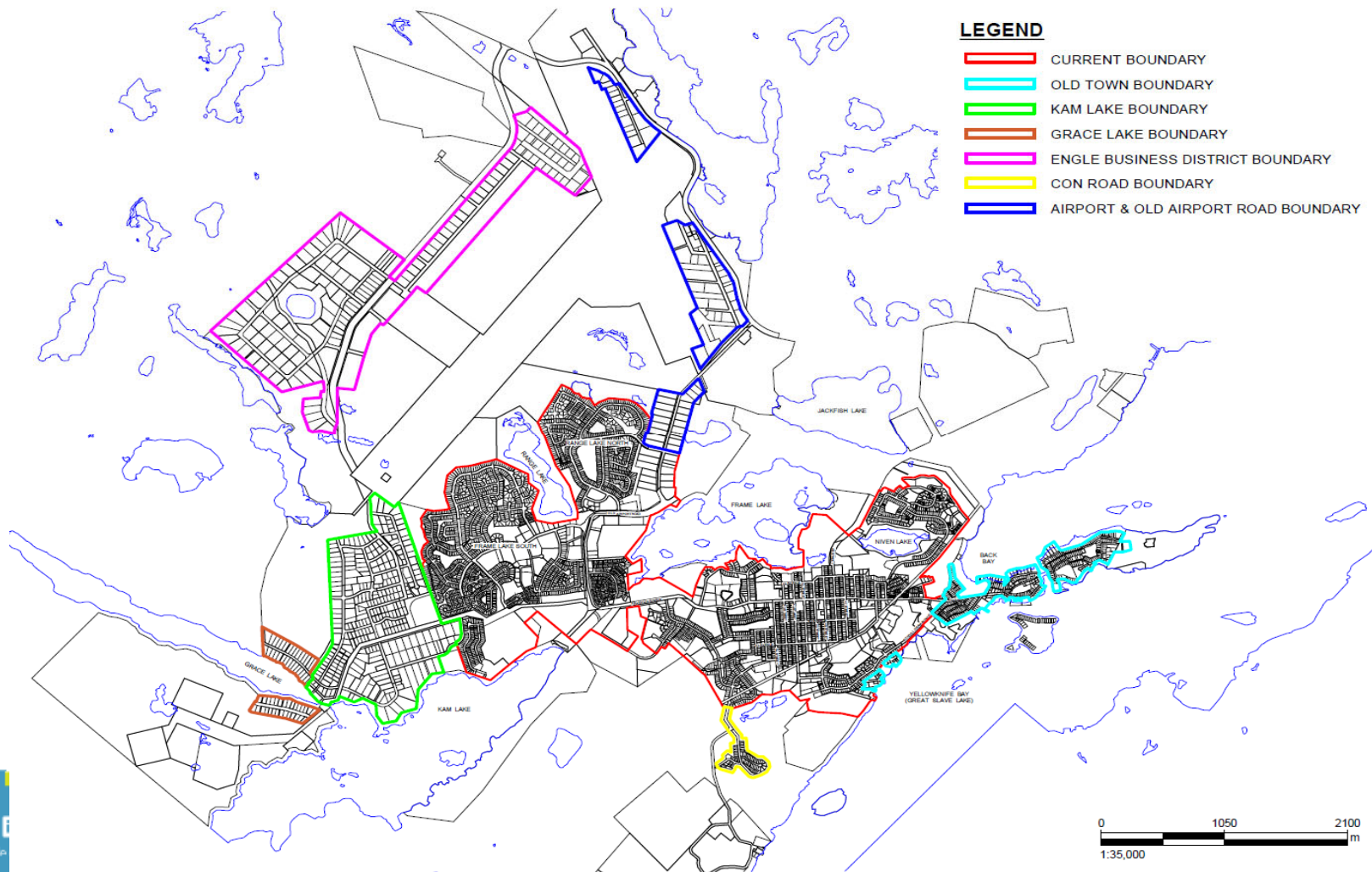


WATER & SEWER SYSTEM OVERVIEW

COUNCIL-ADMINISTRATION ROUND TABLE

April 20, 2023



Piped Infrastructure

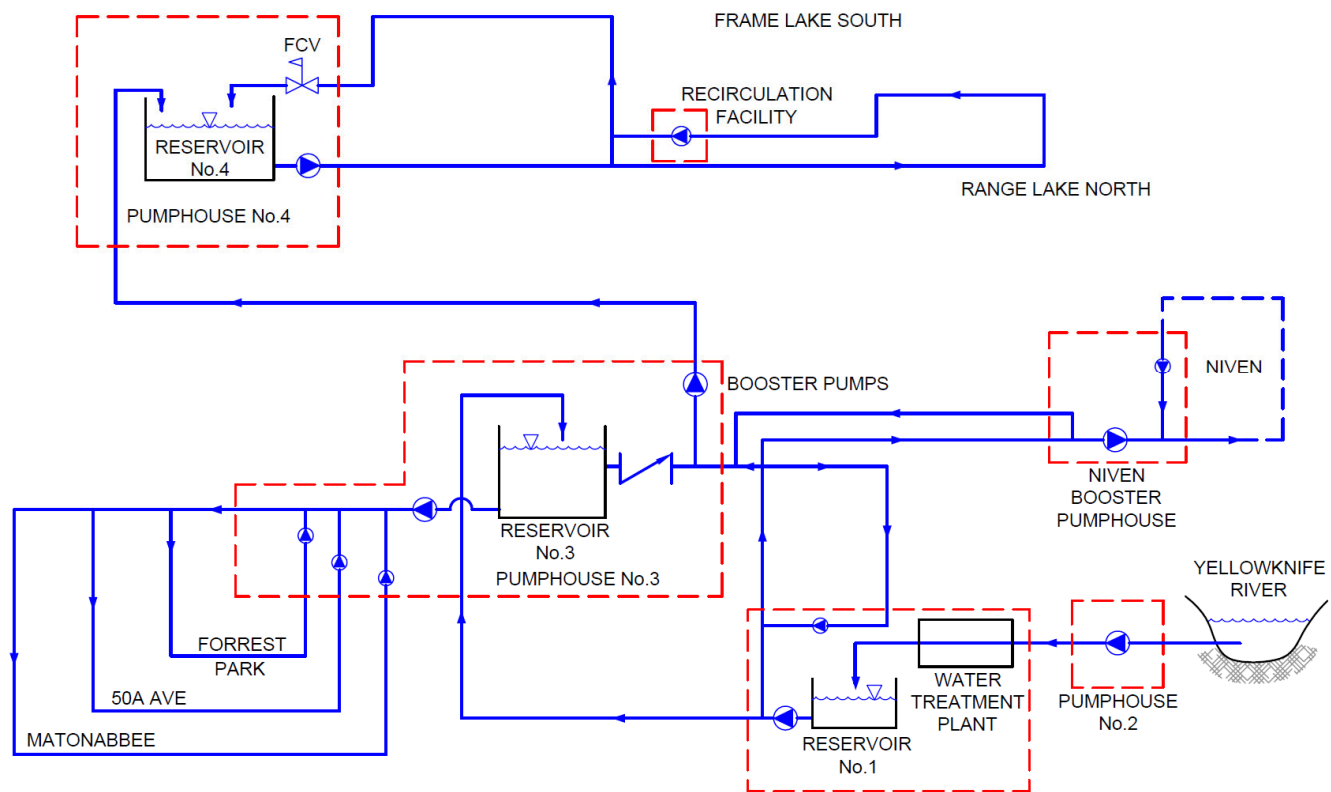
- Linear Assets

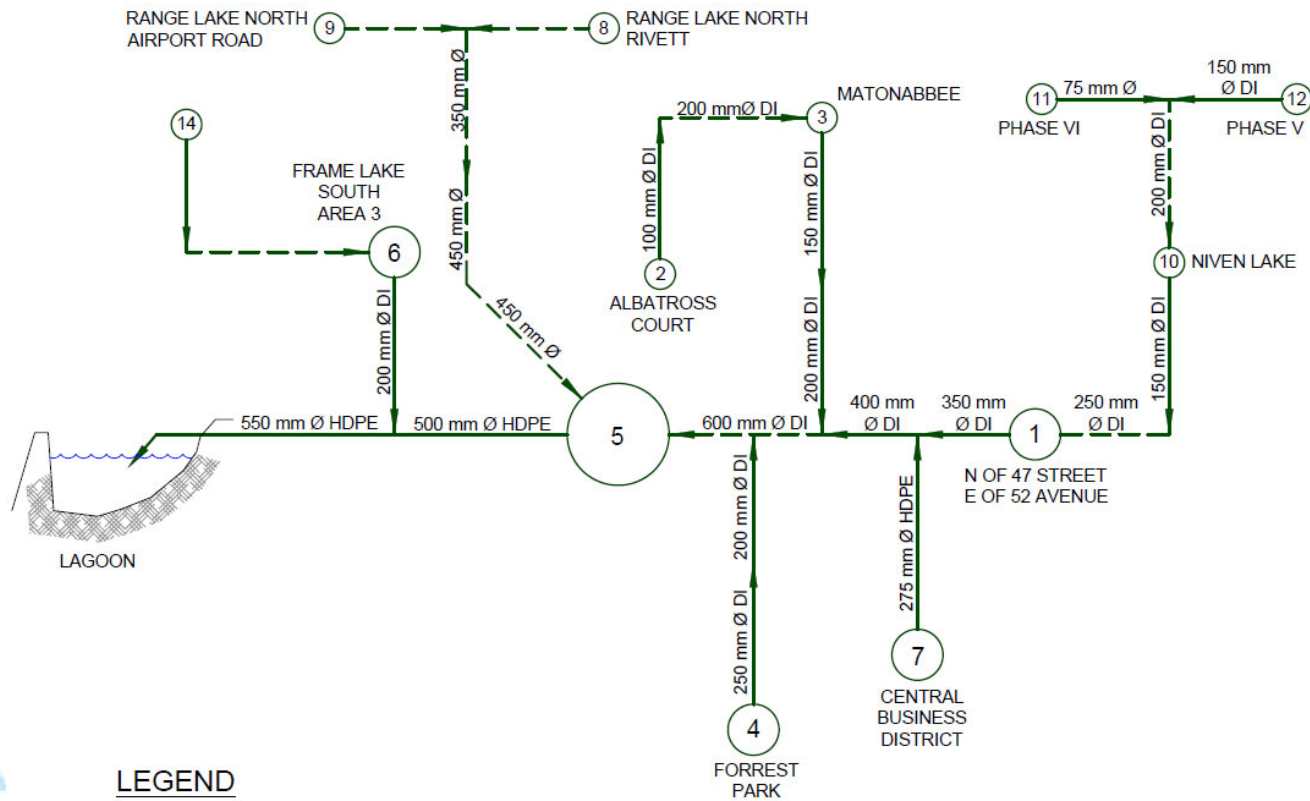
- Mains/Force mains
- Services
- Surface Water Lines
- Sanitary Manholes
- Water Vaults
- Hydrant Vaults

(both surface and subsurface components)

- Complex (Point) Assets

- Water Treatment Plant
- Fiddlers Lake Lagoon System
- 6 Drinking Water Pump Houses
- 14 Sanitary Sewage Lift Stations





LEGEND

- FORCEMAIN
- - - TRUNK (GRAVITY) MAIN

Trucked Infrastructure

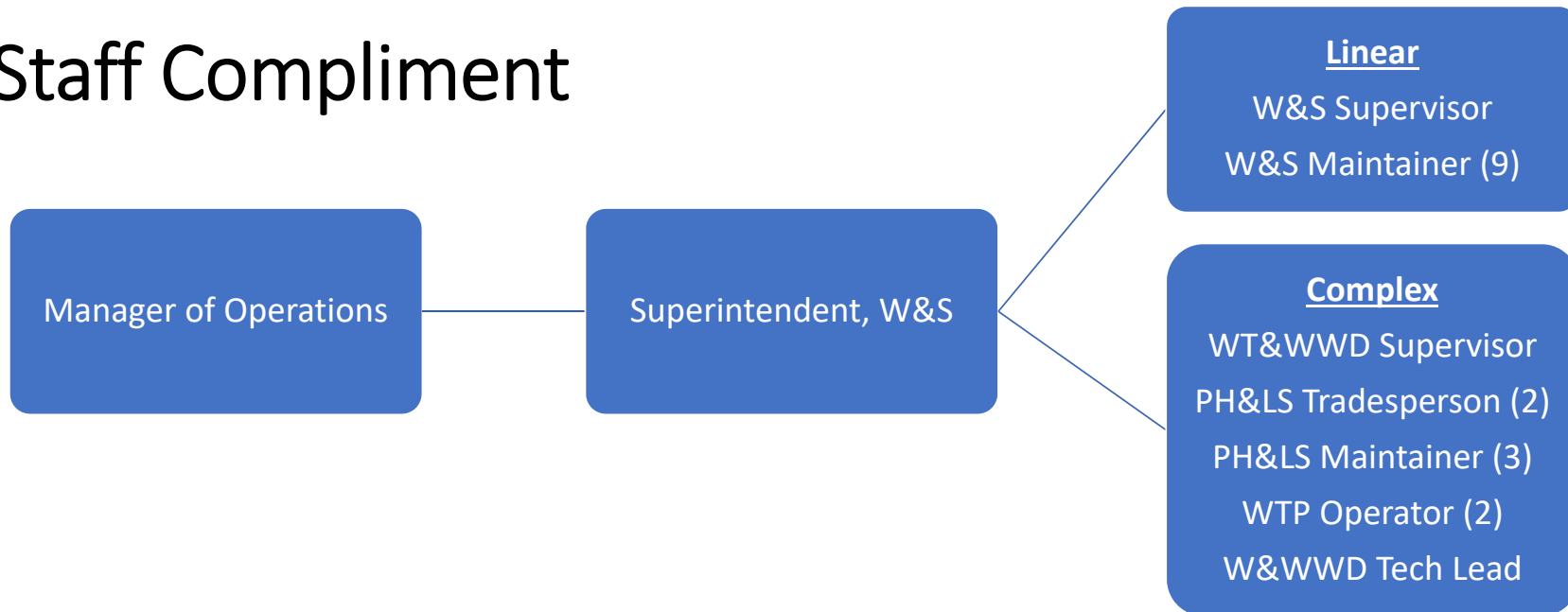
- Water

- 2 truck fill locations (PH4)
- 1 contractor truck fill location (WB)
- RV hose fill at PH4
(not to be used for commercial fills)
- RV hose fill at Kam Lake Road
(not to be used for commercial fills)

- Sanitary Sewage

- 1 pump out location on School Draw
- 1 pump out location at LS#5
- 1 pump out location at LS#6
- 1 RV dump at PH4
- 2 RV dumps at Kam Lake Road

Staff Compliment



Annual Operating Budget

- Budget 2023, Page 91 – Water & Sewer Fund
- Expenditures (By Activity)
 - Sewage Disposal \$2.6M
 - Water Distribution \$6.1M
 - Amortization \$6.8M
- Includes trucked services contracts.

Capital Additions/Investments (20 yr) \approx \$154M+

- | | |
|-------------------------------------|---------|
| • Water Treatment Plant (2015) | • \$32M |
| • Northlands LIC* (2015) | • \$18M |
| • CWWF (Canada) Investment | • \$18M |
| • Pumphouse #6 (Niven) | • \$6M |
| • 5 New Sewage Liftstations | • \$20M |
| • Avg Capital Replacement (\$4M/yr) | • \$80M |

Challenges

WATER

- Leaks (known/unknown)
- Increasing operating/capital costs
- Increased regulatory requirements
- Aging infrastructure
(despite heavy investments)

SEWER

- Backups (known/unknown)
- Problem (poor grade) sewer mains
- Inherited infrastructure (private)
- Legacy infrastructure
 - (Surface water lines)
- Increased regulatory requirements
- Aging infrastructure

Takeaways

- Moving towards mixed asset capital funding.
(Less heavy on underground, increased funding of complex assets.)
- Standing firm on design standards and best northern practices.
(Things that work in other/southern jurisdictions do not work here.)
- Limit trucked service development.
(Very costly and inefficient means of providing water/sewer services.)
- Moving away from legacy infrastructure.
(Surface water lines cannot be replaced and is a higher service level than other areas.)