## **SCHEDULE 44**

#### **STAGE 2 ADDITIONAL VEHICLES**

# PART 1 DEFINITIONS

#### **1.1 Definitions**

The following definitions shall have the following meanings in this Schedule 44:

- (a) "Additional Vehicles Termination Date" has the meaning given to it in Section 3.1(b)(i) of this Schedule 44.
- (b) "Belfast MSF Expansion" has the meaning given to it in the MOU.
- (c) "**Belfast MSF Expansion Variation**" means one or more Variations to be entered into between Project Co and the City relating to the Belfast MSF Expansion and pursuant to the MOU.
- (d) **"Break Point**" means July 31, 2017.
- (e) "CC LD Account" has the meaning given to it in Section 2.7(e)(i) of this Schedule 44.
- (f) "Default Interest Rate" means
- (g) "**Delivery**" means delivery by Project Co of the Stage 2 Additional Vehicles purchased by the City in the condition required by Sections 2.1, 2.2, 2.6 and 2.9 of this Schedule 44 to the Designated Site and "**Deliver**" and similar terms shall be construed accordingly.
- (h) **"Delivery Date"** means the date required for Delivery of each Stage 2 Additional Vehicle as set out in Appendix 1 to this Schedule 44.
- (i) **"Designated Site**" means the Belfast Road maintenance and storage facility.
- (j) "**Excluded Matters**" means (i) any obligation or liability of Project Co arising out of the provisions of the Project Agreement and (ii) any matter related to the provisions of the Project Agreement, in either case other than those specifically relating to the Delivery of the Stage 2 Additional Vehicles as set out in this Schedule 44.
- (k) **"Expanded System**" means the System as expanded by the Stage 2System.
- (1) **"Expanded System Diagram**" means the diagram set out at Appendix 2 to this Schedule 44.
- (m) "**Expanded System Revenue Service Availability**" occurs when substantial completion of the Stage 2 System and Systems Integration have been completed such that the Expanded System operates as a single coherent system.

- (n) **"Final Milestone**" means in respect of each Stage 2 Additional Vehicle, the milestone referenced in Section 2.4(a)(ix) of this Schedule 44.
- (o) "Longstop Delivery Date" means March 15, 2020.
- (p) "**MOU**" means the agreement set out in the Memorandum of Understanding dated March 16, 2017 and made between the City and Project Co.
- (q) "**Prime Rate**" means on any day, the annual rate of interest announced by the Royal Bank of Canada (or its successor), or any Canadian chartered bank agreed by the City and Project Co, from time to time as its reference rate then in effect for determining interest rates on Canadian dollar commercial loans made by it in Canada.
- (r) "Punch List" means, in respect of each Stage 2 Additional Vehicle, a list of minor deficiencies (such that they do not affect the safety or operation of such Stage 2 Additional Vehicle) and which will not substantially affect the use of such Stage 2 Additional Vehicle for its intended purpose (either until or while the work is completed).
- (s) "**Punch List Items**" means the items on the Punch List.
- (t) **"Rolling Stock Activities**" means any activities undertaken by any person under, relating to, or in connection with the implementation of, this Schedule 44 and any and all early works packages contemplated by the MOU in connection with the Belfast MSF Expansion.
- (u) **"Rolling Stock Component**" means an amount equal to comprising part of the aggregate Vehicle Unit Price for all the Stage2 additional Vehicles.
- (v) "**RTG Delay Costs**" means any losses, damages or costs reasonably and properly incurred or suffered by the Construction Contractor as a result of any delay by the Vehicle Supplier in the performance of the Stage 2 Vehicle Supply Variation up to a maximum amount of per vehicle per day of delay.
- (w) "S2AV Capital Spares" means the spare parts and components for the Stage 2 Additional Vehicles identified in Appendix 3 to this Schedule 44.
- (x) "S2AV Payment Account" means an account into which Project Co shall direct by written notice to the City and the Construction Contractor that all Stage 2 Additional Vehicles Milestone Payments and other payments under Section 2.4 of this Schedule 44 shall be made.
- (y) "**Stage 1 Vehicles**" means the Vehicles required to be delivered under this Project Agreement in order to achieve Substantial Completion of the Vehicle Component, excluding, for greater certainty, any Stage 2 Additional Vehicles.

- (z) "**Stage 2 Additional Vehicles**" means 38 Alstom Citadis Spirit 48m light rail transit vehicles purchased by the City pursuant to this Schedule 44 (including the Thales vehicle on-board train control and on-board communications equipment).
- (aa) "Stage 2 Additional Vehicles Milestone Payments" has the meaning given to it in Section 2.4(a).
- (bb) "**Stage 2 East Extension**" means the east extension of the Confederation Line from Blair station to Trim as generally illustrated by the thinner red lines to the east of the Confederation Line in the Expanded System Diagram.
- (cc) "**Stage 2 LRT Project**" means the Stage 2 East Extension and the Stage 2 West Extension.
- (dd) "Stage 2 System" means the light rail rapid transit system for the Stage 2 LRT Project.
- (ee) "**Stage 2 Vehicle Supply Variation**" means the variation for the supply of the Stage 2 Additional Vehicles dated June 21, 2017 to the contract dated February 12, 2013 between the Construction Contractor and the Vehicle Supplier for the supply by the Vehicle Supplier of the Stage 1 Vehicles.
- (ff) "**Stage 2 West Extension**" means the west extension of the Confederation Line from Tunney's Pasture to Moodie Drive as generally illustrated by the thinner red lines to the west of the Confederation Line in the Expanded System Diagram.
- (gg) "**Systems Integration**" means ensuring that all components of the Expanded System function together as a coherent system.
- (hh) "Vehicle Long Stop Date" means January 1, 2023.
- (ii) "Vehicle Supplier" means Alstom Transport Canada Inc.
- (jj) **"Vehicle Unit Price**" means, subject as provided in Section 2.4(d), per Stage 2 Additional Vehicle.
- (kk) **"Weekday**" means Monday, Tuesday, Wednesday, Thursday or Friday that is not a statutory holiday in the Province of Ontario.

Unless otherwise defined in this Schedule 44, terms defined in Schedule 1 to this Project Agreement shall have the same meaning in this Schedule 44.

### 1.2 Appendices

The following documents, all of which are hereby incorporated by reference into and form part of this Schedule:

Appendix No. Description		Description
Appendix 1	_	Delivery Dates
Appendix 2	-	Expanded System Diagram
Appendix 3	-	S2AV Capital Spares
Appendix 14	-	Commissioning of Stage 2 Vehicles

# PART 2 PURCHASE OF STAGE 2 ADDITIONAL VEHICLES

#### 2.1 City's Purchase

- (a) The City hereby purchases from Project Co the Stage 2 Additional Vehicles and the S2AV Capital Spares and requires that each Stage 2 Additional Vehicle be Delivered by Project Co to the Designated Site on the Delivery Date for such Vehicle set out in Appendix 1 or on such earlier date as may be agreed by the City and Project Co.
- (b) The Parties acknowledge that the City intends to use the Stage 2 Additional Vehicles on the System and the Expanded System, provided that it is expressly acknowledged by the Parties that Project Co shall have no responsibility or liability under this Schedule 44 in respect of any aspect of Systems Integration. The Stage 2 Additional Vehicles shall be capable of being used to achieve Expanded System Revenue Service Availability and capable of being utilized on the System and the Expanded System, assuming that the Expanded System will be designed and constructed to the same requirements as the System.
- (c) The purchase of each Stage 2 Additional Vehicle shall be completed upon the Delivery Date for such Vehicle. Together with the documentation required under Section 29.5 of the Project Agreement, as applied herein, Project Co will deliver to the City a Punch List together with the Delivery of each Vehicle. The Delivery of any Stage 2 Additional Vehicle shall be effective even if there are Punch List Items. Such Punch List Items shall be corrected as expeditiously as possible by the Project Co at the Designated Site. Such Punch List Items shall be itemized and listed along with a rectification date agreed between the parties, and must be remedied by the agreed upon rectification date.
- (d) Except to the extent otherwise provided in this Schedule 44 and subject always to Section 2.8 of this Schedule 44, the provisions of the Project Agreement relating to Vehicles, including (but not limited to) Section 29.5 of the Project Agreement shall apply, *mutatis mutandis*, to the Stage 2 Additional Vehicles, provided that, for the purposes of this Schedule 44, the provisions of the Project Agreement entitling Project Co to extensions of time for any Delay Event shall apply to each of the Delivery Dates hereunder, provided Project Co shall have complied with its obligations in respect of any Delay Event under Section 40 of the Project Agreement (including, as such obligations shall relate to the details of the consequences (whether direct or indirect, financial or non-financial) which such Delay Event may have upon any of the Delivery Dates). The

City shall allow Project Co an extension of time equal to the delay caused by any relevant Delay Event and shall fix a revised Delivery Date as soon as reasonably practicable and, in any event, within ten (10) Business Days of the latter of (A) the date of receipt by the City Representative of Project Co's notice given in accordance with Section 40.2(a) of the Project Agreement and the date of receipt of any further particulars (if such are required under Section 40.2(c) of the Project Agreement), whichever is later and (B) the date of receipt by the City Representative of any supplemental information supplied by Project Co in accordance with Section 40.2(b) of the Project Agreement and the date of receipt of any further particulars (if such are required under Section 40.2(c) of the Project Agreement and the date of receipt of any further particulars (if such are required under Section 40.2(c) of the Project Agreement and the date of receipt of any further particulars (if such are required under Section 40.2(c) of the Project Agreement and the date of receipt of any further particulars (if such are required under Section 40.2(c) of the Project Agreement and the date of receipt of any further particulars (if such are required under Section 40.2(c) of the Project Agreement), whichever is later.

- (e) If, as at the Delivery Date for any Stage 2 Additional Vehicle:
  - (i) the relevant Stage 2 Additional Vehicle is encumbered by any encumbrances contrary to Section 29.5 of the Project Agreement; or
  - (ii) Project Co has failed to perform any covenant on its part in respect of such Stage 2 Additional Vehicle,

(a "Default Event") then, without prejudice to the City's entitlement to the payment of liquidated damages under and in accordance with Section 2.7(a) and (b) of this Schedule 44, the City may serve notice on Project Co (the "Vehicle Notice") requiring Project Co to remove the encumbrance or rectify or otherwise deal with any other relevant Default Event and giving Project Co a reasonable period in light of the nature of the encumbrance, default or failure (the "Vehicle Cure Period"), to do so. If by the end of the Vehicle Cure Period, Project Co has not removed the encumbrance or rectified the other relevant Default Event(s) to the satisfaction of the City, acting reasonably, the City may in its Discretion on prior written notice to Project Co (the "Default Notice"), arrange for the encumbrance to be discharged or otherwise perform, rectify or remedy the other relevant Default Event(s) and if the relevant Default Event(s) reasonably requires the payment or expenditure of money, the City may make such payment or expenditure and deduct or set-off all sums so expended (together with interest thereon at the Default Interest Rate until the date of such deduction and/or set-off) from any subsequent Stage 2 Additional Vehicles Milestone Payment but not, for greater certainty, against any other amount payable by the City under this Project Agreement. The Parties agree that Delivery of any Stage 2 Additional Vehicle shall not, unless otherwise agreed by Project Co and the City, take place until any outstanding Default Event has been remedied to the satisfaction of the City, acting reasonably.

# 2.2 Output Specifications of Stage 2 Additional Vehicles

(a) Subject to Section 2.2(b), the Stage 2 Additional Vehicles purchased by the City pursuant to Section 2.1(a) shall be substantially identical to the design of those light rail vehicles purchased under the Project Agreement, subject only to changes necessitated by changes in the supplier of components or in the nature of components supplied by manufacturers and, in any event, manufactured in accordance with the Output Specifications provided for in Schedule 15-2 – Output Specifications - Design and Construction Specifications, as the same have been amended pursuant to all variations, instructions, adjustments and deviations, to the extent agreed or approved by RTG on or prior to the date of execution of the Variation Confirmation related to this Schedule 44. To the extent that there is any Dispute outstanding relating to the Output Specifications provided for in Schedule 15-2 or the interpretation thereof, the Parties agree that the outcome of such Dispute will apply equally to the Stage 2 Additional Vehicles as to the Stage 1 Vehicles.

(b) Notwithstanding Section 2.2(a), the City may further amend the Output Specifications provided for in Schedule 15 – Output Specifications in respect of the Stage 2 Additional Vehicles after the date specified in Section 2.2(a). Such further amendments shall constitute a Variation and shall be subject to the Variation process set out in the Project Agreement and Schedule 22 - Variation Procedure.

### 2.3 Price of Additional Vehicles and S2AV Capital Spares

Subject as provided in Sections 2.2(b) and 2.4(d) to (h), the price of each of the Stage 2 Additional Vehicles purchased by the City pursuant to Section 2.1(a) shall be the Vehicle Unit Price. Subject as provided in Sections 2.2(b) and 2.4(d) to (h), the price of the S2AV Capital Spares shall be .

### 2.4 Payment of Price of Additional Vehicles and S2AV Capital Spares

[REDACTED]

## 2.5 Insurance Premium Adjustment

The City shall on the date of execution of this Schedule 44 pay to Project Co a single payment of \$ (inclusive of relevant taxes) to compensate Project Co for the increase in its insurance costs relating to the requirement to insure the Stage 2 Additional Vehicles.

### 2.6 Commissioning of Additional Vehicles

The Stage 2 Additional Vehicles purchased pursuant to this Schedule shall be tested and commissioned by Project Co in accordance with Appendix 14 - Commissioning of Stage 2 Vehicles.

### 2.7 **Project Co's Failure to Deliver**

- (a) If by June 15, 2019, Project Co shall have failed to complete serial testing on 17 Stage 2 Additional Vehicles, the City shall, subject as provided in Section 2.7(d) to (f), be entitled on account of liquidated damages to an amount equal to for each of the first 17 Stage 2 Additional Vehicles in respect of which serial testing is delayed for each day of delay from June 15, 2019 until serial testing of such Stage 2 Additional Vehicle has been achieved.
- (b) If by the Longstop Delivery Date, the Final Milestone has not been achieved in respect of all Stage 2 Additional Vehicles, the City shall, subject as provided in Section 2.7(d) to (f), be entitled on account of liquidated damages to an amount equal to:
  - (i) for each of the first 17 Stage 2 Additional Vehicles in respect of which the Final Milestone is delayed for each day of delay from the Longstop Delivery Date until such Final Milestone has been achieved; and
  - (ii) for each of the next 21 Stage 2 Additional Vehicles in respect of which the Final Milestone is delayed for each day of delay from the Longstop Delivery Date until such Final Milestone has been achieved.
- (c) Except as provided in Sections 2.1(e) and 3.1 of this Schedule, the amounts of liquidated damages referred to in Sections 2.7(a) and (b) of this Schedule shall constitute the City's sole and exclusive remedy in respect of a failure of Project Co to Deliver the Stage 2 Additional Vehicles in accordance with the provisions of this Project Agreement.
- (d) The maximum amount of Project Co's liability under Section 2.7(a) and (b) of this Schedule 44 shall be the lesser of:
  - (i) the maximum liability of the Vehicle Supplier in respect of liquidated damages payable by it to the Construction Contractor under the terms of the Stage 2 Vehicle Supply Variation; and
  - (ii) subject to Section 2.7(e) and (f) the amount standing to the credit of the CC LD Account as at the Longstop Delivery Date.
- (e) Project Co shall ensure that with effect from May 1, 2019:

#### **Ottawa Light Rail Transit Project**

- (i) the Construction Contractor shall pay any liquidated damages which it receives from the Vehicle Supplier under the Stage 2 Vehicle Supply Variation into an account (the "**CC LD Account**") in the name of the Construction Contractor;
- (ii) any amounts standing to the credit of the CC LD Account shall thereafter be applied only to compensate the Construction Contractor in respect of accrued RTG Delay Costs or to pay to Project Co amounts to enable Project Co to meet its obligations to the City under Section 2.7(a) and (b) of this Schedule 44; and
- (iii) the City shall be entitled to a security interest in the CC LD Account as security for the payment of amounts due and payable to the City under Section 2.7(a) and (b) of this Schedule 44.
- (f) If, as at the Longstop Delivery Date, there is an ongoing unresolved dispute as to any amount of liquidated damages payable to the Construction Contractor by the Vehicle Supplier under the terms of the Stage 2 Vehicle Supply Variation, then any payment of liquidated damages by Project Co under Section 2.7(a) and (b) shall be deferred until the resolution of such dispute.
- (g) If Project Co shall fail to Deliver the Stage 2 Additional Vehicles by the Vehicle Long Stop Date, the City shall have the right to:
  - (i) cancel the purchase of the undelivered Stage 2 Additional Vehicles (the "Cancelled Vehicles") by written notice to Project Co, provided that any Stage 2 Additional Vehicles completed or work partially completed in connection with any Stage 2 Additional Vehicles shall be delivered, within a reasonable period after such termination, at the City's cost to a location specified by the City, acting reasonably; or
  - (ii) without derogation from the City's right under Section 2.7(a) and (b), but subject as provided in Section 2.7(d), complete the purchase of the Cancelled Vehicles by written notice to Project Co.

# 2.8 Ring Fencing Provisions and Limitation on Liability

- (a) The City agrees that nothing in or arising out of this Schedule 44 and no performance or delay or failure in the performance of any obligation under or in connection with this Schedule 44 (including any delay or failure relating to the Stage 2 Additional Vehicles or the Delivery thereof) shall give rise to or be capable of giving rise to a Project Co Event of Default.
- (b) In addition, to the extent that any Claim by the City under this Schedule 44 would cause Project Co to be unable to meet its obligations under the Lending Agreements or would otherwise have a Material Adverse Effect under and as defined in the Lending Agreements, satisfaction of such Claim shall be deferred until (i) after the Substantial Completion Payment Date; and (ii) such time as Project Co is able to satisfy such Claim without breaching any of its obligations under the Lending Agreements or otherwise creating or giving rise to any Material Adverse Effect under and as defined in the Lending Agreements.

#### Ottawa Light Rail Transit Project

- (c) The City further agrees that no performance or delay or failure in the performance by Project Co of any of the Excluded Matters shall give rise or be capable of giving rise to any default or failure on the part of Project Co under this Schedule 44.
- (d) Notwithstanding any other provisions of this Project Agreement or any other Project Document, the City shall not be entitled to exercise any right under this Project Agreement, any other Project Document, or otherwise howsoever arising, to deduct or set-off any amount due or owing to it under this Schedule 44 against any payment that it is required to make under any other provision of this Project Agreement or any other Project Document or to deduct or set-off any amount payable by it under this Schedule 44 against any amount due or owing to it under any other provision of this Project Agreement or any other Project Document.
- (e) The maximum aggregate liability of Project Co under this Schedule 44, including for default, breach, negligence, any liquidated damages, indemnity obligations or otherwise in connection with Project Co's obligations under this Schedule 44, shall be limited to the amount recovered from the Construction Contractor under the variation to the Construction Contract reflecting the amendments set out in this Schedule 44 (the "CC Dropdown"). Project Co shall ensure that the maximum aggregate liability of the Construction Contractor under the CC Dropdown shall not be less than an amount equal to the greater of (i) % of the total remuneration payable to the Construction Contractor under the CC Dropdown, being times the Vehicle Unit Price plus on account of the S2AV Capital Spares and (ii) the aggregate amounts recovered by the Construction Contractor against (x) the Vehicle Supplier under the Stage 2 Vehicle Supply Variation and (y) the supplier of the vehicle on-board communications equipment under its supply contract with the Construction Contractor.

# 2.9 Canadian Content

- (a) Prior to or concurrently with the Delivery of each Stage 2 Additional Vehicle, Project Co shall deliver to the City or shall procure the delivery to the City of the Canadian Content Certificate, which shall, in a manner consistent with the Canadian Contact Certificate(s) delivered in respect of the Stage 1 Vehicles:
  - (i) demonstrate that such Stage 2 Additional Vehicle meets the Canadian Content Requirements;
  - (ii) include any necessary or desirable back-up information reasonably necessary to support the contents thereof and to address the requirements of the Canadian Content Policy;
  - (iii) be true and correct in all material respects; and
  - (iv) be in form and content satisfactory to the City, acting reasonably.

### PART 3 TERMINATION OF PROJECT AGREEMENT

# **3.1** Termination of Project Agreement

#### Ottawa Light Rail Transit Project

- (a) In the event that the Project Agreement shall be terminated pursuant to and in accordance with the provisions thereof, the provisions of this Section 3.1 shall apply.
- (b) If the Project Agreement shall be terminated as a result of a City Event of Default or the exercise of the City's right to terminate for convenience pursuant to Section 47.3 of the Project Agreement:
  - Project Co shall have the right either to continue to carry out its obligation to Deliver the Stage 2 Additional Vehicles pursuant to the terms and conditions of this Schedule or to terminate the terms and conditions of this Schedule by giving the City a written notice within thirty (30) days following the termination of the Project Agreement effective immediately (the "Additional Vehicles Termination Date");
  - (ii) in the event that Project Co shall elect to carry out its obligation to Deliver the Stage 2 Additional Vehicles pursuant to the terms and conditions of this Schedule

in accordance with subparagraph (i) above, the provisions of this Schedule shall survive and apply together with those parts of this Project Agreement necessary to enable the Parties to comply therewith; and

- (iii) in the event that Project Co shall elect to terminate the terms and conditions of this Schedule in accordance with subparagraph (i) above, the City shall not be entitled to any refund of the payments that the City shall have made in respect of the Stage 2 Additional Vehicles prior to or on the Additional Vehicles Termination Date; provided that any Stage 2 Additional Vehicles completed or work partially completed in connection with any Stage 2 Additional Vehicles shall be delivered at the City's cost to a location specified by the City, acting reasonably.
- (c) If the Project Agreement shall be terminated as a result of the exercise of the City's right to terminate pursuant to Section 45 of the Project Agreement:
  - the City shall have the right either to continue to carry out the terms and conditions of this Schedule or to terminate the terms and conditions of this Schedule by giving Project Co a written notice within thirty (30) days following the termination of the Project Agreement effective immediately;
  - (ii) in the event that the City shall elect to carry out the terms and conditions of this Schedule in accordance with subparagraph (i) above, the provisions of this Schedule shall survive and apply, together with those parts of this Project Agreement necessary to enable the Parties to comply therewith, provided that the Parties shall have agreed any and all amendments to the Project Agreement necessary to provide for the facilities necessary for the manufacture, storage and maintenance of the Vehicles to be Delivered hereunder; and
  - (iii) in the event that the City shall elect to terminate the terms and conditions of this Schedule in accordance with subparagraph (i) above, the provisions of Section 48 of this Project Agreement shall apply.
- (d) If the Project Agreement shall be terminated as a result of Section 47.1 or 47.2 of the Project Agreement:
  - (i) either party shall have the right to terminate the terms and conditions of this Schedule 44 by giving the other party a written notice within thirty (30) days following the termination of the Project Agreement effective immediately;
  - (ii) in the event that neither Party shall elect to terminate the terms and conditions of this Schedule 44 in accordance with subparagraph (i) above, the provisions of this Schedule 44 shall survive and apply, together with those parts of this Project Agreement necessary to enable the Parties to comply therewith, provided that the Parties shall have agreed any and all amendments to the Project Agreement necessary to provide for the facilities necessary for the manufacture, storage and maintenance of the Vehicles to be Delivered hereunder; and

- (iii) in the event that either Party shall elect to terminate the terms and conditions of this Schedule in accordance with subparagraph (i) above, the City shall not be entitled to any refund of the payments that the City shall have made in respect of the Stage 2 Additional Vehicles prior to or on the Additional Vehicles Termination Date; provided that any Stage 2 Additional Vehicles completed or work partially completed in connection with any Stage 2 Additional Vehicles shall be delivered, within a reasonable period after termination, at the City's cost to a location specified by the City, acting reasonably.
- (e) In the event that Project Co or the City, as the case may be, fails to deliver a written notice within thirty (30) days following the termination of the Project Agreement as provided for in Section 3.1(b), Section 3.1(c) or Section 3.1(d), it shall be deemed that the City has elected to terminate the terms and conditions of this Schedule 44.
- (f) For greater certainty, the City acknowledges and agrees that, if the Project Agreement is terminated for any reason, including as a result of a Project Co Event of Default, nothing in or arising out of this Schedule 44 will have any impact whatsoever on the compensation payable to Project Co pursuant to Schedule 23 (Compensation on Termination).

# **3.2** Impact of Termination on M&R Activities

On any termination of the terms and conditions of this Schedule 44:

- (a) the City shall negotiate in good faith with Project Co such amendments to the Project Agreement as shall place Project Co and the Maintenance Contractor in no better and no worse position in respect of the provision of the Maintenance Services or in relation to the Payment Mechanism as each of them would have been in had the Rolling Stock Activities not been carried out; and
- (b) the City shall compensate Project Co for any incremental cost, liability or expense that either of Project Co and the Maintenance Contractor shall demonstrate to the reasonable satisfaction of the City that it has suffered or incurred in having complied with or in continuing to comply with its obligations under the Project Agreement as a result of the Rolling Stock Activities.

#### PART 4 BREAK POINT

### 4.1 Break Point

(a) The Parties acknowledge that they are currently negotiating the terms of the Belfast MSF Expansion Variation. The Parties further acknowledge that Project Co's ability to perform its obligations under this Schedule 44 may be adversely impacted if the Belfast MSF Expansion Variation is not executed in sufficient time to enable the Belfast MSF Expansion to be substantially complete by December 31, 2018 (the "Deadline Date").

- (b) The Parties agree that, if the Belfast MSF Expansion Variation shall not have been executed on or before the Break Point, then the Parties shall meet within 10 Business Days of the Break Point to negotiate in good faith with a view to agreeing the following:
  - (i) the funding by the City of such additional early works packages as will enable work to continue on the Belfast MSF Expansion; and
  - (ii) any Variations that may be necessary to the MOU, this Schedule 44 or to the other provisions of this Project Agreement, or any provisions that may be necessary in any Variation contemplated under the MOU that is still being negotiated, due to the delay in achieving agreement on the Belfast MSF Expansion Variation or as a result of the Belfast MSF Expansion not going ahead as anticipated in the MOU.

# 4.2 Break Point Option

If, by the date that is 60 days after the Break Point or such later date as the Parties may agree, being not later than the date falling 90 days after the Break Point, the Belfast MSF Expansion Variation has not been executed and agreement has not been reached by the Parties on the matters referred to in Section 4.1(b)(i) and (ii) of this Schedule, then the City shall, at its discretion, either (a) take a novation of the Stage 2 Vehicle Supply Variation from the Construction Contractor at no cost to the Construction Contractor and this Schedule 44 shall terminate and the provisions of Section 3.1(b)(iii) shall apply; or (b) continue with the operation and performance of this Schedule 44, provided that, regardless of which option the City shall elect, the City shall negotiate in good faith with Project Co such amendments to the Project Agreement as shall place Project Co and the Maintenance Contractor in no better and no worse position in respect of the provision of the Maintenance Services or in relation to the Payment Mechanism as each of them would have been in had the Rolling Stock Activities not been carried out and any disagreement as to the terms of such amendments shall be determined by the Dispute Resolution Procedure and provided further that, with effect from the Break Point, any Rolling Stock Activities that in any way impede, restrict or otherwise interfere with the carrying out by Project Co of its obligations under the Project Agreement and/or any Variation thereto, including this Schedule 44, shall be treated for all purposes under the Project Agreement and any such Variation as an Excusing Cause and a Compensation Event.

#### PART 5 FURTHER VEHICLES

### 5.1 Further Vehicles

(a) Project Co acknowledges and agrees that the City may require additional light rail transit vehicles following the date hereof, including all electromechanical and other equipment therein, designed and manufactured in accordance with Section 2.2 hereof (the "Option Vehicles"). For clarity, this includes any additional light rail transit vehicles beyond the initial fleet of Vehicles to be provided by Project Co at the Revenue Service Availability Date and the Stage 2 Additional Vehicles provided under this Schedule 44. The City anticipates that it may require delivery of approximately 28 Option Vehicles between 2026 and 2036. Project Co and the City acknowledge and agree that the City shall have

the opportunity to provide one or more written notices to Project Co to negotiate a price per Option Vehicle (each a "Vehicle Option Notice"). In the event a Vehicle Option Notice is delivered, Project Co shall have 75 days from the delivery of a Vehicle Option Notice to deliver a proposed price per Option Vehicle to the City (the "Vehicle Option **Proposal**"). The proposed price per Option Vehicle shall be determined in good faith by Project Co and negotiated in good faith between the City and Project Co based on (A) a detailed "line item" price build-up provided by Project Co to the City as to differences between the Vehicle Unit Price and the proposed price per Option Vehicle and (B) and market comparables and metrics as regards the pricing for similar light rail transit vehicles being manufactured and delivered at that time. The Vehicle Option Proposal shall include sufficient information and detail with respect to items (A) and (B) above. To the extent the City and Project Co are able to mutually agree on a final price per Option Vehicle within 105 days of the delivery of a Vehicle Option Notice (or such longer period as the City and Project Co may mutually agree), such Option Vehicles shall be purchased and delivered on substantially similar terms, under prevailing conditions at the time of Vehicle Option Proposal, as those set forth in this Schedule 44.

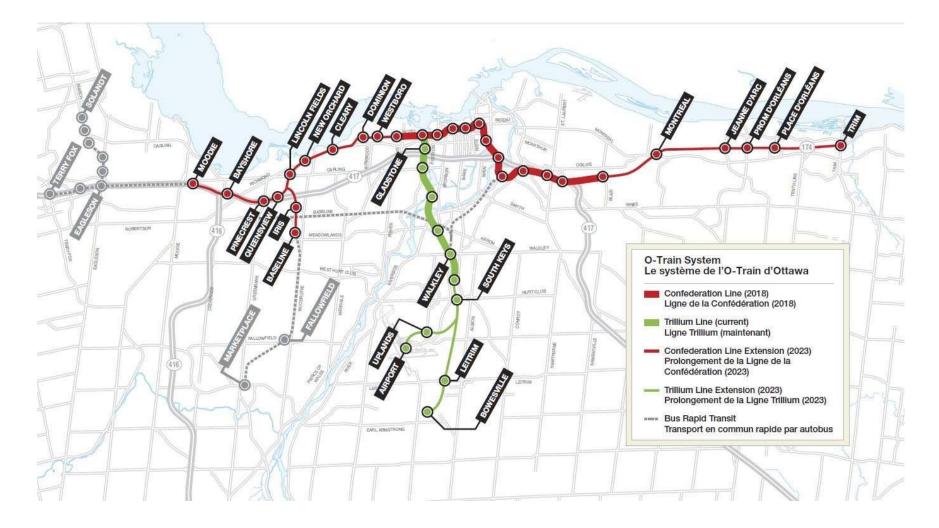
### 5.2 Amendments to Lifecycle Payments

- (a) Where the City shall purchase any Option Vehicles pursuant to Section 5.1(a), the City and Project Co shall agree on appropriate amendments to the schedule of Lifecycle Payments set out in Schedule 20 - Payment Mechanism, taking into account lifecycle costs for the Option Vehicles that occur within the MaintenanceTerm.
- (b) The amendments of the Lifecycle Payments schedule as provided for in Section 5.2(a) shall be presumptively based on a lifecycle cost curve identical in real dollar terms to the lifecycle cost curve for the Vehicles contained in Project Co's financial model at Financial Close, as amended from time to time. Any variations must be demonstrated by Project Co with specific references to unique features of the Option Vehicles which require a different lifecycle maintenance approach.
- (c) For greater certainty, the amendment of the Lifecycle Payments as provided for hereunder shall take into account that:
  - (i) any amendment in the Output Specifications requested by the City shall result in an adjustment in the Lifecycle Payments; and
  - (ii) the City shall be responsible for lifecycle costs for the Option Vehicles that occur beyond the Maintenance Term.

# **DELIVERY DATES**

	Quantity of LRV Deliveries				
Month	By Month	Cumulative			
June 2018	1	1			
July 2018	1	2			
August 2018	1	3			
September 2018	1	4			
October 2018	1	5			
November 2018	1	6			
December 2018	1	7			
January 2019	2	9			
February 2019	3	12			
March 2019	2	14			
April 2019	3	17			
May 2019	3	20			
June 2019	2	22			
July 2019	3	25			
August 2019	2	27			
September 2019	3	30			
October 2019	2	32			
November 2019	2	34			
December 2019	2	36			
January 2020	2	38			

# EXPANDED SYSTEM DIAGRAM



# S2AV CAPITAL SPARES

Main System	DESCRIPTION	Capital Spares Qty	Existing Contract	Additonal
BOGIE	Power Bogie (without motor)	4	3	1
BOGIE	Axle beam	10		10
BOGIE	Trailer bogie	3	2	1
BOGIE	Primary suspension spring	5		5
BOGIE	Vertical damper	5		5
BOGIE	Lateral damper	3		3
BOGIE	Equipped traction converter	4	3	1
TCMS	Traction motor	6		6
TCMS	Line filter inductor	3		3
TRACTION	RHEOSTATIC BRAKE RESISTOR	3		3
COUPLER	Coupler	3	3	0
GANGWAY	Gangway	3		3
DOORS	Passenger access doors	5		5
DOORS	Door mechanism	5		5
DOORS	Door control unit	5		5
HVAC	HVAC saloon	7	4	3
HVAC	HVAC saloon compressor	4		4
HVAC	HVAC saloon controller	4		4
HVAC	Cabin booster	4	2	2
BRAKE	Hydraulic Power Unit Motor	5		5
BRAKE	Disc brake unit complete	5		5
BRAKE	Track brake unit	5		5
BRAKE	Electronic Brake Control Unit	2		2
CURRENT COLLECTION	Pantograph	2	1	1
CURRENT COLLECTION	Surge arrester	1		1
CVS	APS	2		2
BATTERY	Battery box	3	1	2
DRIVER INTERFACE	Master controller	4	2	2
DRIVER INTERFACE	Driver seat	1		1
SAFETY SYSTEMS	Event Recorder	2		2
AIR GENERATION UNIT	Air production unit	2		2
CVS	HSCB module	2	1	1
CVS	POWER MODULE ONIX	3		3
PAPIS	UNIT CONTROL AGATE	1		1
PAPIS	Frontal display	2		2
PAPIS	9" TFT display for wheelchair area	2		2
PAPIS	Internal LED display	4		4
PAPIS	LCD display	6		6
PAPIS	PIS Server stand alone module	2		2
TCMS	RIOM T314	5		5
TCMS	RIOM T304	1		1
TCMS	Redundant Gateway MVB-WTB	1		1
PAPIS	Retrovision IP camera	4		4
TCMS	MPU 3U9	2		2

### **COMMISSIONING OF STAGE 2 VEHICLES**

#### **1.1** Applicable Standards

- (a) Project Co shall plan, schedule, coordinate and execute the commissioning of the Stage 2 Vehicles with the support of the Vehicle Supplier.
- (b) Project Co shall provide all relevant documentation in respect of any changes or variations in design of any of the Stage 2 Additional Vehicles in comparison to the design of the Stage 2 Additional Vehicles in accordance with the requirements of Schedule 10 -Review Procedure.

#### **1.2** Vehicle Commissioning Activities

- (a) The following commissioning tests are intended to verify all vehicle functions are operating correctly on the City's right of way (Stage 1):
  - (i) Static functional testing of a 2 car Train shall be conducted to ensure that all functionality, both within the Stage 2 Vehicle and across the trainlines, is operating normally.
  - (ii) Tests of the brake rates shall be performed on all Stage 2 Vehicles per the requirements of the Project Agreement. Brake rates shall be verified using virtual chart recordings and the Velocity/Time (V/T) method:
    - (A) Emergency Brake rates;
    - (B) Dynamic brake rates;
    - (C) and friction rates;
    - (D) The parking brakes shall be engaged on each end of each Stage 2 Vehicle stopped on the maximum grade on the stage 1 system. The parking brakes shall prevent car movement.
  - (iii) Each Stage 2 Vehicle shall be tested to ensure that the acceleration rates of Project Agreement are met.
  - (iv) Project Co and the City shall mutually agree on a final form of testing and commissioning plan to ensure the Stage 2 Vehicles are capable of running on the Stage 1 system (and the Expanded System if built to Stage 1 specifications), on the basis that the testing and commissioning plan shall be no more onerous than the testing and commissioning plan for the Stage 1 Vehicles.