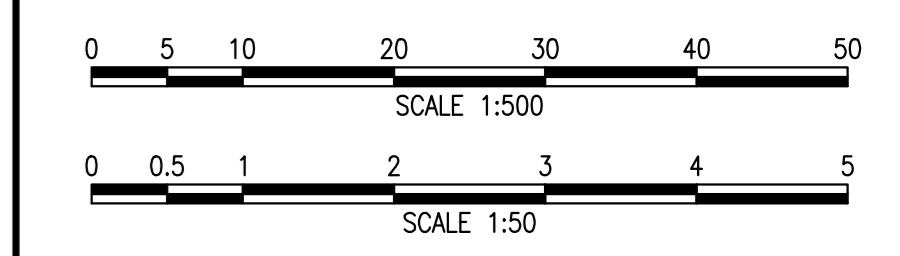
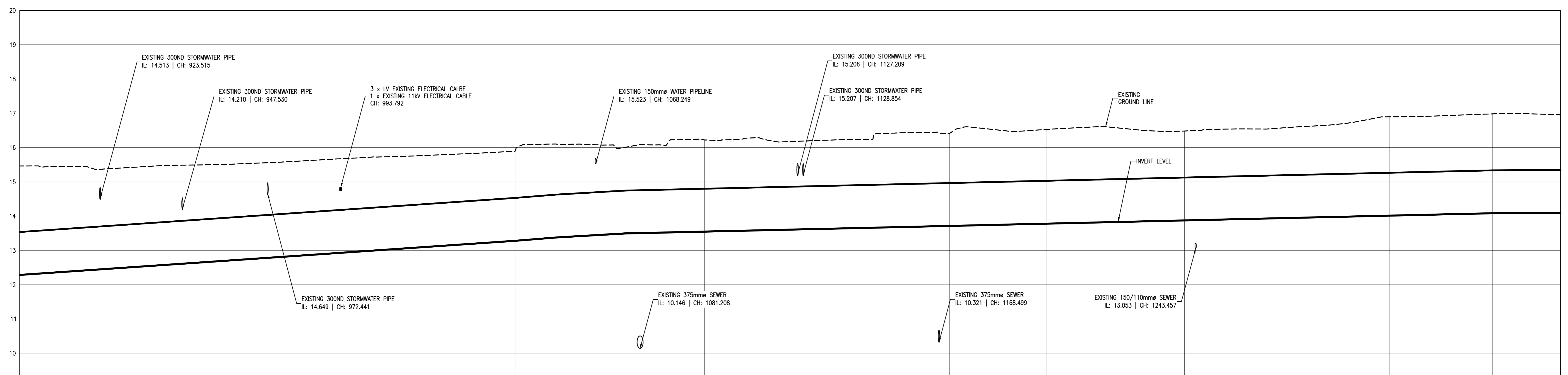


LAYOUT PLAN
SCALE 1:500

| CHAINAGE | X | Y | PIPE INVERT LEVEL (m) | DESCRIPTION |
|----------|---------------|------------|-----------------------|-------------|
| 830.853 | 3 760 345.551 | 42 829.005 | 11.821 | CHANGE IN |
| 1044.687 | 3 760 551.930 | 42 884.972 | 13.290 | CHANGE IN |
| 1056.748 | 3 760 554.836 | 42 896.678 | 13.388 | CHANGE IN |
| 1076.748 | 3 760 559.654 | 42 916.089 | 13.505 | CHANGE IN |
| 1136.748 | 3 760 574.110 | 42 974.322 | 13.644 | CHANGE IN |
| 1171.542 | 3 760 582.493 | 43 008.090 | 13.725 | CHANGE IN |
| 1240.180 | 3 760 649.233 | 43 024.120 | 13.885 | CHANGE IN |
| 1330.180 | 3 760 736.159 | 43 047.441 | 14.094 | CHANGE IN |
| 1413.927 | 3 760 817.041 | 43 069.158 | 14.141 | CHANGE IN |

- LEGEND**
- 20010 NEW CAPE FLATS 3 BULK SEWER RISING MAIN
 - 8.41 EXISTING BENCHMARK
 - THS GEOTECHNICAL INVESTIGATION POSITION
 - EXISTING LAMP POST
 - EXISTING TRAFFIC SIGNAL
 - EXISTING STORMWATER PIPE AND MANHOLE
 - EXISTING STORMWATER KERB INLET
 - EXISTING SEWER AND MANHOLE
 - EXISTING FENCE
 - EXISTING WALL
 - EXISTING STORMWATER STRUCTURE INFORMATION
COVER LEVEL
INVERT LEVEL
DEPTH
 - EXISTING SEWER STRUCTURE INFORMATION
COVER LEVEL
INVERT LEVEL
DEPTH

LONGITUDINAL SECTION
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:50



| CHAINAGE (m) | NATURAL GROUND LEVEL (m) | PIPE INVERT LEVEL (m) | TRENCH EXCAVATION DEPTH (m) | COVER TO PIPE CROWN (m) | HORIZONTAL BEND | VERTICAL BEND | PIPE LENGTH AND GRADE | PIPE DETAIL | GEOTECHNICAL DETAIL |
|--------------|--------------------------|-----------------------|-----------------------------|-------------------------|-----------------|---------------|-----------------------|-------------|---------------------|
| 830.853 | 15.461 | 15.451 | 0.010 | 1.925 | | | | | |
| 910 | 15.451 | 15.451 | 0 | 1.846 | | | | | |
| 920 | 15.431 | 15.431 | 0 | 1.758 | | | | | |
| 930 | 15.405 | 15.405 | 0 | 1.663 | | | | | |
| 940 | 15.464 | 15.464 | 0 | 1.653 | | | | | |
| 950 | 15.489 | 15.489 | 0 | 1.610 | | | | | |
| 960 | 15.507 | 15.507 | 0 | 1.559 | | | | | |
| 970 | 15.548 | 15.548 | 0 | 1.531 | | | | | |
| 980 | 15.565 | 15.565 | 0 | 1.510 | | | | | |
| 990 | 15.601 | 15.601 | 0 | 1.497 | | | | | |
| 1000 | 15.704 | 15.704 | 0 | 1.48 | | | | | |
| 1010 | 15.739 | 15.739 | 0 | 1.447 | | | | | |
| 1020 | 15.776 | 15.776 | 0 | 1.415 | | | | | |
| 1030 | 15.818 | 15.818 | 0 | 1.398 | | | | | |
| 1040 | 15.867 | 15.867 | 0 | 1.369 | | | | | |
| 1050 | 15.895 | 15.895 | 0 | 1.362 | | | | | |
| 1060 | 16.026 | 16.026 | 0 | 1.472 | | | | | |
| 1070 | 16.096 | 16.096 | 0 | 1.449 | | | | | |
| 1080 | 16.074 | 16.074 | 0 | 1.398 | | | | | |
| 1090 | 16.026 | 16.026 | 0 | 1.290 | | | | | |
| 1100 | 16.132 | 16.132 | 0 | 1.337 | | | | | |
| 1110 | 16.146 | 16.146 | 0 | 1.486 | | | | | |
| 1120 | 16.186 | 16.186 | 0 | 1.496 | | | | | |
| 1130 | 16.193 | 16.193 | 0 | 1.445 | | | | | |
| 1140 | 16.268 | 16.268 | 0 | 1.448 | | | | | |
| 1150 | 16.455 | 16.455 | 0 | 1.509 | | | | | |
| 1160 | 16.574 | 16.574 | 0 | 1.458 | | | | | |
| 1170 | 16.465 | 16.465 | 0 | 1.458 | | | | | |
| 1180 | 16.529 | 16.529 | 0 | 1.50 | | | | | |
| 1190 | 16.584 | 16.584 | 0 | 1.529 | | | | | |
| 1200 | 16.580 | 16.580 | 0 | 1.502 | | | | | |
| 1210 | 16.489 | 16.489 | 0 | 1.398 | | | | | |
| 1220 | 16.581 | 16.581 | 0 | 1.367 | | | | | |
| 1230 | 16.637 | 16.637 | 0 | 1.419 | | | | | |
| 1240 | 16.745 | 16.745 | 0 | 1.505 | | | | | |
| 1250 | 16.886 | 16.886 | 0 | 1.63 | | | | | |
| 1260 | 16.907 | 16.907 | 0 | 1.620 | | | | | |
| 1270 | 16.844 | 16.844 | 0 | 1.654 | | | | | |
| 1280 | 16.892 | 16.892 | 0 | 1.648 | | | | | |
| 1290 | 16.895 | 16.895 | 0 | 1.645 | | | | | |
| 1300 | 16.899 | 16.899 | 0 | 1.624 | | | | | |