

- | Facilities | Pressure | Velocity |
|----------------------------|-----------------------------------|----------------|
| Booster Station | <250 kPa (36.3 psi) | >1.5 m/s |
| Reservoir | 250 - 300 kPa (36.3 - 43.5 psi) | 1.25 - 1.5 m/s |
| Water Treatment Plant | 300 - 400 kPa (43.6 - 58.0 psi) | 1.0 - 1.25 m/s |
| Pressure Reducing Valve | 400 - 500 kPa (58.0 - 72.5 psi) | 0.5 - 1.0 m/s |
| Red Deer City Limits | 500 - 600 kPa (72.5 - 87.0 psi) | 0.0 - 0.5 m/s |
| Growth Analysis Boundaries | 600 - 650 kPa (87.0 - 94.0 psi) | |
| | 650 - 700 kPa (94.0 - 101.5 psi) | |
| | 700 - 750 kPa (101.5 - 105.8 psi) | |
| | >750 kPa (105.8 psi) | |

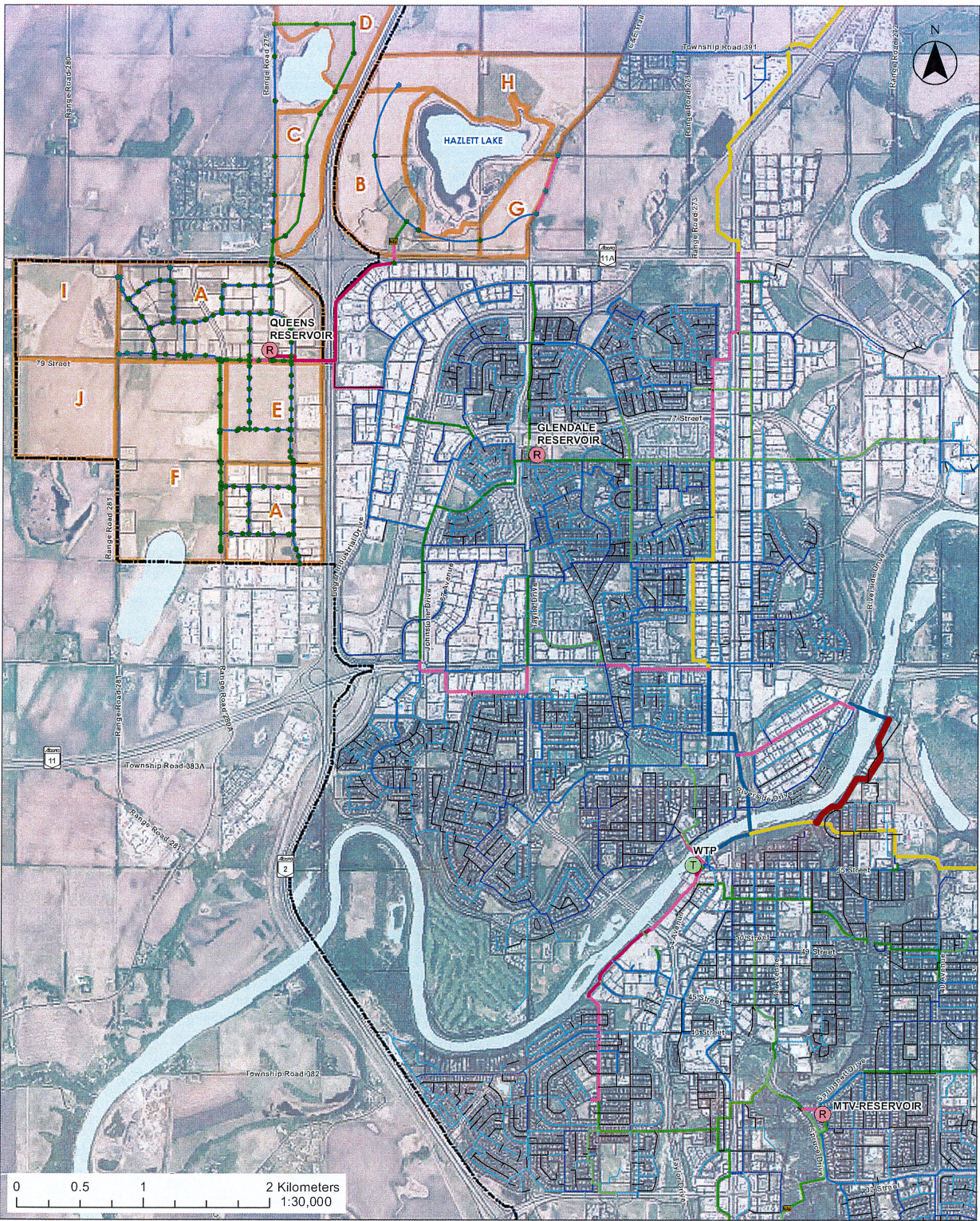
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 Date: 6/16/2023

Completed By: AL
Date: 6/16/2023

Project No.: 110170064



Figure 6.29: Scenario 1
Pressures and Pipe Velocities in the PHD - Relaxed Standard
 City of Red Deer Water Model Update
 City of Red Deer



Facilities	Available Fire Flow	Pipe Network Diameter	Pipe Network Diameter
Booster Station	<75 l/s	50mm	450 mm
Reservoir	75 - 135 l/s	100 mm	500 mm
Water Treatment Plant	135 - 180 l/s	150 mm	600 mm
Pressure Reducing Valve	180 - 233 l/s	200 mm	750 mm
Red Deer City Limits	233 - 300 l/s	250 mm	900 mm
Growth Analysis Boundaries	300 - 400 l/s	300 mm	1050 mm
	>400 l/s	350 mm	1200 mm
		400 mm	>1200 mm

S:\Projects\2022\11750 - City of Red Deer - Water Model Update - MDD - Relaxed Standard - Scenario 2 - Final - 6/16/2023 - AL

Completed By: AL
Date: 6/16/2023

Project No.: 110170064



Figure 6.30: Scenario 2
Available Fire Flows in MDD - Relaxed Standard
 City of Red Deer Water Model Update
 City of Red Deer

