

APPENDIX C – CONTRACT RISK MATRIX

No.	Risk Description	Probability (High, Medium, Low)	Impact (High, Medium, Low)	Planned Mitigation/Enhancement
1	Selected site is not zoned for a hydrogen station	High	High	Contractor to request accessory use classification to the existing C3 zoning
2	Project budget overages impacts City's purchasing power through the Transition to zero-emission bus program	Low	High	Contractor to ensure project aligns to City Council approved budget, and provide the City options to delay integration of non-essential design elements to outer budget years if necessary
3	Power limitation at existing facility; load shared between hydrogen infrastructure at Fort Rouge Garage and charging infrastructure at Brandon Garage	High	Low	Contractor to work with Manitoba Hydro to secure maximum available contract load; Fuel production to be scalable based on available load. Contractor to consult with charging infrastructure contractor as required to determine potential impacts.
4	Fuel production capacity does not meet needs of fleet	Low	Medium	Contractor to develop design that meets the City's technical requirements. Design to consider provision for delivered hydrogen supply to extend supply.
5	Lead time of equipment longer than forecast	High	High	Contractor to place order for long lead time items as soon as possible. Contractor to report on status of long lead time items as it relates to project schedule.
6	Hydrogen infrastructure not reaching Substantial Completion prior to arrival of buses	High	Medium	City to investigate temporary fueling supply options and/or adjust delivery schedule of buses
7	Vehicle design in process – volume of on-board fuel not yet confirmed	Low	Low	City to report any changes in vehicle technical specification as it relates to fueling
8	Inflationary impact on project budget	High	Low	The contract is funded through a larger flexible program. Contractor will be responsible for managing approved project budget
9	Climate resiliency	Medium	Medium	The proposed design to align with the Transition to Zero Emission Buses - Climate Lens Assessment – Climate Resilience report.
10	Soil contamination at proposed site	High	Medium	Contractor to provide soil remediation strategy.
11	Temperature fluctuations	Low	Medium	The proposed design must be capable of operating through all of Winnipeg's seasons including temperatures ranging from -40°C to +40°C
12	Snow accumulation	High	Low	The contractor shall consider impact of snow accumulation in the design for performance and safety of fueling as well as service and maintenance access.
13	Missing project deadlines	Medium	High	Contractor to develop project schedule to achieve required timeframes and consider Winnipeg's climate
14	Project complexity	High	High	Contractor to work collaboratively with the City and the City's owner advocate and maintain clear lines of communication and reporting.