

| PROPOSED STORM SEWER DESIGN RECORD                                 |               |      |                               |                       |                       |      |                 |                             |                  |                 |                 |                              |                              |                           |               |                          |                                   |                        |                        |        |                       |                        |         |                 |
|--|---------------|------|-------------------------------|-----------------------|-----------------------|------|-----------------|-----------------------------|------------------|-----------------|-----------------|------------------------------|------------------------------|---------------------------|---------------|--------------------------|-----------------------------------|------------------------|------------------------|--------|-----------------------|------------------------|---------|-----------------|
| STRUCTURE NUMBER   | DRAINAGE AREA |      | WEIGHTED C RUNOFF COEFFICIENT | TIME OF CONCENTRATION | DESIGN YEAR INTENSITY |      |                 | DESIGN YEAR LOCAL DISCHARGE |                  |                 | UPSTREAM BYPASS | UPSTREAM BYPASS INLET NUMBER | LOCAL FLOW + UPSTREAM BYPASS | INTERCEPTED FLOW BY INLET | BYPASSED FLOW | BYPASSED TO INLET NUMBER | AVERAGE TRANSVERSE PAVEMENT SLOPE | WIDTH OF FLOW AT INLET | DEPTH OF FLOW AT INLET | DESIGN | ELEVATION GRATE / RIM | ELEVATION FLOWLINE OUT | REMARKS |                 |
|  | No.           | Acre |                               |                       | IN / HR               | MIN  | I <sub>10</sub> | I <sub>50</sub>             | I <sub>100</sub> | Q <sub>10</sub> |                 |                              |                              |                           |               |                          |                                   |                        |                        |        |                       |                        |         | Q <sub>50</sub> |
| 100  | A100 A/B      | 0.33 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.23                        | -                | -               | 0.00            | -                            | 2.23                         | 1.89                      | 0.34          | 102                      | -                                 | 4.00%                  | 6.34                   | 0.25   | LONG. BARR. TYPE II   | 703.44                 | 697.23  |                 |
| 101  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 703.83                 | 797.20  |                 |
| 102  | A102 A/B      | 0.32 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 1.92                        | -                | -               | 0.34            | 100                          | 2.26                         | 1.97                      | 0.29          | 104                      | -                                 | 4.00%                  | 7.17                   | 0.29   | LONG. BARR. TYPE II   | 702.23                 | 696.26  |                 |
| 103  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 702.48                 | 696.22  |                 |
| 104  | A104 A/B      | 0.49 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 3.24                        | -                | -               | 0.29            | 102                          | 3.53                         | 3.00                      | 0.53          | 106                      | -                                 | 4.00%                  | 8.64                   | 0.35   | LONG. BARR. TYPE II   | 700.79                 | 694.78  |                 |
| 105  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 700.98                 | 694.74  |                 |
| 106  | A106 A/B      | 0.72 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 4.80                        | -                | -               | 0.53            | 104                          | 5.33                         | 4.29                      | 1.04          | 108                      | -                                 | 4.00%                  | 10.34                  | 0.41   | LONG. BARR. TYPE II   | 699.36                 | 693.30  |                 |
| 107  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 699.48                 | 692.76  |                 |
| 108  | A108 A/B      | 0.61 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 4.08                        | -                | -               | 1.04            | 106                          | 5.12                         | 4.35                      | 0.77          | 110                      | -                                 | 4.00%                  | 11.17                  | 0.45   | LONG. BARR. TYPE II   | 697.79                 | 691.23  |                 |
| 109  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 698.09                 | 690.69  |                 |
| 110  | A110 A/B      | 0.45 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.97                        | -                | -               | 0.77            | 108                          | 3.74                         | 3.19                      | 0.55          | 122                      | -                                 | 4.00%                  | 8.55                   | 0.34   | LONG. BARR. TYPE II   | 696.22                 | 689.45  |                 |
| 111  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 696.67                 | 688.91  |                 |
| 112  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 695.67                 | 686.15  |                 |
| 113  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 694.79                 | 685.47  |                 |
| 120  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 694.73                 | 685.99  |                 |
| 121  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 695.40                 | 687.35  |                 |
| 122  | A122 A/B/C/D  | 0.74 | 0.89                          | 5.0                   | -                     | 9.83 | -               | -                           | 6.40             | -               | 0.80            | 110 & 124                    | 7.20                         | 7.20                      | 0.00          | -                        | -                                 | 4.00%                  | 5.85                   | 0.23   | LONG. BARR. TYPE II   | 694.96                 | 687.39  |                 |
| 123  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 696.76                 | 690.31  |                 |
| 124  | A124 A/B      | 0.24 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 1.62                        | -                | -               | 0.44            | 126                          | 2.06                         | 1.82                      | 0.24          | 122                      | -                                 | 4.00%                  | 5.41                   | 0.22   | LONG. BARR. TYPE II   | 696.30                 | 690.35  |                 |
| 125  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 699.26                 | 692.40  |                 |
| 126  | A126 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.38            | 131                          | 2.68                         | 2.24                      | 0.44          | 124                      | -                                 | 4.00%                  | 5.48                   | 0.22   | LONG. BARR. TYPE II   | 698.81                 | 692.44  |                 |
| 130  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | JUNCTION BOX          | 705.00                 | 692.62  | SPECIAL DESIGN  |
| 131  | A131 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.32            | 132                          | 2.62                         | 2.24                      | 0.38          | 126                      | -                                 | 4.00%                  | 5.59                   | 0.22   | LONG. BARR. TYPE II   | 702.71                 | 696.87  |                 |
| 132  | A132 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.40            | 133                          | 2.70                         | 2.38                      | 0.32          | 131                      | -                                 | 4.00%                  | 6.19                   | 0.25   | LONG. BARR. TYPE II   | 705.63                 | 699.00  |                 |
| 133  | A133 A/B      | 0.44 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.86                        | -                | -               | 0.20            | 143                          | 3.06                         | 2.66                      | 0.40          | 132                      | -                                 | 4.00%                  | 6.54                   | 0.26   | LONG. BARR. TYPE II   | 707.44                 | 702.24  |                 |
| 140  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 708.70                 | 700.36  |                 |
| 141  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 709.45                 | 704.25  |                 |
| 142  | A142          | 0.39 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.58                        | -                | -               | 0.56            | 145                          | 3.14                         | 2.64                      | 0.50          | DITCH                    | -                                 | 4.00%                  | 8.57                   | 0.34   | LONG. BARR. TYPE I    | 709.00                 | 704.29  |                 |
| 143  | A143 A/B      | 0.32 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.10                        | -                | -               | 0.24            | 146                          | 2.34                         | 2.14                      | 0.20          | 133                      | -                                 | 4.00%                  | 5.89                   | 0.24   | LONG. BARR. TYPE II   | 709.68                 | 706.51  |                 |
| 144  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 711.10                 | 706.28  |                 |
| 145  | A145          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.57            | 152                          | 3.38                         | 2.82                      | 0.56          | 142                      | -                                 | 4.00%                  | 8.81                   | 0.35   | LONG. BARR. TYPE I    | 710.65                 | 706.32  |                 |
| 146  | A146 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.24            | 153                          | 2.54                         | 2.30                      | 0.24          | 143                      | -                                 | 4.00%                  | 6.09                   | 0.24   | LONG. BARR. TYPE II   | 711.34                 | 708.17  |                 |
| 150  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 712.48                 | 702.66  |                 |
| 151  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 712.90                 | 703.42  |                 |
| 152  | A152          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.60            | 155                          | 3.41                         | 2.84                      | 0.57          | 145                      | -                                 | 4.00%                  | 8.84                   | 0.35   | LONG. BARR. TYPE I    | 712.45                 | 705.94  |                 |
| 153  | A153 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.24            | 156                          | 2.54                         | 2.30                      | 0.24          | 146                      | -                                 | 4.00%                  | 6.08                   | 0.24   | LONG. BARR. TYPE II   | 713.14                 | 709.97  |                 |
| 154  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 714.70                 | 705.89  |                 |
| 155  | A155          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.71            | 158                          | 3.52                         | 2.92                      | 0.60          | 152                      | -                                 | 4.00%                  | 8.95                   | 0.36   | LONG. BARR. TYPE I    | 914.25                 | 708.41  |                 |
| 156  | A156 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.28            | 159                          | 2.58                         | 2.34                      | 0.24          | 153                      | -                                 | 4.00%                  | 6.12                   | 0.24   | LONG. BARR. TYPE II   | 714.94                 | 711.77  |                 |
| 157  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 716.64                 | 708.74  |                 |
| 158  | A158          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.81            | 161                          | 3.62                         | 2.91                      | 0.71          | 155                      | -                                 | 4.00%                  | 8.45                   | 0.34   | LONG. BARR. TYPE I    | 716.19                 | 710.76  |                 |
| 159  | A159 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.32            | 162                          | 2.62                         | 2.34                      | 0.28          | 156                      | -                                 | 4.00%                  | 5.76                   | 0.23   | LONG. BARR. TYPE II   | 716.88                 | 713.71  |                 |
| 160  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 720.12                 | 712.77  |                 |
| 161  | A161          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.78            | 164                          | 3.59                         | 2.78                      | 0.81          | 158                      | -                                 | 4.00%                  | 7.80                   | 0.31   | LONG. BARR. TYPE I    | 719.67                 | 714.30  |                 |
| 162  | A162 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.31            | 165                          | 2.61                         | 2.29                      | 0.32          | 159                      | -                                 | 4.00%                  | 5.32                   | 0.21   | LONG. BARR. TYPE II   | 720.36                 | 717.19  |                 |
| 163  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 724.02                 | 716.61  |                 |
| 164  | A164          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.69            | 167                          | 3.50                         | 2.72                      | 0.78          | 161                      | -                                 | 4.00%                  | 7.73                   | 0.31   | LONG. BARR. TYPE I    | 723.57                 | 718.14  |                 |
| 165  | A165 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.28            | 168                          | 2.58                         | 2.27                      | 0.31          | 162                      | -                                 | 4.00%                  | 5.30                   | 0.21   | LONG. BARR. TYPE II   | 724.26                 | 721.09  |                 |
| 166  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 727.28                 | 720.15  |                 |
| 167  | A167          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | 0.70            | 170                          | 3.51                         | 2.82                      | 0.69          | 164                      | -                                 | 4.00%                  | 8.28                   | 0.33   | LONG. BARR. TYPE I    | 726.83                 | 721.68  |                 |
| 168  | A168 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | 0.29            | 171                          | 2.59                         | 2.31                      | 0.28          | 165                      | -                                 | 4.00%                  | 5.67                   | 0.23   | LONG. BARR. TYPE II   | 727.51                 | 724.34  |                 |
| 169  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 729.98                 | 722.51  |                 |
| 170  | A170          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | -               | 173                          | 2.81                         | 2.11                      | 0.70          | 167                      | -                                 | 4.00%                  | 8.29                   | 0.33   | LONG. BARR. TYPE I    | 729.53                 | 724.04  |                 |
| 171  | A171 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | -               | 174                          | 2.30                         | 2.01                      | 0.29          | 168                      | -                                 | 4.00%                  | 5.69                   | 0.23   | LONG. BARR. TYPE II   | 730.21                 | 727.04  |                 |
| 172  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | SMD-TYPE II           | 729.58                 | 725.17  |                 |
| 174  | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | SMD-TYPE II           | 731.70                 | 727.78  |                 |
| ANTICIPATED PROPOSED STORM SEWER FROM FUTURE PROJECT (JP20315(04)) |               |      |                               |                       |                       |      |                 |                             |                  |                 |                 |                              |                              |                           |               |                          |                                   |                        |                        |        |                       |                        |         |                 |
| F172   | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 732.87                 | 725.17  | FUTURE PROJECT  |
| F173   | A173          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | -               | 176                          | 2.81                         | 2.10                      | 0.71          | 170                      | -                                 | 4.00%                  | 7.80                   | 0.31   | LONG. BARR. TYPE I    | 732.42                 | 726.70  | FUTURE PROJECT  |
| F174   | A174 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | -               | 177                          | 2.30                         | 1.95                      | 0.35          | 171                      | -                                 | 4.00%                  | 5.41                   | 0.22   | LONG. BARR. TYPE II   | 733.10                 | 727.78  | FUTURE PROJECT  |
| F175   | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 736.88                 | 729.30  | FUTURE PROJECT  |
| F176   | A176          | 0.42 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.81                        | -                | -               | -               | 179                          | 2.81                         | 2.24                      | 0.57          | 173                      | -                                 | 4.00%                  | 7.01                   | 0.28   | LONG. BARR. TYPE I    | 736.43                 | 730.83  | FUTURE PROJECT  |
| F177   | A177 A/B      | 0.34 | 0.89                          | 5.0                   | 7.46                  | -    | -               | 2.30                        | -                | -               | -               | 180                          | 2.30                         | 2.04                      | 0.26          | 174                      | -                                 | 4.00%                  | 5.00                   | 0.20   | LONG. BARR. TYPE II   | 737.11                 | 731.91  | FUTURE PROJECT  |
| F178   | -             | -    | -                             | -                     | -                     | -    | -               | -                           | -                | -               | -               | -                            | -                            | -                         | -             | -                        | -                                 | -                      | -                      | -      | MANHOLE               | 741.08                 | 733.94  | FUTURE PROJECT  |
| F179   | A179          | N/A  | N/A                           | N/A                   | N/A                   | -    | -               | 0.00                        | -                | -               | 0.00            | -                            | -                            | -                         | 0.00          | 176                      | -                                 | 4.00%                  | -                      | -      | LONG. BARR. TYPE I    | 740.63                 | 734.98  | FUTURE PROJECT  |
| F180   | A180 A/B      | N/A  | N/A                           | N/A                   | N/A                   | -    | -               |                             |                  |                 |                 |                              |                              |                           |               |                          |                                   |                        |                        |        |                       |                        |         |                 |