



# SOIL AND WATER CONSULTING

## Data Collection Report

Fall 2020

Date of Collection: 10/14/20

Client: Parks Department Fields



| <i>SOUTHSIDE PARK</i>     | Acceptable Range For<br>Alkaline Soils Sample   | Football<br>9/20/19 | Football<br>10/14/20 |
|---------------------------|-------------------------------------------------|---------------------|----------------------|
| Organic Matter (Humus)    | 2 - 3%                                          | 4.16                | 5.11                 |
| Sulfur                    | 12 - 16 ppm                                     | 29.00               | 71.00                |
| Olsen - Phosphorus        | 13 - 20 ppm                                     | 69.00               | 29.00                |
| Calcium - TEC of 6 - 12   | 1,000 lbs/acre                                  | 5,210.00            | 4,992.00             |
| Magnesium                 | >7% base saturation or at<br>least 200 lbs/acre | 23.71%/1,136        | 25.21%/1,178         |
| Potassium - TEC of 0 - 35 | 100 ppm                                         | 408.00              | 373.00               |
| Manganese                 | >50 ppm                                         | 52.00               | 31.00                |

| <i>CENTENNIAL PARK SOCCER</i> | Acceptable Range For<br>Alkaline Soils Sample   | South<br>9/20/19 | South<br>10/14/20 | North<br>9/20/19 | North<br>10/14/20 |
|-------------------------------|-------------------------------------------------|------------------|-------------------|------------------|-------------------|
| Organic Matter (Humus)        | 2 - 3%                                          | 5.16             | 7.01              | 5.15             | 6.28              |
| Sulfur                        | 12 - 16 ppm                                     | 52.00            | 35.00             | 46.00            | 48.00             |
| Olsen - Phosphorus            | 13 - 20 ppm                                     | 46.00            | 17.00             | 37.00            | 31.00             |
| Calcium - TEC of 6 - 12       | 1,000 lbs/acre                                  | 4,310.00         | 5,384.00          | 5,218.00         | 3,828.00          |
| Magnesium                     | >7% base saturation or at<br>least 200 lbs/acre | 28.37%/1,280     | 27.14%/1,452      | 27.4%/1,442      | 30.66%/1,292      |
| Potassium - TEC of 0 - 35     | 100 ppm                                         | 619.00           | 564.00            | 631.00           | 546.00            |
| Manganese                     | >1 ppm                                          | 59.00            | 20.00             | 69.00            | 35.00             |

| <i>SOUTHSIDE PARK</i> | Acceptable Range For<br>Saturated Paste Sample | Football<br>9/20/19 | Football<br>10/14/20 |
|-----------------------|------------------------------------------------|---------------------|----------------------|
| Nitrate - Ryegrass    | 5 - 10 ppm                                     | 6.80                | 13.30                |
| Phosphorus            | 2 - 10 ppm                                     | 3.37                | 2.44                 |
| Potassium             | 40 - 100 ppm                                   | 44.30               | 42.81                |
| Calcium               | 60 - 200 ppm                                   | 70.30               | 135.87               |
| Magnesium             | 20 - 70 ppm                                    | 40.88               | 68.44                |
| Sodium                | 0 - 30 ppm                                     | 100.42              | 88.78                |
| Soluble Salts         | <1,920 ppm                                     | 627.00              | 892.00               |
| Bicarbonate           | <60 ppm                                        | 239.16              | 222.03               |
| Chloride              | <1,000 ppm                                     | 112.00              | 85.00                |
| SAR                   | <4%                                            | 2.36                | 1.55                 |

| <i>CENTENNIAL PARK SOCCER</i> | Acceptable Range For<br>Saturated Paste Sample | South<br>9/20/19 | South<br>10/14/20 | North<br>9/20/19 | North<br>10/14/20 |
|-------------------------------|------------------------------------------------|------------------|-------------------|------------------|-------------------|
| Nitrate - Ryegrass            | 5 - 10 ppm                                     | 1.80             | 36.30             | 1.90             | 90.40             |
| Phosphorus                    | 2 - 10 ppm                                     | 9.64             | 4.17              | 4.88             | 9.70              |
| Potassium                     | 40 - 100 ppm                                   | 96.45            | 50.27             | 57.93            | 75.25             |
| Calcium                       | 60 - 200 ppm                                   | 88.96            | 75.67             | 69.68            | 105.58            |
| Magnesium                     | 20 - 70 ppm                                    | 62.38            | 45.73             | 45.58            | 71.90             |
| Sodium                        | 0 - 30 ppm                                     | 73.34            | 81.79             | 69.91            | 106.20            |
| Soluble Salts                 | <1,920 ppm                                     | 781.00           | 671.00            | 604.00           | 970.00            |
| Bicarbonate                   | <60 ppm                                        | 261.12           | 106.03            | 222.08           | 93.94             |
| Chloride                      | <1,000 ppm                                     | 81.00            | 95.00             | 66.00            | 125.00            |
| SAR                           | <4%                                            | 1.46             | 1.83              | 1.60             | 1.95              |