

Risk Assessment Tool Scoring Matrices

1. Asset Category Likelihood Indicators

The City requires the Proponent to assign weights to the individual likelihood indicators. The greyed out cells in Table 1 indicate that the likelihood indicator is not applicable to that specific asset category. An example for Pipework and Valves is shown in Table 1.

Table 1: Likelihood Indicator Weights.

Asset Condition Category	Likelihood Indicator Weight				
	Physical Condition	Fitness For Purpose	Maintainability and Operability	Demand Condition	Susceptibility to 3rd Party & Environmental Damage
Structure					
Pumps and Motors					
Internal Electrical and Communications					
Pipework and Valves	0.97	0.01	0.01	0.01	
Power					
Force Main					

2. Asset Condition Category

The City requires the Proponent to assign weights to the asset condition categories. An example is shown in Table 2.

Table 2: Asset Condition Category Weights

Asset Condition Category	Weight
Structure	0.90
Pumps and Motors	0.02
Internal Electrical and Communications	0.02
Pipework and Valves	0.02
Power	0.02
Force Main	0.02

3. Consequence Scores

The City requires the Proponent to assign scores to the consequences identified in Table 3. An example for Receiving Water Course is shown in Table 3.

Table 3: Consequence Score Matrix

		Consequence Score				
		VL	L	M	H	VH
		1	2	3	4	5
Spills	Available Storage					
	Receiving Water Course	5	50	500	5000	50000
	Catchment Type					
Flooding	Available Storage					
	Flooding					
	Catchment Type					

4. Strategic Importance Factors

The City requires the Proponent to assign scores to the various strategic importance factors (SIF). An example is shown in Table 4.

Table 4: Strategic Importance Factor Matrix

Strategic Importance Factor	Value
On Skate Route	5%
Not on SCADA	50%
No Temporary Pumping	500%
End of Chain Lift Station	5000%

5. Lift Station Size Factor

The City requires the Proponent to assign factors for overall station risk based on the lift station size. An example is shown in Table 5.

Table 5: Lift Station Size Factor

Size Band	Min	Max	Band	Factor
Extra Small	0	5	XS	0.25
Small	5.0001	25	S	2.50
Medium	25.0001	75	M	25.00
Large	75.0001	150	L	250.00
Extra Large	150.0001	100000	XL	2500.00

6. Safety Constant

The City requires the Proponent to assign a safety constant score to calculate the lift station total risk score.

Table 6: Safety Constant Score

Safety Constant	50
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