62         |
| 275                                 | SUM INST. TAPA TOOL GALVANI 0.60X0.60M           | U   | 2.00     | 69.44    | 138.88           |
| <b>F. CAMARA DE VALVULAS TIPO 1</b> |                                                  |     |          |          | <b>11,075.21</b> |
| 276                                 | LIMPIEZA Y DESBROCE                              | M2  | 20.25    | 2.44     | 49.41            |
| 277                                 | REPLANTEO Y NIVELACIÓN                           | M2  | 20.25    | 0.82     | 16.60            |
| 278                                 | EXCAVACION MANUAL                                | M3  | 22.05    | 8.04     | 177.28           |
| 279                                 | ENCOFRADO ESPECIAL PARA PARED                    | M2  | 18.90    | 35.62    | 673.22           |
| 280                                 | REPLANTILLO H.S 140 KG/CM2 E=5 CM                | M2  | 15.21    | 155.35   | 2,362.87         |
| 281                                 | HORMIGON SIMPLE FC=210KG/CM2                     | M3  | 4.59     | 186.95   | 858.10           |

|                               |                                                                                      |    |        |        |                  |
|-------------------------------|--------------------------------------------------------------------------------------|----|--------|--------|------------------|
| 282                           | ACERO DE REFUERZO FY=4200 KG/CM2                                                     | KG | 563.55 | 2.30   | 1,296.16         |
| 283                           | ACERO ESTRUCTURAL DE CUBIERTA                                                        | KG | 477.01 | 7.52   | 3,587.12         |
| 284                           | CUBIERTA GALVALUME                                                                   | M2 | 20.70  | 24.07  | 498.25           |
| 285                           | ENLUCIDO DE PARED                                                                    | M2 | 18.90  | 15.13  | 285.96           |
| 286                           | ACCESORIOS HIDRAULICOS                                                               | U  | 1.00   | 91.13  | 91.13            |
| 287                           | CANAleta DE AGUAS LLUVIAS                                                            | ML | 4.50   | 32.71  | 147.20           |
| 288                           | BAJANTE DE AGUAS LLUVIAS                                                             | U  | 2.00   | 13.97  | 27.94            |
| 289                           | HORMIGON CICLOPEO 1:3:6 (50%PIEDRA)                                                  | M3 | 8.01   | 125.34 | 1,003.97         |
| <b>G.CASETA DE GUARDIANIA</b> |                                                                                      |    |        |        | <b>14,968.17</b> |
| 290                           | REPLANTEO PARA ESTRUCTURAS                                                           | M2 | 20.79  | 2.98   | 61.95            |
| 291                           | EXCAVACIÓN MANO PARA ESTRUCTURAS, S/CLAS                                             | M3 | 9.22   | 8.04   | 74.13            |
| 292                           | MAMPOSTERÍA DE LADRILLO VISTO                                                        | M2 | 48.84  | 20.92  | 1,021.73         |
| 293                           | ENCOFRADO DE LOSAS                                                                   | M2 | 26.92  | 14.81  | 398.69           |
| 294                           | ENLUCIDOS DE MORTERO DE CEMENTO                                                      | M2 | 96.44  | 10.31  | 994.30           |
| 295                           | PINTURA DE CAUCHO EXTERIORES                                                         | M2 | 48.30  | 6.73   | 325.06           |
| 296                           | PINTURA DE CAUCHO INTERIORES                                                         | M2 | 48.30  | 4.13   | 199.48           |
| 297                           | REPLANTILLO DE PIEDRA E = 15 CM                                                      | M2 | 3.15   | 28.16  | 88.70            |
| 298                           | HORMIGON POBRE DE CEMENTO PORTLAND, CLASE C, F'C=140 KG/CM2 PARA REPLANTILLOS        | M3 | 1.28   | 156.41 | 200.20           |
| 299                           | HORMIGÓN CICLÓPEO 40% PIEDRA 60% HORMIGÓN 180 KG/CM2                                 | M3 | 3.33   | 276.50 | 920.74           |
| 300                           | HORMIGON SIMPLE FC=210KG/CM2                                                         | M3 | 3.10   | 186.95 | 579.54           |
| 301                           | HORMIGÓN ESTRUCTURAL, CLASE A FC=210 KG/CM2,                                         | M3 | 11.20  | 217.79 | 2,439.25         |
| 302                           | VENTANA METÁLICA 2,35 X 1,30, CON PROTECCIÓN DE HIERRO , INCLUYE VIDRIO DE 4 MM      | U  | 1.00   | 177.47 | 177.47           |
| 303                           | VENTANA METÁLICA 1,6X 1,30, CON PROTECCIÓN DE HIERRO, INCLUYE VIDRIO DE 4 MM         | U  | 1.00   | 99.43  | 99.43            |
| 304                           | VENTANA METÁLICA 0,70 X 0,35, CON PROTECCIÓN DE HIERRO, INCLUYE VIDRIO DE 4 MM       | U  | 1.00   | 21.01  | 21.01            |
| 305                           | PUERTA MADERA 0,84X2,00;BASTIDOR, MARCO Y TAPAMARCO LAUREL-FORRO TRIPLEX CLASE A 4MM | U  | 2.00   | 168.89 | 337.78           |
| 306                           | PUERTA MADERA 0,74X2,00;BASTIDOR, MARCO Y TAPAMARCO LAUREL-FORRO TRIPLEX CLASE A 4MM | U  | 2.00   | 168.89 | 337.78           |
| 307                           | ACERO DE REFUERZO FY=4200 KG/CM2                                                     | KG | 935.52 | 2.30   | 2,151.70         |
| 308                           | PISO DE BALDOSA DE GRANITO                                                           | M2 | 13.61  | 118.40 | 1,611.42         |
| 309                           | REVESTIMIENTO CERÁMICO DE PAREDES                                                    | M2 | 10.65  | 102.08 | 1,087.15         |
| 310                           | REVESTIMIENTO CERÁMICO EN PISOS                                                      | U  | 3.84   | 114.08 | 438.07           |

|                           |                                                                                            |    |          |        |                   |
|---------------------------|--------------------------------------------------------------------------------------------|----|----------|--------|-------------------|
| 311                       | SUM. INS. INODORO, INC. ACCESORIOS, TUBOS DE ABASTO, VALVULAS DE CIERRE Y LLAVES (CLASE A) | U  | 1.00     | 114.79 | 114.79            |
| 312                       | SUM. INS. LAVABO, INC. ACCESORIOS, TUBOS DE ABASTO, VALVULAS DE CIERRE Y LLAVES (CLASE A)  | U  | 1.00     | 72.79  | 72.79             |
| 313                       | SISTEMA ELECTRICO (PUNTOS DE LUZ, TOMACORRIENTES)                                          | U  | 1.00     | 518.02 | 518.02            |
| 314                       | INSTALACIONES DE AGUAS SERVIDAS                                                            | U  | 1.00     | 191.05 | 191.05            |
| 315                       | INSTALACIONES DE PUNTO DE AGUA POTABLE                                                     | U  | 2.00     | 26.81  | 53.62             |
| 316                       | SUM E INT DE MEDIDOR (ACOMETIDA 110W)                                                      | U  | 1.00     | 254.96 | 254.96            |
| 317                       | TANQUE DE RESERVA 250 LT (INC. ACCESORIOS)                                                 | U  | 1.00     | 105.84 | 105.84            |
| 318                       | SUMINISTRO E INSTALACION RECOLECCION DE AGUAS LLUVIAS                                      | U  | 1.00     | 91.52  | 91.52             |
| <b>G1 APERTURA DE VIA</b> |                                                                                            |    |          |        | <b>11,560.67</b>  |
| 319                       | REPLANTEO Y NIVELACIÓN LINEAL                                                              | KM | 0.08     | 225.04 | 18.00             |
| 320                       | ADOQUINADO VEHICULAR 350KG/CM2 + CAMA DE ARENA                                             | M2 | 237.03   | 24.67  | 5,847.53          |
| 321                       | EXCAVACION DE CALZADA                                                                      | U  | 118.51   | 2.47   | 292.72            |
| 322                       | BERMA H.S. H=35 CM B=15 CM F'C=240 KG/CM2                                                  | ML | 9.00     | 14.26  | 128.34            |
| 323                       | BASE CLASE 3                                                                               | M3 | 47.40    | 23.23  | 1,101.10          |
| 324                       | EXCAVACION MANUAL PARA ACERAS Y BORDILLOS                                                  | M3 | 25.21    | 6.53   | 164.62            |
| 325                       | BORDILLO H.S. 0.18*0.15*0.50 F'C=180 KG/CM2                                                | ML | 157.60   | 24.02  | 3,785.55          |
| 326                       | CONFORMACION DE SUB-RASANTE                                                                | M2 | 237.03   | 0.94   | 222.81            |
| <b>RED DISTRIBUCION</b>   |                                                                                            |    |          |        | <b>739,662.93</b> |
| <b>H. ADUCCION</b>        |                                                                                            |    |          |        | <b>75,962.16</b>  |
| 327                       | REPLANTEO Y NIVELACION (KM-E. TOTAL)                                                       | KM | 2.80     | 175.33 | 490.92            |
| 328                       | EXCAVACIÓN MANO PARA ESTRUCTURAS, S/CLAS                                                   | M3 | 217.82   | 8.04   | 1,751.27          |
| 329                       | RELLENO COM. FINAL CON MAT. PROPIO DE EXCAVACIÓN                                           | M3 | 2,780.59 | 6.31   | 17,545.52         |
| 330                       | SUMINISTRO,INSTALACION Y PRUEBA TUB. PVC 187.60MM; 0.8 MPA U/E                             | M  | 365.30   | 24.26  | 8,862.18          |
| 331                       | SUMINISTRO,INSTALACION Y PRUEBA TUB. PVC 150.00MM; 0.8 MPA U/E                             | M  | 1,649.76 | 13.57  | 22,387.24         |
| 332                       | SUMINISTRO,INSTALACION Y PRUEBA TUB. PVC 103.20MM; 0.8 MPA U/E                             | M  | 408.31   | 9.97   | 4,070.85          |
| 333                       | EXCAVACION A MAQUINA DE 0-2 M                                                              | M3 | 2,831.66 | 4.33   | 12,261.09         |
| 334                       | RASANTEO DE FONDO DE ZANJA                                                                 | M2 | 2,178.20 | 2.18   | 4,748.48          |
| 335                       | SUMINISTRO,INSTALACION Y PRUEBA TUB PVC 90 MM; 08 MPA U/E                                  | M  | 400.48   | 9.60   | 3,844.61          |

| I. RED DE DISTRIBUCION         |                                                                 |    |           |        | 390,745.48 |
|--------------------------------|-----------------------------------------------------------------|----|-----------|--------|------------|
| 336                            | REPLANTEO Y NIVELACION (KM-E. TOTAL)                            | KM | 18.91     | 175.33 | 3,315.49   |
| 337                            | EXC. ZANJAS, A MANO SUELO SIN CLASF 0-2M                        | M3 | 1,325.37  | 9.64   | 12,776.57  |
| 338                            | RELLENO COM. FINAL CON MAT. PROPIO DE EXCAVACIÓN                | M3 | 17,084.92 | 6.31   | 107,805.85 |
| 339                            | SUMINISTRO, INSTALACION Y PRUEBA TUB. PVC 187.60MM; 0.8 MPA U/E | M  | 20.00     | 24.26  | 485.20     |
| 340                            | SUMINISTRO, INSTALACION Y PRUEBA TUB. PVC 84.20MM; 0.8 MPA U/E  | M  | 1,771.25  | 9.61   | 17,021.71  |
| 341                            | SUMINISTRO, INSTALACION Y PRUEBA TUB. PVC 58.80MM; 0.8 MPA U/E  | M  | 9,947.92  | 8.99   | 89,431.80  |
| 342                            | SUMINISTRO, INSTALACION Y PRUEBA TUB. PVC 46.80MM; 0.8 MPA U/E  | M  | 7,191.85  | 7.79   | 56,024.51  |
| 343                            | EXCAVACION A MAQUINA DE 0-2 M                                   | M3 | 17,229.82 | 4.33   | 74,605.12  |
| 344                            | RASANTEO DE FONDO DE ZANJA                                      | M2 | 13,430.84 | 2.18   | 29,279.23  |
| J. ACCESORIOS RED DISTRIBICION |                                                                 |    |           |        | 7,479.00   |
| 345                            | SUM. INST. TEE D=90MM                                           | U  | 6.00      | 16.56  | 99.36      |
| 346                            | SUM. INST. TEE D=63MM                                           | U  | 128.00    | 8.16   | 1,044.48   |
| 347                            | SUM. INST. TEE D=50MM                                           | U  | 30.00     | 5.76   | 172.80     |
| 348                            | SUM. INST. TEE REDUCT D=200MMX160MM                             | U  | 2.00      | 20.16  | 40.32      |
| 349                            | SUM. INST. TEE REDUCT D=200MMX90MM                              | U  | 2.00      | 17.76  | 35.52      |
| 350                            | SUM. INST. TEE REDUCT D=160MMX90MM                              | U  | 2.00      | 32.16  | 64.32      |
| 351                            | SUM. INST. TEE REDUCT D=110MMX90MM                              | U  | 3.00      | 26.16  | 78.48      |
| 352                            | SUM. INST. TEE REDUCT D=90MMX63MM                               | U  | 41.00     | 17.76  | 728.16     |
| 353                            | SUM. INST. REDUCTORA U/Z D=200MMX160MM                          | U  | 3.00      | 69.36  | 208.08     |
| 354                            | SUM. INST. REDUCTORA U/Z D=160MMX110MM                          | U  | 2.00      | 42.96  | 85.92      |
| 355                            | SUM. INST. REDUCTORA U/Z D=110MMX90MM                           | U  | 3.00      | 20.16  | 60.48      |
| 356                            | SUM. INST. REDUCTORA U/Z D=90MMX75MM                            | U  | 14.00     | 68.16  | 954.24     |
| 357                            | SUM. INST. REDUCTORA U/Z D=75MMX63MM                            | U  | 12.00     | 44.16  | 529.92     |
| 358                            | SUM. INST. REDUCTORA U/Z D=63MMX50MM                            | U  | 35.00     | 26.16  | 915.60     |
| 359                            | SUM. INST. VALVULA DE SECCIONAMIENTO D=90MM                     | U  | 4.00      | 134.16 | 536.64     |
| 360                            | SUM. INST. VALVULA DE SECCIONAMIENTO D=50MM                     | U  | 1.00      | 98.16  | 98.16      |
| 361                            | SUM. INST. CODO 90° D=160MM                                     | U  | 7.00      | 26.16  | 183.12     |
| 362                            | SUM. INST. CODO 90° D=110MM                                     | U  | 1.00      | 20.16  | 20.16      |
| 363                            | SUM. INST. REDUCTORA U/Z D=75MMX63MM                            | U  | 4.00      | 44.16  | 176.64     |
| 364                            | SUM. INST. CODO 45° D=160MM                                     | U  | 4.00      | 26.16  | 104.64     |
| 365                            | SUM. INST. CODO 45° D=63MM                                      | U  | 8.00      | 6.96   | 55.68      |
| 366                            | SUM. INST. CODO 45° D=50MM                                      | U  | 4.00      | 4.56   | 18.24      |



|                                    |                                                      |    |        |          |                   |
|------------------------------------|------------------------------------------------------|----|--------|----------|-------------------|
| 367                                | SUM. INST. CODO 22.5° D=200MM                        | U  | 2.00   | 36.96    | 73.92             |
| 368                                | SUM. INST. CODO 22.5° D=160MM                        | U  | 3.00   | 26.16    | 78.48             |
| 369                                | SUM. INST. CODO 22.5° D=90MM                         | U  | 4.00   | 14.16    | 56.64             |
| 370                                | SUM. INST. CODO 22.5° D=63MM                         | U  | 9.00   | 6.96     | 62.64             |
| 371                                | SUM. INST. CODO 22.5° D=50MM                         | U  | 3.00   | 4.56     | 13.68             |
| 372                                | SUM. INST. CODO 11.25° D=200MM                       | U  | 3.00   | 36.96    | 110.88            |
| 373                                | SUM. INST. CODO 11.25° D=160MM                       | U  | 3.00   | 26.16    | 78.48             |
| 374                                | SUM. INST. CODO 11.25° D=110MM                       | U  | 1.00   | 20.16    | 20.16             |
| 375                                | SUM. INST. CODO 11.25° D=90MM                        | U  | 3.00   | 14.16    | 42.48             |
| 376                                | SUM. INST. CODO 11.25° D=63MM                        | U  | 5.00   | 6.96     | 34.80             |
| 377                                | SUM. INST. CODO 11.25° D=50MM                        | U  | 3.00   | 4.56     | 13.68             |
| 378                                | SUM. INST. UNION GIBault H.F. SIMETRICA D=50 MM      | U  | 2.00   | 44.22    | 88.44             |
| 379                                | SUM. INST. UNION GIBault H.F. SIMETRICA D=90 MM      | U  | 8.00   | 74.22    | 593.76            |
| <b>K. INSTALCION DE HIDRANTES</b>  |                                                      |    |        |          | <b>1,436.09</b>   |
| 380                                | EXC. ZANJAS, A MANO SUELO SIN CLASF 0-2M             | M3 | 4.55   | 9.64     | 43.86             |
| 381                                | SUMINISTRO,INSTALACIÓN Y PRUEBA DE HIDRANTE-BF 2"    | U  | 1.00   | 1,363.52 | 1,363.52          |
| 382                                | RELLENO COM. FINAL CON MAT. PROPIO DE EXCAVACIÓN     | M3 | 4.55   | 6.31     | 28.71             |
| <b>L. ACOMETIDAS DOMICILIARIAS</b> |                                                      |    |        |          | <b>228,730.05</b> |
| 383                                | CONEXIONES DOMICILIARIAS DE AP TERMOFUSIÓN 50 X 1/2" | U  | 650.00 | 165.67   | 107,685.50        |
| 384                                | CONEXIONES DOMICILIARIAS DE AP TERMOFUSIÓN 63 X 1/2" | U  | 550.00 | 166.06   | 91,333.00         |
| 385                                | CONEXIONES DOMICILIARIAS DE AP TERMOFUSIÓN 90 X 1/2" | U  | 165.00 | 180.07   | 29,711.55         |
| <b>M. PASO DE QUEBRADA</b>         |                                                      |    |        |          | <b>35,310.15</b>  |
| 386                                | EXCAVACIÓN A MANO                                    | M3 | 129.25 | 8.16     | 1,054.68          |
| 387                                | HORMIGON CICLOPEO 40% PIEDRA 60 % H.S F'C=210 KG/CM2 | U  | 3.54   | 168.92   | 597.98            |
| 388                                | HORMIGON SIMPLE FC=210KG/CM2                         | M3 | 169.00 | 186.95   | 31,594.55         |
| 389                                | ALAMBRE N° 14 L= 0.7 M                               | U  | 12.00  | 5.60     | 67.20             |
| 390                                | CABLE TIRANTE 1/2"                                   | M  | 45.00  | 9.65     | 434.25            |
| 391                                | CABILLA 1 1/4"                                       | U  | 2.00   | 11.52    | 23.04             |
| 392                                | TUBO DE HG 2 1/2"                                    | U  | 2.00   | 9.42     | 18.84             |
| 393                                | CABLE DE SUSPENSION L=7M                             | U  | 2.00   | 31.62    | 63.24             |
| 394                                | CABLE DE SUSPENSION L=5M                             | U  | 2.00   | 23.22    | 46.44             |
| 395                                | CABLE DE SUSPENSION L=3.5M                           | U  | 2.00   | 16.92    | 33.84             |
| 396                                | CABLE DE SUSPENSION L=1.6M                           | U  | 1.00   | 8.94     | 8.94              |
| 397                                | TUBO DE HG 6 PLG                                     | U  | 28.00  | 27.12    | 759.36            |
| 398                                | GUARDA CABLE 3/8                                     | U  | 9.00   | 5.88     | 52.92             |
| 399                                | MORDAZA PROVISION E INSTALACION 3/8"                 | U  | 36.00  | 9.19     | 330.84            |

|                                 |                                                                                            |     |          |            |                     |
|---------------------------------|--------------------------------------------------------------------------------------------|-----|----------|------------|---------------------|
| 400                             | MORDAZA MODIFICADA                                                                         | U   | 9.00     | 11.59      | 104.31              |
| 401                             | GUARDA CABLE 1/2"                                                                          | U   | 2.00     | 7.08       | 14.16               |
| 402                             | MORDAZAS 1/2"                                                                              | U   | 8.00     | 10.39      | 83.12               |
| 403                             | TENSOR 1/2"                                                                                | U   | 2.00     | 11.22      | 22.44               |
| <b>N. PLANTA DE TRATAMIENTO</b> |                                                                                            |     |          |            | <b>333,886.49</b>   |
| <b>FASE CONSTRUCTIVA</b>        |                                                                                            |     |          |            | <b>333,886.49</b>   |
| 404                             | PLANTA DE TRATAMIENTO GLOBAL                                                               | U   | 1.00     | 333,886.49 | 333,886.49          |
| <b>RUBROS AMBIENTALES</b>       |                                                                                            |     |          |            | <b>59,397.51</b>    |
| 405                             | ACOMETIDA ELECTRICA PLANTA DE TRATAMIENTO AGUA POTABLE                                     | U   | 1.00     | 22,264.56  | 22,264.56           |
| 406                             | ALQUILER DE BATERIA SANITARIA PORTÁTIL-1 UNIDAD AL MES (INC LIMPIEZA)                      | U   | 16.00    | 571.67     | 9,146.72            |
| 407                             | AGUA PARA CONTROL DE POLVO                                                                 | M3  | 5,040.00 | 4.22       | 21,268.80           |
| 408                             | PLANTAS EN ÁREA CONTIGUA DE PLANTA DE TRATAMIENTO                                          | U   | 100.00   | 4.07       | 407.00              |
| 409                             | CHARLAS DE CAPACITACION                                                                    | C/U | 4.00     | 240.00     | 960.00              |
| 410                             | COMUNICADOS RADIALES                                                                       | U   | 10.00    | 72.00      | 720.00              |
| 411                             | MONITOREO DE CALIDAD DEL AGUA                                                              | U   | 12.00    | 275.99     | 3,311.88            |
| 412                             | BASUREROS                                                                                  | U   | 3.00     | 72.00      | 216.00              |
| 413                             | ROTULOS SE SEÑALIZACION EN TOOL, POSTES HG 2"- INCL. LOGOS Y LEYENDA (PROVISION Y MONTAJE) | M2  | 2.50     | 101.02     | 252.55              |
| 414                             | CONOS DE 28 PULGADAS                                                                       | U   | 20.00    | 31.73      | 634.60              |
| 415                             | CINTA REFLECTIVA (ROLLOS DE 100 M)                                                         | U   | 25.00    | 0.36       | 9.00                |
| 416                             | POSTES DE SEÑALIZACION DE CAÑA (PITUTO)                                                    | U   | 30.00    | 6.88       | 206.40              |
| <b>TOTAL</b>                    |                                                                                            |     |          |            | <b>3,838,648.69</b> |

PRECIO TOTAL DE LA OFERTA (DE LOS RUBROS OFERTADOS)

SON: TRES MILLONES OCHOCIENTOS TREINTA Y OCHO MIL SEISCIENTOS CUARENTA Y OCHO CON 69/00 DOLARES.

NOTA: ESTOS PRECIOS NO INCLUYEN IVA.

Cumandá, 20 de octubre del 2025.

ING. CRISTIAN VELASCO  
**CONSULTOR**