

CITATION: Schindler Elevator Corporation v. Walsh Construction Company of Canada,
2021 ONSC 283

COURT FILE NOS.: CV-15-540309,
CV-15-543296,

CV-15-536536-A1

DATE: 2021 01 18

**ONTARIO
SUPERIOR COURT OF JUSTICE**

IN THE MATTER OF the *Construction Act*, RSO 1990, c. C.30, as amended

B E T W E E N :

SCHINDLER ELEVATOR CORPORATION

Plaintiff / Defendant by counterclaim

- and -

WALSH CONSTRUCTION COMPANY OF
CANADA, BONDFIELD CONSTRUCTION
COMPANY LIMITED, WALSH
CONSTRUCTION/BONDFIELD
PARTNERSHIP and WOMEN'S COLLEGE
HOSPITAL

Defendants / Plaintiffs by counterclaim

A N D B E T W E E N :

WALSH CONSTRUCTION/BONDFIELD
PARTNERSHIP

Plaintiff

- and -

ZURICH INSURANCE COMPANY LTD.

Defendant

)
)
) P. Du Vernet, L. Wang, and J. McClelland,
) *for the plaintiff/defendant by counterclaim*
)
)

) G. Ackerley, F. Bogach, K. Thavaraj, and
) P. Conrod, *for the defendants/plaintiffs by*
) *counterclaim, Walsh Construction Company*
) *of Canada, Bondfield Construction*
) *Company Limited, and Walsh*
) *Construction/Bondfield Partnership*
)
)

) G. Ackerley, F. Bogach, K. Thavaraj, and
) P. Conrod, *for the plaintiff*
)
)

) P. Du Vernet, L. Wang, and J. McClelland,
) *for the defendant*
)
)

AND BETWEEN:)
)
WALSH CONSTRUCTION/BONDFIELD) G. Ackerley, F. Bogach, K. Thavaraj, and
PARTNERSHIP, WALSH) P. Conrod, *for the defendants*
CONSTRUCTION COMPANY CANADA)
and BONDFIELD CONSTRUCTION)
COMPANY LIMITED)
)
Defendants)
)
- and -)
)
SCHINDLER ELEVATOR CORPORATION) P. Du Vernet, L. Wang, and J. McClelland,
and ZURICH INSURANCE COMPANY INC.) *for the third parties*
)
Third Parties)
)
)
)
) **HEARD:** January 20-24, 27-31, February 3,
12-14, 18-20, 27-28, 2020

REASONS FOR JUDGMENT

Master Todd Robinson

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I. INTRODUCTION

[1] In 2010, Walsh Construction/Bondfield Partnership, a partnership comprised of Walsh Construction Company of Canada and Bondfield Construction Company Limited (collectively, “WBP”), commenced construction of a new 624,000 square foot hospital to replace the former Women’s College Hospital at 76 Grenville Street in downtown Toronto. The redevelopment project, known as the Women’s College Hospital Capital Redevelopment Project (the “WCH Project”), involved the phased demolition of the existing hospital buildings at the site and a phased construction of new facilities.

[2] Schindler Elevator Corporation (“Schindler”) was among the subcontractors retained by WBP for the WCH Project. Schindler was subcontracted to fabricate, deliver and install all elevators for the new hospital buildings. A performance bond issued by Schindler’s surety, Zurich Insurance Company Inc. (“Zurich”), was provided as security for the performance of Schindler’s obligations under its subcontract.

[3] Schindler’s position is that it completed its entire subcontract scope of work in good faith, including approved extras and having incurred acceleration costs for which WBP agreed to pay, all of which was done despite ongoing non-payment by WBP. WBP is argued to have breached the subcontract by failing to make payment of amounts due and owing to Schindler.

[4] WBP argues that Schindler's delays in fabrication, delivery and installation of six elevators critically impacted the project schedule, resulting in WBP incurring both extensive costs to mitigate the overall project delay and contractual penalties for late completion of the first phase. WBP claims damages from Schindler for its apportioned share of those losses and damages, to which WBP acknowledges other subcontractors contributed. Schindler denies that it caused or contributed to any material delay on the project, and particularly no delay to the critical path of the project schedule, which Schindler argues was caused solely by WBP and other subcontractors.

[5] Following completion of Schindler's subcontract work, Schindler registered a claim for lien for \$952,841.59 on account of unpaid services and materials. Schindler's lien was vacated by WBP upon the posting of a lien bond in the amount of \$1,022,841.99, and thereafter perfected by Schindler issuing the action in Court File No. CV-15-540309. At trial, Schindler pursued a total claim of \$956,864.00, inclusive of HST. WBP counterclaimed for \$3,435,597.59 (reduced to \$2,237,638.17 during trial) comprised primarily of amounts paid for work on behalf of Schindler, delay impact losses, amounts levied against WBP, and contractual penalties paid by WBP, all of which are claimed to be properly attributed, in whole or in part, to Schindler. WBP further claims against Zurich pursuant to Schindler's performance bond for the same amounts claimed against Schindler.

[6] For the reasons that follow, I have made the following determinations:

- (a) In Court File No. CV-15-540309, Schindler breached its subcontract by delayed performance of elevator installation, and that WBP was entitled to withhold payment from Schindler by reason of that breach. However, I have also found that Schindler's delayed performance has not been proven to have delayed the critical path of the WCH Project and, accordingly, most of the damages claimed against Schindler are unsupportable against it. I have, however, determined that there are some compensable damages suffered by WBP on account of Schindler's breach of the subcontract;
- (b) In Court File No. CV-15-536536-A1, I have determined that Schindler is not contractually required to indemnify WBP for the deductions levied against it for elevator unavailability, and that WBP cannot recover from Schindler the amounts paid to B&M for warranty and maintenance claims; and
- (c) In Court File No. CV-15-543296, I have determined that, based on my determinations in the other two proceedings, there is no basis for a claim by WBP against Zurich.

[7] In the result, I find that Schindler is entitled to a lien in the amount of \$650,786.20 and judgment against WBP for the same amount, plus pre-judgment interest. I also find that the actions in Court File Nos. CV-15-536536-A1 and CV-15-543296 should be dismissed.

II. BACKGROUND

a. Project structure

[8] The WCH Project is a substantial public-private-partnership (P3) project utilizing an alternative financing and procurement model. The model required that the successful proponent be responsible for design, construction, financing and 30-year maintenance of the WCH Project.

[9] In 2009, a request for proposals for the WCH Project was issued by Infrastructure Ontario on behalf of Women's College Hospital ("WCH"). That procurement process ultimately resulted in selection of Women's College Partnership ("ProjectCo") as the preferred proponent.

[10] In July 2010, WCH and ProjectCo entered into a project agreement for the WCH Project (the "Project Agreement"), governing all aspects of ProjectCo's design, construction, financing and maintenance obligations. Pursuant to the Project Agreement, ProjectCo was contractually required to achieve Interim Completion by April 29, 2013 and achieve Substantial Completion by September 9, 2015.

[11] WBP was part of a consortium that bid on the WCH Project. Concurrently with execution of the Project Agreement, ProjectCo entered into a construction contract with WBP for the design and construction of the WCH Project for a contract price of \$272,680,000, excluding HST (the "Construction Contract"). The Construction Contract contained the same deadlines for achieving Interim Completion and Substantial Completion.

[12] Construction of the WCH Project was formally divided into two phases, but essentially proceeded in a three-phase approach. The first phase, referred to as "Phase 1" during the trial, began in fall of 2010. It involved all steps required to achieve Interim Completion pursuant to the Project Agreement, namely demolition of an existing apartment building and parking garage, as well as the construction of a new hospital tower on the eastern portion of the site. The second phase, referred to as "Phase 2" during the trial, involved all steps required to achieve Substantial Completion pursuant to the Project Agreement, namely demolition of the existing main hospital building (following transfer of all hospital operations and decanting of all patients to the new tower) and construction of a new administrative, research and education facilities on the western portion of the site. The third phase, referred to as "Phase 2.5" during the trial, involved integration of Phase 1 and Phase 2.

[13] Two other project-level agreements are also relevant in these proceedings:

- (a) ProjectCo entered into a facilities maintenance agreement with Black & McDonald Limited ("B&M"), pursuant to which B&M was responsible for performing the "Project Co Services" required of ProjectCo pursuant to the Project Agreement (the "Service Contract"); and
- (b) ProjectCo, WBP, and B&M entered into an interface agreement, pursuant to which WBP and B&M agreed to cooperate and integrate their conduct of activities to meet

performance requirements under the Construction Contract and the Service Contract (the “Interface Agreement”). Among other terms, the Interface Agreement allocates certain risk and liability as between WBP and B&M.

[14] WBP contracted with Perkin Eastman Black/IBI Group Architects in Joint Venture (“PEB/IBI”) for design of the WCH Project. WBP and PEB/IBI have separate litigation arising from the WCH Project that was not tried with these actions.

b. Elevator subcontract

[15] Schindler’s involvement in the WCH Project was limited to Phase 1 and Phase 2. Excepting an issue with warranty and maintenance obligations, WBP’s claims against Schindler relate solely to Phase 1. Schindler’s claim against WBP is in respect of services and materials supplied to both Phase 1 and Phase 2.

[16] Schindler’s subcontract was for the fabrication, delivery and installation of a total of ten machine room less (MRL) elevators for the WCH Project: eight in Phase 1 and two in Phase 2. Only six of those elevators are at issue in this litigation, all involving Phase 1. The first set are the two main elevators located roughly in the centre of the tower, which were to be used as construction freight elevators during the course of construction and patient elevators following construction, referred to as elevator nos. 1 and 2 (the “Freight Elevators”). The second set are the four passenger elevators located on the west side of the tower, referred to as elevator nos. 3-6 (the “Passenger Elevators”).

[17] Schindler initially bid for the supply and installation of the ten elevators in December 2010. Schindler’s bid of \$2,181,727, plus HST, was broken down by elevator, with the Passenger Elevators bid as a lump sum. It also included clarifications and conditions in two places: first, in the covering bid memorandum under the heading, “Clarifications to the Plans and Specifications”, and second, in a schedule containing various conditions to Schindler’s proposal entitled, “Proposal Conditions”.

[18] The first clarification in the bid memorandum states, “Minimum hoistway, pit and clear overhead dimensions to be as per attached specification summary sheets.” Various additional conditions are identified in the “Proposal Conditions” schedule, argued at trial to be relevant requirements, including the following:

- (a) clear access to the building and elevator hoistway with storage adjacent to the hoistway (a condition in bold and underlined in the schedule, and also noted in bold in the bid memorandum);
- (b) that the elevator hoistways were to be prepared and properly enclosed;
- (c) that the elevator hoistways were “plumb from top to bottom within a variation of one inch per one hundred feet, and provided with sufficient clearance at the top and bottom of the shaft for proper installation of machinery”; and

- (d) an elevator shaft pit of “adequate depth provided with the necessary drains and waterproofing.”

[19] Schindler’s bid was accepted. WBP provided Schindler with the form of subcontract, which included, among other aspects, contractual terms and conditions in Exhibit A, the proposed scope of subcontract work and additional terms in Exhibit B, and a copy of the then-planned project schedule in Exhibit L. Evidence from both parties supports that Exhibit B was the subject of specific discussion and negotiation by George Mealey of Schindler (who passed away prior to litigation) with Erica Carroll of WBP. Tracey Davies and Dave Brennan of Schindler also both gave evidence that they reviewed Exhibit B with Erica Carroll (née Kowert) prior to subcontract execution. The subcontract was signed by George Mealey.

[20] Initial shop drawings for the MRL elevators were submitted by Schindler to WBP in March 2011, sent by email to Erica Carroll. Cover sheets to the shop drawings set out a number of requirements for elevator installation, including the following:

1. Clear, plumb hoistway with variations not to exceed +/- 25 mm (+/- 1 inch) within the first 30.5 metres (100 ft) [...] pit floor to be dry, level, free of bumps and debris [...] hoistway, pit, and overhead dimensions to be as specified on Schindler final layout drawing.
2. Acceptable material unloading area within 30.5m (100ft) of hoistway with “rollable” access (planked or paved) or uninterrupted use of a crane or forklift and operator no cost to Schindler. Dry and enclosed storage area of adequate size for elevator materials near hoistway. [...]
3. Power for construction adjacent to hoistways and machine/control rooms (110/220 volt single phase for welders and hoists) and sufficient 3-phase power to run elevator(s) at the same time. Refer to Schindler Power Supply Data Sheet. To meet the date on which the elevators are to be turned over the power for construction and permanent 3-phase power must be installed and available prior to the start of elevator installation.
4. All work areas, including hoistway, machine/control room and pit, clear of debris. [...] Adequate work area in front of ground floor entrance required. Proper lighting of work areas;
[...]
7. Dried-in hoistway(s) and machine/control room(s).
8. Clear, flat, vertical or horizontal services for mounting rail brackets at each floor [...].
[...]
17. Adequate sealing and waterproofing of pit. Effective prevention of pit exposure to storm water or ground water.
[...]

22. Access to the main machine/control room and machinery space (Rule 2.7.3). Door(s) shall be self-closing, self-locking and operable from inside without a key. [...]

[...]

25. Provide a lockable, fused disconnect switch or circuit breaker suitable for 3 phase power for elevator control on a separate lockable fuse disconnect switch for car lighting circuit for each elevator. [...]

[...]

32. Adequate supports for machine beams, including wall pockets and patching after beams are set in place [...].

37. A temporary work platform is required for installation of the elevator. [...] Erection, maintenance and removal are by others [...].

[21] In July 2011, the subcontract was executed. The agreed base subcontract price, excluding any extras, was \$2,100,000 plus HST for the fabrication, supply and installation of all ten MRL elevators for the WCH Project.

[22] Contract duration is a seriously disputed issue. Pursuant to Exhibit B, Section 3.C.9 of the subcontract, elevator installation work was “not to exceed 16 weeks per phase” (undisputed to be equivalent to 80 working days). The construction schedule at Exhibit L to the contract identifies three relevant activities for Schindler’s Phase 1 work, as follows:

- (a) A4320, identified as “Procurement – Phase 01, Elevators”, comprising a 140 working day period;
- (b) A1540, identified as “Freight Elevator Construction”, comprising a 129 working day period; and
- (c) A2640, identified as “Testing and Commissioning of Elevators”, comprising a 20 working day period.

[23] The Passenger Elevators are not specifically identified in the Exhibit L schedule. The parties do not agree on how subcontract terms regarding time for performance apply to the Passenger Elevators, but it is undisputed that installation of the Passenger Elevators ultimately proceeded separately from the Freight Elevators. In WBP’s July 31, 2012 works schedule, activity A1720, identified as “Elevator 3 - 6 Installation”, was added and thereafter carried forward in subsequent schedules, although evidence supports that those schedules were never provided to Schindler.

c. Other subcontractors

[24] WBP engaged a substantial number of subcontractors to complete construction of the WCH Project. Several subcontractors are particularly relevant in these proceedings, namely:

- (a) Yuanda Canada Enterprises Ltd. (“Yuanda”), which was subcontracted by WBP to construct the curtain wall and perform glazing work for Phase 1 of the WCH Project;
- (b) B&M, which was subcontracted by WBP for a total subcontract price in excess of \$90 million to design and construct the mechanical and electrical systems for the WCH Project. B&M performed its mechanical and electrical work in Phase 1 throughout the structure;
- (c) Advanced Precast Inc. (“Advanced Precast”), which was subcontracted by WBP to supply and install precast panels for the building;
- (d) Marel Contractors (“Marel”), which was subcontracted by WBP to perform various interior civil works, including all framing, gypsum assemblies, and acoustic panel assemblies; and
- (e) Greenfield Painting Services (“Greenfield”), which was subcontracted by WBP to perform painting services.

[25] B&M’s role as WBP’s subcontract was distinct from its role as the facilities management service provider under the Service Contract. Although the facilities management branch of B&M was argued by WBP to be effectively a separate organization, B&M as service provider is nevertheless the same entity as B&M as WBP’s subcontractor. The two divisions are operated, though, by entirely separate teams.

d. Phase 1 - Early project delays

[26] Prior to Schindler commencing its work, there were a number of project delays to the WCH Project, including completion of foundations and structural issues. In order to mitigate the delays caused by the structural work, WBP revised its construction methodology. Originally, WBP had planned to construct the building on a floor-by-floor basis. To accelerate the schedule, WBP changed to a “core first” methodology, whereby work was focused on constructing the core of the structure by building up reinforced concrete shear walls, followed by building out the steel and construction of the floor slabs. Evidence supports that WBP also changed the mechanical penthouse floors from thick, floating slabs to narrow, fixed slabs, which had delaying impacts on B&M’s work.

[27] Expert evidence at trial was variant on the impact of these early project delays. WBP’s expert calculates an initial critical path delay to completion of foundations at 102 calendar days, of which 52 days was recovered, resulting in late structural completion of 50 days. Schindler’s expert calculates a 90 calendar day delay to completing roofing work over the penthouse above the Freight Elevators, which is an activity that directly delayed commencement of Schindler’s subcontract work.

e. Phase 1 - Delays to Interim Completion

[28] During the course of construction, a man-and-material hoist was erected on the north side of the structure, which was used to transport construction materials and workers to the various levels of the structure. This was referred to during the trial as a “skip hoist”. The skip hoist was the primary means of transporting all workers, construction tools, materials, and equipment from the ground and the higher floors through a significant portion of the construction work. However, while the skip hoist remained in place, the north side of the building could not be enclosed.

[29] The Freight Elevators played a significant planned role in Phase 1. Once constructed, the Freight Elevators were to take over as the primary means of transporting materials and workers within the structure. Turnover of the Freight Elevators for construction use allowed a sequence of events to occur. First, the skip hoist could be dismantled. Next, enclosure of the north side of the building could proceed, including installation of precast, windows, and curtainwall. Build out of the north side rooms could thereafter occur, as well as other internal work that first required the building to be enclosed. The north side of the building included some key components of the new hospital tower, including a CT/MRI suite, operating room recovery suites, and laboratory spaces.

[30] Schindler was ultimately able to commence installation work for the Freight Elevators on May 22, 2012, at which point Schindler’s equipment and materials were delivered to site. Substantive installation work commenced on May 25, 2012, after WBP had completed installation of temporary work platforms for use by Schindler, the responsibility for which was a disputed issue between WBP and Schindler. The Freight Elevators were ultimately turned over to WBP for construction use on Friday, December 7, 2012, permitting skip hoist dismantling to commence on Monday, December 10, 2012. That work was completed four days later on December 14, 2012, after which work to complete the building enclosure on the north wall commenced on December 17, 2012, continued over the holidays, and was completed in early January 2013.

[31] Schindler’s installation work on the Passenger Elevators was ready to commence on September 12, 2012, but did not proceed in earnest until after the machine rooms for the Passenger Elevators were turned over to Schindler on November 19, 2012. Ultimately, installation of the Passenger Elevators was completed and they were approved by the Technical Standards and Safety Authority (“TSSA”) for service on March 18, 2013 (elevator no. 5), March 19, 2013 (elevator no. 3), April 11, 2013 (elevator no. 4), and April 12, 2013 (elevator no. 6). Final TSSA inspections of the Passenger Elevators occurred on April 29, 2013, with certificates issued April 30, 2013.

[32] With respect to the delays in its own work, Schindler alleges a number of events impacting its performance, discussed in greater detail later in these reasons. These are argued to be entirely beyond Schindler’s control and exonerate it from any responsibility for project delay. Regarding the Freight Elevators, they include the failure of PEB/IBI to make allowance for Schindler’s shop drawings and, in particular, a structural ledge required for installation of the MRL elevators; misconstruction by WBP of box-outs necessary to permit elevator installation in the absence of a ledge; water penetration into the elevator hoistways; and conflict with other trades. Regarding the Passenger Elevators, they include delayed installation of machine room roofing; water penetration

into the hoistways; twisted and out of plumb construction of the hoistways, which Schindler argues required substantial reworking of planned elevator installation; lack of power; lack of clearance in the hoistway for equipment installation; required grouting cleanup from masonry work; work stoppage directed by WBP; and conflict with other trades.

[33] Other trades were also delayed through the same period. Delayed performance by Yuanda was specifically highlighted in trial evidence. Testimony and affidavit evidence support substantial delays in Yuanda's curtainwall and glazing installation work, and impact from those delays on other trades. Those delays included issues with Yuanda's installation subcontractors and deficient installations and materials requiring rectification. As a result of these delays, Yuanda's materials came to be stored on the perimeter of the tower on almost every level, which prevented other trades from working in those areas. WBP issued diagrams to its subcontractors identifying these "hold areas" where work could not proceed. Yuanda's delays became sufficiently pronounced that WBP ultimately engaged another curtainwall installer, Bass Installation Inc., to perform a substantial portion of Yuanda's work. WBP's delay expert identifies Yuanda as controlling the critical path delay during this period of the WCH Project. Yuanda's delayed scope of work was completed by November 23, 2012, other than enclosure at the skip hoist.

[34] There was also trial evidence supporting delays by B&M in its mechanical and electrical work, some of which was caused by others, such as Yuanda, and some of which was argued to have direct impacts on Schindler's work. In addition, evidence supports delays by Advanced Precast in its precast panel installation, Marel in its drywalling work, and Greenfield in its painting. However, limited direct evidence was tendered on the overall impact of delays by these trades, particularly Marel and Greenfield.

[35] Causes of and responsibility for delay are disputed issues in litigation. WBP issued numerous written notices of default to Schindler between February 9, 2012 and August 2, 2013, each dealing with alleged delays in Schindler's work during Phase 1. A further notice of default was also issued on January 6, 2014, dealing with performance assurance regarding Phase 2 work. WBP withheld all further payment from Schindler. Schindler denied default. Witnesses were directed to several formal notices of default issued by WBP to Yuanda, B&M, and Advanced Precast in respect of their delays, and correspondence by WBP specifically responding to B&M's formal notices of default for delays by outlining B&M's own delays. Formal notices of default regarding delays by Marel and Greenfield were not in evidence, but Timothy Meana confirmed during his cross-examination that a notice was sent to Greenfield. Internal WBP emails discussing delays by Marel in completing the building enclosure were put to witnesses.

[36] Interim Completion was ultimately achieved on May 14, 2013, a delay of 15 calendar days beyond scheduled Interim Completion on April 29, 2013. Liquidated damages were assessed against WBP for the 15-day period, calculated at a rate of \$37,199.28 per day in accordance with the Construction Contract, for a total of \$672,562.98, including HST. In addition, WCH assessed \$348,991.23, excluding HST, in further damages against ProjectCo for various costs arising from delayed Interim Completion. ProjectCo back charged WBP for those amounts.

[37] In reliance on its expert's assessment, WBP argues that the Freight Elevators were completed 51 calendar days late and the Passenger Elevators were completed 61 calendar days late, resulting in significant impacts to the overall project schedule. However, it is undisputed that other subcontractors also contributed to project delay. WBP's expert acknowledges schedule impacts of delayed performance by Yuanda, Advanced Precast, and B&M.

a. Bond claim

[38] Pursuant to its subcontract obligation, Schindler provided WBP with a subcontractor performance bond issued by Zurich in the amount of \$1,186,500.

[39] Limited trial evidence was tendered on WBP's performance bond claim. WBP's first notice to Zurich was by copy on the notice of default dated November 15, 2012 sent to Schindler, with formal claim being made on the performance bond by letter dated November 19, 2012. A meeting between WBP and Schindler also occurred on November 19, 2012, at which an agreed plan was reached for turnover of the Freight Elevators in the following several weeks.

[40] On January 21, 2013, Zurich's adjuster wrote to WBP, seeking clarification of WBP's intentions with respect to Zurich given the agreed plan for turnover of the Freight Elevators and TSSA inspection reports for the Freight Elevators dated December 6, 2012. A meeting followed at the WCH Project site on January 24, 2013, at which Zurich was in attendance, and certain subsequent correspondence was copied to Zurich.

[41] From the evidence tendered at trial, WBP made no concerted effort to correspond with or involve Zurich between the meeting on January 24, 2013 until near the deadline for Interim Completion. Zurich's only direct involvement in that period appears to have been in consenting to release of payments to Schindler in February 2013. WBP did, however, copy Zurich (or its adjuster) on all subsequent notices of default, which include statements that WBP's claim on the Zurich bond remained in full force and effect.

[42] Zurich has not made any payment under the performance bond and disputes WBP's claim.

b. Phase 2

[43] Substantial Completion of the WCH Project (*i.e.*, completion of Phase 2) was achieved on September 24, 2015. Schindler's claim includes unpaid amounts for its elevator work in Phase 2. WBP asserts no delay or other claims against Schindler regarding Phase 2, except for some warranty and maintenance items for which WBP indemnified B&M. WBP does not dispute the amounts claimed by Schindler in respect of its work on Phase 2. WBP maintains, however, that it was entitled to retain payment from Schindler pursuant to the subcontract by reason of Schindler's delays in Phase 1. Accordingly, the details of Phase 2 have no particular bearing on disposition of these actions.

c. Elevator failures

[44] Schindler's subcontract included a two-year maintenance and warranty obligation on the elevators. In the period following Interim Completion, ProjectCo began assessing deductions from payments to B&M pursuant to the Service Contract for elevator failures. B&M, in turn, levied those deductions against WBP pursuant to the Interface Agreement. Evidence supports that the elevator failures were being communicated to Schindler, but not the deductions.

[45] There is some evidence that, by mid-2015, a total of \$3,083,679.11 in deductions had been levied by ProjectCo against payments to B&M under the Service Contract, which B&M sought to levy against WBP pursuant to the Interface Agreement. Evidence also supports that B&M, with assistance from WBP, negotiated with ProjectCo and WCH to reduce those significant deductions. A negotiated resolution was ultimately reached for ProjectCo to withhold only \$390,969.85, plus HST, from B&M for incidents between May 28, 2013 to June 26, 2015. That amount is quantified in a chart appended to the first affidavit of WBP's project director, Daniel Wierec, and was the subject matter of a subsequent invoice by B&M to WBP. WBP did not pay the invoice.

[46] B&M ultimately commenced the action in Court File No. CV-15-536536 against WBP for payment of the deductions, referred to at trial as the "elevator penalties" claim. Following issuance of the claim, WBP made formal demand for payment of the deductions from Schindler by letter dated September 30, 2015. Schindler denied liability for the deductions, after which WBP issued a third party claim against Schindler and Zurich, which is one of the proceedings heard at trial.

[47] Further elevator unavailability deductions were made after commencement of B&M's action. Affidavit evidence tendered at trial asserts that, by April 2016, a total of \$410,882.18 in deductions had been made.

d. Extended warranty option

[48] In October 2015, Schindler communicated expiry of its warranty to B&M. Negotiations between Schindler and B&M for an elevator maintenance agreement followed. Notwithstanding Schindler's position that the warranty period had expired, and that there was no contract for ongoing maintenance, Schindler continued to perform maintenance work on the elevators, for which payment was made by B&M.

[49] Schindler's two-year maintenance and warranty obligation was subject to extension in accordance with alternates provided in the subcontract. In particular, the subcontract provided four alternate pricing options for extensions beyond the two-year period for 5 years, 10 years, 15 years, or 20 years. The 20-year alternate contemplated a maintenance fee of \$400 per elevator per month for the duration of the extended period.

[50] On March 8, 2016, WBP issued Change Order No. 210068S24-006, purporting to exercise a maintenance extension for approximately two years. The change order sought to extend the maintenance agreement from expiration date of May 14, 2015 to the day before Substantial

Completion, plus an additional two years to September 23, 2017. The change order contemplated an increase in the subcontract price by \$113,381.99, plus HST, or \$128,121.65.

[51] On March 9, 2016, WBP issued Change Order No. 210068S24-007, purporting to further extend the maintenance period from September 24, 2017 to March 23, 2035. This change order contemplated a further increase in the subcontract price by \$729,750, plus HST, or \$824,617.50.

[52] Upon receipt of Change Order No. 210068S24-006, Schindler immediately objected, following which correspondence was exchanged regarding WBP's attempt to exercise the alternates options. Notwithstanding Schindler's position, WBP issued a cheque for \$128,121.65 on March 11, 2016. Schindler did not accept or execute the change orders, and disputes their validity. Schindler did cash WBP's cheque, but prior to doing so confirmed that it was being cashed on account of unpaid amounts owing to Schindler, and not in respect of the maintenance extension. In an email dated April 7, 2016 sent by Eliseo Subranni, a sales manager of Schindler, to Daniel Wierco, that prior notice was recorded as follows:

I would also add, as stated in our lawyer's letter to you, that the cheque you sent to us was cashed to clear the outstanding T&M invoices that were owed to Schindler. Despite having a weeks' notice of our stated intention to cash the cheque and the basis upon which we would be doing so, you did not cancel the cheque nor did you dispute our right to cash it on that basis. As we previously mentioned in our correspondence, please indicate if you would like the balance returned to you or applied to future invoices (assuming there are any).

[53] Throughout this period, evidence supports that negotiations between Schindler and B&M for an elevator maintenance agreement continued. Schindler suspended elevator maintenance work for a period in late 2016, which appears to have been viewed as a strong-arm tactic by B&M. Schindler and B&M ultimately finalized a maintenance agreement in mid-December 2016, with a commencement date of January 1, 2017. B&M agreed to pay Schindler the sum of \$1,543 per elevator per month for extended warranty and maintenance work.

[54] On June 30, 2017, WBP issued Change Order No. 210068S24-008, reversing the maintenance extensions in Change Order Nos. 210068S24-006 and 210068S24-007 and purporting to deduct amounts paid by WBP to B&M pursuant to minutes of settlement entered regarding B&M's "elevator penalties" claim. The overall effect of this change order was a purported decrease in the total value of Schindler's subcontract by \$1,449,067.99, plus HST, or \$1,637,446.83. That results in a final contract price of \$1,548,996.00, plus HST, or \$1,750,365.48. Schindler disputes the validity of this change order.

e. Procedural history

[55] Litigation between Schindler and WBP initially commenced with a claim by WBP against Schindler in Court File No. CV-14-517598. WBP issued a notice of action on December 5, 2014, with statement of claim subsequently filed on January 5, 2015, claiming \$7,000,000 in damages.

WBP did not serve the statement of claim until June 2, 2015. Schindler did not defend, although served a notice demand for particulars and notice of intent to defend in mid-June 2015.

[56] On September 15, 2015, Schindler preserved its lien for \$952,841.99, inclusive of HST, by registration of a claim for lien as instrument no. AT4008764 against title the WCH Project. Schindler's lien was vacated by order of Master Short dated October 9, 2015 upon WBP posting with the Accountant of the Superior Court of Justice a lien bond in the amount of \$1,002,841.99 as security for the lien and costs. That security remains in court.

[57] Schindler's action in Court File No. CV-15-540309 was thereafter commenced on November 12, 2015 to perfect Schindler's lien. On January 11, 2016, WBP counterclaimed for \$7,000,000, duplicating the claim made against Schindler in Court File No. CV-14-517598, which was concurrently discontinued by WBP. Schindler's action against WCH has been discontinued.

[58] WBP commenced the two other actions that were referred to be tried concurrently with Schindler's lien action: a claim issued against Zurich in Court File No. CV-15-543296, claiming a declaration that Zurich is obligated to indemnify WBP pursuant to the subcontract performance bonds and payment pursuant to them, and the already-mentioned third party claim against Schindler and Zurich in Court File No. CV-15-536536-A1, claiming contribution and indemnity to damages claimed by B&M in its action against WBP. As noted, WBP and B&M settled B&M's action in Court File No. CV-15-536536, with WBP made payment to B&M of \$675,000, excluding HST. The action was dismissed by order of Master Graham dated November 19, 2018, which order provided that WBP's third party claim continued.

f. Reference history

[59] This reference was commenced by judgment of reference signed by Justice Himel on June 29, 2015 in Yuanda's lien action in Court File No. CV-13-484688, which was the former lead reference file. That judgment of reference was made pursuant to the former *Construction Lien Act*, RSO 1990 c C.30 (the "CLA"), referring the action to be determined by a construction lien master. An order for trial was subsequently made and the reference was constituted before now-retired Master Albert. Schindler's lien and its related action, as well as the liens of numerous other lien claimants, became subsumed into the reference by operation of the provisions of the CLA.

[60] In addition to the lien reference, orders directing a reference pursuant to Rule 54 of the *Rules of Civil Procedure*, RRO 1990, Reg 194 (the "Rules") were made by Justice Goldstein in Court File No. CV-15-543298 and by Justice Morawetz in Court File No. CV-15-536536-A1.

[61] All of the related references were conducted as a single, consolidated reference proceeding. Following Master Albert's retirement, Justice Koehnen was appointed as a case management judge to assist with coordination of the requested long trial. Trial length was reduced to 35 days with use of a hybrid trial format employing both affidavit and *viva voce* evidence, and was referred back to a construction lien master for trial. I thereafter assumed the reference and conducted several

hearings for directions and heard a number of motions in the course of readying the actions for trial.

[62] Pursuant to the order of Justice Hainey dated April 3, 2019 in Court File No. CV-19-615560-00CL under the *Companies' Creditors Arrangement Act*, RSC 1985, c. C-36 (the "CCAA Order"), which deals with a plan of arrangement for Bondfield Construction Company Limited ("Bondfield"), all proceedings against Bondfield were stayed. Since Bondfield was a party to all of the actions then-remaining in the reference, written consent from Bondfield's court-appointed monitor was obtained pursuant to the CCAA Order for WBP to continue the actions within the reference.

[63] Prior to trial, all liens except for Schindler's lien had been resolved. When this trial was scheduled, only the lien claims by Yuanda and Schindler (and counterclaims against them by WBP) remained outstanding. Schindler's action became the lead reference file following a settlement between WBP and Yuanda that occurred after trial had been scheduled.

III. ISSUES

[64] Numerous issues are in dispute in these actions, summarized generally as follows:

- (a) What amounts have been earned by Schindler under its subcontract, but remain unpaid?
- (b) Did WBP breach the subcontract by failing to make payment to Schindler?
- (c) Did Schindler breach the subcontract by delayed performance?
- (d) If Schindler breached the subcontract, did delayed performance impact the critical path of the project schedule?
- (e) Is Schindler liable to indemnify WBP for any of the following:
 - (i) amounts allegedly incurred by WBP for work on behalf of Schindler;
 - (ii) WBP's delay and impact losses, liquidated damages assessed against WBP by ProjectCo, and the additional damages assessed by WCH against ProjectCo and levied against WBP;
 - (iii) B&M's loss of productivity claim;
 - (iv) contractual penalties levied against B&M and other amounts paid by WBP to B&M; and
 - (v) WBP's bond premiums for the lien bond taken out to vacate Schindler's lien?

- (f) Did WBP comply with the requirements of Schindler's performance bond in making demand on the bond? If so, to what extent is Zurich liable for WBP's damages claim?

IV. POSITIONS OF THE PARTIES

[65] WBP acknowledges that \$702,439.99 of Schindler's claim is undisputed, which is an acknowledgment relied upon by Schindler. WBP's alleged attribution of WBP's payment made to purportedly exercise the extended warranty option under the subcontract is argued to be unsustainable given Schindler's written notice that it would be allocating the amount to outstanding and unpaid maintenance invoices. Schindler further maintains that WBP agreed to pay for acceleration of work for elevators 3 to 6 in January 2013, for which Schindler claims entitlement to an additional \$126,302.36.

[66] WBP's position is that it was entitled to withhold payment from Schindler on account of Schindler's breaches of the subcontract by delayed performance. As noted, the sum of \$702,439.99 is acknowledged to be earned and unpaid, but WBP argues that no other amounts are owing. WBP denies any amount is payable to Schindler for the acceleration extra because Schindler failed to meet the acceleration deadline. WBP argues that Schindler's schedule delays significantly impacted timely closure of the exterior of the building. That, in turn, delayed hospital commissioning and finishing work, which could not be completed (and in some cases started) until after the building was enclosed. WBP further submits that the considerable expenses incurred mitigating Phase 1 delays are fully attributable to several subcontractors responsible for critical path schedule delays, including Schindler. WBP maintains that Schindler breached its subcontract, and is liable for its apportioned share of those expenses and the delay-related losses suffered by WBP. WBP also argues that Schindler is liable for the elevator-related penalties assessed against WBP and amounts paid by WBP in settlement of B&M's claim, which were payable only because of Schindler's failure to honour WBP's valid extensions of the maintenance and warranty period.

[67] Schindler argues that it was never in breach of its subcontract. WBP's counterclaim is further argued to be disproportionate to the nature and extent of Schindler's subcontract, work, and involvement at the WCH Project. It is, in Schindler's submission, based on entirely inappropriate and unjustified allocations and calculations that have neither demonstrable foundation or causal connection to Schindler's work, since WBP was already actively compressing the project schedule and accelerating trades in order to recover substantial project delays that predated Schindler's commencement of work. WBP is argued to be trying to improperly transfer responsibility and consequences for its own delays, and the delays of its other subcontractors, to Schindler. With respect to the elevator penalties and associated claims, Schindler denies it has any liability to WBP pursuant to the subcontract terms, there is no legal basis for WBP to pursue those claims against Schindler since Schindler is not a party to the Interface Agreement, and WBP lacks standing to pursue warranty and maintenance amounts given an assignment of its rights to B&M.

[68] On the core dispute regarding project delay and the extent of subcontractor liability for the delays, both Schindler and WBP argue that whether Schindler delayed the "critical path" of the

project is determinative of Schindler's liability for delay and impact damages and losses claimed by WBP. Appropriate use of critical path method (CPM) assessment in analyzing the project schedules is disputed. Schindler's position is that it never controlled the critical path, so therefore cannot be liable for any delay or impact costs stemming from late achievement of Interim Completion, even if it is found to have delayed the project. WBP's position is that several subcontractors, including Schindler, caused concurrent critical path delays and that Schindler should therefore be liable for a proportionate share of WBP's delay-related costs and losses.

[69] With respect to the performance bond, WBP argues that Zurich's liability under the bond is coextensive with that of Schindler. Zurich's position is that it has no liability to WBP since the preconditions pursuant to WBP claiming under the performance bond were not satisfied, including that Schindler was not in default of its obligations, and that amounts claimed by WBP are not recoverable under the bond, even if recoverable from Schindler.

V. PRE-TRIAL MOTIONS

[70] In accordance with the direction of Justice Koehnen, the majority of evidence-in-chief at trial was tendered by affidavit. At the commencement of trial, I heard motions by both Schindler and WBP regarding challenges to admissibility of portions of the substantial affidavit evidence-in-chief tendered by both sides. Various paragraphs in the affidavit evidence were struck. Other paragraphs were not struck, but subject to reservation of argument regarding weight. My reasons for decision and supplementary reasons for decision were released on January 22, 2020 (2020 ONSC 433 and 2020 ONSC 443). Filed affidavits in which paragraphs were ordered struck were amended accordingly and the amended versions were used during trial.

VI. WITNESSES

[71] Trial proceeded as a hybrid trial, with evidence in chief both by affidavit and *viva voce* testimony. The majority of witnesses tendered affidavit evidence in chief. Many witnesses also supplemented their affidavit evidence with *viva voce* testimony in chief before being cross-examined. Notwithstanding orders in my trial directions limiting the maximum length of affidavit evidence in chief, several affidavits tendered by WBP greatly exceeded those maximums, although Schindler did not ultimately seek any relief in respect of the non-compliance.

[72] WBP's primary non-expert trial witnesses were as follows:

- (a) Daniel Wierec, the project director and senior project manager of WBP on the WCH Project, who was WBP's lead witness. Mr. Wierec supervised the project management team, which included several of the other WBP witnesses called. He was responsible for liaising with representatives of ProjectCo, WCH, and B&M's facilities maintenance division throughout the WCH Project;
- (b) Tyler Kondel, an assistant project manager of WBP during the WCH Project, responsible for site logistics and overall daily scheduling and coordination of site activities

performed by subcontractors. Mr. Kondel was also responsible for supervising Schindler during the planning and installation of the ten elevators for the WCH Project;

(c) Tim Meana, a senior project manager of WBP reporting to Daniel Wierec, who was responsible for developing and coordinating schedules for work by WBP's subcontractors. Mr. Meana was involved in negotiating and creating the Exhibit L schedule to Schindler's subcontract, as well as developing the timelines used in Exhibit B to the subcontract;

(d) Erica Carroll (née Kowert), a project manager of WBP reporting to Daniel Wierec who worked alongside WBP's management team, including Tim Meana and Tyler Kondel. Ms. Carroll was WBP's lead during negotiation of subcontract terms with Schindler, and was further responsible for progress payment applications and cost accounting processes for the WCH Project;

(e) Joseph Zachariah, a construction manager of B&M, who gave evidence on B&M's electrical and mechanical subcontract, impacts to B&M from project delays, and the settlement between B&M and WBP regarding B&M's subcontract claim. Mr. Zachariah also gave evidence on acceleration costs paid to B&M by WBP; and

(f) Jason Scott, a division manager of B&M, who gave evidence on the service contract between ProjectCo and B&M, the interface agreement between WBP and B&M, elevator failures, penalties levied against B&M, the related litigation and settlement between B&M and WBP regarding the penalties, and negotiation and execution of the maintenance agreement between B&M and Schindler.

[73] In addition, WBP tendered affidavit evidence in chief and filed witness statements from twelve additional witnesses on damages issues, each of which was a representative from other subcontractors allegedly impacted by project delays and regarding which a portion of WBP's claim relates. Ultimately, only three of those witnesses testified at trial following Schindler's concession that the work invoiced by the other trades was performed and their invoices paid by WBP. Those damages witnesses were as follows:

(a) Tony Perry, a superintendent of Bondfield, who was responsible for preparing and reviewing timesheets for Bondfield's unionized workers on the WCH Project;

(b) Hristos Verikukis, a project manager of G&P Construction Cleaners, Inc. Mr. Verikukis was one of the two damages witnesses cross-examined on his affidavit evidence in chief at trial;

(c) Adam Figuera, a project manager of Advanced Precast. Mr. Figuera was the other damages witnesses cross-examined on his affidavit evidence in chief at trial;

(d) Colin Bogue, a senior surveyor of J.D. Barnes Limited. Mr. Bogue was not cross-examined on his affidavit by reason of Schindler's concession as outlined above;

(e) Farid Atrash, the President of OHE Consultants. Mr. Atrash not cross-examined on his affidavit by reason of Schindler's concession as outlined above;

(f) Jamie Groves, the Vice President of Operations at North Wood Carpet & Tile Company, Ltd. Mr. Groves was not cross-examined on his affidavit by reason of Schindler's concession as outlined above;

(g) Stephen Hart, the founder & CEO of DedON Layouts Inc. Mr. Hart was not cross-examined on his affidavit by reason of Schindler's concession as outlined above;

(h) Steven Smith, an employee of Marel. Mr. Smith was not cross-examined on his affidavit by reason of Schindler's concession as outlined above;

(i) Tom Rankine, the Owner of Total Contract Glazing Inc. Mr. Rankine was not cross-examined on his affidavit by reason of Schindler's concession as outlined above;

(j) Tim Glover, a field manager with Greenfield Painting Services ("Greenfield"), which was WBP's painting subcontractor. Mr. Glover was not called at trial by reason of Schindler's concession as outlined above;

(k) Genio Condotta, a general manager at DC Granite & Marble Inc. ("DC Granite"), which was WBP's interior stone and tile flooring subcontractor. Mr. Condotta was not called at trial by reason of Schindler's concession as outlined above; and

(l) Carlos Almeida, an employee of All Wood Fine Interiors Limited ("All Wood"), which was WBP's millwork subcontractor. Mr. Almeida was not called at trial by reason of Schindler's concession as outlined above.

[74] No affidavit evidence in chief was delivered for Mr. Glover, Mr. Condotta, or Mr. Almeida. Rather, only unsigned witness statements were filed for each of them. There is accordingly no formal evidence before the court from any of those witnesses. However, Schindler's concession is such that I have accepted as conceded that the invoices and change orders referenced in the witness statements of those three witnesses were paid, as stated, and that the invoiced work or work contemplated by paid change orders, as applicable, was performed.

[75] WBP filed a further witness statement from Martin Valdmanis, a senior architect at IBI Group, and an affidavit sworn by Gary Lemna, a US attorney employed by WBP, which was one of the affidavits subject to Schindler's pre-trial motion to strike. Mr. Valdmanis was not called at trial and WBP ultimately elected to withdraw Mr. Lemna's affidavit during the course of trial. I ordered that Mr. Valdmanis' witness statement and Mr. Lemna's affidavit (as amended pursuant to my pre-trial motion order) be struck. I have accordingly not considered them.

[76] Schindler's non-expert trial witnesses were as follows:

(a) Dave Brennan, the New Installations Manager, Toronto District for Schindler at the material times, to whom key Schindler personnel on the WCH Project reported directly on operational matters. Mr. Brennan had some involvement during the subcontract negotiations. He confirmed in oral testimony that he was on-site only a few times during the course of Schindler's work, including for a site walkthrough in late November 2012;

- (b) Timothy Russell, a senior project manager for Schindler at the material times, responsible for scheduling, site logistics, and financial aspects of the WCH Project;
- (c) Tracy Davies, a sales representative for Schindler at the material times, who reported to Dave Brennan and was involved in both preparing Schindler's bid proposal, negotiating the Exhibit B subcontract terms, and coordinating the production of shop drawings and other required documents;
- (d) Dave Simm, a construction supervisor for Schindler at the material times who was directly involved in many of the site issues in dispute;
- (e) Giuseppe Michelizzi, an elevator mechanic for Schindler who was primarily involved in the installation of the Freight Elevators, but who also worked on the Passenger Elevators; and
- (f) Mark Quin, an elevator mechanic for Schindler who was directly involved in installation of the Passenger Elevators.

[77] Zurich's sole trial witness was Edouard Chassé, a principal of BBCG Claims Services, which was retained by Zurich as adjusters for WBP's claim under the performance bond. Mr. Chassé was not cross-examined on his affidavit at trial.

[78] This is not a case where credibility of witnesses is a significant factor. Notwithstanding submissions that WBP's witnesses exhibited "varying degrees of personal commitment to WBP's counterclaim" and "animus toward Schindler", I generally found all of the testifying witnesses to be honest and forthright in their testimony. Their evidence was typically reconcilable as between one another. Nevertheless, there were instances in which effective cross-examination called into question the credibility of certain aspects of a witness' affidavit evidence or oral testimony or, perhaps more significantly, the accuracy and reliability of that evidence. In my assessment below, I address such instances where they have borne on my determinations.

VII. EXPERTS

[79] Expert evidence was tendered by both parties regarding assessment of project delays and quantification of WBP's damages claim. Three experts were called, namely:

- (a) L. Alex Staley of Analytical Management Solutions, Inc., called by WBP, who opined on allocation of project delays and WBP's delay-related losses and damages;
- (b) Paul Stynchcomb of Vero Construction Consultants, Corp., called by Schindler, who critiqued the delay analysis of Mr. Staley and put forward a competing analysis regarding the extent of Schindler-caused delay, written jointly with Glen Stevens of Stevens & Associates, Inc.; and

- (c) Wiley R. Wright of BDO USA, LLC, called by Schindler, who critiqued Mr. Staley's damages methodology and assessment.

[80] Expert reports served as the primary evidence in chief for each expert witness, as supplemented with *viva voce* examination in chief. Each expert was subject to lengthy cross-examination. I provide below my general observations and comments on the experts and the weight given to their opinions as set out in their reports and supplemented by their respective *viva voce* examinations.

a. L. Alex Staley, Analytical Management Solutions, Inc.

[81] WBP sought to have Alex Staley qualified as an expert with respect to analysis in construction delay claims, including damages analysis. Following the qualification *voir dire*, Schindler opposed Mr. Staley's qualification as an expert in delay damages analysis.

[82] For reasons orally given during the trial, having considered the relevant principles set out by the Court of Appeal in *Bruff-Murphy v. Gunawardena*, 2017 ONCA 502 at paras. 35-36, I qualified Mr. Staley to give evidence on construction project delay analysis and analysis of damages associated with delay in construction claims. I acknowledged that Mr. Staley's experience and credentials regarding damages assessment are not as pronounced as they are for schedule analysis. Nevertheless, as per my oral reasons, the probative value of having Mr. Staley's evidence on damages outweighed any prejudice, and it remained open to Schindler and Zurich to argue what weight I should be ascribing to Mr. Staley's evidence.

[83] Mr. Staley's first report dated June 29, 2018 confirms a retainer to review, analyze and allocate project delays in the performance of the Phase 1 construction of the WCH Project, including allocation of associated delay damages incurred by WBP, its design team, and other trades. Mr. Staley's assessment focuses on the subcontractors that he identifies as having caused critical path delays to the WCH Project in the period following June 1, 2012, namely Schindler, Yuanda, B&M, and Advanced Precast. Overall, Mr. Staley's view is that the primary delaying activity to the critical path of the project was Yuanda's delayed installation of curtainwall and windows through 2012. He finds, however, that late precast turnover by Advanced Precast and delayed elevator installation by Schindler were concurrent critical path delays to Yuanda's delay leading up to turnover of the Freight Elevators. In the period after turnover, Mr. Staley's opinion is that Schindler's delayed installation work and B&M's delayed mechanical and electrical work concurrently delayed the critical path of the WCH Project to Interim Completion.

[84] Mr. Staley's assessment attributes a total of 112 calendar days of critical path delay to Schindler: 51 calendar days in completing the Freight Elevators and a further 61 calendar days in completing the Passenger Elevators. Mr. Staley's opinion is that delayed completion of the Freight Elevators impacted planned removal of the skip hoist and, as a result, the building could not be enclosed and WBP was unable to proceed with interior construction of the north side areas on all floors. He also opines that delayed completion of the Passenger Elevators impacted completion of elevator lobbies and adjacent spaces on each floor, which required further mitigation efforts by

WBP. As noted, Mr. Staley acknowledges concurrent delays by Yuanda, Advanced Precast, and B&M for different portions of those periods.

[85] Schindler raises a number of objections and issues with Mr. Staley's analysis, including the following:

- (a) delay is not assessed using a proper CPM scheduling analysis, or even using reasonable project time period windows, but was instead assessed using an unrecognized methodology developed by Mr. Staley;
- (b) accepted standards for delay analysis set by American Association of Cost Engineering ("AACE"), admittedly known to Mr. Staley, were not applied, resulting in data manipulation that Schindler argues renders his opinion both unreliable and unmeaningful;
- (c) liability is assessed based on a basket of damages and an allocation that disconnects any delay from the actual consequences and impact of that delay;
- (d) no independent assessment of WBP's damages was conducted, such as failing to provide any point of comparison for overtime and other mitigation costs and making no allowance for base costs; and
- (e) there is no assessment or consideration of causation for WBP's damages, which include numerous heads of losses with no causal connection to any work performed by Schindler.

[86] Schindler argues that I should give no weight to Mr. Staley's assessment and analysis. WBP relies heavily on Mr. Staley's assessment of delay and, perhaps more significantly, his assessment and apportionment of WBP's damages and losses between Schindler and other subcontractors. As outlined later in these reasons, I have determined that many of the criticisms raised by Schindler and its experts are legitimate. My own concerns with Mr. Staley's methodology, together with the impact of certain assumptions that I have not accepted, have significantly impacted the usefulness of his report and his testimony.

b. Paul Stynchcomb, Vero Construction Consultants, Corp.

[87] Paul Stynchcomb was Schindler's delay expert. Schindler tendered Mr. Stynchcomb as an expert to be qualified in CPM scheduling, construction management, contract and subcontract administration, delay and cost impact analysis and loss of labor productivity. Following a qualification *voir dire*, WBP did not oppose qualification of Mr. Stynchcomb. He was accordingly qualified in the areas requested by Schindler on an unopposed basis.

[88] As noted above, Mr. Stynchcomb co-authored Schindler's delay expert report with Glen Stevens of Stevens & Associates, Inc. Mr. Stevens was not called as a witness at trial. According to the report, Mr. Steven's firm specializes in CPM schedule development, updating, delay analysis, loss of labour productivity quantification and project management services. Since

Mr. Stynchcomb was qualified as an expert in most of those areas, Schindler's decision not to call Mr. Stevens at trial was not, in my view, a material factor, nor was it argued to be such.

[89] The joint analysis put forward in the report is largely focused on critiquing and challenging the assessment of Schindler's impact on project delay as performed by Mr. Staley. Reliability of WBP's project schedules in performing a proper CPM schedule analysis is challenged, and the authors provide an opinion on Schindler's lack of responsibility for project delay based on their interpretation of subcontract terms and analysis of causes for delay in Schindler's performance.

[90] In addition to signing a Form 53 Acknowledgment of Expert's Duty, Mr. Stynchcomb testified to his understanding that his opinion was to be fair, objective and non-partisan. He further confirmed that he viewed his opinion as being fair, objective and non-partisan. Certainly, I found Mr. Stynchcomb's testimony to be quite honest, truthful, and candid.

[91] However, on the totality of the report and Mr. Stynchcomb's testimony, I do not agree that his findings, opinions, and conclusions on Schindler's lack of critical path impact on the WCH Project are truly non-partisan and unbiased. In my view, Mr. Stynchcomb did not remain within the role of an independent expert. He failed to remain impartial and instead assumed the role of an advocate for Schindler. This is most stark in the expert report itself. Throughout the report, the authors appear to identify their views and opinions as being those of Schindler, rather than their own. In many places, the report reads more like a factum supporting Schindler's case than the report of independent, unbiased experts. There are many examples. At points, the authors employ a story-telling style utilizing hyperbole in their conclusions (*e.g.*, stating, "This defective WBP activity resulted in substantial elevator alignment delays to Schindler's crews", without explaining how "at least 6 working days" of delay constitutes "substantial" and asserting that the twisted hoistway caused "further delay and losses of productivity" without substantiation). The authors comment on what was "reasonably anticipated" by Schindler without explanation. They observe that reasons are "unbeknownst to Schindler" and, at one point, conclude that work of other trades "took significantly longer than reasonably expected and experienced by Schindler on other like projects", seeming to be an unreserved acceptance of Schindler's views on reasonableness. The apparent identification with Schindler has significantly impacted the weight I have given Mr. Stynchcomb's opinion on whether Schindler's delays caused any critical path delay.

[92] However, notwithstanding the foregoing, I would still find that limited weight should be given to Mr. Stynchcomb's opinions and conclusions on Schindler's lack of critical path impact for several reasons, a few of which are particularly noteworthy.

[93] Firstly, the CPM schedule delay assessment hinges entirely on a contractual analysis of the subcontract terms, leading Mr. Stynchcomb (and Mr. Stevens) to conclude that Schindler had a 129-day duration to complete installation of the Freight Elevators. Mr. Stynchcomb is not a lawyer and was not qualified to give opinion evidence on legal interpretation of construction contracts, yet opined on the very contractual analysis that must be determined by the court in these actions. Mr. Stynchcomb also gave no consideration for the contractual analysis being incorrect, and what impact that may have on his critique of Mr. Staley's delay assessment. For reasons set out below,

I have not accepted Schindler's argument that it had a 129-day duration for its installation work on the Freight Elevators, which abrogates the usefulness of much of Mr. Stynchcomb's analysis.

[94] Secondly, the report and assessment do not acknowledge or address work schedules prepared by Schindler during the project that depict a 16-week installation schedule, consistent with the disputed term in the subcontract. When cross-examined, Mr. Stynchcomb confirmed that he had seen them, but ultimately dismissed them after being advised by Timothy Russell that Schindler had been directed by WBP to prepare those schedules.

[95] Thirdly, the opinions and conclusions of Mr. Stynchcomb (and that of his co-author) are based, in part, on information provided by Schindler's representatives during interviews, but the individuals interviewed are not clearly identified and any information received from them does not appear to have been verified or challenged. An apt example is Mr. Stynchcomb's determination not to consider Schindler's work schedules based on Mr. Russell's explanation of them.

[96] For these reasons, I have given limited weight to Mr. Stynchcomb's analysis and opinion regarding Schindler's contribution to project delay. Nevertheless, I have still found certain aspects of the report and testimony helpful in my assessment of delay on the WCH Project, namely his views on principles of proper critical path delay analysis (regarding which he is eminently qualified to opine), his critique of Mr. Staley's methodology, and his general analysis of schedule impacts from delay events on the WCH Project.

c. Wiley R. Wright, BDO USA, LLC

[97] Wiley Wright was Schindler's responding damages expert, engaged to critique Mr. Staley's damages analysis. Schindler tendered Mr. Wright as an expert to be qualified in areas of assessment, calculation and allocation of construction damages and claims. After Mr. Wright's qualification examination in chief, WBP's counsel elected not to cross-examine and took no issue with Mr. Wright's qualification. He was accordingly qualified in the requested area on an unopposed basis.

[98] Mr. Wright's mandate was to analyze and rebut Mr. Staley's assessment and calculation of damages with respect to Schindler. In his report, he outlines a number of criticisms, largely focused on lack of causation, failure to independently analyze and verify WBP's assertions regarding damages, and improper assumptions about responsibility for delay on the project. I found Mr. Wright's testimony to be both fair and impartial. Combined with his expertise, I have given his opinions on proper delay damages quantification and critique of Mr. Staley's damages methodology considerable weight in my decision.

VIII. ANALYSIS

[99] On July 1, 2018, substantive amendments to the *CLA* came into force, including amending the name of the legislation to the *Construction Act*. Pursuant to s. 87.3 of the *Construction Act*, the provisions of the act as they read on June 29, 2018 (*i.e.*, the provisions of the *CLA*) continue to

apply to the WCH Project improvement and, thereby, the liens and lien actions arising from the improvement. References in these reasons for judgment are accordingly to the *CLA*.

a. Terms of the subcontract

[100] Schindler argues that the conditions outlined in its bid proposal are relevant to interpreting the rights and obligations of the parties under the subcontract. The subcontract is quite detailed and was negotiated between two sophisticated parties. In the course of evidence and submissions, I was directed to no term in the subcontract incorporating Schindler's bid as a relevant contract document. "Contract Documents" is a defined term in Exhibit C to the subcontract as "this Construction Subcontract, the Construction Contract between the Project Co. and the Construction Contractor, and all conditions, requirements, specifications, drawings, attachments and addendum thereto [definition omitted], and all modifications to any of the Contract Documents and all Documents, Addenda, Specifications, and Plans as listed below." The list comprises 30 pages. Schindler's bid proposal is not listed as a "Contract Document".

[101] Although not a "Contract Document", certain conditions identified in Schindler's bid proposal nevertheless argued by Schindler to have bearing on subcontract interpretation. In particular, Schindler tendered evidence and argument at trial regarding necessary working conditions for carrying out its subcontract work, including work performed before Schindler's arrival necessary for its elevator work to proceed, such as proper construction of elevator hoistways.

[102] A number of terms in Schindler's subcontract are relevant to disposition of this litigation, as discussed below. Elsewhere in these reasons, I have also considered terms of other contracts in the contractual structure of the WCH Project. In assessing and interpreting all of these provisions, I have considered and applied the following principles:

(a) Contractual interpretation is an exercise in which the principles of contractual interpretation are applied to the words of the written contract, considered in light of the factual matrix: *Sattva Capital Corp. v. Creston Moly Corp.*, 2014 SCC 53 at para. 50;

(b) When interpreting a contract, the court aims to determine the intentions of the parties in accordance with the language used in the written document and presumes that the parties have intended what they have said: *Shaun Developments Inc. v. Shamsipour*, 2018 ONSC 440 at para. 46, *aff'd* 2018 ONCA 707;

(c) The court construes the contract as a whole, in a manner that gives meaning to all of its terms, and avoids an interpretation that would render one or more of its terms ineffective, but must also interpret the contract so as to accord with sound commercial principles and good business sense, and avoid commercial absurdity: *Shaun Developments Inc.*, *supra* at para. 46;

(d) It is unnecessary to consider any extrinsic evidence when the document is clear and unambiguous on its face. To interpret a plainly worded document in accordance with the

true contractual intent of the parties is not difficult, if it is presumed that the parties intended the legal consequences of their words: *Eli Lilly & Co. v. Novopharm Ltd.*, [1998] 2 SCR 129 (SCC) at paras. 55-56; and

(e) If the court finds that the contract is ambiguous, it may then resort to extrinsic evidence to clear up the ambiguity, but the factual matrix should only be used to clarify the intention of the parties, and cannot be used to contradict that intention or create an ambiguity where one did not previously exist: *Shaun Developments Inc.*, *supra* at para. 46; *Sattva*, *supra* at para. 57.

i. Applicable version of subcontract

[103] Multiple versions of the subcontract were in evidence at trial. During opening submissions, the parties confirmed agreement that the applicable version of the subcontract was found at tab 9 of the joint book of documents (115 pages). That version represents the same version of the subcontract made an exhibit to Dave Brennan's first affidavit, which was confirmed and adopted by Daniel Wierc's affidavit evidence to be the correct version of the subcontract.

[104] One week into the trial, WBP's counsel raised that the version of the subcontract referenced by Mr. Brennan and adopted by Mr. Wierc was not, in fact, the complete version of the subcontract. In particular, pages from Exhibit L appeared to be missing. The parties were ultimately able to reach consensus that the issue arose during copying of the subcontract and agreed that the correct version of the subcontract was at tab 97 of the joint book of documents (127 pages). I was advised that the tab 97 version was the same one provided to and reviewed by the experts.

[105] The tab 97 version contains an additional three pages in Exhibit L, but does not have the same covering page included in the tab 9 version. Neither trial evidence nor submissions identified what constitutes the remaining additional pages in the tab 97 version. However, since there are no additional pages in either Exhibit A or Exhibit B, and the remaining exhibits to the subcontract were not the subject of any substantive trial evidence or argument, the variance is immaterial to disposition of the actions. I have accordingly proceeded on the basis of the parties' mutual admission that the correct version of the subcontract governing the parties is the one found at tab 97 of the joint book of documents.

ii. Invoicing and payment requirements

[106] Exhibit A, Article 3 and Exhibit F to the subcontract govern payments and the procedure for Schindler's progress payments. Exhibit A, Article 3.6, which addresses the timing of progress payments, is relied upon by Schindler as being breached by WBP. It provides as follows:

3.6 Time of Payment. If Subcontractor is in compliance with this Subcontract and if, and only if, Project Co. pays Construction Contractor, which is an express condition precedent to Construction Contractor's duty to pay Subcontractor, Progress Payments shall be due to Subcontractor no later than ten (10) days after receipt of payment from Project Co. by Construction Contractor provided Subcontractor remains in compliance with the terms of

this Construction Subcontract. No Progress Payment made under this Construction Subcontract shall be considered an acceptance of Subcontractor's Work, in whole or in part.

[107] The clause contains two preconditions to payment: first, that Schindler must be in compliance with the subcontract and, second, that WBP is paid by ProjectCo. Subject to those conditions, payment is to be made within ten days of payment by Project Co. As outlined further below, there are additional provisions specifically entitling WBP to withhold payment from Schindler.

[108] No argument was advanced that Schindler's progress payment applications were non-compliant with Article 3.6. WBP's basis for withholding payment of acknowledged earned and unpaid amounts is WBP's position that Schindler was in breach of the subcontract, which contractually entitled WBP to withhold.

iii. *Changes in the work or extensions of time*

[109] Changes in Schindler's work, or extensions of time for performance of the subcontract work, are governed by Exhibit A, Article 4 of the subcontract. WBP had the right to direct changes and Schindler had a separate right to request changes. Articles 4.1 and 4.2 provide broad discretion for WBP to direct changes in Schindler's work, either on a fixed price or time and material basis.

[110] Schindler's entitlement to request extras or an extension of subcontract time was contractually circumscribed to those matters for which prompt written notice of a claim by the earlier of one week prior to commencing work or within one week of first knowledge of the event. Exhibit A, Article 4.3 provides as follows (emphasis added):

4.3 Claims. A "Claim" is a Subcontractor's demand or assertion seeking, as a matter of right, an increase in Subcontract Amount, an extension in the time for performance of Subcontractor's Work, coverage under an insurance policy related to the Project, or relief with respect to the terms of the Contract Documents. All Claims must be made by written notice to the Construction Contractor at least one (1) week prior to the beginning of the Subcontractor's affected or additional work, or the date by which Construction Contractor is obligated to give notice to the Project Co. with respect to such claim, or within one (1) week of the Subcontractor's first knowledge of the event, whichever shall first occur, otherwise, such claims shall be deemed waived. Pending final resolution of a Claim, unless otherwise agreed in writing, the Subcontractor shall proceed diligently with performance of the Subcontractor's Work. Subcontractor shall permit Construction Contractor to inspect and copy any of Subcontractor's documents pertaining to Claim (failure of which shall be deemed a waiver of such Claim). Subcontractor waives its right to seek consequential damages arising from this Project.

[111] In addition, the subcontract includes an express requirement for WBP to provide an extension of Schindler's time for performance in the event of delays beyond Schindler's control. Exhibit A, Article 4.4 provides, in part, as follows:

4.4 Delay. If the progress of the Subcontractor's Work is substantially delayed, hindered or interfered with through no fault or responsibility of the Subcontractor, then the Construction Contractor shall either (i) extend the time for the performance of Subcontractor's Work by Change Order, but such extension shall be limited to that amount of time which will enable Construction Contractor to meet its obligation to Project Co. to complete the Project in accordance with the Contract Documents, or (ii) have the right to order Subcontractor to accelerate its Work with additional manpower and the expediting of materials, but Construction Contractor shall be obligated to pay only for the costs of expediting material and costs recovered under Article 11.3 of this Construction Subcontract.

[112] In my view, Articles 4.3 and 4.4 are distinct. Article 4.3 provides Schindler with a right to request extras or extensions of subcontract time at its own initiative. Article 4.4, by including the mandatory language of “shall”, creates a positive obligation on WBP to either provide and extension of time or to direct Schindler to accelerate for additional compensation in the event of “substantial” delays or interference beyond Schindler’s control. I do not view that obligation as being in any way contingent on a “Claim” first being made pursuant to Article 4.3. Article 4.3 is not referenced in Article 4.4, nor is there any other precondition language to WBP’s mandatory obligation.

iv. *Contractual time for performance of elevator work*

[113] One of the core disputed issues in the litigation involves terms of the subcontract as they relate to the contractual time for performance of Schindler’s elevator work. Provisions of the subcontract dealing with the schedule for Schindler’s work, found in Exhibit A and Exhibit B to the subcontract, were the subject matter of considerable interpretive dispute.

[114] Schindler’s scope of work comprised the fabrication and delivery of the elevators, installation of all ten elevators, and testing and commissioning of each elevator. Each of these was contemplated as separate activities in Exhibit L as activities A4320, A1540 and A2640, respectively.

Duration of elevator installation

[115] WBP’s position is that, properly interpreted, the subcontract required that all Phase 1 elevators be installed within a 16-week period, although whether by express or implied agreement WBP and Schindler agreed that the Freight Elevators and the Passengers Elevators would each have separate 16-week periods. Schindler’s position is that, properly interpreted, the subcontract provided 129 working days for Schindler to complete installation of the Freight Elevators and no specific requirement for the Passenger Elevators.

[116] Schindler puts significant weight on the activity durations identified in the project schedule included as Exhibit L, which is specifically referenced in Exhibit B. Indeed, Exhibit B, Section 1.38 states as follows:

38. Reference Exhibit L for schedule dates and durations for all Phases.

[117] As noted earlier in these reasons, the Exhibit L schedule includes three relevant activities specific to elevators. Activity A4320, identified as “Procurement - Phase 01, Elevators,” is shown as 140 working days from August 10, 2011 to February 29, 2012. Activity A1540, identified as “Freight Elevator Construction,” is shown as 129 working days from February 29 to August 31, 2012. Activity A2640, identified as “Testing and Commissioning Elevators,” is shown as 20 working days from September 3 to October 1, 2012, commencing concurrently with skip hoist removal, shown at activity A1550. Both Alex Staley and Paul Stynchcomb agree that activity A2640 reasonably relates to the “Freight Elevator Construction” activity, which is consistent with Mr. Meana’s evidence on his preparation of the schedules.

[118] Exhibit B, Section 3 of the subcontract contains additional terms that are relevant in assessing Schindler’s contractual time for performance. Subsections C.1, C.7, C.8, and C.9 are of particular significance. They provide as follows:

1. For Phase 1, provide 2 Elevator Cars for Construction Use 6 months prior to turn-over of Phase 1. All required scheduled maintenance fees have been included in the contract price. The warranty period to be prorated to begin at interim completion date.

[...]

7. Prescribed elevator duration must be read within the context of construction schedule (Exhibit-L); where there is discrepancy, construction schedule will take precedence.
8. Phase 1 Elevator works/installation to commence February 2012. Phase 2 Elevator work to commence August 2014. The prescribed starting and end dates may be expedited and or delayed, this trade subcontractor to maintain minimum production rate.
9. Installation not to exceed 16 weeks per phase.

[119] Subsection C.9 is the source of the 16-week period relied upon by WBP. Schindler argues that the 16-week duration is inconsistent with both the 129 working days provided in Exhibit L for activity A1540 and Exhibit B, Section 1.38 (extracted further above), which provides that Exhibit L is to be referenced for both schedule dates and durations. Schindler points to subsection C.7, which also provides that the Exhibit L schedule will take precedence in the event of discrepancy. It is Schindler’s position, and Mr. Stynchcomb’s opinion, that Schindler was thereby contractually entitled to 129 working days to complete elevator installation, notwithstanding the express requirement to complete installation within 16 weeks as provided in subsection C.9.

[120] Schindler argues that there is a distinction between duration and schedule. That distinction was put to many of WBP’s witnesses during cross-examination and to WBP’s expert. I agree that there is a distinction between them, but they are not mutually exclusive. While Exhibit B, Section 1.38 provides that Exhibit L is to be referenced for schedule dates and durations, that provision cannot be read in isolation from Exhibit B, Section 3.C.7, which states that the prescribed

elevator duration is read “within the context of construction schedule (Exhibit-L)”. In my view, the language of “within the context” is of particular importance, since it allows both requirements to be read in harmony.

[121] I find no ambiguity or inconsistency between the 16-week installation duration contemplated by subsection C.9 in the context of the 129 working day period contemplated in activity A1540. Significant in that determination are my acceptance of the evidence of Tim Meana, rejection of Mr. Russell’s evidence that he believed Schindler had 129 working days to complete installation work, and the contemporaneous schedules prepared by Schindler depicting a 16-week installation period for the Freight Elevators.

[122] Mr. Meana’s evidence is that activity A1540, which is “Freight Elevator Construction”, not “Freight Elevator Installation”, includes more than Schindler’s scope of installation work. In particular, Mr. Meana testified that the activity included elevator installation, hoist beams, divider beams, ladders, pit ladders, and pit work, also extending into fire alarm and sprinkler work. He testified that it broadly included “anything involving time in the shaft.” His affidavit evidence is the same, stating that the activity includes “other elements of construction that are required to put up elevators”, such as pouring the concrete, hoist steel, masonry, life safety, fire proofing, and shaft punch lists.

[123] Although Timothy Russell provided sworn affidavit evidence that he believed Schindler had 129 working days to complete installation work, I do not find that evidence to be reliable. During cross-examination, Mr. Russell conceded both that he could not verify he was specifically aware of the 129-day duration during the WCH Project and that the majority of emails in his recollection referenced the 16-week duration. Mr. Russell’s contemporaneous emails suggest he viewed the contractual requirement to be 16 weeks. For example, in internal email dated August 14, 2012 from Mr. Russell to Justin Klodner of Schindler, Mr. Russell states, “We have spent 11 of the 16 contractual weeks on the first two cars and all we have are rails installed.”

[124] In addition, with respect to the Passenger Elevators, WBP’s reply to Schindler’s position on delay sent in response to WBP’s Failure of Performance and Default Letter #4 was put to Mr. Russell during his cross-examination. WBP’s response states, in part, as follows (emphasis added):

Elevators 3 - 6 construction by Schindler commenced on November 19th. Walsh/ Bondfield Partnership further reminds Schindler of the contractual completion date for Elevators 3 - 6 is March 1st, and further reminds Schindler that the contractual duration of 16 weeks includes all work to achieve TSSA acceptance and completion to the specifications of the project; including the masonry work at elevator entrance frames and sills.

[125] When asked if he agreed that the emphasized portion above was Schindler’s contractual obligation, Mr. Russell answered affirmatively, acknowledging it was what Schindler was trying to achieve at that time.

[126] There are, in fact, no contemporaneous records supporting that any employee of Schindler genuinely believed that Schindler had 129 working days to complete installation at any material time. To the contrary, Schindler's own schedules generated on June 5, July 3, July 11, and July 20, 2012 support the understanding of a 16-week installation period, with each schedule depicting a total duration from commencement to turnover of the Freight Elevators within 80 working days. Schindler argues that these schedules were not subcontract schedules, but rather were only schedules for aspects of Schindler's work requested by WBP to be prepared within a 16-week period. However, I have taken into consideration an examination read-in from the examination for discovery of John McCleister on behalf of Schindler. When responding to a question regarding whether 16 weeks was a fair estimate of how long it would take to install MRL elevators, Mr. McCleister confirmed that expected installation would be within 16 weeks.

[127] There is an absence of evidence corroborating a reasonable belief or understanding by Schindler that 129 working days were available. Schindler made no contemporaneous objection to WBP's repeated communication of the 16-week period. There is also no evidentiary basis upon which to view as unreasonable an interpretation that all ten MRL elevators were to be installed within 16 weeks. I accordingly find that the evidence supports the parties understood and agreed that Schindler's elevator installation work was to be completed within 16 weeks.

Distinction between Freight Elevators and Passenger Elevators

[128] Both Schindler and Paul Stynchcomb correctly point out that Exhibit L only includes a construction activity for "Freight Elevator Construction", and does not expressly contemplate the Passenger Elevators. However, I do not view this omission as being material to interpreting Schindler's time for performance of Phase 1 work. In my view, it is not an ambiguity.

[129] The only distinction in Exhibit B regarding contract time is between Phase 1 and Phase 2 elevators. The 16-week period in Section 3.C.9 makes no distinction between Phase 1 and Phase 2 elevators. As noted, John McCleister's discovery evidence supports that a 16 week duration was not unreasonable for elevator installation work. In my view, properly interpreted, installation of all elevators in each of Phase 1 and Phase 2 were contractually to be completed in a period not exceeding 16 weeks, meaning that both the Freight Elevators and the Passenger Elevators were originally contemplated by the subcontract to be installed within the same period. Even if I had found some ambiguity in the subcontract terms, the parol evidence tendered regarding Schindler's bid and subcontract negotiations support that determination as the reasonable intention of the parties.

[130] Since WBP acknowledges that Schindler had two separate 16-week installation periods to complete each of the Freight Elevators and Passenger Elevators, I have assessed the evidence in light of that project reality.

Enforceability of installation duration

[131] Schindler argues that the only “time for performance” specified in the subcontract for Phase 1 work is the A1540 activity for “Freight Elevator Construction” in Exhibit L, for which the scheduled start date was February 29, 2012. Schindler’s position is that, as a result of delays beyond its control, elevator installation work could not start until at least May 22, 2012. Schindler thereby argues that both Exhibit L and the scheduled time for performance were rendered “academic” by WBP’s delays, with the provisions having ceased to have any meaningful application. I do not agree.

[132] Schindler’s argument is inconsistent with a series of contractual obligations supporting the significance of Schindler complying with its contractual time for performance. Particularly relevant in my assessment is the time is of the essence clause in Exhibit A, Article 2.1, which provides as follows:

2.1 Time is of the Essence. Subcontractor shall proceed with Subcontractor's Work in accordance with Construction Contractor's schedules as amended by Construction Contractor from time to time. Construction Contractor shall have the right to direct the sequence and pace of Subcontractor's Work, including overtime, without monetary compensation to Subcontractor. Subcontractor shall supply sufficient labor, equipment and material to enable Construction Contractor, Project Co. and all other subcontractors to complete the construction of the entire Project in the time required by the Construction Contract between the Project Co. and Construction Contractor. The Subcontractor shall furnish to the Construction Contractor in such detail and as often as required, full reports of the progress of the Subcontractor's Work irrespective of the location of such Subcontractor's Work. THE TIME OF SUBCONTRACTOR'S PERFORMANCE IS OF THE ESSENCE.

[133] Contractual terms in commercial contracts entered into by sophisticated parties that expressly state performance of timed obligations is of the essence is a clear signal that breach of any obligations calling for performance at a specified time amounts to breach of an essential element of the contract: *1473587 Ontario Inc. v. Jackson* (2005), 137 ACWS (3d) 649 (ON SCJ) at para. 19, *aff’d* (2005) 75 OR (3d) 484 (CA).

[134] WBP’s inability to accommodate the scheduled start date for Schindler’s work does not invalidate the time is of the essence clause. The clause itself expressly contemplates that WBP has the right to direct the sequence and pace of Schindler’s work, including overtime, without additional monetary compensation. Article 2.1 is also not a standalone contractual requirement. The substance of the clause is buttressed by numerous other contractual obligations that support the significance of maintaining the construction schedule, such as various terms in Exhibit B, Section 1, namely subsections 12, 14, 27, 28, 29, and 30, which provide as follows:

12. Subcontractor shall provide multiple crews and appropriate crew sizes in order to meet construction schedule.

[...]

14. Subcontractor shall include multiple mobilizations as required for Subcontractor's work and as necessary for construction schedule. This is a phased project; 8 elevators in Phase 1 and 2 elevators in Phase 2.

[...]

27. [...] Delivery of each elevator shall be on an as needed basis and scheduled with Contractor.

28. Subcontractor shall provide a manpower-loaded 4-week look ahead schedule to the Construction Contractor on a weekly basis. Failure to provide an approved look-ahead schedule, as required by Contractor, is means for payment hold to this Subcontractor.

29. Subcontractor includes all premium time or shift work necessary to maintain the construction schedule due to non-performance by this Subcontractor.

30. Perform reasonable out-of-sequence work or accelerate schedule, if required by the Contractor, to permit the coordination of the work of this Subcontractor and of other trades.

[135] Similarly, although Schindler disputes that its contractual durations were “portable”, such a position is not consistent with other terms of the subcontract. Notably, the covering page to Exhibit L expressly provides that the Exhibit L schedule is subject to change at WBP’s option. I see no reasonable commercial basis upon which to find that Schindler’s contractual performance durations ceased to apply when adjustment to the Exhibit L schedule was required by earlier Phase 1 foundation and structural delays.

[136] Both WBP and Schindler are sophisticated parties. During closing submissions, Schindler conceded that there was no inequality of bargaining power between them. Contractual provisions were negotiated and agreed governing time for performance of Schindler’s work. The subcontract, in several places, provides discretion to WBP to change the construction schedule and to direct commencement, sequencing, and pace of Schindler’s work. More importantly, the terms include various clauses specifically addressing how delays to Schindler’s work would be handled. In the event of WBP-caused delay, Schindler’s recourses are found in Exhibit A, Article 4.3 and Article 4.4 (already discussed above). These provide a mechanism for Schindler to request extensions in the time for performance of its work, and an obligation for WBP to either extend Schindler’s time for performance or to direct compensable acceleration if Schindler is “substantially delayed, hindered or interfered with through no fault or responsibility” of its own.

[137] I accept Schindler’s submission that the parties did not manage the work or schedule in strict compliance with Article 4.4, which is supported by the evidence. However, although WBP did not issue any formal change orders extending Schindler’s contract time to account for the early project delays, the evidence supports that WBP did, in fact, extend Schindler’s time for performance in compliance with the intent of Article 4.4, at least with respect to affording Schindler the same 16-week period to complete installation of elevators from delayed commencement of installation (as applied separately to the Freight Elevators and the Passenger Elevators). If the contractual durations were no longer feasible for Schindler to meet or maintain given delays prior to commencement of Schindler’s work, then Article 4.3 governed.

[138] Put simply, given the terms of the subcontract, time did not cease to be of the essence for Schindler's work because WBP or its other subcontractors delayed the WCH Project. I do not accept that sophisticated commercial parties who have agreed to contractual terms governing project delay are excused from abiding by them when unanticipated delays are encountered.

Commencement of installation

[139] Exhibit B, Section 3.A.28 to the subcontract is relevant to when Schindler was contractually required to commence installation. WBP argues that the subsection governs the start date for Schindler's 16-week installation duration. Section 3.A.28 provides that rail installation is to commence upon issuance of a notice to proceed by WBP, as follows:

28. Subcontractor will commence rail installation upon notice to proceed from Contractor's Superintendent. It is intended that shafts will not be completed at the commencement of rail installation and overhead protection will be provided by others.

[140] In closing argument, Schindler pointed out that no notice to proceed was identified in the evidence. I agree there was no specific evidence of any formal notice to proceed from WBP, but it would be commercially unreasonable to find that Schindler's time for performance of the installation work performed was never triggered.

[141] None of Schindler's witnesses confirmed the date of commencing installation work for the Freight Elevators. Several witnesses gave evidence that Schindler could not start until May 22, 2012, since the elevator penthouse roofing was not completed until May 21, 2012. Evidence supports that Schindler's equipment was delivered to the project site on May 22, 2012, and that installation work commenced on May 25, 2012, following WBP's erection of temporary work platforms for Schindler's use on May 24, 2012. Nevertheless, during closing submissions, Schindler's counsel confirmed that it is undisputed that Schindler's installation work started on May 22, 2012. I find accordingly. I also find that Schindler had notice to proceed on May 22, 2012, from which contractual performance times should be measured.

Completion of installation

[142] The parties dispute the significance of the requirement in Exhibit B, Section 3.C.1 that Schindler provide two elevator cars for Phase 1 construction use six months prior to turn-over of Phase 1. It is undisputed that this requirement refers to the Freight Elevators, and that the intention behind completing them at least six months prior to the planned Phase 1 completion date was to allow sufficient time to dismantle the skip hoist, enclose the building on the north wall, and continue remaining construction work to meet the scheduled completion date.

[143] Paul Stynchcomb's opinion is that subsection C.1 indicates that Schindler would meet its contractual requirement if work on the Freight Elevators was completed by September 27, 2012 (being Mr. Stynchcomb's calculation of six months prior to the scheduled Phase 1 completion date in Exhibit L to the subcontract on March 27, 2013). In my view, that interpretation is a legal

opinion that Mr. Stynchcomb is not qualified to give, but I do not agree with that interpretation in any event.

[144] Contract provisions must be read in harmony with one another. Mr. Stynchcomb's proposed interpretation ignores the other subcontract terms imposing time requirements discussed above and the express contemplation of potential delay to Schindler's performance in Exhibit A, Articles 4.3 and 4.4. Subsection C.1 provides an additional timeline requirement for the Freight Elevators to be ready for construction use. In my view, it would be improper contractual interpretation to view the clause as invalidating or superseding other time requirements. It is capable of being read in conjunction with the other terms in the subcontract, without superseding them, to reflect an additional outside deadline for completion of the Freight Elevators for construction use in the event of any delays to Schindler's work.

[145] Activity A1030 in Exhibit L to the subcontract, identified as "Substantial Completion Phase 1 – (Interim Completion)," provides a completion date of March 27, 2013. The evidence supports that date as the target Phase 1 completion deadline set by WBP, which was approximately one month in advance of WBP's deadline for Interim Completion on April 29, 2013 pursuant to the Construction Contract. I am satisfied that this is the Phase 1 "turn-over" date contemplated in the subcontract.

[146] I accordingly find that, in the event of any delay in commencement or progress of Schindler's work, the subcontract nevertheless required that the Freight Elevators to be turned over for construction use by no later than September 27, 2012.

Completion of subcontract work

[147] Absent from the subcontract is any express term providing a completion date for Schindler's Phase 1 work. Activity A2640 contemplates that elevator testing and commissioning was to be completed by October 1, 2012, over a period of 20 working days. I am satisfied from the evidence at trial that Schindler's work on elevators would be completed following testing and commissioning. I accordingly find that the subcontract contemplated Schindler's completion of all elevator work by October 1, 2012.

Fabrication and delivery

[148] Little evidence and argument was tendered on fabrication and delivery of the elevators. In Schindler's closing submissions, it argued that there was no subcontract requirement for elevator production. I do not agree. That position is inconsistent with Schindler's argument that Exhibit L governs the contractual duration for elevator installation. Phase 1 elevator procurement is expressly contemplated in activity A4320 in Exhibit L to be completed by February 29, 2012, the same date as the commencement of the "Freight Elevator Construction" activity A1540. The only "procurement" activity regarding elevators supported by any evidence at trial is elevator fabrication and delivery, which would necessarily have to be completed by commencement of

installation. Both Schindler and WBP agree that installation work was originally scheduled to commence on February 29, 2012.

[149] Paul Stynchcomb testified during his examination in chief that, based on his review of the schedules, the elevator procurement activity (activity A4320) was the predecessor activity to “Freight Elevator Construction” (activity A1540). During cross-examination, he also confirmed his view that the procurement activity included fabrication. Given Mr. Stynchcomb’s qualifications in CPM schedule analysis, I find no basis dispute that interpretation of the schedule, which also accords with a logical, non-expert review of Exhibit L.

[150] For these reasons, I find that the subcontract contemplated Schindler completing fabrication and delivery of the Phase 1 elevators by February 29, 2012.

Summary of findings regarding performance time

[151] In summary, I find that the contractual time for completion of Schindler’s subcontract work was 140 days for fabrication and delivery of the elevators, to be completed by February 29, 2012, 80 working days for elevator installation from the commencement of installation work, with the Freight Elevators ready for construction use by no later than six months prior to March 27, 2013 (i.e., September 27, 2012), and a final 20 working days for testing and commissioning of elevators completed by October 1, 2012. These contractual times were subject to adjustment by changes or delays in accordance with the terms of the subcontract.

v. Default provisions

[152] Exhibit A, Article 8.1 to the subcontract is the relevant provision dealing with WBP’s recourse in the event of Schindler’s default of its contractual obligations. Given its significance in these proceedings, I reproduce it in its entirety below:

8.1 Failure of Performance and Default. If the Subcontractor refuses or fails to supply enough properly skilled workers, proper materials, or maintain the Schedule of Work, or it fails to make prompt payment for its workers, subcontractors or suppliers, disregards Laws or orders of any public authority having jurisdiction, or otherwise materially breaches a provision of this Construction Subcontract, and fails within seventy-two (72) hours after receipt of written notice (confirmed facsimile transmission shall constitute sufficient notice) to commence and continue satisfactory correction of such default with diligence and promptness, the Construction Contractor, without prejudice to any other rights or remedies, shall have the right to any or all of the following remedies: (i) supply such number of workers and quantity of materials, equipment and other facilities as the Construction Contractor deems necessary for the completion of the Subcontractor’s Work, or any part thereof which the Subcontractor has failed to complete or perform after the aforesaid notice, and charge the cost thereof to the Subcontractor, who shall be liable for the payment of same including reasonable overhead, profit and attorney’s fees; (ii) contract with one or more additional contractors to perform such part of the Subcontractor’s Work as the Construction Contractor shall determine will provide the most expeditious completion of the total Work and charge the cost thereof to the Subcontractor; and/or (iii)

withhold payment of any moneys due the Subcontractor pending corrective action to the extent required by and to the satisfaction of the Construction Contractor and the Architect/Engineer. In the event of an emergency affecting the safety of persons or property, the Construction Contractor may proceed as outlined above without notice.

If Construction Contractor shall have reasonable grounds to question Subcontractor's intent or ability to perform, Construction Contractor may, in writing, demand that Subcontractor give adequate assurance, in writing, of its intent or ability to perform. If such a demand is made and no written assurance adequate to the Construction Contractor is given within five (5) calendar days, Construction Contractor may treat this failure to give such adequate assurance as a default or an anticipatory repudiation of the contract. In the event of a default, the Construction Contractor, without prejudice to any other rights or remedies, shall have the right to any or all of the remedies stated above.

[153] The provision establishes five grounds of default: (i) Schindler's refusal or failure to supply enough properly skilled workers, to supply proper materials, or to maintain the "Schedule of Work"; (ii) Schindler's failure to make prompt payment for its workers, subcontractors or suppliers; (iii) Schindler's disregard of "Laws" (defined in Article 7.13) or orders of any public authority having jurisdiction; (iv) Schindler materially breaching a provision of the subcontract; and (v) Schindler failing to provide adequate written assurance of its ability to perform upon written demand by WBP made on reasonable grounds to question Schindler's intent or ability to perform. With respect to the first ground of default, although capitalized, "Schedule of Work" is not defined in the subcontract. It is, however, the title of Article 2 and, in the context of the subcontract as a whole, is reasonably interpreted and understood to mean the work schedule contemplated by Article 2.2, which requires Schindler to prepare and maintain progress schedules that provide for "expeditious and practicable execution" of Schindler's work, indicating the dates for starting and completion of the various stages of work.

[154] By operation of Article 8.1, any of the defaults trigger WBP's use of the three itemized remedies identified, namely supplying additional labour or materials to complete Schindler's work at Schindler's expense, subcontracting portions of Schindler's work to other trades at Schindler's expense, and withholding payment from Schindler pending corrective action to the extent required by and to the satisfaction of WBP and PEB/IBI. However, absent emergency circumstances, written notice is a contractual pre-requisite to exercising any remedy for default. For the first four grounds of default, WBP is contractually obliged to provide a written notice of default. Article 8.1 expressly provides a 72-hour period in which to commence correction of any default, after which Schindler is obliged to "continue satisfactory correction of such default with diligence and promptness."

[155] The three itemized remedies in Article 8.1 are "without prejudice to any other rights or remedies". WBP also relies on two other default remedy provisions to support its claim for damages: WBP's right of set-off pursuant to Exhibit A, Article 3.12 and the liquidated damages clause in Exhibit A, Article 4.5.

[156] Exhibit A, Article 3.12 provides as follows:

3.12 Right of Set Off. Construction Contractor may withhold amounts otherwise due under this Construction Subcontract or any other agreement between the parties to cover Construction Contractor's reasonable estimate of any costs or liability Construction Contractor has incurred or may incur for which Subcontractor may be responsible.

[157] Exhibit A, Article 4.5 provides as follows (emphasis added):

4.5 Liquidated Damages. If the Contract Documents provide for liquidated damages for delay beyond the completion date(s) set forth in the Contract Documents, and such liquidated damages are so assessed, then the Construction Contractor may assess the same against the Subcontractor in proportion to the Subcontractor's share of the responsibility for such delay. The amount of liquidated damages assessed shall not exceed the amount assessed against the Construction Contractor. Liquidated damages, as assessed against Construction Contractor for Subcontractor's default, may be but one item of the actual damages that may be incurred by Construction Contractor, and which the Construction Contractor may assess against Subcontractor. The proportionate assessment of liquidated damages shall not limit Construction Contractor's right to collect from Subcontractor all actual damages incurred by Construction Contractor as a result of Subcontractor's delay or default.

[158] Each of these three provisions have one commonality: they each contemplate, expressly or impliedly, some default by Schindler giving rise to compensable losses incurred by WBP. Considering the subcontract as a whole, I find that, if WBP viewed Schindler to be in default of any of its obligations, then WBP was contractually required to provide written notice of default. In the case of a default under Article 8.1, WBP was also required to provide a 72-hour period for Schindler to commence correction of the default and, provided Schindler did so, and continued “satisfactory” correction with “diligence and promptness”, WBP was not entitled to exercise its remedies.

vi. Contractual indemnity obligations

[159] WBP's primary damages claim comprises apportioned indemnification for delay and impact losses incurred by WBP for acceleration and mitigation efforts that WBP asserts were required to meet the Interim Completion deadline under the Construction Contract. WBP also claims indemnification for liquidated damages assessed against WBP and a flow-through of damages assessed by WCH against ProjectCo pursuant to the Project Agreement (levied against WBP pursuant to the Construction Contract) and by ProjectCo against B&M pursuant to the Service Contract (levied against WBP pursuant to the Interface Agreement). WBP relies on contractual indemnification provisions in the subcontract in pursuing these losses and damages against Schindler.

[160] Standard contractual interpretation principles also govern interpretation of indemnity clauses in commercial contracts: *Ontario v Turn-Key Construction Inc.*, 2016 ONSC 5350 at paras

22-23. The main clause relied upon by WBP is Exhibit A, Article 9.3 of the subcontract, which contains a broad indemnity. The article provides, in full, as follows (emphasis added):

9.3 Additional Indemnification. Subcontractor shall further indemnify, defend and hold harmless the Indemnified Parties from and against any and all claims, damages, losses, demands, suits, actions, judgments, liability, fines, penalties, expenses and costs (including but not limited to attorneys and expert fees and costs of litigation, arbitration, or mediation) arising out of or resulting from Subcontractor's actual or alleged failure to perform under this Construction Subcontract in accordance with the terms of this Construction Subcontract and the Contract Documents. Without limitation, the indemnity and defense obligations of Subcontractor shall include, but are not limited to, indemnifying, defending and holding harmless from claims made by third parties against any Indemnified Party. Subcontractor's liability includes, but is not limited to, (i) damages and other delay costs payable by Construction Contractor; (ii) Construction Contractor's increased costs of performance, such as extended overhead and increased performance costs resulting from Subcontractor caused delays or omitted or defective Subcontractor's Work; (iii) warranty, rework and repair costs; (iv) liability to third parties, including, but not limited to, other subcontractors of Construction Contractor and Project Co.'s contractors; (v) excess procurement costs; (vi) costs to obtain a substitute subcontractor or costs incurred to demand and ensure performance of Subcontractor's surety in the event of Subcontractor default; (vii) consultants' and experts' fees; and (viii) attorneys' fees and related costs. Subcontractor's actual or alleged failure to perform shall include the actual or alleged failure of Subcontractor's lower-tier subcontractors or suppliers to perform. The foregoing indemnity shall also be an obligation of Subcontractor's performance bond surety provided, however, the existence or non-existence of a performance or payment bond shall in no way limit or condition Construction Contractor's right of indemnity or remedies against Subcontractor nor shall it limit Subcontractor's responsibilities hereunder.

[161] As emphasized above, a precondition to any liability for indemnification pursuant Article 9.3 is that the amounts claimed arise out of or result from a failure to perform under the subcontract in accordance with the terms of the subcontract and the “Contract Documents” (defined in Exhibit C, as noted above). The indemnity is in favour of “Indemnified Parties”, which is defined in Article 9.1 to include WBP, ProjectCo, and PEB/IBI, as well as “and any other entity as provided in the Contract Documents and agents and employees of any of them.” WBP has tendered case law supporting that additional language of “save harmless” has been held to impose an additional obligation that goes beyond the obligation “to indemnify”: *Ontario v Turn-Key Construction Inc.*, *supra* at para. 19. WBP acknowledges that Article 9.3 is a harsh clause, but submits that it was negotiated and settled upon between the parties.

[162] In addition to the specific liquidated damages clause in Exhibit A, Article 4.5 (extracted and discussed further above), the subcontract includes a more general indemnification obligation for amounts assessed by ProjectCo against WBP, which is also relied upon by WBP. Exhibit A, Article 7.17 provides as follows (emphasis added):

7.17 Penalties, Fines, Liquidated Damages, Disincentives. Subcontractor shall be responsible for penalties, fines, liquidated damages, and disincentives, or any other

withholding or forfeiture of money, as assessed by the Project Co., arising from Subcontractor's Work or workforce.

[163] As emphasized above, a precondition to Schindler's liability for the amounts assessed against WBP by ProjectCo is that they must arise from Schindler's work or workforce. Schindler disputes that any amounts charged or levied by ProjectCo against WBP arise from Schindler's work or its workforce.

[164] One of Schindler's arguments is that the claim against it is completely disproportionate to the subcontract price and role of Schindler on the WCH Project. In response to that argument, WBP points to the critical nature of Schindler's work to the project as a whole. During opening submissions, WBP raised Article 9.2, which provides that there is no cap on Schindler's liability for claims arising from its work. However, the clause was not raised again during closing submissions. To the extent it is relied upon by WBP, I do not agree that it has any bearing on the disposition of these proceedings. By its language, its application is limited to removing any limitation of liability for claims against the "Indemnified Parties" for which Schindler is liable to indemnify under Article 9.1. Although Article 9.1 contains a broad indemnity, that indemnity is only for claims "attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself)". None of WBP's claims are argued to fall within the Article 9.1 indemnity, and they do not. Accordingly, Article 9.3 is the only indemnity clause with relevance in these proceedings.

b. Earned and unpaid amounts claimable under the subcontract

[165] It is undisputed that Schindler completed its subcontract work. Schindler's position, and the evidence of Dave Brennan in his first affidavit, is that the total subcontract price, including changes, was \$2,555,811.40, including HST. Mr. Brennan's affidavit evidence is that Schindler submitted a total of fourteen invoices and progress payment applications totalling that amount, and that only \$1,602,970.88 has been paid by WBP. Mr. Brennan's evidence is that there remained a balance owing of \$952,841.99 as of August 15, 2019, representing the total of Schindler's last eight invoices dated between January 18, 2013 and September 8, 2015. That figure, which is the amount of Schindler's preserved lien, is consistent with an appended internal billing status report from Schindler dated August 24, 2016, but is inconsistent with the statement of account appended to Mr. Brennan's affidavit, which shows a slightly lower amount outstanding of \$952,840.52.

[166] Daniel Wierec's first affidavit includes WBP's calculation of the subcontract balance. Mr. Wierec's evidence acknowledges that \$702,439.99 remains earned and unpaid. That figure is derived by subtracting WBP's payments totalling \$1,732,633.17 (\$129,662.29 higher than the payments reflected in Schindler's statement of account) from a total subcontract price of \$2,435,073.16, excluding the last three disputed change orders issued after Schindler's work was completed. In Mr. Brennan's second affidavit, he acknowledges the payment by WBP of \$128,121.65 discussed by Mr. Wierec, but does not otherwise address Mr. Wierec's evidence on subcontract accounting. Mr. Brennan's oral testimony did not assist. I agree with WBP's

submission that Mr. Brennan appeared confused about both the subcontract accounting and his affidavit evidence on the matter.

[167] Comparing Schindler's affidavit evidence and WBP's affidavit evidence on subcontract accounting discloses the following discrepancies:

- (a) Schindler calculates the total subcontract price, including changes, to be \$120,738.24 higher than WBP's calculation of the total subcontract price (excluding disputed change orders); and
- (b) WBP calculates total payments made to Schindler to be \$129,662.29 higher than the total payments credited by Schindler, representing two cheques not included in Schindler's accounting.

[168] In closing submissions, Schindler re-quantified its claim to the aggregate amount of \$956,864.00, inclusive of HST. Schindler accepts WBP's quantification of the undisputed \$702,439.99, net of all payments. In addition, Schindler also seeks payment of \$126,302.36 in relation to acceleration of the Passenger Elevators and adds the WBP payment of \$128,121.65.

[169] Given Mr. Brennan's unclear evidence, and since Schindler claims recovery of an additional \$128,121.65, notwithstanding that the payment is accounted for in WBP's calculation of the agreed amount earned by Schindler and unpaid by WBP, I have more closely reviewed the evidence to assess that claim. I have also considered Schindler's claim for acceleration costs.

i. Discrepancies in subcontract price calculations

[170] The discrepancy between WBP and Schindler on the total subcontract price relates to the changes to Schindler's work. Mr. Brennan acknowledged during cross-examination that he had no involvement in change orders, and appeared to have no personal knowledge of the changes claimed by Schindler to have been agreed.

[171] WBP's position, and Mr. Wierc's evidence, is that there were eight change orders issued for Schindler's subcontract, four of which were not accepted by Schindler. Excluding change order nos. 210068S24-005 through 210068S24-008, which are all disputed change orders, the variances between the accounting of the parties are the following:

- (a) Change order no. 210068S24-003, which was not signed by Schindler, but only purports to change a contact hierarchy for elevator maintenance works. It thereby has no impact on the subcontract price;
- (b) Change order no. 210068S24-004 in the amount of \$4,924, plus HST, which relates to replacement of damaged hoist ropes, and does not appear to be reflected in Schindler's accounting; and
- (c) Schindler's claimed extra for acceleration of installation work for the Passenger Elevators, identified in Schindler's statement of account as G1102_02 for

acceleration of elevator nos. 3 and 5 and GO G1102_3 for acceleration of elevator nos. 4 and 6. The claimed amounts total \$111,772.00, plus HST. This extra is discussed below.

[172] Since the parties agree that the earned and unpaid subcontract amount is \$702,439.99, the only genuinely disputed issues are Schindler's additional claim for the \$128,121.65 payment and the acceleration extra claimed by Schindler. I accordingly need not address any other accounting discrepancies and turn to Schindler's claim for those additional amounts.

ii. Unaccounted payment

[173] Schindler's accounting does not include two payments claimed by WBP, as outlined in Daniel Wierec's first affidavit. Although WBP cheque no. 4186 dated October 24, 2013 for \$1,540.64 is not reflected in Schindler's accounting, there is no need to review it further, since it is accounted for in WBP's calculation of \$702,439.99, agreed by Schindler. The other unaccounted payment is WBP cheque no. 5927 dated March 11, 2016 for \$128,121.65.

[174] As discussed earlier in these reasons, according to Daniel Wierec's evidence, payment of \$128,121.65 was made by WBP, on account of contract items and WBP's purported exercise of a subcontract option to extend the period of maintenance warranty for Phase 1. Since Schindler did not provide any extended maintenance, WBP argues the amount should be credited as a payment by WBP. In Mr. Brennan's responding affidavit, he acknowledges Schindler's receipt of the payment from WBP, which his evidence confirms was deposited against amounts owing to Schindler. In particular, as also already noted, prior to depositing the cheque, Schindler confirmed to WBP that it would be depositing the cheque on that basis.

[175] There is no evidentiary basis supporting a further payment to Schindler for \$128,121.65. I am satisfied from Mr. Wierec's evidence on the \$702,439.99 that the payment has already been accounted in that calculation of earned and unpaid amounts, which is agreed by the parties. The payment is not reflected in Schindler's subcontract accounting as provided through Mr. Brennan's first affidavit, which calculates Schindler's claim in the same amount as its lien. There is no evidence that Schindler repaid the amount to WBP. It accordingly ought to be credited as a payment against Schindler's claim.

[176] I am reinforced in that determination by Schindler's own subcontract accounting. After excluding the disputed acceleration extras and crediting the unaccounted payment, Schindler's subcontract accounting supports an earned and unpaid amount of \$698,416.51, which is close in proximity to the amount agreed by the parties.

[177] I accordingly find that Schindler's claim for another \$128,121.65 is erroneous and unsupported by the evidence.

iii. Extra for acceleration costs

[178] Schindler's position is that it was directed by WBP to accelerate installation work on the Passenger Elevators, did so, and is entitled to compensation for the extra. Schindler claims acceleration costs of \$65,500 for elevator nos. 3 and 5 and \$46,272 for elevator nos. 4 and 6. Those claimed amounts, totalling \$111,772 plus HST, were the subject matter of two of the "Field Change Request Quotations" submitted by Timothy Russell to Erica Carroll by email on January 11, 2013 with a request that she "return the Change Notices ASAP so [Schindler] can begin this weekend." The amounts were ultimately invoiced in Schindler's progress payment application on March 22, 2013, bearing invoice no. 7401304318.

[179] WBP's position is that no change order was approved or issued, such that the costs do not form part of the subcontract. WBP also argues that Schindler substantially delayed in completion of the Passenger Elevators, so is disentitled from any acceleration extra in any event.

[180] Schindler's claim stems from a direction given by Daniel Wierec on January 3, 2013 to accelerate installation of the Passenger Elevators and his subsequent agreement "in principle" to pay some of the associated costs. WBP's direction to accelerate was confirmed in an email dated January 3, 2013 from Mr. Wierec, 2013, sent following a meeting with Tim Russell and Stephen McGinlay. The email directs that elevator nos. 3 and 5 are to be completed and ready for use by February 1, 2012, and that elevator nos. 4 and 6 are to be completed by January 25, 2013 "to facilitate finishes in the elevator lobbies." Mr. Wierec acknowledges Schindler's estimate of \$65,000 for acceleration of elevator nos. 3 and 5, proposes an equal division of acceleration costs, and requests an acceleration plan for elevator nos. 4 and 6. The email also sets out that acceleration was necessary, in part, "to repair incorrectly installed elevator entrance frames on cars 1 and 2" and because "the elevator machine rooms were turned over in a 'ready' condition to Schindler later than anticipated on Nov 19th."

[181] The second email relied upon by Schindler is an email dated January 15, 2013 sent by Daniel Wierec to Tim Russell. In that email, Mr. Wierec confirmed WBP's agreement "in principle" to provide Schindler with change orders for 50% of Schindler's overtime to accelerate elevator nos. 3 and 5 and 100% of Schindler's overtime to accelerate elevator nos. 4 and 6.

[182] Daniel Wierec's evidence on payment for Schindler's acceleration was inconsistent. During cross-examination, he testified that WBP did not pay for Schindler's acceleration overtime because the overtime work did not end up accelerating completion of the Passenger Elevators. That is in contrast to the acknowledgment in his first affidavit that, "WBP agrees that it would also need to account for the amounts it agreed to pay Schindler in its emails to Schindler on January 3, 2013 and on January 15, 2013 but Schindler has not yet provided a breakdown of these amounts to WBP."

[183] During cross-examination, Erica Carroll confirmed that she believed she had approved Schindler's change requests, but did not know if it was paid and did not know where approval of the changes would be. I am not satisfied that Ms. Carroll has any actual recollection of approving the changes. There is no contemporaneous records supporting approval. In fact, after receiving

the Schindler's "Field Change Request Quotations", Ms. Carroll forwarded them to Daniel Wierec with a number of questions regarding them. Neither Mr. Wierec's response, nor his cross-examination, clearly confirm agreement to the amounts claimed by Schindler. The email states at one point, "The hours and rates calculated by Tim seem way off. Need to verify hours and rates."

[184] Timothy Russell gave evidence that Schindler was stalled in installation work because WBP did not provide power to the elevator machine room before at least mid-January 2013. By email dated January 14, 2013 to Erica Carroll, Mr. Russell advised as follows:

As of Monday January 14, 2013 Schindler can not proceed with several installation operations for cars 3-6. We will continue to install the remaining parts, until such time as out of sequence work is no longer available. The anticipated accelerated scheduled turn over of Jan 31 for cars 3 and 5 are in jeopardy of late turn over due to lack of power.

[185] Evidence also supports that WBP delayed in providing necessary floor elevations to set door frames, which was the testimony of Guiseppe Michelizzi and Timothy Russell. I am satisfied from the evidence that WBP did not provide the elevations to Schindler until at least February 1, 2013. An email from Erica Carroll on that date confirms instructions to "set all frames at -1200 from mark to finish floor except for Level 1 which should be set at -1151." However, it may be that the required detail was not provided until February 7, 2013. In an email from Daniel Wierec on that date, he directs Tyler Kondel and Scott Watson to "confirm finish floor elevations at all floors today so that Schindler can set all frames."

[186] Notwithstanding the foregoing, I have determined that I need not address the evidence and Schindler's arguments for why the accelerated completion dates were not met. I am not satisfied that Schindler has proved its claim for the acceleration extra.

[187] As the party claiming the extra, Schindler has the evidentiary onus of proving that the work was performed. Even if I accept that there was agreement for WBP to pay Schindler for acceleration overtime, the evidence does not support agreement to any fixed price. At best, it supports agreement to pay percentages of Schindler's overtime costs, as stated in Daniel Wierec's emails dated January 11 and 15, 2013. Schindler thereby also has the evidentiary onus of proving quantification of claimed overtime costs.

[188] As noted above, Mr. Wierec's affidavit evidence is that "Schindler has not yet provided a breakdown of these amounts to WBP." Apart from Schindler's evidentiary onus, supporting documentation for Schindler's acceleration claim is a contractual requirement. If considered a WBP-directed change to accelerate, then the lack of agreement on price would exclude it from operation of Exhibit A, Article 4.1. Accordingly, Schindler's acceleration extra would necessarily fall under Article 4.2 (viewed as WBP's direction to proceed with acceleration on a time and materials basis) or Article 4.3 (viewed as a "Claim" by Schindler). Both clauses oblige Schindler to retain records and produce them for inspection. In the case of Article 4.2, it expressly provides that Schindler waives any right for compensation for a day on which written records are not kept and submitted for verification.

[189] Schindler has tendered two internal documents dated February 22, 2013, said by Dave Brennan in his first affidavit to be internal allocations of “labour and material” for the acceleration of the Passenger Elevators. They indicate 544 mechanic hours for acceleration of elevator nos. 3 and 5 and 384 mechanic hours for acceleration of elevator nos. 4 and 6. Despite Mr. Brennan’s description of them, no material is listed. These internal allocations reflect the \$65,500 and \$46,272 figures claimed and invoiced to WBP on March 22, 2013. Under the heading “Estimated Costs”, the acceleration cost is listed as \$42,240 for elevator nos. 3 and 5 and \$32,640 for elevator nos. 4 and 6. The relationship of these “estimated costs” to the total change amount was not explained in evidence.

[190] Mr. Brennan was admittedly on site a maximum of three times in the course of the project. He confirmed during cross-examination that he did not know if the elevators were completed on time and that he was not involved in arranging the acceleration. He also confirmed that would typically not get involved in change orders, which were handled by Schindler’s project management. His testimony makes clear that he has no personal or direct knowledge regarding whether any overtime work was actually performed.

[191] The only other evidence from Schindler’s witnesses regarding acceleration hours actually spent is a self-serving affidavit statement by Timothy Russell, as follows:

In order to try and mitigate WBP delays and impacts to Schindler, I had the crew accelerate as much as possible and by January 15, 2013, had documented at least 11 days of overtime acceleration efforts, for submittal to WBP for compensation due to delays caused by WBP.

[192] No exhibit is appended and no document is referenced by Mr. Russell to substantiate the “documented” days of overtime acceleration efforts. None of the other witnesses gave evidence on overtime hours spent to accelerate the Passenger Elevators or quantification of the claim. Simply put, there is no evidence from any Schindler witness regarding the number of overtime hours incurred, by whom, on which days, and the cost of that work. In the absence of an express agreement to a fixed price change, as here, such evidence was necessary to prove the claim.

[193] For these reasons, irrespective of whether WBP may be liable to pay for Schindler’s acceleration overtime, I find that Schindler has not met its evidentiary onus to prove the quantum of the acceleration extra. Schindler’s evidence does not substantiate any actual overtime hours or expense being incurred. I accordingly deny Schindler’s acceleration claim.

iv. Summary of findings on subcontract amounts

[194] For the foregoing reasons, I find that the earned and unpaid subcontract balance owing to Schindler, before assessing the validity of WBP’s set-offs and other claims, is \$702,439.99, inclusive of HST.

c. Breach of the subcontract

[195] Since WBP does not dispute that \$702,439.99 is owing under Schindler's subcontract (\$830,561.64 at the time Schindler preserved its lien, since the \$128,121.65 payment post-dated both preservation and perfection), WBP's non-payment of Schindler would constitute a breach of the subcontract, as Schindler alleges, unless Schindler was itself already in breach of the subcontract and WBP was contractually entitled to withhold payment.

[196] WBP alleges that Schindler breached the subcontract by delayed performance of its elevator work. Schindler argues that it was delayed in performance by events beyond its control. Much of the trial evidence focused on overall delay in Schindler's installation work on the Freight Elevators and the Passenger Elevators. As already noted, there is no dispute that the Freight Elevators and Passenger Elevators were installed during separate installation periods, which is acknowledged by WBP as being agreed. Accordingly, notwithstanding my findings on the time for performance of Schindler's work, the separation of work is not a basis for any breach of the subcontract.

[197] WBP also raises delay in Schindler's fabrication and delivery of the Freight Elevators and in testing and commissioning of all elevators. Those are also delays disputed by Schindler, but were not a focal point at trial for delays for which Schindler is alleged to be responsible.

[198] As outlined earlier in these reasons, the subcontract contains detailed contractual terms dealing with payment requirements, delay, notice of default, and default remedies. Determining whether WBP or Schindler breached the subcontract thereby turns not only on whether Schindler's delays were beyond its control, but also compliance with the subcontract.

i. Delays to Schindler

[199] Schindler claims it was delayed in the performance of its subcontract work through no fault of its own. Schindler thereby has the evidentiary onus of proving those delays and the extent of their impact, as well as the right to an extension of subcontract time in accordance with the terms of the subcontract. Schindler has tendered evidence regarding a number of delay events and claimed impacts from those delays.

Delays with Freight Elevators

[200] For reasons outlined above, I have already found that May 22, 2012 was the commencement date for installation of the Freight Elevators, and that Schindler's performance time under the subcontract should be measured from that date. Accordingly, for the Freight Elevators, the actual installation duration was a total of 140 working days from commencement on May 22, 2012 to turnover of the second elevator car on December 7, 2012.¹

¹ Calculated using Ontario working day calculator at <http://www.workingdays.ca/>.

[201] Schindler has tendered evidence on various events that delayed its performance of work on the Freight Elevators. Before addressing the evidence on those events, I note that Paul Stynchcomb's opinion is that there are 22 working days, or 31 calendar days, of excusable delay in Schindler's installation of the Freight Elevators. If I were to accept the full 22 working days of excusable delay assessed by Mr. Stynchcomb, then Schindler's performance was still delayed by 38 working days.

[202] Mr. Stynchcomb also notes delays to Schindler's work by "poor jobsite organization and material handling", for which no delay was assessed in his report, instead only noting Schindler's position that lost time associated with scattered storage of Schindler's equipment and materials was estimated to have impacted Schindler by "at least two weeks" on the Freight Elevators. The source of that estimate is unattributed and it does not appear to have been independently verified or assessed by Mr. Stynchcomb. I accordingly give no weight to that comment.

[203] My findings on delay events alleged by Schindler during installation of the Freight Elevators are outlined below.

[204] *Incomplete pre-start checklist items:* Schindler asserts that various items included in a pre-start checklist provided to WBP remained incomplete, delaying its commencement of installation work. Based on the trial evidence, I accept that WBP agreed to complete these items, but am not satisfied that there was any delay associated with them after May 22, 2012 not separately addressed in the balance of delay events discussed below. Regardless, Schindler bears the onus of proving the extent of delay, so its closing submission that the cumulative effect of the pre-start requirements being incomplete impeded and delayed Schindler's work "in a subtle and insidious but pervasive way" is a bare hyperbole with no evidentiary value. Subject to overlapping items below, I find no delay beyond May 22, 2012 from incomplete pre-start checklist items.

[205] *Temporary work platforms:* As of May 22, 2012, temporary work platforms had not been erected for use by Schindler. WBP and Schindler disagree on who had contractual responsibility to supply them, although Timothy Russell acknowledged during cross-examination that Schindler had agreed to pay for them. I agree with WBP that supplying the temporary work platforms was Schindler's obligation pursuant to Exhibit A, Article 6.1, which requires that Schindler "furnish all temporary services and/or facilities necessary to perform its work". I do not accept Schindler's argument that the work platform is a "structure" and not a "facility". Merriam-Webster defines "facility" to include "something that makes an action, operation, or course of conduct easier".

[206] I also do not accept Schindler's argument that the term in the fine print of its shop drawings, at item no. 38, requiring that temporary work platforms be erected, maintained and removed by others, governed. Exhibit A, Article 6.6 expressly provides that WBP's approval of submittals, including shop drawings, does not relieve Schindler from its obligation to perform its work "in strict compliance" with the subcontract. The only exception appears to be an express requirement in Exhibit B, Section 3.A.20 to include "any and all access door and/or roof hatch requirements" on the initial shop drawings. Nothing in the subcontract gives priority to shop drawing terms.

I accordingly find no delay to Schindler beyond its control from the temporary work platforms not being installed, since any delay was by reason of its own non-performance.

[207] Water in the elevator pits: Evidence supports incidents of water penetrating into the elevator pits on May 29, June 12, and July 27 to August 3, 2012. I am satisfied from the evidence that Schindler was unable to work in the elevator shafts when there was water on the elevator pit floor as a matter of safety and in accordance with union requirements. I accordingly find that Schindler was delayed beyond its control for 8 working days.

[208] Yellow steel: Schindler asserts that WBP's failure to construct a ledge depicted on Schindler's shop drawings and required to install "yellow steel" at the top of the shaft (*i.e.*, yellow-painted structural steel that supports both the elevator hoist motor and the elevator cab) resulted in delays. I am satisfied from the evidence that construction of necessary support for the MRL elevators was beyond the scope of Schindler. Schindler's shop drawings do depict a ledge for installation of yellow steel, which was not incorporated into the designs of PEB/IBI. Evidence from both David Simm and Tyler Kondel support that the absence of a ledge for the yellow steel was identified by December 2011. Although liability for the cost is disputed, it is undisputed that an alternative solution was agreed to provide box-outs (*i.e.*, pockets) on either side of the elevator shafts for Schindler to install the yellow steel. The box-outs were two different sizes. That work was performed or arranged by WBP.

[209] I accept the evidence of Guiseppe Michelizzi that the box-outs were reversed, and the evidence of Mr. Simm that some box-outs that needed to be 24-inches were too small. These issues required additional chipping of the smaller box-outs to accommodate installation of the yellow steel. I also accept that Schindler was unable to work in the hoistways while the chipping was ongoing, which was not completed until August 27, 2012, after which Schindler was able to install the yellow steel.

[210] While the evidence on responsibility for the errors was conflicting, I am satisfied from the totality of testimony that the drawings were sufficiently clear, and had the box-outs been chipped by WBP's subcontractor per the relevant drawings, additional chipping would not have been required. Both experts agree roughly on the schedule impact of additional chipping. Based on the evidence and expert testimony, I find that Schindler was delayed beyond its control by 5 working days as a result of the necessary additional chipping required to install the yellow steel.

[211] Outstanding trade work for TSSA inspections: Mr. Russell's evidence is that a TSSA inspection could not occur until other subcontractors completed work in the Freight Elevators, identified in an email from Mr. Russell dated November 26, 2012 as work by Bondfield, B&M, and Greenfield. Schindler's witnesses did not give any evidence on when such work was performed in relation to Schindler's outstanding work identified in Mr. Russell's email, and if and how the other work impacted Schindler. I find no delay substantiated by the evidence regarding delays from other trades.

[212] Conflict with other trades: There is some evidence supporting conflicts with other trades working in the elevator hoistways during the course of installation work on the Freight Elevators.

However, I am not satisfied that the extent of an 8 working day delay as assessed by Paul Stynchcomb is supported by the evidence tendered at trial. Moreover, Exhibit B, Section 3.A.9 of the subcontract provides, in part, “The Subcontractor has included an allowance of 160 hours for an elevator mechanic to run the cars for work by others.” I agree with Schindler’s submission that the uncontradicted evidence of Giuseppe Michelizzi is that he had incurred over half of that allowance running the Freight Elevators by December 2012. However, any unavailability of Mr. Michelizzi’s to work on the Freight Elevators for 80 hours was delay contemplated by the subcontract terms. There is no evidence substantiating more than 80 hours of a mechanic running cars for other trades. I am nevertheless satisfied that the evidence supports other trade interference impacts, and accordingly find and allow an aggregate of 3 working days of delay beyond Schindler’s control with respect to conflict with other trades.

[213] Lack of adequate laydown areas: Schindler alleges that it suffered delays as a result of having no laydown areas for its materials and supplies, as well as relocation of its materials and supplies. Schindler’s shop drawings do include a term, at item no. 2, for an “acceptable material unloading area within 30.5m (100ft) of hoistway”. However, as already discussed, terms contained in a shop drawing do not supersede subcontract terms. Exhibit A, Article 5.1 includes an acknowledgment that it will be necessary for WBP to allocate storage space (among other resources) at its discretion with preference to certain trades and, provided WBP acts in good faith, Schindler waives any and all claims for extension of time. Schindler’s complaint falls squarely within this provision. There is no evidence of any absence of good faith by WBP not allocating laydown areas per the shop drawing terms. In any event, very limited evidence was tendered by Schindler on the impact of inconsistent material and equipment storage areas. In my view, Schindler has not met its evidentiary onus to quantify the delay. I accordingly find no delay associated with lack of consistent material and equipment laydown areas.

[214] For these reasons, I accordingly find that the evidence supports an aggregate of 16 working days of delay in the course of installing the Freight Elevators beyond Schindler’s control.

Delays with Passenger Elevators

[215] Although Schindler argues that it was unable to perform any meaningful work until the elevator machine rooms were turned over to Schindler, Schindler was ready to commence installation work for the Passenger Elevators on September 12, 2012, as confirmed by both David Simm’s affidavit evidence and an email from Timothy Russell to Timothy Meana on that date stating, “We are ready to get started on the next four cars (3-6). And the labor is available.” Giuseppe Michelizzi’s evidence is that he began working on elevator nos. 3 and 5 in September 2012.

[216] For the same rationale as applied above, I accordingly find that September 12, 2012 was the commencement date for installation of the Passenger Elevators, from which contractual performance times should be measured. I find also that the completion date for installation of the Passenger Elevators is the date of TSSA acceptance of the elevators for use. Accordingly, for the Passenger Elevators, the actual installation duration was a total of 147 working days from

commencement on September 12, 2012 to turnover of the final elevator (elevator no. 6) on April 12, 2013.²

[217] Schindler has tendered evidence on many events that delayed its performance of work on the Passenger Elevators. My findings on delay events alleged by Schindler are outlined below.

[218] *Machine room turnover*: Evidence supports both that the Passenger Elevator machine rooms were not turned over until November 19, 2012, and that Schindler was delayed in any meaningful performance until that time. Schindler had no control over completion of the machine rooms. I am satisfied from the evidence of David Simm that the extent of installation work available for Schindler to perform was quite limited, since the elevators could not be installed without the machine rooms in a ready condition. I accordingly find that this delay of 48 working days was beyond Schindler's control. Since this subsumes certain other delay events alleged by Schindler, I have not considered additional delays prior to November 19, 2012.

[219] *Twisted shafts*: I accept the evidence of Giuseppe Michelizzi and Mark Quin that the shaft for elevator no. 4 was twisted, and that Schindler was delayed in having to consider and implement remedial solutions. Mr. Russell's evidence is that Schindler was seriously delayed during the time for a remedial solution to be identified, for Schindler to implement the directed correction of modifying steel beams (including performing necessary additional chipping work), and then to adjust installation of the elevator cab toward the lobby to accommodate the shaft twist. Mr. Russell's evidence is also that the twisted shaft further impacted doors, which required modification to accommodate the twisted shaft.

[220] WBP points to the allowance in Schindler's shop drawings for variance in the hoistway, arguing that evidence supports a finding that the twist was approximately 20 mm, and thereby within the acceptable variance. Nevertheless, evidence supports that Tyler Kondel, Erica Carroll, and Mark Quin met and agreed to shift the elevator cab slightly toward the lobby to accommodate hoistway clearances. This is described in an email from Erica Carroll as "the best solution." Evidence supports, and I find, that work commenced on December 10, 2012. Notwithstanding that the extent of twist may have technically been within Schindler's anticipated variance, I am satisfied that, in the on-site realities of the WCH Project, the twist required adjustment by Schindler to facilitate proper installation of the elevator. Schindler was not responsible for the construction of the hoistway, so the delay associated with adjusting installation to accommodate the twisted shaft is a delay beyond Schindler's control.

[221] In total, Mr. Russell's affidavit evidence is that Schindler suffered 15 working days of delay, which is the same duration assessed by Paul Stynchcomb. I find neither of those assessments to be helpful. Inconsistencies in Mr. Russell's evidence have led me to question the reliability of his evidence and the basis of Mr. Stynchcomb's opinion is not clearly stated. Alex Staley provided no allowance for delay from the twisted shaft.

² Calculated using Ontario working day calculator at <http://www.workingdays.ca/>.

[222] WBP points to Schindler's discovery evidence on the duration, which formed part of WBP's read-ins. By way of answer to undertaking, Schindler confirmed that the recollection of Steve McGinlay (who was not called by Schindler as a witness) was that "the attempts by [Schindler] to resolve this problem cost [Schindler] 2-3 additional days." This answer to undertaking was put to Mr. Russell during his cross-examination. He testified that he understood it to be the duration for each elevator. However, evidence does not support that the hoistway twist in elevator no. 4 had any impact on installation work in the other hoistways. Also, the question put to Schindler by way of undertaking was unambiguous.

[223] Notwithstanding that Mark Quin was involved in the remedial work, he gave no evidence on the duration of completing it. I accordingly accept the read-in from Schindler's discovery evidence as the best evidence regarding the impact. I find that Schindler was delayed by 2 working days.

[224] Lack of power: Exhibit B, Section 3.A.10 to the subcontract requires Schindler to "commence machine/control room work upon turnover of any machine/control room with adequate power to run one car." Schindler asserts that it was delayed by a lack of power to the machine rooms until late January 2013. During cross-examination, Timothy Russell testified that Schindler only needed permanent power in the machine rooms "just prior to commissioning", subsequently clarifying that it would be required, at a minimum, one week before TSSA inspection. Although Mr. Russell then sought to suggest that emphasis should be placed on his assertion that it was required "at a minimum" of one week prior, I found that shift in his evidence to be convenient and unreliable, since it was made in direct response to being challenged on why lack of permanent power was "a big role" in his affidavit. Permanent power was available by late January 2013. None of the elevator cars were ready for inspection until mid-March 2013. Given Mr. Russell's evidence, I find that lack of permanent power was not a delaying event to Schindler's work.

[225] Schindler argues that, not only was there no permanent power, but there was no power at all in the machine room until January 2013. Schindler argues that WBP cannot take the position that time is running under the subcontract when a "fundamental requirement" has not been provided. While Mr. Russell confirmed during his supplementary testimony in chief that there was no power at all as of December 13, 2012, he then confirmed in cross-examination that he believed Schindler had enough power to operate a false car, which would allow Schindler to perform some rail installation work. Work was, in fact, proceeding, since lines were dropped and rails adjusted in December 2012, with the twisted hoistway delay occurring during that work. I am not satisfied that there is sufficient evidence to find any delay to Schindler's work in the period from November 19, 2012 to late January 2013 by reason of a lack of sufficient power. Schindler has not met its evidentiary onus to prove delay.

[226] Hall calls: Giuseppe Michelizzi's evidence confirmed that part of Schindler's work included installing "hall call" buttons, which are depicted on the shop drawings. Mr. Michelizzi's affidavit evidence is that, in the course of coring work, Tyler Kondel directed a work stoppage for scanning and engineering review. Although Mr. Michelizzi's affidavit evidence suggests this was

an issue on the Passenger Elevators, he agreed during cross-examination that this issue was in respect of the Freight Elevators. Regardless, I am satisfied from the testimony of Mr. Michelizzi and a relevant subcontract term that the need for coring arose solely as a result of Schindler's failure to place sleeves prior to the concrete pour.

[227] Exhibit E, Article 21 of the subcontract provides that Schindler is responsible for providing sleeves, box-outs, and/or necessary coring or cutting in order to complete its work. Mr. Michelizzi confirmed during cross-examination that "usually" sleeves are placed to create pockets for hall calls, which precludes the need for coring. Schindler did not place those sleeves. As a result, coring was required. I accept Tyler Kondel's evidence that scanning was required as a result of concerns that coring may damage the rebar. Mr. Michelizzi agreed on cross-examination that scanning should occur before coring through poured concrete. I accordingly find that any delay associated with work stoppage for scanning prior to coring of "hall call" pockets was within Schindler's control.

[228] Grouting cleanup: Mark Quin's evidence is that debris from elevator frame grouting by another of WBP's subcontractors, BMC Masonry, was left in and around the frames, and in the sills, which required cleaning by Schindler before installation could continue. During cross-examination, Mr. Quin confirmed that it took "a couple of days" for the crews working on cleanup to complete it, although acknowledged that no work tickets were prepared. I accept Mr. Quin's evidence, which was honest and truthful. Paul Stynchcomb assesses a total of 4 working days of delay, based on two working days per hoistway. There is no evidentiary support for that conclusion. Having accepted Mr. Quin's evidence, I find that Schindler was delayed by 2 working days on account of grouting cleanup beyond Schindler's control.

[229] Equipment clearance: Schindler asserts that clearances for equipment specified by Schindler had not been provided, which required additional chipping before the equipment could be placed. Evidence from David Simm confirms that dimensions for "machine pockets" were provided on January 25, 2012 (as confirmed by an email from Mark Smith of Schindler to Erica Kowert and Tyler Kondel), and also states that two days of chipping were required to obtain the necessary clearance. Mr. Simm's evidence refers to an email from Stephen McGinlay dated January 29, 2013, reporting that Darrell Cherry "has spent two days chipping the concrete to get the necessary [sic] clearance".

[230] Neither Mr. McGinlay nor Mr. Cherry was called as a witness at trial. I am not prepared to accept the hearsay use of Mr. McGinlay's email as proof of the truth of its contents, namely that two days of chipping work was required. Moreover, even if I did accept that evidence, it does not support a finding that Schindler was delayed by 2 working days. One employee working on chipping does not necessarily mean Schindler was unable to work on other portions of installation work. I find that Schindler has not met its evidentiary onus to prove this delay.

[231] Conflict with other trades: David Simm's evidence is that WBP's failure to coordinate resulted in B&M performing electrical installation work overhead of Schindler's work, which in turn resulted in Schindler having to shut down its work due to safety concerns. This is

substantiated by contemporaneous emails. There is also evidentiary support for some interference by other trades, such as materials being stored at elevator entrances. Paul Stynchcomb refers to additional interferences that were not the subject matter of trial evidence. Overall, there is limited evidence on the impact of the delays, but I accept that they did impact Schindler's ability to work, and were beyond its control. I accordingly allow and find an aggregate of 2 working days of delay to Schindler's work.

[232] Final floor elevations: As discussed earlier in these reasons regarding Schindler's acceleration claim, final floor elevations required from WBP for Schindler to set the elevator door frames were not provided until either February 1 or 7, 2013. Exhibit E, Section 24 of the subcontract provides as follows:

24. Survey / Layout

Unless noted otherwise in Exhibit B, the Subcontractor will be provided with a benchmark survey point for major axis/control lines, radii working points and elevation within reasonable proximity of the subcontractor's work. All further engineering layout required for the Subcontractor to perform their work is the responsibility of the subcontractor to provide .

[233] I am satisfied from the evidence that WBP did delay in providing Schindler with the required floor elevations. However, there is no evidence supporting a quantifiable delay to Schindler's work as a result of delayed receipt. Notably, this is not a delay event assessed by either delay expert. I lack sufficient evidentiary foundation to make any determination on the extent to which Schindler was delayed in its performance, if at all, by delay in receipt of the floor elevations, which were provided more than a month before elevator nos. 3 and 5 were turned over. Schindler has not met its evidentiary onus to prove this delay.

[234] Water in pits: David Simm's evidence supports incidents of water entering the elevator pits on April 12, 2013 for elevator no. 4 and on April 15, 2013 regarding water in the pits for all Passenger Elevators. In my view, these incidents are irrelevant, since they post-date TSSA's approval of the Passenger Elevators for use, which is the end date for the assessment regarding delay.

[235] Work by other trades for TSSA approval: David Simm's affidavit also provides evidence that work by other trades was required to achieve successful TSSA inspections, referring to two emails dated March 12, 2013. Those emails identify eleven items of work by other trades required to be completed in advance of the TSSA inspections for elevator nos. 3 and 5 scheduled for March 18 and 19, 2013. The elevators both passed inspection on those dates, and were approved for use. It accordingly follows, and I find, that the work of other trades to achieve those approvals did not delay Schindler's work.

[236] For these reasons, I accordingly find that the evidence supports an aggregate of 54 working days of delay in the course of installing the Passenger Elevators beyond Schindler's control.

Subcontract compliance

[237] As outlined earlier in these reasons, Schindler's contractual right to extensions of time for performance of its subcontract work is governed by Exhibit A, Articles 4.3 and 4.4. My earlier findings on operation of those two clauses are summarized as follows:

- (a) Article 4.4. creates a positive obligation on WBP to grant extension or direct compensable acceleration where progress of Schindler's work has been "substantially delayed, hindered or interfered with through no fault or responsibility" of Schindler; and
- (b) Article 4.3 provides Schindler with a right to request extensions of subcontract time "as a matter of right" at its own initiative, provided that notice of the delay event is given to WBP at least one week prior to the beginning the affected work or within one week of Schindler's first knowledge of the delay event, whichever occurs first. Absent such notice, the claim for an extension would be deemed waived.

[238] In my view, given the wording of these provisions and the agreement of the parties that time of the subcontract was of the essence, the fact of a delay for which Schindler was not responsible is not itself sufficient to extend Schindler's time for performance. Contractually, one of these two clauses must be triggered as a precondition to any extension in the subcontract time.

[239] Having considered the events that delayed Schindler's work beyond its control, I find that water in the elevator pits during installation of the Freight Elevators (8 working days), chipping required to accommodate yellow steel (5 working days), and the machine room turnover for the Passenger Elevators (48 working days) are all delays that are captured by Article 4.4. In my view, the nature of the delay in each of these events is sufficiently significant in its impact on Schindler to warrant a finding that they constituted substantial delay, hinderance or interference with Schindler's work, though no fault or responsibility of Schindler. WBP was accordingly obliged to provide an extension in the subcontract time of performance for these delays.

[240] For the remaining delay events, namely conflict with other trades (5 working days in total for both the Freight Elevators and the Passenger Elevators), twisted shaft in elevator no. 4 (2 working days), and grouting cleanup (2 working days), Schindler is only entitled to an extension of subcontract time in accordance with Article 4.3. It requires notice to WBP by the earlier of at least one week prior to the beginning the affected work or within one week of Schindler's first knowledge of the delay event.

[241] Evidence supports written notice to WBP of the interference of B&M performing electrical work above Schindler (1 working day), as well as interference by other trades (4 working days), as well as the twisted hoistway (2 working days), which complies with Article 4.3. In my view, Schindler is contractually entitled to an extension in its time for performance for these items. Notice provisions are strictly construed by the court, particularly in commercial contracts. No notice of the grouting delay was given. Schindler accordingly waived its right to extension for that delay, as provided in Article 4.3.

Summary of findings regarding delays to Schindler

[242] For the foregoing reasons, I find that Schindler was entitled to extension in its time for performance totalling an additional 16 working days in installation of the Freight Elevators and an additional 52 working days installation of the Passenger Elevators.

[243] With respect the Freight Elevators, having commenced work on May 22, 2012, Schindler was contractually required to complete the elevator installation by September 13, 2012 (80 working days). Given my findings above, Schindler was entitled to an extension of 16 working days to October 5, 2012. This date falls after the outside deadline for turnover of the Freight Elevators on September 27, 2012, but I find that, particularly since all but 3 days of the extension fall under Article 4.4, it would be inconsistent with the language of Article 4.3 and 4.4 to circumscribe the extension to September 27, 2012. Turnover of the Freight Elevators was accordingly delayed by 45 working days.

[244] With respect to the Passenger Elevators, having commenced work on September 12, 2012, Schindler was contractually obliged to complete the elevator installation by January 7, 2013 (80 working days). Given my findings above, Schindler was entitled to an extension of 52 working days to March 21, 2013. Two of the four Passenger Elevators were turned over within that extended deadline. The remaining two elevators were delayed by 15 working days for elevator no. 4 and 16 working days for elevator no. 6.

ii. Notices of default

[245] As held above, each of Exhibit A, Articles 3.12 and Exhibit A, Article 8.1 contemplate some default by Schindler giving rise to compensable losses incurred by WBP. I have already found that it was a contractual requirement for WBP to provide written notice of default for delay before WBP was entitled to assert any of its remedies under the subcontract, including withholding of payment pursuant to either Article 3.12 or Article 8.1. The parties' agreement is consistent with case law requiring notice of default before a contractor exercises remedies in reliance on any such default.

[246] Given the foregoing, WBP's written notices of default are directly relevant to determining whether Schindler was in breach of the subcontract. For WBP to have validly exercised relief under either Article 3.12 or Article 8.1, Schindler must first have been in default when notice was given. For relief under Article 8.1, WBP has the added requirement of demonstrating that Schindler failed to commence correction within 72 hours and, if correction was commenced, further failed to "continue satisfactory correction of such default with diligence and promptness."

Notice of default #1: February 9, 2012

[247] WBP's notice of default dated February 9, 2012, signed by Erica Carroll, asserts that Schindler failed to uphold its contractual obligation to release the Freight Elevators for fabrication. The notice asserts that Schindler represented that the elevators would be released for fabrication

in early January 2012, with Schindler ready for elevator installation in mid-April 2012. The notice also states that Schindler is being held to the Exhibit L schedule or as coordinated with WBP.

[248] Evidence supports that, as of February 2012, Tracey Davies and Erica Carroll were still coordinating on requirements for Schindler to approve the Freight Elevators for production, and that discussions continued after the notice was sent. I have found that elevator fabrication and delivery was contractually to be completed by February 29, 2012. While the evidence supports that fabrication would take longer than the 20 days remaining at the time of the notice of default, the notice itself acknowledges that the elevator hoistways would not be ready for Schindler until April 15, 2012. That date is well after the date for commencing elevator construction contemplated in Exhibit L as February 29, 2012. Schindler was not formally in default at the time of the notice, since the contractual time for fabrication and delivery had not yet expired, and I am not satisfied it was reasonable to issue a notice of default in the circumstances of both the ongoing discussions regarding fabrication requirements and delayed turnover of the hoistways to Schindler.

[249] In any event, even if Schindler was in default, I find that none of the costs and liabilities claimed by WBP are reasonably caused or materially contributed to by any delay in fabrication release, so Exhibit A, Article 3.12 does not apply. With respect to Exhibit A, Article 8.1, I am satisfied from the evidence that Schindler's subsequent continued work on finalizing the fabrication requirements and release of the elevators for fabrication satisfies the requirement that Schindler "commence and continue satisfactory correction of [its] default with diligence and promptness."

[250] I accordingly find that WBP was not entitled to exercise any remedies by reason of the notice of default dated February 9, 2012.

72-hour notice of default: August 3, 2012

[251] WBP's notice of default dated August 3, 2012, signed by Timothy Meana, asserts that Schindler is in default for failing to comply with the 16-week construction duration for the Freight Elevators outlined in Exhibit B, Section 3.C.9 of the subcontract and demanded assurance that the elevators would be completed by September 13, 2012. The notice acknowledges excusable delays previously negotiated in May and July, which extended the elevator completion date. An 8 working day critical path delay is specifically cited in the notice, said to arise from Schindler's lead foreman being sent to training and Schindler's remaining three workers being moved to another site.

[252] Calculation of the September 13, 2012 date referenced in the notice of default, inclusive of extension for excusable delays, is unclear from the evidence. My calculations have been based on the parties' agreement at trial that the 16-week period was equivalent to 80 working days.

[253] In any event, taking into account my findings above, I find that Schindler was not in default of the subcontract when the notice of default dated August 3, 2012 was issued. With respect to the demanded assurance, the evidence supports, and I find, that Erica Carroll was aware that

Schindler's foreman would be away for training and had agreed to it. I accordingly find no evidentiary basis for "reasonable grounds" for WBP to believe that Schindler lacked either intent or the ability to perform based on the foreman being off-site. This was accordingly not a valid notice of default.

Notice of default #2: August 17, 2012

[254] WBP's notice of default dated August 17, 2012, signed by Timothy Meana, asserts that Schindler is in ongoing default for failing to comply with the 16-week construction duration in Exhibit B, Section 3.C.9 of the subcontract. The notice specifically identifies further schedule impacts by Schindler providing "incorrect direction on box out sizes and cut outs at Level 10 for the elevator yellow support steel for Elevators #1 and 2." I have already found that the delay from yellow steel issues were not attributable to any fault of Schindler, and that delays entitled Schindler to extension in its time for performance. I accordingly find that Schindler was not in default of its contractual obligations as of August 17, 2012 and, accordingly, there was no sustainable basis for a notice of default to be issued.

Notice of default #3: November 15, 2012

[255] WBP's notice of default dated November 15, 2012, signed by Erica Carroll, asserts that Schindler is ongoing default for failing to comply with the 16-week construction duration in Exhibit B, Section 3.C.9 of the subcontract. The notice asserts that the elevators were to be completed by September 11, 2012 (now two days earlier than stated in the prior notice dated August 3, 2012), and that Schindler "remains unsure and lacks confirmation" of when the Freight Elevators would be completed and ready for construction use. Schedule impact totalling 65 calendar days was asserted against Schindler in the notice. The notice further directs Schindler to "work overtime on 24-hours a day, 7-days per week basis (24-7) on Elevators 1 & 2 until they are completed and turned over for use." A similar directive is made regarding elevator nos. 3 and 5 of the Passenger Elevators, which WBP asserts would serve as back-up inside elevator cars for use in the event the Freight Elevators were not ready.

[256] Given my findings above, Schindler was in breach of contract when this notice was sent, having failed to complete installation of the Freight Elevators by October 5, 2012. I am satisfied that default was sufficient to trigger WBP's right of set-off pursuant to Exhibit A, Article 3.12, entitling WBP to withhold payment from Schindler on account of estimated costs and liability from project delay.

[257] On the same day the notice was sent, although in response to a separate email from Daniel Wierc, Dave Brennan confirmed that Timothy Russell was "working on an execution plan that will resolve the matter." Evidence from Daniel Wierc is that Schindler's plan was outlined in an email from Timothy Russell as bringing an adjuster from Schindler's high rise division to finalize the elevator wiring and the control room. In the email, Mr. Russell indicated that TSSA inspections were planned for November 28 or 29, 2012, and that barring mechanical failure during inspection, the Freight Elevators to be ready for use on November 30, 2012. There is insufficient evidence on

WBP's view of the recovery plan for the Freight Elevators to find that the recovery plan was unsatisfactory, since Mr. Wierc's evidence around the email focused more on elevator nos. 3 and 5. I am accordingly unable to determine if Schindler's proposal constituted "commenc[ing] and continu[ing] satisfactory correction" of its default pursuant to Exhibit A, Article 8.1.

Notice of default #4: January 23, 2013

[258] WBP's notice of default dated January 23, 2013, signed by Erica Carroll, asserts default by Schindler for removing all of its site forces, causing "additional direct impacts to the overall completion schedule." Schindler's suspension of work followed its demand for payment for \$756,746, which was claimed by Schindler to be earned and owing at the time, against which WBP was asserting withholding rights pursuant to Exhibit A, Article 3.12 of the subcontract. When the notice was issued, Schindler had already returned to site.

[259] WBP's notice comments on prior turnover of the Freight Elevators for construction use on December 7, 2012. Various incomplete items and issues are identified, including car floor-to-floor run times, door closing issues, ride quality, cab push button accuracy, inadequate elevator entrance installations, and car usage maintenance. The notice also specifically asserts impacts from Schindler's delay on achieving Phase 1 completion as follows:

Schindler's lateness of Elevators 1 & 2 have led to, but is not limited to, the following delays in meeting the project's on time completion: dismantle and removal of the temporary hoist, completion of curtain wall and precast, completion of the CACF room, completion of the Medical Imaging Suite, completion of the Laboratory, completion of the OR Suite, completion of the meta l panel system and louvers, air balancing, water balancing, site works, etc.

[260] I find that the notice was a valid notice of default. Pursuant to Exhibit A, Article 8.1, Schindler had refused to supply properly skilled workers or maintain the schedule of work by demobilizing. However, I find that Schindler's immediate return to site and continuation of work satisfied its obligation under Article 8.1 to commence and continue satisfactory correction of the default, thereby curing the default.

Notice of default #5: August 2, 2013

[261] WBP's notice of default dated August 2, 2013, signed by Erica Carroll, demanded written confirmation from Schindler "assuring of its ability and intentions to complete the outstanding Phase 1 works". The notice further provides that, absent receiving adequate assurance of Schindler's intent to complete, WBP would be proceeding with termination. The notice arose out of a meeting on July 19, 2013, at which Schindler is said (as stated in the notice) to have agreed to provide a Phase 1 maintenance plan, Phase 1 completion plan, and Phase 2 shop drawings, engineering, schedule and management plan.

[262] Evidence supports that Schindler was in default of its subcontract obligations by having failed to address deficiency issues and elevator unavailability identified in July 2013. Schindler

immediately responded to the notice to confirm it would honour its contractual obligations. A meeting subsequently occurred and deficiency items appear to have been addressed by October 2013. Nevertheless, WBP's withholding right under Exhibit A, Article 3.12 was properly exercised in respect of the estimated costs of deficiency rectification.

Notice of default #6: January 6, 2014

[263] WBP's notice of default dated January 6, 2014, signed by Daniel Wierec, demanded written assurance that Schindler intended to fulfill its contractual obligations for Phase 2, arising from WBP's position that Schindler had failed to provide revised Phase 2 shop drawings or indication regarding when those shop drawings would be submitted. Since there are no issues with Schindler's Phase 2 performance, this notice is irrelevant to the issues in dispute.

iii. Summary of findings regarding breach of subcontract

[264] Based on my findings regarding Schindler's contractual time for performance, the evidence on the commencement dates for elevator installations, my determinations on delays entitling Schindler to extension of its subcontract time, and valid notices of default, WBP was not in breach of the subcontract when it ceased making payments to Schindler.

[265] Pursuant to Exhibit A, Article 3.12, WBP was entitled to withhold an amount to cover the reasonable estimate of costs or liability that WBP had incurred or may incur on account of Schindler's delays. Given the nature of the WCH Project and the substantial contractual penalties payable by WBP pursuant to the Construction Contract if Interim Completion was not achieved by April 29, 2013, as well as known costs being incurred on account of project delay, I find that it was reasonable for WBP to withhold all payment in circumstances where WBP was unable to ascertain the extent of anticipated loss or liability for Schindler's delayed performance.

d. WBP's damages claim

[266] WBP bears the evidentiary burden of proving its damages claim. Although I have found that Schindler was in breach of its subcontract due to delayed performance and completion of its elevator work, that does not relieve WBP from proving both that the damages and losses claimed were incurred and that they flow from Schindler's breach of contract. Causation for WBP's alleged damages and losses is a particularly disputed issue.

[267] At the commencement of trial, WBP sought a total of \$3,435,597.59 in damages. However, WBP's claim was adjusted and recalculated to address certain trial evidence, namely withdrawal of a claim for the supply and installation of mould resistant drywall, reduction in the claim for temporary heat, and re-apportionment calculations based on evidence that all of the Passenger Elevators had been turned over for use by April 12, 2013, and not by the later date of April 30, 2013 used by Alex Staley in his delay and damages assessment. During his testimony, Mr. Staley acknowledged that his calculations should be adjusted to account for the earlier turnover dates. A full recalculation was provided by WBP in its written closing submissions as a reasonable way to

take into account the impact of Mr. Staley's acknowledgement. I have accepted WBP proceeding in this manner, but the recalculations provided are not evidence. WBP elected not to use re-examination of Mr. Staley to perform the recalculation exercise. Accordingly, the recalculations represent WBP's argument for how Mr. Staley's findings, opinions and conclusions should be adjusted in light of trial evidence.

[268] The result is a lower claim amount of \$2,237,637.18, calculated as \$2,331,697.16 for extra work and delay costs attributed to Schindler, plus \$608,646.00 with respect to elevator penalties, less \$702,439.99 acknowledged by WBP to be Schindler's earned and unpaid contractual entitlement. WBP's revised damages claim is more specifically broken down and categorized as follows:

- (a) \$50,441.15 for work performed on behalf of Schindler;
- (b) \$1,075,168.40 for delay and impact losses, comprised of \$32,920.24 for work performed to mitigate Schindler's delays, \$562,584.74 for allocated delay impact costs, and \$479,663.42 for allocated overtime and mitigation costs;
- (c) \$279,628.84 for liquidated damages and WCH impact costs;
- (d) \$815,425.58 for an allocated portion of B&M's loss of productivity;
- (e) \$111,033.20 for 5% overhead and profit on the above amounts; and
- (f) \$608,646.00 for elevator-related penalties, comprised of \$422,164.00 for deductions made by ProjectCo for unavailability of elevators, \$159,200.00 for allegedly inflated rates charged by Schindler to B&M for elevator maintenance, \$62,653.00 for warranty and repair items required to closeout Schindler's work, and a credit for \$35,371.00 for acknowledged unpaid Schindler invoices for warranty work.

i. Work performed on behalf of Schindler

[269] WBP claims back charges for costs incurred for work and materials that Schindler is said to have been contractually obliged to perform and supply. The twelve items claimed against Schindler are outlined in Mr. Wierec's affidavit evidence and Mr. Staley's report in Section 7.2.1 as item nos. A-1 to A-12. Schindler argues that WBP has "identified" these costs to Mr. Staley without reference to any contractual obligation to perform them, and that the items were never the subject matter of any invoice, detail or back-charge during the course of the WCH Project.

Repair hoist beam / repair block wall (item no. 1)

[270] WBP claims for \$1,180.22 paid to BMC Masonry to patch and repair the hoist beam at the Passenger Elevators at level 10. Daniel Wierec's evidence is that WBP issued a change order for this work and paid BMC Masonry. In supplemental testimony in chief, Mr. Wierec testified that the hoist beam was moved slightly at Schindler's request. Schindler relies on Exhibit B,

Section 3.A.6 of the subcontract, which provides that “for those items that require concrete encasement, the concrete work will be by others”, and points to David Simm’s evidence that he did not agree to any changes for accommodating the elevator installation.

[271] I am not satisfied that Mr. Wierec has any personal knowledge of the circumstances of this change. Nothing in the change order or quotation supports Mr. Wierec’s *viva voce* explanation. I also accept that this work was required to permit elevator installation, rather than as a matter of convenience to Schindler, and there is no contractual basis for WBP to back charge the cost to Schindler. I accordingly find that Schindler is not liable for this amount.

Door frames (item no. 2)

[272] WBP claims for \$2,339.03 paid to BMC Masonry for removal and replacement of a block wall at elevator no. 1 to accommodate Schindler’s work realigning door frames. Daniel Wierec’s evidence is that WBP issued a change order for this work and paid BMC Masonry. Schindler argues that the work was required to replace the door frames due to construction damages.

[273] As with item no. 1 above, I am not satisfied that Mr. Wierec has any personal knowledge of the circumstances of this change. Nothing in the change order or quotation supports Mr. Wierec’s *viva voce* explanation. I find that WBP has not met its evidentiary onus for this item.

Crane for unloading Schindler equipment/materials (item no. 3)

[274] WBP claims \$2,466.09 paid to Forma-Con Construction to assist Schindler with unloading Schindler’s materials. Daniel Wierec’s evidence is that Forma-Con Construction was paid the amount. Schindler argues that, as supported by Timothy Russell’s testimony, Schindler received no notice of a back charge at the time and that the Schindler’s shop drawings include, at item no. 2, a requirement that Schindler be provided with use of a crane or forklift and operator at no cost to Schindler.

[275] Exhibit B, Section 1.15 of the subcontract expressly includes hoisting for all equipment and materials in Schindler’s subcontract scope. As noted earlier in these reasons, Exhibit A, Article 6.6 expressly provides that approval of shop drawings does not relieve Schindler from strict compliance with the “Contract Documents”. I am satisfied from Mr. Wierec’s evidence that the crane was used for Schindler’s benefit, that Schindler reasonably ought to have expected to pay for use of the crane given the subcontract terms, and that the cost is properly chargeable to Schindler.

[276] However, WBP has failed to meet its evidentiary onus of proving quantum. The change order and supporting documentation referenced by Mr. Wierec in his affidavit evidence only includes value for crane usage for Yuanda. All remaining amounts and totals seem to have been redacted. There is a line item for crane usage for unloading Schindler’s elevator material, but no cost is listed. The supporting cheque relied upon is in the amount of \$1,317,102.90, well in excess of the amount claimed and an amount that is not reflected on the change order. The cheque does

not refer to the change order. There is no evidence substantiating the amount asserted by Mr. Wierec as having been invoiced and paid in respect of crane usage for Schindler's benefit. The evidence does not support that Mr. Wierec has personal knowledge of a specific line item amount charged by Forma-Con Construction that is reflected on the change order in evidence. I accordingly find that WBP has failed to prove the quantum of this claim.

Temporary work platforms (item no. 4)

[277] WBP claims \$1,702.09 for the cost of erecting temporary work platforms for Schindler's use. During examination, Timothy Russell conceded that he agreed for Schindler to bear the cost of the platforms. In closing submissions, Schindler confirmed that it no longer disputes this item. I accordingly find that the amount is payable to WBP.

Rebar adjustment for yellow steel boxouts (item nos. 5-6)

[278] WBP claims \$15,437.54 for amounts paid to Harris Rebar to rework rebar at the box-outs to accommodate Schindler's new design for installing yellow steel, and a further \$1,551.00 paid for additional rebar for the box-outs in elevator nos. 4 and 6.

[279] Although I found earlier that Schindler was entitled to extension for delay beyond its control with respect to additional chipping required to install the yellow steel, I did not address the contractual compliance of Schindler's shop drawings proposing a ledge for yellow steel. I have accepted and found that PEB/IBI made no allowance for MRL elevator installation in the designs, and that WBP and Schindler agreed to implement box-outs.

[280] Mr. Wierec testified that the proposed ledge across the width of the sheer hoistway wall was too great a deviation from project specifications and drawings, and that Schindler ought to have submitted a request for information (RFI) before submitting its shop drawings. Evidence from David Simm supports that installation of yellow steel was not contemplated in the design drawings and that the box-out solution was agreed as the method of accommodating the yellow steel. Mr. Simm's evidence is that there was no contemporaneous request by WBP for Schindler to pay any additional cost. Schindler argues that it was only necessary because WBP and PEB/IBI made no provision for MRL installation, such that the structural work to accommodate the MRL installation is entirely the responsibility of WBP.

[281] I agree with Schindler. Notwithstanding Mr. Wierec's view that the ledge represented a substantial design change, the fact remains that Schindler's shop drawings were submitted in March 2011. There was no rejection of Schindler's proposed ledge, depicted in the shop drawings, until December 2011. While Mr. Simm did acknowledge in his testimony that it was common for the ledge to be rejected by contractors, that acknowledgment has no bearing on the determination here. MRL elevators were specified for the WCH Project, and it is reasonable to expect that PEB/IBI would make allowance in its design for installation of those MRL elevators, particularly since it had access to Schindler's shop drawings well before concrete pouring and construction of

hoistway. After the issue of installation was raised, the box-out solution was reached. I find that was an accommodation for which Schindler was not responsible.

Elevator gridlines (item nos. 7-8)

[282] WBP claims for a total of \$6,403.18 paid to J.D. Barnes Limited for additional surveying for gridlines for elevators on levels P2 and 7-10. In his affidavit, Mr. Wierc asserts that because of “Schindler’s delays, the changes to the elevator mechanic crews, and the other interruptions in Schindler’s work, the originally placed survey gridlines became obstructed and had to be re-installed.” Schindler argues that the uncontradicted evidence of Timothy Russell is that the initial gridlines were misaligned and had to be redone. Schindler also argues that there were repeated water events on levels 9 and 10, which were not enclosed.

[283] Mr. Russell’s evidence that the gridlines were “not lined up in the right location” was not challenged during his cross-examination, nor contradicted by any other witness. WBP challenges the evidence as being unsupported by any documentary evidence. While true, WBP has the evidentiary onus to prove its claims. There is no evidence supporting a finding that the gridlines were correctly aligned. Notably, Colin Bogue of J.D. Barnes Limited provided affidavit evidence, but it is restricted to confirming that the two invoices were rendered and paid. He provides no evidence on whether the original gridlines were done correctly. I accept Mr. Russell’s uncontradicted evidence that the gridlines were misaligned and had to be redone. There is accordingly no basis for a back charge to Schindler.

Painted steel saddles (item no. 9)

[284] WBP claims \$3,261.00 paid to Muia Streel, Ltd. to supply painted steel saddles for the Freight Elevators. Daniel Wierc’s evidence is that these saddles provided the interface between the elevator divider beam and Schindler’s rails, and should have been provided by Schindler. WBP, in its closing, suggests that Giuseppe Michelizzi appeared to confirm that the work was “probably Schindler’s”. I do not agree. Mr. Michelizzi was evidently guessing in response to a question about responsibility for welding work. Having confirmed that he had “no idea” whose work it was, Mr. Michelizzi then commented, “probably Schindler’s”.

[285] Schindler argues that the steel saddles were related to the divider beams, which were the responsibility of WBP. Schindler points to the specific exclusion of divider beams from its scope in Exhibit B, Section 4(3) of the subcontract. Schindler further relies on its pre-start checklist, signed and noted up by Erica Carroll, which includes a number of item that Schindler required WBP to complete prior to Schindler commencing its installation, one of which is “Inserts/Divider Beams/Rail Bracket Supports, to be provided as per Schindler shop drawings”.

[286] Exhibit B, Section 4(3) of the subcontract only expressly excludes divider beams. I am not satisfied that the evidence supports a finding that the steel saddles are reasonably construed as part of the divider beams. Schindler’s pre-start checklist was put to Erica Carroll during her cross-examination, and she was specifically asked about the “Inserts/Divider Beams/Rail Bracket

Supports” item. Ms. Carroll was evasive in her response about whether she understood it to be WBP, but I am satisfied from her ultimate evidence that she understood at the time it was work to be performed by WBP by the May 15, 2012 date written on the checklist.

[287] I am satisfied from the evidence, and find, that the steel saddles are a form of rail bracket support. I further find that WBP represented to Schindler that WBP would be providing them when the pre-start checklist was sent to Schindler on May 9, 2012 indicating the work would be performed by WBP by May 15, 2012. In the absence of notice to Schindler of WBP’s intention to back charge for the cost at or around the time it was incurred, I find that it is not claimable from Schindler.

Welding at top of elevator shafts (item no. 10)

[288] WBP also claims for a further \$7,101.00 paid to Muia Steel, Ltd. for yellow steel welding work at the top of the Freight Elevators and the Passenger Elevators. Tyler Kondel’s evidence is that custom welding was required to implement the box-out solution to the yellow steel issue, which he says was performed by Muia Steel, Ltd.

[289] Schindler argues that it arranged for a welder to weld beams at no cost to WBP. That was the testimony of Giuseppe Michelizzi, who also testified that he was the one who made the arrangements. The difficulty I have with the suggestion that the Schindler-arranged welder performed the work, and that WBP cannot correlate Muia Steel, Ltd.’s work to the yellow steel beams, is that Mr. Kondel’s sworn evidence correlates them. However, Mr. Kondel’s evidence is also that the welding was required to implement the box-out solution. Since I have found the need for that solution was a design omission for which Schindler is not responsible, it follows that Schindler should not be responsible for this cost of implementing the box-out solution. I am reinforced in that view by the lack of any contemporaneous notice that WBP would back charge Schindler for the welding cost. Schindler had no opportunity to respond or arrange its own welders, which may have been at a reduced cost. I accordingly find that Schindler is not contractually responsible for this cost.

WBP coordination costs (item nos. 11-12)

[290] WBP claims \$6,000 for costs of coordinating with the structural engineer regarding the box-out solution in the elevator shaft shearwalls, and a further \$3,000 for coordination regarding repairing elevator entrance widths. According to Daniel Wierce’s affidavit evidence, the first figure is calculated at 0.5 months at a rate of \$12,000 per month for Tyler Kondel’s coordination with WBP’s structural engineer. The second figure is calculated at 0.25 months of work at a rate of \$12,000 per month for “WBP’s staff”, who seem to be Erica Carroll and Tim Meana.

[291] I agree with Schindler that these claimed coordination costs are not substantiated on the evidence. Mr. Kondel baldly confirms the \$6,000 figure in his affidavit evidence as an additional cost to WBP, but could not recall where the number came from during cross-examination. There is no evidentiary basis to find that Mr. Kondel worked for half of a month coordinating the box-

out issue or that other staff worked for a quarter month on entrance repair coordination. Even if there was support for those time amounts, the \$12,000 per month figure is unsupported by any evidence. Moreover, there is no evidence supporting that any of the coordination work was “extra”. It is not clear that Mr. Kondel or the other staff would have been paid any differently or that WBP would have incurred any additional cost due to the coordination. Mr. Kondel’s own affidavit evidence confirms that he had some coordination responsibility in his role with WBP. That an employee performed unplanned work does not itself equate to that work having additional cost associated with it. Quantification of these claims has not been made out.

ii. Analysis of project delay

[292] WBP has the evidentiary onus of proving, on a balance of probabilities, that there is a causal connection between Schindler’s delays and WBP’s delay and impact losses. This analysis is distinct from my assessment above leading to the finding that Schindler’s delayed performance was a breach of the subcontract. Schindler’s delayed performance, while a breach of the subcontract, does not necessarily equate to liability for overall project delay and associated losses and damages.

[293] The Supreme Court of Canada has held that the “but for” test remains the primary test for causation, but that in some special circumstances a “material contribution” test may properly be applied where two conditions are satisfied: (i) it must be impossible for the plaintiff to prove that the defendant’s negligence (or, in this context, breach of contract) caused the plaintiff’s loss using the “but for” test, and (ii) it must be clear that the defendant breached a duty of care owed to the plaintiff (or, in this context, breached the contract), thereby exposing the plaintiff to an unreasonable risk of loss that was the loss suffered by the plaintiff: *Resurfice Corp. v. Hanke*, 2007 SCC 7 at paras. 21-25.

[294] In my view, issues of concurrent delay on a complex construction project, as alleged by WBP, will often give rise to a material contribution assessment for causation. The second example cited by the Supreme Court of Canada in explaining material contribution, at para. 28, is apt when applied to delay claims in a complex commercial construction project:

28 A second situation requiring an exception to the "but for" test may be where it is impossible to prove what a particular person in the causal chain would have done had the defendant not committed a negligent act or omission, thus breaking the "but for" chain of causation. For example, although there was no need to rely on the "material contribution" test in *Walker Estate v. York-Finch General Hospital*, this Court indicated that it could be used where it was impossible to prove that the donor whose tainted blood infected the plaintiff would not have given blood if the defendant had properly warned him against donating blood. Once again, the impossibility of establishing causation and the element of injury-related risk created by the defendant are central.

[295] It is agreed by the parties that before Schindler has any liability to indemnify WBP for its delay and impact losses, there must be a finding that Schindler caused critical path delay to the WCH Project.

Relevant terminology

[296] Mr. Stynchcomb's testimony and first report provided helpful explanations of relevant schedule analysis concepts and terminology. As explained by Mr. Stynchcomb, the "critical path" of a project is the longest chain of logically connected activities in a project schedule that, if delayed, will delay the end date of a project. The time required to complete the longest sequence of dependent events dictates the earliest that a project may be completed.

[297] Mr. Stynchcomb's opinion relies heavily on the concept of "controlling critical path", which he explains as the logic path that most delays the project's end date. Put another way, activities that are "controlling critical path" are those that control the project end date. Mr. Stynchcomb did acknowledge that there can be parallel logic paths in a CPM schedule with identical controlling critical path items, which would give rise to concurrent delay. The concept of a "logic path" refers to the CPM computer schedule itself, which contains what are commonly referred to as "logical connections", "logic ties" or "logic restraints" between activities. The logic ties between various activities on a project dictate a sequence of activities where delay in one activity will delay commencement of its logically connected successor activity (or activities). It is the longest chain of these dependent activities that determines the critical path of a project.

[298] As confirmed by both experts, project schedules include target completion or "early finish" dates for activities as well as "late finish" dates by which an activity must be completed before becoming critical. The difference between the early finish and late finish dates in a schedule is referred to as "float", being the number of days that an activity can be delayed in a schedule before it impacts the critical path of the project by forcing extension of the completion date. The absence of a logic restraint (*i.e.*, where no outside completion date is scheduled) was referenced at trial as an "end dangle". WBP and Schindler agree that float in Schindler's scheduled activities is time available to Schindler in assessing whether its delay had any impact on the critical path of the WCH Project.

Relevant law

[299] The party claiming delay damages has the onus of proving delay: *Voka Steel Inc. v Edgecon Construction Inc.*, 2011 ONSC 1938 at para 81. While the parties differ on their application of the relevant law, that relevant law is not disputed. As set out by Quinlan J. in *Total Meter Services Inc. v Aplus General Contractors Corp.*, 2015 ONSC 3830 at para. 29, to recover damages for a delay claim, the following must be established:

- (a) the cause of the delay must be isolated and defined;
- (b) the delay must be analyzed to determine whether it is excusable or the responsibility of the contractor;
- (c) if the delay is the contractor's responsibility, the contractor must bear the cost. If it is excusable, the extent of the delay must be determined;

- (d) the contractor must prove that actual or constructive notice of the delay was given if required by the contract;
- (e) it must be established whether the delay affected items on the critical path or whether it merely reduced or eliminated the float;
- (f) the contract must be reviewed to assess whether it provides that the contractor is entitled to a remedy of extension of time only or time and compensation; and
- (g) the quantum of compensation must be determined.

[300] In assessing delay for a contract having a fixed completion date, it is appropriate to begin by looking at the term containing the completion date and assessing any allowable extensions contemplated by the contract on the facts to determine whether the work was completed on time: *Beta Construction Inc. v Chiu*, 2015 ONSC 5288 (Master) at paras 44-48. Whether a delay is excusable or non-excusable determines whether a claimant is entitled to a time extension, compensation, or both: Grenier, G., “Evaluating Concurrent Delay: Unscrambling the Egg” (2006), 53 CLR (3d) 46.

[301] Delays to a contractor, subcontractor or supplier that are beyond its control are generally viewed as excusable delays. These include weather, strikes, floods, fires, earthquakes and other similar natural disasters, acts of municipal and government authorities, acts of God or *force majeure*, delays by subcontractors or suppliers arising from unforeseen events caused beyond the control and without the fault or negligence of the contractor, subcontractor, or supplier, and unanticipated soil conditions beyond the reasonable contemplation of the parties: *Bemar Construction (Ontario) Inc. v. Mississauga (City)*, [2004] OJ No 235 (SCJ) at para. 171; *Selectra Inc. v. Penetanguishene (Town)*, 2016 ONSC 2293 at para. 27. The converse is that non-excusable delays are delays for which a contractor, subcontractor or supplier is not entitled to any time extension or compensation, and may result in exposure to other parties for their cost consequences of the delay. Non-excusable delays include delays resulting from parties’ failing to perform their own obligations.

[302] As explained by McRae J. in *Brule Construction Ltd v Ottawa (City)* (1989), 14 ACWS (3d) 121 (Ont HCL) at para. 25, there are numerous consequential losses that may be suffered by a contractor when a contract is delayed:

25 When a contract is delayed, there are numerous consequential losses which may be suffered by the contractor. These losses are outlined in I.N. Duncan Wallace ed., *Hudson's Building & Engineering Contracts*, 10th ed. (London: Sweet & Maxwell, 1970) at 597-598;

- (a) When delay in completion of the whole project results, a contractor will usually suffer:
 - (i) a loss owing to the fact that his off-site overheads, which will partly be independent of the actual site expenditure or even the period the contract takes to complete (such as head-office rents) and partly may be dependent (such as

additional administrative expenditure in relation to a dislocated and longer contract) will have either increased in the latter case, or need to be recovered from a smaller annual turnover than that budgeted for in the former case;

(ii) a loss of the profit-earning capacity of the particular contract organisation affected, due to its being retained longer on the contract in question without any corresponding increase in the monetary benefit earned and without being free to move elsewhere to earn the profit which it otherwise might do;

(iii) an increase of cost in his running on-site over-heads, that is to say those elements of cost directly attributable to the contract which are governed by time and which are independent of the amount of work carried out — for instance supervisory costs, costs of permanent plant such as site huts, and certain special plant needed throughout the work;

(iv) in a contract without an applicable fluctuations clause, the inflationary or other increases in the cost of labour or materials (less any decreases) which he would not have incurred but for the delay.

(b) Whether or not delay in completion results, the disturbance of a contractor's progress or planning may also result in lower productivity from the contractor's plant or labour.

[303] Because of the simultaneity of delays, concurrent delay on a project is often difficult to evaluate since it involves evaluating how each event delayed completion of the project, which is a much more involved and speculative assessment process compared to an isolated or singular cause of delay. Analysis of concurrent delay requires breaking the overall delay into its component parts and apportioning time, responsibility and costs: Grenier, G., “Evaluating Concurrent Delay: Unscrambling the Egg”, *supra*.

[304] I have applied these principles in considering and weighting the evidence on delay and delay-related losses and damages.

Delay analysis of Alex Staley

[305] Schindler and Paul Stynchcomb challenge Alex Staley for performing an inappropriate CPM assessment, arguing that Mr. Staley's assessment is unreliable, since he did not perform a month-to-month or other periodic assessment of delay despite having reviewed WBP's monthly reports and schedules. Mr. Staley is also challenged for having failed to comply with AACE recommended practices for CPM schedule analysis.

[306] None if this is particularly disputed by Mr. Staley. During cross-examination, Mr. Staley acknowledged that his assessment was not a CPM schedule analysis, but rather was based on both CPM principles and his exercise of professional judgment. Mr. Staley acknowledged his awareness of the AACE recommended practices, but his report clearly states that his analysis was “guided, but not solely dictated” by them. He expressly states his view that neither the AACE practices nor any other protocol were considered prescriptive.

[307] Mr. Staley's analysis utilizes what he describes as an "as-planned" versus "as-built" methodology to evaluate project delay. It essentially compares the planned schedule prior to the period impacted by delay and compares it to the actual activities as they occurred, relying on "late start" and "late finish" dates for activities in the project schedules to assess delay in relevant activities. For the WCH Project, Mr. Staley used a June 1, 2012 project schedule prepared by WBP as the planned schedule, which is a date by which Mr. Staley felt the early project delays had been absorbed and was roughly contemporaneous with the commencement of Schindler's and Yuanda's respective work.

[308] Mr. Staley's assessment ultimately identifies four subcontractors as being responsible for the critical path delays that prevented WBP from achieving Interim Completion by April 29, 2013: Schindler, Yuanda, Advanced Precast, and B&M. His delay findings are summarized as follows:

- (a) *Schindler*: As already noted, Mr. Staley assesses a total of 51 calendar days of critical path delay to completing the Freight Elevators and a further 61 calendar days of critical path delay to completing the Passenger Elevators. Although acknowledging some excusable delay, Mr. Staley does not discount his figures given his view that any excusable delay fell within the available float for Schindler's activities;
- (b) *Yuanda*: Mr. Staley assesses 93 calendar days of critical path delay caused by Yuanda's delayed completion of the curtainwall, but concurrent with 23 calendar days of delay attributed to Advanced Precast for late turnover of precast and the 51 calendar days of delay assessed against Schindler;
- (c) *Advanced Precast*: As noted, Mr. Staley assesses 23 days of critical path delay by Advanced Precast, concurrent with Yuanda's delay; and
- (d) *B&M*: Mr. Staley assesses 61 days of critical path delay by B&M in completing level 9 and 10 work, concurrent with Schindler's delay in completing the Passenger Elevators.

[309] Having made those findings, Mr. Staley divided the responsibility for delay into four periods to reflect concurrent delays by Yuanda and Advanced Precast, Schindler and Yuanda, and Schindler and B&M. In doing so, he reduced the delay in the fourth period by 15 days, representing the number of days the WCH Project was delayed after the Interim Completion deadline, leaving a 46 calendar day net delay attributable to Schindler and B&M. Mr. Staley made that adjustment to reflect that mitigation efforts were not fully successful. A *pro rata* allocation of responsibility was then calculated by each period and for the overall project. Mr. Staley assessed that Schindler was responsible for 34.9% of overall project delay.

[310] In assessing WBP's damages, Mr. Staley's report acknowledges that his allocation is based on the understanding that actual costs incurred by WBP in implementing the largely successful mitigation measures should be the responsibility of the parties that directly contributed to the delay. Mr. Staley felt that contribution should be based on allocation of actual delays. His calculation of the percentage of responsibility for delay were accordingly the basis of calculating the allocation

of losses and damages payable by each of the four delaying subcontractors, divided into the period pre-February 24, 2013 and post-February 24, 2013. That division date was drawn from Mr. Staley's analysis of B&M's loss of productivity claim, which Mr. Staley determined was the date of commencement of a separate period of productivity impacts to B&M.

[311] WBP's damages were categorized into eight distinct categories, as follows, with percentage allocations of damages attributed to Schindler as noted:

- (a) Extra work performed on behalf of Schindler, allocated to Schindler at 100% (which I have already addressed above in these reasons);
- (b) Extra work performed solely to mitigate Schindler impacts, allocated to Schindler at 100%;
- (c) Delay impact costs incurred by WBP through February 2013, allocated to Schindler at 34.9%;
- (d) Delay impact costs incurred by WBP after February 2013, allocated to Schindler at 34.9%;
- (e) Overtime / mitigation costs incurred by WBP through February 2013, allocated to Schindler at 34.9%;
- (f) Overtime / mitigation costs incurred by WBP after February 2013, allocated to Schindler at 34.9%;
- (g) Labour inefficiencies / additional costs incurred by B&M, using a "measured mile" calculation discussed further below, allocated to Schindler at 27.4% for the period up to February 24, 2013 and 34.9% for the period after February 24, 2013; and
- (h) Liquidated damages and WCH impact cost assessment, allocated to Schindler at 34.9%.

Reliability of Alex Staley's methodology

[312] I have determined that Mr. Staley's methodology cannot be relied upon as presenting an accurate picture of critical path delay on the WCH Project and, accordingly, is also unreliable in how WBP's losses and damages from project delay were allocated. I have numerous concerns with Mr. Staley's approach to assessing impacts to the project from Schindler's delay, but discuss only the most significant ones below.

[313] Firstly, I do not accept Mr. Staley's conclusion that WBP's project schedule as of June 1, 2012 was an appropriate schedule against which to assess delays by Yuanda, Schindler and others. As already discussed, it is undisputed that the WCH Project was delayed for reasons beyond Schindler's control prior to Schindler's commencement of installation work. It is equally undisputed that planned project schedule (from which the Exhibit L schedule was generated) was revised by WBP over the course of the WCH Project to reflect the adjusted construction

methodology, actual progress and completion of activities, refinement of activities by breaking them down, schedule delays, and mitigation efforts.

[314] Mr. Staley's report confirms that WBP's June 1, 2012 schedule was used in his assessment because it represented a point in time where WBP had already mitigated earlier structural delays prior to Yuanda and Schindler commencing their work. It also reflected schedule refinements and mitigation efforts that forecasted an on-time completion by April 29, 2013. With respect to Schindler, the schedule provided a 16-week duration for installation of the Freight Elevators, with an additional 23 working days of schedule float, effectively allowing 148 calendar days for installation of the Freight Elevators. Mr. Staley's view is that the June 1, 2012 schedule represents a "realistic and achievable completion plan" to achieve Interim Completion by April 29, 2013. The June 1, 2012 schedule is, in Mr. Staley's opinion, "the most appropriate schedule basis to evaluate Yuanda and Schindler's actual performance, as well as those of other trades, and their effect on the overall project completion."

[315] In my view, Mr. Staley's conclusion that the effects of early project delays had been fully mitigated by June 1, 2012 is closer to an assumption than the result of a complete delay analysis of the period leading up to June 1, 2012. Mr. Staley's assessment acknowledges that the critical path of the overall project was already delayed by 102 calendar days by completion of the foundations. He then assesses that WBP's mitigation efforts of changed methodology and acceleration of other trades successfully reduced critical path delay to 50 calendar days to the completion of the structure. Nevertheless, he does not appear to consider or assess the overall impact of his assessed 50 calendar days of early project delay to the remainder of the WCH Project. He also does not appear to consider if WBP's decision to change the construction methodology in mitigation of early project delays had any impact beyond June 1, 2012. Mr. Staley's approach is to effectively reset the project as of June 1, 2012.

[316] Commencement of Schindler's installation work was delayed from its originally planned date of February 29, 2012 (per Exhibit L to the subcontract) to May 22, 2012, which is a total of 84 calendar days. Had Schindler been able to commence installation work on February 29, 2012, as planned, but had still taken the same delayed duration to complete installation of the Freight Elevators (*i.e.*, 140 working days, correlating to turnover on September 18, 2012), would Schindler still have delayed the project? The six-month planned outside deadline for Freight Elevator turnover based on the Exhibit L schedule was September 27, 2012. I ask this question not to suggest that Schindler should be exonerated from critical path delay that it caused, but rather to emphasize why, to me, the suggestion that early project delays had been fully mitigated and absorbed by June 1, 2012 is contrary to common sense and logic. In my view, it seems evident that the prior delays impact the balance of the project activities by decreasing tolerance for delay in them.

[317] I agree with Schindler that compression caused by the pre-June 1, 2012 delays had nothing to do with Schindler. In my view, the evidence supports a finding that impacts from the earlier project delays did continue into the post-June 1, 2012 period. That impact, or even potential for impact, was not seriously considered or assessed by Mr. Staley.

[318] In addition to early project delays being absent from Mr. Staley's analysis after June 1, 2012, they are also not accounted for in attribution of responsibility for delay. Despite his view that that WBP's mitigation costs should be borne by those parties directly contributing to project delay, Mr. Staley's assessment exonerates those responsible for the early project delays from any apportionment of WBP's damages, as though the only trades properly held responsible for failing to achieve Interim Completion by April 29, 2013 are those trades contributing to critical path delay after June 1, 2012. Mr. Staley assesses 102 calendar days of initial critical path delay in completion of the foundations, mitigated over the following ten months to 50 calendar days. If Schindler, Yuanda, Advanced Precast, and B&M are to be held responsible for their contribution to critical path delay, then why not all parties who contributed to critical path delay in the entirety of the WCH Project? The analysis effectively excuses those who caused or contributed to the significant early project delays from any attribution of fault for overall critical path delay. In my view, such an assessment results in unfairly increased attribution of fault to those causing critical path delay after June 1, 2012.

[319] For these reasons, I do not accept that the critical path of the project prior to June 1, 2012, and responsibility for the events delaying it, are irrelevant to disposition of WBP's delay and impact claims against Schindler. I accordingly do not accept Mr. Staley's reasons for assessing delay based on the June 1, 2012 schedule.

[320] Secondly, although referring throughout his report to "critical path delay" by Schindler, Yuanda, Advanced Precast, and B&M, there is no clear identification of the actual critical path of the project, including what activities were on the critical path, who was responsible for those critical path activities, and whether any other activities were delayed. Nowhere in Mr. Staley's report does he discuss the overall planned critical path activities for the WCH Project or the ultimate "as-built" critical path activities.

[321] Evidence at trial points to gaps in Mr. Staley's assessment of critical path delay. For example, there is some evidence to support that Marel was at least accused of delaying the critical path. Daniel Wierec was cross-examined on an email he sent on August 20, 2012, in which he stated as follows:

Marel is delaying the skin just as much as Advanced and Yuanda.....perhaps Marel needs to be put on contractual notice for the skin.....ahhhhh but they haven't signed the Contract

[322] Mr. Wierec confirmed that what he wrote at the time was true. However, Mr. Staley does not discuss that evidence or Marel's activities in his reports. During cross-examination, Mr. Staley acknowledged being aware of delay notices sent by WBP to Marel and other trades, but explained that he did not attribute delay to them because their work was "impacted severely" by Yuanda and Schindler. While that may be the case, it is in contrast to B&M's delays not being excused by the substantial impacts comprising its loss of productivity claim. The failure to clearly assess the activities and impacts of Marel and other trades to which WBP sent delay notices has raised concerns for me about the thoroughness and accuracy of Mr. Staley's assessment.

[323] Another example of a gap in Mr. Staley's assessment is his determination that Schindler's assessed delays in installation of the Passenger Elevators were critical path delays, when the June 1, 2012 schedule did not include any activity for the Passenger Elevators. Evidence supports that activity A1720 was not added to the project schedule until the June 30, 2012 works schedule. Mr. Staley acknowledges in his report that "the June 1, 2012 schedule lacked detailed activities for the completion of all Phase 1 elevators" (emphasis in original). His assessment of delay regarding the Passenger Elevators seems to begin with WBP's January 1, 2013 schedule update, with a conclusion that delayed performance was a critical path delay. Mr. Staley appears to presume that the delayed Passenger Elevators became critical past the planned late finish date reflected in the January 1, 2013 schedule, without assessing any other critical activities to achieving Interim Completion.

[324] I accept that all activities on the project schedule needed to be completed in order to achieve Interim Completion, but that does not mean all delayed activities were on the critical path. Mr. Staley provides no clear assessment or opinion regarding why the Passenger Elevators and elevator lobbies, as opposed to other outstanding activities, were on the critical path in March to April 2013. He also provides no clear assessment or explanation for how an activity not contemplated on the June 1, 2012 schedule and subsequently added became a critical path activity. During cross-examination, Mr. Staley sought to explain why he viewed the Passengers Elevators as becoming a critical activity, but effective cross-examination casted doubt over whether Mr. Staley had genuinely assessed logic ties between the Passenger Elevators and other events in the overall critical path.

[325] In my view, without clearly articulated findings on the planned and actual critical path activities on the WCH Project, the focal lens placed on Schindler, Yuanda, Advanced Precast, and B&M presents a skewed picture of the WCH Project, a skew that is only exacerbated by Mr. Staley's assumption that critical path delays occurring prior to June 1, 2012 are irrelevant in overall attribution of project delay.

[326] Thirdly, although Mr. Staley's report suggests that WBP's damages were "evaluated" and "verified" as being "applicable to the impacts" caused by Schindler, Yuanda, Advanced Precast, and B&M, there is nothing in the report explaining how they were evaluated and on what basis they were determined to be "applicable" to the delays on which Mr. Staley opines. Mr. Staley's report provides only cursory statements regarding the review performed and general statements for attributing each of the broad categories of damages either specifically to Yuanda or Schindler or proportionately among the four subcontractors in accordance with Mr. Staley's calculated percentages for critical path delay responsibility. There is no opinion regarding why particular line items are, in Mr. Staley's opinion, properly claimable or any review or discussion of the underlying invoices and documents supporting the claims.

[327] Effective cross-examination demonstrated that Mr. Staley and his team did not, in fact, independently evaluate WBP's damages claim in any detail. Mr. Staley was asked during his cross-examination if, by "reviewing costs" he meant reviewed the costs with WBP and WBP confirmed that they were considered "additional". He agreed with the statement, adding only that

the nature of costs were consistent with delay costs. I am satisfied that WBP's alleged impact costs were effectively accepted as-is, with Mr. Staley relying heavily on WBP's advice that they were additional costs. I accordingly accept Wiley Wright's criticism that Mr. Staley apparently failed to undertake any appropriate independent analysis and verification of WBP's damages, or at least failed to provide necessary details of what was done for me to find otherwise. Mr. Staley's lack of any apparent independent evaluation of the validity of the claimed amounts weakens the value of his opinion on quantification of WBP's damages attributable to Schindler.

[328] Fourthly, there are several examples of Mr. Staley drawing conclusions without analysis or that are not supported by trial evidence. One example is with respect to the yellow steel issue, on which Mr. Staley opines that "the actual impact should not have exceeded one week". This conclusion was reached without any expert assessment, apparently based solely on his view that the work "could have been completed earlier" and evidence from answers to undertakings (although the specific answer to undertaking is not identified in his report) that the total impact to the Freight Elevators was of the magnitude of one week.

[329] Another example is with respect to the Passenger Elevators. The only impact assessed by Mr. Staley from delayed completion of the Passenger Elevators is completion of elevator lobbies and adjacent areas. Mr. Staley opines that, as of WBP's schedule as of December 31, 2012, all elevator lobby activities were "stacked" to support the final finishes activities. The basis for that finding is not clearly articulated in his report. Notably, Joseph Zachariah's evidence is that B&M was delayed in its work in the elevator lobbies by Schindler's delays in completing the Passenger Elevators, but Mr. Staley offers no analysis of the impacts generally discussed by Mr. Zachariah.

[330] Moreover, Mr. Staley's report does not assess when the work in elevator lobbies and adjacent areas actually commenced as compared to when that work ought reasonably to have commenced, and how it was impacted. There are also eleven "Elevator lobby finishes" activities in the "as-built" project schedule dated May 31, 2013, but no evidence connects those activities to specific elevators or levels nor explains the progress reflected in the as-built schedule. Correlation between delayed elevator lobby finishes and achievement of Interim Completion is also not made out on the evidence. Notably, three "Elevator lobby finishes" activities are not shown as being completed until after Interim Completion on May 15, 2013.

[331] A further example is Mr. Staley's opinion that B&M's delayed mechanical and electrical installation and commissioning work on Levels 9 and 10 contributed to critical path delay concurrently with Schindler's delays between February 2013 and March 2013. That conclusion is provided without assessment of the nature or extent of B&M's delay, comprised of only a summary statement as follows:

Simultaneously, the contemporaneous schedule records commencing in February 2013 and March 2013 indicate the mechanical and electrical work on Levels 9 and 10 were also impacting the project schedule. As B&M's Level 9 and 10 installation and commissioning work continued during this timeframe and through the Phase 1 turnover, AMS has determined that this constitutes a concurrent critical path impact with Schindler's late

elevator turnovers. This finding is consistent with the contemporaneous schedule updates though May 2013.

[332] A final example is Mr. Staley's dismissal of delayed turnover of the machine rooms for the Passenger Elevators to Schindler as having no impact. Mr. Staley acknowledged during cross-examination that he was aware of the late machine room turnover, but viewed it as being within the available float and thereby having no impact. However, during cross-examination on the November 1, 2012 schedule, he acknowledged that activity A1720 showed 36 working days of float. I have found delay from the late machine room turnover to be 48 working days, which suggests that Mr. Staley's basis for dismissing that delay event, namely that the total delay was within available float, is not borne out by trial evidence and findings.

[333] On the totality of these reasons, I have determined that Mr. Staley's assessment is unreliable and should be given little or no weight in both my determination of alleged critical path delay by Schindler and my assessment of damages on an allocated or other basis.

Assessment of critical path delay

[334] Given that determination, and my prior determination that Paul Stynchcomb's opinions and conclusions on Schindler's lack of critical path impact should also given little weight, I am left without expert assistance to determine the extent to which Schindler caused or contributed to critical path delay, if at all.

[335] In closing submissions, WBP pointed to *TMS Lighting Ltd. v KJS Transport Inc.*, 2014 ONCA 1, at para 61, where the Court of Appeal held that a trial judge is obliged "to do his or her best" to assess damages on available evidence even where quantification is difficult. The Court of Appeal specifically held as follows:

It is also beyond controversy that a plaintiff bears the onus of proving his or her claimed loss and the quantum of associated damages on a reasonable preponderance of credible evidence. Further, as the trial judge recognized in this case, a trial judge is obliged to do his or her best to assess the damages suffered by a plaintiff on the available evidence even where difficulties in the quantification of damages render a precise mathematical calculation of a plaintiff's loss uncertain or impossible. Mathematical exactitude in the calculation of damages is neither necessary nor realistic in many cases. The controlling principles were clearly expressed by Finlayson J.A. of this court in *Martin v. Goldfarb*, 1998 CanLII 4150 (ON CA), [1998] O.J. No. 3403, 112 O.A.C. 138, at para. 75, leave to appeal to S.C.C. refused, [1998] S.C.C.A. No. 516:

I have concluded that it is a well established principle that where damages in a particular case are by their inherent nature difficult to assess, the court must do the best it can in the circumstances. That is not to say, however, that a litigant is relieved of his or her duty to prove the facts upon which the damages are estimated. The distinction drawn in the various authorities, as I see it, is that where the assessment is difficult because of the nature of the damage proved, the difficulty of assessment is no ground for refusing substantial damages even

to the point of resorting to guess work. However, where the absence of evidence makes it impossible to assess damages, the litigant is entitled to nominal damages at best.

[336] Case law also supports that apportionment of liability in a delay claim need not be a precise calculation: *Convert-A-Wall Ltd. v Brampton Hydro-Electric Commission* (1988), 12 ACWS (3d) 15 (Ont DivCt) at para. 32.

[337] Notwithstanding these cases, I agree with Schindler's submission that, while I am obliged to "do my best" in assessing WBP's damages, any determination that I make must still be supportable on the evidence. I cannot undertake an exercise that amounts to guesswork that may effectively vitiate WBP's evidentiary onus of proving damages. WBP is not relieved of its burden to demonstrate both delay by Schindler and cause or material contribution to losses and damages simply because the analysis is difficult. In my view, with the rejection of Mr. Staley's delay analysis, for WBP to meet its evidentiary onus it must demonstrate impacts of Schindler's delayed work on subsequent work and sequencing for the court to be in a position to make fair and just determinations on causation between proven delays by Schindler and WBP's damages. It has failed to do so.

[338] Mr. Stynchcomb's primary opinion from his CPM schedule analysis is that WBP's project schedules do not support that Schindler's work was ever on the critical path and, accordingly, Schindler cannot be viewed as having caused critical path delays. Schindler maintained throughout questions asked by its counsel at trial and in closing argument that its work was never a critical path activity. Schindler supports its position by pointing to Mr. Stynchcomb's testimony and the cross-examination of Tim Meana, which demonstrated a number of issues with the schedules. I agree that the evidence and assessment of WBP's project schedules supports that they may be an unreliable indicator of the project critical path.

[339] I accept WBP's argument that the failure of the schedules to depict Schindler's work on the critical path does not mean that Schindler's work was not and never was on the critical path. However, the issue for WBP is that the evidence does not support any sequence of critical subsequent activities to Interim Completion that were impacted by delayed elevator work, including how those subsequent activities could not be commenced or completed until completion of the elevator work. After careful assessment of the evidence tendered on the project schedules and damages claimed by WBP, I am unable to determine any critical activities on the schedules following Schindler's elevator work that were reasonably impacted by Schindler's delays that would support a reasonable, fair or just finding that Schindler materially contributed to the ultimate delayed achievement of Interim Completion.

[340] For example, WBP's position is that Schindler's delayed completion of the Passenger Elevators impacted completion of elevator lobbies and adjacent areas. However, the "as-built" schedule shows multiple concurrent activities completing between late March and late April 2013. A cursory review discloses at least five activities (other than testing and commissioning activities) with completion dates at the same time or after the turnover of the last of the Passenger Elevators, namely:

- (a) activity A3980, identified as “Glazing removal & replacement,” which shows a completion date of April 11, 2013;
- (b) activity A1792, identified as “Curtainwall Glazing Caulking with Swing Stage,” which shows a completion date of April 18, 2013;
- (c) activity A2689, identified as “Fire Safety Plan being reviewed by City of Toronto,” which shows a completion date of May 10, 2013;
- (d) activity A7300, identified as “Site Work – Phase 1,” which shows a completion date of April 25, 2013; and
- (e) activity A2692, identified as “Fire Safety Signage Furnish and Install - Phase 1,” which shows a completion date on May 8, 2013.

[341] No evidence explains what these activities were, if they were impacted by delayed elevator work, or why they were not critical path activities themselves. I note also that elevator testing and commissioning is shown as being completed by April 30, 2013 (commensurate with the date on which TSSA’s final inspections were accepted by WBP), whereas testing and commissioning of electrical, HVAC, life safety, and security systems were not completed until between May 3 and 13, 2013. Although high level evidence was tendered by witnesses such as Daniel Wierc on the sequence of activities following elevator installation, there is no evidence explaining how and why these testing and commissioning activities were sequentially dependent on completion of the Passenger Elevators and the impact of delayed elevator completion.

[342] In WBP’s statement of law, WBP points to case law supporting that, in order to isolate and define causes of delay, the court will particularize each cause of delay and analyze the evidence pertaining to each specific cause of delay: *Bemar Construction, supra* at paras. 196-199; *Dean Construction Co. v. MJ Dixon Construction Ltd.*, 2011 ONSC 4629 at paras. 117-124. I do not disagree, but it is not for the court to identify the specific delay events and the impacts from them. That is the onus of the party alleging delay. Here, WBP maintains that Schindler concurrently contributed to critical path delay, but has relied entirely on an expert who focuses on four subcontractors as being solely responsible for all project delay without sufficiently assessing why their activities were on the critical path and without particularizing the sequence of impacts on subsequent activities that is inherent in a critical path delay. Considering that WBP did not only issue notice of delay to Schindler, Yuanda, Advanced Precast and B&M, the absence of assessing delay by other subcontractors who received such notices, such as Marel and Greenfield, is particularly stark. WBP itself has also not tendered specific evidence to support the sequencing impacts from Schindler’s delays. Experts are not fact witnesses. Facts necessary to support an expert opinion must be tendered at trial.

[343] Combined with my findings and comments above regarding the Passenger Elevators in discussing reliability of Alex Staley’s report, I agree with Schindler that WBP has failed to prove that the Passenger Elevators were on the critical path of the WCH Project or that any delay in their completion caused or contributed to WBP’s failure to achieve Interim Completion by April 29, 2013. I accordingly find that Schindler did not cause or materially contribute to the failure to

achieve Interim Completion by April 29, 2013 by reason of delayed turnover of the Passenger Elevators.

[344] The Freight Elevators are less clear, since (as already noted) evidence does support sequential dependency of skip hoist removal and enclosure of the north wall on turnover of the Freight Elevators for construction use. While I have found Mr. Staley's delay assessment based on the June 1, 2012 schedule to be unreliable, in my view, the schedule is still a helpful indicator of WBP's planned completion schedule and how Schindler's work factored into that plan, which is relevant in assessing the impact of Schindler's delay on the overall project schedule. I note, as Mr. Staley notes in his report, that the June 1, 2012 schedule shows achievement of Interim Completion on April 29, 2013 (activity A1030). As part of the sequencing to achieve Interim Completion, the schedule includes an 80 working day target duration for installation of the Freight Elevators (activity A1540) between May 22 and September 13, 2012, with a late finish date of October 17, 2012, or 23 days of float. I have found that Schindler was entitled to an extension of 16 working days, which is within that float.

[345] I have difficulty accepting Schindler's argument that the Freight Elevators were not on the critical path of the WCH Project. While evidence does, as Schindler argues, support substantial and critical delays by Yuanda, it also clearly supports that necessary removal of the skip hoist and subsequent completion of the enclosure at the north wall were activities that held up a series of subsequent events, all of which hinged on turnover of the Freight Elevators.

[346] I do not accept Paul Stynchcomb's opinion in his testimony that concurrent delay requires two co-critical and co-controlling activities that are parallel in time and identical in duration. In his article on concurrent delay, Glenn Grenier takes a different view. He states, "It is not necessary for the independent causes of delay to occur exactly at the same time for them to be considered concurrent. Indeed, it is rare that concurrent delays start and end at the same time. Concurrent delays are more commonly experienced as overlapping events": Grenier, G., "Evaluating Concurrent Delay – Unscrambling The Egg", *supra*. That view is more realistic and, in terms of the court's assessment, more likely to lead to a fair and just result. Mr. Stynchcomb's position on concurrency is, in my view, too rigid for use by courts, at least in more complex cases of concurrency. It is essentially a "but for" analysis that, unless there are clear facts supporting more singular responsibility for project delay, may unfairly result in one party being held solely responsible for delay on a project where the evidence supports a finding of multiple parties delaying the project and difficulty assessing responsibility.

[347] Although I am not satisfied that WBP has met its evidentiary onus of proving that the Freight Elevators caused or materially contributed to overall critical path delay, I am satisfied that delayed turnover of the Freight Elevators did directly impact the immediate successor activities of skip hoist removal and enclosure of the north wall. It is after that point where causation is less clear. In the absence of a reliable expert assessment of critical path delay on the WCH Project or clear evidence supporting a finding regarding Schindler's impact on the overall critical path, I cannot ascertain the extent of Schindler's responsibility, if any, for critical path delay on the overall project. I accordingly find that Schindler did not cause or materially contribute to the

failure to achieve Interim Completion by April 29, 2013 by reason of delayed turnover of the Freight Elevators.

[348] I am nevertheless satisfied that the evidence supports direct impacts by Schindler's delayed turnover of the Freight Elevators to the necessary acceleration of work to enclose the building on the north wall. I have accordingly considered the extent to which Schindler is liable for costs causally connected to that delayed performance from October 5, 2012 to turnover of the Freight Elevators on December 7, 2012, which was in breach of the subcontract. It would be inequitable to excuse it entirely from causally connected losses and damages.

iii. Delay-related losses

[349] As outlined earlier in these reasons, WBP claims an aggregate of \$1,075,168.40 for delay and impact losses, and a further \$279,628.84 for liquidated damages and WCH impact costs. Since, in my view, they are more properly viewed as direct losses and damages arising from Schindler's breach of contract, I address WBP's claims for \$32,920.24 in costs associated with direct impacts from delayed turnover of the Freight Elevators in the next section. The balance of the delay-related losses are discussed below.

[350] I have considered WBP's claims of \$562,584.74 for allocated delay impact costs, \$479,663.42 for allocated overtime and mitigation costs, and \$279,628.84 for liquidated damages and WCH impact costs all of which are losses and damages that Mr. Staley attributed liability to Schindler based on his calculation of Schindler's percentage contribution to critical path delay.

[351] WBP relies on Exhibit A, Article 9.3 of the subcontract as the basis of liability for these delay-related costs and losses, which contemplates causation between Schindler's failure to perform and the claims or damages incurred by WBP. Given the subcontract language, and the relevant law of causation, it follows that Schindler only has liability for those damages with a proven causal connection to Schindler's breach of its subcontract by delayed completion of the Freight Elevators or Passenger Elevators. I need only consider whether Schindler materially contributed to WBP's losses if it is impossible for WBP to prove liability on a "but for" standard and the nature of Schindler's breach gave rise to an unreasonable risk of the very type of damages now claimed.

[352] I am satisfied from both the nature of the damages claimed in the categories of delay-related losses and the evidence tendered on them that most are in respect of costs and losses incurred by WBP solely as a result of its mitigation efforts in attempting to achieve Interim Completion by April 29, 2013. Since I have found that Schindler's delays did not delay the critical path of the project, I find that most of the items claimed have no causal connection to Schindler's breaches of the subcontract. They are all losses and damages that would only reasonably accrue upon a finding that Schindler had caused or materially contributed to critical path delay, which I have not found.

[353] There are a few items, though, that based on evidence and argument may have a clearer causal nexus to Schindler's own delays, namely:

- (a) storage of millwork;
- (b) temporary heating and piping;
- (c) additional skip hoist operation work;
- (d) cleanup and relocation of construction materials;
- (e) additional labour for “dock master”;
- (f) accelerated work for isolation pads; and
- (g) accelerated interior stone and tile flooring.

[354] I discuss each of these below, but otherwise dismiss WBP’s claim for the remainder of losses and damages claimed in the categories of allocated delay impact costs, allocated overtime and mitigation costs, and liquidated damages and WCH impact costs.

Storage of millwork (item nos. 17-18)

[355] Daniel Wierc testified that millwork was fabricated in accordance with the contract, but could not be delivered to site until humidity in the building was stable and there heating in the building. WBP incurred five months of off-site storage costs totalling \$143,380. I accept that the millwork could not be delivered to site while the building remained unenclosed, and thereby open to inconsistent temperatures and weather, and was stored off-site. I also accept and find that WBP did pay the \$143,480 to All Wood Fine Interiors. However, since I have found that Schindler was not in breach of the subcontract until after October 5, 2012, offsite storage of millwork until that point was not a loss caused by any breach of the subcontract by Schindler. Since the curtainwall was not complete until November 23, 2012, I also find that millwork could not be delivered to site during that period by reason of Yuanda’s delays, and that Schindler’s delay through November did not materially contribute to the need for storage.

[356] For the period of December through January 2013, the evidence supports a finding that millwork could not be delivered to site until enclosure of the building was completed, which occurred in January 2013. In my view, it is impossible to assess causation for millwork storage on a “but for” standard given the clear impacts by Yuanda. However, off-site storage of materials that may be damaged through exposure is a reasonably anticipated loss from delays to an activity preventing enclosure of the building. I accept that Schindler materially contributed to the need for continued storage as a direct result of its delayed performance. I have not accepted Alex Staley’s calculations of Schindler’s proportionate share of project delay, but accept that Yuanda does bear greater responsibility by reason of its delays. I accordingly find Schindler 25% responsible for the cost of storage in December and January in the amount of \$12,358.

Temporary heating and piping (item nos. 19-22, 24, and 42)

[357] WBP has not established causation between Schindler’s breach of its subcontract and the requirement for temporary heating, including the installation and subsequent removal of temporary piping for that heating.

[358] Daniel Wierec's affidavit evidence is that delayed installation of the Freight Elevators "pushed back the schedule for interior work", but during his testimony he confirmed the need for temporary heating was due to delays in the building enclosure to avoid freezing pipes. Timothy Russell agreed that the building not being enclosed was the reason for temporary heat. Testimony from Tim Meana supports that that temporary heating was required until the skip hoist was removed and the building fully enclosed.

[359] However, I am nevertheless satisfied that the evidence supports the need for temporary heat as being due to B&M's failure to have air handling units (AHUs) available before January 2013 to provide temporary heat. This is stated in an email dated November 14, 2012 from Daniel Wierec, which Mr. Wierec acknowledged during cross-examination. Tyler Kondel was asked about the email on cross-examination regarding whether temporary heating was required as of November 2012 because B&M's mechanical equipment for heating would not be available until January 2013 (as stated in the email). Mr. Kondel confirmed it was "standard". Erica Carroll separately confirmed during her testimony that B&M's AHUs were not ready for temporary heat, and did not recall when they were available. Tim Meana acknowledged responsibility of B&M, but his testimony was that delayed installation of the Freight Elevators had a "knocking effect" that impacted enclosing the building and completing the heating and cooling loops around the perimeter. Tony Perry acknowledged that temporary heat was required because B&M's equipment was not installed.

[360] It appears that, at the time, B&M was viewed by WBP as being responsible. An internal email dated October 24, 2012 from Ms. Carroll was put to her during cross-examination. The attachment is a document entitled, "WBP/B&M Executive Committee Gameplan". Ms. Carroll confirmed that she had added clarifications to the document, which already stated that WBP would back charge B&M for temporary heating, including that "B&M should be responsible for all temporary heating costs incurred by WBP."

[361] WBP argued that schedules and a letter dated October 5, 2012 indicate that the majority of AHUs were installed by April 2012, and the issue was bringing them online to provide temporary heat by late December 2012. WBP argues that I should rely on statements made in B&M's "Request for Equitable Adjustment" dated November 15, 2013 (discussed in greater detail further below) that "starting the AHU's prior to the completion of 'dirty' construction would have contaminated the ductwork". I do not accept that hearsay use as reliable or necessary evidence. While Timothy Russell agreed during his cross-examination that "dirty" construction work creating construction debris would have to be done before AHUs could be moved forward, I give that "admission" no weight. There is no foundation for a finding that Mr. Russell has any knowledge or experience about whether AHUs can or cannot be used during ongoing construction for temporary heating purposes. I also do not find any evidence supporting that post-enclosure construction work was any less dirty, or at least sufficiently less dirty, than pre-enclosure work argued to have prevented bringing the AHUs online. I accordingly do not accept that B&M was prevented from bringing the AHUs online by reason of ongoing pre-enclosure construction work.

[362] Taking into account the evidence tendered on temporary heating and related piping, I find that the need for temporary heating was attributable to B&M's delays in bringing the AHUs online and not by reason of Schindler's delayed turnover of the Freight Elevators.

Additional skip hoist operation work (item no. 39)

[363] I am satisfied that WBP has established causation between Schindler's breach of its subcontract and the requirement for additional hoist operation work. Although there was some evidence at trial regarding B&M wanting the skip hoist to remain later so that larger equipment could be transported, I am not satisfied there is sufficient evidence to find that the skip hoist could not have come down sooner if Schindler had not delayed turnover of the Freight Elevators. Dismantling commenced on the next business day after turnover.

[364] Taking into account my finding regarding Schindler's subcontract time to complete installation of the Freight Elevators and the date of turnover, I find that the period of additional skip hoist operation is two months, from October 6 to December 7, 2012. Daniel Wierc's evidence is that WBP's total cost overrun was \$85,066, of which \$72,831.05 was incurred through February 2013 and \$12,234.95 was incurred after February 2013. This evidence is confusing, since the skip hoist was dismantled between December 10-14, 2012. Mr. Wierc confirmed during his supplementary testimony in chief that WBP is only claiming additional hoist work to 2012. However, the evidence does not substantiate an amount for additional skip hoist operation.

[365] Mr. Wierc's affidavit links to a document that contains 650 pages of invoices from Bondfield, described in the relevant footnote to Mr. Wierc's affidavit as "Bondfield's invoices to WBP, WBP's cheques to Bondfield and Bondfield's time sheets in respect of work performed in relation to "dock master" services, Phase 1 punch list work, Phase 1 periodic cleanup and relocation of materials and Phase 1 hoisting work for the months of June 2012 to December 2013." It is unclear which invoices, cheques, and timesheets relate to hoist operation. It is further unclear how the cost overrun of \$85,066 was calculated and what portion of that is properly allocated to the hoist operation, as opposed to other tasks.

[366] I find that, while WBP has established causation, WBP has failed to prove the quantum of any damages suffered for additional hoist operation to December 7, 2012.

Cleanup and relocation of construction materials (item no. 40)

[367] WBP has not established causation between Schindler's breach of its subcontract and alleged increased costs of periodic site cleanup performed by Bondfield. In WBP's written closing submissions, WBP argues that these costs "are directly attributable to the trade stacking and acceleration work necessitated by Schindler's late installation of its elevators and the resulting delay to the [WCH] Project." I accept that additional cleaning and construction material relocation was required, but given my finding that Schindler did not cause critical path delay, the evidence does not support any additional costs as a causal result of Schindler's breach of subcontract.

I accordingly find that additional costs for cleanup and relocation of construction materials were not caused or materially contributed to by Schindler's breach of its subcontract.

Additional labour for "dock master" (item no. 42a)

[368] WBP has not established causation between Schindler's breach of its subcontract and alleged increased costs for a "dock master" to manage, organize, and coordinate delivery of materials at the loading dock.

[369] WBP's position is that, if there had been no delay to the building enclosure and the flow of work been maintained, a dock master would not have been required. It was accordingly an additional cost directly connected to the delayed enclosure of the building. The evidence does not support a finding of cause or material contribution to the need for a dock master by Schindler's delays in the context of the altered construction methodology being employed by WBP, stacked trades, and substantial curtainwall delays directly attributable to Yuanda. I find accordingly.

Accelerated work for isolation pads (item no. 51)

[370] WBP has established causation between Schindler's breach of its subcontract and the acceleration of CDMca Ltd.'s installation of vibration isolation pads and chiller room floors along the north side of levels 9 and 10. I accept Tim Meana's evidence that the installation areas were adjacent to the skip hoist, and could not be completed with other vibration pads. I find that delayed skip hoist dismantling was the cause of the need for dismantling. Since Yuanda's curtainwall work was completed on November 23, 2012, Schindler's delay to December 7, 2012 was a direct cause of the delayed vibration pad and chiller floor installation. I find that Schindler is liable to indemnify WBP for the amount paid to CDMca Ltd. of \$4,800.

Accelerated interior stone and tile flooring (item nos. 52-53)

[371] WBP has established causation between Schindler's breach of its subcontract and the acceleration of DC Granite & Marble, Inc.'s work for the cab flooring in the Passenger Elevators and lobby flooring. However, WBP has not made out quantification, since the extent of quantifiable loss caused by Schindler's delays cannot be determined.

[372] I have found that Schindler was contractually entitled to complete the Passenger Elevators by March 25, 2013, by which time elevator nos. 3 and 5 had been turned over. Accordingly, the only valid claim by WBP would be on account of Schindler's delays in completing installation of elevator nos. 4 and 6. Neither of the invoices is accompanied by timesheets, nor do the invoices identify on which dates the accelerated work was performed. No other evidence was tendered on when the work was undertaken. I accordingly find that WBP has failed to prove this claim.

iv. Work performed to mitigation Schindler's delays

Material hoist fill-in (item no. 13)

[373] WBP claims for costs paid to Advanced Precast to perform accelerated work to fill in the area of the skip hoist following its dismantling. Advanced Precast invoiced WBP for \$5,974.50 on January 31, 2013 for premium time completed on December 15, 2012. WBP issued a change order to Advanced Precast on July 10, 2013, which included the acceleration cost.

[374] It is undisputed by Schindler that the skip hoist could not be taken down until the Freight Elevators had been turned over for construction use, and that dismantling the skip hoist was a requirement to complete the building enclosure on the north wall. The interrelationship of the three activities is reflected in the Exhibit L schedule, which indicates completion of "Freight Elevator Construction" by Friday, August 31, 2012 (activity A1540), commencement of "Man Material Hoist Dismantle" on Monday, September 3, 2012 with completion of the dismantling by September 17, 2012 (activity A1550), and commencement of "Enclosure @ Man Material Hoist" on September 18, 2012. As discussed above, once the Freight Elevators were turned over on December 7, 2012, the skip hoist was dismantled by December 14, 2012, and enclosure work commenced thereafter. As also discussed above, I have found that the evidence does not support a finding that the skip hoist could not have been dismantled earlier due to B&M's requests to leave it in place.

[375] I accept Mr. Wierec's testimony that, on December 7, 2012, WBP was taking steps to accelerate the work required to fill-in the north wall, which included directing Advanced Precast and Total Contract Glazing Inc. to accelerate work over the holidays. I also accept Mr. Wierec's evidence for why these acceleration costs were necessary and find that they were directly caused by Schindler's delayed turnover of the Freight Elevators. I accept Adam Figueira's evidence and find that the work was performed and was paid by WBP.

[376] Schindler acknowledged in closing it would accept an incremental cost for the item, but argued that there has been no allowance for a base cost, as Alex Staley admitted on cross-examination there should have been. I am satisfied that the totality of evidence supports a finding that the hours claimed in the subject invoice are the premium time hours only. I thereby find that Schindler is contractually obliged to indemnify WBP for the entirety of these costs.

Overtime masonry (item no. 14)

[377] WBP claims for \$8,245.74 in overtime costs paid to BMC Masonry to accelerate masonry work around the Passenger Elevators, as outlined by Daniel Wierec in his affidavit evidence. The acceleration work was performed in February and March 2013, prior to expiry of the time for Schindler to complete the Passenger Elevators, as I have found. Since WBP's position is that the work was necessarily accelerated prior to March 25, 2013, I find it was not by reason of any breach by Schindler of its subcontract and is not recoverable from Schindler.

Crane rental (item no. 15)

[378] WBP claims \$2,310 for the cost of a crane rental for use by Advanced Precast in installing precast in the north wall following dismantling of the skip hoist. Daniel Wierec's affidavit explains that Advanced Precast had previously demobilized its crane for use on another project. The crane rental was a less expensive option than paying Advanced Precast to bring its crane back to site.

[379] I accept Daniel Wierec's evidence and find it reasonable for Advanced Precast to have demobilized its crane given the curtainwall and Freight Elevator delays. I have already rejected Schindler's argument that it was entitled to use of a crane, without charge, which was again raised in response to this item. I find that the crane rental cost was necessary to complete fill-in of the north wall by reason of Schindler's delay in turnover of the Freight Elevators, and a less expensive option than Advanced Precast returning its crane to site. I find that WBP paid this amount, and is entitled to indemnification from Schindler pursuant to the subcontract.

Accelerating curtainwall enclosure (item no. 16)

[380] WBP claims \$16,390 for costs paid to Total Contract Glazing Inc. to perform, as Daniel Wierec's affidavit evidence explains, overtime work to accelerate curtainwall and ribbon windows at the skip hoist bay. I accept Mr. Wierec's evidence that Total Contract Glazing was accelerated with Advanced Precast over the holidays. Tom Rankine was not cross-examined on the basis of Schindler's concession that the work invoiced was performed and the invoice paid by WBP. I accept Mr. Wierec's evidence for why these acceleration costs were necessary and find that they were directly caused by Schindler's delayed turnover of the Freight Elevators.

[381] Schindler acknowledged in closing it would accept an incremental cost for the item, but argued that there has been no allowance for a base cost, as Alex Staley admitted on cross-examination there should have been. I disagree. Total Contract Glazing Inc.'s invoice appends the timesheets for its work on December 21, 22, 27, 28 and 29, 2012. Each of the timesheets shows substantially more hours worked than is reflected in the invoice. For example, on December 21, 2012, the timesheet totals 122.5 hours, while the invoice charges 45.5 hours of premium time. I am satisfied that the invoice reflects the premium time component only, and find that Schindler is contractually obliged to indemnify WBP for these costs.

v. Indemnification for B&M claims

[382] WBP advances two different indemnification claims in respect of separate claims made by B&M against WBP:

- (a) B&M's claimed loss of productivity in the course of its mechanical and electrical subcontract work;
- (b) Amounts relating to elevator unavailability deductions charged to B&M pursuant to the Service Contract and levied by B&M against WBP pursuant to the Interface

Agreement and amounts paid by WBP to indemnify B&M for alleged overcharging by Schindler for warranty and maintenance work.

[383] WBP argues that Schindler has contractual liability to indemnify WBP for these payments by virtue of the broad indemnity in Exhibit A, Article 9.3 of the subcontract, requiring indemnification by Schindler for all claims, damages and losses arising out of or resulting from Schindler's actual or alleged failure to perform under the subcontract. As noted earlier in these reasons, a precondition to any liability for indemnification pursuant Article 9.3 is that the amounts claimed arise out of or result from Schindler's actual or alleged failure to perform under the subcontract in accordance with the terms of the subcontract and the "Contract Documents".

[384] Schindler disputes that the flow-through claims fall within the provision, arguing that neither B&M's loss of productivity claim nor the elevator penalties are claims "arising out of or resulting from" any "actual or alleged failure to perform" under the subcontract. Schindler further points to Wiley Wright's report and testimony that there is no causal connection between Schindler's work and WBP incurring these losses.

B&M's loss of productivity

[385] WBP claims indemnification for \$887,577.45 from Schindler for contribution to B&M's loss of productivity on the WCH Project. The figure is calculated by Alex Staley based on his assessment of B&M's loss of productivity claim and percentage allocation of critical path delay caused by Schindler on the basis that "Schindler's delayed completion of its elevator scope directly contributed to impacts to the mechanical and electrical installation after September 1, 2012."

[386] B&M's claim was advanced as part of its lien action in Court File No. CV-13-486969, issued August 15, 2013, in which B&M claimed a lien in the amount of \$17,741,799, and damages in the same amount. As part of that claim, B&M pleaded breach of contract by WBP and damages from critical path delay to the WCH Project that required B&M to incur "significant additional labour hours, costs and expenses". At the time of issuing the claim, B&M quantified that loss in its statement of claim at \$3,184,818 of the total lien amount.

[387] Joseph Zachariah of B&M was WBP's primary witness on B&M's loss of productivity on the WCH Project. His evidence was that, following issuance of B&M's lien action, negotiations took place between WBP and B&M. In the course of those negotiations, B&M prepared and submitted a document entitled, "Request for Equitable Adjustment" dated November 15, 2013 (the "B&M REA"). The B&M REA set out particulars of B&M's delay claim, with supporting documentation. Mr. Zachariah's evidence is that \$4,616,060 of B&M's claim was for "labour inefficiencies, unpaid overtime and shift premium amounts, and extended overhead costs that occurred primarily from in or around September 2012 to in or around May 2013 during B&M's work on Phase 1 of the Project".

[388] B&M's lien action was ultimately settled between WBP and B&M, with a substantial payment made by WBP to B&M. The minutes of settlement do not allocate any portion of the

settlement amount to B&M's loss of productivity claim. WBP seeks indemnification from Schindler for its allocated share of the losses suffered by B&M. Pursuant to the minutes of settlement, B&M is entitled to share in 50% of WBP's recovery in this litigation above \$1,500,000, to a maximum of B&M receiving a further \$1,500,000. B&M also agreed to cooperate with WBP in its efforts to advance the claims pursued in this litigation.

[389] In his affidavit evidence, Mr. Zachariah states that Schindler's late delivery of the Freight Elevators and the Passenger Elevators "negatively impacted B&M by, among other things, delaying B&M's work and increasing acceleration costs". Mr. Zachariah's evidence addresses direct impacts on B&M by Schindler's delayed performance, as well as other delays suffered by B&M in the early project and as a result of delays in the work of Yuanda and Marel.

[390] During cross-examination, Mr. Zachariah was confirmed to have had no involvement in preparation of the B&M REA, other than perhaps directing "subordinates" to provide documents or information needed by B&M's consultant. He acknowledged that the B&M REA does not take into account delays to Schindler's work, including those caused by B&M, that he did not know why the elevator work was delayed, that B&M's delay was measured with reference to its own schedules, and that the recovery schedule prepared in August 2011 involved compressing activities and stacking trades.

[391] WBP relies on Alex Staley's quantification of B&M's loss of productivity claim in the amount of \$1,392,199.53 for B&M's mechanical work and \$1,543,294.37 for B&M's electrical work. Indemnification of WBP by Schindler for a portion of that amount is based on WBP having paid B&M a settlement amount that includes loss of productivity and reliance on Schindler's indemnification obligation pursuant to Exhibit A, Article 9.3. As discussed, that provision requires that the claim be one arising out of or resulting from Schindler's failure to perform under the subcontract. Since I have found that Schindler's delayed performance did not impact the critical path of the WCH Project, Schindler is only liable to indemnify WBP for those portions of B&M's claim that are demonstrated to have been directly caused or materially contributed to by Schindler's delays.

[392] Causation between Schindler's breaches of subcontract and B&M's loss of productivity has not been made out on the evidence, nor has quantification of loss been proven. While I need not go through all of the reasons leading me to that determination, I will review several key reasons.

[393] Firstly, although B&M's subcontract was tendered in evidence, no contractual analysis was provided to support B&M's contractual entitlement to recover its loss of productivity claim from WBP, nor evidence supporting compliance with the contractual requirements in the subcontract regarding delay. For example, Article 8.4 of the subcontract appears to require prompt notification of delay events, but no evidence was tendered on compliance with that or other provisions. This includes whether B&M would be contractually entitled to recover any loss of productivity for delay if it was found (as Alex Staley assesses to be the case) that B&M contributed to critical path delay. If B&M been a party at trial, liability for B&M's assessed portion of overall delay would

presumably require a finding that B&M breached its subcontract by reason of inexcusable delayed performance.

[394] As the party seeking indemnification, WBP has the evidentiary onus of proving B&M's claim. It did not do so. Rather, WBP treated the claim as a valid head of damages based on the high-level evidence of Joseph Zachariah, the B&M REA, and Alex Staley's assessment, without proving the underlying claim by B&M.

[395] Secondly, I am unable to find that Schindler caused or materially contributed to B&M's loss of productivity based on the evidence. In the B&M REA, it is acknowledged that, "Often Black & McDonald was unable to distinguish between a delay directly caused by WBP and a delay caused by either of WCH or any of WBP's subcontractors." Joseph Zachariah was asked about that comment during cross-examination, and acknowledged that the B&M REA was outlining events that had delayed B&M without distinguishing responsibility for delay. He did, however, point out that B&M's consultant did identify specific areas impacted by Schindler's delayed work.

[396] Mr. Staley's analysis does not allocate any loss of productivity specifically to Schindler or delays for which Schindler may reasonably be responsible. His approach is based on assessment of hours spent against a calculated "measured mile", organized by activity and by level in is from an overall project delay during specific periods, rather than connected to specific delay events. Nothing in Mr. Staley's assessment permits me to assess any direct causation by Schindler; rather, usefulness of the assessment hinges on a finding that Schindler delayed the critical path of the WCH Project, which I have not found.

[397] No evidence supports a finding regarding the extent of any quantifiable direct loss suffered by B&M by reason of Schindler's delayed performance in installation of the elevators. Notably, the B&M REA suggests that other delays were significant contributors to B&M's loss of productivity, even during the period of delayed installation of the Freight Elevators. For example, the B&M REA acknowledges significant impact from curtainwall installation delays, that the skip hoist removal (*i.e.*, after turnover of the Freight Elevators) commenced prior to B&M having access to any in-wall mechanical and electrical perimeter work on level 8 and most of the perimeter on level 7, and that B&M had to compress six months of delayed work into the last eight months of the WCH Project.

[398] Thirdly, Mr. Staley's assessment does not consider the impacts of B&M's delays on Schindler, as I have found, nor does he consider the impacts of Marel's delays on B&M and loss of productivity. With respect to the latter, Joseph Zachariah's evidence is that, once the Freight Elevators were turned over, the skip hoist dismantled, and the north side of the building enclosed, B&M could not commence mechanical and electrical work around the perimeter of the building near the skip hoist until Marel had completed its own perimeter work. Mr. Zachariah's evidence is that Marel was delayed in that work, causing delay to B&M.

[399] Fourthly, I accept Mr. Wright's criticisms of Mr. Staley's approach to the "measured mile" and use of the composite rate of \$76.75 in calculating B&M's loss of productivity. Mr. Wright's opinion that the "measured mile" used by Mr. Staley is not a proper measured mile analysis for

several reasons, including that Mr. Staley failed to determine the actual costs incurred by WBP as a result of B&M's loss of productivity; used inconsistent time periods for his delay allocation percentages and loss of productivity assessment, thereby disconnecting allocation and pricing from causally connected impact events; used B&M's composite rate of \$76.75 without any independent verification that it was accurate or appropriate, rendering the damages calculation unreliable and possibly overstated; and used a self-developed method comparing as-bid estimated or budgeted man-hours, percentage complete, and actual man-hours without verification of the accuracy or reliability of the data, particularly given concerns expressed by B&M's in documents supporting that it had underbid the mechanical portion of the WCH Project.

[400] In my view, particularly in light of Mr. Wright's criticisms, Mr. Staley's assessment regarding B&M's loss of productivity is precisely the type of opinion evidence cautioned against by the Court of Appeal in *Johnson v. Milton (Town)*, 2008 ONCA 440, at para. 49, which states:

[49] Apart from trial economy, trial judges who fail to properly perform their gatekeeper function run the risk of having their decision-making function usurped or severely eroded by "expert generalists" who profess to know something about everything and who are only too willing to provide the court with a ready-made solution for any contentious issue that might exist. The problem with such witnesses is that while they appear knowledgeable and generally come across well, upon closer scrutiny, their opinions may well turn out to be little more than concoctions consisting of guesswork, speculation, commonplace information and junk science, with a hint of valid science thrown in for good measure.

[401] I accordingly reject Mr. Staley's assessment and quantification of B&M's loss of productivity claim. As noted earlier in these reasons, the court must strive to "do its best" when particular damages are inherently difficult to assess, which accurately summarizes a claim for loss of productivity by reason of delay. However, in this case, even if I could determine a reasonable measure for loss and applicable hourly amount (and I am not satisfied that there is sufficient evidentiary supports for me to find a fair and reasonable measure or hourly rate), it would not overcome the other issues outlined above.

[402] For these reasons, I find that B&M's loss of productivity claim has not been proven and, in any event, has not been proven to be a claim arising out of or resulting from any failure to perform by Schindler under the subcontract.

Effect of WBP's assignment of warranty

[403] As part of the settlement with B&M, WBP executed an "Assignment of Rights and Warranties" dated August 24, 2016 (the "Assignment Agreement"), an executed copy of which is appended as Schedule D to the minutes of settlement between WBP and B&M appended to Change Order No. 210068S24-008 issued to Schindler. The Assignment Agreement is explained in paragraph 18 the minutes of settlement as being to "assign its contractual rights and obligations in the Schindler Subcontract in respect of Schindler's performance of Phase 2 Warranty and Maintenance Work to B&M."

[404] Sections 1 and 2 of the Assignment Agreement state as follows:

1. **Assignment.** The Assignor hereby irrevocably and unconditionally assigns, transfers and conveys to the Assignee, all of the Assignor's right, title, interest, claim and demand whatsoever in and to, together with any and all benefits, advantages, privileges and rights relating thereto or arising and flowing therefrom, all of the Schindler Warranty, including without limitation the rights, benefits, and interests of the Assignor pursuant to Section 7.11 of the Schindler Subcontract, and the Assignee hereby accepts the assignment herein from the Assignor.
2. **Rights to Enforce.** For clarity, the assignment of the Schindler Warranty pursuant to Section 1 includes all of the Assignor's enforcement rights with respect to the Schindler Warranty in order that the Assignee may enforce the provisions of the Schindler Subcontract as against Schindler in the event of any default by Schindler arising from the Schindler Warranty, subject to and in accordance with the provisions of the Schindler Subcontract.

[405] "Schindler Warranty" is defined in recital C, which states as follows:

- C. Pursuant to a subcontract signed in July, 2011 (the "Schindler Subcontract"), the Assignor retained Schindler Elevator Corporation ("Schindler") to provide, install and perform warranty and maintenance work on the elevators for the Project, in accordance with the warranty provisions of the Construction Contract, and to provide the additional obligations set out in the Schindler Subcontract (all such warranty and maintenance obligations included in the Schindler Subcontract, including all exhibits and schedules thereto, collectively referred to as the "Schindler Warranty");

[406] Schindler argues that, as a result of the absolute and unconditional assignment to B&M of all of WBP's rights to the claims for Schindler's alleged breaches of the warranty and maintenance provisions of the subcontract, WBP has no legal status to pursue its claim. Schindler submits that B&M's claim in Court File No. CV-15-536536 has been dismissed on the basis of that settlement, including the assignment, foreclosing WBP from proceeding with the third party claim.

[407] I agree with Schindler's argument, in part. WBP did execute an unconditional assignment of WBP's rights in respect of the Schindler's warranty and maintenance obligations under the subcontract, "together with any and all benefits, advantages, privileges and rights relating thereto or arising and flowing therefrom." That assignment expressly included "all of [WBP's] enforcement rights with respect to the Schindler Warranty in order that [B&M] may enforce the provisions of the Schindler Subcontract as against Schindler." There is no reservation of rights for the existing third party claim or any other existing warranty claims, whereas there is a clause clearly confirming that the assignment is "limited to those rights and interest in the Schindler Warranty assigned pursuant to [the Assignment Agreement]" and that WBP otherwise reserves all of its right, title and interest to the balance of the subcontract with Schindler.

[408] Since WBP's evidence is that the settlement was concluded, there was thereby consideration for the Assignment Agreement. I accordingly find that, by operation of the

Assignment Agreement, WBP ceased to have legal standing to pursue the warranty and maintenance claims against Schindler that are pursued. It follows that those portions of WBP's claim are dismissed. However, I find that the Assignment Agreement does not extend to WBP's claim for indemnification for amounts paid in respect of elevator unavailability penalties. In my view, that portion of the claim is in respect of a flow-through of deductions by way of indemnity obligations under the Interface Agreement and Schindler's subcontract.

Contractual basis for pass-through of elevator penalties

[409] WBP relies on the indemnification obligations in Exhibit A, Article 7.17 and Article 9.3 as the basis for claiming over against Schindler amounts paid by WBP to B&M on account of deductions assessed by ProjectCo against B&M under the Service Contract for unavailability of elevators, elevator maintenance fees, and buy-out of the risk of future elevator defects. WBP argues that it was contractually obliged to indemnify B&M, and is contractually entitled to pass on those amounts to Schindler. Schindler argues that it has no liability to WBP for the amounts paid to B&M because they arise under the Service Contract and that the amounts do not fall within either Exhibit A, Article 7.17 or Article 9.3 because they do not arise from Schindler's work or failure to perform.

[410] Pursuant to Article 7.17, the penalties subject to indemnification are those assessed by ProjectCo arising from Schindler's work or workforce. Pursuant to Article 9.3, Schindler's indemnification obligation is for claims against WBP arising out of or resulting from a failure to perform (alleged or actual) under the subcontract. In my view, in the case of either provision, the only commercially reasonable interpretation of Schindler's indemnification obligations is for those penalties assessed by ProjectCo or claims against WBP that are validly claimed as against WBP. It follows that WBP has an evidentiary onus to prove that it had an obligation to pay the penalties before it may seek recovery of those payments from Schindler.

[411] Affidavit evidence from Jason Scott, a Division Manager at B&M, provides a detailed explanation of the interrelationship between the Service Contract and the Interface Agreement regarding the basis upon which B&M asserted WBP's liability for the elevator-related deductions under the Service Contract. As part of that evidence, Mr. Scott explains the contractual provisions in the Service Contract entitling ProjectCo to make deductions from the amounts payable to B&M for an "Elevator Availability Failure". In WBP's written closing submissions, the contractual provisions are reviewed in detail. Mr. Scott's evidence and WBP's submissions both rely on Attachment 20 to the Service Contract as containing the relevant terms for ProjectCo's assessment of deductions for an "Elevator Availability Failure".

[412] While the analysis performed by Mr. Scott in his affidavit evidence, and by WBP in its closing submissions, is helpful, I am unable to verify it. Attachment 20 is not appended to the version of the Service Contract in evidence (tabs 5 and 8 of the joint book of documents, which link to the same document no. WCH00635585). It was also not otherwise tendered into evidence. Part 1, Section 1.1(c) of the Service Contract lists "the Attachments listed in Part 2, Section 1.1(b)"

as forming part of the contract. None of those attachments, which include Attachment 20, are appended to the copy of the Service Contract in evidence.

[413] I note, though, that the clauses referenced by Mr. Scott in his affidavit evidence and by WBP in its closing submissions appear to mirror provisions with the same numbering in Schedule 20 to the Project Agreement. There is no specific evidence supporting that Attachment 20 to the Service Contract is a duplicate of Schedule 20 to the Project Agreement, but it appears so based on other cross-referencing provisions that rely on the Project Agreement.

[414] WBP argues that its obligation to indemnify B&M for deductions by ProjectCo for an “Elevator Availability Failure” arises from Section 3.1(e) of the Interface Agreement, the tripartite agreement between ProjectCo, WBP, and B&M. That section provides as follows:

(e) Subject to Section 1.4(d), the Construction Contractor will indemnify the Service Provider for (without duplication) the reasonable and proper additional service costs and Direct Losses suffered by the Service Provider, including any Deductions made by Project Co in accordance with the provisions of the Service Contract, (provided the Service Provider has taken reasonable steps to mitigate the consequences of such Defect or Latent Defect and such costs) as a result of a Defect or Latent Defect during the periods specified in Part 1 Article 9 of the Construction Contract.

[415] Although capitalized, “Deductions” is not a defined term in the Interface Agreement, but Section 1.1(a) of the Service Contract incorporates by reference the definitions in Schedule 1 to the Project Agreement where a term is not defined. “Deductions” is defined in Schedule 1 to the Project Agreement by reference to Schedule 20, which defines the term as “a deduction made from an Interim Monthly Service Payment or a Monthly Service Payment in accordance with this Schedule 20.” Schedule 20 to the Project Agreement includes mirror provisions to those identified by Jason Scott as being in Attachment 20 to the Service Contract.

[416] WBP’s indemnification obligation under the Interface Agreement requires that deductions must be “as a result of a Defect or Latent Defect”, which are respectively defined in Section 1.2(e) and (m) of the Interface Agreement. The definition of “Defect” is the pertinent one to disposition of the penalties claim, which is as follows:

“Defect” means any non-compliance with the Output Specifications in the design or construction of the Facility (or any part thereof) or with the Construction Contractor Proposal Extracts (or any part thereof), excluding, for greater certainty, any noncompliance with the Output Specifications arising from a failure to operate or maintain the Facility (or any part thereof) in accordance with Part 4 of the Output Specifications and Good Industry Practice.

[417] WBP focuses on non-compliance with “Construction Contractor Proposal Extracts”, which is not defined in the Interface Agreement or the Project Agreement, but is defined in Attachment 1, Section 1.63 to the Construction Contract as “documents attached as Attachment 13 - Construction Contractor Proposal Extracts”. Attachment 13 lists and incorporates by reference number of documents, none of which were specifically highlighted or discussed in the course of evidence.

[418] WBP points to Daniel Wierec's evidence that the WCH Project was always designed to have eight elevators, and the bank of Passenger Elevators was always designed to have four elevators. WBP submits that, since all eight Phase 1 elevators were always in the design of the WCH Project, it follows that any time one of those elevators fails or is otherwise unavailable, it would constitute a non-compliance with the designs, a breach of the "Construction Contractor Proposal Extracts", and thereby a "Defect" pursuant to the Interface Agreement.

[419] WBP's argument is, in my view, too general in the context of the WCH Project structure, which involves a series of detailed contracts with expressly outlined obligations. WBP has not identified which of the "Construction Contractor Proposal Extracts" are relevant in its argument nor provided any argument regarding how elevator maintenance is contemplated by them. Absent clear evidence and argument on what portion of the "Construction Contractor Proposal Extracts" deals with elevator maintenance, I cannot accept WBP's argument.

[420] The other non-compliance contemplated in the definition of "Defect" is with the Output Specifications, which was tendered in evidence by Jason Scott. Mr. Scott's affidavit evidence refers generally to the Output Specifications setting out "a number of elevator Performance Indicators that govern the level of performance and service that must be supplied to the Project by the elevators." No elaboration was provided in his affidavit or in oral testimony. On review of the Output Specifications document, the only obvious elevator specifications are located in Section 3.4.3 of Part 3 of the Output Specifications under the heading "Architectural Systems". It includes lists of "essential", "important" and "optional" elevator requirements. However, none of these appear to address maintenance requirements. For example, two of the essential requirements are Section 3.4.3.1(a)(ii) and (ix), which respectively state, "It is Essential that a group of 2 service elevators / patient transfer elevators in Phase 1 serve all levels" and, "It is Essential that the service elevators listed at (ii) above have the capacity to serve all floors of a potential future vertical expansion of four to six floors." These, as with the others, are focused on design and capacity requirements, not ongoing operation and maintenance. No requirement in the Output Specifications was highlighted in evidence or argument dealing with requirements for ongoing elevator operation and maintenance, a breach of which could be argued to constitute "non-compliance with the Output Specifications in the design or construction of the Facility (or any part thereof)".

[421] The other aspect of the "Defect" definition is the express exclusion of any non-compliance with the Output Specifications arising from a failure to operate or maintain the hospital facility in accordance with Part 4 of the Output Specifications and "Good Industry Practice". In Dave Brennan's responding affidavit, he sets out an interpretation of the Output Specifications in support of an argument that the relevant performance indicators for the required level of performance to be maintained are set out in Part 4 of the Output Specifications, such that a breach of those performance indicators is a failure to comply with Part 4, and thereby within the exclusion. Mr. Brennan's affidavit states that, "An Elevator Availability Failure can only arise once an Event has occurred, which is the direct result of a failure to comply with Performance Indicators, and thereby, a non-compliance with Part 4 of the Output Specifications."

[422] In his reply affidavit, Daniel Wierec disputes Mr. Brennan's interpretation by referring to the definitions of "Event", "Availability Condition", and "Accessibility Condition" in Attachment 20 to the Service Contract, arguing that any "Elevator Availability Failure" could result in deductions being levied by ProjectCo against B&M, and thereby triggering WBP's indemnification obligation.

[423] My difficulty with this "evidence" from both Dave Brennan and Daniel Wierec is that both witnesses are proffering legal argument on interpretation of the definition of "Defect" under the Interface Agreement, including the interpretive impact of Part 4 of the Output Specifications, when neither Attachment 20 of the Service Contract nor Part 4 of the Output Specifications are in evidence. With respect to the Output Specifications, they are linked as Exhibit 2 to Jason Scott's affidavit, but the linked document ends after Part 3 with copies of various drawings referenced in Part 3.

[424] For these reasons, I find that WBP has failed to prove that the deductions for "Elevator Availability Failures" are "Defects" under the Interface Agreement for which WBP was contractually required to indemnify B&M. Since no other legal basis for B&M to claim over against WBP for those deductions was argued in opening or closing submissions, I find that WBP had no obligation to indemnify B&M for them and, accordingly, they are not an amount in respect of which Schindler would have any obligation to indemnify WBP pursuant to the subcontract. Since the "elevator penalties" claim is broader than only deductions for elevator unavailability, though, that determination does not dispose of WBP's claim.

Validity of WBP purported exercise of alternates

[425] My determination above regarding the effect of the Assignment Agreement is sufficient to dispose of WBP's claims arising from alleged breaches of Schindler's warranty and maintenance obligations. However, in the event I am wrong in that determination, I have nevertheless considered the validity of WBP's attempt to exercise the available alternates under the subcontract and considered its claims for indemnity regarding amounts paid to B&M on account of Schindler's warranty and maintenance work.

[426] Exhibit B, Section 3.B of the subcontract provides for a two-year, all-inclusive warranty as part of the base subcontract price, prescribed to commence to "match interim completion date and substantial completion date as per attached Exhibit -L." Daniel Wierec's evidence confirmed agreement that Schindler's warranty obligation for the Phase 1 elevators commenced on the date of Interim Completion being achieved, namely May 14, 2013. It is undisputed that Schindler's warranty obligation for the Phase 2 elevators commenced on the date of Substantial Completion being achieved, namely September 24, 2017.

[427] Exhibit B, Section 5.2 of the subcontract provides alternative pricing for extending the maintenance agreement "beyond the initial 2 year warranty maintenance term" for periods of 5 years, 10 years, 15 years, and 20 years, including monthly rates payable to Schindler for elevator maintenance. As outlined earlier in these reasons, on March 8, 2016, WBP issued Change Order

No. 210068S24-006, purporting to extend elevator maintenance by Schindler to the expiry of the Phase 2 warranty period, plus an additional two years to September 23, 2017. The next day, WBP issued Change Order No. 210068S24-007, purporting to further extend the maintenance period from September 24, 2017 to March 23, 2035.

[428] Both evidence and argument were tendered at trial regarding the validity of Change Order Nos. 210068S24-006 and 210068S24-007, and whether WBP had exercised the alternates provided in the subcontract. However, I need not determine whether the alternates options were validly exercised, since I have determined that the issue was rendered legally moot by WBP's revocation of the two change orders purporting to extend the maintenance period.

[429] Daniel Wierec's affidavit evidence is that Change Order No. 210068S24-008 was issued to Schindler to address a number of items, mostly back charges for the amounts subject to the settlement with B&M. Of significance is Mr. Wierec's affidavit evidence that the first two items were to "reverse the extended maintenance plan activated by WBP" in Change Order Nos. 210068S24-007 and 210068S24-006, respectively. The third item was issued to reverse the "resolution amounts" agreed by WBP in Change Order No. 210068S24-006. During Mr. Wierec's supplementary testimony in chief, he confirmed that Change Order No. 210068S24-008 reversed both Change Order Nos. 210068S24-006 and 210068S24-007.

[430] Schindler argues that, regardless of whether or not the alternates were validly exercised through issuance of Change Order Nos. 210068S24-006 and 210068S24-007, the effect of WBP issuing Change Order No. 210068S24-008 was to reverse those prior change orders and, as a result, revoke WBP's exercise of the alternates. I agree with Schindler.

[431] Contractually, WBP's issuance of change orders to Schindler is governed by Exhibit A, Article 4 (discussed earlier in these reasons). Since no separate mechanism for exercising the alternates is provided in Exhibit B, Section 5 to the subcontract, I find that the change process in Exhibit A, Article 4 must apply, which is consistent with WBP's actions by its issuance of change orders to exercise the maintenance extensions. If WBP's exercise of extended maintenance alternates through Change Order Nos. 210068S24-006 and 210068S24-007 was valid and contractually binding on both WBP and Schindler (*i.e.*, triggering both an obligation for extended maintenance for Schindler and the corresponding payment obligation for WBP), then reversing the exercise of the alternates options by issuing Change Order No. 210068S24-008 must also be binding on both parties.

[432] Accordingly, if I accept Schindler's argument that Change Order Nos. 210068S24-006 and 210068S24-007 were invalid, then Schindler's warranty and maintenance obligations for the Phase 1 elevators ended on May 14, 2015. If I accept WBP's arguments that the change orders were contractually valid, then WBP's subsequent reversal of those change orders is the same end result: Schindler's contractual warranty and maintenance obligations ended on May 14, 2015 for Phase 1 elevators.

Assessment of penalties and other charges

[433] There are several components to the “elevator penalties” claim, which represent portions of the settlement paid to B&M by WBP in CV-15-536536. The amounts claimed are discussed in Daniel Wierec’s second affidavit and Jason Scott’s affidavit, and were summarized in WBP’s written closing arguments as follows:

- (a) \$422,164 in deductions in deductions made by ProjectCo from amounts payable to B&M under the Service Contract for elevator unavailability;
- (b) \$159,200 for maintenance rates charged by Schindler to B&M in excess of the amounts chargeable pursuant to alternates under Schindler’s subcontract;
- (c) \$62,653 for costs incurred to complete warranty and repair closeout items that are alleged to be Schindler’s responsibility; and
- (d) a credit of \$35,371 for valid invoices by Schindler for Phase 1 elevator warranty work.

[434] The \$422,164 figure claimed is comprised of two elements of the total settlement amount paid to B&M: \$347,164 for indemnification paid to B&M for elevator unavailability deductions and \$75,000 paid by WBP in exchange for B&M assuming the risk of future elevator-related latent defect issues. As derived from Mr. Wierec’s affidavit evidence, the \$347,164 amount is the net of total deductions of \$410,882.18 for elevator unavailability (\$107,159 for the Freight Elevators and \$220,093 for the Passenger Elevators), which Mr. Wierec says were paid to B&M as part of the settlement, less \$63,718 relating to user-caused damage to the elevators for which no claim is made against Schindler (an amount shared equally by WBP and B&M in their settlement).

[435] In WBP’s written closing submissions and in oral argument, WBP submitted that the deductions claim was for \$390,969.85, which is the amount supported by the evidence as being ultimately negotiated and withheld by WCH from B&M for elevator deductions prior to B&M commencing its action in CV-15-536536. The difference between that figure and the \$410,882.18 confirmed by Jason Scott’s affidavit evidence as being the total deductions assessed by April 2016 is \$19,912.33. Mr. Wierec’s affidavit evidence is that the \$19,912 represents deductions levied by ProjectCo after B&M commenced its action.

[436] However, I need not further address the seeming inconsistency between WBP’s closing submissions and Mr. Wierec’s evidence and make findings on the extent of the actual deductions for elevator unavailability. My finding above is that ProjectCo’s deductions for “Elevator Unavailability Failures” are not in respect of “Defects” under the Interface Agreement and, accordingly, they are not amounts for which Schindler is contractually required to indemnify WBP. Accordingly, whether the quantum of the deductions is proven to be \$347,164 or \$390,969.85 is moot. Neither amount is recoverable from Schindler.

[437] With respect to the \$75,000 buy-out amount, I have found that Schindler’s Phase 1 and Phase 2 warranty and maintenance obligations expired on May 14, 2015 and September 24, 2017,

respectively. The minutes of settlement between WBP and B&M expressly state that the buy-out period is from September 24, 2017 to the later of May 2043 and the end of the term of the Service Contract. Given my finding, it follows that Schindler had no ongoing warranty or maintenance obligation for that period, since even its two year warranty and maintenance obligation for Phase 2 elevators had expired. It is accordingly not an amount paid on account of any failure to perform by Schindler under the subcontract, and is thereby not a claim for which Schindler is required to indemnify WBP pursuant to Exhibit A, Article 9.3 of the subcontract. In my view, Exhibit A, Article 7.17 is inapplicable.

[438] Mr. Wierec's second affidavit explains that the \$159,200 claim for inflated maintenance fees represents the difference between the \$400 per elevator per month price for elevator maintenance contemplated by the 20 year alternate in Exhibit B, Section 5.2.d.i of the subcontract and the \$1,942.85 per elevator per month price charged by Schindler to B&M. That is not Jason Scott's evidence, whose affidavit states that the maintenance agreement reached between Schindler and B&M provides for \$1,543 per elevator per month for extended warranty and maintenance work. The minutes of settlement between WBP and B&M indicate that the \$159,200 was "additional compensation for Warranty and Maintenance Work on the Phase 1 Elevators from July 1, 2016 to September 24, 2017 (being \$ 1,543 per month, per car)."

[439] Since the claim relates to charges by Schindler to B&M for the period after I have found Schindler's warranty and maintenance obligations to have expired, I need not assess the evidence further. Assuming WBP did not assign its rights to B&M and is unable to pursue them, the alternate pricing relied upon by WBP was either not validly triggered or was triggered and subsequently rescinded by WBP. In either case, Schindler was not bound by any of the alternates pricing amounts in Exhibit B, Section 5. These amounts are thereby not a claim for which Schindler is obliged to indemnify WBP pursuant to Exhibit A, Article 9.3 of the subcontract, and Article 7.17 does not apply.

[440] The final part of the "elevator penalties" claim is WBP's claim for amounts alleged by WBP to have been improperly charged by Schindler to B&M for warranty and defect repair work, comprised of three components set out in Daniel Wierec's second affidavit: \$4,342 for warranty work on the Phase 1 elevators in April 2016, \$24,484 for repair and maintenance work performed by Schindler on Phase 2 elevators (elevator nos. 7 and 8) in 2015, and \$33,827 for repair work for defects or latent defects and warranty work that Schindler performed on the elevators in 2015 and 2016.

[441] I accept Daniel Wierec's evidence that B&M invoiced WBP for the amount of \$7,141.75 elevator maintenance work in April 2016, and that \$4,342 represents the difference between the amount invoiced and the \$400 per elevator per month alternates rate. Since, as I have found above, Schindler's warranty and maintenance obligations ended prior to April 2016, Schindler was not bound by any of the alternates pricing. The \$4,342 is thereby not an amount for which Schindler is required to indemnify WBP pursuant to Exhibit A, Article 9.3 of the subcontract, and Article 7.17 does not apply.

[442] Mr. Wierc's affidavit evidence is that Schindler improperly billed B&M the total amount of \$24,484 to complete work subject to its two-year warranty obligation under the subcontract, and further billed B&M the total amount of \$33,827 for elevator warranty work performed in 2015 and 2016 when Schindler's warranty obligations remained in effect. No evidence other than Change Order No. 210068S24-008 was tendered to support these claims.

[443] The \$24,484 figure is derived from a spreadsheet entitled, "WCH Project- Schindler Invoice Reconciliation May 2S, 2016 JS-TS-DW-JF May 31 drw" appended to the change order. That spreadsheet identifies 21 invoices with a notation stating, "Schindler agreed to strike, part of Schindler contract" (excepting two invoices, which do not have that notation), totalling \$24,484. The \$33,827 figure is also derived from the same spreadsheet, which identifies 19 invoices with various notations, totalling \$33,827. The totality of evidence on these amounts is the spreadsheet and Mr. Wierc's statements that, with respect to the \$24,484 amount, "Schindler charged these amounts despite the work occurring during the warranty period under the Schindler Subcontract" and, with respect to the \$33,827 amount, "Schindler's warranty obligations were still in effect at this time."

[444] This evidence is insufficient proof of the amounts being invoiced or the nature or extent of work allegedly performed by Schindler that is alleged to have been properly addressed pursuant to its warranty obligations. The invoices are not in evidence, nor is there evidence regarding the work performed supporting that such work is properly found to be warranty work that Schindler was obliged to perform at its own expense. Regarding the \$24,484 amount, there is also no evidence supporting that Schindler "agreed to strike" any amounts, as reflected in the chart. WBP has not met its evidentiary onus regarding this portion of its claim. Neither amount is one for which Schindler is required to indemnify WBP pursuant to Exhibit A, Article 9.3 of the subcontract, and Article 7.17 does not apply.

[445] Given the foregoing, I find that none of the amounts comprising the "elevator penalties" claim, paid to B&M by WBP pursuant to the minutes of settlement, are subject to indemnification by Schindler. I thereby need not address the acknowledged credit for valid invoices by Schindler to B&M. If those invoices remain unpaid, it is a matter between Schindler and B&M.

vi. Overhead and profit

[446] WBP argues that it is entitled to its general overhead and profit on amounts found payable by Schindler, as expressly contemplated by Exhibit A, Article 9.3. WBP relies on Alex Staley's quantification of overhead and profit at 5%, on which Mr. Staley was not cross-examined. Mr. Staley accounts for a 5% markup for "WBP Overhead and Profit" in his calculations, but provides no opinion on why that percentage markup is used or the basis for the markup. However, I accept that WBP's actual loss for reimbursable costs as I have found them would be greater than the amount actually expended had they been compensable extras. I accordingly accept that some markup for overhead and profit is commercially reasonable in all the circumstances, and find that 5% is an appropriate amount.

[447] I note, however, that although I did not allow WBP's damages claim for B&M's productivity losses, liquidated damages, and impact costs assessed by WCH, I would not have granted the 5% markup for overhead and profit on these damages, as done by Mr. Staley. These damages are not of the same character and no explanation or justification was provided by WBP for overhead and profit being applicable to these amounts.

vii. Summary of determinations on WBP's damages claim

[448] Based on the foregoing, I have found that WBP's claim, properly set-off against amounts owing to Schindler, is proven in the amount of \$51,653.79, inclusive of HST, calculated as follows:

Work Performed on Behalf of Schindler

Temporary work platforms (item no. 4)	\$ 1,702.09
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Delay Impact Costs

Storage of millwork (item nos. 17-18)	\$ 12,358.00
Accelerated work for isolation pads (item no. 51)	4,800.00

Work to Mitigate Schindler Delays

Material hoist fill-in (item no. 13)	\$ 5,974.50
Crane rental (item no. 15)	2,310.00
Accelerating curtainwall enclosure (item no. 16)	<u>16,390.00</u>
Subtotal	\$ 43,534.59
Overhead and profit (5%)	<u>2,176.73</u>
Revised subtotal	\$ 45,711.32
HST	<u>5,942.47</u>
Total	<u>\$ 51,653.79</u>

viii. Impact of settlement with Yuanda

[449] Given the findings above, I need not address the impact of WBP's settlement with Yuanda. My determinations are such that there will be a net amount owing to Schindler, not WBP, and the set-offs I have allowed, with one exception, arise from direct causation flowing from Schindler's breaches of the subcontract, rather than project delays caused or materially contributed to by Schindler and others, including Yuanda.

e. Lien entitlement and quantification

[450] Accounting for allowed set-offs against the earned and unpaid amounts owing to Schindler, the net result is that Schindler is still owed the sum of \$650,786.20, inclusive of HST. Taking into account the payment made after Schindler preserved its lien, I accordingly find that Schindler was entitled to a lien in the amount of \$778,907.85 at the time of preservation and perfection, and that

the value of Schindler's lien was reduced by the payment of \$128,121.65 on March 11, 2016, such that the amount of Schindler's lien entitlement is \$650,786.20, inclusive of HST.

[451] Not addressed above is WBP's claim of \$11,472 for costs of the lien bond obtained to vacate Schindler's lien from the WCH Project. Daniel Wierc's affidavit evidence confirms that the amount is comprised of \$4,452 paid to WBP's broker to arrange the lien bond, and two amounts of \$3,510 invoiced to Bondfield for the lien bond and lien bond renewal. I have found that Schindler was entitled to a lien in the amount of \$778,907.85 at the time of preserving the lien, so it follows that WBP would always have been required to vacate Schindler's lien. Since there is no evidence supporting that these costs would have been any less if a lien bond for a lower amount was required, I find no basis to further reduce the amounts found owing to Schindler.

f. Bond claim

[452] I have found that no amounts are owing to WBP by Schindler. Accordingly, there are no amounts for which Zurich would be required to indemnify under the performance bond if a valid claim on the bond was made by WBP. There is accordingly no need to assess whether WBP complied with the requirements of Schindler's performance bond in advancing its bond claim.

IX. CONCLUSION

[453] For the foregoing reasons, I find that Schindler is entitled to a lien in the amount of \$650,786.20, inclusive of HST, and judgment against WBP in the same amount, plus pre-judgment interest. The actions in Court File Nos. CV-15-536536-A1 and CV-15-543296 are dismissed.

X. INTEREST & COSTS

[454] Since the parties were not ready to file bills of costs at the conclusion of trial, they were directed to exchange and file their bills of costs on a timetable to be agreed. I understand that the parties' bills of costs have been served and filed as directed.

[455] The parties are encouraged to settle the rate and calculation of pre-judgment interest, the rate of post-judgment interest, and costs. If agreement cannot be reached, then the parties' submissions on both interest and costs shall be made in writing. Schindler and Zurich shall deliver written costs submissions by February 10, 2021. WBP shall thereafter deliver its responding costs submissions by March 5, 2021. Schindler and Zurich shall thereafter be entitled to deliver reply cost submissions, if any, by March 12, 2021. Absent leave of the court, written submissions of the parties shall not exceed ten (10) pages, excluding any offers to settle or case law, with any reply submissions not to exceed five (5) pages.

[456] Service of all costs submissions by email is hereby authorized. All costs submissions shall be submitted by email directly to me or my Assistant Trial Coordinator with a scanned copy of proof of service. Hard copies of costs submissions and original proof of service need only be filed

if the court so directs. In the absence of receiving written submissions as directed above, the parties shall be deemed to have agreed on costs.

XI. REPORT

[457] The parties shall prepare and file a draft report substantially in the form prescribed by the *CLA*, with any necessary modifications. The draft report shall be submitted by email directly to me or my Assistant Trial Coordinator in Word format by no later than the deadline for reply costs submissions. If the parties are unable to agree on the form of final report, then a hearing may be required to settle it.

[458] Counsel for the parties are to be commended on their cooperation, collegiality and organization throughout the course of what was a lengthy and complex trial. I am indebted to all counsel for their professionalism and candour as well as for the very helpful written materials filed on behalf of their respective clients. Conduct of counsel throughout the course of this trial, and in preparation for it, was a model example of how counsel can effectively work together to assist the court in presenting the case without derogating from capable and staunch advocacy for a client's interests.

MASTER TODD ROBINSON

Released: January 18, 2021

ERRATUM: Following release of these reasons for judgment, an inadvertent misspelling of a counsel's name was identified. In addition, misspellings of party or witness names and two minor typographical errors were identified in paragraphs 72(f), 166, 185, 215, 264, 271, 273, 429, 441, and 451. On January 19, 2021, these inadvertent errors were corrected and the decision re-sent to counsel for the parties.

CITATION: Schindler Elevator Corporation v.
Walsh Construction Company of Canada,
2021 ONSC 283

COURT FILE NO.: CV-15-540309

DATE: 2021 01 18

ONTARIO
SUPERIOR COURT OF JUSTICE

IN THE MATTER OF the *Construction Act*, RSO 1990,
c. C.30, as amended

B E T W E E N :

SCHINDLER ELEVATOR CORPORATION

Plaintiff

- and -

WALSH CONSTRUCTION COMPANY OF
CANADA, BONDFIELD CONSTRUCTION
COMPANY LIMITED, WALSH
CONSTRUCTION/BONDFIELD PARTNERSHIP
and WOMEN'S COLLEGE HOSPITAL

Defendants

REASONS FOR JUDGMENT

Master Todd Robinson

Released: January 18, 2021