Ex_I_T_1_S_8_Attach_5

East-West Tie Line Project

REPORT OF FINDINGS

SCHEDULE DELAY, IMPACT ISSUES

& ASSOCIATED ADDITIONAL COSTS

July 14, 2021

CHRISTOPHER E. ANDERSON
C2G INTERNATIONAL, LLC
27412 Aliso Creek Road
Aliso Viejo, CA 92656
T: 307-263-1999
canderson@c2gi.com

ROBERT T. ADAMS
C2G INTERNATIONAL, LLC
27412 Aliso Creek Road
Aliso Viejo, CA 92656
T: 949-387-9400 Ext. 264
radams@c2gi.com

Consultants for Valard Construction, LP

Table of Contents

Table of Exhibits

Exhibit 24	Graphic Illustration: Tower Steel Deliveries
Exhibit 25	Graphic Illustration: Schedule Comparison: C.O. #1 Baseline vs. Schedule Adjusted for Steel Delivery Impacts vs. June 2021 Valard Forecast
Exhibit 26	Industry Study: Empirical Productivity Impacts of the Novel Coronavirus
Exhibit 27	Industry Study: The Silver Lining of Construction Productivity and COVID-19
Exhibit 28	Industry Study: Early Impacts of the COVID-19 Pandemic on the United States Construction Industry
Exhibit 29	Industry Study: Mental Health During COVID-19 Outbreak
Exhibit 30	Industry Study: COVID-19-Related Mental Health Effects in the Workplace
Exhibit 31	Industry Study: Both Remote and On-Site Workers are Grappling with Serious Mental Health Consequences of COVID-19
Exhibit 32	Industry Study: An Analysis of the Psychological Anxiety Factors of Construction Workers
Exhibit 33	Industry Study: Analyzing Psychological Conditions of Field-Workers in the Construction Industry
Exhibit 34	Industry Study: Mental Health Policies and Programmes in the Workplace
Exhibit 35	Industry Study: How Anxiety Can Affect Our Attention and Concentration at Work and What to Do About It
Exhibit 36	Industry Study: Why Anxiety Is the Number One Productivity Killer
Exhibit 37	Industry Study: A Systematic Review of the Prevalence of Anxiety Symptoms During Coronavirus Epidemics
Exhibit 38	Industry Study: Both Remote and On-Site Workers are Grappling with Serious Mental Health Consequences of COVID-19
Exhibit 39	Industry Study: UK Construction Counts the Productivity Cost of COVID-19
Exhibit 40	Industry Study: COVID-19 Construction Productivity Changes
Exhibit 41	Industry Study: Pandemics and Construction Productivity: Quantifying the Impact
Exhibit 42	Industry Study: Pandemics and Productivity: Quantifying the Impact
Exhibit 43	Graphic Illustration: Change Order No. 1 As-Planned Right-of-Way Work
Exhibit 44	Graphic Illustration: Owner Permit Release Dates + ROW Clearing & Access – As-Planned vs. As-Built
Exhibit 45	Graphic Illustration: Owner Permit Release Dates + ROW Clearing & Access – As-Planned vs. As-Built – WF 01

Exhibit 46	Graphic Illustration: Owner Permit Release Dates + ROW Clearing & Access – As-Planned vs. As-Built – WF 05
Exhibit 47	Graphic Illustration: Owner Permit Release Dates + ROW Clearing & Access – As-Planned vs. As-Built – WF 06
Exhibit 48	Graphic Illustration: Permit Release Dates – P6 Change Order No. 1 Baseline vs. As-Built, with Foundation Probe Dates
Exhibit 49	Graphic Illustration: Permit Release Dates – P6 Change Order No. 1 Baseline vs. As-Built, with Foundation Probe Dates
Exhibit 50	Graphic Illustration: As-Built – ROW Clearing, Access Roads and Foundation Work
Exhibit 51	Graphic Illustration: Structure Work As-Earned vs. As-Built (structure hauling, assembly & erection)
Exhibit 52	Graphic Illustration: Structure Setting – Period 3
Exhibit 53	Graphic Illustration: Material Management Staffing Comparison – As-Planned vs. As-Built/Forecasted
Exhibit 54	Damages Analysis: Equipment Mobilized to Site During Initial Work Start Delay Period
Exhibit 55	Damages Analysis: Standby Equipment Costs During Initial Work Start Delay Period
Exhibit 56	Damages Analysis: Field Overhead Costs During Initial Work Start Delay Period
Exhibit 57	Damages Analysis: Escalation Costs resulting from Initial Work Start Delay
Exhibit 58	Damages Analysis: Equipment Costs During Remaining Delay Period
Exhibit 59	Damages Analysis: Field Overhead Costs During Remaining Delay Period
Exhibit 60	Damages Analysis: Escalation Costs resulting from Remaining Delay
Exhibit 61	Damages Analysis: Right-of-Way Impact Costs
Exhibit 62	Damages Analysis: Right-of-Way COVID Mitigation Tracking and Productivity loss Costs
Exhibit 63	Graphic Illustration: COVID-19 Subcontractor Costs (Actual + Forecast)
Exhibit 64	Damages Analysis: Foundation Type Changes (Unforeseen Soil Conditions) Backup Data
Exhibit 65	Damages Analysis: Foundation Type Changes (Owner Directed Relocations) Backup Data
Exhibit 66	Damages Analysis: Foundation Work Inefficiency / Constructability Losses Backup Data
Exhibit 67	Damages Analysis: Foundation Work COVID Mitigation Tracking and Productivity loss Costs Backup Data

Exhibit 68	Damages Analysis: Structure Work COVID Mitigation Tracking and Productivity loss Costs Backup Data
Exhibit 69	Damages Analysis: Stringing Work COVID Mitigation Tracking and Productivity loss Costs Backup Data
Exhibit 70	Damages Analysis: Materials Management Work COVID Mitigation Tracking and Productivity loss Costs Backup Data
Exhibit 71	Damages Analysis: Kama Cliffs Work Added Costs Backup Data
Exhibit 72	Damages Analysis: Water Crossings Work – List of Crossings
Exhibit 73	Damages Analysis: Water Crossings Work Added Costs Backup Data
Exhibit 74	Damages Analysis: Water Crossings Work Added Costs Backup Data (determination of Average Crossing Cost)
Exhibit 75	Damages Analysis: COVID Direct Costs Tracked Discretely Backup Data
Exhibit 76	Damages Analysis: COVID-19 Other Direct Costs (Air Travel) Backup Data
Exhibit 77	Damages Analysis: COVID-19 Subcontractor Claims Backup Data
Exhibit 78	Graphic Illustration: Camp Operations Summary Schedule Comparison
Exhibit 79	Damages Analysis: Camp Operations Delay Costs Backup Data

1. Introduction

1.1 Nature of Engagement

Christopher E. Anderson and Robert T. Adams of C2G International, LLC ("C2G") have been retained by Valard Construction, LP ("Valard"), to review and analyze contemporaneous Project records and develop opinions related to causation and responsibility for the schedule delay, impact issues and cost overruns experienced during the construction of the East-West Tie Line Project ("Project"). Valard is the prime contractor on the Project and was engaged by NextBridge Infrastructure, LP ("Owner").

The opinions and analyses presented in this report are based on currently available information. As of the date of this report, the Project is ongoing. C2G and Valard have not had access to the majority of the Project documentation within the files of the Owner and/or its agents. Hence, the conclusions contained herein should be considered preliminary and are subject to change.

1.2 Executive Summary

As established herein, major impacts resulting in schedule delays and subsequent acceleration have dramatically increased Valard's cost to construct the Project. The major impacts and delays can generally be ordered based on the flow of the work on the Project, which generally aligns with the sequence in which the issues came about. These major impacts and delays are grouped as follows:

- Late, Out-of-Sequence and Piecemeal Owner Permits;
- Late, Out-of-Sequence and Piecemeal Owner Steel Deliveries; and,
- COVID-19 Pandemic.

The major impacts and delay issues that have occurred on this Project to date have had a compounding effect on Valard's ability to perform the work on the Project in the efficient and cost-effective manner upon which it based its original bid. Certainly, major impacts on construction projects often result in schedule delays and cost increases, however, the adverse effects can often be overcome to some extent through resequencing, work arounds and adding resources to mitigate the problem. On this Project, the successive major impacts that occurred, in combination with the inter-related nature of both the impacts and the work, made it impossible for Valard to gain any of the momentum required to even begin the process of working its way back to its original plan for construction.

The first major impact to the Project resulted from extensive Owner permit work release delays. For the first three full months of the Project (August 1, 2019, to October 31, 2019) no work could be performed by Valard due to Owner permit delays. In fact, for the entire first winter work, when most of the right-of-way work was originally planned to have been completed, Valard was only able to complete approximately one-third of the work due to access restrictions.

The Owner permit delays continued through the calendar year 2020. The final Owner permit approvals came more than 18 months into the Project, and the approval delay at each tower site averaged 224 days, or more than seven months. Moreover, there was no logic and/or sequence to the way in which the Owner permit approvals occurred. As a result, Valard had no ability to properly plan and organize its resources for the Project. In fact, during the first season of work on the Project Valard had no choice but to go where it could and complete what it could, regardless of efficiency and/or cost effectiveness.

To make matters far worse, another major impact issue began to reveal itself within the first few months after the start of work in the field. From the outset of work on the Project, the Owner-furnished tower steel has been delivered to the site substantially later than planned and completely out-of-sequence. Again, there has been no logic and/or sequence to the way in which the Owner tower steel deliveries have occurred. And again, Valard has had no ability to properly plan and organize its resources for the Project. Instead, Valard has been forced to endure a materials management quagmire while attempting to maintain some semblance of progress by "robbing" missing tower steel parts from any available inventory to support ongoing tower assembly and erection.

Due to the out-of-sequence and late deliveries, coupled with the Owner's direction to work towards an accelerated March 2022 completion, Valard has been left to find whatever parts that will work to progress the towers needed for field assembly and erection, regardless of the intended tower type and/or location. While this has helped to mitigate some of the schedule impacts associated with the late Owner deliveries, it has also introduced significant inefficiencies in all aspects of the structure work.

Finally, and layered on top of the two major impact issues above, the world, and this Project was hit with the COVID-19 pandemic. However, in the case of this Project, since both permit approvals and tower steel deliveries were late and out-of-sequence, the effects of the pandemic was to make an already bad situation much worse. Numerous industry articles and studies included with this report identify a significant loss of productivity by comparing conditions during the pandemic to "normal" operations. Unfortunately, nothing on this Project was "normal" (i.e., going as planned) when the pandemic started.

Without question, additional schedule delays have incurred as a result of COVID-19. In fact, the permit process and steel deliveries have most certainly also been impacted by COVID-19. Without question, the rate at which permits were being approved declined significantly starting in March 2020. Similarly, tower steel deliveries declined significantly starting in the spring of 2020. While relatively strong deliveries continued through May of 2020, beginning in June 2020, presumably after parts in transit at the onset of the pandemic had arrived at the site, deliveries plummeted to an average of less than 2,000 pieces for the next three months (a 70% reduction from prior months).

Of course, the productivity loss associated with COVID-19 has also had a significant impact on schedule. Without consideration of any mitigation measures, the time loss outlined herein would translate to approximately three months of delay since March 2020. But again, this delay coincides with the ongoing delays associated with Owner permits and tower steel delivery, which themselves were likely impacted by COVID-19. Consequently, the delays on the Project are both overlapping and interrelated and cannot be isolated individually.

Valard is currently forecasting substantial completion of the Project (Provisional Acceptance) at the end of March 2022, approximately five months later than planned after the execution of Change Order No. 1, which had initially extended the Project by nearly a full year also due to Owner permit delays. The details of our analysis outlined within this report, clearly establish that Valard is entitled to a full time extension under the terms of the Contract, and that Valard has overcome significant additional schedule delays through its mitigation efforts implemented to accelerate the completion of the remaining work on the Project.

Of course, the major impact issues, the resulting schedule delays, and the efforts to accelerate completion have dramatically increased Valard's cost to complete the

Contract work. Valard's cost increases include, among others, labor inefficiencies, material overruns, added supervision and extended field overhead costs. The successive nature of the three major impacts outlined above, in combination with the inter-related nature of both the impacts and the work, have had a compounding effect on Valard's ability to pursue the work on the Project in accordance with its original bid and Change Order No. 1. Furthermore, the quantity and magnitude of the resulting impacts plagued Valard's ability to efficiently and cost effectively perform the Contract work. As a result, Valard has, and will continue to incur substantial unanticipated additional costs on the Project.

As summarized below, Valard is entitled to the issuance of a Change Order under the Contract providing for an equitable adjustment in the amount of **$163,363,285** (excluding applicable taxes).

Delay Costs:	
Initial Work Start Delay Costs (1-Aug-19 to 31-OCT-19)	
Equipment Standby Costs	$2,989,560
Field Overhead Costs	$3,544,366
Escalation Costs	$1,383,057
Subtotal – Initial Work Start Delay Costs	**$7,916,983**
Remaining Delay through Completion (1-Nov-19 to 31-May-22)	
Equipment Standby Costs	$5,891,897
Field Overhead Costs	$11,079,496
Escalation Costs	$1,383,057
Subtotal – Remaining Delay Costs	**$18,354,450**
Total – Added Time-Related Costs	**$26,271,433**
Right-Of-Way Costs:	
Inefficiency and Impact costs	$21,908,438
COVID-19 Costs	$3,468,587
Total – Right-of-Way Costs	**$25,377,025**
Foundation Costs:	
Foundation Type Changes (Unforeseen Soil Conditions)	$900,310
Foundation Type Changes (Owner Directed Relocations)	$117,111

Foundation Type Changes (Acceleration)	$3,436,714
Foundation COVID-19 Costs	$4,200,011
Foundation Inefficiency / Constructability Losses	$3,512,324
Total - Foundation Work Costs	**$12,166,470**
Structure Work Costs:	
Structure Work COVID-19 Costs	$15,350,141
Structure Work Inefficiency	$13,991,569
Total - Structure Work Costs	**$29,341,710**
Stringing Work Costs:	
Stringing Work COVID-19 Costs	$11,242,034
Stringing Work Inefficiency	$2,583,212
Total - Stringing Work Costs	**$13,825,246**
Materials Management Costs:	
Materials Management Work COVID-19 Costs	$3,395,824
Materials Management Work Delay / Inefficiency	$5,316,843
Total - Materials Management Work Costs	**$8,712,667**
Kama Cliffs Costs:	**$5,680,037**
Water Crossing Costs:	**$6,535,506**
COVID-19 Additional Costs:	
COVID-19 Direct Costs Tracked Discretely	$9,598,789
COVID-19 Other Direct Costs (Air Travel)	$5,845,543
COVID-19 Subcontractor Claims	$5,519,893
Total - COVID-19 Additional Costs	**$20,964,225**
Camp Costs:	**$9,730,812**
Subtotal	**$158,605,131**
Supercom Fees (3% per Contract Exhibit X (Part 1) – Appendix 1)	$4,758,154
Total	**$163,363,285**

1.3 Qualifications of Christopher E. Anderson

I am an Executive Director of C2G, an independent consulting firm. C2G has more than 50 professionals experienced in schedule analyses, project management construction accounting and engineering, with offices in Aliso Viejo, California; Atlanta, Georgia; and Charleston, South Carolina. I previously worked for other national and international construction and litigation consulting firms, including Construction Management Services Company, LLC, Navigant Consulting, Inc. and A.W. Hutchison, LLC.

I have more than 35 years of overall experience in the construction industry and spent approximately 15 years working for general contractors performing a variety of construction activities on projects in the southeastern part of the United States (Georgia, Alabama, Tennessee, South Carolina, and Florida). During my tenure in construction, I initially worked in the field as a laborer, pipefitter, equipment operator and foreman on heavy civil construction projects. Subsequently, I held various management positions including assistant project manager, project manager and senior project manager. My responsibilities during this period included all aspects of project planning, management, scheduling, coordination, shop drawing review and submittal, material procurement, pay requests and communications with project owners and engineers. Throughout my time working in construction, I also prepared bid estimates on numerous construction projects.

As a construction consultant, I regularly provide services and offer expert opinions on all aspects of estimating, scheduling, construction management, project risk management, damages quantification and dispute resolution. I have been retained to provide consulting and testifying expert services for construction related labor productivity, schedule analysis, delay and impact evaluations, project management and damages analysis. I have performed these types of analyses on projects located throughout the world, including many large-scale projects in Canada.

During my tenure in the construction business, I have constructed and analyzed numerous large heavy civil projects involving extensive earthwork, concrete, and structural steel installations, including:

- **Projects Constructed:**
  - Anheuser-Busch, Inc. Pretreatment Facility, *Georgia*
  - Douglasville Wastewater Treatment Plant, *Georgia*

- Rose Creek Water Treatment Plant, *Georgia*
- Santee Cooper Surface Water Treatment Plant, *South Carolina*
- Summerville Wastewater Treatment Plant, *South Carolina*

- **Projects Analyzed:**
  - Brucejack Transmission Line Project, *British Columbia*
  - Eastern Alberta Transmission Line, *Alberta*
  - Jefferson-Martin Transmission Project, *California*
  - Labrador Island Link Transmission Line, *Newfoundland and Labrador*
  - OMPPA Transmission Project, *California*
  - Sunrise Power Link Transmission Line, *California*

As a construction consultant, I have been qualified as an expert and have offered expert opinions related to construction management, delay and impact evaluation and damage calculations. I have been qualified to testify as an expert witness and have testified in formal litigation proceedings on 23 separate occasions (including US State and Federal Courts, US Armed Services Board of Contract Appeals proceedings, US arbitration and ICC arbitration).

A copy of my current biography is attached hereto as **Exhibit 1**.

1.4 Qualifications of Robert T. Adams

I am a Director of C2G based out of the Aliso Viejo, CA office. I previously worked for other national and international construction and litigation consulting firms including Analytical Management Solutions, SNC Lavalin, Inc., Halliburton, and Fluor.

I currently hold a PMP (Project Management Professional) designation, which I received in 2013. I also obtained an associates degree in Accounting which I received in 1997 from ICS College in Ontario, Canada.

I have more than 26 years of overall experience in the engineering and construction industry, with over 18 years spent specifically in the oil/gas and mining industry. I have spent the other approximately eight years working as a consultant in construction claims and dispute resolution for owners and general contractors for a variety of projects throughout the United States, Canada and the Middle East. During my tenure in engineering and construction, I worked in the United States and Canada as an onsite project scheduler, engineering lead planner, project controls lead and document control manager.

My specific construction experience includes the development and maintenance of detailed construction and engineering schedules, often in excess of 30,000 activities. I also performed quantitative and qualitative risk analysis on projects in excess of $4B. These specific projects include:

- Keystone XL Pipeline, *Houston, Texas*
- Syncrude UE-1 Upgrader, *Fort McMurray, Alberta, Canada*
- Husky Debottlenecking Project, *Lloydminster, Alberta*
- CNRL Horizon Oil Sands Project, *Fort McMurray, Canada*
- Jansen Potash Project, *Saskatchewan, Canada*
- Chevron, *Tengiz, Kazakhstan*

During my tenure as a consultant, I have performed delay analysis and schedule forensics for other projects such as sports facilities, industrial sites, pharmaceutical labs, resorts and residential mixed-use construction, including:

- Tampa Bay Buccaneers Stadium, *Tampa, Florida*
- Broadcom Inc Headquarters, *Irvine, California*
- Academy Museum of Motion Pictures, *Los Angeles, California*
- Jordan Cove LNG Project, *Oregon*
- Shire Pharmaceuticals, *Glendale, California*

- Texas Rangers Stadium, *Arlington, Texas*
- RTA Terminal A Extension, *Kitimat, BC, Canada*

As a construction claims consultant, I have assisted the principals with mediation and settlement presentations at meetings and have offered my expert opinions related to construction management, and delay and impact evaluation.

A copy of my current biography is attached hereto as **Exhibit 2**.

1.5 Methodology

C2G utilizes various schedule analysis methodologies depending on the project, the assignment, and the available data. However, C2G most often uses a combination of methodologies, which as a whole is generally referred to in the industry as a retrospective evaluation of the actual facts and events that occurred during the project and relies upon a detailed evaluation of what actually happened. C2G refers to this retrospective evaluation as an As-Planned vs. As-Built Critical Path Analysis. This methodology should not be confused with other methodologies having similar names that are criticized by some analysts as over-simplified. The C2G approach to forensic schedule analysis includes review of available schedules and updates (not just the As-Planned and the As-Built), as well as validation of the schedules' as-built data with contemporaneous project records (i.e., daily reports, RFIs, contemporaneous photos, correspondence, schedule updates, monthly reports, etc.).

The C2G analysis methodology also includes review of the contemporaneous progress of the work and the corresponding critical path as the project progressed forward (commonly referred to as a "Windows Analysis" and/or a "Time Impact Analysis"). Therefore, C2G includes various methodologies in its analysis to minimize subjectivity and maximize the objective benefits in order to identify and quantify the actual delays

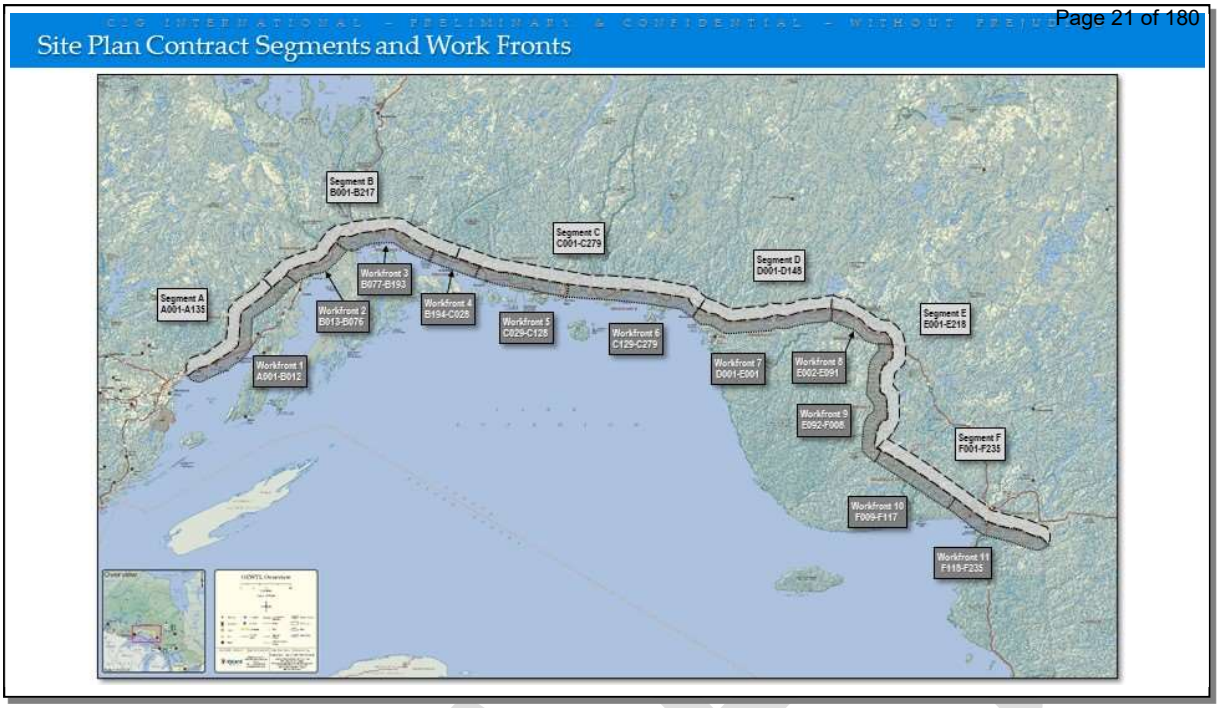
to the project. For purposes of summarizing this analysis, C2G has performed the following basic tasks:

1. Identify the as-planned schedule(s) that establish the most accurate representation of how the parties agreed to perform the work, prior to any delay or impact (commonly referred to as the Baseline Schedule; the Contract Schedule; or the Project Schedule);
2. Develop and review detailed as-built schedule data (utilizing available contemporaneous Project records);
3. Perform an analytical comparison of the as-planned schedule to the as-built schedule to identify and quantify discrete impacts, periods of delay, and periods of acceleration;
4. Research the contemporaneous Project records to determine responsibility for the impacts and delays; and,
5. Analyze the cost of the work to specifically correlate the actual costs incurred to the impact issues identified so that damages can be quantified and assigned to the responsible party.

2. Project Background

On December 5, 2017, Valard entered into a Contract with the Owner to construct the Project consisting of an approximate 450 kilometer, double-circuit 230-kilovolt transmission line between transformer stations near Thunder Bay and Wawa Ontario [**Exhibit 3**].

The graphic depiction, included as **Exhibit 4** below, delineates the overall right-of-way, the six Contract defined Work Segments and the 11 Work Front areas defined by Valard.



The original Contract Agreement between the parties totaled $520,500,000. As of the date of this report, formal Contract Change Orders have been issued totaling $13,237,754.68, increasing the Contract Value to $533,737,754.68. The Contract specified that the Owner would furnish the structures (steel towers), the conductor, the optical ground wire (OPGW), and the overhead ground wire (OHGW). The Contract also specified the Owner would procure a significant majority of the permits required from provincial and federal regulatory agencies to allow for the start of field construction activities. Valard's work scope was generally comprised of all field installation work, including the following:

- Gates and Fencing: all equipment, labor and material to install all gates and fences where necessary.
- Temporary Culvert and Bridge Installation and Removal: all labor, material and equipment to install and remove all temporary culverts and bridges required to allow safe ingress and egress of all material deliveries and construction equipment.

- Permanent Culvert and Bridge Installation: all equipment, labor and material to install all permanent culverts and bridges as set out in Exhibit A to the Contract.
- Access Roads: all equipment, labor and material to perform all installation, grading, maintenance and removal activities required to allow safe ingress, and egress of construction equipment and material deliveries.
- Erosion Control: equipment, material and labor to install and maintain erosion and sedimentation control devices.
- Restoration and Reclamation: all equipment, labor and material to restore properties to the original contours and grades, except when necessary to establish an appropriate right-of-way for maintenance of the transmission line, and to establish set-up sites for maintenance of the transmission line.
- Excavation: all equipment, labor and material to drill and excavate structure and guy anchor foundations to the required dimensions and depth, and maintain the hole until the foundation, anchor and backfill material is installed.
- Foundations: all equipment, labor and material to design and install foundations and anchors.
- Structure Assembly and Framing: all equipment, labor and consumables to assemble the Owner provided structures.
- Structure Erection: all equipment, labor, material and consumables to install the Owner provided structures.
- Guying and Anchoring: supply, install and test all guys and anchors.
- Grounding and Bonding: supply, install and test ground rods and bond structures ground rods.
- Conductor, OPGW and OHGW: all equipment, labor and material to unload, install, splice, sag and clip Owner provided conductor, OPGW and OHGW.
- Permits: Exhibit H to the Contract required Valard to furnish the majority of municipal permits (building permit, noise, burning, etc.) and select provincial and federal permits as required (Crown land timber harvesting, burn permits, sign permits, transportation of dangerous goods and blasting permits).

Contract Exhibit C-1 included a tabular form schedule outlining the planned start and finish dates for each element of work within each Segment. Overall, the Contract contemplated the start of work on November 2, 2018, completion of all work through Guaranteed Provisional Acceptance on December 11, 2020, and Final Acceptance by May 13, 2021.

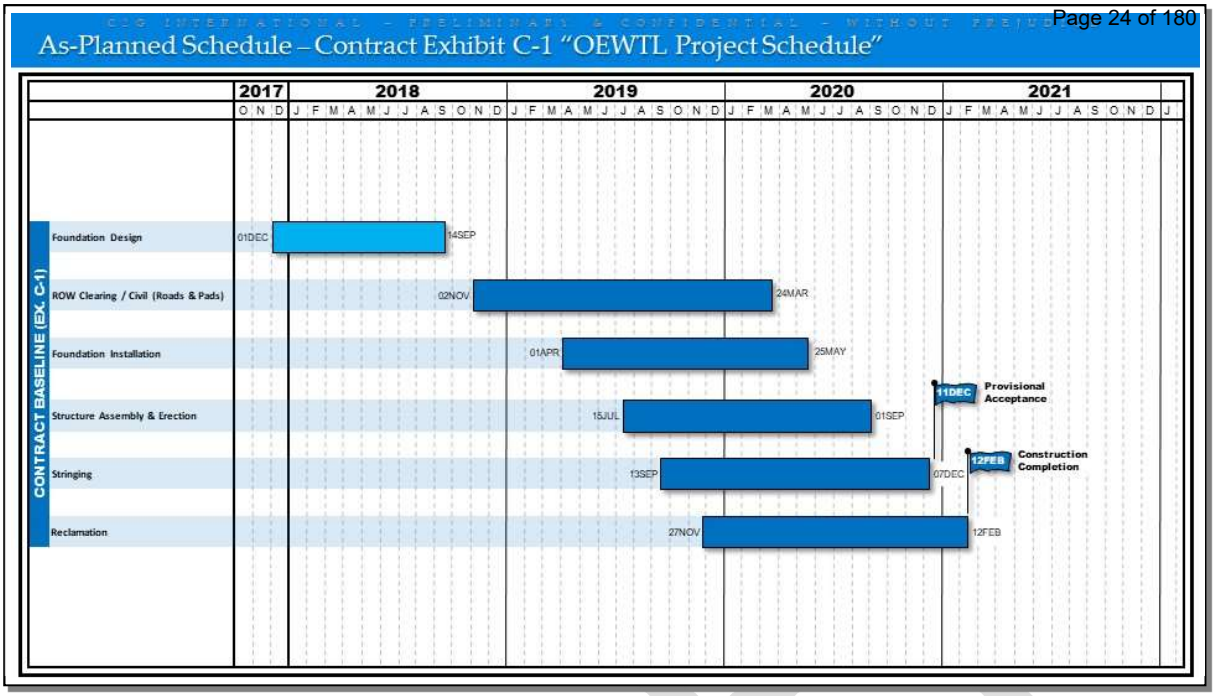
3. As-Planned Schedule

For purposes of this analysis, or any forensic schedule analysis, it is important to identify the schedule that establishes the most accurate representation of how the parties agreed the work would be performed, prior to any delay or impact (commonly referred to as the Baseline Schedule). The Baseline Schedule is then referenced for purposes of comparison with the as-built schedule data and measuring performance and/or delay.

Due to significant initial work start delays, which are discussed further in subsequent sections of this report, C2G considered three different schedules that were developed by the parties in the early stages of the Project: The Contract Baseline Schedule, the Change Order No. 1 Adjusted Contract Baseline Schedule, and the Revised March 2022 Completion Schedule.

3.1 Contract Baseline Schedule

As stated, the original Contract included an Exhibit C-1 tabular form schedule outlining the planned start and finish dates for each element of work within each Segment. The graphic illustration included as **Exhibit 5** below summarizes the dates and durations included in the Contract baseline schedule.



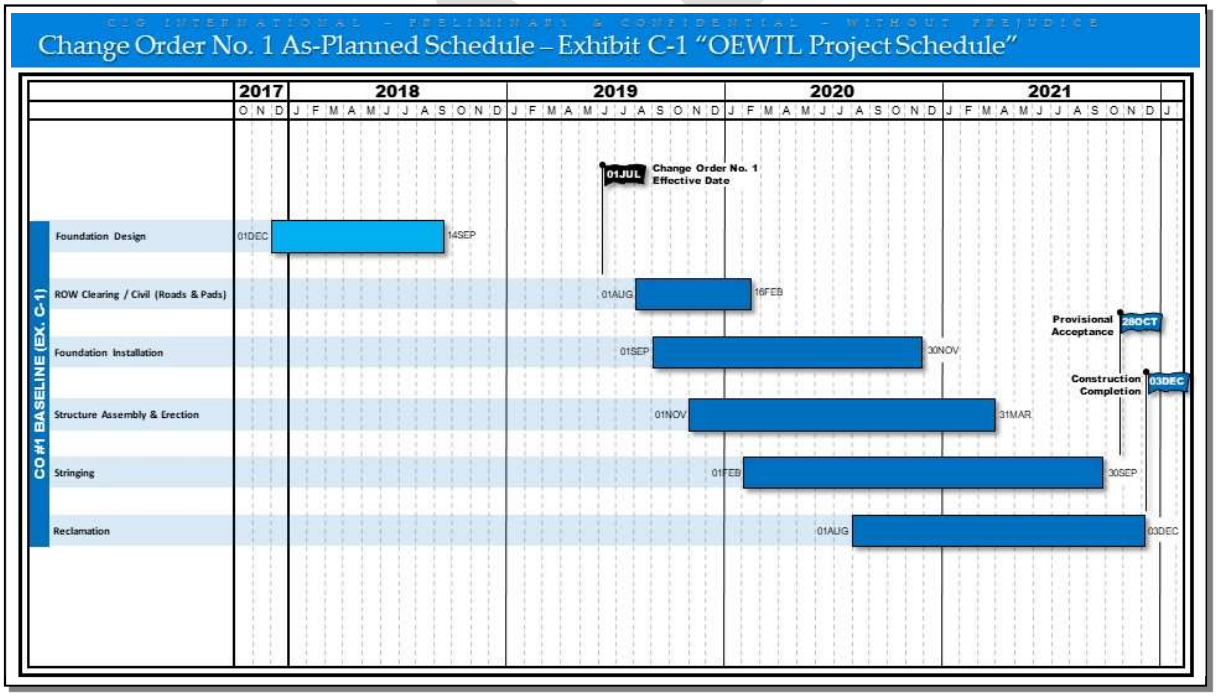
As indicated in the schedule summary shown above, the original Contract contemplated that during the first 11 months of the Project and prior to the start of any field construction, the foundation design would be completed. This work included the preparation of several different foundation design options based on expected soil conditions and structure type (i.e., Micropile, Drilled Shaft, Drilled Pile, Grillage, etc.), which could then be quickly designated after probing the soil at each tower site. Once access to the right-of-way was available (planned for November 2, 2018, at all segments pursuant to Contract, Exhibit C-1), Valard would probe the sites, select the predetermined foundation types, and submit the design to the Owner for approval. This approach was formulated to allow Valard to then prepare a detailed plan for the foundation construction work in advance of the start of physical work at the Project segments.

As indicated, the Contract contemplated Provisional Acceptance would occur on December 11, 2020, 770 calendar days after the start of field construction activities on November 2, 2018. The completion of the field installation work on the Project,

including right-of-way reclamation, which was to continue beyond Provisional Acceptance, was planned for 833 calendar days from November 2, 2018, to February 12, 2021.

3.2 Change Order No. 1 Adjusted Contract Baseline Schedule

Change Order No. 1, dated July 1, 2019, adjusted the time requirements of the Contract, stating in part that "OEB LTC approval was delayed causing the construction mobilization date to be re-scheduled from November 1, 2018 to August 1, 2019." As a result, Exhibit C-1 to the Contract was amended to reflect the work start delay. The graphic illustration included as **Exhibit 6** below summarizes the dates and durations included in the Contract baseline schedule.



As indicated, Change Order No. 1 shifted the planned start of field work to August 1, 2019, and contemplated that Provisional Acceptance would occur on October 28, 2021, 819 calendar days after the start of field construction work. The completion of the field installation work on the Project, including right-of-way reclamation, which was to

continue beyond Provisional Acceptance, was planned for 855 calendar days, from August 1, 2019, to December 3, 2021.

While the overall planned durations to Provisional Acceptance and the completion of all field work were extended (49 days and 22 days respectively), this effectively accounts only for the fact that the work was pushed over an additional spring thaw non-work period in 2021, a planned duration of approximately 42 days on this Project. Aside from this, the schedule was simply shifted to start field work on the Project approximately nine months later than contemplated in the original Contract.

Notably, as indicated on the illustration above, the Change Order No. 1 amended Exhibit C-1, but did not adjust the dates and durations for the foundation design work (all dates are the same as included in the original Contract). Nonetheless, at the time that Change Order No. 1 was issued, Valard was continuing to operate under the original concept for foundation pre-design, followed by soil probing and selection immediately following the provision of access to the right-of-way (planned for August 1, 2019, at all segments pursuant to the amended Change Order No. 1, Exhibit C-1).

3.3 Revised March 2022 Completion Schedule

After the execution of Change Order No. 1, the Project experienced significant additional work start delays due again to the Owner's inability to obtain the necessary permits to allow access to the right-of-way. No physical work in the field was able to be performed from the Change Order No. 1 adjusted start date of August 1, 2019, through October 2019. In early November, Valard was able to start some limited activity on the right-of-way based on initial piecemeal permit releases. However, by the end of 2019, only 4% of the civil, foundations and structures work had been completed (based on approved billings). In contrast, by the end of December 2019,

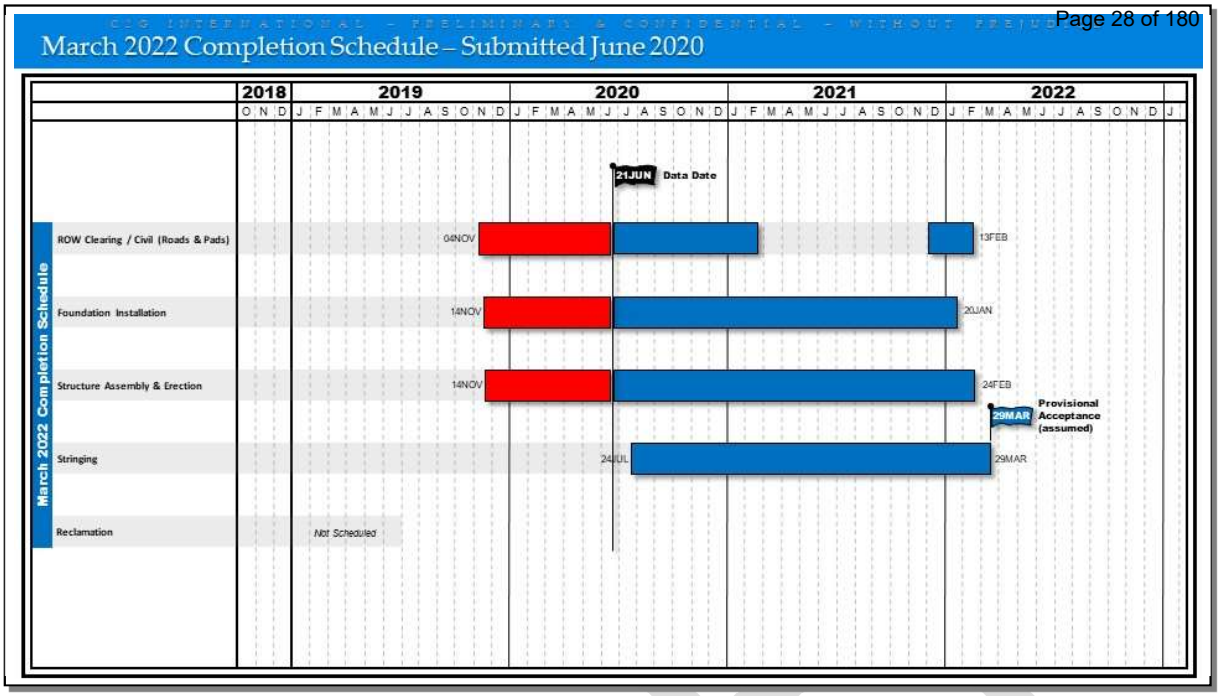
Valard's Change Order No. 1 plan contemplated the completion of approximately 73% of the civil work, 23% of foundation work and 6% of structures work.

Without question, in comparison to the Change Order No. 1 plan, very little work was accomplished in the planned five month work period in 2019. Moreover, due to the additional permitting delays at the outset of the Change Order No. 1 amended Project duration, the dates and durations included in the revised Exhibit C-1 were rendered invalid.

Of course, the parties recognize that the significant additional work start delays had been incurred. In fact, through May 2020, Valard's monthly reports to the Owner carried the following statements related to the delay:

- "The project has suffered delays from permitting due to the MNRF for clearing and road building, from private landowner agreements and due to land expropriation."
- "As discussed with NextBridge, an updated Milestone Schedule is pending final direction on the revised project schedule. No Milestone Schedule included in this report."

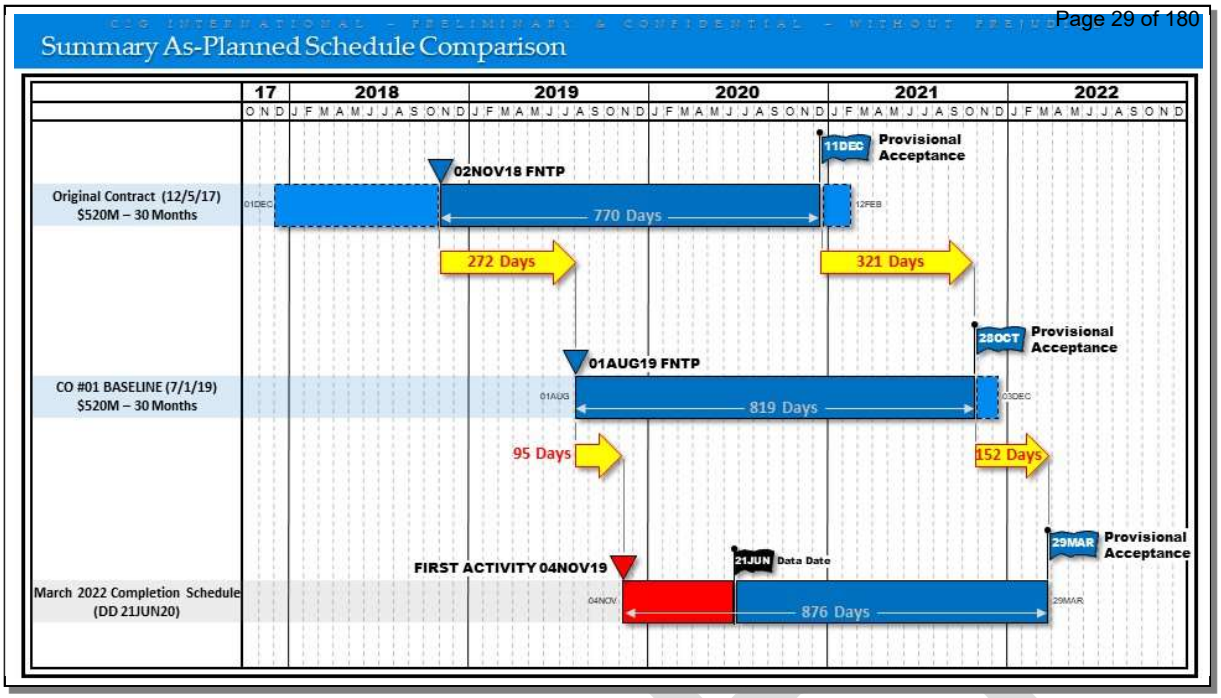
After the first pause in field activity for the 2020 spring thaw, in June 2020 Valard provided the Owner with a revised schedule, which forecasted completion in March 2022. While the Owner has not issued another formal Contract schedule amendment, from that point forward, the Project participants have been working towards the revised dates included in the Valard "March 2022 Completion Schedule" and the various updates to this schedule that have occurred to date. The graphic illustration included as **Exhibit 7** below summarizes the dates and durations included in the March 2022 Completion Schedule (as submitted in June 2020).



As indicated above, the Valard March 2020 Completion Schedule, with a data date of June 21, 2020, memorialized the actual start of field work on November 4, 2019, and forecasted overall completion of stringing work 876 calendar days later, on March 29, 2022. As stated, this is the completion date (Provisional Acceptance) that the parties have been working towards. While the schedule summarized above includes delays, which have not yet been resolved between the parties, it is clear the overall Project Provisional Acceptance date should be extended until at least March 29, 2022.

3.4 Summary of As-Planned Schedules

As discussed above, at the outset of this Project, significant delays and impacts were experienced. The graphic illustration included as **Exhibit 8** below summarizes the dates and durations included in the March 2022 Completion Schedule (as submitted in June 2020).



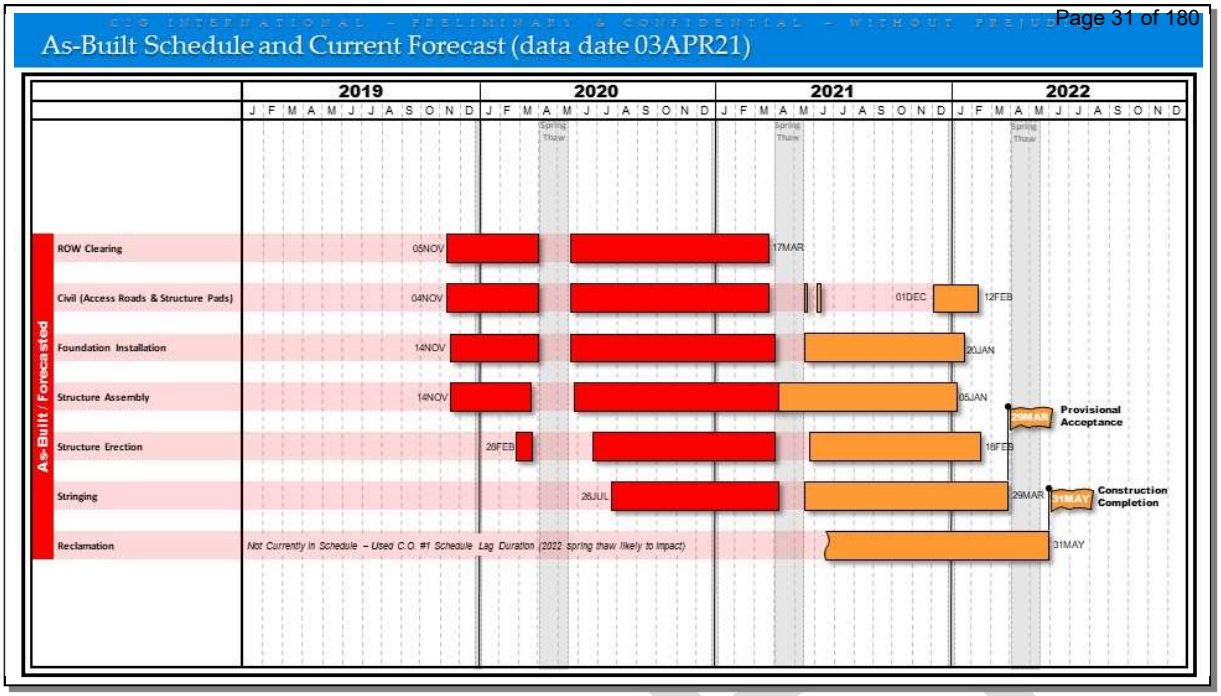
As indicated above and described earlier, substantial delays and impacts were incurred on the Project prior to the full release of field work. The start of initial field work activities was delayed approximately one year. Moreover, due to the shift into additional non-work periods (i.e., spring thaw and holidays), as well as the limited areas released by permits at the start of initial field work, the forecasted completion of field work activities was delayed by nearly 16 months.

As noted, the delays and impacts beyond Change Order No. 1 have not yet been resolved between the parties. Accordingly, our analysis has determined that the Change Order No. 1 schedule (the revised Contract Exhibit C-1 and the corresponding Valard Primavera schedule) represents the appropriate plan for construction and should be utilized to compare to the as-built schedule for purpose of identifying and quantifying additional delays and impacts to the work.

4. As-Built Schedule & Current Schedule Forecast

The next step in our analysis was to establish how the Project has actually been constructed to date and review the current forecast for completion. The establishment of the as-built schedule was accomplished by preparing a detailed "as-built" schedule. The as-built schedule contains information from the schedule updates prepared by Valard, as well as the contemporaneous Project records that have been maintained through the course of construction. This includes information such as: daily reports and production logs, weekly and monthly reports, labor expenditure reports, correspondence, photographs, and internal and external communications of the parties.

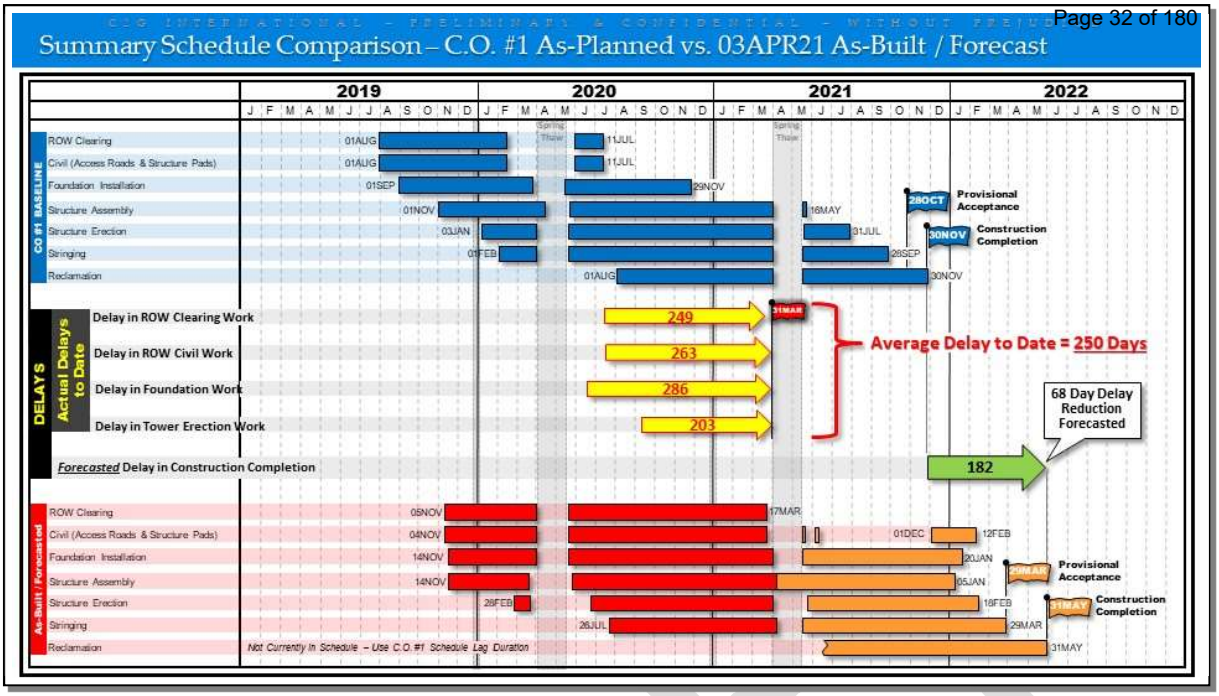
The source documents utilized in compiling the detailed as-built schedule information in our analysis is too voluminous to attach but is available for review as needed. However, C2G has included as **Exhibit 9** copies of a spreadsheets summarizing the daily work activities and production data through April 2021, as well as the most recent schedule update (data date 03APR21). This data forms the primary basis of the as-built schedule and current forecast. The illustrations, or "bar charts" included in this report, such as the summary of the as-built and current forecasted schedule included below as **Exhibit 10**, are graphic depictions that summarize the detailed as-built and forecasted information referenced above.



As indicated on the graphic illustration above, through its current schedule update, Valard has maintained the forecasted Provisional Acceptance date of March 29, 2022, as was established in its June 2020 Completion Schedule. Similar to the revised schedule submitted in June 2020, Valard has not yet updated the right-of-way reclamation portion of the schedule. While the reclamation work is certainly important to the completion of the Project, the Contract schedules have always contemplated that this work would extend beyond Provisional Acceptance, and to date, all Project participants have been focused primarily on maintaining the forecast for Provisional Acceptance in March 2022.

5. Comparison of the As-Planned & As-Built Schedules

The next step in our analysis was to compare the as-planned and as-built schedules to begin the process of identifying and quantifying the periods of Project delay and/or acceleration. A summary comparison of the planned versus actual performance is included below as **Exhibit 11**.



As indicated above, a comparison of the as-planned versus as-built schedule indicates a forecasted overall completion delay of 182 calendar days. However, this forecasted completion delay is the net of the delays incurred to date on the Project, plus acceleration (68 day delay reduction) that is anticipated by Valard to occur over the next one-year period through Provisional Acceptance on March 29, 2022, and Construction completion on May 31, 2022.

As indicated, through the current schedule data date (03ARR21), the average delay incurred in the primary field installation work activities averages 250 calendar days. The delay measurements through March 31, 2021, are based upon a comparison of completed quantities to date (from Owner approved billing data), versus the point in time in the Change Order No. 1 as-planned schedule when the same quantity of work was planned to have been completed. For example, the approved billings indicate that Valard had completed the erection of 618 towers as of March 31, 2021. Our analysis of the Change Order No. 1 baseline schedule indicates that this quantity was planned to

have been completed by September 9, 2020. Accordingly, as shown above the actual delay incurred to date equates to 203 calendar days (09SEP20 to 31MAR21 = 203 days).

As is evident from the graphical comparison above, the delays to date have substantially changed Valard's original plan to construct the Project. Of particular note, Valard's plan and Change Order No. 1 contemplated that the work on the Project would be "out of the ground" at roughly the half-way stage of the planned overall Project duration (i.e., all right-of-way and foundation work was to have been entirely completed by the end of November 2020).

As shown in the as-built/forecasted schedule, Valard currently forecasts this work continuing through 90% of the construction period and completing just six weeks before Provisional Acceptance. This is a dramatic departure from the original plan and adds significant expense to extend the resources required for the civil work (i.e., 16 months planned for civil work versus nearly 28 months in the as-built/forecasted schedule). Consequently, while the overall Project completion is currently forecasted to be approximately six months late, there are actually "internal" schedule delays of much greater durations.

The subsequent sections of this report contain significant additional discussions regarding the as-built schedule and the delays and impacts to Valard's work on the Project.

6. Analysis of Major Impacts & Delays

6.1 Summary of Major Impacts & Delays:

Our discussion of the major impacts and delays are generally ordered based on the flow of the work on the Project, which generally aligns with the sequence in which the issues came about. This report is structured to first set forth the facts around the major

delay and impact issues (this Section 6), and then (Section 7) examine how the major impacts and delays affected Valard's progress and efficiency in the performance of its work to date. The following summarizes the major impacts and delays discussed in the following sections of this report:

Section 6.2: Late, Out-of-Sequence and Piecemeal Owner Permits

Section 6.3: Late, Out-of-Sequence and Piecemeal Owner Steel Deliveries

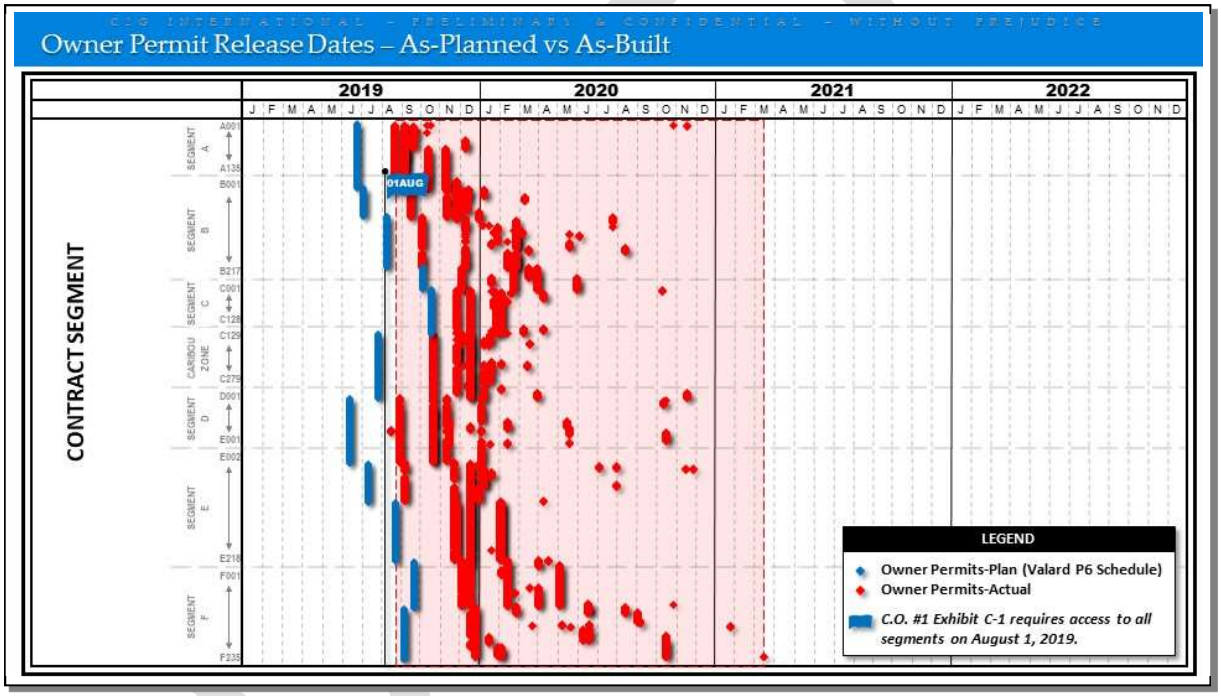
Section 6.4: COVID-19

The major impacts and delay issues that have occurred on this Project to date have had a compounding effect on Valard's ability to perform the work on the Project in the efficient and cost-effective manner upon which it based its original bid. Certainly, major impacts on construction projects often result in schedule delays and cost increases, however, the adverse effects can often be overcome to some extent through resequencing, work arounds and adding resources to mitigate the problem. On this Project, the successive major impacts that occurred, in combination with the inter-related nature of both the impacts and the work, made it impossible for Valard to gain any of the momentum required to even begin the process of working its way back to its original plan for construction.

6.2 Late, Out-of-Sequence & Piecemeal Owner Permits

While we now know that the late and piecemeal receipt of permits and access to the right-of-way was only the first of several major impacts on the Project, it has certainly been one of the primary causal factors leading to the delays and cost increases experienced to date. From the outset of the Project, this issue has caused substantial havoc and denied Valard any opportunity to implement the logical, efficient and cost-effective plan upon which its bid estimate was based.

In total, there were well over 1,200 different permits required on this Project. On average, more approximately 11 separate permits were required for each tower site. Valard has researched the contemporaneous records to determine when each permit on the Project was received. This data, which is included as **Exhibit 12,** includes each tower site, and identifies the permit type, approving entity, the party responsible for procurement (Owner or Contractor) and dates of submittal and approval. The graphic illustration included as **Exhibit 13** below, summarizes the substantial delays that were incurred in the permitting process.



The blue flag shown on August 1, 2019, in the graphic above, represents the date upon which Change Order No. 1, Exhibit C-1 indicated that "Construction Access Available" to all segments on the right-of-way. The blue colored diamonds plotted on the graphic above represent the as-planned permit release dates from Valard's Primavera schedule developed around the dates and durations included in the revised Change Order No. 1, Exhibit C-1. These dates illustrate the dates that Valard's more detailed schedule stated permits (and access) were needed for each Work Front.

The red colored diamonds plotted on the graphic above represent the actual dates that permits were approved (and access allowed) for each tower site on the Project. As indicated, the permitting process, which was planned to have been entirely completed roughly three months into the Project, has continued more than 19 months from the amended start date of the Project. Moreover, the receipt of the permits in the piecemeal and out-of-sequence manner shown, substantially exacerbated the impact of the delays.

Notably, the graphic illustration above includes only the Owner responsible permit approval dates for initial right-of-way work (i.e., approval dates for either clearing or access). There are separate permit approval dates (later than the dates shown above), specific to conductor stringing. To avoid confusion, these subsequent dates are not shown on the graphic above but were required for approximately one-half of the tower sites (638) and were received from February to December 2020.

6.2.1 Consideration of Permit Types & Responsibility

6.2.1.1 Contract Provisions

The Contract outlines the distribution of risk that was negotiated and agreed upon. "Owner-Caused Delay" for which Valard is entitled to relief is defined as:

> *a material delay in Contractor's performance of the Work that is actually and demonstrably caused directly and solely by Owner's failure to perform any covenant of Owner hereunder (other than a Move Around Event and/or by exercise of rights under this Agreement, including the exercise by Owner of the right to have defective or nonconforming Work corrected or re-executed) which actually, demonstrably, adversely and materially affects the Critical Path of the Work. Contractor expressly acknowledges and agrees that any delay that is due in part to Contractor's or any of its Subcontractors' action or inaction is not an Owner Caused Delay.*

Significantly, the above definition does not require blameworthy conduct on the part of Owner. It simply requires the inability or untimely completion of an Owner covenant. There are only two Owner obligations outlined as Owner covenants in Article 5 of the Contract, namely the requirement to provide "Owner-Furnished Equipment" and "Owner Permits." In respect to permits, clause 5.2 reads:

> *5.2 Permits. Owner shall, with Contractor's reasonable assistance (to be provided at no additional cost to Owner), timely obtain and maintain, at its own cost and expense, all Owner Permits as set forth in Exhibit H. In addition, Owner shall execute, at no cost to Owner, such applications as Contractor may reasonably request in connection with obtaining any of the Contractor Permits.*

Delay associated with "obtaining or maintaining" the Owner Permits mandate relief pursuant to the Contract. This is consistent with industry norm and is fair and reasonable.

Change Order No. 1 obligated Valard to aid the Owner in obtaining some of the Owner Permits. Valard agreed to complete the Detailed Project Plans required to properly maintain the Environmental Assessment (EA) Permit. Based on our review of the contemporaneous records, C2G sees no indication the Owner permitting delays were attributable to the conduct of Valard while providing this assistance.

Of course, there were a variety of different types of permits required for the Project, some were the responsibility of the Owner to procure, and some were Valard's responsibility. Generally, the permits for which the Owner was responsible to procure were the primary permits that allowed access to the right-of-way. The table included below describes each of the Owner permit types.

Owner Permit Types

Legend	Permit Type	Resp	Description	Access	Clear	Assy	Fdns	Erect	String	Reclam
◆	DPP - Supplemental Environmental Assessment	Owner	- Site-specific assessment to supplement the Environmental Assessment - Minimum 30 day review period. If no comments after 30 days, the DPP is considered approved, and the the date of the final submission is considered the approval date.	X	X	X	X	X	X	X
◆	Ministry of Transport - Entrance	Owner	- Agreement with Ministry of Transportation to utilize an approach from an MTO Road to an access road on either crown or private land. - Applies to utilize existing approaches, and to construct a new approach. - The entrance permit is a prerequisite, where required, to enter onto an MTO road.	X	X	X	X	X	X	X
◆	3rd Party Clearance	Owner	- Agreement to clear, drive, or construct over a third party disposition - Includes crossings, encroachments, ground disturbance, road use, temporary work	X	X	X	X	X	X	X
◆	Private Landowner Road Use Easement	Owner	- Agreement with a private landowner - For the use of existing access or the construction of new temp or permanent access - The agreement is required to clear/construct access within the parcel of land.	X	X	X	X	X	X	X
◆	Crown Provincial Access	Owner	- Ministry of Natural Resources & Forestry Permit for roads on Provincial Crown Land. - Required to clear and construct roads, or and upgrade existing roads. - 7 day notification period - Does not apply to snow removal, grading, unplugging culverts	X	X	X	X	X	X	X
◆	Crown Provincial Land Use Permit	Owner	- Ministry of Natural Resources & Forestry Land Use Permit for Provincial Crown Land. - Required to enter Crown Land initially for clearing, and through out all phases of construction.	X	X	X	X	X	X	X
◆	Off-ROW Access Private Landowner	Owner	- Off right of way access through privately owned land parcels, to access the right of way.	X	X	X	X	X	X	X
◆	Crown Federal Indigenous Reserve	Owner	- Consists of 28.2 Permit or a License for Road Access - Allows for the clearing, construction, maintenance of the roads, watercourse crossings, ROW and the powerline as well as decommissioning of temporary features.	X	X	X	X	X	X	X
◆	Private Landowner Easement	Owner	- Transmission Easement agreement entered into with a private landowner. - Required to enter the parcel initially for clearing the right of way, and throughout all phases of construction.	X	X	X	X	X	X	X
	Nav Canada	Owner	- Permit issued by Nav Canada, with regard to the impact of the proposed physical structures on the air navigation system and installations. - Specification for required marking and lighting is provided. - Required for erection and stringing.					X	X	
	Transport Canada - Aeronautical Assessment	Owner	- Required to assess the intent for installation of infrastructure of certain criteria; in this case, the transmission structures and line. - Required for erection and stringing					X	X	

As indicated above, the Owner permits included environmental assessments, approvals from various governmental agencies and private landowner easements. Permits were required for access to the right-of-way itself, as well as the use, construction, or improvement of roadways to access the right-of-way. Of course, any given location along the right-of-way may have required multiple different permits to provide approval and access for construction. On average for all tower sites on the Project, there were 5.26 permits required for each site. The duration from the initial to final Owner permit averaged 4.5 months; ranging from roughly 50 sites where all permits were procured in under one month, to roughly 50 sites where all permits took more than a full year to procure.

There were also a variety of different types of permits designated in the Contract as Valard's responsibility. Generally, the permits for which Valard was responsible to procure were the secondary permits that allowed clearing/harvesting of timber and water crossings. Valard was also responsible for obtaining all permits within

Provincial Parks and/or Conservation Reserves (less than 10% of the tower sites). The table included below describes each of the Contractor permit types.

Contractor Permit Types

Legend	Permit Type	Resp	Description	Access	Clear	Assy	Fdns	Erect	String	Reclam
●	Crown Provincial - FRL	Contractor	- Forest Resource Licence and Haul Permit to clear and haul timber on Crown Land. - Where Timber rights are held by a Sustainable Forest License (SFL) already, a prerequisite for the FRL is an OLA, and LUP / WP Approvals. - MNRF must be notified 7 days prior to commencement of clearing activities.	X	X					
●	Forestry Clearance - Private Land	Contractor	- A Clearance of Forest Resources is required from MNRF on private land. - Clearance requires signed Private Easement and Private Access with landowner	X	X					
●	Forestry Clearance - Off ROW	Contractor	- Off right of way access through privately owned land parcels, to access the right of way.	X	X					
●	Transport Canada - Navigable Waters	Contractor	- Required for the crossing of scheduled waters on the Project. - For non-sheduled waters that are navigable a registration and 30-day public consultation period is required (no approval issued).						X	
●	Watercrossing	Contractor	- Permit issued by MNRF and/or Conservation Authority for the purpose of installing water course crossings (culvert, bridge, snowfill) - Watercourse crossings are required to commence clearing activities. - 7 day notice required prior to commencement of clearing/construction activities.	X	X	X	X	X	X	X
●	MECP - Land Use Permit	Contractor	- Issued by the Ministry of Environment Conservation and Parks, for transmission easement within Provincial Parks or Conservation Reserves. -Required to commence activities (clearing) within the Park and is required for all phases of construction.	X	X	X	X	X	X	X
●	MECP - Work Permit	Contractor	- Work Permit to permit clearing, access and watercourse crossings construction within a Provincial Park or Conservation Reserve. - Required for all phases of construction.	X	X	X	X	X	X	X
●	MECP - Endangered Species Act	Contractor	- Required when activities will destroy critical habitat for and Endangered species or will harm, kill or destroy a population or individuals. - Eastern Whippoorwill, and bat roosting was addressed by the implementation of timing restrictionn. Bat and caribou required a permit known as the Overall Benefit Permit	X	X	X	X	X	X	X
●	Department of Fisheries and Oceans (DFO)	Contractor	- Review submitted for all watercourse crossings on the project. - Approval required for any site where instream was planned (culverts). - 10 day notification prior to commencement of activities	X	X					X
●	Overlapping Agreement (OLA)	Contractor	- Overlapping Agreements with SFL (Sustainable Forest Licence) Holders, allow contractor to cut timber within their licenced areas on crown land. - A prerequisite for MNRF to issue FRL and Haul Permits (noted above) - Agreement required to commence clearing.	X	X					

For most of the contractor permits listed above, approvals are dependent upon the Owner obtaining the primary permits to allow access to the right-of-way. For example, the timber harvesting permits, only provide the right to cut timber and cannot be issued in advance of land tenure (either a land use permit "LUP", work permit or private land agreement, depending on location), which was the responsibility of the Owner.

With regard to water crossings, there were different types of permit approvals required, including those issued as a work permit by Ministry of Natural Resources and Forestry ("MNRF"), and those issued by Fisheries and Oceans Canada ("DFO"). The MNRF work permit for a water crossing cannot be issued in advance of the associated LUP, nor in advance of the associated work access permit, both of which were the Owner's responsibility. DFO water crossing permits were generally

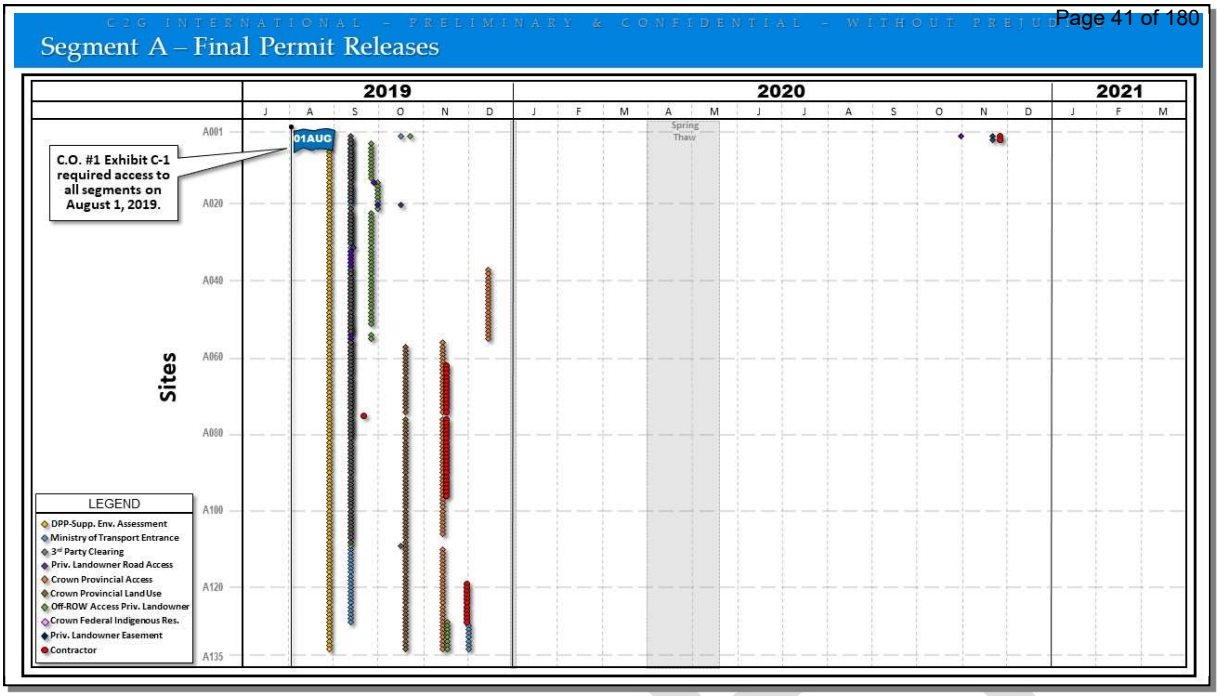
independent of the Owner's land tenure process. Of course, approval of water crossing permit would be of no benefit without the ability to access the right-of-way. It is important to recognize that if water crossing review and approval delays had the potential to impact field execution, Valard had the option to switch to a clear-span crossing, thus eliminating the need for approval.

6.2.1.2 Consideration of Valard Permits

While the Owner Permits were clearly the primary permits required for Valard to access the right-of-way, our analysis has also considered areas where a secondary Valard responsible permit was later than the last Owner responsible permit date. To assess the Owner permit delays, as well as any other potential impacts related to the procurement of permits, C2G has analyzed each Contract work segment separately.

The following graphics depict the dates when each of the Owner permits were received for each tower site (different colored diamonds corresponding to the legend on the Owner Permit Types table above). If any Valard responsible permits were later than the last Owner permit at a given site, those permits are shown with a red colored circle (no red circle is at a tower site which means the Owner permit was the last permit).

The graphic illustration included below as **Exhibit 14** summarizes the Segment A as-built permit approval dates for all Owner responsible primary permits, as well as all Valard responsible permits that were approved later than the last Owner permit at any given tower site.

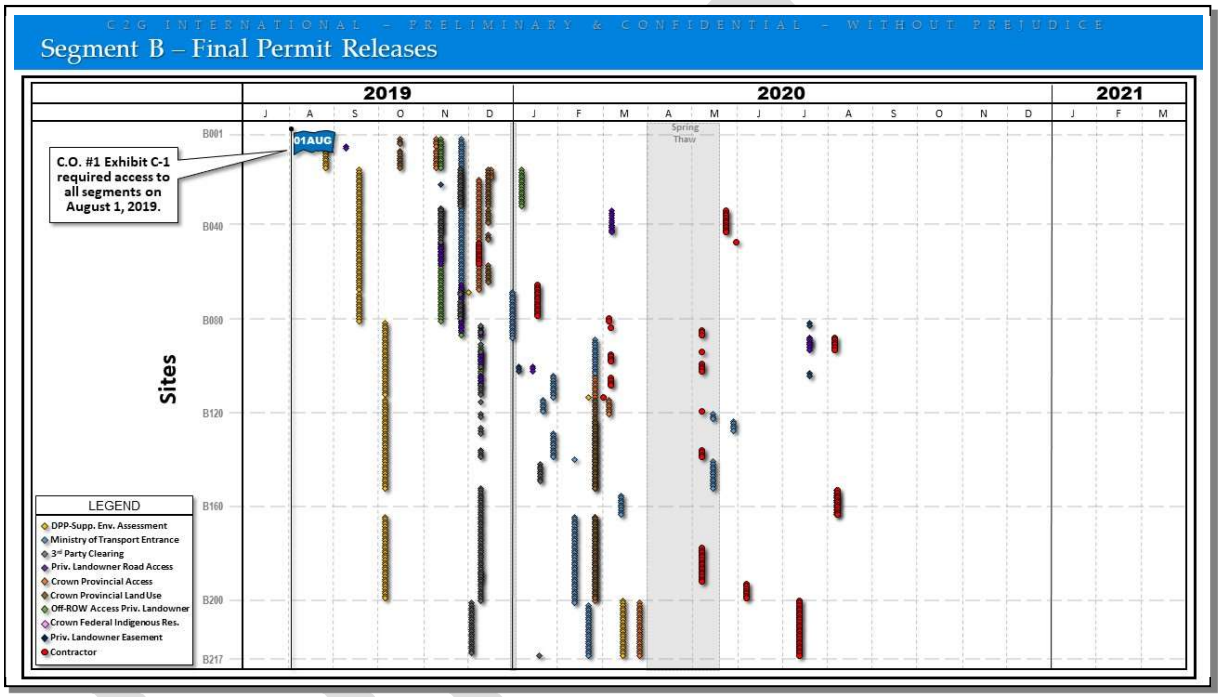


As indicated above, all of the Owner permits were late for Segment A. The Owner received all of the required permits for the first tower site (A074) on September 11, 2019, or 41 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 50% of the sites was achieved on November 12, 2019, or 103 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 98.5% of the sites was achieved on December 12, 2019, or 133 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). The final Owner permits (two sites, A001 and A002) were received on November 13, 2020, or 470 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1).

With regard to the Valard permits that were obtained for sites after the last Owner permits, as indicated above there were 48 instances where this occurred at Segment A, however, the incremental delay between the last Owner permit and the last Valard permit was only five days for Segment A. In other words, there were no material

impacts associated with the Valard permits at Segment A, all of which were all dependent upon the approval of the primary Owner permits.

The graphic illustration included below as **Exhibit 15** summarizes the Segment B as-built permit approval dates for all Owner responsible primary permits, as well as all Valard responsible permits that were approved later than the last Owner permit at any given tower site.



As indicated above, all of the Owner permits were late for Segment B. The Owner received all of the required permits for the first tower sites (22 sites) on November 29, 2019, or 120 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 50% of the sites was achieved on February 28, 2020, or 211 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 80% of the sites was achieved on March 30, 2020 or 242 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). The final

Owner permits (11 sites) were received on August 11, 2020, or 376 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1).

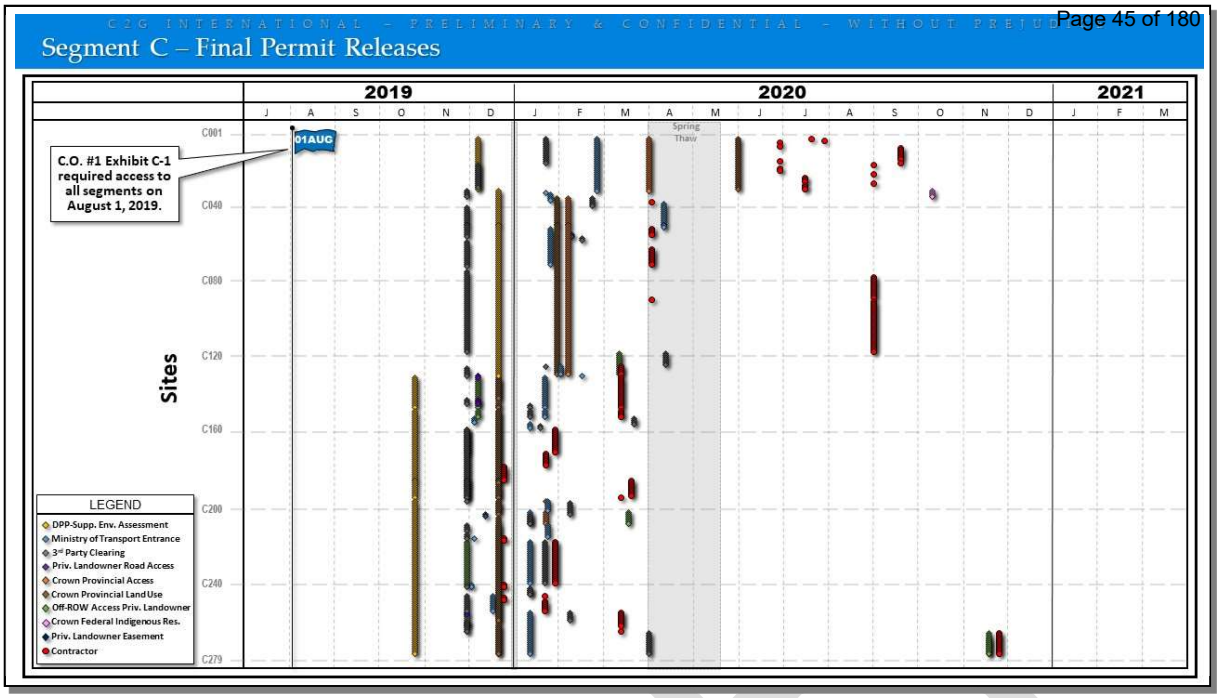
With regard to the Valard permits that were obtained for sites after the last Owner permits, as indicated above there were 122 instances where this occurred at Segment B. Our analysis of these Valard responsible permits is summarized below:

- 28 instances (23%) were DFO permits. Valard developed a mitigation strategy for DFO permits that entailed switching to a clear-span crossing if there was a potential risk of delaying work progress. Additionally, Valard received the 28 DFO permits during the spring thaw. Many of the Owner permits were received in late February 2020, one month prior to the start of the spring thaw. Consequently, sufficient time was not available for performance of the right-of-way work prior to the start of the spring thaw. Therefore, it is reasonable to view the contractor permits as having no significant impact to the Project schedule. Notably, the impacts associated with the onset of COVID-19 were generally driving work progress during this period.
- 11 instances (9%) were Private Clearance permits at one location with one private landowner. The permits were dependent on prior receipt of an Owner permit. Valard submitted permit applications within a few days after receipt of the Owner permits. Permits were received right after the spring thaw had ended; therefore, the permit receipt dates caused no impact to the Project schedule.
- Seven instances (6%) were Water Crossing permits at one location along Gurney Road. The permits were dependent on prior receipt of an Owner permit. Initial scans returned dry ground, however, during construction the site environment necessitated the need for a water crossing permit. Owner permits were not received until late Feb 2020, less than one month prior to demobilization for the spring thaw window. Contractor permits were received right after the spring thaw had ended. These permits did not delay construction; temporary crossings could have been used to accommodate clearing if needed. Notably, the impacts associated with the onset of COVID-19 were generally driving work progress during this period.

- 24 instances (20%) were Ministry of Environment Conservation and Parks ("MECP") permits (for one location at Gravel River. Valard submitted its permit application five days after receipt of the Owner Detailed Project Plans, on March 18, 2020. Considering the processing delays with MECP due to COVID-19 and the spring thaw in April/May 2020, the final permit receipt date in July 2020 is reasonable. Pursuant to the March 2022 completion schedule, clearing was planned for September to November 2020. Permits were in hand mid-July 2020; therefore, the permit receipt dates caused no impact to the Project schedule.
- The 52 (42%) remaining instances the of 122 late contractor permits in Segment B were received within a reasonable time (less than one month) after the Owner permit, therefore they can be considered as being driven by the late Owner permits, and not a significant contributor to any schedule delay.

As indicated above, our analysis has not identified any material delays to the Segment B work resulting directly from the Valard responsible permit approvals.

The graphic illustration included below as **Exhibit 16** summarizes the Segment C as-built permit approval dates for all Owner responsible primary permits, as well as all Valard responsible permits that were approved later than the last Owner permit at any given tower site.



As indicated above, all of the Owner permits were late for Segment C. The Owner received all of the required permits for the first tower sites (51 sites) on December 20, 2019, or 141 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 50% of the sites was achieved on February 5, 2020, or 188 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 75% of the sites was achieved on March 20, 2020, or 232 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). The final Owner permits (12 sites) were received on November 13, 2020, or 470 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1).

With regard to the Valard permits that were obtained for sites after the last Owner permits, as indicated above there were 200 instances where this occurred at Segment C. Our analysis of these Valard responsible permits is summarized below:

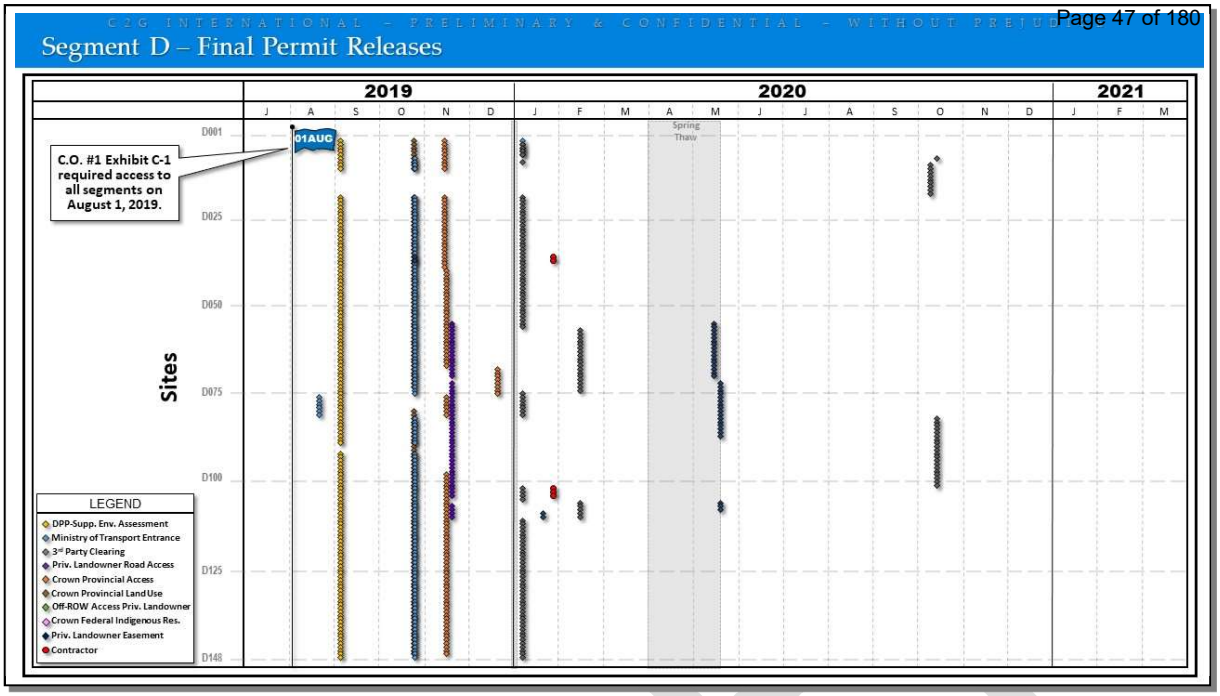
- 21 instances (11%) were DFO permits. Valard developed a mitigation strategy for DFO permits that entailed switching to a clear-span crossing if there was a

potential risk of delaying work progress. Therefore, the permit receipt dates had no impact to the Project schedule.

- The remaining 179 (89%) permits all required prior receipt of Owner permits. It is important to note that over 128 (70%) of the last 179 Owner permits were not received until after January or February 2020, leaving approximately only one month of permit submission/approval time before the six month non-work Caribou window from Spring through fall. By the time the Caribou window ended in September, Valard had submitted and received approval on all outstanding contractor permits. It is also noteworthy that the contractor permit approvals Valard received in March 2020 had an effective date starting 11 months earlier in April 2019, meaning that once the Owner permits were received, Valard was clear to proceed.

As indicated above, our analysis has not identified any material delays to the Segment C work resulting directly from the Valard responsible permit approvals.

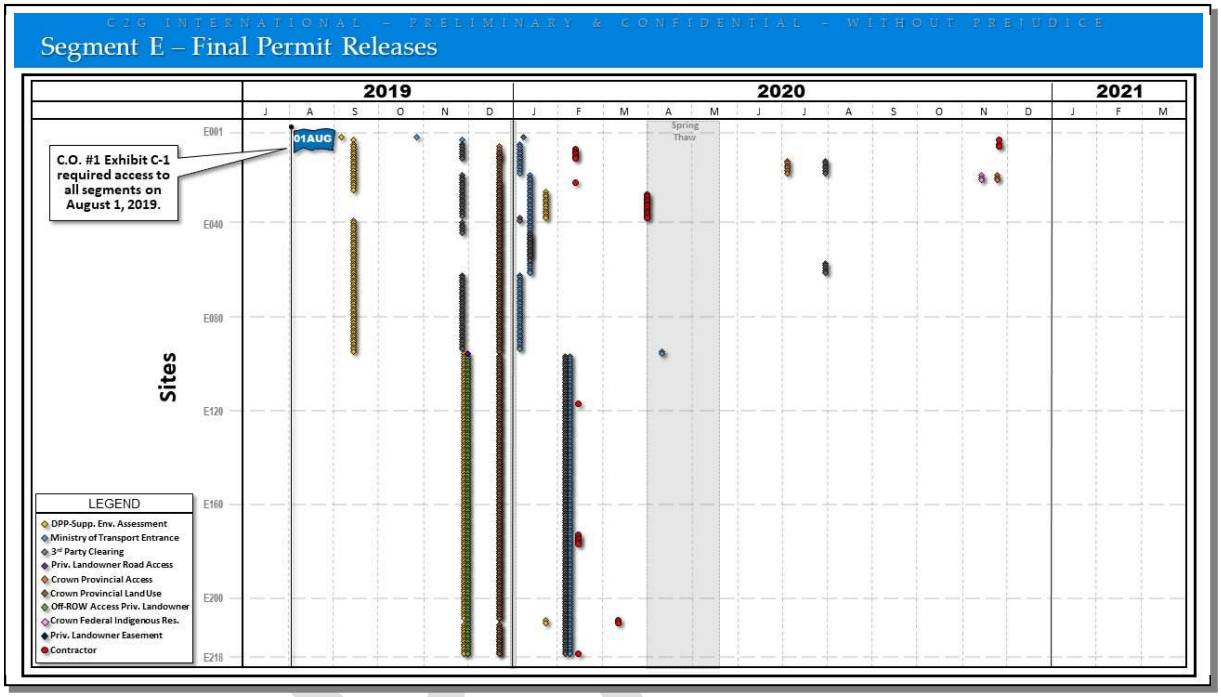
The graphic illustration included below as **Exhibit 17** summarizes the Segment D as-built permit approval dates for all Owner responsible primary permits, as well as all Valard responsible permits that were approved later than the last Owner permit at any given tower site.



As indicated above, all of the Owner permits were late for Segment D. The Owner received all of the required permits for the first tower sites (86 sites, representing 58% of the sites) on January 6, 2020, or 158 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 80% of the sites was achieved on May 19, 2020, or 292 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). The final Owner permits (21 sites) were received on October 13, 2020, or 439 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1).

With regard to the Valard permits that were obtained for sites after the last Owner permits, as indicated above there were five instances where this occurred at Segment D, however, the incremental delay between the last Owner permit and the last Valard permit was only 21 days for Segment D. In other words, there were no material impacts associated with the Valard permits at Segment D, all of which were dependent upon the approval of the primary Owner permits.

The graphic illustration included below as **Exhibit 18** summarizes the Segment E as-built permit approval dates for all Owner responsible primary permits, as well as all Valard responsible permits that were approved later than the last Owner permit at any given tower site.



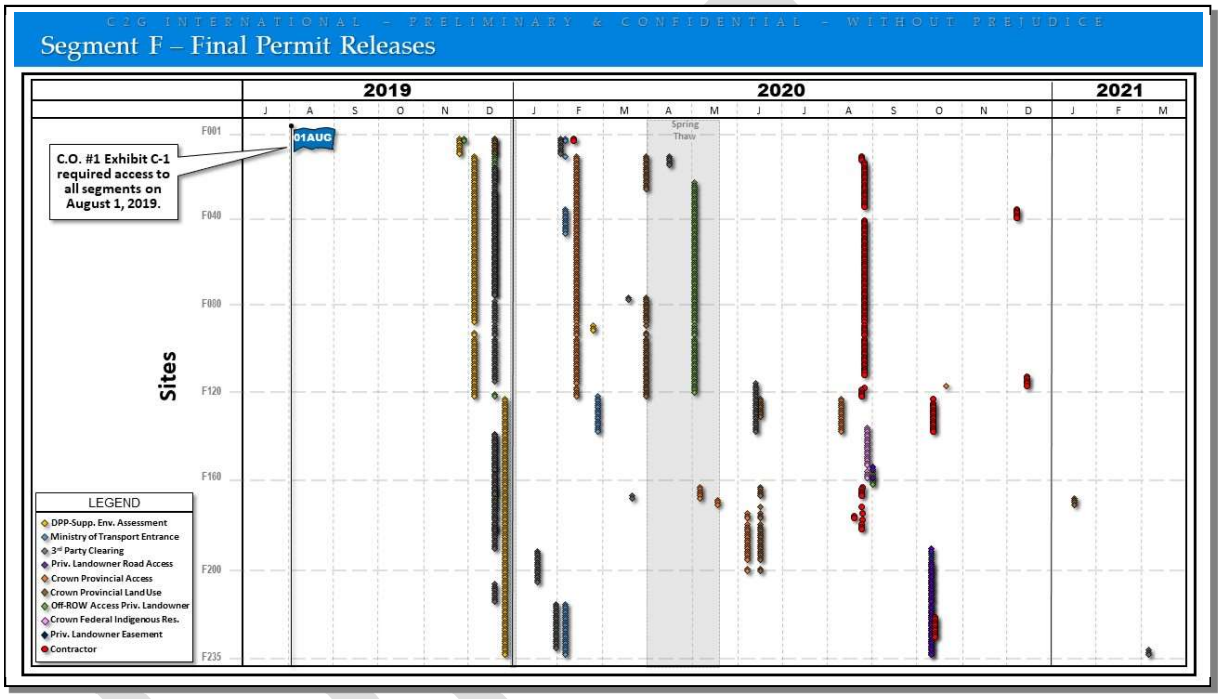
As indicated above, all of the Owner permits were late for Segment E. The Owner received all of the required permits for the first tower site (one site) on November 25, 2019, or 116 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 93% of the sites was achieved on February 6, 2020, or 189 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). The final Owner permits (three sites) were received on November 23, 2020, or 480 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1).

With regard to the Valard permits that were obtained for sites after the last Owner permits, as indicated above there were 29 instances where this occurred at Segment E. Our analysis of these Valard responsible permits is summarized below:

- Six instances (21%) were DFO permits. Valard developed a mitigation strategy for DFO permits that entailed switching to a clear-span crossing if there was a potential risk of delaying work progress. Therefore, the permit receipt dates had no impact to the Project schedule.
- Three instances (10%) were Crown Provincial FRL permits ("Forest Resource License") at one location. The permits were dependent on prior receipt of an Owner permit. Valard received permit approval in December 2019, however, they were required to resubmit one year later due to a realignment of the right-of-way. It is Valard's understanding that this realignment followed from ongoing consultation with Pic Mobert First Nations. Any schedule delay is not a result of the permit dates, but rather a result of the right-of-way realignment requested by Pic Mobert First Nations, and subsequent permit resubmittal.
- 11 instances (38%) were MECP LUPs for one location in the Kwinkwaga Conservation Reserve. Contractor permit dates at this location were delayed in January 2020 by a stop work notice by the Pic Mobert First Nations, and also due to COVID-19 impacts to MECP permit review staff. As per the March 2022 completion schedule, clearing was planned for September 2020, therefore the permit receipt dates in March 2020 did not impact the Project schedule.
- Two instances (7%) were MECP LUPs for one location at Pukaskwa River. These two permits are linked to the Owner Detailed Project Plans, which was received in late January 2020. Contractor permit review/approval time was approximately 60 days after the Detailed Project Plans, also due to COVID-19 impacts to MECP permit review staff. As per the March 2022 completion schedule, clearing was planned for September 2020, therefore the permit receipt dates in March 2020 did not impact the Project schedule.
- The remaining seven instances (24%) in Segment E were received within a reasonable time (less than one month) after the Owner permit, therefore they can be considered as being driven by the late Owner permits, and not a significant contributor to any schedule delay.

As indicated above, our analysis has not identified any material delays to the Segment E work resulting directly from the Valard responsible permit approvals.

The graphic illustration included below as **Exhibit 19** summarizes the Segment F as-built permit approval dates for all Owner responsible primary permits, as well as all Valard responsible permits that were approved later than the last Owner permit at any given tower site.



As indicated above, all of the Owner permits were late for Segment F. The Owner received all of the required permits for the first tower site (one site) on December 27, 2019, or 148 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 49% of the sites was achieved on May 4, 2020, or 277 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval status of approximately 77% of the sites was achieved on September 3, 2020, or 399 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). Owner permit approval

status of approximately 97% of the sites was achieved on October 23, 2020, or 449 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1). The final Owner permits (three sites) were received on March 10, 2021, or 587 days later than required by Contract Exhibit C-1 (as modified by Change Order No. 1).

With regard to the Valard permits that were obtained for sites after the last Owner permits, as indicated above there were 148 instances where this occurred at Segment F. Our analysis of these Valard responsible permits is summarized below:

- 15 instances (10%) were Off-Row Access Permits, for three locations. The permits were dependent on prior receipt of Owner permits. Once the Owner permits were received, Valard immediately submitted their permit application. Delays in receipt of approval are due to MNRF staff resources due to COVID-19 in spring 2020. As per the March 2022 completion schedule, clearing was planned for September 2020, therefore permit receipt dates in August 2020 did not impact the Project schedule
- 28 instances (19%) were Water Crossing permits. The permits were dependent on prior receipt of Owner permits.
    - Five of these 28 permits were for one location that would have required an expensive all-season crossing, however, Valard successfully championed the option of constructing a winter ice crossing, without impact to the Project schedule. Permit submission and approval dates were consequently timed to align with the cost and schedule efficient mitigation efforts. The permit receipt dates did not impact the Project schedule.
    - Five of these 28 permits were for one location that was previously undiscovered during recon scans. Permits were submitted immediately and also constructed as a cost-efficient winter ice crossing. The permit receipt dates did not impact the Project schedule.
    - 16 of these 28 permits were for one location that required mitigation efforts due to a Beaver Dam. However, even with the extensive efforts required to relocate the animals and their habitat, Valard still submitted and received

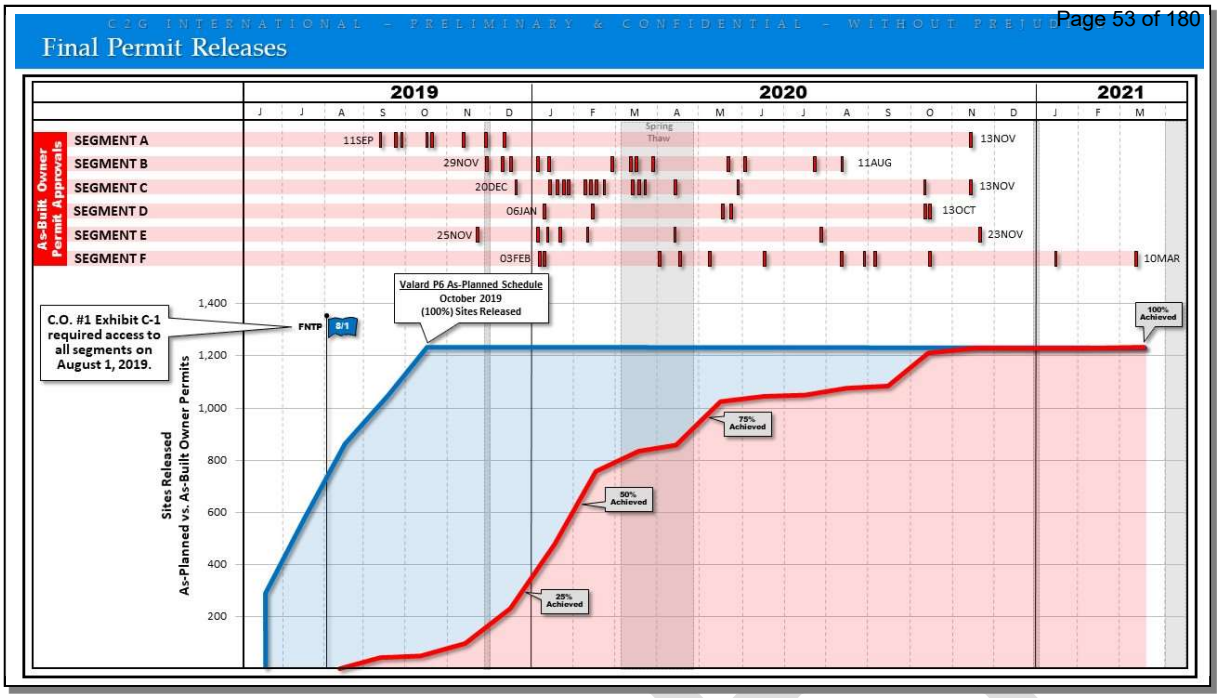
permit approval 63 days after receipt of Owner permit. The permit receipt dates did not impact the Project schedule.

- The remaining two of the 28 instances were for one location. Schedule changes required Valard to change the crossing type. Permit approval was received approximately 60 days after receipt of the Owner permit. The permit receipt dates did not impact the Project schedule.
- In summary, in all 28 of the water crossing instances, Valard significantly mitigated potential schedule delay and cost to the Project, while also protecting the environmental habitat.

- 91 (62%) instances were DFO permits. Valard developed a mitigation strategy for DFO permits that entailed switching to a clear-span crossing if there was a potential risk of delaying work progress. Therefore, the permit receipt dates had no impact to the Project schedule.
- The remaining 14 (9%) permits in Segment F were received within a reasonable time (less than one month) after the Owner permit, therefore, they can be considered as driven by the late Owner permits, and not a significant contributor to any schedule delay.

As indicated above, our analysis has not identified any material delays to the Segment F work resulting directly from the Valard responsible permit approvals.

Without question, substantial delays were incurred in the Owner's provision of approved permits and access to the right-of-way. The graphic illustration included below as **Exhibit 20** summarizes the Owner permit approvals for all segments on the Project.



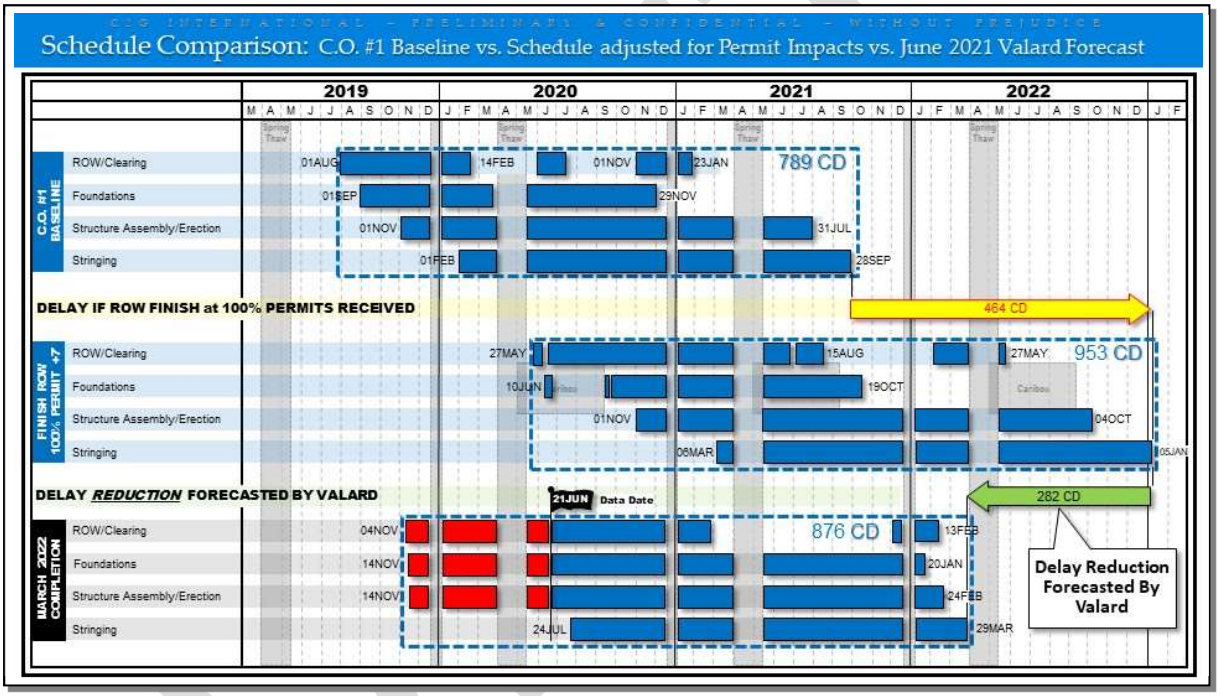
As indicated above, whether one considers the August 1, 2019 "Construction Access Available" date for all segments, or Valard's more detailed as-planned P6 Baseline schedule, extensive Owner permit work release delays were incurred. In fact, the delays for Owner permit approval at each tower site averaged 224 days, or more than seven months. As is also evident from the graphic illustration above, there was no logic and/or sequence to the way in which the Owner permit approvals occurred. As a result, Valard had no ability to properly plan and organize its resources for the Project. Without question, during the first season of work on the Project Valard had no choice but to go where it could and complete what it could, regardless of efficiency and/or cost effectiveness.

6.2.2 Schedule Delay Entitlement Due to Late Owner Permits

To assess the schedule delay impact associated with the late Owner permits, C2G has "impacted" Valard's Change Order No. 1 baseline schedule for the actual permit release dates. Because of the intermittent and out-of-sequence manner in which the permits were received, this analysis assumes completion of right-of-way work seven

calendar days after receipt of the final Owner permit within a given area (i.e., a seven day finish to finish lag relationship was established from the latest Owner permit date and completion of right-of-way activities within each of the schedule Work Fronts).

The graphic illustration included as **Exhibit 21** below compares the Change Order No. 1 baseline schedule versus the impacted schedule described above versus the June 2020 schedule prepared by Valard, which forecasts a March 2022 completion (still the forecasted completion date as of today).



As indicated above, with no accelerative measures by Valard, and reasonably assuming that right-of-way work would complete seven calendar days after the last Owner permit within a given Work Front, the resulting delay would be recalculated to a completion date of January 5, 2023, or 464 calendar days later than contemplated in the Change Order No. 1 baseline schedule. This stands to reason, considering that there were permits for 24 tower sites, within four of the six Contract Segments, that were released more than 464 days late. In fact, as shown in the table below, the final Owner permit releases within all segments were similarly delayed:

Area	Last Owner Permit Date	Days Delayed (vs. C.O. #1, Ex. C-1)	Days Delayed (vs. C.O. #1, P6 Sch.)
Segment A	13-NOV-20	470 Days	507 Days
Segment B	11-AUG-20	376 Days	375 Days
Segment C	13-NOV-20	470 Days	438 Days
Segment D	13-OCT-20	439 Days	488 Days
Segment E	23-NOV-20	480 Days	475 Days
Segment F	23-NOV-20	480 Days	438 Days

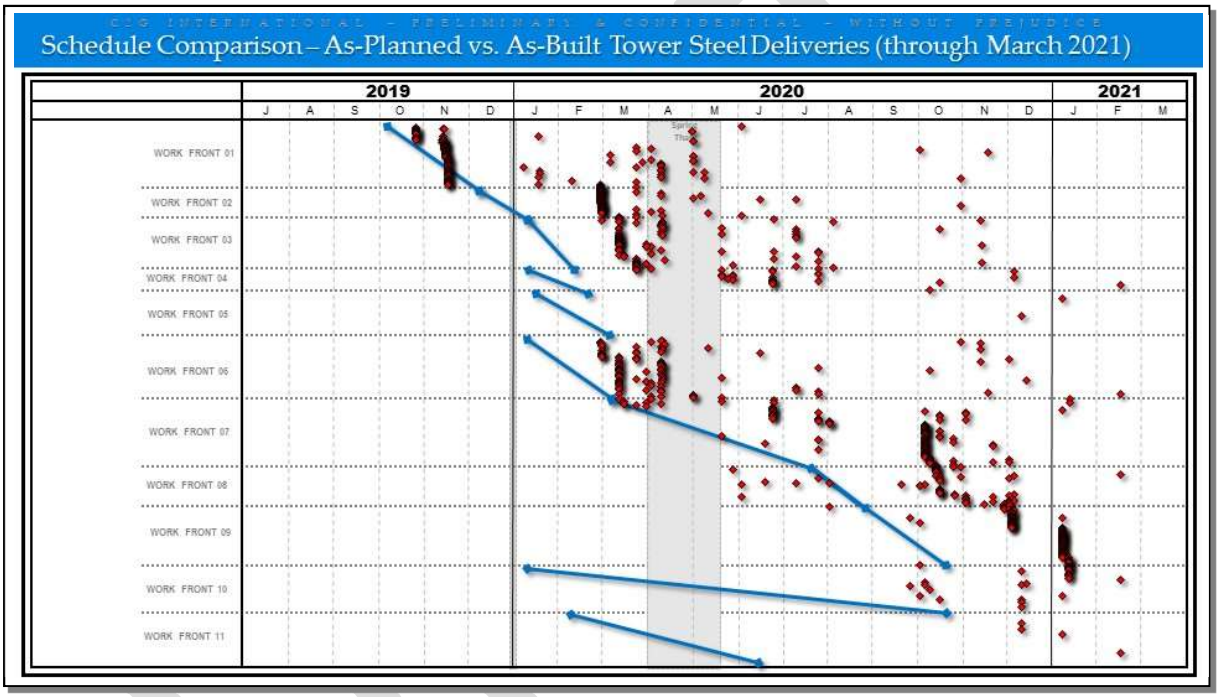
Of course, as shown in the Exhibit 21 graphic illustration above, in its first revised schedule, prepared in June 2020, Valard did not simply forecast completion based on entitlement. Instead, in an effort to accommodate the Owner's desire to achieve substantial completion in March 2022, Valard's forecast contemplated significant delay mitigation (a 282 calendar delay reduction). As of this writing, Valard continues to forecast a March 2022 substantial completion date.

The delay mitigation is being achieved through acceleration measures, including starting work in areas that are not fully released by Owner permits (i.e., Valard working where it can when it can), and by adding resources where possible (i.e., working multiple unplanned Work Fronts). However, as discussed in the following sections, the impacts associated with the Owner permit delays were compounded by two other major impact issues.

6.3 Late, Out-of-Sequence & Piecemeal Owner Steel Deliveries

Valard's ability to execute its plan for organized and sequential operations along the right-of-way was immediately thwarted given the late and out-of-sequence permits. To make matters far worse, another major impact issue began to reveal itself within the first few months after the start of work in the field. From the outset of work on the Project, the Owner-furnished tower steel has been delivered to the site substantially later than planned and completely out-of-sequence.

Valard has extensively researched the contemporaneous records to determine when all required tower steel inventory was available for each tower on the Project. This data, which is included as **Exhibit 22,** includes delivery dates for steel bundle or box required for each tower site. Notably, at the time of drafting this report (June 2021), Tower steel was still being delivered to the site. The graphic illustration included as **Exhibit 23** below, summarizes the substantial delays that have been incurred thus far in the Owner tower steel deliveries.

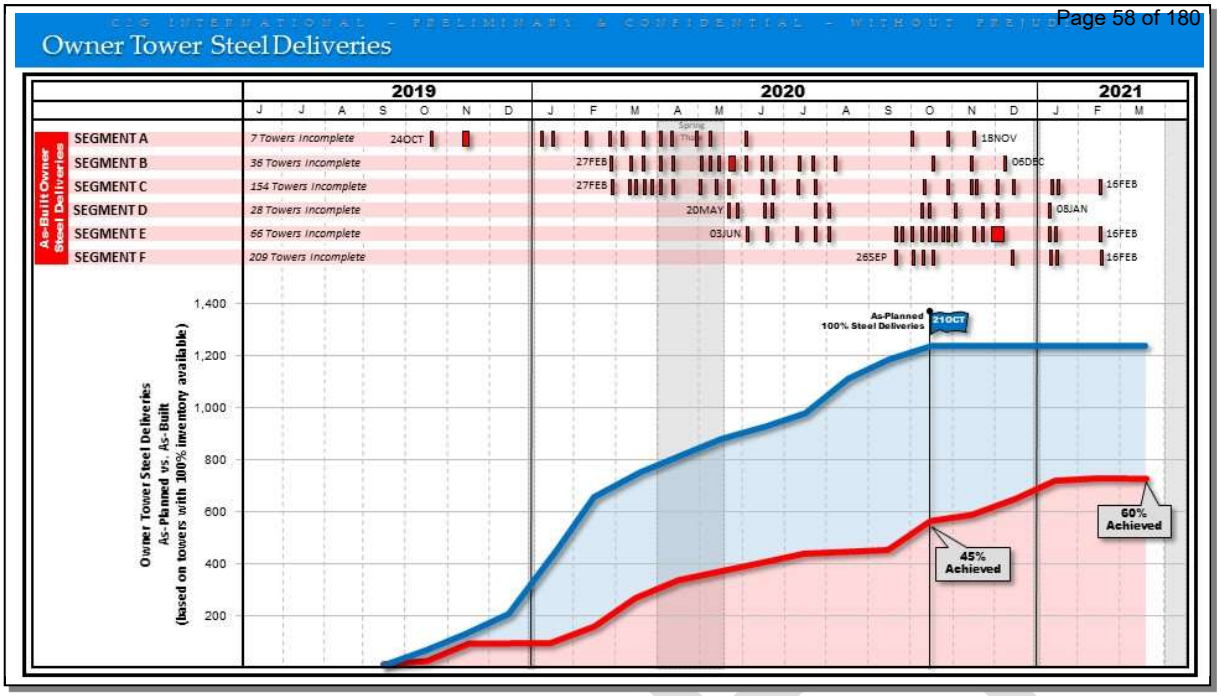


The blue colored lines plotted on the graphic above represent the as-planned steel delivery dates from Valard's Primavera schedule developed around the dates and durations included in the revised Change Order No. 1, Exhibit C-1. For example, Valard's baseline Primavera schedule contemplated that all tower steel required for Work Front 01 would be delivered by the Owner between October 4, 2019, and December 9, 2019. The timing of these deliveries was intended to support field tower assembly, which in the case of Work Front 01 was to take place from November 1, 2019,

to January 8, 2020. Accordingly, the blue colored lines illustrate the dates that Valard's more detailed schedule stated that tower steel was needed for each Work Front.

The red colored diamonds plotted on the graphic above represent the actual dates that the complete inventory required for each tower was actually delivered by the Owner. Again, the red colored diamonds shown represent approximately 60% of the towers on the Project, as all of the required inventory for the towers on the Project had not yet been delivered as of March 31, 2021. As indicated, Owner tower steel deliveries, which were planned to have been entirely completed by October 21, 2020, roughly 15 months into the Project, has actually continued for more than 20 months from the amended start date of the Project and are still not complete. Moreover, the receipt of the steel in the piecemeal and out-of-sequence manner shown, has substantially exacerbated the impact of the other major impacts and delays on the Project.

Without question, substantial delays have been, and continue to be, incurred in the Owner's provision of tower steel. The graphic illustration included below as **Exhibit 24** summarizes the Owner tower steel deliveries for all segments on the Project.



As is evident from the graphic illustrations above, there has been no logic and/or sequence to the way in which the Owner tower steel deliveries have occurred. As a result, Valard has had no ability to properly plan and organize its resources for the Project. Instead, Valard has been forced to endure a materials management quagmire while attempting to maintain some semblance of progress by "robbing" missing tower steel parts from any available inventory to support ongoing tower assembly and erection.

According to the Owner-furnished tower steel bills of material, there are over 50,000 bundles and boxes of parts required for the towers on this Project. The Owner prepared bills of material for each tower type, identified any additional parts required for each specific tower location (i.e., leg or body extensions), and assigned each bundle or box to be delivered with a specific identifier. Of course, the intent was to provide an efficient way Valard could organize the materials and quickly identify the required parts needed when it came time to assemble a given tower.

Our determinations of when the complete inventory plotted above for when the complete inventory for a given tower was available is based simply on actual deliveries. When parts were delivered that could be used at multiple tower sites, C2G has utilized Valard's as-planned schedule sequence to dictate which towers the parts were assigned. For example, if parts bundle XXX is delivered on a given date and could be taken from inventory and used at 10 different towers, C2G let the original planned assembly sequence dictate to which tower the part was assigned.

Of course, the analysis described above is how the process was supposed to have worked. However, due to the out-of-sequence and late deliveries, coupled with the Owner's direction to work towards an accelerated March 2022 completion, Valard has been left to find whatever parts that will work to progress the towers needed for field assembly and erection, regardless of the intended tower type and/or location. Consequently, and in an effort to mitigate the ongoing delay, in some cases towers have been assembled and erected prior to when the inventory data indicates all parts required for the tower were available. Again, this helps to mitigate some of the schedule impact associated with the late Owner deliveries, but also introduces significant material handling inefficiencies.

Regarding the tower steel not yet delivered, our analysis indicates that there are 493 towers with inventory shortfalls. Parts bundles (typically steel members) are missing for 445 of these towers (average of five bundles per tower). Parts boxes (typically bolts) are missing for 391 of these towers (average of five boxes per tower). Both parts bundles and boxes are missing for a total of 343 towers.

Clearly, this is not a problem where just a few minor parts are missing. As of the end of March 2021, being 20 months into the Project and five months beyond the date that all Owner tower steel was to have been delivered, on an overall volume basis, less than

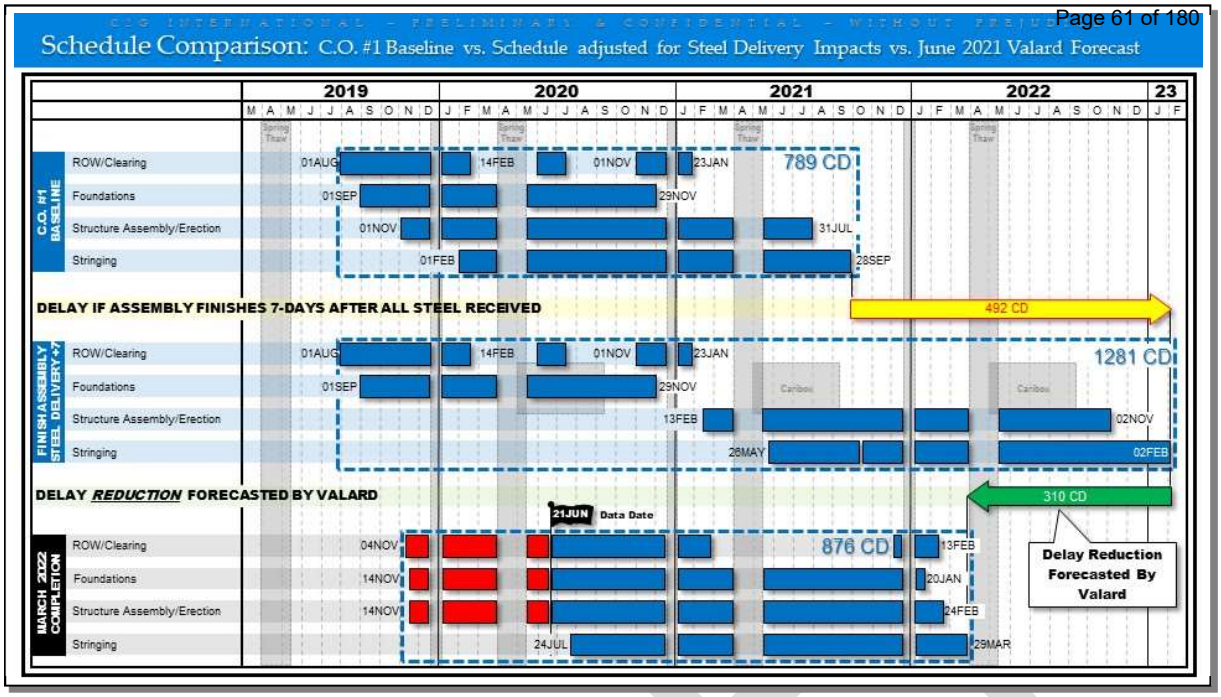
10% of the parts have yet to be delivered. However, this represents over 4,000 boxes and bundles needed to finalize the inventory required to complete assembly of nearly 500 towers.

6.3.1 Schedule Delay Entitlement Due To Late Owner Steel Deliveries

To assess the schedule delay impact associated with the late Owner tower steel deliveries, C2G has "impacted" Valard's Change Order No. 1 baseline schedule for the actual steel delivery dates. Similar to the permit delay entitlement analysis discussed above, C2G completed an analysis that assumed completion of tower assembly work seven calendar days after receipt of all tower steel within a given Work Front (i.e., a seven day finish to finish lag relationship would be established from the latest steel delivery date to completion of tower assembly activities within each of the schedule Work Fronts).

However, in the case of tower steel deliveries, as of the data date of our analysis, there were still outstanding tower steel deliveries for on the Project. Accordingly, for purposes of assessing schedule delay entitlement, our analysis assumes that all remaining tower steel parts were delivered on May 16, 2021, the day after the spring thaw standdown period. Although we now know that even this did not happen, to gain a view of schedule delay entitlement, C2G has impacted the baseline schedule to reflect final deliveries of all Owner-furnished steel on May 16, 2021.

The graphic illustration included as **Exhibit 25** below compares the Change Order No. 1 baseline schedule versus the impacted schedule described above versus the June 2020 schedule prepared by Valard, which forecasts a March 2022 completion (still the forecasted completion date today).



As indicated above, with no accelerative measures by Valard, and reasonably assuming that assembly work would complete seven calendar days after the last Owner-furnished steel deliveries for a given Work Front (all assumed to be May 16, 2021), the resulting delay would be recalculated to a completion date of February 2, 2023, or 492 calendar days later than contemplated in the Change Order No. 1 baseline schedule. Notably, this impacted completion forecast, which has been calculated independently, is roughly one month later than the delay entitlement forecast calculated of the late Owner permits.

Again, this stands to reason, considering that the steel delivery delays by Work Front are as much as 524 days late as of May 16, 2021, and were not yet completed as of that date. In fact, as of May 16, 2021, significant Owner steel delivery delays have already been incurred at all Work Fronts:

Area	Planned Final Delivery Date	Days Delayed (as of 16-MAY-21)
Work Front 01	09-DEC-19	524 Days
Work Front 02	03-JAN-20	499 Days

Area	Planned Final Delivery Date	Days Delayed (as of 16-MAY-21)
Work Front 03	16-FEB-20	455 Days
Work Front 04	26-FEB-20	445 Days
Work Front 05	02-MAR-20	440 Days
Work Front 06	03-MAR-20	439 Days
Work Front 07	25-JUL-20	295 Days
Work Front 08	30-AUG-20	259 Days
Work Front 09	20-OCT-20	208 Days
Work Front 10	21-OCT-20	207 Days
Work Front 11	13-JUN-20	337 Days

Of course, as shown on the Exhibit 25 graphic illustration above, in its first revised schedule, prepared in June 2020, Valard did not simply forecast completion based on entitlement. Instead, in an effort to accommodate the Owner's desire to achieve substantial completion in March 2022, Valard's forecast contemplated significant delay mitigation (a 310 calendar delay reduction). As of this writing, Valard continues to forecast a March 2022 substantial completion date.

The delay mitigation is being achieved through acceleration measures, including working out-of-sequence (i.e., Valard working where it could, based on available steel), borrowing parts to complete tower erection prior to final deliveries, and adding resources where possible (i.e., working multiple unplanned Work Fronts, added material handling staff, etc.). However, as discussed in the following sections, the impacts associated with the tower steel delivery delays were compounded by another major impact issue.

6.4 COVID-19 Impacts

Construction productivity in its most basic form is defined as the quantity of "inputs" required to produce an "output." [*Empirical Productivity Impacts of the Novel*

Coronavirus, **Exhibit 26**] Typically, the inputs of a contractor consist of labor, equipment and materials needed to complete a project. The resulting output is the progress made, which for example may take the form of a building or paved roadway. When the required inputs are greater per unit of work performed than that which the contractor anticipated when developing its bid, a loss of productivity occurs.

The COVID-19 pandemic had major impacts on the construction industry. New safety measures and rules and regulations directly impacted productivity. Similarly, new working environments created angst and uncertainty amongst workers, further contributing to productivity losses. Mental health challenges have risen significantly since the pandemic began, especially amongst individuals in the construction industry.

6.4.1 Industry Studies & Analysis

Until recently, attempting to differentiate and quantify the cumulative productivity impacts of COVID-19 on construction projects was a challenge. Stakeholders could contemplate possible or perceived impacts in seeking compensation, but no precise metrics were available. Empirical studies in North America and the United Kingdom have now provided accurate measures for estimating the productivity losses. As described below, the losses attributable to COVID-19 are generally in the range of at least 15% to 22%, with even greater losses observed for certain types of work.

- **Impact of Government Measures on Productivity**

Research demonstrates that much of the losses in productivity and efficiency are attributed to government-mandated safety measures designed to protect the workforce by curbing the spread of COVID-19. In the construction industry such measures have encompassed, for example, crew size reductions to accommodate social distancing requirements, sanitizing of tools, equipment, work areas and materials. [*The Silver Lining of Construction Productivity and COVID-19*, **Exhibit 27**]

Furthermore, according to a survey of construction project managers conducted in the United States, productivity has decreased because workers have failed to report to work for various reasons, including quarantining requirements, caring for children because of school closures, and fear of being infected at work. [*Early Impacts of the COVID-19 Pandemic on the United States Construction Industry*, **Exhibit 28**] This has also necessitated the recruitment and training of replacement workers, consuming additional time and resources. Lack of productivity of construction workers has also been attributed to negative changes in mental health, as detailed below.

- **Psychological Impacts of COVID-19 on Productivity**

  - **Psychological Impacts on the Workforce**

Data collected in 2021 by Mental Health Research Canada ("MHRC") from 3,000 Canadians revealed that during the COVID-19 outbreak, Canadians recorded the highest level of anxiety (25%) and depression (17%) to date. [*Mental Health During COVID-19 Outbreak*, **Exhibit 29**] During the height of first wave of the pandemic, the level of depression amongst Canadians increased by 70%. Within the overall Canadian population, younger Canadians (aged 18-34), who make up a large portion of the Canadian work force, are more likely to experience anxiety and depression than their older counterparts.

Studies illustrate that one of the most common causes of anxiety and stress amongst workers during the pandemic is related to the risk of contagion in the workplace and the adoption of preventive procedures. A research paper published in the International Journal of Environmental Research and Public Health, concluded that the pandemic had major psychological impacts on members of the workforce. [*COVID-19-Related Mental Health Effects in the Workplace*, **Exhibit 30**] New mental health issues have emerged as people cope with changed working conditions and novel stressors.

Existing mental health issues have been exacerbated. In addition, many workers have experienced burnout, which frequently results from chronic workplace stress and can impact an individual's motivation and productivity. [*Both Remote and On-Site Workers are Grappling with Serious Mental Health Consequences of COVID-19*, **Exhibit 31**]

In a survey of 132 construction workers, it was found that the working environment had the greatest influence on psychological anxiety. [*An Analysis of the Psychological Anxiety Factors of Construction Workers,* **Exhibit 32**] Factors including a shortage of personal protective equipment (particularly in the early stages of the pandemic); physical weight and inconvenience caused by wearing such equipment; fear of infection and the associated risk of harm to family members; conflict between safety procedures and the desire for social interaction; longer working hours; increased multitasking; and the stigmatization of infected people returning to work after quarantine all deeply affect the mental well-being of workers. As a result, workers may develop a range of behavioral (e.g., direct consequences on performance), physical (e.g., headache, gastric disturbances), and psychological (e.g., mood swings, lowered motivation, depressive thoughts, feelings of isolation) reactions leading to decreases in productivity. [COVID-19-Related Mental Health Effects in the Workplace, Exhibit 30]

- **Psychological Issues and Decreased Productivity in Construction Workers**

Mental health challenges impact both the wellbeing and productivity of construction workers. A study from 2017 [*Analyzing Psychological Conditions of Field-Workers in the Construction Industry*, **Exhibit 33**] analyzed the effects of psychological conditions of fieldworkers in the construction industry and concluded that, in accordance with findings of the World Health Organization, [*Mental Health Policies and Programmes in the Workplace*, **Exhibit 34**] mental health problems such as stress, personality disorder,

depression and anxiety (all of which can also lead to substance abuse) can affect the ability of workers to perform work safely and can lower productivity. In the construction industry, many studies have identified mental health as a critical factor influencing safety and productivity. Occupational stress (e.g., heavy workload, job insecurity), organizational stress (e.g., inefficient communication, interpersonal conflicts, lack of rewards), and environment-related stress (e.g., inadequate personal protective equipment, excessive noise, severe weather conditions) can reduce workplace safety and productivity. Worker anxiety causes avoidance and procrastination, unnecessary task-switching, and excessive worry about completing a given task, leading to delays in work output. [*How Anxiety Can Affect Our Attention and Concentration at Work and What to Do About It*, **Exhibit 35**] An American study [*Why Anxiety Is the Number One Productivity Killer*, **Exhibit 36**] analyzed the various ways anxiety impacts workers and concluded that it has negative effects on the following:

- Workplace performance (56%)
- Relationships with coworkers and peers (51%)
- Quality of work (50%)
- Relationships with superiors (43%)

Anxiety has been coined "the number one productivity killer", as 40% of workers experience persistent stress or excessive anxiety in their daily lives and 72% find that it interferes with their job performance and personal lives.

Other studies revealed that depression and anxiety were strongly linked to long-term productivity losses and safety issues by causing motivation, satisfaction, and emotional problems. This is relevant during the COVID-19 pandemic as many studies point out that mental health issues are exacerbated during the pandemic, with approximately half of the population being affected by symptoms of anxiety. [*A Systematic Review of the Prevalence of Anxiety Symptoms During Coronavirus Epidemics,*

Exhibit 37] Research indicates that individuals working during the pandemic face unique threats to mental health and wellbeing depending on which sector they work in and their potential for exposure to the coronavirus, with construction workers being at one of the highest levels of risk for increased mental health issues. [*Both Remote and On-Site Workers are Grappling with Serious Mental Health Consequences of COVID-19*, **Exhibit 38**]

- **Quantification**

Quantifying the impact of COVID-19 on productivity in the construction industry is critical because it allows for equitable compensation of past losses and formulation of more accurate cost projections. Empirical studies conducted in North America and the United Kingdom provide concrete data on the magnitude of the losses.

A study of 70 medium-sized construction projects in the United Kingdom found that COVID-19 caused a typical productivity loss of 15%. [*UK Construction Counts the Productivity Cost of COVID-19*, **Exhibit 39**] Of this, labor shortages and social distancing measures accounted for a combined 7%, with late or unavailable materials contributing another 7%. The final 1% was attributable to poor transfer of design information while remote working.

Compass International conducted a survey of construction managers, site superintendents and estimators on industrial projects in Canada and the US to assess the productivity losses arising on various projects. The results indicate that pandemic-related losses are typically in the range of about 10% to 35%, depending on the type of work involved. For example, site clearance experienced losses of 10%, while losses for concrete work and the installation of towers and other major equipment were as high as 25%. In all cases, losses for indirect site work, including material distribution, clean-

up, administration, and transport ranged up to 25%. [*COVID-19 Construction Productivity Changes*, **Exhibit 40**]

A study commissioned by ELECTRI International analyzed the productivity losses suffered by electrical contractors as a result of COVID-19. [*Pandemics and Construction Productivity: Quantifying the Impact*, **Exhibit 41**] The losses were divided into two main categories: mitigation tracking (which quantifies hours consumed carrying out measures designed to reduce the risk of exposure to the virus, such as training, health screenings, cleaning and disinfecting, job site access, and administration) and productivity benchmarking (which quantifies the reduction in direct work productivity resulting from factors such as social distancing, staggered shifts, reduced crew sizes, use of increased personal protective equipment, related job site regulations, extra mobilizations/demobilizations, work fatigue from anxiety and excess absenteeism, and altered delivery of materials).

Based on a random sampling of more than 92,000 labor hours in the electrical industry across the United States and Ontario, ELECTRI International found an 8.9% productivity loss as a result of mitigation tracking, with a further 12.9% loss associated with productivity benchmarking. Importantly, these two metrics are additive, such that the average productivity impact was found to be 21.8%. The study concludes that this result constitutes a suitable baseline for productivity loss across a wide array of projects, with modifications to be made based on the specific circumstances at hand.

A similar study was conducted by New Horizons Foundation using the same mitigation tracking and productivity benchmarking measures for sheet metal, HVAC and mechanical contractors from a random sample of over 20,000 labor hours across the United States. [*Pandemics and Productivity: Quantifying the Impact*, **Exhibit 42**] The New Horizons study found negative impacts of 8.7% for mitigation tracking and 9.2%

for productivity benchmarking. These metrics are again additive, for a total productivity loss of 17.9%.

Combined, the above studies signify that the presumed starting point for productivity loss is in the range of 15% to 22%, with adjustments to be made based on the particular circumstances of the project and the type of work involved.

6.4.2 Project Specific Mitigation & Productivity Impacts

Certainly, this Project felt the brunt of the COVID-19 impacts described above. Moreover, at the onset of the pandemic, Valard's field crews were already experiencing significant inefficiencies due to the fact that both permit approvals and tower steel deliveries were late and out-of-sequence. The industry articles and studies referenced above assess the loss of productivity by comparing conditions during the pandemic to "normal" operations. Nothing on this Project was "normal" (i.e., going as planned) when the pandemic started. In this case, the effect of the pandemic was to make an already bad situation much worse.

As suggested in the industry studies referenced above, our analysis is segregated between mitigation tracking and productivity loss. Mitigation tracking includes impacts that are more directly associated with addressing the many operational changes brought about by the pandemic. These changes, all of which were unanticipated, include items such as the purchase additional safety supplies and personal protective equipment; time spent on additional safety training; time spent on health screenings and symptom testing; time spent cleaning and sanitizing; added workplace and camp inspections; and travel disruptions and restrictions. Generally, the mitigation tracking impacts are easily discernible and lend themselves to more discrete quantification.

The productivity loss component is intended to separately quantify the indirect impacts of the pandemic. In this case, the productivity losses result from a combination of the implementation of the operational changes referenced above and the psychological impacts of the pandemic. As summarized previously, the factors giving rise to inefficiencies include a shortage of personal protective equipment (particularly in the early stages of the pandemic); physical weight and inconvenience caused by wearing such equipment; fear of infection and the associated risk of harm to family members; conflict between safety procedures and the desire for social interaction; longer working hours; increased multitasking; and the stigmatization of infected people returning to work after quarantine all deeply affect the mental well-being of workers. Clearly, these factors have had a significant adverse impact on productivity, but it is also true that the quantification of the overall impact is more difficult to assess.

6.4.2.1 Mitigation Tracking

The examples of added costs and inefficiencies associated directly with the pandemic are numerous and easily discernable. First, time has been lost on a daily basis due to the implementation of additional safety protocols. Below are daily impacts faced by the field crews while working the unprecedented pandemic conditions. Notably, these are not captured separately in Valard's cost accounting data, but rather are included within the direct cost accounts by crew and/or work type.

- **COVID-19 Screening at Security Gate/Check-in Site:**
  - ✓ At the start of each shift, all personnel are required to line-up to get a temperature check and answer a list of questions.
  - ✓ Depending on the number of crews at the gate, wait ranges from 5 to 30 minutes.

- **Daily Crew Checklist with Tailboard Meetings:**
  - ✓ While these daily meetings are standard operating procedure, Valard estimates that the duration of the meetings has been extended by at least 10 minutes for COVID-19 related discussion.
  - ✓ Field Supervision are required to perform COVID-19 daily screening with each crew member.
  - ✓ This included asking each crew member individually if they have any of the following: new or worsening cough, shortness of breath or difficulty breathing, temperature equal to or over 37.5°C, feeling feverish, chills, fatigue or weakness, muscle or body aches, new loss of smell or taste, headache, gastrointestinal symptoms (abdominal pain, diarrhea, vomiting).
  - ✓ Results will be recorded and documented on the Daily Tailboard.
- **Daily Truck Cleaning:**
  - ✓ To increase cleaning to help control the COVID-19 pandemic, daily truck cleaning was required at the Project site.
  - ✓ Operators of shared vehicles or equipment being used on the Project, are required to disinfect/sanitize commonly touched surfaces in/on the vehicle or equipment at the start and end of the day and between uses when sharing with another co-worker. COVID-19 vehicle inspections must be completed daily.
  - ✓ Valard estimates that approximately 30 mins each day has been required to clean and disinfect pick-up trucks. Notably, Valard has agreed to allocate this amount of time to its right-of-way subcontractors.
- **Truck Passenger Limitations (lunch rotations):**
  - ✓ Valard was also forced to implement a limitation of two crew members traveling in a truck at any given time.
  - ✓ Because crews could not eat lunch in trucks due to distancing requirements, a rotation was implemented to allow two people per vehicle sitting on opposite sides of vehicle.

- ✓ This lunch rotation was a hinderance to productivity, as there are many jobs that would require full crew. Instead of having everyone on break at once, having staggered multiple breaks degrades efficiency of the overall crew.

- **Additional Cleaning of Tools and Equipment:**
  - ✓ Time spent wiping electronic keyboards, workstations, small tools, etc.
  - ✓ While not easily quantifiable, additional time has clearly been lost cleaning tools and equipment, wiping down workstations, etc.
- **Personal Protective Equipment, Sanitizer, Signage:**
  - ✓ Lost time associated with employees using sanitizer throughout the day, having to replace their mask, adjust their mask, etc.
  - ✓ Eye wear fogging up, constant adjustments throughout the day. Use of masks often fog up glasses & goggles and restrict breathing during laborious activity.
  - ✓ Supervisors are asked to constantly monitor signage (i.e., for damage, removal, etc.). As crews move from location to location, which is quite often, signage must be relocated.
- **Exit Screening:**
  - ✓ Workers are required to inform security when exiting the project. Responses to screening questions and temperatures are documented. Failure to complete exit screening results in refusal of site access for up to 14 days.
  - ✓ If a worker is staying off camp, they must visit a security check point on their last day of work to have exit screening completed.
  - ✓ Depending on the number of crews at the gate, the wait time ranges from 5 to 30 minutes.

In addition to the additional tasks performed daily, time has also been lost for other periodic activities performed in relation to the work on the Project. Below are other field crew impacts due to the pandemic conditions.

- **COVID-19 Training and Response Drills:**
  - ✓ COVID-19 training and response drills are held monthly. All personnel working on the Project are required to attend these meetings to review COVID-19 protocols and practices to help minimize the risk of contracting the virus.
  - ✓ These monthly meetings are typically 30 minutes in duration.
- **Weekly Inspections of Camps and Work Areas:**
  - ✓ Once weekly, all camps and work areas (tool cribs, shops, storage containers, etc.) are inspected to ensure that procedures and protocols are in place (i.e., screening requirements are in place and enforced, cleaning and cleaning supplies are suitable, signage in place, social distancing requirements being followed, etc.).
- **Travel Disruptions and Restrictions:**
  - ✓ Due to COVID-19 protocols, when traveling to the site, an additional 24-48 hours' notice is required before arrival, to confirm flight bookings. Typical travel procedures under COVID-19 restrictions are as follows:
    - Employee receives travel itinerary.
    - 24-48 hours prior to travel the employee fills out a pre-travel screening form.
    - Employee travels to site (flights, driving, etc.).
    - Upon arrival at site, the employee undergoes PCR (polymerase chain reaction) testing at the Valhalla Inn Thunder Bay or the Thunder Bay Office. Note, depending on the arrival time in Thunder Bay, the employee may need to overnight either due to testing capacities and timeline, or because they got in on a late flight.
    - Employee waits for test results (generally 2-3 hours).
    - If a negative result is received, employee goes to camp/hotel/work site via Valard crew vehicle or a shuttle service.

- If results are positive or inconclusive (referred to as "non-negative" on the Project), employee goes through additional testing and may be required to self-isolate pursuant to the relevant safety protocol.

✓ In general, the Project team prioritizes our booking efforts to ensure that travel is arranged to get the crews from home, all the way to the intended accommodations/camp that they will be working from in one travel day, so the employee can start construction activities the next day (the official first work day). COVID-19 has impacted these efforts as follows:

- Restricted availability (or elimination) of flights that would normally allow workers to get from home, all the way to the worksite, in one day.
- This is somewhat mitigated by the charter program; however, charters are typically more expensive unless completely full.
- While Valard does not provide compensation to the workers to travel on the day they go from their home to the Project, when someone has to stay in a hotel as a direct result of the COVID-19 testing, there is a lost day, or at the least a delayed start.
- For example, typically an employee could make it to the camp on the first travel day, but because they have to wait for test results, it becomes too late to travel so they have to book a hotel and wait another night. Valard had to pay for that one additional night living out allowance.
- This all significantly hinders Valard's ability to plan and coordinate its field efforts efficiently and leads to never-ending adjustments in crew placement and sizes.

The impacts identified above outline the added safety protocols arising from the pandemic. These are not inefficiencies in the classic sense, but rather increments of time lost on a daily basis as a result of having to perform additional tasks not required under typical working conditions. While the time to perform these tasks clearly varied from crew to crew and day to day, Valard estimates the lost time as follows:

Activity	Time Impact Range (minutes)		Notes
Daily truck cleaning checklist	20	30	30 minutes previously allocated by Valard to ROW subcontractors.
Wait time at security gate	10	15	Varies from 5-25 mins, based on number of crews at the gate.
Additional time related to COVID-19 checklist on crew tailboard	8	12	Meetings has been extended by at least 10 minutes for COVID-19 related discussion.
Additional wait time for entry and exit screening	5	10	Varies. Typically, 5 mins, but could be up to 30 mins if there is a line. Time impact range includes both entrance and exit.
Extra lunch time due to truck rotation	5	10	Crews cannot eat in truck together due to social distancing requirements. Must rotate to 2/truck, sitting on opposite ends.
Impact of daily COVID-19 Impacts (minutes)	**48**	**77**	
Total Shift (minutes)	660	660	Standard work day is 11 hours for EWT
Daily Impacts (calculated %)	7.3%	11.7%	
Other Impacts	2%	3%	Other periodic impacts applied to the overall work force.
Total	**9.3%**	**14.7%**	

In combination, C2G estimates the mitigation tracking impacts and unplanned additional work associated with the added COVID-19 protocols to be in the range of 9.3% to 14.7%. C2G believes the time impacts listed in the table above represent a conservative assessment of the lost time due to employees being diverted from normal construction related activities to pandemic related activities. Again, these are not inefficiencies in the classic sense, but rather increments of lost time as a result of having to perform additional unplanned COVID-19 related tasks, which are not required under typical working conditions.

6.4.2.2 Productivity Loss

We are left with the assessment of the actual labor inefficiency – the loss of productivity for the workers while actually performing work tasks (the quantification of the

reduction in direct work productivity resulting from factors such as social distancing, staggered shifts, reduced crew sizes, use of increased personal protective equipment, related job site regulations, extra mobilizations/demobilizations, work fatigue from anxiety and excess absenteeism, and altered delivery of materials). Examples of these additional impacts include the following:

- **Distancing Requirements:**
  - ✓ Most crews on this type of project normally work in close proximity to one another. Valard had to reorganize activities and work to ensure physical distancing could be observed pursuant to safety requirements.
  - ✓ Office management and supervisory staff had to be moved around to respect physical distancing requirements in indoor spaces, resulting in inefficiencies, as the team was split up in different buildings.
  - ✓ Tower assembly crews unpacking steel from bundles have had to be extra cognizant of physical distancing and proper mask usage. This has resulted in increased time to complete assembly activities.
  - ✓ Distancing requirements are an ongoing obstacle on the tower erection and stringing crews. Many of the activities associated with this work require 2 or more employees working in direct proximity (ladders, splice locations, man baskets, puller/tensioner sites), so masks are required if distancing is not possible (masks often fog up glasses & goggles and restrict breathing during laborious activity).
- **Truck Passenger Limitations (other follow-on impacts):**
  - ✓ Significant time has been spent by supervisors to gather vehicles for the 2-person per vehicle protocol. Additionally, supervisors have spent a great deal of time enforcing COVID-19 protocols and paperwork instead of focusing on the planning and coordination of the work.
  - ✓ The 2-person per vehicle protocol resulted in increased congestion on site (i.e., 6 trucks per assembly crew, rather than 3). Congested sites have made moving material & equipment through trails of limited size over difficult

terrain more difficult, as well as increasing the risk of impact/damage to equipment.

- ✓ The 2-person per vehicle protocol resulted in long wait times even before arriving at the tower locations. Often times, lines of vehicles at security checkpoints and fueling depots doubled further degraded efficiency and delayed physical work progress.

- **Isolation of employees**
  - ✓ The requirement for employee isolation has occurred frequently since the onset of the pandemic. Symptomatic workers and those found to have been in direct contact/exposure must be isolated where possible on the site or sent home.
  - ✓ For example, there have been 210 isolated employees tracked since March 2020.
  - ✓ Due to the isolation procedures resulting from rotational COVID-19 testing (most notably the close contact isolation requirement) many of the crews have been working with 1-2 missing crew members for various periods of time. The crew size disparity has further increased the loss of productivity.
- **Psychological Impacts on the Workforce**
  - ✓ As noted previously, and as has now been experienced firsthand by most of the world, the combination of numerous psychological issues has clearly impacted productivity in the field:
    - Physical weight and inconvenience caused by wearing such additional personal protective equipment;
    - Fear of infection and the associated risk of harm to family members;
    - Stress and family unrest creating a psychological distraction while at site;
    - Conflict between safety procedures and the desire for social interaction;
    - Increased multitasking;
    - The stigmatization of infected people returning to work after quarantine;
    - Occupational stress (e.g., heavy workload, job insecurity); and,

- Organizational stress (e.g., inefficient communication, interpersonal conflicts, lack of rewards).

✓ Worker anxiety causes avoidance and procrastination, unnecessary task-switching, and excessive worry about completing a given task, leading to delays in work output.

- **Diversion of Management and Supervisory Resources:**

✓ Valard's management and supervisory team has been required to draft many policies and continue to provide guidance and oversight to respond to changing circumstances and government regulations, which have been in a constant state of flux. The time spent developing policies by management personnel required significant effort on the part of Valard and diverted those resources from typical planning and coordination work on the Project.

✓ Valard's unplanned role as liaison to various levels of health authorities took significant effort by Valard's management employees. The construction industry was certainly under a microscope in Ontario and being responsive and working with health officials was an incredibly onerous task to prevent stop work orders.

✓ In addition to monitoring themselves for pandemic burnout, Valard's supervisors were asked to take a more active role in monitoring employees for mental fatigue.

✓ Significant research was required to develop best practices, and significant time was spent communicating and educating these practices to management and supervisory staff members, and to the field workers.

✓ Valard's out of province resources, including executive leadership, was restricted from attending site to provide guidance and support to the Project.

✓ In addition, the scope of this Project affected many communities. Valard had to constantly prepare concise and clear messaging assuring subcontractors, and members of the public that its policies would allow construction to continue in a safe manner.

- ✓ To ensure practice was as good as policy, members of the safety team and supervisors were required to constantly audit protocols, including as follows:
  - Checks for levels of safety equipment (PPE/sanitizer was required – i.e., inventory checks).
  - Checks on cleanliness of worksites and equipment.
  - Of course, the ongoing inspections also required unplanned time for the workers to stop their activities during any spot audits and answer questions.
- ✓ Development of the many new policies and procedures during the pandemic took significant time and resources:
  - Develop and implement COVID-19 management plan;
  - Create various COVID-19 safety checklists;
  - Create all field forms and documents used in relation to COVID-19;
  - Compile weekly tracking documents (Safety Meetings, Tailboards); and,
  - Develop and implement testing procedures.

- **Psychological Impacts:**
  - ✓ The workers on the Project have expressed an increased level of overall stress as a result of having to be extra aware of social distancing protocols while completing the work.
  - ✓ All workers are facing increased mental fatigue, anxiety over family health, and pandemic burn-out.
  - ✓ Valard's Project management and supervision team members have repeatedly stated that they have never seen this state of work staff, and employee tracking records clearly support this declaration.
    - From 2019 to 2020, there was an 11% increase in claims related to workplace stress.
    - Quarter over quarter (Q1 2020 and Q1 2021), there was a 42% increase in claims related to workplace stress.

- Between second quarter 2020 and first quarter 2021, 15% of all calls to Valard's employee assistance program were related to COVID-19.

In combination, C2G estimates the productivity loss impacts associated with COVID-19 to be in the range of 8% to 10%. Notably, the two studies referenced in Section 6.4.1 above that segregate mitigation tracking and productivity loss identify the productivity loss component in the range of 9.2% to 12.9%. Accordingly, C2G believes the range identified on this Project represents a conservative assessment of the productivity loss related to the pandemic.

6.4.2.3 Summary of COVID-19 Mitigation & Productivity Impacts

In combination, C2G has identified a range of 17.3% to 24.7% for mitigation tracking and productivity loss on this Project. This range ties closely to the 19.3% overall average of the four industry studies referenced in Section 6.4.1 above. For purposes of calculating damages later in this report, our analysis will utilize the average of the range identified, which equates to 21% for mitigation tracking and productivity loss.

6.4.3 Other COVID-19 Impacts

Beyond the labor impacts discussed above, there are a variety of other cost impacts associated with COVID-19. The following subsections summarize the additional cost impacts known as of this writing (further details are also provided in the Quantification of Damages section of this report).

6.4.3.1 Schedule Delay

Without question, additional schedule delays have been incurred as a result of COVID-19. These delays are difficult to quantify specifically due to the nature of the associated impacts, as well as the fact that there are multiple overlapping delay issues on this

Project (Owner permits and tower steel delivery). In fact, the permit process and steel deliveries have most certainly also been impacted by COVID-19.

Without question, the rate at which permits were being approved declined significantly starting in March 2020. For permits that Valard has a record of the submission dates, those received prior to March 2020 had a review time averaging 72 calendar days. Conversely, the permits approved from March 2020 forward had a review time averaging 145 calendar days. More than one-half (767) of the tower sites were approved in the first six months of the Project, through February 2020. However, permit approvals for the remaining tower sites took more than one year to obtain.

Similarly, tower steel deliveries declined significantly starting in the spring of 2020. While relatively strong deliveries continued through May of 2020 (averaging nearly 6,200 boxes and bundles delivered per month for March, April and May 2020), beginning in June 2020, presumably after parts in transit at the onset of the pandemic had arrived at the site, deliveries plummeted to an average of less than 2,000 pieces for the next three months (a 70% reduction from prior months). While deliveries did increase again in the fall of 2020 (reaching nearly 6,500 pieces in the month of October 2020), all of the required steel has still not been delivered, some six months after the planned delivery completion date.

Of course, the productivity loss associated with COVID-19 has also had a significant impact on schedule. Without consideration of any mitigation measures, the 21% loss outlined above would translate to approximately three months of delay since March 2020. However, this delay coincides with the ongoing delays associated with Owner permits and tower steel delivery, which themselves were likely impacted by COVID-19. Consequently, the delays on the Project are both overlapping and interrelated and cannot be isolated individually.

6.4.3.2 Increased Material & Subcontractor Costs

As is further detailed in the damages section of this report, significant third-party cost increases have been incurred as a result of COVID-19. These include directly related material purchases for items such as the COVID-19 symptom testing, personal protective equipment, quarantine related costs, increased travel costs and camp operational costs. These costs have generally been tracked separately to date and are forecasted discretely through Project completion.

Valard has also received COVID-19 related claims from subcontractors working on the Project. To date, Valard has received claims from right-of-way subcontractors Kabi Lake Forest Products Inc., and E. Corbiere & Sons Contracting, valued at approximately $2.5 million and $2 million respectively. Additionally, Valard has also been required to compensate both of these subcontractors for the additional health and safety activities related to the COVID-19 preventative measures discussed previously. While these are the only two subcontractors that have submitted claims to date, based on the documentation seen, it is certainly possible additional subcontractors may come forward with COVID-19 claims.

7. Impacts Arising from Delays Incurred

7.1 Impacts to Valard's Overall Bid & Schedule Concept

The three primary delay issues discussed above have had wide reaching impacts on the Project. Perhaps most significant was the undoing of the principal concept that formed the basis for Valard's bid estimate and the original plan for the construction of the Project, which was to "get out of the ground" as early as possible and proceed with linear progression of construction. Right-of-way work was to have been completed by July 2020, shortly after the first spring thaw period. All foundations were to have been in place by November 2020, a full year prior to Project completion. However, both

right-of-way and foundation work are now forecasted to complete just a few months prior to completion.

Based on the values established in the original Contract, right-of-way and foundation represents approximately one-half of the work on the Project. Consequently, while the overall Project Provisional Acceptance date is currently forecasted to be approximately six months late, roughly one-half of the work on the Project will incur delays of more than 10 months. Although much of this work is subcontracted, this internal schedule shift will substantially increase the cost of the work due to the need to maintain management, supervision, equipment and camp resources on the site much longer than originally planned.

These delays incurred, coupled with the out-of-sequence manner in which Owner permitting and steel deliveries occurred, the unprecedented impacts of COVID-19, and the Owner's desire for Valard to maintain the very aggressive schedule to achieve Provisional Acceptance by March 2022, have entirely changed the nature of the Project and dramatically increased the cost of the work.

7.2 Impacts Due to Work Shifting into Unplanned Time Periods

The schedule delays have significantly increased the impacts associated with non-work periods. For example, Valard's Change Order No. 1 baseline schedule did not contemplate that the right-of-way crews at any Work Front would be working up to and immediately after a spring thaw period. As a result of the delays (primarily the Owner permit delays and the onset of COVID-19), Valard's right-of-way crews had started, but not completed, work in eight of the 11 Work Fronts during the first winter season. While the right-of-way crews would have likely worked through a portion of the 2020 spring thaw period, with the onset of COVID-19 in February and March 2020, the crews were forced to stop work completely during most of April and May 2020.

Consequently, the right-of-way crews experienced unplanned demobilizations and remobilizations, which resulted in added expense and inefficiencies.

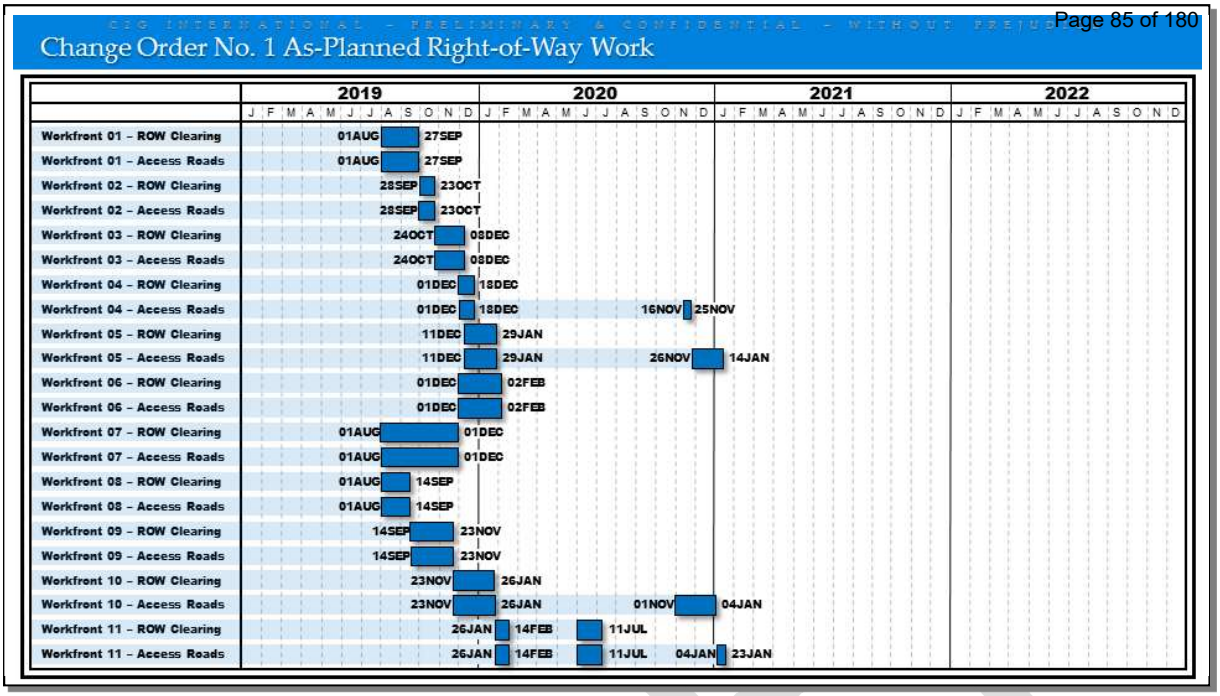
In addition, the delays have also resulted in much of the work being performed in different, and less favorable, seasons. For example, Valard's Change Order No. 1 baseline schedule contemplated that roughly 77% of the right-of-way and foundation work would be performed in the fall and winter seasons (September to February). As a result of the delays, roughly 25% of the civil work has been pushed into the spring and summer seasons, which is generally less efficient and more costly (i.e., adverse weather conditions, access road maintenance, etc.).

7.3 Impacts to Right-of-Way Work

The Owner permit delays have had wide reaching impacts to the Right-of-Way work. Valard's bid estimate and original plan for the construction of the Project contemplated "getting out of the ground" as early as possible. Right-of-way work was to have been completed by July 2020, shortly after the first spring thaw period. Some access road work was planned in the second winter season of 2020/2021 to facilitate the workflow of foundation, structure and stringing crews in the 2021 spring and summer season.

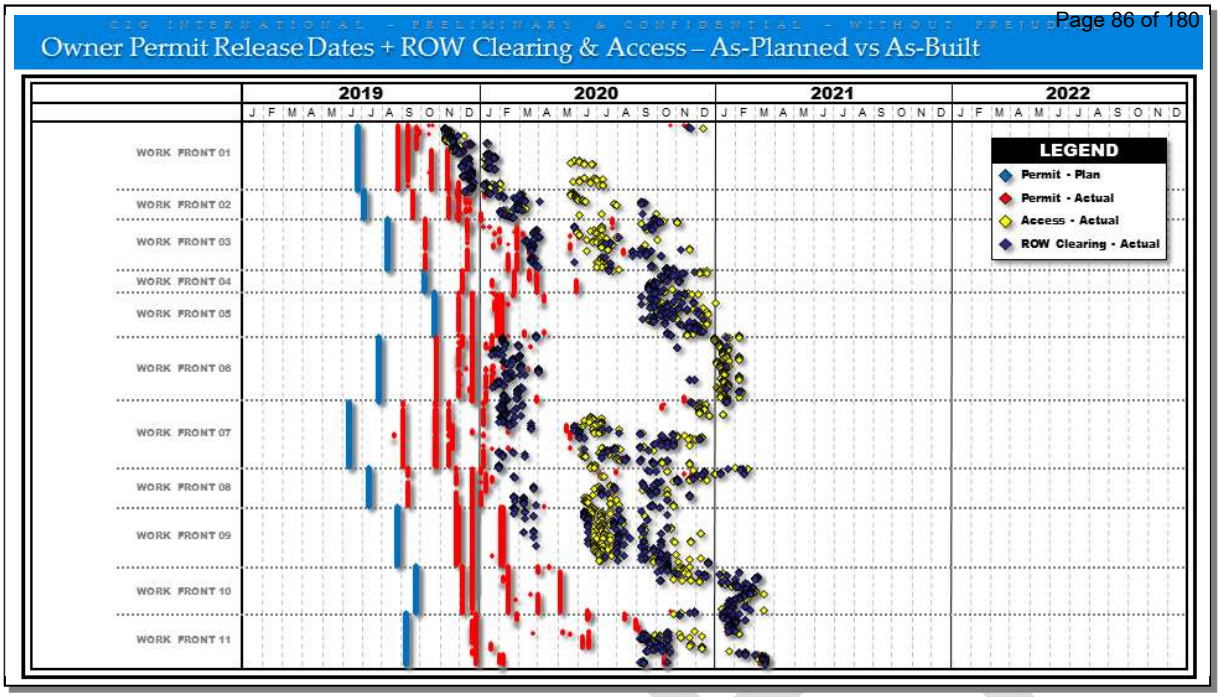
Valard's plan to execute right-of-way work included a combination of winter roads and all-season roads, with a focus on constructing as many winter roads as possible. Winter road construction and associated winter water crossings are much more cost-effective when compared to an all-season access road and the associated water crossings. There is also much less remediation required with a winter road.

As clearly seen in the graphic illustration included below as **Exhibit 43**, the plan for right-of-way work (clearing and access road construction) based on Change Order No.1 had a logical workflow, based on the sequential receipt of Owner permits.



Right-of-way work was planned to be executed in three workflows. One workflow was planned to start on August 1, 2019, in Work Front 01 (Contract Segment A), continuing west to east and finishing in Work Front 05 (Contract Segment C) in late January 2020. A second workflow would also start on August 1, 2019, in Work Front 07 (Contract Segment D), continuing from east to west, and finishing in Work Front 06 (Contract Segment C) in early February 2020. A third workflow would also start on August 1, 2019, in Work Front 08 (Contract Segment E), continuing east to east and finishing in Work Front 11 (Contract Segment F) in July 2020.

Valard's plan, as memorialized in the Change Order No.1 Primavera P6 schedule, provided the most cost-effective workflow sequence to execute the right-of way work. However, as detailed above, access to the right-of-way was not provided pursuant to the plan established by Change Order No. 1, and the Owner permitting delays clearly drove Valard's ability to clear right-of way areas and construct access roads. The graphic illustration included below as **Exhibit 44** shows all work on the entire right-of-way, organized by Work Front to illustrate this obvious point.



It can be clearly seen in the graphic illustration above that right-of-way clearing and access road construction followed the receipt of the Owner permits. All Owner permits for all sites are shown in the graphic, with the last Owner permit being the trigger that allowed Valard to begin their scope of work.

The delay in Owner permits completely disrupted the sequential workflow logic that Valard had planned, as the permits were received in a piece-meal scattered manner. The permit delays also required Valard to re-evaluate the types of access roads and crossings to construct, due to some permits being received in an entirely different season than planned. Valard often found themselves having to make decisions in real-time as permits arrived, as to whether an access road and the associated crossing should be constructed as planned, or whether a different road and crossing should be constructed, due to the permit receipt dates occurring in a different season, with different weather conditions.

The impacts to the right-of way work, as a result of the Owner permit delays, can be categorized as 1) Double-Construction of Access Roads, 2) Change in Road Type from

Winter to All-Season, 3) Change in Water Crossing Type, and 4) Work Front 06/Caribou Zone Specific

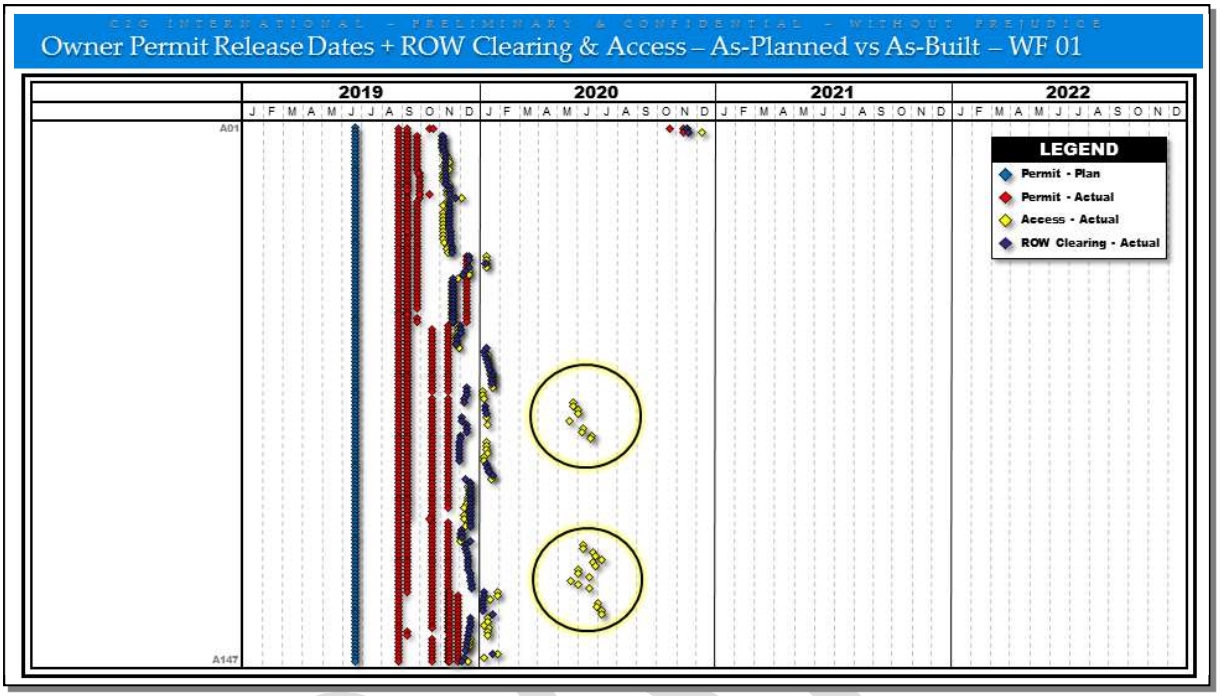
7.3.1 Double-Construction of Access Roads

In the Change Order No.1 schedule, some of the first access roads were planned to be constructed as an all-season road. However due to permit delays, the initial period prior to the 2019/2020 winter season was lost. This resulted in some of the access roads having to be installed initially as a winter road, and then later reconstructed as an all-season road. All-seasons roads cannot be built in a cost-effective manner, in the heart of winter, as to do so would require significantly more effort in establishing the subgrade, and constant clearing of snow. This double-construction effort occurred in Work Front 01, Work Front 02, Work Front 08, and Work Front 09.

In Work Front 01, located in Contract Segment A, the construction plan in the Change Order No. 1 schedule would have allowed Valard to construct all 47.41 kilometers of access roads as all-season roads from August to September 2019.

As substantiated by Valard's Permitting Tracker, failure to obtain necessary Owner permits mandated that access and clearing work be postponed in Work Front 01 until October 2019. This delay shortened Valard's window to construct all-season roads. Valard accelerated its workforce in an attempt to establish all-season access roads prior to significant snowfall. However, in early January 2020, winter weather began to overwhelm crews with snow and temperatures below -27°C. Consequently, Valard was not able to construct 8.7 kilometers of the Work Front 01 access as all-season roads and was forced to construct a winter road for this area, in order allow construction to progress. Subsequently, in order to complete the remaining work in summer of 2020, Valard had to return and reconstruct the same 8.7 kilometers of the access road as an

all-season road. The road reconstruction can be clearly seen occurring in May/June 2020 in the graphic illustration included below as **Exhibit 45**.



Without the initial permitting delay, Valard would have completed the 47 kilometers of access road in Work Front 01 as all-season access, as planned in Change Order No.1. However, due to the permit delays, Valard was required to first install 8.7 kilometers of access as a winter road, and then later reconstruct those same 8.7 kilometers as all-season access as part of constructing the full 47.41 kilometers of roadway as all-season access.

In Work Front 02, located in Contract Segment B, the construction plan in the Change Order No. 1 schedule would have allowed Valard to construct all 25.65 kilometers of access roads as all-season roads from September 2019 to October 2019. However, due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), the primary construction activities for Work Front 02 moved to the second half of 2020. This included access development to be performed

in the summer of 2020. However, some clearing work was still to be performed from January 2020 to March 2020 (inside the limited clearing season for this Project).

In order to accommodate the clearing work being performed prior to the total access development to occur months later, Valard had to construct some access roads prior to the summer of 2020. This included 6.01 kilometers of winter access roadway relating to structures B018 to B053 (around Stewart Lake). This same 6.015 kilometers of access road was then reconstructed as an all-season access road in the summer of 2020.

Without the initial permitting delay, Valard would have completed the 25.4 kilometers of access road in Work Front 02 as all-season access, as planned in Change Order No.1. However, due to the permit delays, Valard was required to first install 6.015 kilometers of access as a winter road, and then later reconstruct those same 6.015 kilometers as all-season access as part of constructing the full 25.4 kilometers of roadway as all-season access.

In Work Front 08, located in Contract Segment E, the construction plan in the Change Order No. 1 schedule would have allowed Valard to construct all access roads as all-season roads in September 2019. However, due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), Valard had to construct 14.87 kilometers of winter roads to allow clearing to proceed on schedule. These same 14.87 kilometers of access roads then later had to be reconstructed as all-season roads in order to allow construction to proceed as planned in accordance with the March 2022 completion schedule.

In Work Front 09, located in contract segment E and F, the construction plan in the Change Order No. 1 schedule would have allowed Valard to construct all access roads as all-season roads from September 2019 to November 2019, prior to the 2019/2020 winter season. However, due to the initial permitting delay and subsequent new re-

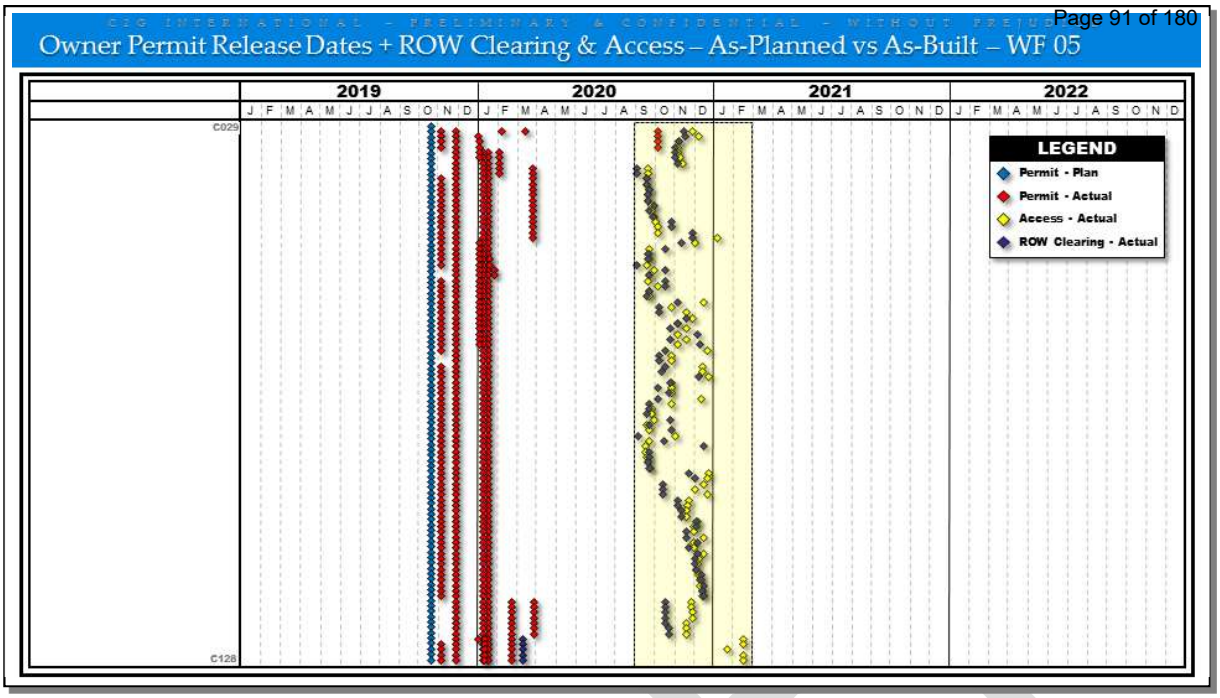
baselined schedule (the March 2022 completion schedule), Valard had to construct 4.02 kilometers of winter roads to allow clearing to proceed on schedule. These same 4.02 kilometers of access roads then later had to be reconstructed as all-season roads in order to allow construction to proceed as planned in accordance with the March 2022 schedule.

7.3.2 Change in Road Type from Winter to All-Season

As planned in Change Order No. 1 schedule, some Work Fronts such as Work Front 05 and Work Front 10, would have constructed primarily winter only access roads. However, due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), Valard had to incur additional costs associated with all-season roads (higher unit rates, gravel costs, higher reclamation costs) in order to maintain the re-baseline schedule.

In Work Front 05, located in Contract Segment C, the construction plan in Change Order No.1 schedule would have allowed Valard to construct primarily winter roads, and focus work in two winter seasons. Valard originally planned to construct only 11.72 kilometers of all-season roads, with the remaining portion of Work Front 05 roads to be constructed as cost-effective winter roads.

However, due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), Valard could no longer take advantage of two full winter seasons to construct more cost-effect winter roadways. Owner permits for Work Front 05 did not begin to become available until after the winter season had ended, and by that time the spring thaw was about to begin, limiting Valard's ability to proceed until Summer of 2020. The road construction can clearly be seen in September 2020 to February 2021, in the graphic illustration included above as **Exhibit 46**.



The Owner permit delays prevented Valard from constructing primarily winter roads and required that Valard adapt and construct approximately 57.4 kilometers (to date) of all-season roads, at a much higher expense.

In Work Front 10, located in Contract Segment F, the construction plan in the Change Order No.1 schedule would have allowed Valard to construct primarily winter roads and snow fill crossings in two full winter seasons.

However, due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), Valard lost the entire 2019/2020 winter season, and Owner permits for Work Front 10 were not received until August 2020. Loss of the initial winter season changed the Project program requiring full all-season access and Valard had to construct a 23-kilometer section from tower sites F072 to F117 as all-season roads to support the March 2022 completion schedule.

7.3.3 Change in Water Crossing Type

As planned in the Change Order No. 1 schedule, some Work Fronts such as Work Front 05 and Work Front 10, would have been able to construct cost-effective winter snow crossings. However, due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), the season that work was being executed changed and Valard had to construct a different water crossing other than a winter snow crossing, in order to maintain progress in the re-baseline schedule.

In Work Front 05, located in Contract Segment C, the construction plan in the Change Order No. 1 schedule would have allowed Valard to construct snowfall crossings on the winter roads. As discussed, many of the winter roads in Work Front 05 were constructed as all-season roads, therefore the water crossings also had to be adjusted to an all-season crossing, such as a bridge, culvert, or rig mat. The deviation in crossings from snow fill to another type can be seen in the examples in the table below showing planned and actual crossing types for sites C059 to C124:

Crossing ID	WCID Number	Planned Crossing	Actual Crossing
WC383	7331.00-WC-A	Snowfill	Rig Mat
WC393	7440.00-WC-A	Snowfill	New Culvert
WC591	7530.02-WC-A	Snowfill	New Culvert
WC594	7161.00-WC-A	Snowfill	New Culvert
WC693	505.00-WC-A	Snowfill	New Culvert
WC389	7380.00-WC-A	Snowfill	New Clear-Span
WC405	7580.01-WC-A	Snowfill	New Clear-Span
WC619	7209.00-WC-A	Snowfill	Rig Mat
WC403	7541.00-WC-A	Snowfill	Rig Mat
WC406	7600.01-WC-A	Snowfill	Rig Mat
WC408	7611.00-WC-A	Snowfill	Rig Mat
WC409	7630.01-WC-A	Snowfill	Rig Mat
WC412	7671.00-WC-A	Snowfill	Rig Mat
WC402	7540.00-WC-A	Snowfill	Rig Mat

In Work Front 10, located in Contract Segment F, the construction plan in the Change Order No.1 schedule would have allowed Valard to construct snowfill crossing on the winter roads. As discussed, many of the winter roads in Work Front 10 were

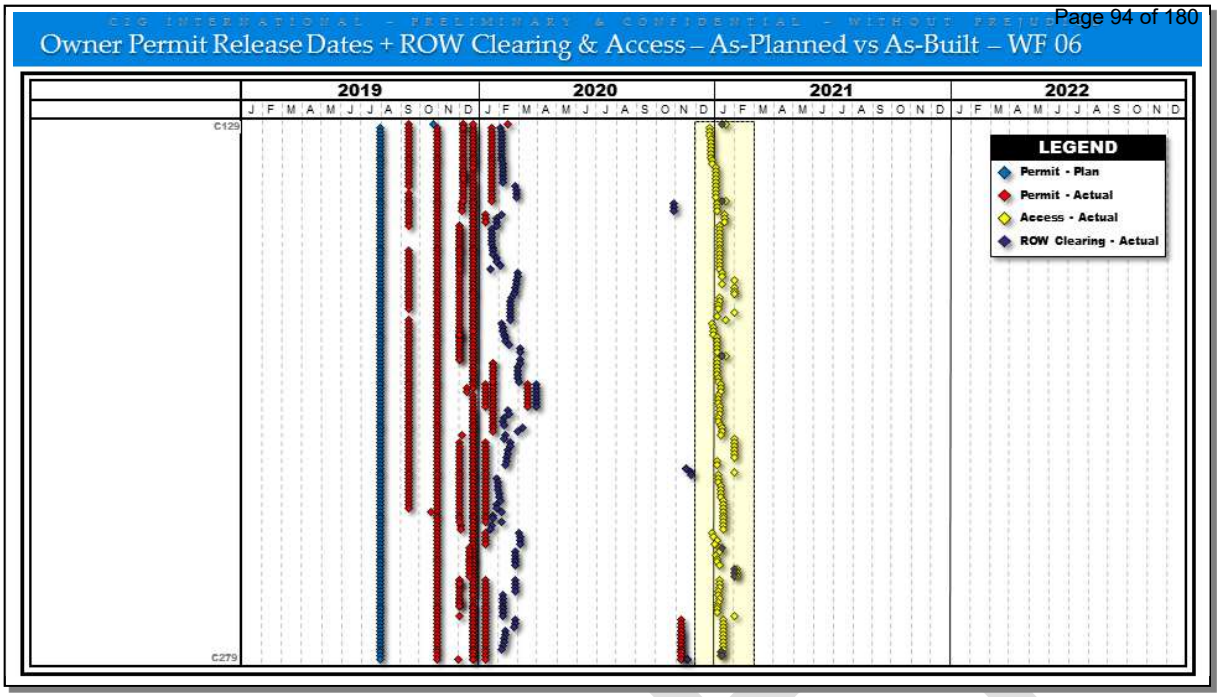
constructed as all-season roads, therefore the water crossings also had to be adjusted to an all-season crossing, such as a bridge, culvert, or rig mat. In Work Front 10, the specific areas were sites F072 to F117.

7.3.4 Work Front 06 (Caribou Zone) Triple Access

In Work Front 06, located in Contract Segment C, the construction plan in the Change Order No.1 schedule would have allowed Valard to construct primarily in one winter season, with only a small amount of access for stringing in a second winter season. The seasonal restrictions imposed by MECP in Work Front 06 related to the Caribou protection do not allow construction from May 1st through September 14th each year, severely limiting the workable timeframe, therefore any disruption, even a minor one, can severely impact the work in this sensitive Work Front.

Due to the initial permitting delay and subsequent new re-baselined schedule (the March 2022 completion schedule), Valard was unable to complete right-of-way work in the first winter season as planned and had to execute work over three winter seasons.

As illustrated below in the graphic illustration included below as **Exhibit 47**, the late Owner permit delayed Valard's ability to construct access roads in the 2019/2020 winter season. The result was only a minimal amount of construction activities were able to be completed before the 'no-work' Caribou window began on April 1, 2020. Valard was required to replan the installation of winter roads in the following winter season and will be required to re-install some winter roads in the upcoming 2021 winter season in order to complete the scope of work.



The re-baseline schedule required substantive construction work throughout three winter seasons. Access work was needed as planned in the first winter season. In the second winter season, full access was again required compared to the plan to complete a minimal amount of access work to support stringing activities. The third winter season again will require fully established winter access roads.

In summary, the Owner permits severely impacted the access release dates along the right-of-way. As a result, the right-of-way work had to be performed in a piecemeal and out-of-sequence manner. The specific impacts, as discussed, resulted in double-construction of access roads, changes in road types from winter to all-season, change in water crossings, and significant impact to the Work Front 06 Caribou Zone. As a result, Valard has been deprived of any opportunity to pursue the right-of-way work in the logical, efficient, and cost-effective manner upon which its bid was based.

7.4 Impacts on Foundation Work

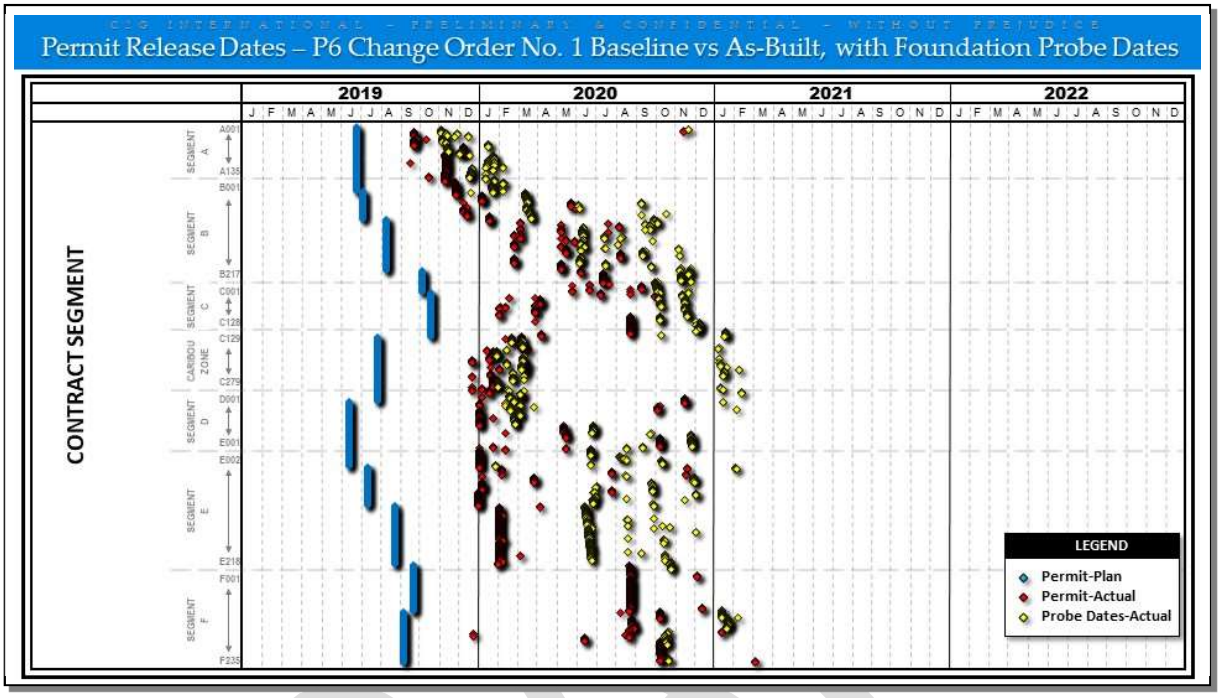
Change Order No. 1, Exhibit C-1, identifies the "Limited Notice to Proceed" date of December 17, 2017, and states that "Construction Access Available" would occur on August 1, 2019 (in all Contract work Segments). Valard's more detailed Primavera schedule, which was required by the original Contract and Change Order No. 1, segregated the work into 11 Work Fronts and set forth specific dates for permit approval in each of the Work Fronts. The earliest of these dates was June 13, 2019 (Work Front 07), and the latest was October 19, 2019 (Work Front 05). The permit approval dates, which allow access to the right-of-way, were established to allow adequate time for foundation geotechnical verification work (soil probing), foundation selection and/or additional design, if needed, and planning of resource requirements.

On average, Valard's Primavera baseline schedule contemplated more than two months from permit approval to start of physical work at a given Work Front (ranging from 19 to 141 calendar days). The baseline schedule also contemplated an average of just over six months from permit approval to start of foundation work at a given Work Front (ranging from 68 to 385 calendar days).

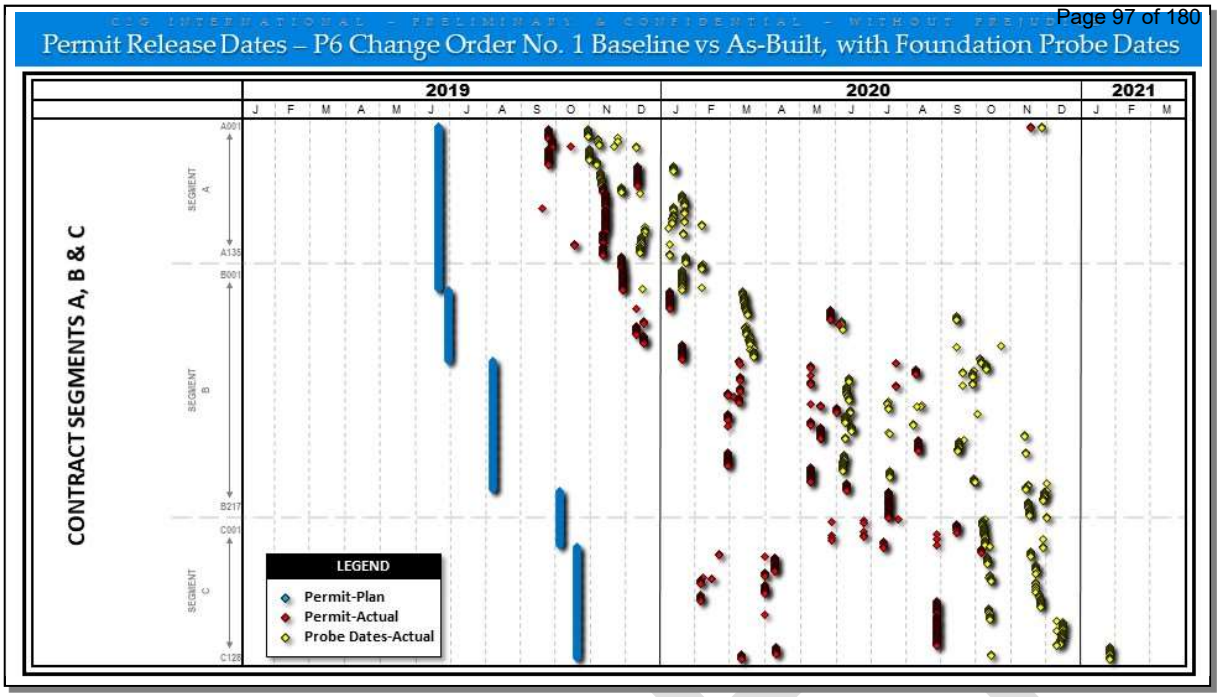
In summary, Valard's baseline schedule, as well as its original agreement to take on responsibility for design and installation of the foundations, was based on the premise that it would have sufficient time to recommend the most cost-effective foundation type and properly and efficiently plan and coordinate its foundation crews to optimize the installation schedule and the cost of the work.

Of course, as discussed, access to the right-of-way was not provided pursuant to the plan established by Change Order No. 1, and the Owner permitting delays clearly drove Valard's ability to initiate the foundation selection process throughout each area

of the Project. The graphic illustration included below as **Exhibit 48** illustrates this obvious point.



As illustrated above, the foundation probe dates (the initial geotechnical evaluation process necessary for foundation selection and design) followed the permit and access release dates along the right-of-way. And in the same fashion as the permit approval dates, the foundation selection process had to be performed in the piecemeal and out-of-sequence manner shown above. This becomes even more apparent with a sampling of the right-of-way. The graphic illustration included as **Exhibit 49** below plots the same data for only Contract Segments A, B and C.



Again, the foundation probing work was clearly controlled and released by the delayed and out-of-sequence receipt of permits and access to the right-of-way. While there are some lag times between the receipt of permits and the probe dates, the graphic above includes on three Segments of work, less than 40% of the tower sites on the Project (i.e., crews are elsewhere on the 450 km right-of-way), the dates upon which permits would actually be received was unknown (i.e., no ability to plan), other work was being performed at the sites (i.e., clearing, accesses roads, initial surveys, etc.) and the probing work is being focused to support the progress and locations of the foundation construction crews (i.e., attempting to complete longer areas of the right-of-way to improve successor crew flow).

As a result of the delayed and out-of-sequence receipt of permits and access to the right-of-way, Valard has been deprived of any opportunity to pursue the foundation selection and design process in the logical, efficient and cost-effective manner upon which its bid was based. Rather than being given unrestricted timely access to entire Work Fronts, the Owner permit releases have been provided on a piecemeal basis

leading to significant inefficiencies in the soil probing and foundation selection process. The table below illustrates the disjointed way access was provided along the 450 km right-of-way:

Owner Permit Dates	Days Since Prior	WF 1	WF 2	WF 3	WF 4	WF 5	WF 6	WF 7	WF 8	WF 9	WF 10	WF 11	Total Sites
11-Sep-19	0												1
25-Sep-19	14												25
29-Sep-19	4												7
15-Oct-19	16												1
18-Oct-19	3												3
12-Nov-19	25												69
15-Nov-19	3												1
25-Nov-19	10												1
29-Nov-19	4												29
11-Dec-19	12												5
12-Dec-19	1												19
17-Dec-19	5												11
20-Dec-19	3												51
27-Dec-19	7												0
03-Jan-20	7												56
06-Jan-20	3												87
09-Jan-20	3												16
10-Jan-20	1												32
17-Jan-20	7												2
20-Jan-20	3												44
21-Jan-20	1												12
22-Jan-20	1												8
03-Feb-20	12												6
05-Feb-20	2												63
06-Feb-20	1												138
07-Feb-20	1												2
14-Feb-20	7												6
21-Feb-20	7												3
28-Feb-20	7												65
09-Mar-20	10												6
10-Mar-20	1												5
11-Mar-20	1												10
16-Mar-20	5												7

Owner Permit Dates	Days Since Prior	WF 1	WF 2	WF 3	WF 4	WF 5	WF 6	WF 7	WF 8	WF 9	WF 10	WF 11	Total Sites
18-Mar-20	2												1
20-Mar-20	2												4
30-Mar-20	10												23
01-Apr-20	2												0
09-Apr-20	8												16
10-Apr-20	1												7
17-Apr-20	7												0
04-May-20	17												0
15-May-20	11												16
19-May-20	4												28
29-May-20	10												28
02-Jun-20	4												5
15-Jun-20	13												0
18-Jun-20	3												0
24-Jul-20	36												10
29-Jul-20	5												11
11-Aug-20	13												11
12-Aug-20	1												0
30-Aug-20	18												0
03-Sep-20	4												0
06-Oct-20	33												4
09-Oct-20	3												9
13-Oct-20	4												21
23-Oct-20	10												0
13-Nov-20	21												14
23-Nov-20	10												3
18-Jan-21	56												0
10-Mar-21	51												0
Count of Permit Approval Dates		**10**	**6**	**8**	**2**	**9**	**9**	**6**	**7**	**3**	**5**	**8**	**61**
Time Span (first date to last)		**429**	**256**	**221**	**60**	**244**	**329**	**281**	**364**	**66**	**205**	**439**	**546**

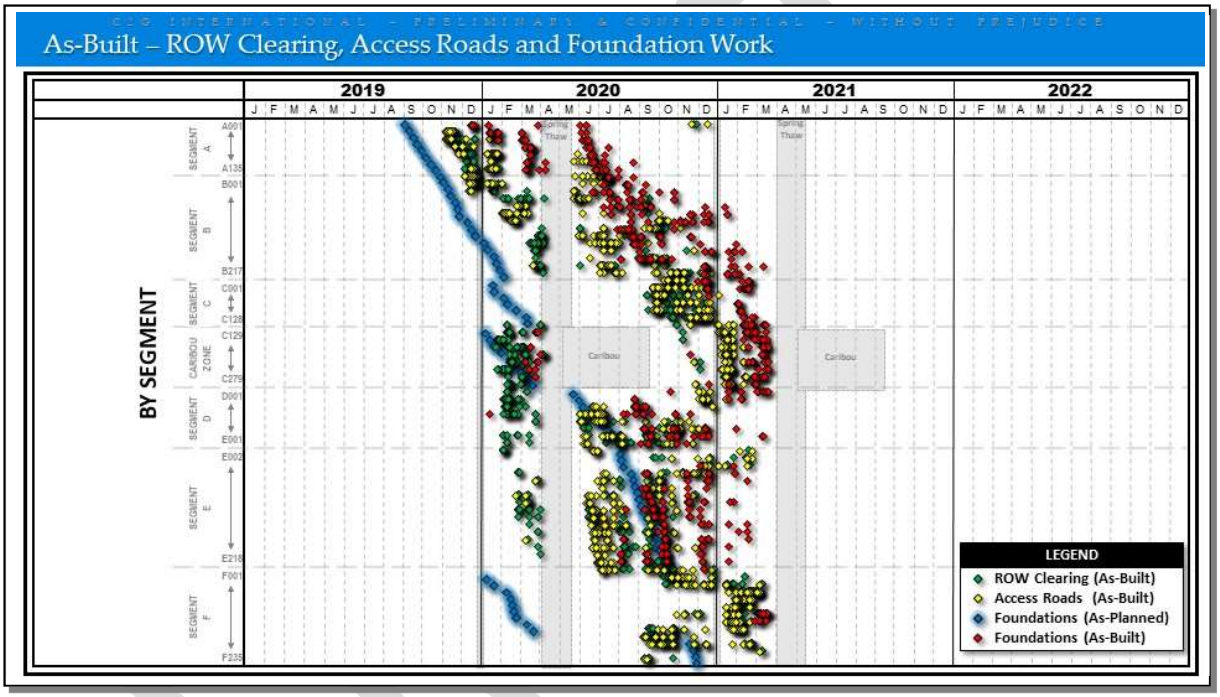
As detailed above, on average there were seven different Owner permit release dates for the 11 Work Fronts on the Project. The average time span between the first and last Owner permit release was 263 calendar days. Again, rather than receiving access to all tower sites within a given Work Front as planned, on average, access releases were

broken into seven different increments spanning nearly nine months. Further, the sequence in which the permit approvals were obtained was illogical and entirely inefficient. As an example, there were two tower sites released by permit approvals on November 15 and 25, 2019, however, one site was in Work Front 01 (A128) and the other site was nearly 250 kilometers away in Work Front 08 (E002).

Of course, Valard had no way of knowing which permits, if any, would come on a given day. As noted in the table above, there were 61 different dates over 19 months when varying sized groups of Owner permits were received. While the quantities of sites released were in some cases insignificant, the process effectively left Valard in a continuous state of re-planning in reaction to the ever-changing work site availability. This process amounted to a worst case scenario for what was planned to be very sequential and efficient foundation selection process. Valard no longer had the opportunity to make appropriate foundation selections and consider cost-effective solutions when faced with challenges.

Moreover, in an effort to accommodate the Owner's desire to achieve substantial completion in March 2022, work has been accelerated by changing certain rock foundations and Driven Pipe Pile to Micropile foundations. This allowed the performance of as much work as possible in the shortened 2019/2020 winter season. In particular, this approach was necessary in order to complete foundation work prior to the end of final scheduled winter work within the Caribou Zone. Similarly, to allow for the completion of foundation work within the Michipicoten First Nations (MFN) territory before the end of the winter season, as requested by MFN, work was accelerated to complete the 31 foundations within the available 4-week window. Valard is entitled to reimbursement for these foundation type changes, which were implemented to mitigate prior delays and accelerate Project completion.

Of course, all the issues outlined above also lead to productivity losses incurred during the construction of the foundations and anchors. Work on the Project was intended to be sequential. Foundation work is the immediate successor to right-of-way work. As discussed in the prior section, the Owner permit delays caused the right-of-way work to be performed in a piecemeal and out-of-sequence manner. The graphic included as **Exhibit 50** below illustrates how the progress of foundation work was controlled by right-of-way work.



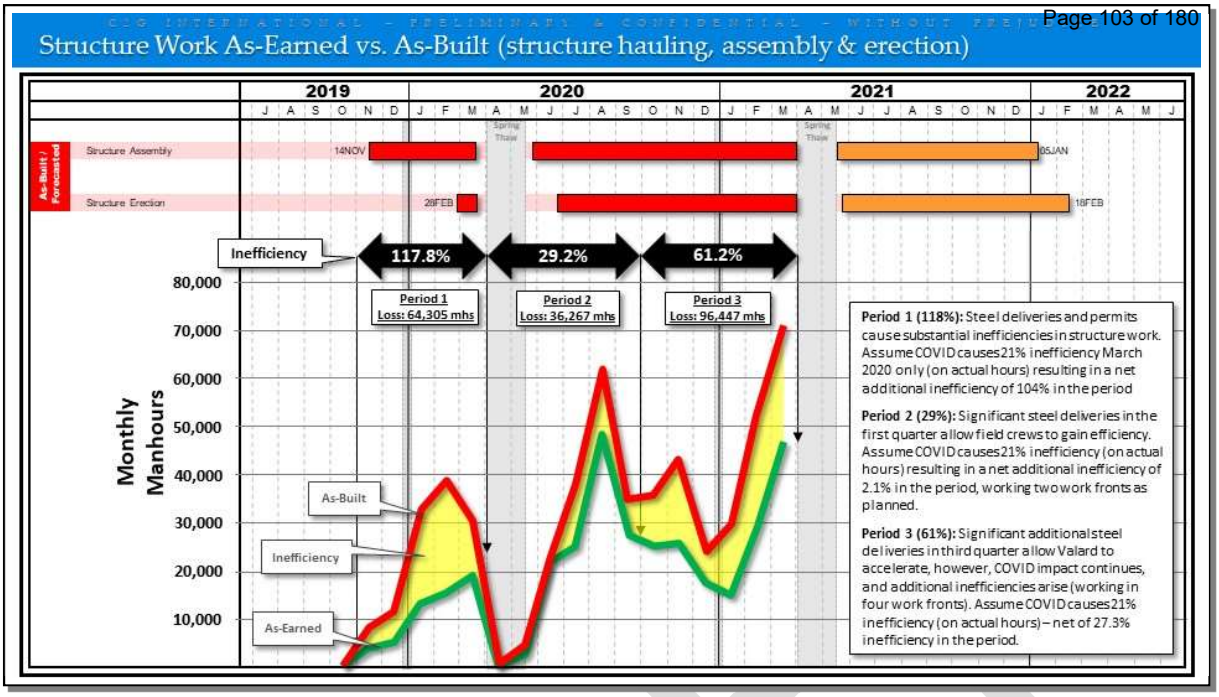
As illustrated above, the foundation followed the permit and access release dates along the right-of-way. And, in the same fashion as the permit approval dates, the foundation selection process had to be performed in the piecemeal and out-of-sequence manner shown above. As a result, Valard has been deprived of any opportunity to pursue the foundation work in the logical, efficient and cost-effective manner upon which its bid was based. Rather than being given unrestricted timely access to entire Work Fronts, the Owner permit releases have been provided on a piecemeal basis leading to significant inefficiencies in the foundation work. Valard is

entitled to reimbursement for the inefficiencies associated with the significant disruption to the foundation work.

7.5 Impacts on Structure Work

The structure work on the Project was impacted by all three major delay issues. As noted previously, the steel deliveries were planned to support the originally scheduled sequence and timing of tower assembly and erection. First, the late and out-of-sequence Owner permitting caused an immediate disconnection between the Owner steel delivery plan and the field construction plan. Second, steel deliveries were also late and out-of-sequence, including both partial deliveries of the towers needed by Work Front, and partial deliveries of steel needed to complete towers (i.e., some of the parts delivered, but not all the parts needed for assembly). This compounded the problems in the field and greatly increased the inefficiencies experienced by Valard in the performance of the structure work. Finally, the onset of COVID-19 made an already bad situation worse, as an entire new set of inefficiencies were set upon Valard's field crews.

The structure work on this Project is almost entirely self-performed by Valard. To analyze the effects of the major impacts set forth above, C2G has performed an earned value analysis. This analysis utilized approved billing data (to establish monthly quantities completed), original budget data (to establish budgeted labor manhours earned based on quantities completed), and actual manhour data (to compare to budget hours earned and assess productivity). The graphic illustration included below as **Exhibit 51** summarizes the results of this analysis.



The graphic illustration above summarizes the as-built schedule and current forecast (as of April 3, 2021) for structure work (red and orange colored bars at top). The green colored curve at the lower portion of the graphic represents the value of budgeted labor manhours earned, based on quantities completed and approved in billings to Owner. The red colored curve at the lower portion of the chart represents the actual labor manhours expended to complete the work. The yellow shaded portion between the green and red curves represents monthly manhour overruns incurred (i.e., Valard spent more manhours than its budget allowed). The findings of this analysis are summarized as follows:

- **Period 1** (November 2019 through March 2020): This initial period represented the time period of the greatest labor losses during the Project thus far. Valard earned [redacted] manhours based on assembling approximately 190 structures and erecting approximately 43 structures. Valard actually spent [redacted] manhours to complete the work during the period, resulting in an overrun of [redacted] manhours (117.8% inefficiency during the period). Notably, Valard's Change Order No. 1 plan called for the assembly of approximately 415 structures and the erection of approximately 300 structures during this period. Clearly, the

impact of the delays during the period was substantial. Namely, the late and out-of-sequence Owner steel deliveries and permits caused substantial inefficiencies in structure work.

- **Period 2** (April 2020 through September 2020): During this period, the work was performed at the most efficient rates during the Project thus far. Valard earned [redacted] manhours based on assembling approximately 325 structures and erecting approximately 202 structures. Valard actually spent [redacted] manhours to complete the work during the period, resulting in an overrun of [redacted] manhours (29.2% inefficiency during the period). C2G attributes the greatly increased productivity to the significant permit approvals and steel deliveries that occurred in the first quarter of 2020. Put simply, when work restarted after the spring thaw period, Valard had far fewer limitations on what towers it could assemble and where towers could be erected, and Valard was able to work in two Work Fronts as planned. However, during this period the COVID-19 pandemic started in earnest. As discussed in Section 6.4 above, our analysis attributes an inefficiency of 21% to COVID-19 mitigation tracking and productivity losses (applied to actual hours). Applying a 21% COVID-19 inefficiency resulting during this period results in a net additional inefficiency of 2.1% (measured against budgeted hours).

- **Period 3** (October 2020 through March 2021): During this period, additional inefficiencies were experienced, which were twice the rate of Period 2, but one-half the rate of Period 1. Valard earned [redacted] manhours based on assembling approximately 288 structures and erecting approximately 372 structures. Valard actually spent [redacted] manhours to complete the work during the period, resulting in an overrun of [redacted] manhours (61.2% inefficiency during the period). C2G attributes the greatly increased productivity to the significant permit approvals and steel deliveries that occurred in the first quarter of 2020. During this period, the significant additional steel deliveries in third quarter allowed Valard to accelerate (working in four Work Fronts, where the plan contemplated only two). However, in the latter portion of this period, steel deliveries, namely missing parts for individual structures, began to impact the work once again. As discussed in Section 6.4 above, our analysis attributes an inefficiency of 21% to COVID-19 mitigation tracking and productivity losses

(applied to actual hours). Applying a 21% COVID-19 inefficiency resulting during this period results in a net additional inefficiency of 25.2% (measured against budgeted hours).

Based on the results above, it is C2G's view that Period 2 (April 2020 through September 2020) can be utilized as a measured mile to quantify the additional losses in the remaining two periods, as well as the expected loss through completion. Period 2 represents approximately 30% of the work period to date and approximately 37% of the assembly and erection work was done in the period. Certainly, the work performed was substantial enough to be utilized as a baseline assessment of Valard's productivity capabilities. Of course, the COVID-19 pandemic was ongoing during this period, however, C2G believes its assessment of the overall loss associated with COVID-19 (21%) is reasonable and appropriately segregated from each of the periods.

After segregating the 21% for COVID-19, the remaining loss during Period 2 equates to 2.1%. Accordingly, this establishes that Valard was capable of performing at a rate of very close to its original bid contemplation. If this rate is utilized to assess the balance of the structure work, the results are as follows:

Time Period	Baseline Period Loss (not claimed)	COVID-19 Loss	Inefficiency Above Baseline
Period 1 (11/2019 through 3/2020)	[redacted]	[redacted]	[redacted]
Period 2 (4/2020 through 9/2020)	[redacted]	[redacted]	[redacted]
Period 3 (10/2020 through 3/2021)	[redacted]	[redacted]	[redacted]
Forecasted Through Completion (based on Period 3 productivity)	[redacted]	[redacted]	[redacted]
Totals	[redacted]		

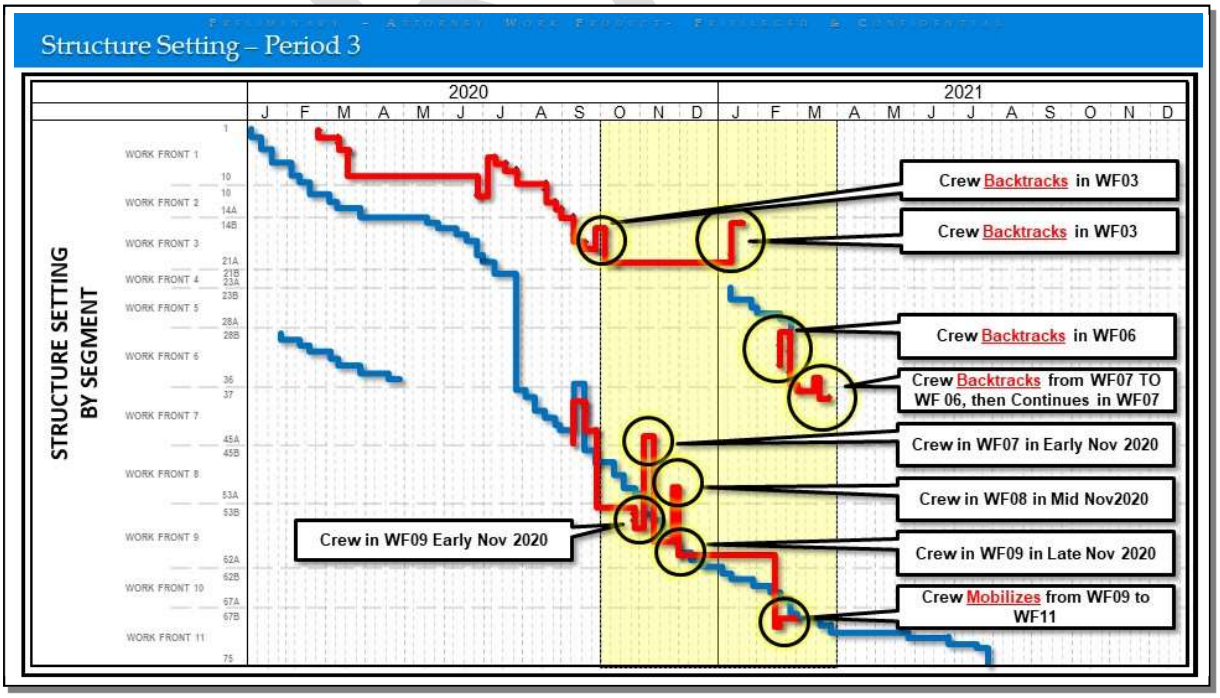
As indicated above, our analysis quantifies 11,165 manhours of unclaimed loss based on utilization of the 2.1% baseline Period 2 loss. It is C2G's opinion that this manhour overrun should be absorbed by Valard. A total of 162,487 manhours is attributed to the

impacts associated with COVID-19 (21% of actual manhours from March 1, 2020, to forecasted completion). And 148,105 manhours are attributed to the impacts associated with the late and out of sequence Owner permit and steel deliveries (equating to a 27.4% overall inefficiency on originally budgeted manhours, or 17.2% inefficiency on total actual manhours to be spent on structure work).

In the first period outlined in the analysis (November 2019 through March 2020), Owner permit approvals were clearly driving all aspects of the work on the Project. During the first period outlined in the analysis, when nearly 800 foundations were planned to have been completed, only 174 were actually installed (70% of these in February and March 2020). Thus, the impacts to foundation work, which resulted from late permitting and right-of-way work, paced the ability to assemble and erect towers. Our analysis also indicates that steel deliveries during the first period included complete inventory for only 266 towers (nearly 70% of these became available for assembly in February and March 2020). The combination of the unavailability of tower sites and the late arriving steel resulted in the very bad productivity outlined above.

In the second time period, which forms the baseline productivity period (i.e., measured mile period), Valard had significant foundations out in front of the tower erection crews (131 foundations at the start of the period and 507 foundations at the end of the period), and, thanks to a significant wave of steel deliveries from February through July 2020, it had a significant inventory of towers that could be assembled (73 at the start of the period and deliveries completed inventory for 180 more during the period). However, during this period the COVID-19 impacts were certainly being felt. Nonetheless, in terms of where and what work it could pursue, Valard's structure crews clearly had far fewer impediments, and this was borne out in the greatly improved productivity.

Just prior to the start of the final time period, Valard's assembly crews caught up to the available steel inventory. In fact, starting at the end of the second period, Valard's assembly numbers began to exceed what the steel inventory would indicate was possible. This occurred because in Valard's attempts to accelerate they were left with no choice but to start the process of "borrowing" parts (i.e., using parts from a tower, where the inventory had not been entirely delivered, to support assembly of other towers that also had incomplete inventories). Valard was forced to continue this practice throughout the final period, which certainly drove inefficiencies. Additionally, during the third period Valard accelerated the structure work by expanding the work into multiple Work Fronts (five different Work Fronts in total) and began significant backtracking to areas previously skipped due to the prior delays. This drove further inefficiencies, as the crews became fragmented, working on almost the entire right-of-way (from Work Front 03 to Work Front 11 during the period). The graphic illustration included below as **Exhibit 52** illustrates the fragmented nature of the work in the final period.



The blue line on the graphic illustration above represents Valard's Change Order No. 1 plan for structure setting on the Project. As indicated, the plan was generally to work a single erection crew along the right-of-way sequentially, with the exception of two time periods when a second crew would perform erection work in Work Front 06 (Caribou Zone) and Work Front 05. Instead, as shown in the as-built (red line), during the final period, the crews were continuously backtracking and jumping from one Work Front to another. Again, this fragmented work, in combination with steel shortage caused additional inefficiencies in the structure work during the final period.

In summary, after considering the obvious impacts of the COVID-19 pandemic, C2G's analysis establishes that Valard was capable of performing the structure work on this Project pursuant to the productivity rates included in its original bid estimate. Further, the loss of efficiency experienced by Valard in the performance of the structural work clearly correlates with the Owner's late and out-of-sequence permitting and steel deliveries. C2G's analysis establishes that Valard is entitled to recover its inefficiency related losses incurred in the performance of the structure work.

7.6 Impacts on Stringing Work

Conductor stringing work, the last step in the construction process prior to energization and Provisional Acceptance, has also been impacted by the major delays identified herein. The Change Order No. 1 schedule contemplated the start of stringing on February 1, 2020, approximately six months into the Project. Stringing was not able to actually start until on or about July 26, 2020, nearly six months later than planned. As of the end of March 2021 (prior to the start of the 2021 spring thaw), Valard had completed approximately 106 kilometers of the stringing work on the Project (105,745.92 meters, or approximately 23.18% of the work). In contrast, the Change

Order No. 1 schedule contemplated that the stringing work would be approximately 70% complete as of March 31, 2021.

Stringing work is currently forecasted to be completed by March 29, 2022. Accordingly, remaining work (approximately 77% of the stringing work) is contemplated to be completed over a 9 month time period (excluding the 2021 spring thaw non-work period). Considering that only 23% of the work was completed in the eight months of work through March 2021, Valard's forecasts are based on the assumption that the delays and impacts will be significantly reduced going forward and allow for a substantial increase in production. The production increase will be achieved, in part, with the unplanned extended use of a second stringing crew, as well as an advance jumper crew to expedite the work of the main crews. These accelerative measures will require added resources and the work will have to be performed out-of-sequence.

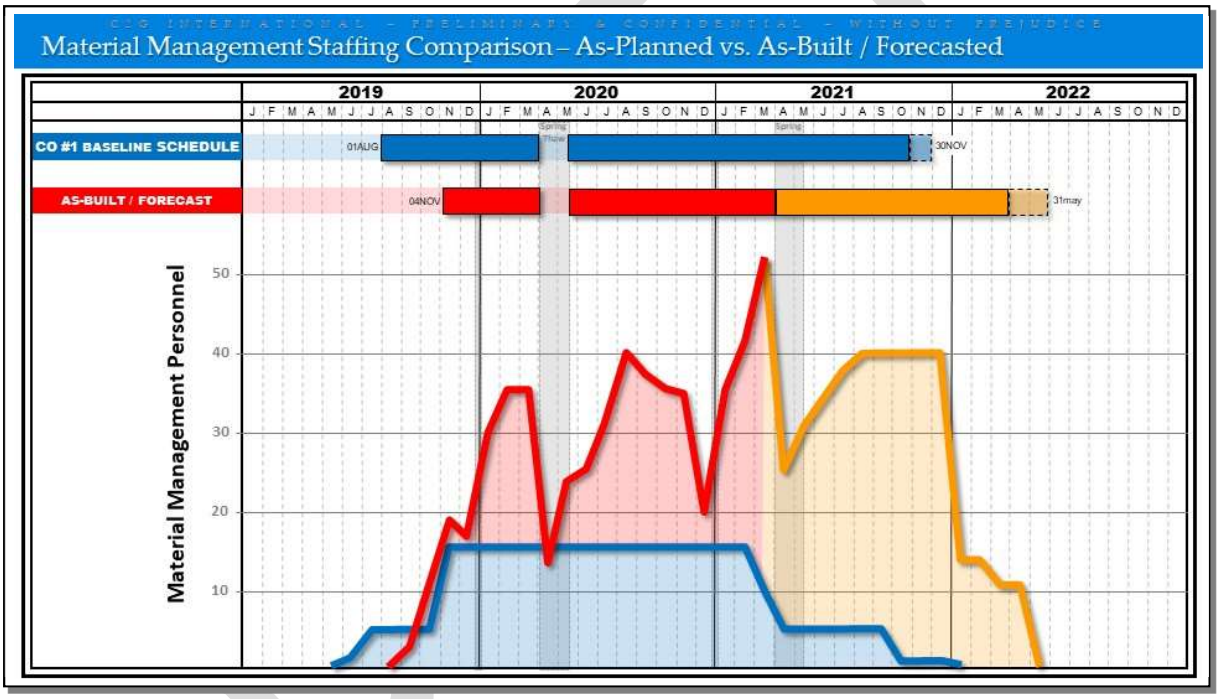
Without question, the impacts experienced to date, as well as the acceleration efforts outlined above, have impacted the efficiency of the stringing crews to date, and will continue to do so through completion. Given the current completion status of the stringing activities, the magnitude of the inefficiencies that will be experienced is difficult to assess with precision. Accordingly, based on our analysis and discussions with the Project team, we believe that a relatively minor inefficiency factor in the range of 5% to 10% is appropriate. However, we must reserve the right to reassess the efficiency of this work as additional delays and impacts arise and the accelerative measures are fully implemented.

7.7 Impacts to Material Management & Handling

The major delays and associated impacts identified above have had a devastating effect on Valard's costs to manage and handle materials on the Project. Virtually every aspect of the work on the Project has become disjointed due to the delays. The late

Owner permits have resulted in substantial changes to the sequencing of the field work, the impacts and delays to the foundation selection process have caused uncertainty in material requirements, the late and out-of-sequence steel deliveries have extended material management resource requirements and resulted in extra work (i.e., borrowing parts), and COVID-19 has cast a pall over any ability to build momentum and efficiencies.

The graphic illustration included below as **Exhibit 53** highlights the significant differences that have come about with regard to the materials management work.



As indicated above, the materials management staffing requirements for this Project have significantly increased and have been extended. In fact, through the primary materials management planned performance period (through September 2021), the average staffing per month is approximately 234% of what was planned [redacted] staff member average vs. [redacted] staff member average). Moreover, the Project completion delay has significantly extended the requirement for a full complement of materials

management staffing personnel. Valard estimates that it will spend in excess of 5,000 additional man days due solely to the extended performance period (equating to more than one-half of its original budget).

Again, the reasons for this significant increase in material handling requirements is relatively straightforward and include factors such as:

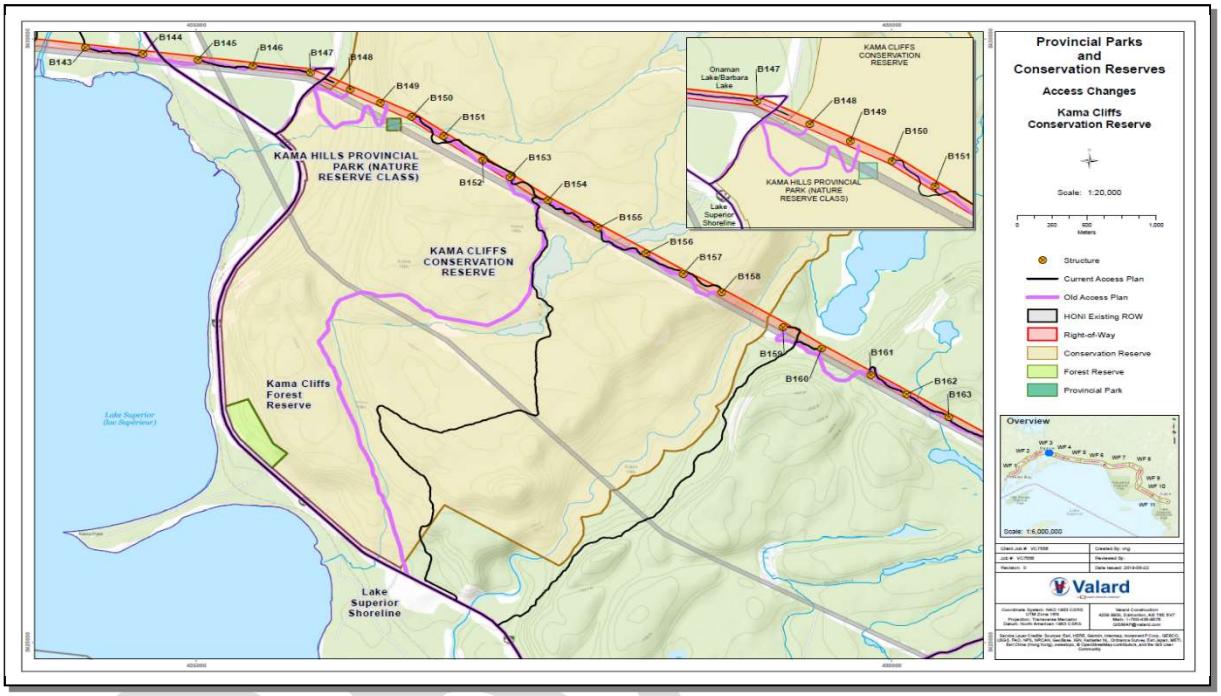
- Late Owner permitting, which created additional material storage requirements and out-of-sequence work;
- Late and out-of-sequence steel deliveries, which created extra work related to management of the tower steel inventory and continues to contribute to the extended the performance period;
- The COVID-19 pandemic, which has caused significant lost time and the requirement for additional staffing; and
- The cumulative effect of the major delays above, which resulted in substantial internal schedule delay to the front-end civil work, which in turn, has resulted in out-of-sequence work throughout the duration of the Project, which in turn, created the need for added field resources, which in turn, must be supported by the materials handling staff.

Without question, Valard is entitled to recover its substantial and unanticipated additional material handling costs associated with the impact issues summarized directly above and detailed in the prior sections of this report.

7.8 Impacts at Kama Cliffs

The Kama Cliffs Conservation Reserve is located in Work Front 03 in Contract Segment B. The Contract incorporates a Master Access Plan which Valard was to rely on in planning, and more importantly, pricing this Project. Securing access rights is a responsibility that has always been an Owner obligation. Valard was to have

conventional access to the tower sites (B149 to B158) located on the Kama Cliffs. Conventional access would have allowed for construction to be executed from access roads and the associated crossings, such as bridges, culverts and rig mats. As seen on the map below, sites B149 to B158 are located in the northern portion of the Kama Cliffs Conservation Reserve.



Due to a commitment made during the consultation phase of the Project, the MECP refused to allow conventional access as indicated within the Contract. While Valard argued jointly with the Owner that the subject commitment, commitment (#1038), should not prevent conventional access to the entire Kama Cliffs Area, the MECP issued a letter on July 27, 2020, indicating that road access was rejected.

The Owner requested Valard present options on how to proceed in light of this failure to acquire necessary access. Valard prepared documentation outlining the scope change and the associated estimated cost impact for construction activities of towers B149-B158 using helicopter access only. Although the Owner agreed that incurred costs were compensable, quantification was left to be finalized.

Following discussions and verbal agreement with Jeff Damon, Owner, it was understood that Valard would proceed with the Kama Cliffs work on a cost-plus basis (with a credit to be given for costs that would have been incurred for completion of the work with conventional access).

With the exception of right-of-way work, which has incurred an overall savings due to not having to build access roads and crossings, all disciplines have experienced additional impacts. Engineering has required additional effort to design foundation micropiles and tower steel that can be installed by helicopter. Geotechnical work has required additional effort related to soil testing and drilling by helicopter. Foundations and anchors have been revised to allow for installation by helicopter with portable drill rigs. Structure erection has required changes to structure splices, so that they can be installed by helicopter. Stringing has required special equipment and tooling to install by helicopter.

To summarize, due to the lack of access to sites B149 to B158 by conventional access roads, Valard has had to execute all construction work using helicopter access. The logistics and coordination involved with the use of a helicopter for construction, combined with the engineering changes, specific tools and equipment required for the construction, has significantly impacted Valard in the Kama Cliffs Conservation Reserve. Valard is entitled to recover its additional costs associated with this extra work.

7.9 Water Crossing Impacts

Valard's plan for the installation of water crossings is based on Contract Exhibit X Part 2 and Exhibit A – Appendix A-20. The Contract documents provide locations and types of water crossings to be installed as part of Valard's scope.

As shown in the table below, there were 228 crossings to be installed in the Contract. However, the preliminary Environmental Protection Plan ("EPP") significantly altered, as did the Project schedule, as previously discussed. As a result, Valard was required to install significantly more water crossings than indicated in the Contract. In addition, the water crossing types indicated in the Contract drastically changed.

Description	**Crossing Count**
Water Crossings to Install per Contract	228
Not installed (due to changes in EPP Schedule)	28
Water Crossings Installed per Contract	200
Total Changed Crossings	111
New Water Crossings Installed (due to changes in EPP/Schedule)	123
Total Water Crossings Installed	**323**

Due to the impact of changes in the EPP, and the Project schedule, 28 of the water crossings were not installed, leaving a subtotal of 200 water crossings installed according to the Contract. Also due to the impact of changes in the EPP and the Project schedule, 123 new water crossings were installed bringing the total installed water crossings to 323. Of these 323 crossings, some crossing types were changed from the Contract.

The 28 water crossings that were not installed are shown in the table below. Valard will provide a credit for the crossings that were not required to be installed.

CID	Workfront	Location	Crossing ID	Crossing Type
WC141	3	B133	6550.01	Culvert
WC695	10	F033	10640.01	Culvert
WC475	10	F057	11160	Culvert
WC500	11	F119	11890.02	Clear Span Bridge
WC15	1	A061	5060.01	Culvert
WC45	1	A123	5569	Culvert
WC86	2	B035	5960.01	Culvert
WC360	5	C038	7091	Culvert
WC292	8	E017	9049	Clear Span Bridge
WC522	11	F132	12100.01	Clear Span Bridge
WC705	11	F139	15004	Culvert
WC706	11	F140	15005	Culvert
WC52	1	A004	4771	Culvert
WC167	3	B155	302	Culvert
WC144	3	B151	6600	Clear Span Bridge
WC691	5	C039	502	Snowfill
#N/A	6	C153		Drainage/Snowfill
WC276	7	D018	8551	Culvert
WC305	8	E076	9241	Culvert
#N/A	9			Culvert
#N/A	9			Culvert
WC393	5	C091	7440	Snowfill
WC182	6	C174	7890	Drainage/Snowfill
WC199	6	C206	8171	New Clear-Span
WC485	10	F081	11280	Snowfill
WC495	10	F106	11774	Snowfill
WC611	10	F074	11241	Snowfill
WC486	10	F083	11290	Snowfill

The 123 new water crossings that were required, due to the impact of changes in the EPP and the Project Schedule, are listed in the table below.

CID	Workfront	Location	Crossing ID	Crossing Type
WC708	1	A042	121.00	Bridge
WC687	4	B193	401.00	Bridge
WC685	4	B203	402.00	Bridge
WC683	4	B205	405.00	Bridge
WC689	4	C020	406.00	Timber Crane
WC692	5	C040	503.00	Bridge
WC252	6	C194	605.00	Bridge
WC311	8	E018	800.00	Snow Fill
WC688	4	B207	403.00	Bridge
WC73	1	A025	118.00	Timber Crane
WC72	1	A018	120.00	Bridge
WC714	3	B187-B194	307.00	Bridge
WC716	5	C064	507.00	Bridge
WC715	10		15105.00	Bridge
WC294	8	E018	9060.00	Culvert
WC299	8	E053	9150.01	Culvert
WC301	8	E055	9160.01	Culvert
WC11	1	A042	4960.02	Bridge
WC47	1	A124	5590.01	Bridge
WC105	2	B020	5830.00	Bridge
WC92	2	B049	6071.01	Bridge
WC95	2	B054	6120.01	Bridge
WC96	2	B055	6150.01	Bridge
WC83	2	B022	5860.01	Culvert
WC134	3	B116	6430.00	Bridge
WC136	3	B117	6470.00	Bridge
WC162	3	B142	6560.02	Bridge
WC164	3	B142	6570.01	Bridge
WC163	3	B081	6259.00	Rig Mat
WC161	3	B171	6720.01	Bridge
WC154	3	B184	6771.00	Bridge
#N/A	4	B196	400.00	Bridge
WC345	4	C001	6950.00	Bridge
#N/A	4	C014	6962.00	Timber Crane
WC596	4	C017	6981.00	Rig Mat
WC364	5	C048	7140.01	Bridge
WC413	5	C126	7672.00	Timber Crane
WC181	6	C172	7880.00	Bridge
WC195	6	C195	8130.01	Bridge
WC203	6	C234	8310.01	Bridge
WC212	6	C260	8440.01	Bridge
WC225	6	C276	8510.01	Bridge
WC277	7	D020	8560.01	Bridge
WC278	7	D020	8570.00	Bridge
WC279	7	D020	8571.00	Bridge
WC258	7	D038	8600.00	Bridge
WC263	7	D065	8660.00	Bridge
WC267	7	D078	8720.01	Bridge
WC268	7	D081	8740.01	Bridge
WC269	7	D086	8800.00	Bridge
WC280	7	D115	8860.00	Bridge
WC275	7	D143	8940.00	Bridge
WC287	8	E006	8970.01	Bridge
WC319	9	F007	10080.00	Bridge
WC525	11	F139	12130.02	Rig Mat
WC598	11	F157	12490.00	Rig Mat/Snow Fill
WC571	11	F207	12840.01	Bridge
WC578	11	F225	12970.00	Bridge
WC586	5	C070	7230.01	Rig Mat

1

CID	Workfront	Location	Crossing ID	Crossing Type
WC372	5	C073	7240.00	Rig Mat
WC381	5	C075	7320.00	Rig Mat
WC470	10	F050	11080.00	Bridge
WC471	10	F052	11100.01	Bridge
WC477	10	F059	11180.02	Bridge
WC103	2	B061	6151.00	Culvert
WC104	2	B061	6152.00	Culvert
WC102	2	B061	6153.00	Culvert
WC97	2	B067	6180.01	Bridge
WC99	2	B074	6231.00	Bridge
WC157	3	B184	6800.00	Bridge
WC307	8	E082	9290.01	Bridge
WC1	1	A003	4770.01	Bridge
WC266	7	D075	8681.00	Culvert
WC504	11	F120	11910.01	Bridge
WC530	11	F150	12191.00	Rig Mat/Snow Fill
WC587	11	F154	12423.00	Rig Mat
WC604	11	F156	12470.01	Rig Mat
WC588	11	F157	12480.00	Rig Mat/Snow Fill
WC549	11	F170	12570.01	Bridge
WC550	11	F170	12571.00	Bridge
WC558	11	F185	12670.01	Bridge
WC559	11	F188	12671.00	Bridge
WC192	6	C191	8091.00	Rig Mat
WC358	5	C034	7080.01	Culvert
WC601	10	F046	11033.00	Rig Mat
WC207	6	C249	8351.00	Timber Crane
WC208	6	C249	8352.00	Rig Mat
WC289	8	E009	9010.00	Bridge
WC607	10	F031	10430.00	Rig Mat
WC602	10	F041	10871.00	Rig Mat
WC597	10	F037	10961.00	Bridge
WC466	10	F043	11020.00	Rig Mat
WC599	10	F046	11031.00	Culvert
WC600	10	F046	11032.00	Culvert
WC612	10	F060	11180.00	Bridge
WC624	5	C063	7216	Rig Mat
WC615	5	C062	7203.00	Bridge
WC616	5	C061	7204.00	Culvert
WC619	5	C062	7209.00	Bridge
WC618	5	C068	7211.00	Rig Mat
WC622	5	C066	7214.00	Rig Mat
WC625	5	C064	7217.00	Bridge
WC386	5	C083	7362.01	Bridge
WC388	5	C083	7371.01	Culvert
WC592	5	C087	7400.00	Culvert
WC392	5	C089	7430.01	Rig Mat
WC400	5	C092	7490.01	Rig Mat
WC407	5	C107	7610.00	Rig Mat
WC411	5	C111	7670.00	Bridge
WC694	5		506	Bridge
WC710	6	C177	601.00	Bridge
WC700	10	F112	15103.00	Bridge
WC227	6	C144	607.00	Bridge
WC230	6	C136	611.00	Timber Crane
WC231	6	C231	618.00	Snow Fill
WC176	6	C149	7800.02	Snow Fill
WC187	6	C181	8040.00	Bridge
WC251	6	C184	8050.01	Bridge
WC205	6	C240	8320.02	Bridge
WC215	6	C186	8072.00	Snow Fill
WC492	10	F097	11771.00	Bridge
WC494	10	F103	11773.01	Bridge
WC609	10	F105	11775.00	Rig Mats

1

In addition to the quantity of crossings, 111 crossing types as shown in the list below were changed from the Contract; changing a crossing type from a culvert or clear span to a bridge type crossing that has related cost and schedule impacts.

CID	Workfront	Location	Crossing ID	Planned Crossing Type	Actual Crossing Type
WC712	4	B203	407.00	CLEAR_SPAN	Bridge
WC2	1	A006	4790.00	CULVERT	Timber Crane
WC6	1	A013	4860.01	CULVERT	Bridge
WC23	1	A068	5081.01	CULVERT	Bridge
WC24	1	A070	5090.02	CULVERT	Bridge
WC35	1	A098	5321.00	CULVERT	Bridge
WC48	1	A129	5593.00	CULVERT	Bridge
WC82	2	B019	5810.01	CULVERT	Bridge
WC84	2	B027	5920.01	CULVERT	Bridge
WC87	2	B040	5961.00	CULVERT	Rig Mat
WC88	2	B040	5962.00	CULVERT	Rig Mat
WC94	2	B052	6081.01	CULVERT	Bridge
WC126	3	B091	6331.00	CULVERT	Rig Mat
WC98	2	B067	6200.01	CLEAR_SPAN	Bridge
WC101	2	B076	6250.01	CLEAR_SPAN	Bridge
WC123	3	B088	6300.00	CULVERT	Bridge
WC133	3	B114	6400.00	CULVERT	Bridge
WC138	3	B127	6510.00	CLEAR_SPAN	Bridge
WC142	3	B140	6560.01	CLEAR_SPAN	Bridge
WC147	3	B165	6660.00	CLEAR_SPAN	Bridge
WC151	3	B174	6750.01	CULVERT	Bridge
WC152	3	B176	6760.00	CULVERT	Bridge
WC153	3	B184	6770.00	CLEAR_SPAN	Bridge
WC155	3	B184	6780.00	CLEAR_SPAN	Bridge
WC158	3	B188	6820.00	CULVERT	Bridge
WC159	3	B190	6840.00	CULVERT	Bridge
WC340	4	B194	6870.00	CULVERT	Bridge
WC341	4	B199	6880.00	CULVERT	Bridge
WC346	4	C005	6951.00	CULVERT	Bridge
WC350	4	C016	6980.01	CULVERT	Bridge
WC353	4	C022	7040.01	CULVERT	Bridge
WC354	4	C025	7041.00	CULVERT	Bridge
WC355	4	C028	7050.01	CULVERT	Bridge
WC356	4	C028	7060.01	CULVERT	Bridge
WC362	5	C043	7093.00	CULVERT	Bridge
WC363	5	C048	7130.01	CULVERT	Bridge
WC366	5	C053	7160.00	CULVERT	Bridge
WC368	5	C057	7180.01	CULVERT	Bridge
WC370	5	C060	7201.00	CULVERT	Bridge
WC371	5	C064	7210.00	CLEAR_SPAN	Bridge
WC385	5	C081	7350.01	CLEAR_SPAN	Bridge
WC401	5	C095	7491.00	CLEAR_SPAN	Bridge
WC180	6	C172	7870.00	CLEAR_SPAN	Bridge
WC184	6	C176	7938.00	CULVERT	Bridge
WC185	6	C178	8000.00	CULVERT	Bridge
WC197	6	C206	8150.01	CLEAR_SPAN	Bridge
WC206	6	C242	8340.01	CLEAR_SPAN	Bridge
WC211	6	C259	8400.01	CULVERT	Bridge
WC214	6	C276	8500.01	CULVERT	Bridge
WC254	7	D014	8530.00	CULVERT	Bridge
WC255	7	D019	8550.01	CULVERT	Bridge
WC260	7	D056	8640.00	CULVERT	Bridge
WC261	7	D058	8641.00	CULVERT	Timber Crane

CID	Workfront	Location	Crossing ID	Planned Crossing Type	Actual Crossing Type
WC262	7	D063	8650.01	CULVERT	Bridge
WC265	7	D075	8680.00	CULVERT	Culvert
WC272	7	D124	8870.01	CLEAR_SPAN	Bridge
WC273	7	D132	8880.00	CLEAR_SPAN	Bridge
WC288	8	E008	9000.00	CULVERT	Bridge
WC290	8	E013	9040.01	CULVERT	Bridge
WC293	8	E018	9050.00	CULVERT	Snow Fill
WC298	8	E049	9131.00	CULVERT	Culvert
WC300	8	E054	9151.00	CULVERT	Culvert
WC302	8	E057	9170.00	CULVERT	Bridge
WC304	8	E075	9240.00	CULVERT	Bridge
WC308	8	E087	9300.00	CLEAR_SPAN	Bridge
WC315	9	E168	9760.01	CULVERT	Bridge
WC416	10	F011	10102.00	CULVERT	Culvert
WC433	10	F026	10410.00	CLEAR_SPAN	Bridge
WC696	10	F036	10660.01	CULVERT	Rig Mat
WC460	10	F035	10930.00	CULVERT	Rig Mat
WC463	10	F039	10960.00	CULVERT	Bridge
WC464	10	F041	10970.00	CULVERT	Rig Mat
WC472	10	F054	11110.02	CLEAR_SPAN	Bridge
WC480	10	F066	11210.02	CULVERT	Bridge
WC482	10	F073	11250.01	CLEAR_SPAN	Bridge
WC488	10	F087	11333.00	CLEAR_SPAN	Bridge
WC499	10	F115	11870.00	CULVERT	Bridge
WC511	11	F119	11950.01	CULVERT	Bridge
WC512	11	F119	11970.00	CLEAR_SPAN	Culvert
WC520	11	F127	12070.01	CLEAR_SPAN	Bridge
WC553	11	F172	12610.00	CLEAR_SPAN	Bridge
WC569	11	F202	12820.00	CULVERT	Bridge
WC570	11	F207	12821.01	CULVERT	Bridge
WC31	1	A085	5181.01	CULVERT	Bridge
WC49	1	B009	5720.01	CULVERT	Bridge
WC121	3	B081	6260.01	CLEAR_SPAN	Bridge
WC130	3	B095	6370.00	CLEAR_SPAN	Bridge
WC131	3	B097	6380.00	CLEAR_SPAN	Bridge
WC139	3	B130	6530.00	CULVERT	Bridge
WC143	3	B144	6580.01	CULVERT	Bridge
WC342	4	B201	6890.00	CLEAR_SPAN	Bridge
WC349	4	C014	6970.00	CLEAR_SPAN	Bridge
WC365	5	C053	7141.00	CULVERT	Culvert
WC369	5	C057	7200.01	CULVERT	Bridge
WC384	5	C080	7340.00	CULVERT	Bridge
WC410	5	C111	7650.00	CLEAR_SPAN	Bridge
WC196	6	C204	8140.00	CULVERT	Bridge
WC209	6	C253	8370.00	CLEAR_SPAN	Bridge
WC264	7	D073	8670.01	CULVERT	Culvert
WC274	7	D135	8899.00	CULVERT	Bridge
WC297	8	E026	9100.00	CULVERT	Bridge
WC320	9	F007	10100.00	CLEAR_SPAN	Bridge
WC434	10	F028	10420.02	CULVERT	Bridge
WC467	10	F045	11030.00	CLEAR_SPAN	Bridge
WC469	10	F048	11060.02	CLEAR_SPAN	Bridge
WC474	10	F057	11150.00	CLEAR_SPAN	Bridge
WC476	10	F059	11170.01	CLEAR_SPAN	Bridge
WC478	10	F062	11190.00	CLEAR_SPAN	Bridge
WC479	10	F065	11200.00	CLEAR_SPAN	Bridge
WC501	11	F119	11900.01	CLEAR_SPAN	Bridge
WC521	11	F131	12090.01	CULVERT	Snow Fill

1

In summary, Valard's plan to install the quantity and type of water crossings as per the Contract requirements changed, and significantly impacted Valard.

8. Quantification of Damages

This quantum analysis sets forth the findings of our evaluation of the added costs associated with the impacts and delays discussed in detail above. The purpose of the information presented in this Quantum Analysis, and the attached exhibits, is to establish the financial damages suffered by Valard during the course of completing the Project.

As established in the narrative above and in various Project-related correspondences, the events on the Project to date have substantially delayed and disrupted Valard's progress on the Project and adversely impacted Valard's performance of the Contract work scope. The critical path delays, impacts and acceleration documented above dramatically increased Valard's cost to complete the Contract work. Valard's cost increases include, among others, labor inefficiencies, material overruns, added supervision and extended field overhead costs.

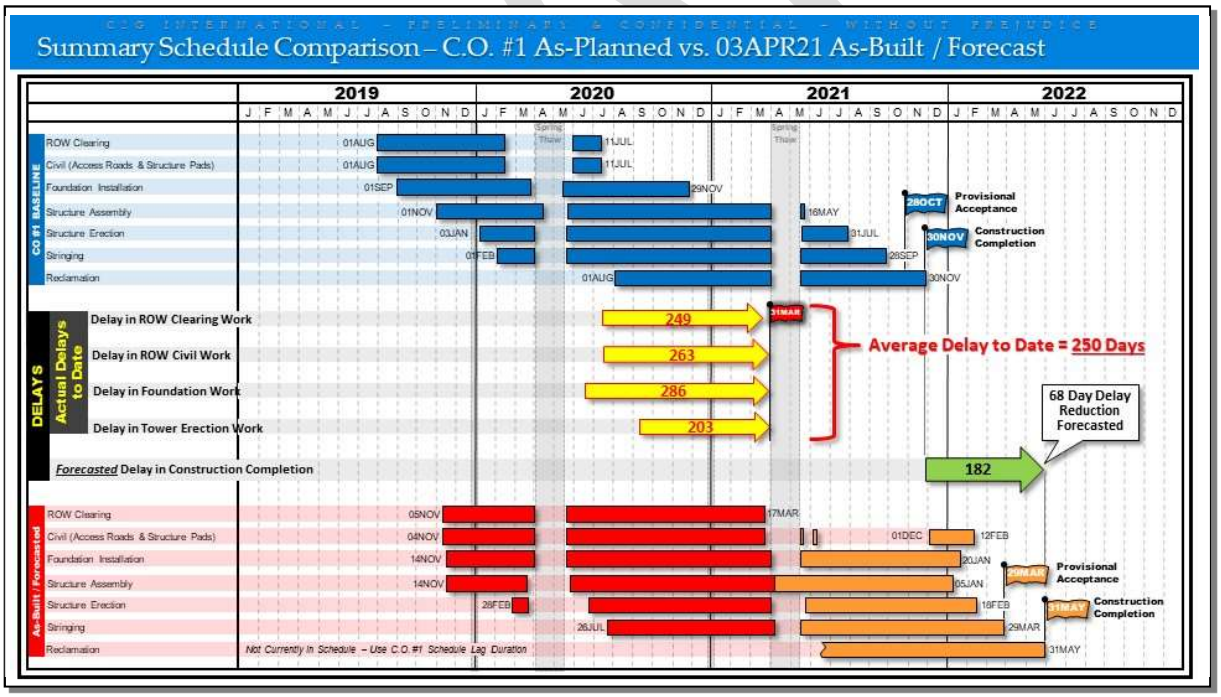
The successive nature of the three major impacts outlined above, in combination with the inter-related nature of both the impacts and the work, have had a compounding effect on Valard's ability to pursue the work on the Project in accordance with its original bid and Change Order No. 1. Furthermore, the quantity and magnitude of the resulting impacts plagued Valard's ability to efficiently and cost effectively perform the Contract work. As a result, Valard has and will continue to incur substantial unanticipated additional costs on the Project.

As set forth below, Valard is entitled to the issuance of a Change Order under the Contract providing for an equitable adjustment to the Contract price in the amount of $163,363,285.

In calculating its damages, Valard has relied upon its internal books and records, some of which are summarized in the exhibits to the Quantum Analysis. This Quantum Analysis is part of Valard's efforts to negotiate a settlement with the Owner of Project-related claims and, as such, should be considered preliminary and without prejudice.

8.1 Summary of Delays Incurred/Forecasted

As summarized in the graphic illustration included below and previously as Exhibit 11, Valard's current schedule update (data date 03APR21) forecasts the completion of all stringing activities on the Project by March 29, 2022.



As indicated above, the schedule comparison indicates a forecasted overall completion delay of 182 calendar days. However, this forecasted completion delay is the net of the delays incurred to date on the Project, plus acceleration (68 day delay reduction) that

is anticipated by Valard to occur over the next one-year period through Provisional Acceptance on March 29, 2022, and construction completion on May 31, 2022.

As is evident from the graphical comparison above, the delays to date have substantially changed Valard's original plan to construct the Project. Of particular note, Valard's plan and Change Order No. 1 contemplated that the work on the Project would be "out of the ground" at roughly the half-way stage of the planned overall Project duration (i.e., all right-of-way and foundation work was to have been entirely completed by the end of November 2020).

As shown in the as-built/forecasted schedule, Valard currently forecasts this work continuing through 90% of the construction period and completing just six weeks before Provisional Acceptance. This is a dramatic departure from the original plan and adds significant expense to extend the resources required for the civil work (i.e., 16 months planned for civil work versus nearly 28 months in the as-built/forecasted schedule). Consequently, while the overall Project completion is currently forecasted to be approximately six months late, there are actually "internal" schedule delays of much greater durations.

8.2 Added Time-Related Costs

Given the events on this Project to date, we have segregated the assessment of added time-related costs into the following components:

- **Initial Work Start Delay Costs (1-Aug-19 to 31-OCT-19)**
    - Equipment Standby Costs $2,989,560
    - Field Overhead Costs $3,544,366
    - Escalation Costs $1,383,057

    Subtotal – Initial Work Start Delay Costs **$7,916,983**

- **Remaining Delay through Completion (1-Nov-19 to 31-May-22)**
    - Equipment Standby Costs $5,891,897
    - Field Overhead Costs $11,079,496
    - Escalation Costs $1,383,057

Subtotal – Remaining Delay Costs $18,354,450

Total – Added Time-Related Costs $26,271,433

8.2.1 Initial Work Start Delay (91 Days from 1-Aug-19 to 31-OCT-19)

Change Order No. 1, dated July 1, 2019, re-established the start date for the Owner's provision of site access and the start of construction from November 1, 2018, to August 1, 2019. However, the Owner was unable to provide sufficient access to the site to allow for the start of construction until on or about November 1, 2019. The records establish that no meaningful work on the right-of-way was started until on or about November 4, 2019.

In accordance with the direction in Change Order No. 1, Valard continued to mobilize resources to the Project site in preparation to start work on August 1, 2019. Consequently, due to further delays in the Owner's permitting process, substantial costs were incurred by Valard, but no production of any sort was achieved for the 91 day period from August 1, 2019, to October 31, 2019. There can be no debate regarding Valard's entitlement to recover the costs incurred during this additional work start delay period. The damages incurred by Valard are segregated into three cost categories below.

8.2.1.1 Equipment Standby Delay Costs

Valard incurred substantial unanticipated additional costs associated with standby construction equipment during the period of August 2019 through October 2019.

Valard has assessed these additional costs based upon the use of standby equipment rates for the equipment mobilized to the site during this period.

Since the significant majority of the equipment mobilized to the site between August 2019 and October 2019 was not in productive use, it would be inappropriate to price the equipment based on the job cost accounting standard rates. Consequently, to avoid any potential overstatement of damages during the initial 3 month period, Valard has segregated its equipment cost analysis to capture standby rates through October 31, 2019 and will utilize standard ("operated") rates from November 1, 2019 forward. Effectively, the analysis of added equipment costs for the initial work start delay through October 2019 has been performed outside of Valard's job cost accounting, so that the lesser standby rates can be applied to establish the damages incurred.

As detailed in the attached **Exhibit 54**, Valard has discretely identified each piece of equipment mobilized to the site during the August 2019 to October 2019 period. The majority of Valard's equipment have GPS locators, so there should be no significant debate over the equipment included in the analysis. The equipment was then priced at standby rates. Where applicable, the standby rates utilized correspond to the rates used in previously executed change orders on this Project.

The calculations described above and detailed in **Exhibit 55** establish Valard's added costs totaling $2,599,617 for the unanticipated standby equipment costs incurred from August 1, 2019, through December 31, 2019. Valard is entitled to recover this unanticipated additional cost, which, including a 15% markup, total **$2,989,560**.

8.2.1.2 Field Overhead Delay Costs

Field overhead costs, also referred to as general conditions, are direct project costs such as trailer rentals, electrical power, water, telephone and postage. In addition, direct

labor costs for the project manager, superintendent, and support staff are accounted for on a weekly or monthly basis. These costs are identified with specificity within Valard's job cost accounting system.

Based on the direction in Change Order No. 1, Valard staffed the Project in anticipation of commencing work on August 1, 2019. As summarized below and detailed within **Exhibit 56**, Valard incurred field overhead costs totaling $3,082,057 during the period of August 1, 2019, through October 31, 2019.

Month	Overhead Staff	Site Overheads	Travel/LOA	Total
August 2019	[redacted]	[redacted]	[redacted]	[redacted]
September 2019	[redacted]	[redacted]	[redacted]	[redacted]
October 2019	[redacted]	[redacted]	[redacted]	[redacted]
Totals	[redacted]	[redacted]	[redacted]	[redacted]

The costs summarized in the table above exclude any equipment costs addressed previously, one-time charges for items such as the letter of credit and legal services, and extra costs included in prior change orders (i.e., out of scope permitting). The costs captured represent the time-related field overhead costs incurred during the period of non-performance due the inability to access the right-of-way.

In considering the costs outlined above, one might suspect that a portion of the costs are typical project start-up type costs that may not be subject to inclusion in a delay calculation. However, this Project was originally contemplated to have started in November 2018. Valard had been incurring field overhead costs for months prior to the Change Order No. 1 adjusted start date of August 1, 2019. In fact, for the three months prior to August 1, 2019, Valard expended well in excess of a million dollars for time-related field overhead costs.

Put simply, Valard mobilized to the site pursuant to the Owner's direction, spent $3,082,057 of its field overhead budget for the Project, but could not perform any work on the right-of-way. Of course, this additional work start delay, and the costs expended during the period, were unanticipated and not the responsibility of Valard. Clearly, Valard is entitled to recover its time-related field overhead costs during the period, which, including a 15% markup, total **$3,544,366**

8.2.1.3 Escalation Delay Costs (Initial Work Start Delay Period)

The three month work start delay has shifted the time periods in which labor expenditures and material purchases will occur. As detailed in the attached **Exhibit 57**, Valard has calculated escalation costs for the period utilizing the same worksheet used for the LTC delay costs approved in Executed Contract Owner Change Order No. 1. Pursuant to the contractual requirements, the worksheet was updated with Consumer Price Index ("CPI") values relevant to the start of delay.

The calculations detailed in Exhibit 57 establish Valard's added costs totaling $1,203,453 for the unanticipated escalation costs resulting from the delay incurred from August 1, 2019, through October 31, 2019. Valard is entitled to recover this unanticipated additional cost, which, including a 15% markup, totals **$1,383,971**.

8.2.2 Remaining Delay (91 Days from 1-Nov-19 to 31-May-22)

Based on Valard's current completion plan, a net additional delay of 91 days of delay is forecasted for the period of November 1, 2019, through May 31, 2022. As stated previously, the records establish that work on the right-of-way was started on or about November 4, 2019. Considering the facts outlined above, Valard is entitled to recover the costs incurred as a result of the additional delay incurred during the balance of the Project. The damages incurred by Valard are segregated into four cost categories below.

8.2.2.1 Equipment Delay Costs

Valard is incurring substantial unanticipated additional costs associated with the requirement to maintain construction equipment on the Project for an additional 91 days during the period of November 1, 2019, through completion. Valard has assessed these additional costs based upon the standard operating rates utilized within its job cost accounting system. To avoid confusion and potential duplication, the bullet point summaries below explain how we have assessed the equipment cost on this Project.

- **Equipment Standby Costs Related to Initial Work Start Delay:** Any equipment job cost accounting charges included in the initial work start delay period outlined in Section 8.2.1 above, are excluded from all other equipment damage calculations.
- **Direct Equipment Delay Costs:** Includes construction equipment utilized in the performance of the physical installation work, excluding any indirect/support equipment and/or equipment charged to cost codes associated with extra work change orders and/or claims included separately herein. Damage calculations are based on average rate during delay period, multiplied times days of delay incurred.
- **Inefficiency Related Added Equipment Costs:** Includes construction equipment utilized in the performance of the physical installation work. To the extent labor inefficiencies are identified and requested herein, the associated equipment losses are calculated for each work element, based on the actual ratio of equipment costs versus labor manhour. To avoid potential duplication, to the extent that equipment costs are requested in both delay and inefficiency calculations, the delay costs are credited as an offset against inefficiency related added equipment costs.
- **Indirect Equipment Delay Costs** (i.e., management, supervision and support, pickup trucks, vans, semi-trucks, etc.). These costs are analyzed separately with field overhead costs in Section 8.2.2.2 below.

This section quantifies the direct equipment losses associated with the 91 days of delay currently forecasted to be incurred from November 1, 2019, through Project

completion (March 2022). As detailed in the attached **Exhibit 58**, based on Valard's detailed job cost accounting transactional data, direct equipment costs totaling [redacted] were incurred from November 1, 2019, through March 31, 2021. Accordingly, the average daily rate for direct equipment costs equates to [redacted] Considering the 91 days of additional delay incurred in the period, utilizing this average daily rate results in a direct equipment delay damage totaling [redacted]).

Valard recognizes that the Owner may suggest that the average daily rate for the direct equipment delay costs should be derived from early in the Project (i.e., November 1, 2019, through March 2020). We have performed an alternate calculation based on this time period and have determined that the damage calculation would be reduced by approximately $2.5 million. However, the delays and Valard's efforts to mitigate the delays, have continued from the outset of the Project through the current date. Owner permit approvals continued into 2021 and Owner Steel deliveries, as well as the impacts associated with the COVID-19 pandemic are ongoing. Without question, the ebb and flow of additional impacts and delays, and then subsequent efforts to mitigate have been continuous.

All things considered, it is our view that the most reasonable approach to calculating the added direct equipment costs stemming from the delays incurred is to base the calculation on an overall average daily rate during the entire period that the impacts and delays were experienced. Accordingly, it is the opinion of C2G that Valard is entitled to recover this unanticipated additional direct equipment delay costs, which, including a 15% markup, total **$5,891,897**.

8.2.2.2 Field Overhead Delay Costs (Remaining Delay Period)

Field overhead costs, also referred to as general conditions, are direct project costs such as trailer rentals, electrical power, water, telephone and postage. In addition, direct labor costs for the project manager, superintendent, and support staff are accounted for on a weekly or monthly basis. These costs are identified with specificity within Valard's job cost accounting system.

Valard is incurring substantial unanticipated additional extended field overhead costs associated with the additional 91 days of delay currently forecasted. Valard has assessed these additional costs based upon its detailed job cost accounting data. The costs include indirect equipment costs and exclude any one-time charges for items such as the letter of credit and legal services, and extra costs included in prior change orders (i.e., out of scope permitting). The costs captured represent the time-related field overhead costs incurred during the period.

As detailed in the attached **Exhibit 59**, based on Valard's detailed job cost accounting transactional data, time-related field overhead costs totaling [redacted] were incurred from November 1, 2019, through March 31, 2021. Accordingly, the average daily rate for field overhead costs equates to [redacted] Considering the 91 days of additional delay incurred in the period, utilizing this average daily rate results in a direct equipment delay damage totaling [redacted] prior to markups [redacted]

Similar to the discussion of direct equipment losses above, that the Owner may suggest that the average daily rate for the direct equipment delay costs should be derived from early in the Project (i.e., November 1, 2019, through March 2020). Again, we have performed an alternate calculation based on this time period and have determined that the damage calculation would be reduced by approximately $2.1 million. However,

the delays, and Valard's efforts to mitigate the delays, have continued from the outset of the Project through the current date. Owner permit approvals continued into 2021; and, Owner Steel deliveries, as well as the impacts associated with the COVID-19 pandemic are ongoing. Without question, the ebb and flow of additional impacts and delays, and then subsequent efforts to mitigate have been continuous.

All things considered, it is our view that the most reasonable approach to calculating the added field overhead costs stemming from the delays incurred is to base the calculation on an overall average daily rate during the entire period that the impacts and delays were experienced. Accordingly, it is the opinion of C2G that Valard is entitled to recover this unanticipated additional time-related field overhead delay costs, which, including a 15% markup, total **$11,079,496**.

8.2.2.3 Escalation Delay Costs (Remaining Delay Period)

The additional three months of delay has continued to shift the time periods in which labor expenditures and material purchases will occur. As detailed in the attached **Exhibit 60**, Valard has calculated escalation costs for the period utilizing the same worksheet used for the LTC delay costs approved in Executed Contract Owner Change Order No. 1. Pursuant to the contractual requirements, the worksheet was updated with CPI values relevant to the start of delay.

The calculations described above and detailed in Exhibit 4 establish Valard's added costs totaling $1,203,453 for the unanticipated escalation costs resulting from the delay incurred from November 1, 2019, through completion. Valard is entitled to recover this unanticipated additional cost, which, including a 15% markup, total **$1,383,971**.

8.3 Added Right-of-Way Work Costs

As discussed in Section 7.3 above, the impacts to the right-of way work can be categorized as 1) Double-Construction of Access Roads, 2) Change in Road Type from Winter to All-Season, 3) Change in Water Crossing Type, and 4) Work Front 06/Caribou Zone Specific. The quantification of the added costs associated with the right-of-way impacts, which total $21,908,438, including markup, are summarized by Work Front in the table below, and detailed in the attached **Exhibit 61.**

Work Front	Planned (A)	Actual (B)	Forecast (C)	Impact (B+C)-A
WF 01	[redacted]	[redacted]	[redacted]	$4,266,125.97
WF 02	[redacted]	[redacted]	[redacted]	$97,132.33
WF 05	[redacted]	[redacted]	[redacted]	$2,726,758.25
WF 06	[redacted]	[redacted]	[redacted]	$2,403,712.99
WF 07	[redacted]	[redacted]	[redacted]	$337,932.41
WF 08	[redacted]	[redacted]	[redacted]	$154,426.71
WF 09	[redacted]	[redacted]	[redacted]	$50,065.99
WF 10	[redacted]	[redacted]	[redacted]	$5,022,852.80
WF 11	[redacted]	[redacted]	[redacted]	$607,784.50
Maintenance	[redacted]	[redacted]	[redacted]	$3,384,023.92
TOTAL:				**$19,050,815.87**
WITH 15% MARKUP				**$21,908,438.25**

The impacts to Work Front 01, as discussed in Section 7.3 of this report, resulted in double construction of 8.7 kilometers of access roads. Additionally, due to the piecemeal manner in which Work Front 01 was released Valard's subcontractor refused to work on unit rates and required that payment be made on a time and material basis. This resulted in a substantial cost increase to Valard. The impacts amounted to a cost of $4,266,126, as summarized in the table below, and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Impact (B+C) - A
WF 01	[redacted]	[redacted]		**$4,266,125.97**

The impacts to Work Front 02, as discussed in Section 7.3 of this report, resulted in double construction of access roads. Valard had to construct some access roads prior to the summer of 2020. This included 6.015 kilometers of winter access roadway relating to structures B018 to B053 (around Stewart Lake). This same 6.015 kilometers of access road was then reconstructed as an all-season access road in the summer of 2020. The impacts resulting from the release of Owner permits (an Owner Caused Delay) amounted to a cost of $97,132.33, as summarized in the table below, and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Impact (B+C) - A
WF 02	[redacted]	[redacted]	-	**$97,132.33**

The impacts to Work Front 05, as discussed in Section 7.3 of this report, prevented Valard from constructing primarily winter roads and required that Valard adapt and construct approximately 57.4 kilometers (to date) of all-season roads, at a much higher expense. Constructing an all-season access road not only requires more effort to develop the land, but it also requires greater effort to reclaim the land. Therefore, additional costs are incurred for both the initial road construction and reclamation. Additionally, since many of the winter roads in Work Front 05 were constructed as all-season roads, the water crossings also had to be adjusted to an all-season crossing, such as a bridge, culvert, or rig mat. The quantification of impacts in Work Front 05 amounted to a cost of $2,726,758.25 as summarized in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Impact (B+C) - A
WF 05	[redacted]	[redacted]	[redacted]	**$2,726,758.25**

The impacts to Work Front 06 as discussed in Section 7.3 of this report, prevented Valard from completing the right-of-way work in the first winter season as planned, and ultimately, the work had to be executed over three winter seasons. The quantification of impacts in Work Front 06 amounted to a cost of $2,403,712.99 as summarized in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Impact (B+C) - A
WF 06	[redacted]	[redacted]	[redacted]	**$2,403,712.99**

The impacts to Work Front 07 as discussed in Section 7.3 of this report required Valard to construct 27.63 kilometers of winter roads to allow clearing to proceed on schedule. These same 27.63 kilometers of access roads then later had to be reconstructed as all-season roads in order to allow construction to proceed as planned in accordance with the March 2022 completion schedule. The quantification of impacts in Work Front 07 amounted to a cost of $337,932.41 as summarized in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Total (B+C) - A
WF 07	[redacted]	[redacted]		**$337,932.41**

The impacts to Work Front 08 as discussed in Section 7.3 of this report required Valard to construct 11.08 kilometers of winter roads to allow clearing to proceed on schedule. These same 11.08 kilometers of access roads then later had to be reconstructed as all-season roads in order to allow construction to proceed as planned in accordance with the March 2022 completion schedule. The quantification of impacts in Work Front 08 amounted to a cost of $154,426.71 as summarized in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Total (B+C) - A
WF 08	[redacted]	[redacted]		**$154,426.71**

The impacts to Work Front 09, as discussed in Section 7.3 of this report, required Valard to construct 4.02 kilometers of winter roads to allow clearing to proceed on schedule. These same 4.02 kilometers of access roads then later had to be reconstructed as all-season roads in order to allow construction to proceed as planned in accordance with the March 2022 completion schedule. The quantification of impacts in Workfront 09 amounted to a cost of $50,065.99 as shown in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Total (B+C) - A
WF 09	[redacted]	[redacted]		**$50,065.99**

The impacts to Work Front 10, as discussed in Section 7.3 of this report, required Valard had to construct a 34 kilometer section from tower sites F072 to F117 as all-season roads to support the March 2022 completion schedule. The water crossings at the same locations also had to be adjusted to an all-season crossing, such as a bridge, culvert, or rig mat. Loss of the initial winter season changed the Project program requiring full all-season access, and the associated material and reclamation costs associated with that change are outlined below. The quantification of impacts in Workfront 10 amounted to a cost of $5,022,852.80 as summarized in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Impact (B+C) - A
WF 10	$[redacted]	[redacted]	[redacted]	**$5,022,852.80**

The impacts to Work Front 11 were similar to Work Front 10, requiring access roads to be constructed different than planned. Loss of the first winter resulted in an entire shift of the program. In order to accommodate a new construction plan Valard had to construct more significant winter roads for a portion of the access way between F118 to F-158, covering 22.93 kilometers, as well as construct a portion of this access way as

all-season roadway. The quantification of impacts in Workfront 11 due amounts to a cost of $607,784.50 as shown in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Impact(B+C) - A
WF 11	[redacted]	[redacted]	[redacted]	**$607,784.50**

Based on Exhibit B of the Contract, the access road maintenance cost planned, including markup, totaled [redacted]. Assuming a markup of 15%, the planned cost of the work was [redacted] To date, the actual maintenance costs incurred total [redacted] Valard's forecasted cost to complete was conducted by examining the TILOS schedule, determining when construction activity will be taking place, and assigning a rate for winter & summer months for the Work Fronts. Only applicable months were taken into consideration, the maintenance costs of the roads during reclamation were assumed to be [redacted] a month and Valard estimated the number of months per Work Front to complete the reclamation of the roads.

The quantification of impacts to maintenance costs due to schedule impacts resulting from Owner permit delays amounts to a cost of $3,384,023.92 as summarized in the table below and detailed in Exhibit 61.

Workfront	Planned (A)	Actual (B)	Forecast (C)	Total (B+C) - A
Maintenance	[redacted]	[redacted]	[redacted]	**$3,384,023.92**

In summary, as a result of the impacts to the right-of-way work, Valard is entitled to recover its unanticipated additional costs, which are quantified above in the total amount of $21,908,438, including markup.

In addition, Valard has incurred costs of [redacted] to maintain COVID-19 safety protocols during the right-of way clearing and access activities. Two subcontractors were engaged, Kabi Lake and Corbiere & Sons. The quantification of actual costs to

date, as well as forecasted remaining costs is summarized below, and detailed in **Exhibit 62**.

Type	Actual Costs (up to May 2021)	Forecast (June 202 to March 2022)	Total
Kabi Lake	[redacted]	[redacted]	[redacted]
Corbiere Contracting	[redacted]	[redacted]	[redacted]
Subtotal	[redacted]	[redacted]	[redacted]
WITH 15% MARKUP			**$3,468,587**

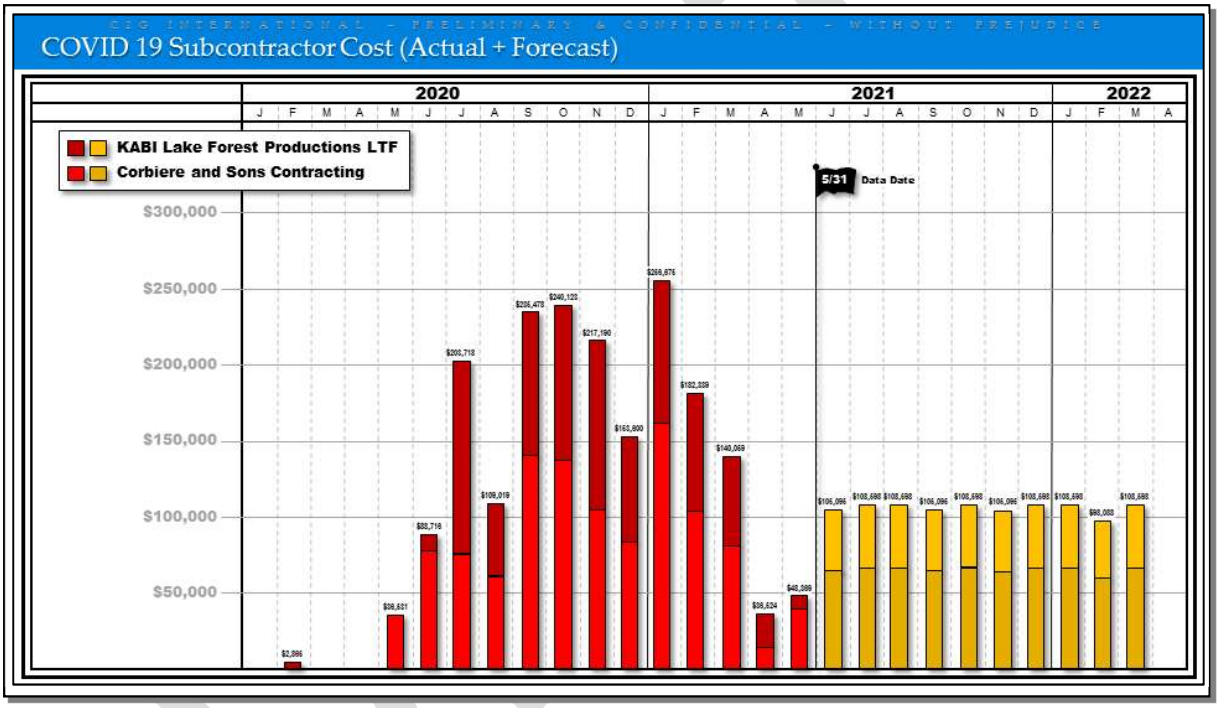
Valard's agreement with the subcontractors contains static fixed costs and labor workforce costs. Static fixed costs are agreed-upon daily fixed costs that Valard has established contractually with each subcontractor. The static fixed costs are summarized in the table below. Labor workforce costs in addition to the static fixed costs are for additional labor staff as required. Actual costs for labor staff are taken directly from the Project records, dated up through the end of May 2021. Forecast costs for Corbiere & Sons are calculated at 0.5 hours per laborer per day based on approved force account rates, and $40 per laborer per day for Kabi Lake. Total static costs for the subcontractor Corbiere & Sons are [redacted] per day. Total static costs for Kabi Lake are [redacted] per day.

Subcontractor	Cost Description	Daily Fixed Cost
Corbiere & Sons	Safety Advisor/COVID-19 Coordinator	[redacted]
Corbiere & Sons	Laborer	[redacted]
Corbiere & Sons	Truck	[redacted]
Corbiere & Sons Static Daily Costs		[redacted]
Kabi Lake	Administrator/Health & Safety Manager	[redacted]
Kabi Lake	Laborer	[redacted]
Kabi Lake Static Daily Costs		[redacted]

Forecast costs begin in June 2021 through to March 2022. Forecast costs for Corbiere & Sons total [redacted] per day, as detailed in Exhibit 62. Calculations include the daily static costs as discussed, plus an additional daily cost of [redacted] for approximately 11

laborers per day with miscellaneous supplies. Forecast costs for Kabi Lake total [redacted] per day, as detailed in Exhibit 62. Calculations include the static costs as discussed, plus an additional daily cost of $470.00 for approximately 11 laborers with miscellaneous supplies.

Monthly actual costs up through the end of May 2021, and forecast costs from June 2021 through to March 2022, are shown in the graphic illustration below, and included as **Exhibit 63**.



In summary, it is our view that Valard is entitled to recover its unanticipated additional cost in the performance of right-of-way work in the total amount of **$25,377,025**. Notably, these calculations leave Valard with a substantial forecasted remaining loss for the right-of-way work on the Project.

8.4 Added Foundation Work Costs

The cost to perform the foundation work on the Project has significantly increased for a variety of reasons. Unforeseen soils conditions and the need to accelerate the work

have resulted in costly changes to foundation types. The delayed, out-of-sequence and subsequently accelerated manner that both the foundation selection and installation work has proceeded has caused significant inefficiencies and has prevented Valard from making appropriate foundation type changes and/or consider cost-effective solutions to the challenges faced. And of course, the COVID-19 pandemic has caused additional inefficiencies and compounded the effects of the permitting delays. The following subsections outline the unanticipated additional costs associated with the issues.

8.4.1 Foundation Type Changes (Unforeseen Soil Conditions)

During negotiation of the Contract, the parties discussed in detail that only a very minimal geotechnical investigation was performed. Therefore, the parties listed the assumed soil conditions for every structure location and defined a procedure for when the assumed conditions failed to represent the actual subsurface conditions found during construction. Upon encountering unforeseen subsurface conditions, NextBridge would have the option of moving the structure location, allowing a change in foundation type, or terminating the Contract.

> ***9.4 Scope Changes Due to Concealed Conditions***. *Excluding archaeological artifacts at the Job Site which shall be governed by Section 2.26, Contractor shall conduct and complete, at Contractor's own cost, at the Job Site a geotechnical investigation of any portion of the Job Site as Contractor reasonably deems necessary to confirm the Job Site conditions. If, as a result of the geotechnical investigation but subject to the next sentence in this Section 9.4, within ten (I 0) days after the date Contractor (i) acquires knowledge of or encounters any concealed subsurface conditions which a reasonable, experienced contractor would not foresee existing at the Job Site and which vary materially from the conditions shown in this Agreement, if any, and (ii) any such condition causes an actual, demonstrable and material increase or decrease in the Contract Price, then Contractor shall notify Owner of the existence of such unknown and unforeseen subsurface condition in accordance with the Scope Change process*

outlined in Exhibit V-2 with written notice in the form of Exhibit V-3 with respect to such unknown and unforeseen subsurface condition at the Job Site. Notwithstanding the preceding sentence, Contractor acknowledges and agrees that it shall under no circumstances whatsoever have the ability and hereby waives and releases the 1ight to assert a Scope Change Order for any unknown and/or unforeseen dirt, dewatering activities, rock, sloughing conditions and/or access conditions of any kind at the Job Site. Owner in its sole discretion may either (a) issue a Scope Change Order to address such condition (by either abandoning such layout location or adapting the design and plan to accommodate the conditions encountered), pursuant to which Contractor shall be entitled to an extension of the time to perform the Work hereunder, which extension shall be for an equitable duration designed to reflect the delay actually caused by such condition and/or an increase in the Contract Price in accordance with the unit rates set forth in Exhibit B-2 hereto or (b) terminate this Agreement pursuant to Section 13.3. Contractor specifically waives the right to make any such claims with respect to the relevant portion of the Job Site (I) after the expiration of ten (I 0) day period set forth in this Section 9.4 or (2) if Contractor failed to comply with the Scope Change process outlined in Exhibit V-2 with written notice in the fo1m of Exhibit V-3. Except as set forth in this Section 9.4, Contractor assumes the risk of surface and subsurface conditions at the Job Site and shall not be entitled to an extension of the Project Schedule or an increase in the Contract Price as a result thereof.

Negotiation of the Contract mandated the inclusion of the geotechnical report and assumed soil conditions as Contract documents. This was to confirm that Valard's pricing was contingent upon these assumptions. Inexplicably, to date NextBridge's Project team has continued to state changed subsurface conditions are the responsibility of Valard and have refused to entertain discussion of relief for unanticipated soil conditions. In our view, Valard has clear entitlement to additional costs stemming from unanticipated soils conditions.

As detailed in **Exhibit 64,** a comparison of the structure coordinates contained within Appendix A-13 versus the actual structure staking data, indicates that there were 601 structures that do not change location. In 435 of these locations, the soil profile differed

from the assumptions outlined in Appendix A-13. Using the unit pricing agreed to in Exhibit B of the Contract, and considering both additions and reductions in value, the resulting change in foundation type results in additional costs totaling **$900,310**. Notably, this amount is derived based entirely on the differing unit rates established in the Contract and is therefore not subject to additional markups.

8.4.2 Foundation Type Changes (Owner Directed Relocations)

During the course of the Project to date, the Owner's representative (Burns & McDonnell) directed the relocation of 51 structures. As detailed in **Exhibit 65**, in 34 of these locations, the structure move resulted in the soil profile changing from the assumptions outlined in Appendix A-13. Using the unit pricing agreed to in Exhibit B of the Contract, and considering both additions and reductions in value, the resulting change in foundation type results in additional costs totaling **$117,111**. Notably, this amount is derived based entirely on the differing unit rates established in the Contract and is therefore not subject to additional markups.

8.4.3 Foundation Type Changes (Acceleration)

As discussed in Section 7.4 above, in an effort to accommodate the Owner's desire to achieve substantial completion in March 2022, Valard accelerated, in part, by changing certain foundation types to Micropiles. In total Valard altered the planned type for 24 foundation types to allow construction to proceed without further delay.

For example, this approach was necessary in order to complete foundation work prior to the end of the 2020/2021 winter work season within the Caribou Zone. Work within the Caribou Zone is restricted seasonally, from May through mid-September. Considering the spring thaw, in effect no work can be completed from approximately the first of April through mid-September. Valard's Change Order No. 1 plan called for

all of the Caribou zone right-of-way, civil and foundation work to be completed in the 2019/2020 winter season. However, Owner permits and access to the area was provided late (most procured from December 20, 2019, through March 20, 2020; with 12 provided in mid-November 2020). This delayed the start of much of the work to the 2020/2021 winter season.

Due to crew and rock hammer limitations (more experienced labor required to do rock pile and available rock hammers tied up in other locations due to delays and out-of-sequence work), Valard was forced to change originally planned rock foundations to micropile foundations within the Caribou Zone. To allow for the completion of conductor stringing and achievement of provisional acceptance pursuant to the March 2022 completion schedule, it was critical that the foundation work, and as much of the tower setting as possible was completed in the 2020/2021 season.

Another example was the changes to the foundations within the MFN territory. Several foundations were changed from rock foundations to micropiles in this area to allow for the completion of work within the MFN territory before the end of the winter season. In effect, and as requested by MFN, it was necessary to accelerate the work to complete the 31 foundations within the available 4 week window.

As summarized in the table below, 24 foundations have been identified as having been changed in Valard's efforts to accelerate construction.

Structure Number	Original Foundation Type	Original Install Cost	Actual Foundation Type	[redacted]	Variance
A084	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
A085	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
A117	Rock Fdn.	[redacted]	Micropile	[redacted]	$26,471.58
B063	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
C149	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18

Structure Number	Original Foundation Type	Original Install Cost	Actual Foundation Type	[redacted]	Variance
C153	Rock Fdn.	[redacted]	Micropile	[redacted]	$26,471.58
C177	Rock Fdn.	[redacted]	3 Legs Micropile 1 Leg Rock Fdn.	[redacted]	$133,804.37
C198	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
C216	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
C244	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
C246	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
C256	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
C270	Rock Fdn.	[redacted]	3 Legs Micropile 1 Leg Rock Fdn.	[redacted]	$133,804.37
E079	Drilled Shaft	[redacted]	Micropile	[redacted]	$74,054.84
E107	Drilled Shaft	[redacted]	2 Legs Micropile 2 Legs Rock Fdn.	[redacted]	$27,325.20
E151	Drilled Pipe Pile	[redacted]	Micropile	[redacted]	$11,463.26
F047	Rock Fdn.	[redacted]	1 Leg Micropile 3 Legs Rock Fdn.	[redacted]	$87,074.73
F125	Rock Fdn.	[redacted]	2 Legs Micropile 2 Legs Rock Fdn.	[redacted]	$110,439.55
F128	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
F139	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
F142	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
F143	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
F145	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
F157	Rock Fdn.	[redacted]	Micropile	[redacted]	$157,169.18
Totals		[redacted]		[redacted]	**$2,988,447.24**

The pricing shown above (Original Install Cost and Actual Install Cost) is based on the actual rates being paid to the micropile foundation subcontractors. As indicated above, the foundation type changes resulted in an unanticipated cost increase totaling **$2,988,447**. With the application of a 15% markup, it is our view that Valard is entitled to recover its incremental unanticipated additional costs for these foundation type changes in the total amount of **$3,436,714**.

8.4.4 COVID-19 Pandemic Foundation Cost Impacts

As detailed in Section 6.4 of this report, we have quantified a factor of 21% for mitigation tracking and productivity loss associated with COVID-19. In the case of foundations, while a portion of the work is self-performed by Valard, the majority is subcontracted. As detailed in Section 8.4.5 below, to the extent possible, Valard has segregated the costs paid to subcontractors for COVID-19 impacts. This section separately quantifies the COVID-19 impact costs associated with the self-performed work.

As detailed in **Exhibit 66**, from March 1, 2020, through March 31, 2021, Valard's foundation crews expended [redacted] manhours at a total labor cost of [redacted] equating to an average manhour labor rate of [redacted] During this same time period, Valard incurred equipment costs totaling [redacted] equating to an average equipment cost per labor manhour of [redacted]

From March 1, 2020, through March 31, 2021, Valard's foundation crews expended [redacted] manhours. Valard forecasts expending an additional [redacted] manhours for foundation work through Project completion. Accordingly, a total of [redacted] manhours are subject to the 21% mitigation tracking and productivity loss associated with COVID-19. The table below summarizes the additional materials management costs associated with this impact.

Time Period	COVID-19 Loss	
	(Labor)	(Equipment)
Actuals to date (3/2020 through 3/2021)	[redacted]	[redacted]
Forecasted through Completion (4/2021 through completion)	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]

Time Period	COVID-19 Loss	
Credit Eq. Cost in Delay Damages		[redacted]
Subtotals	[redacted]	[redacted]
Markups (@ 15%)	[redacted]	[redacted]
Totals	[redacted]	[redacted]
Grand Total	**$4,200,011**	

8.4.5 Foundation Inefficiency / Constructability Losses

Given the major impacts identified above, the foundation work has been performed in a piecemeal and out-of-sequence manner. Valard has been deprived of any opportunity to pursue the work in the logical, efficient and cost-effective manner upon which its bid was based. As a result, Valard has received multiple extra work requests from its primary foundation subcontractors, Les Equipments Gaetan, Inc. ("LEG") and Double Star Drilling (1988) Ltd. ("Double Star").

Valard has analyzed each of the requests from these subcontractors and identified significant additional costs, which it believes are the result of the schedule delays and impacts detailed herein. As summarized below and detailed in the attached **Exhibit 67**, the added costs associated with the impacts to Valard's foundation subcontractor total $3,054,195. With the application of a 15% markup, the unanticipated additional foundation subcontractor costs total **$3,512,324**.

8.4.5.1 LEG Change Order Requests:

To date, LEG has submitted nearly 600 change order requests (referred to by LEG as "Supplementary Work Orders"). Based on pricing provided thus far by LEG, the change order requests are valued at $3,267,360 (44 of the LEG change order requests have not yet been priced). As summarized below, Valard considers approximately 480

of the LEG change order requests, valued thus far at $2,478,472, to be unanticipated additional costs arising from the delay and disruption experienced on the Project.

Category	Impact Costs	Scope Issues (not claimed)	Totals
Extraordinary Situation	$582,555.09	$179,860.24	$767,245.33
Chargeable Move	$1,730,014.23	$71,069.56	$1,801,083.79
Outside the Scope of the Subcontract	$58,981.32	$344,093.74	$403,075.06
Standby Time	$27,721.94	$28,446.13	$56,168.07
Excessive Travel Time	$79,199.07	$160,588.23	$239,787.30
Totals	**$2,478,471.65**	**$784,057.90**	**$3,267,359.55**

As indicated above, the LEG change order requests have been segregated into five categories. The impact costs associated with each category are described below and detailed in Exhibit 67:

- **Extraordinary Situation**: The major cost impact issues included in this category include the addition of extra probing crews to accommodate out-of-sequence work ($409,810) and unplanned acceleration costs in the summer months of 2020 ($118,090).
- **Chargeable Move**: This category, which represents approximately 64% of the LEG impact costs, includes the cost of 428 separate unanticipated moves along the right-of-way (averaging approximately [redacted] per move).
- **Outside the Scope of Subcontract**: The major cost impact issue included in this category include the construction measures (soil fill) necessary to install foundations and expedite construction.
- **Standby Time**: This category includes the cost of 13 standby time charges from LEG. These requests are associated with wait times for other crews (primarily

survey), which Valard has determined resulted from the out-of-sequence work on the right-of-way.

- **Excessive Travel Time**: This category includes three requests for unanticipated additional costs expended by LEG for extended travel time when it was mobilizing out of the Marathon camp in lieu of the White River camp, the setup of which was delayed as a result of First Nation objections.

8.4.5.2 Double Star Change Order Requests:

To date, Double Star has submitted change order requests totaling $5,120,105. Of this amount, Valard has determined that 10 requests, totaling $575,723, to be unanticipated additional costs arising from the delay and disruption experienced on the Project. The impact costs associated with each category are described below and detailed in Exhibit 67:

- **Double Star C.O. #1 ($25,265)**: Costs associated with excessive travel time between structures and between Work Fronts due to out-of-sequence work on the right-of-way.

- **Double Star C.O. #3 ($33,541)**: Costs associated with added work scope to complete casing splicing (high reveal).

- **Double Star C.O. #5 ($171,117)**: Costs associated with two separate requests: 1) $160,758.75 due to extended travel time when it was mobilizing out of the Marathon camp in lieu of the White River camp, the setup of which was delayed as a result of First Nation objections; and 2) $10,358.25 associated added work scope to complete casing splicing (high reveal).

- **Double Star C.O. #10 ($111,640)**: Costs associated with two separate requests: 1) $109,500.00 of acceleration costs associated with night shift work; and 2) $2,140.23 related to self-isolation, charter flight and COVID-19 precautions.

- **Double Star C.O. #11 ($36,500)**: Acceleration costs associated with night shift work.

- **Double Star C.O. #12 ($197,660)**: Costs associated with three separate requests: 1) $72,557.64 of additional costs associated with COVID-19 mitigation limitation of two people per vehicle; 2) $92,502.50 for excessive travel time between structures and between Work Fronts due to out-of-sequence work on the right-of-way; and 3) $32,600 for mobilization costs from Marathon camp to MFN.

8.5 Added Structure Work Costs

As discussed in Section 7.5 above, the structure work for the Project experienced significant impacts as a result of the combined effects of late Owner permits, late tower steel deliveries and the COVID-19 pandemic. As detailed previously, after segregating the 21% for COVID-19, our analysis establishes that Valard was capable of performing at a rate of very close to its original bid contemplation. Utilizing the benchmark productivity rate established in the measured mile period to assess the balance of the structure work, results in the following allocation of the manhour loss in the structure work:

Time Period	Baseline Period Loss (not claimed)	COVID-19 Loss	Inefficiency Above Baseline
Period 1 (11/2019 through 3/2020)	[redacted]	[redacted]	[redacted]
Period 2 (4/2020 through 9/2020)	[redacted]	[redacted]	[redacted]
Period 3 (10/2020 through 3/2021)	[redacted]	[redacted]	[redacted]

Time Period	Baseline Period Loss (not claimed)	COVID-19 Loss	Inefficiency Above Baseline
Forecasted Through Completion (based on Period 3 productivity)	[redacted]	[redacted]	[redacted]s
Totals	[redacted]		

The narrative referenced exhibits contained within Section 7.5 above detail the analysis to establish Valard's entitlement to recover its costs associated with the manhour losses summarized above (COVID-19 and Inefficiency Above Baseline). Our analysis quantifies these costs based on actual average rates from Valard's job cost accounting data included as **Exhibit 68**, as summarized below.

- **Actual Average Labor Rate**: Valard's actual labor costs for structure work through March 31, 2021, total [redacted]. As detailed in the previously referenced Exhibit 50, Valard's actual labor manhour expenditures for structure work through March 31, 2021, total [redacted] Accordingly, the average actual labor rate for the work through March 31, 2021, equates to [redacted] Valard's budgeted/estimated labor rate for the structure work was [redacted] While the actual labor rate is [redacted] higher than budgeted, the work has been delayed beyond the originally planned performance period, and this increase is offset by a reduction in the average equipment cost per manhour discussed directly below.

- **Actual Average Equipment Rate Per Manhour**: Valard's actual equipment costs for structure work through March 31, 2021, total [redacted] As detailed in the previously referenced Exhibit 50, Valard's actual labor manhour expenditures for structure work through March 31, 2021, total [redacted] Accordingly, the average actual equipment rate per manhour for the work through March 31, 2021, equates to [redacted]. Valard's budgeted/estimated equipment rate per manhour for the structure work was [redacted] Accordingly, the actual equipment rate per manhour is [redacted]ower than budgeted.

Based on the earned value analysis described in detail in Section 7.5, and the actual average labor and equipment rates outlined above, the damages associated with the impacts to the structure work are segregated as follows:

Time Period	COVID-19 Loss		Inefficiency (Above Baseline)	
	(Labor)	(Equipment)	(Labor)	(Equipment)
Period 1 (11/2019 through 3/2020)	[redacted]	[redacted]	[redacted]	[redacted]
Period 2 (4/2020 through 9/2020)	[redacted]	[redacted]	[redacted]	[redacted]
Period 3 (9/2020 through 3/2021)	[redacted]	[redacted]	[redacted]	[redacted]
Forecasted Through Completion (based on period 3 productivity)	[redacted]	[redacted]	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]		[redacted]
Totals		[redacted]		[redacted]

As discussed in Section 8.2.2.1 above, to avoid potential duplication in the damages calculated for equipment, the delay costs included in that section are credited here as an offset. For the equipment utilized in the structure work, this credit totals $1,764,853 ([redacted]

As summarized below, with the application of the credit above and a 15% markup, it is our view that Valard is entitled to recover its unanticipated additional cost in the performance of the structure work in the total amount of **$29,341,710**.

Time Period	COVID-19 Loss		Inefficiency (Above Baseline)	
	(Labor)	(Equipment)	(Labor)	(Equipment)
Period 1 (11/2019 through 3/2020)	[redacted]	[redacted]	[redacted]	[redacted]
Period 2 (4/2020 through 9/2020)	[redacted]	[redacted]	[redacted]	[redacted]
Period 3 (10/2020 through 3/2021)	[redacted]	[redacted]	[redacted]	[redacted]
Forecasted Through Completion (based on Period 3 productivity)	[redacted]	[redacted]	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]		[redacted]
Credit Eq. Cost in Delay Damages	[redacted]	[redacted]	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]		[redacted]

Time Period	COVID-19 Loss	Inefficiency (Above Baseline)
Markups (@ 15%)	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]
Totals	[redacted]	[redacted]
Grand Total	**$29,341,710**	

Notably, regarding the inefficiency damages quantified above, as stated in Section 7.5 above, while the impacts certainly arise in part from late Owner permits and tower steel deliveries, we believe a significant portion of this damage is likely also attributable to the follow-on impacts of COVID-19 (i.e., 2020 delays in agency permit approvals and tower steel supply chain interruptions).

8.6 Added Stringing Work Costs

The impacts to stringing work include the effects of the COIVD pandemic, as well as the out-of-sequence work and acceleration efforts outlined in Section 7.6 above. Given the current completion status of the stringing activities, the magnitude of the inefficiencies that will be experienced is difficult to assess with precision. Accordingly, based on our analysis and discussions with the Project team, we believe that a relatively minor inefficiency factor in the range of 5% to 10% is appropriate.

As detailed in **Exhibit 69**, Valard has expended [redacted] manhours on stringing work through March 31, 2021. Valard estimated/budgeted a total of [redacted] manhours to perform all stringing work. Based on our analysis of Valard's labor expenditure to date, an approximate 21% loss has been incurred (23.18% of the work completed while spending 28.01% of the budget, a difference of 4.83%, an increase of approximately 21%). Consequently, to date it appears COVID-19 has been the primary impact to the stringing work. This stands to reason, since not a lot of the work has been performed

and there has been no real ability to implement accelerative measures (as other impacts have limited the areas ready for stringing).

As discussed previously, Valard's forecast for completion is based on the assumption that the delays and impacts will be significantly reduced going forward and allow for a substantial increase in production. The production increase will be achieved, in part, with the unplanned extended use of a second stringing crew, as well as an advance jumper crew to expedite the work of the main crews. Valard's Change Order No. 1 baseline schedule planned 16 months to complete all stringing work. Valard's current completion schedule now forecasts the completion of approximately 77% of the stringing work in a 9 month time period. Put simply, the current forecast calls for the completion of work originally planned for approximately 12 months within a 9 month time period.

These accelerative measures will require added resources and the work will have to be performed out-of-sequence, which we believe will result in additional inefficiencies. Based on data from available industry studies, the primary impacts expected as the stringing work is accelerated through completion will likely involve reassignment of manpower and crew size inefficiency. Most studies suggest that the inefficiencies arising from these types of impact factors range from 15% to 45%. However, these studies are generally based on forensic analysis where the impact factors developed on projects unexpectedly. In this case, Valard has had the opportunity to plan the acceleration effort. Accordingly, we believe an inefficiency factor of 7.5% is more appropriate (i.e., one-half of the low inefficiency range suggested by most studies).

To establish Valard's entitlement to the added costs associated with the manhour the COVID-19 pandemic and the inefficiency discussed above, our analysis quantifies

these costs based on actual average rates from Valard's job cost accounting data included as Exhibit 69, as summarized below.

- **Actual Average Labor Rate**: Valard's actual labor costs for structure work through March 31, 2021, total [redacted] Valard's actual labor manhour expenditures for stringing work through March 31, 2021, total [redacted] Accordingly, the average actual labor rate for the work through March 31, 2021, equates to [redacted] Valard's budgeted/estimated labor rate for the structure work was [redacted] While the actual labor rate is [redacted] higher than budgeted, this increase is offset by a reduction in the average equipment cost per manhour discussed directly below.

- **Actual Average Equipment Rate Per Manhour**: Valard's actual equipment costs for structure work through March 31, 2021, total [redacted] Based on Valard's actual string work labor manhour expenditures [redacted], the average actual equipment rate per manhour for the work through March 31, 2021, equates to [redacted] Valard's budgeted/estimated equipment rate per manhour for the structure work was [redacted] Accordingly, the actual equipment rate per manhour is considerably lower than budgeted.

Based on the actual average labor and equipment rates outlined above, the damages associated with the impacts to the stringing work are segregated as follows:

Time Period	COVID-19 Loss		Inefficiency (Planned Acceleration)	
	(Labor)	(Equipment)	(Labor)	(Equipment)
Actuals to date (7/2020 through 3/2021)	[redacted]	[redacted]	[redacted]	[redacted]
Forecasted Through Completion (6/2021 through 3/2022)	[redacted]	[redacted]	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]	[redacted]	[redacted]
Credit Eq. Cost in Delay Damages	[redacted]	[redacted]	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]	[redacted]	[redacted]
Markups (@ 15%)	[redacted]	[redacted]	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]	[redacted]	[redacted]
Totals	[redacted]		[redacted]	

Time Period	COVID-19 Loss	Inefficiency (Planned Acceleration)
Grand Total	**$13,825,246**	

As summarized above, with the application of the credit above and a 15% markup, it is our view that Valard is entitled to recover its unanticipated additional cost in the performance of the stringing work in the total amount of **$13,825,246**.

8.7 Added Materials Management and Handling Costs

The major delays and associated impacts identified herein have dramatically increased Valard's costs to manage and handle materials on the Project. Virtually every aspect of the work on the Project has become disjointed due to the delays. The late Owner permits have resulted in substantial changes to the sequencing of the field work, the impacts and delays to the foundation selection process have caused uncertainty in material requirements, the late and out-of-sequence steel deliveries have extended material management resource requirements and resulted in extra work (i.e., borrowing parts), and COVID-19 has cast a pall over any ability to build momentum and efficiencies.

Given the events on the Project, in our view, Valard is likely entitled to a total cost recovery for its added material management costs. Nonetheless, in an effort to be conservative, we have chosen not to calculate damages in this fashion. Instead, we identified the damages that can be reasonably quantified discretely, and are then left with a remaining overrun, which is unallocated (absorbed by Valard).

First, we quantified the impact associated with the COVID-19 pandemic. As detailed in Section 6.4 of this report, we have quantified a factor of 21% for mitigation tracking and productivity loss associated with COVID-19. As detailed in **Exhibit 70**, from March 1, 2020, through March 31, 2021, Valard's material management staff expended

84,103 manhours at a total labor cost of [redacted] equating to an average manhour labor rate of [redacted]. During this same time period, Valard incurred equipment costs totaling [redacted], equating to an average equipment cost per labor manhour of [redacted]

From March 1, 2020, through March 31, 2021, Valard's material management staff expended [redacted] manhours. Valard forecasts expending an additional [redacted] manhours for material management staffing through Project completion. Accordingly, a total of [redacted] manhours are subject to the 21% mitigation tracking and productivity loss associated with COVID-19. The table below summarizes the additional materials management costs associated with this impact.

Time Period	COVID-19 Loss	
	(Labor)	(Equipment)
Actuals to date (3/2020 through 3/2021)	[redacted]	[redacted]
Forecasted through Completion (4/2021 through completion)	[redacted]	[redacted]
Subtotals	[redacted]	[redacted]
Markups (@ 15%)	$[redacted]	[redacted]
Totals	[redacted]	[redacted]
Grand Total	**$3,395,824**	

Next, we quantified the overrun associated with Project delay. Notably, none of the costs associated with materials management have been included in prior delay calculations. As detailed herein, every aspect of the work on the Project has been delayed and disrupted to date. Accordingly, Valard's original material management staffing plan (refer to Exhibit 53) is not helpful for purposes of comparison to the as-built. The staffing plan was formulated based on the baseline schedule for the work of the field installation crews, and the work of all these crews has been delayed to varying

degrees. To this point, the following table summarizes the delays by major work type based on the as-built schedule and Valard's current schedule forecasts.

Work Type	Planned Completion	Actual / Forecasted Completion	Delay Days
ROW Clearing & Civil Work *(excl. 5 month non-work period in 2021)*	11-Jul-20	12-Feb-22	429
Foundation Work	29-Nov-20	20-Jan-22	417
Structure Work	31-Jul-21	18-Feb-22	202
Stringing Work	30-Nov-21	29-Mar-22	119
Average Delay			**292**

Based on the delay days shown above, the delays by major work type vary from four to 14 months. In other words, Valard's material management staffing will be required to support right-of-way and foundation work for an extra 14 months, whereas the support related to structure and stringing work is seven and four months, respectively. Consequently, since the material management staff supports each of the major work types, basing the extended staffing damage calculation on the delay to any single work element would be inaccurate and benefit one party over the other. In our opinion, a reasonable calculation must utilize the average of the delays incurred for all work types (292 days).

From the start of the Project, through the completion of the last major work type summarized above (stringing work at the end of March 2022), Valard's material management staff is forecasted to expend [redacted] labor manhours ([redacted] actual hours through March 2021 and [redacted] forecasted through March 2022). Based on the calendar day duration in the period, Valard's material management staff averages [redacted] manhours per day, equating to roughly [redacted] staff members ([redacted] manhours ÷ 973 calendar days = [redacted] manhours per day average). Multiplying the average daily manhours by the 292 day average delay results in the quantification of [redacted]

manhours resulting from the delays incurred [redacted]

[redacted]

Using the labor and equipment rates summarized above and in Exhibit 70, the table below summarizes the additional materials management costs associated with the delays incurred:

Time Period	Delay Costs	
	(Labor)	(Equipment)
Based on 46,340 additional Hours associated with delay (158.7 hours per day x 292 days delay = 46,340)	[redacted]	[redacted]
Markups (@ 15%)	[redacted]	[redacted]
Totals	[redacted]	[redacted]
Grand Total	**$5,316,843**	

In summary, it is our view that Valard is entitled to recover its unanticipated additional cost in the performance of materials management work in the total amount of **$8,712,667**. Notably, these calculations leave Valard with a forecasted remaining loss totaling 11,766 manhours, which equates to nearly $1.2 million, or approximately 16.5% of its original budget for the materials management work.

8.8 Added Kama Cliffs Costs

As discussed in section 7.8 of this report, Valard's scope of work in the Kama Cliffs has changed significantly from what was contemplated originally in the Contract. Due to lack of access to sites B149 to B158, Valard had to execute all construction work at those sites using helicopter access. The cost for conventional access was planned in the Contract at $3,695,936 as summarized in the table below and detailed in attached **Exhibit 71.**

With the exception of right-of-way work, which has incurred an overall savings due to not having to build access roads and crossings, all disciplines have experienced additional impacts. As summarized in the table below, and detailed in attached Exhibit 71, Valard anticipates incurring additional costs for Geotechnical, Foundations and Anchors, Structure erection, and Stringing totaling **$5,680,037**.

Discipline	Conventional Costs	Heli Program Costs (Actuals + Forecast)	Impact (Variance)
Right-of-Way	[redacted]	[redacted]	[redacted]
Geotech	[redacted]	[redacted]	[redacted]
Foundations/Anchors	[redacted]	[redacted]	[redacted]
Structure Assembly	[redacted]	[redacted]	[redacted]
Structure Erection	[redacted]	[redacted]	[redacted]
Stringing	[redacted]	[redacted]	[redacted]
Total	[redacted]	[redacted]	[redacted]

The class of helicopter currently planned to be used for the execution of work is a S-64 Skycrane. Mobilization/demobilization cost of [redacted] for the S-64 Skycrane is included in the total cost. Hourly rate for the S-64 Skycrane is [redacted] per hour, with a minimum of three hours per day (helicopter & fuel & pilot). The location of the fly yard for assembly of towers and staging of materials is line laydown L-14A.

The class of helicopter currently planned to be used for the transportation of crew to site locations is an A-Star helicopter. Operating rates for the A-Star are [redacted] per hour, with a minimum of four hours per day (helicopter, fuel & pilot). Production rates and projected costs are based on 11 hour workdays.

For Right-of-way work in Kama cliffs, Valard's Contract plan was for conventional road access, including the planned one year rental of planned bridges. Due to the impacts requiring sites B149 to B158 right-of-way work to be executed via helicopter, the scope had to altered to include falling and hand clearing the structure box and out

to the anchor locations for tangents. For the rest of the right-of-way, the impacted plan required hand clearing for line clearances and leaving the lumber where it fell.

For Geotechnical work, Valard's Contract plan assumed conventional road access utilizing a probing drill to quickly determine depth to bedrock, and to only perform full geotechnical investigations when required. Due to the impacts requiring sites B149 to B158 to be executed via helicopter, the impacted plan utilized a more costly geotechnical drill rig. To optimize helicopter time, Valard used three geotechnical drilling rigs. Water was required at each site for the geotechnical drilling rigs and a helicopter was needed to supply water totes up to three runs daily per crew. A full-time medic was required at the laydown area in case of emergencies.

For Foundations & Anchor work, due to the impacts to the plan, the work scope changed significantly. Once the hand falling/clearing along the right-of-way in the conservation area had been completed, micropile foundations, anchors and tie-back anchors were installed with heli-portable equipment (two helicopters were required for execution). A 407 helicopter was used to carry workers and small supplies and a 214B helicopter was used for the heavy lifting foundation equipment and for the grouting.

A helicopter laydown area at the base of Kama Cliffs staging area was required for foundation work. Mats were required as the closest available area was between B147 and B146 which was swampy and could not support equipment and landing helicopters safely. A full-time medic was required at the laydown area in case of emergencies. An extra level of clearing around structure boxes was required for helicopter landing, staging equipment, and pathways for crews to walk around structure safely. Valard supported these activities with internal staff as well.

Clean water required for grout mixing was supplied and refilled from a local contractor, with multiple refills required. Due to the time of year heating was required to keep water at proper temperatures (Three frost fighters were used running 24 hours a day).

Additional costs included a jet fuel tanker required at site to save daily trips with heli-fuel trucks, a zoom boom for loading/unloading at staging area, and a security guard for the helicopters during the evenings while labor staff were offsite.

Additional special considerations needed to be taken for COVID-19 as the Crux subcontractor employees used are American and were required to stay in quarantine for 14 days after arrival. Quarantine protocols included separate camp rooms, kitchen staff delivering food, a separate office to be brought in, additional trucks required for Valard employees, and expedited testing once they landed in Canada.

For Structure Assembly, there was minimal impact to the assembly program with the exception of a fly yard requirement. Conventional access would have allowed for structure assembly right at the tower location. However, due to the impacted plan, structure assembly was executed in a fly yard rather than at the tower location, and assembly was completed in smaller subsections, rather than being fully completed at the tower site.

For Structure Erection work in Kama Cliffs, Valard's plan in the Contract with conventional road access was to erect at a production rate of [redacted] days for dead-end structures and [redacted] days for guyed towers. Due to the impacts requiring sites B149 to B158 to be executed via helicopter, the impacted plan for installation via helicopter was to erect at a production rate of three days for dead-end structures and [redacted] days for guyed towers. Based on the impacted production rates, two erection crews were

required due to schedule constraints. Crew and equipment pricing is calculated using force account type rates.

For Stringing work, Valard's plan in the Contract with conventional road access was to install four kilometers of stringing in this area with three dead-ends. Due to the impacts requiring sites B149 to B158 to be executed via helicopter, the impacted plan of working from a helicopter with no boom truck access required an extra [redacted] days of work for dead-ending, and an extra [redacted] days to install jumper loops. Stringing crew rates are determined using Force Account Rates. Additional helicopter time was required to monitor seating of the running board into the travelers for each pull section. This was in lieu of a watcher monitoring from the ground with a pickup truck.

To summarize, due to the lack of access to sites B149 to B158 by conventional access roads, Valard had to execute a significant amount of construction work using helicopter access. The logistics and coordination involved with the use of a helicopter for construction, combined with the engineering changes, specific tools and equipment required for the construction, has significantly impacted Valard in the Kama Cliffs Conservation Reserve. Valard is entitled to recover its additional costs, which based on the current plan for completion of the work, totals **$5,680,037** associated with this extra work.

8.9 Added Water Crossing Costs

As discussed in Section 7.9 of this report, the Water Crossings for the Project have changed significantly from what was contemplated originally in the Contract. These changes came about due to changes in the preliminary Environmental Protection Plan, as well as the Project schedule. Valard has identified 28 crossings that were originally contemplated in the Contract, but were not installed, 123 added crossings that were not originally contemplated in the Contract, and 111 crossing types that were changed

from what was contemplated in the Contract. The comprehensive list of the crossings designated as either installed from Contract, not installed from Contract, added, or changed is detailed in **Exhibit 72.**

The quantification of cost impacts incurred due to impacts to the Water Crossings, as summarized in the table below and detailed in **Exhibit 73** totals **$6,535,506**.

Description	Crossing Count	Impact
Water Crossings to Install per Contract	228	
Not installed	28	[redacted]
Water Crossings Installed per Contract	200	
Total Changed Crossings	111	[redacted]
New Water Crossings Installed	123	[redacted]
Total Water Crossings Installed	323	
Total Cost Impact		**$6,535,506.31**

The costs and credits are based on unit rates included in Exhibit B to the Contract. If a unit rate was not listed in the Contract, actual installation costs have been utilized, categorized by span length. The table below summarizes the unit rates utilized in the cost calculations.

Crossings Description	UOM	Unit Rate	W/ 15% MU (if applicable)	Comment
Culvert, 1.5M Dia, 3M Lng	Ea.	[redacted]	[redacted]	From Exhibit
Bridge, 2.5M Dia, 5M Lng	Ea.	[redacted]	[redacted]	From Exhibit
Bridge, 3.0M Dia, 7M Lng	Ea.	[redacted]	[redacted]	From Exhibit
Timber Crane	Ea.	[redacted]	[redacted]	
Rig Mats	Ea.	[redacted]	[redacted]	
Snow Fill	Ea.	[redacted]	[redacted]	Sub Unit Rate
Water Crossings 9M	Ea.	[redacted]	[redacted]	from Actuals
Water Crossings 12M	Ea.	[redacted]	[redacted]	from Actuals
Water Crossings 15M	Ea.	[redacted]	[redacted]	from Actuals
Water Crossings 18M	Ea.	[redacted]	[redacted]	from Actuals
Water Crossings 24M	Ea.	[redacted]	[redacted]	Use 18 M

Actual installation costs are from the Project LEM (labor/equipment/material) records. For example, the Contract does not include a 12 meter water crossing, therefore the calculation is based on the average installation cost of a 12 meter water crossing during the Project. To calculate the actual costs, a combination of installation, duration of use, and removal costs were considered. As shown in the table below, using a 12 meter/40 foot crossing as an example, the average installation cost is **$22,416**. The detailed Project records showing the average installation costs, rental rate, and rental durations are included as **Exhibit 74**.

Actual Install	FDM Size	Bridge No.	NMB Size	Install Cost
Bridge	12.1m	600	40	[redacted]
Bridge	12.1m	867	40	[redacted]
Bridge	12.1m	777	40	[redacted]
Bridge	12.19m	869	40	[redacted]
Bridge	12.2m	870	40	[redacted]
Bridge	12.1m	7124	40	[redacted]
Bridge	12.2m	844	40	[redacted]
Bridge	12.2m	776	40	[redacted]
Bridge	12.2m	7200	40	[redacted]
Bridge	12.1m	831	40	[redacted]
Bridge	6.1m	843	40	[redacted]
Bridge	12.2m	7198	40	[redacted]
Bridge	12.19m	758	40	[redacted]
Bridge	12.2m	7205	40	[redacted]
Bridge	12.192m	868	40	[redacted]
			AVERAGE $	[redacted]

Rental costs were based on monthly rates provided by Valard's subcontractor, as shown in the table below. The cost for a 40 foot /12 meter span crossing is [redacted] per month, based on Project LEM (Labor/Equipment/Material) records. The average rental

duration for crossings on the Project is 10.81 months [redacted]

[redacted]

Bridge Rental Costs		
Bridge Length (ft)	**Bridge Length (m)**	**Rental Cost per Month**
20	6	[redacted]
30	9	[redacted]
40	12	[redacted]
50	15	[redacted]
60	18	[redacted]
70	21	[redacted]
80	24	[redacted]

Bridge removal cost has been determined to average **$13,000**, which is based on historical costs as substantiated by Valard's right-of-way department.

To calculate an all-in unit rate, all three values are combined to calculate the "all-in" actual unit rate, as summarized in the table below. For a 12 meter/40 foot span crossing (Value 1: [redacted] + Value 2: [redacted] + Value 3: [redacted] = [redacted]).

Description		A	B		C	Unit Rate	
		Install	Rental		Removal		
Bridge Length (m)	**Bridge Length (ft)**	**Average Install Cost**	**Monthly Rental Rate**	**Total Rental @ Avg 10.81 Months**	**Historical Removal $**	**(A + B + C)**	**Add 15% Markup**
9	30	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
12	40	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
15	50	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
18	60	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
24	80	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

The same methodology has been applied to the other crossing span lengths. These all-in actual unit rates have been used in lieu of a contract unit rate, only if the bridge type and length was not listed in Exhibit B.

The 28 Water Crossings not installed from the Contract have been credited in the amount of $335,245.51. The calculation of this credit is based on unit rates from Exhibit B to the Contract, or actual costs from the all-in actual unit rate table, as required. The list of 28 Water Crossings are shown below, and also included as Exhibit 73.

CID	Workfront	Location	Crossing ID	Crossing Type	Unit Rate	Total Cost
WC141	3	B133	6550.01	Culvert	[redacted]	
WC695	10	F033	10640.01	Culvert		
WC475	10	F057	11160	Culvert		
WC500	11	F119	11890.02	Clear Span Bridge		
WC15	1	A061	5060.01	Culvert		
WC45	1	A123	5569	Culvert		
WC86	2	B035	5960.01	Culvert		
WC360	5	C038	7091	Culvert		
WC292	8	E017	9049	Clear Span Bridge		
WC522	11	F132	12100.01	Clear Span Bridge		
WC705	11	F139	15004	Culvert		
WC706	11	F140	15005	Culvert		
WC52	1	A004	4771	Culvert		
WC167	3	B155	302	Culvert		
WC144	3	B151	6600	Clear Span Bridge		
WC691	5	C039	502	Snowfill		
#N/A	6	C153		Drainage/Snowfill		
WC276	7	D018	8551	Culvert		
WC305	8	E076	9241	Culvert		
#N/A	9			Culvert		
#N/A	9			Culvert		
WC393	5	C091	7440	Snowfill		
WC182	6	C174	7890	Drainage/Snowfill		
WC199	6	C206	8171	New Clear-Span		
WC485	10	F081	11280	Snowfill		
WC495	10	F106	11774	Snowfill		
WC611	10	F074	11241	Snowfill		
WC486	10	F083	11290	Snowfill		
Total						[redacted]

The 123 new Water Crossings installed that were not listed in the Contract total the amount of $ 3,606,241.11. The calculation of this added cost is based on unit rates from Exhibit B of the contract, or actual costs from the all-in actual unit rate table, as required. The list of 123 new Water Crossings are shown below, and also included as Exhibit 73.

CID	Workfront	Location	Crossing ID	Crossing Type	Unit Cost	Total Cost
WC708	1	A042	121.00	Bridge	[redacted]	
WC687	4	B193	401.00	Bridge		
WC685	4	B203	402.00	Bridge		
WC683	4	B205	405.00	Bridge		
WC689	4	C020	406.00	Timber Crane		
WC692	5	C040	503.00	Bridge		
WC252	6	C194	605.00	Bridge		
WC311	8	E018	800.00	Snow Fill		
WC688	4	B207	403.00	Bridge		
WC73	1	A025	118.00	Timber Crane		
WC72	1	A018	120.00	Bridge		
WC714	3	B187-B194	307.00	Bridge		
WC716	5	C064	507.00	Bridge		
WC715	10		15105.00	Bridge		
WC294	8	E018	9060.00	Culvert		
WC299	8	E053	9150.01	Culvert		
WC301	8	E055	9160.01	Culvert		
WC11	1	A042	4960.02	Bridge		
WC47	1	A124	5590.01	Bridge		
WC105	2	B020	5830.00	Bridge		
WC92	2	B049	6071.01	Bridge		
WC95	2	B054	6120.01	Bridge		
WC96	2	B055	6150.01	Bridge		
WC83	2	B022	5860.01	Culvert		
WC134	3	B116	6430.00	Bridge		
WC136	3	B117	6470.00	Bridge		
WC162	3	B142	6560.02	Bridge		
WC164	3	B142	6570.01	Bridge		
WC163	3	B081	6259.00	Rig Mat		
WC161	3	B171	6720.01	Bridge		
WC154	3	B184	6771.00	Bridge		
#N/A	4	B196	400.00	Bridge		
WC345	4	C001	6950.00	Bridge		
#N/A	4	C014	6962.00	Timber Crane		
WC596	4	C017	6981.00	Rig Mat		
WC364	5	C048	7140.01	Bridge		
WC413	5	C126	7672.00	Timber Crane		
WC181	6	C172	7880.00	Bridge		
WC195	6	C195	8130.01	Bridge		
WC203	6	C234	8310.01	Bridge		
WC212	6	C260	8440.01	Bridge		
WC225	6	C276	8510.01	Bridge		
WC277	7	D020	8560.01	Bridge		
WC278	7	D020	8570.00	Bridge		
WC279	7	D020	8571.00	Bridge		
WC258	7	D038	8600.00	Bridge		
WC263	7	D065	8660.00	Bridge		
WC267	7	D078	8720.01	Bridge		
WC268	7	D081	8740.01	Bridge		
WC269	7	D086	8800.00	Bridge		
WC280	7	D115	8860.00	Bridge		
WC275	7	D143	8940.00	Bridge		
WC287	8	E006	8970.01	Bridge		
WC319	9	F007	10080.00	Bridge		
WC525	11	F139	12130.02	Rig Mat		
WC598	11	F157	12490.00	Rig Mat/Snow Fill		
WC571	11	F207	12840.01	Bridge		
WC578	11	F225	12970.00	Bridge		
WC586	5	C070	7230.01	Rig Mat		

1

CID	Workfront	Location	Crossing ID	Crossing Type	Unit Cost	Total Cost
WC372	5	C073	7240.00	Rig Mat		
WC381	5	C075	7320.00	Rig Mat		
WC470	10	F050	11080.00	Bridge		
WC471	10	F052	11100.01	Bridge		
WC477	10	F059	11180.02	Bridge		
WC103	2	B061	6151.00	Culvert		
WC104	2	B061	6152.00	Culvert		
WC102	2	B061	6153.00	Culvert		
WC97	2	B067	6180.01	Bridge		
WC99	2	B074	6231.00	Bridge		
WC157	3	B184	6800.00	Bridge		
WC307	8	E082	9290.01	Bridge		
WC1	1	A003	4770.01	Bridge		
WC266	7	D075	8681.00	Culvert		
WC504	11	F120	11910.01	Bridge		
WC530	11	F150	12191.00	Rig Mat/Snow Fill		
WC587	11	F154	12423.00	Rig Mat		
WC604	11	F156	12470.01	Rig Mat		
WC588	11	F157	12480.00	Rig Mat/Snow Fill		
WC549	11	F170	12570.01	Bridge		
WC550	11	F170	12571.00	Bridge		
WC558	11	F185	12670.01	Bridge		
WC559	11	F188	12671.00	Bridge		
WC192	6	C191	8091.00	Rig Mat		
WC358	5	C034	7080.01	Culvert		
WC601	10	F046	11033.00	Rig Mat		
WC207	6	C249	8351.00	Timber Crane		
WC208	6	C249	8352.00	Rig Mat		
WC289	8	E009	9010.00	Bridge		
WC607	10	F031	10430.00	Rig Mat		
WC602	10	F041	10871.00	Rig Mat		
WC597	10	F037	10961.00	Bridge		
WC466	10	F043	11020.00	Rig Mat		
WC599	10	F046	11031.00	Culvert		
WC600	10	F046	11032.00	Culvert		
WC612	10	F060	11180.00	Bridge		
WC624	5	C063	7216	Rig Mat		
WC615	5	C062	7203.00	Bridge		
WC616	5	C061	7204.00	Culvert		
WC619	5	C062	7209.00	Bridge		
WC618	5	C068	7211.00	Rig Mat		
WC622	5	C066	7214.00	Rig Mat		
WC625	5	C064	7217.00	Bridge		
WC386	5	C083	7362.01	Bridge		
WC388	5	C083	7371.01	Culvert		
WC592	5	C087	7400.00	Culvert		
WC392	5	C089	7430.01	Rig Mat		
WC400	5	C092	7490.01	Rig Mat		
WC407	5	C107	7610.00	Rig Mat		
WC411	5	C111	7670.00	Bridge		
WC694	5		506	Bridge		
WC710	6	C177	601.00	Bridge		
WC700	10	F112	15103.00	Bridge		
WC227	6	C144	607.00	Bridge		
WC230	6	C136	611.00	Timber Crane		
WC231	6	C231	618.00	Snow Fill		
WC176	6	C149	7800.02	Snow Fill		
WC187	6	C181	8040.00	Bridge		
WC251	6	C184	8050.01	Bridge		
WC205	6	C240	8320.02	Bridge		
WC215	6	C186	8072.00	Snow Fill		
WC492	10	F097	11771.00	Bridge		
WC494	10	F103	11773.01	Bridge		
WC609	10	F105	11775.00	Rig Mats		

The added cost associated with the 111 Water Crossings that were changed from what was contemplated in the Contract totals $3,264,510.71, as seen in Variance column in the table below. Again, the calculations are based on unit rates from Exhibit B of the contract, or actual costs from the all-in actual unit rate table, as required. The list of 111 Water Crossings that were changed are shown below, and also included as Exhibit 73.

CID	Workfront	Location	Crossing ID	Planned Crossing Type	Actual Crossing Type	Planned Cost	Actual Cost	Variance
WC712	4	B203	407.00	CLEAR_SPAN	Bridge	[redacted]		
WC2	1	A006	4790.00	CULVERT	Timber Crane			
WC6	1	A013	4860.01	CULVERT	Bridge			
WC23	1	A068	5081.01	CULVERT	Bridge			
WC24	1	A070	5090.02	CULVERT	Bridge			
WC35	1	A098	5321.00	CULVERT	Bridge			
WC48	1	A129	5593.00	CULVERT	Bridge			
WC82	2	B019	5810.01	CULVERT	Bridge			
WC84	2	B027	5920.01	CULVERT	Bridge			
WC87	2	B040	5961.00	CULVERT	Rig Mat			
WC88	2	B040	5962.00	CULVERT	Rig Mat			
WC94	2	B052	6081.01	CULVERT	Bridge			
WC126	3	B091	6331.00	CULVERT	Rig Mat			
WC98	2	B067	6200.01	CLEAR_SPAN	Bridge			
WC101	2	B076	6250.01	CLEAR_SPAN	Bridge			
WC123	3	B088	6300.00	CULVERT	Bridge			
WC133	3	B114	6400.00	CULVERT	Bridge			
WC138	3	B127	6510.00	CLEAR_SPAN	Bridge			
WC142	3	B140	6560.01	CLEAR_SPAN	Bridge			
WC147	3	B165	6660.00	CLEAR_SPAN	Bridge			
WC151	3	B174	6750.01	CULVERT	Bridge			
WC152	3	B176	6760.00	CULVERT	Bridge			
WC153	3	B184	6770.00	CLEAR_SPAN	Bridge			
WC155	3	B184	6780.00	CLEAR_SPAN	Bridge			
WC158	3	B188	6820.00	CULVERT	Bridge			
WC159	3	B190	6840.00	CULVERT	Bridge			
WC340	4	B194	6870.00	CULVERT	Bridge			
WC341	4	B199	6880.00	CULVERT	Bridge			
WC346	4	C005	6951.00	CULVERT	Bridge			
WC350	4	C016	6980.01	CULVERT	Bridge			
WC353	4	C022	7040.01	CULVERT	Bridge			
WC354	4	C025	7041.00	CULVERT	Bridge			
WC355	4	C028	7050.01	CULVERT	Bridge			
WC356	4	C028	7060.01	CULVERT	Bridge			
WC362	5	C043	7093.00	CULVERT	Bridge			
WC363	5	C048	7130.01	CULVERT	Bridge			
WC366	5	C053	7160.00	CULVERT	Bridge			
WC368	5	C057	7180.01	CULVERT	Bridge			
WC370	5	C060	7201.00	CULVERT	Bridge			
WC371	5	C064	7210.00	CLEAR_SPAN	Bridge			
WC385	5	C081	7350.01	CLEAR_SPAN	Bridge			
WC401	5	C095	7491.00	CLEAR_SPAN	Bridge			
WC180	6	C172	7870.00	CLEAR_SPAN	Bridge			
WC184	6	C176	7938.00	CULVERT	Bridge			
WC185	6	C178	8000.00	CULVERT	Bridge			
WC197	6	C206	8150.01	CLEAR_SPAN	Bridge			
WC206	6	C242	8340.01	CLEAR_SPAN	Bridge			
WC211	6	C259	8400.01	CULVERT	Bridge			
WC214	6	C276	8500.01	CULVERT	Bridge			
WC254	7	D014	8530.00	CULVERT	Bridge			
WC255	7	D019	8550.01	CULVERT	Bridge			
WC260	7	D056	8640.00	CULVERT	Bridge			
WC261	7	D058	8641.00	CULVERT	Timber Crane			

CID	Workfront	Location	Crossing ID	Planned Crossing Type	Actual Crossing Type	Planned Cost	Actual Cost	Variance
WC262	7	D063	8650.01	CULVERT	Bridge			
WC265	7	D075	8680.00	CULVERT	Culvert			
WC272	7	D124	8870.01	CLEAR_SPAN	Bridge			
WC273	7	D132	8880.00	CLEAR_SPAN	Bridge			
WC288	8	E008	9000.00	CULVERT	Bridge			
WC290	8	E013	9040.01	CULVERT	Bridge			
WC293	8	E018	9050.00	CULVERT	Snow Fill			
WC298	8	E049	9131.00	CULVERT	Culvert			
WC300	8	E054	9151.00	CULVERT	Culvert			
WC302	8	E057	9170.00	CULVERT	Bridge			
WC304	8	E075	9240.00	CULVERT	Bridge			
WC308	8	E087	9300.00	CLEAR_SPAN	Bridge			
WC315	9	E168	9760.01	CULVERT	Bridge			
WC416	10	F011	10102.00	CULVERT	Culvert			
WC433	10	F026	10410.00	CLEAR_SPAN	Bridge			
WC696	10	F036	10660.01	CULVERT	Rig Mat			
WC460	10	F035	10930.00	CULVERT	Rig Mat			
WC463	10	F039	10960.00	CULVERT	Bridge			
WC464	10	F041	10970.00	CULVERT	Rig Mat			
WC472	10	F054	11110.02	CLEAR_SPAN	Bridge			
WC480	10	F066	11210.02	CULVERT	Bridge			
WC482	10	F073	11250.01	CLEAR_SPAN	Bridge			
WC488	10	F087	11333.00	CLEAR_SPAN	Bridge			
WC499	10	F115	11870.00	CULVERT	Bridge			
WC511	11	F119	11950.01	CULVERT	Bridge			
WC512	11	F119	11970.00	CLEAR_SPAN	Culvert			
WC520	11	F127	12070.01	CLEAR_SPAN	Bridge			
WC553	11	F172	12610.00	CLEAR_SPAN	Bridge			
WC569	11	F202	12820.00	CULVERT	Bridge			
WC570	11	F207	12821.01	CULVERT	Bridge			
WC31	1	A085	5181.01	CULVERT	Bridge			
WC49	1	B009	5720.01	CULVERT	Bridge			
WC121	3	B081	6260.01	CLEAR_SPAN	Bridge			
WC130	3	B095	6370.00	CLEAR_SPAN	Bridge			
WC131	3	B097	6380.00	CLEAR_SPAN	Bridge			
WC139	3	B130	6530.00	CULVERT	Bridge			
WC143	3	B144	6580.01	CULVERT	Bridge			
WC342	4	B201	6890.00	CLEAR_SPAN	Bridge			
WC349	4	C014	6970.00	CLEAR_SPAN	Bridge			
WC365	5	C053	7141.00	CULVERT	Culvert			
WC369	5	C057	7200.01	CULVERT	Bridge			
WC384	5	C080	7340.00	CULVERT	Bridge			
WC410	5	C111	7650.00	CLEAR_SPAN	Bridge			
WC196	6	C204	8140.00	CULVERT	Bridge			
WC209	6	C253	8370.00	CLEAR_SPAN	Bridge			
WC264	7	D073	8670.01	CULVERT	Culvert			
WC274	7	D135	8899.00	CULVERT	Bridge			
WC297	8	E026	9100.00	CULVERT	Bridge			
WC320	9	F007	10100.00	CLEAR_SPAN	Bridge			
WC434	10	F028	10420.02	CULVERT	Bridge			
WC467	10	F045	11030.00	CLEAR_SPAN	Bridge			
WC469	10	F048	11060.02	CLEAR_SPAN	Bridge			
WC474	10	F057	11150.00	CLEAR_SPAN	Bridge			
WC476	10	F059	11170.01	CLEAR_SPAN	Bridge			
WC478	10	F062	11190.00	CLEAR_SPAN	Bridge			
WC479	10	F065	11200.00	CLEAR_SPAN	Bridge			
WC501	11	F119	11900.01	CLEAR_SPAN	Bridge			
WC521	11	F131	12090.01	CULVERT	Snow Fill			
							Total	

In summary, Valard is entitled to recover its unanticipated additional costs associated with the Water Crossing changes, in the total amount of **$6,535,506**.

8.10 Additional COVID-19 Costs

As detailed in Section 6.4 of this report, we have quantified a factor of 21% for mitigation tracking and productivity loss associated with COVID-19. The prior

sections of this report quantify a significant portion of Valard's added costs associated with the COVID-19 pandemic, as follows:

• Right-of-Way Work	$3,468,587
• Foundation Work	$4,200,011
• Structure Work	$15,350,141
• Stringing Work	$11,242,034
• Materials Management Work	$3,395,824
Total	**$37,656,597**

While the categories above represent the significant work types on this Project, and a significant portion of the damages related to the COVID-19 pandemic, there are clearly other aspects of the damages quantified herein that are also influenced by COVID-19. Every element of the Project has been impacted in a similar manner, including the management and supervision staff, field craft workers, subcontractors, material suppliers and the governing agencies responsible for approvals and inspections.

While we have quantified separate delay damages, without question, the productivity loss associated with COVID-19 has also had a significant impact on schedule. However, the delays associated with COVID-19 coincide with the delays associated with Owner permits and tower steel delivery, which themselves were likely impacted by COVID-19. Consequently, the delays on the Project are both overlapping and interrelated and cannot be isolated individually. For this reason, and to avoid any potential duplication in the damages quantified, we have specifically segregated only those damages that can be directly attributed to the impacts of the COVID-19 pandemic.

8.10.1 COVID-19 Direct Costs Tracked Discretely

In addition to the losses outlined above, this section separately quantifies direct additional costs to Valard associated with the pandemic (i.e., direct expenses for items

such as symptom testing, safety equipment, cleaning and disinfection, travel costs, etc.). Most of these costs that have been incurred to date are tracked separately within Valard's job cost accounting system and are individually forecasted through Project completion. In addition to these discrete costs, certain Valard subcontractors have submitted claims for COVID-19 impacts. While these claims have not yet been paid by Valard, they are included here for consideration by the Owner.

As Valard began to incur unanticipated costs associated with the pandemic, it established seven new cost codes to track those direct costs that could be identified with specificity. We have summarized below the costs incurred to date and the forecasts through completion for each of these cost codes. The attached **Exhibit 75** includes the detailed transactional data supporting the costs to date (through March 31, 2021). The forecasts for additional costs through completion represent the Project team's best estimate based on the current situation at the site.

- **COVID19 - Camp Operations [redacted] costs to date, [redacted] forecasted through completion)**: Includes additional costs associated with increased security and staffing at camps for COVID-19-related cleaning, disinfection, etc. (note, includes eight invoices from camp operator totaling $61,028, which were inadvertently cost coded improperly).

- **COVID19 - Site Safety [redacted] costs to date, [redacted] forecasted through completion)**: Includes additional costs associated with increased site safety personnel and staffing for managing and executing COVID-19 screenings, inspections, etc.

- **COVID19 - PPE [redacted] costs to date, [redacted] forecasted through completion)**: Includes additional costs associated with the purchase of COVID-19 personal protective equipment.

- **COVID19 - Tools & Facility [redacted] costs to date, [redacted] forecasted through completion)**: Includes additional costs associated with cleaning and disinfection of tools and equipment ("touch point disinfection"), and general cleaning and disinfection on non-camp work areas.

- **COVID19 - Symptom Testing [redacted] costs to date, [redacted] forecasted through completion)**: Includes additional costs associated with COVID-19 symptom testing, supplies and testing machines.

- **COVID19 - Quarantine [redacted] costs to date, [redacted] forecasted through completion)**: Includes costs and employee time associated with quarantined employees and isolation due to positive and/or inconclusive COVID-19 tests.

With the application of a 15% markup, the additional costs above total **$9,598,789** [redacted] costs to date, [redacted] orecasted through completion). None of the costs above are included in any of the other damage calculations set forth in this report. The costs were obviously unanticipated, were necessary to ensure the safety of Valard's workforce, and were incurred as part of Valard's efforts to mitigate the impact of the pandemic.

8.10.2 COVID-19 Other Direct Costs (Air Travel)

In addition to the costs coded discretely within Valard's cost accounting system, another direct impact associated with the COVID-19 pandemic was the substantial increase in flight costs. Valard's original estimate was based on flight costs averaging [redacted]. We have found no indication that this estimated average cost was unreasonable based on what Valard knew at the time or preparing its bid estimate. In contrast, airfare has increased to an average of approximately [redacted] per flight. As explained below

and detailed in **Exhibit 76**, to calculate the added costs associated with the airfare increase, we have estimated the differential the planned and actual flight costs:

- **Quantification of Number of Flights**: A total of 9,814 flights have been calculated from April 1, 2020, through Project completion. As detailed in Exhibit 76, excluding Project personnel not requiring flights, Valard anticipates expending [redacted] hours through Project Completion [redacted] hours through March 2020 + [redacted] hours from April 2020 to May 2021 + [redacted] hours forecasted to completion = [redacted] hours total). From the start of the COVID-19 impact period (April 1, 2020) through Project completion a total of [redacted] hours in the COVID-19 impact period. Based on an 11-hour workday average and 20 day shifts, the total of 8,692 flights is calculated [redacted] ÷ 11 hours per day = [redacted] man days ÷ 20 days per shift = 9,814 flights (5,433 from April 2020 through May 2021 and 4,381 forecasted through completion).

- **Quantification of Average Flight Cost**: An average actual flight cost of [redacted] has been calculated from April 2020, through May 2021. As detailed in Exhibit 76, costs totaling [redacted] were incurred for Project personnel flights. Based on the number of flights in the same period (calculated above), the actual average flight cost of [redacted] is derived [redacted] flight costs ÷ [redacted] flights = [redacted] per flight average).

- **Quantification of Flight Cost Differential**: Given the estimate of an average flight cost of [redacted] versus the actual average cost calculated above of [redacted] the unanticipated additional cost averages [redacted] per flight [redacted] actual average - [redacted] estimated average = [redacted] cost differential).

- **Quantification of Unanticipated Flight Costs**: Considering the number of flights calculated above and the average cost differential, we have quantified a total unanticipated cost increase of $5,641,841.

In summary, we believe the calculations above represent a reasonable estimate of the added flight costs associated with the impacts of the COVID-19 pandemic. However, our delay calculations in Section 8.2.2 above also include travel costs (i.e., the costs associated with travel for the Project have been both extended and increased). To avoid duplication, our analysis credits here a total of $550,934 of the added costs quantified as part of the Project delay costs (5,433 flights to date x [redacted] added flight cost = [redacted] costs to date ÷ 516 days in period = [redacted] per day average x 91 days delay = $550,934). Considering this credit, and with the application of a 15% markup, the unanticipated costs associated with the increased cost of flights during the COVID-19 pandemic total **$5,845,543** ($5,641,841 - $550,934 = $5,090,907 x 1.15% = $5,845,543).

8.10.3 COVID-19 Subcontractor Claims

As stated in Section 6.4.3.2 above, Valard has received claims from right-of-way subcontractors Kabi Lake Forest Products Inc., and E. Corbiere & Sons Contracting. The subcontractors argue that work was suspended, and they were forced to demobilize in the Spring of 2020 due to the onset of the COVID-19 pandemic.

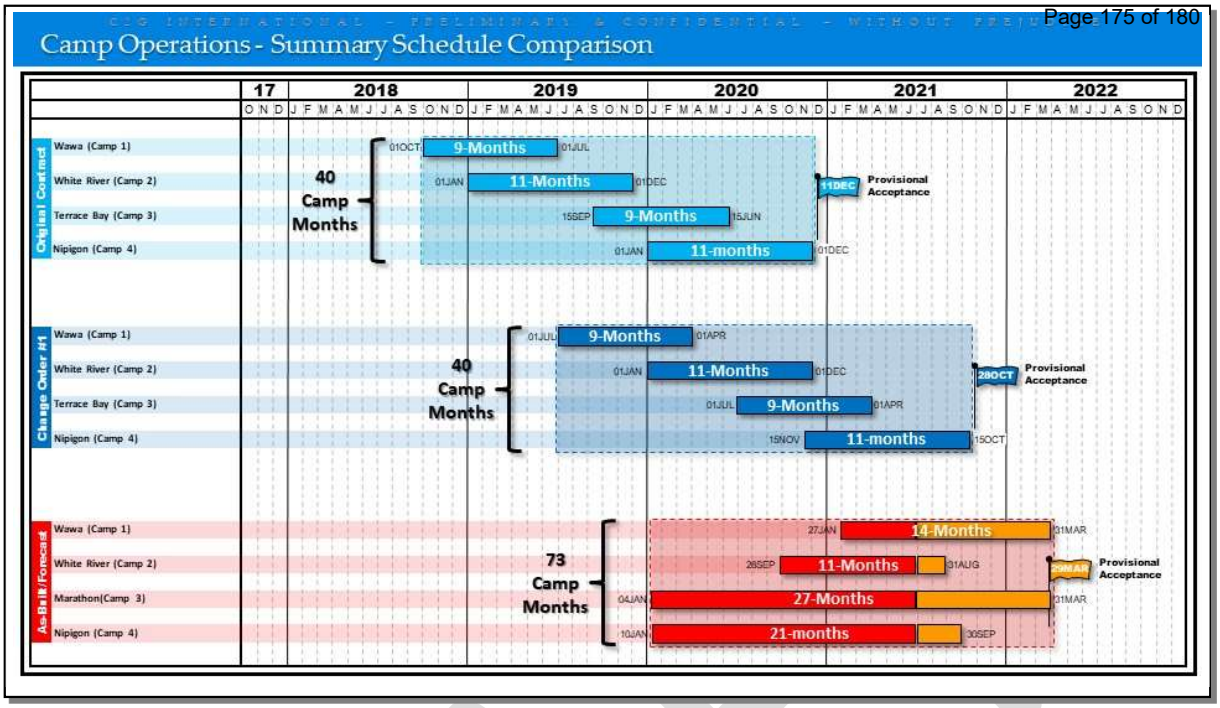
While the suspension coincided with the 2020 spring thaw, it is true that by the time of the 2020 spring thaw, the Change Order No. 1 plan contemplated that the vast majority of the right-of-way work was to have been completed (only a portion of Work Front 11 was to have been remaining and minimal second season access road work would have been required in the 2020/2021 winter season). Point being, in the Change Order No. 1 plan, any mobilization, demobilization and/or standby time would have been minimal. However, due to the prior delays, impacts and out-of-sequence work,

the subcontractors had full complements of equipment on site, which resulted in significant additional costs related to the shutdown.

The two claims, which are included as **Exhibit 77**, total $4,799,907 ($2,801,906.19 for Kabi and $1,998,001.67 for Corbiere). While Valard has not yet paid and/or agreed to pay these claims, they are included here for consideration by the Owner. With the application of a 15% markup, the value included totals **$5,519,893**. While these are the only two subcontractors that have submitted COVID-19 claims to date, based on the documentation seen, it is certainly possible additional subcontractor claims may come forward.

8.11 Camp Delay Costs

Of course, as the Project performance period has been extended, Valard's costs to operate and maintain its camps has also been increased. Valard maintains four camps on this Project (Wawa, White River, Marathon and Nipigon), and through the May 2021, Valard's costs have already exceeded its entire original budget for camps on the Project. Through the currently planned Project completion in the spring of 2022, Valard is now forecasting an overrun of more than $12 million for its camps. As shown on the graphic illustration, included below as **Exhibit 78**, this forecasted overrun comes primarily from the significant increase in the overall camp months that will be required for the Project.



As indicated above, and in accordance with the original sequential work plan for the Project, Valard contemplate staggering its camp operations as the work progressed along the right-of-way. Valard's plan included four camps and a total of 40 months of camp operations. Because of the delayed and out-of-sequence work on the Project, it has been necessary to keep the majority of the individual camps in operation much longer than planned, resulting in the current forecast for 73 months of camp operations, or a 33 month overrun.

Based on Valard's original plan and budget for camps, the "all-in" cost for each camp was contemplated to average [redacted] per month. Through May 2021, the actual average was [redacted] per month. Accordingly, while the per month average to date is approximately 14% less than planned, the forecast indicates that there will be 82% (33 month) increase in the duration of overall camp operations. As shown below and detailed further in **Exhibit 79**, to calculate the cost of the extended camp operations, our analysis quantifies an average rate for each camp, based on the total costs incurred for the camps to date and the forecasted duration of actual camp operations.

Camp	Actual Costs (to May 2021)	Months in Operation (to May 2021)	Average Monthly Rate	Forecasted Months in Excess of Plan	Calculated Cost of Delay
Wawa (Camp 1)	[redacted]	4	[redacted]	5	[redacted]
White River (Camp 2)	[redacted]	8	[redacted]	0	[redacted]
Marathon (Camp 3)	[redacted]	17	[redacted]	18	[redacted]
Nipigon (Camp 4)	[redacted]	17	[redacted]	10	[redacted]
	[redacted]	**46**	[redacted]	**33**	[redacted]

The calculations above indicate a cost of delay for camp operations totaling $16,159,824. However, as noted above, the average actual monthly camp cost is approximately 14% less than what Valard originally contemplated. This stands to reason, because there were more camps operating at the same time, meaning the occupants were spread among more camps, so the occupancy rate and operational costs at each camp was reduced.

In our view, a conservative analysis would apply this reduction in cost during the original performance period as a credit against the delay costs. We have done so here in the amount of $3,410,413 [redacted]. With the application of this credit, the delay cost calculated above is reduced to $12,751,824.

However, we also believe that a portion of the overrun quantified above results from added camp setup costs. In analyzing the cost transactional data, C2G has worked to eliminate any camp setup costs, as we consider these costs to be "one-time" charges, and not subject to increase because of delay. While cost codes were originally established to segregate all setup charges, unfortunately the camp setup cost codes clearly also include recurring operational costs. For example, when the costs charged to each of the camp setup cost codes are isolated from the month after each camp went into operation, through May 2021, more than $1.5 million of costs have been charged

to the camp setup cost codes. This represents approximately 15% of the charges within the camp setup cost codes, and we can see no explanation for these ongoing costs (after each camp had been in operation for a full month), other than miscoding by Valard's field personnel.

To date, Valard has incurred costs totaling [redacted] in its camp setup cost codes. Valard currently forecasts an additional [redacted] of expenditures in its camp setup cost codes, for a forecasted total cost of [redacted] This compares to an original budget of [redacted], for a loss to date of [redacted] and a forecasted total loss of [redacted]. Clearly these comparisons provide another indication that costs for work other than the initial camp setup are being charged to the accounts (i.e., another $3.4 million is forecasted currently, when all the camps have been setup for months).

All things considered, and in an effort to be conservative, we believe an additional credit should be applied against the delay costs calculated above. At this point, we have no way of segregating setup costs from recurring operational costs incurred to date. Clearly, Valard should have done a better job of properly coding the expenses charged to the camp setup accounts. Accordingly, we see little choice but to credit the entirety of the loss incurred in the camp setup cost codes to date [redacted]. This credit amount represents approximately 41% of the costs charged to the camp setup codes to date. Moreover, to account for any demobilization charges going forward, we are crediting another 41% [redacted] of the forecasted cost to complete. In total these credits serve to reduce the remaining delay cost calculated above by [redacted] for a revised total of $8,461,576 [redacted] - [redacted] = [redacted] Notably, these reductions leave Valard with an unclaimed loss totaling approximately $3.6 million.

In summary, inclusive of a 15% markup, it is our view that Valard is entitled to recover its unanticipated additional costs associated with camp operations in the total amount of **$9,730,812** ($8,461,576 x 1.15% = $9,730,812).

8.12 Damages Summary

As summarized below, Valard is entitled to the issuance of a Change Order under the Contract providing for an equitable adjustment in the amount of **$163,363,285** (excluding applicable taxes).

Delay Costs:	
Initial Work Start Delay Costs (1-Aug-19 to 31-OCT-19)	
Equipment Standby Costs	$2,989,560
Field Overhead Costs	$3,544,366
Escalation Costs	$1,383,057
Subtotal – Initial Work Start Delay Costs	**$7,916,983**
Remaining Delay through Completion (1-Nov-19 to 31-May-22)	
Equipment Standby Costs	$5,891,897
Field Overhead Costs	$11,079,496
Escalation Costs	$1,383,057
Subtotal – Remaining Delay Costs	**$18,354,450**
Total – Added Time-Related Costs	**$26,271,433**
Right-Of-Way Costs:	
Inefficiency and Impact Costs	$21,908,438
COVID-19 Costs	$3,468,587
Total – Right-of-Way Costs	**$25,377,025**
Foundation Costs:	
Foundation Type Changes (Unforeseen Soil Conditions)	$900,310
Foundation Type Changes (Owner Directed Relocations)	$117,111
Foundation Type Changes (Acceleration)	$3,436,714
Foundation COVID-19 Costs	$4,200,011
Foundation Inefficiency / Constructability Losses	$3,512,324
Total - Foundation Work Costs	**$12,166,470**
Structure Work Costs:	
Structure Work COVID-19 Costs	$15,350,141
Structure Work Inefficiency	$13,991,569
Total - Structure Work Costs	**$29,341,710**

Stringing Work Costs:	
Stringing Work COVID-19 Costs	$11,242,034
Stringing Work Inefficiency	$2,583,212
Total - Stringing Work Costs	**$13,825,246**
Materials Management Costs:	
Materials Management Work COVID-19 Costs	$3,395,824
Materials Management Work Delay / Inefficiency	$5,316,843
Total - Materials Management Work Costs	**$8,712,667**
Kama Cliffs Costs:	**$5,680,037**
Water Crossing Costs:	**$6,535,506**
COVID-19 Additional Costs:	
COVID-19 Direct Costs Tracked Discretely	$9,598,789
COVID-19 Other Direct Costs (Air Travel)	$5,845,543
COVID-19 Subcontractor Claims	$5,519,893
Total - COVID-19 Additional Costs	**$20,964,225**
Camp Costs:	**$9,730,812**
Subtotal	**$158,605,131**
Supercom Fees (3% per Contract Exhibit X (Part 1) – Appendix 1)	$4,758,154
Total	**$163,363,285**

9. Documents Reviewed to Date

We have based the opinions set forth above on our investigation and analysis performed for this Project, as well as our knowledge of and experience in the construction industry and as consultants working on similar construction projects. Our experience has been influenced by a wide range of contacts within the profession and industry, reading of and/or participation in seminars and classes, and participation, review and consultations concerning project cost impacts, delays and scheduling in the construction industry. As part of our investigation and analysis, we have considered information from the following sources in forming our opinions.

- Project Plans and Specifications
- Subcontract Documents
- Original Request for Proposal, Bid Estimates and Proposal
- Project Change Orders/Change Order Requests
- Project Communications/Correspondence

- Scheduling Data
- Valard Work Progress Tracking Data
- Permit Data
- Tower Steel Delivery Data
- Daily Reports
- Weekly and Monthly Reports
- Project Photos
- Progress Billing/Invoicing Data
- Job Cost Accounting Data

We are advised that we may be asked in the future to review additional documents produced by the Owner, reports of experts of other parties and other information and to render additional opinions or to reconsider prior opinions based on such information. The opinions and analyses presented in this report are based on currently available information. As of the date of this report, the Project is ongoing. C2G and Valard have not had access to the majority of the Project documentation within the files of the Owner and/or its agents. Hence, the conclusions contained herein should be considered preliminary and are subject to change.

This 14th day of July 2021.

_____ _____

Christopher E. Anderson Robert T. Adams

Ex_I_T_1_S_8_Attach_6

Lowe, Amy

From: Merrifield, Scott
Sent: Friday, April 29, 2022 5:51 PM
To: Damen, Jeff
Cc: Feniuk, Jessie; Sousa, Steve
Subject: RE: Covid-19 Loss of Productivity - C2G Review

Hi Jeff,
Thanks for the email. Our goal throughout, and as discussed when we were all in Calgary, is to ensure we present the information in the context of the regulator's review and in a manner that resonates with them. Determining an appropriate quantification methodology should certainly be a focus and we appreciate your comments on this.
Please see the additional comments/responses in red text below.
We certainly agree that having the larger Valard team meet with you to walk through both our comments is necessary to achieve alignment. Please indicate when your schedule will allow.
Thanks,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Thursday, April 28, 2022 10:04 AM
To: Merrifield, Scott <SMerrifield@valard.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Feniuk, Jessie <JFeniuk@valard.com>
Subject: Covid-19 Loss of Productivity - C2G Review
[EXTERNAL]

Good afternoon Scott,
See below and attached a review of the **$89,014,103** claim that has been submitted. In summary, the basis of this claim is that the COVID-19 pandemic resulted in a significant loss of productivity throughout the entire Valard organization on the OEWTL Project, and as a result the contractor claims that they incurred significant unanticipated costs. While this is expected to be true to some degree, NextEra does not agree with the calculation methods used to obtain this figure.
Please consider the following context as to why this was quantified based on the methodology used. In the report Valard provided NextEra last summer, Valard highlighted that unfortunately there was no time period where this job was "normal". From the onset of construction execution, issues with access concerns, steel supply shortages and COVID-19 impacted the project. Not that the other problems should be a focus of concern, but this context is a good reminder for the regulator if they challenge why a measured mile approach could not be used.
Valard's preferred methodology has always been to price this job as a 'cost-plus' in its entirety. This was put forward in Valard's submitted narrative that all the overlapping impacts that existed throughout the full duration of the Project changed this work completely, and the whole job needs to be priced on a cost-plus basis. We recognize that this was not viewed as the preferred approach by NextEra.
Not being able to rely on a measured mile or cost-plus approach, Valard relied on expert opinion which incorporated industry studies on the topic. The studies reveal a common trend of identifying both time lost while performing pandemic related activities (Time Lost), and the reduced efficiency of workers while performing construction activities (Work Inefficiency) as topics leading to losses. We followed this methodology. For time lost (we address in greater detail below – see the 'Additional Time Lost' chart), we note that the range found on this report 9.3-14.7%, which is in line with a north American electrical industry study conducted in 2020 (prior to the Delta and Omicron variants). For work inefficiency (also addressed in more detail below), it is difficult for us to accept that this job did not result in a significantly greater impact than those used for the studies. This is a camp job, and as such, Valard had to create a self-sustaining COVID-19 safe working environment. This is exacerbated even more due to the remoteness of the Project, which is why the extensive COVID-19 Management Plan was created (we believe this document would be a beneficial resource to show the regulator). Additionally, concern for families while at camp relating to this unknown disease, as well as concern for workers' own safety working in areas away from major medical centers certainly increased anxiety

and concern. Valard even provided employee numbers relating to mental health complaints in the initial 2021 report. Recognizing that the pandemic and calculation of its impacts are unprecedented in our time, Valard took great measures to develop creative ways to substantiate this difficult claim.

Overall, we think your mindset of looking for regulatory weaknesses by distinguishing some of the studies makes sense. However, in Valard's view the most appropriate response is to highlight all the factors on this job that are not considered in the studies that would support an increased percentage. For example, in addition to the remote nature of this job, there is significant First Nation Community involvement. Ensuring we follow the specific protocols of Communities requires familiarizing ourselves with those procedures, educating our workers, and auditing work procedures. Additionally, we were subject to work site inspections with individual restrictions imposed by governmental bodies. The magnitude of these impacts must be considered in context of the size of the Project - Valard was subject to oversite by several different regional authorities, each having its own views of acceptable procedures when navigating this unprecedented situation. We have uploaded on the SharePoint an example of all the Orders from that situation as we assumed it would be great evidence for NextBridge to have.

COVID-19 has only existed a couple of years. If it had been with us for several decades, more studies and examples would be available to assist in determining a precise productivity percentage. We agree that some of the studies will always be distinguishable, but in the same token none of them address the situation of a significant transmission line traversing remote communities being subject to a 400-page COVID-19 management plan. Our team was always of the view that the studies did not do the percentage of loss justice for this project. If there are some additional studies that you think would be more acceptable to the regulator, we would certainly consider the same. Furthermore, the studies obtained do not seem to account for exponential increase in cases caused by the Omicron variant. This was significantly more contagious, which meant additional caution needed to be taken.

No study will be perfect as there will always be unique circumstances to any project that is being compared against. Valard firmly believe that the studies fail to capture the significant effects the pandemic specifically had on this Project and the loss of productivity needs to be increased. We respect that a contrary view could be taken since there are some factors in certain studies that do not apply to this job. This substantiates that an appropriate approach is to select the midpoint of a certain range as a compromise.

We are open to discussing how this can be better supported for the regulator but need to ensure that any amount payable remains a fair representation of Valard's actual losses on this unique job.

Loss Factor

The 24.7% loss factor was applied across the board and VC claims that it affected all labor, equipment, travel, accommodations, fuel, and other overhead costs incurred by Valard. This 24.7% figure was obtained from an average of 6 published studies from around the globe. The 6 studies included findings from Malaysia, Singapore, the UK, North America, and other global entities. The COVID-19 pandemic resulted in dramatically different impacts around the world and throughout various industries. These reports include productivity losses attributed to labor shortages, unavailable materials and remote working. These are all items that did not have a significant impact on the OEWTL project. NextEra disagrees with the inclusion of these irrelevant reports to quantify the COVID-19 impacts on the OEWTL project. Please provide an accurate loss factor in direct relation to the OEWTL if this is the method Valard wishes to use to quantify the losses they incurred. The OEB will need proof directly related to the OEWTL project.

Our preferred methodology is to highlight that the whole job was impacted and the only fair quantification would be on a cost-plus basis. We recognize that NextBridge is unlikely to agree to this approach. However, cost-plus is a method Valard believes can be well supported in a regulatory context; we can move that direction if that is preferred. Valard also initially explored comparing productivity rates on this job and costing with jobs Valard has done in the past; we anticipate the claim value would be higher yet using this approach, but believe it is another reasonable alternative.

However, it is common practice to utilize industry studies and publications as a guide to quantify productivity losses on construction projects. Approximately 20 publications were provided as backup documentation. These publications were identified after extensive research and represent best efforts to provide what is available in the world today (or at least prior to the significant impact of the Omicron variant) related to the impacts of COVID. While all the publications indicate that there are extensive impacts associated with COVID in the construction industry, it is true that only six of the studies provide percentage loss estimates, which are outlined in our report.

Valard does not view it proper to 'cherry pick' factors in the studies that do not. apply and ignore factors applicable to this Project that are not covered. Each study has slightly different considerations, which is why a range is provided and the midpoint of that range is used. If NextEra is aware of any other available industry studies, particularly studies related

to impacts on power transmission construction work in Canada, we are happy to review and consider this additional information. To our knowledge, we have provided what is available and believe the information is instructive. In our experience presenting evidence to regulators, they are receptive to and have an obligation to assess the reasonableness of the evidence put before them and opine on whether the proponent made appropriate decisions based on the information available and known at the time the impact was realized. Valard is confident that the breadth of information provided more that constitutes reasonable validation of anticipated costs in absence of a measured mile approach being available.

The loss factor was applied for 11 hours a day to all labor and equipment. It is important to understand that while a crew may work 11 hours a day, their respective equipment is not being utilized for this duration. Travel time to and from site (as high as 5 hours / day during construction pushes), as well as a lunch break for the crews should be factored into these calculations. It is also unreasonable to attribute the same loss factor to crew travel time as actual working hours as the COVID-19 impact to crews traveling on the highway is incredibly minimal (the cost of additional truck rentals has already been included in the "Hard Costs" claim).

Equipment: Valard's practice is to charge production equipment costs to the Project based on operated hours. Meaning that equipment is only being coded (i.e., a factor is only being applied) while it is actually in operation. Because the majority of the production related equipment is charged based on operated hours, the concern raised here about a potential overstatement should be addressed (i.e., if a piece of equipment is charged to the job for only operated hours, equipment idle time never comes into play).

- To ensure full diligence was performed, we identified the exception to this being support type equipment for items such as pickup trucks, forklifts, etc. Additionally, third party rental equipment is typically invoiced by the week or month. However, for support equipment and third-party rentals, these costs are borne by Valard on a time duration basis (i.e., Valard charges the job for an entire day's use of a pickup truck, as do the third-party rental companies). Consequently, if Valard incurs the cost of a pickup or some piece of rental equipment for an entire day, and a loss in production occurs that day, then Valard would be entitled to recover the same percentage loss for the equipment cost for the day. While your comment is appropriate, it was for all these reasons that we chose to account for added equipment costs based on a ratio of equipment cost versus labour hours to ensure that an unreasonable claim was not being made.

Travel Time: Valard understands your point, but if we exclude travel time we will need to exclude it to all portions of the calculation and costs will go up.

- If Travel time loss associated with COVID was calculated separately, the costs requested would increase. Assume 11 hour workdays, 7 days per week and 2 hours daily for travel time to and from the work site. Production time in the week would equate to 63 hours; travel hours in the week would be 14 hours. If 24.7% of the production hours are lost in the week due to COVID, Valard would have only achieved 47.4 hours of productive work (15.6 hours productivity loss). The shortfall would take another 2.3 days to make up – meaning, at 2 hours of travel time per day, an additional 4.6 hours of travel time would be incurred. Consequently, the impact to travel hours for the week would equate to 32.9% (14 hours of travel time spent in the week / 4.6 hours of additional travel time needed = 32.9%). The inclusion of travel time in the calculations is appropriate and represents a conservative estimate of the loss. Either Valard or C2Gi can walk through this point if it would be beneficial.

Equipment that is parked, on standby, or down awaiting repairs should not have a loss factor applied to it as it was not being utilized for construction purposes, and therefore not subject to any inefficiencies. Refer to the equipment comment above.

Fuel and Mechanical allocations should also be exempt from this loss factor as the hard cost of these goods was not subject to any inefficiencies, even if the labor was affected (Fuel truck drivers, field mechanics...)

Valard does not understand this comment. If there is an inefficiency, equipment is required to be in use longer, there would be a corresponding cost of increased fuel. However, your point regarding fuel was not considered in the manner that you highlight. Part of the productivity loss complained of relates to time lost performing COVID-19 tasks (about half of it). It does seem to be fair that this is not applicable to fuel cost. Further discussion with C2Gi is warranted, but Valard agrees there is merit for potentially reducing the inefficiency factor as it applies to fuel charges. However, introducing multiple inefficiency factors may over complicate the narrative when presenting to the regulator as opposed to using the midpoint inefficiency factor of 24.7%.

Another way to approach the loss factor could be to identify the additional hours / day that crews spent working to attempt to meet baseline numbers during the pandemic. For example, crews may use 11 hours in a day to attain the same production that they would have hit in 10 hours pre-pandemic. Only the actual additional costs

incurred by the contractor should be included in the loss factor narrative and calculations, and this could be an accurate way to quantify the loss in production.

Valard agrees, but that in effect is what the Valard calculations are doing. Using an 11-hour day, our calculations identify that we had to work (i.e., pay someone to work) 11 hours to achieve only 8.28 hours planned production (losing 2.717 hour each day). We then are required to pay the same worker to make up for the shortfall by working the 2.717 hours the next day and so on. If the request is to simply compare this to our baseline estimate and receive the difference, this will result in a higher claim figure. This approach will result in an easier calculation, however last summer Valard was instructed not use this approach; NextEra was of the view then there was no metric proving Valard's baseline estimate was ever achievable.

Duplicate Costs

There are many duplicate costs included in the "COVID-19 Loss of Productivity" narrative that are also included in the COVID-19 Hard Costs change order submitted by Valard. These costs are already being addressed in the separate submission and should not be referenced in this narrative. These include but are not limited to;

1. The purchase of additional safety supplies and PPE Material costs are not included in COVID Loss of Productivity calculations – they have been cost coded separately.
2. Time spent on health screenings and symptom testing Not included in COVID calculations – this has been cost coded separately.
3. Time spent cleaning and sanitizing Only added cleaning and sanitizing at Camps is included in COVID-19 Hard Costs change order - cost coded separately
4. Travel disruptions and restrictions Flight Program and testing / quarantine accommodations costs are not included in COVID Loss of Productivity calculations - testing / quarantine accommodations costs cost coded separately – flight program direct costs are credited in COVID Loss of Productivity calculations.
5. Daily truck cleaning Daily truck cleaning is not included in COVID-19 Hard Costs change order (only added truck rentals are included there).
6. Weekly inspections of camps and work areas Weekly inspections of camps and work areas are not included in COVID Loss of Productivity calculations – cost coded separately

Applications to the OEWTL

NextEra disagrees with the narrative that these tasks contributed to a loss in production in correlation to COVID-19. These include but are not limited to;

1. The "physical weight" caused by wearing additional PPE [A cloth mask?] The category was physical weight and inconvenience, or it should have been as you outline below. While the weight of a mask is not relevant, after living through the pandemic there should be no debate regarding the inconvenience, or hinderance to performing certain tasks and the ability to communicate as effectively.
2. Longer working hours [COVID-19 did not attribute to longer working hours] Strongly disagree. The regular schedule was always 11 days, but our team leads were constantly approving additional time for 12 and 13-hour days. We view this directly applicable to this Project. Should Valard be highlighting every occasion an individual worked over 11 hours to help evidence this?
3. PPE restricts breathing for workings during laborious tasks
4. Additional time spent wiping down electronic keyboards, work stations, and small tools [This is done regardless and is good sanitary practice] Strongly disagree. The entire world advocated for intensified cleaning of their workstation or tools in the last two years. It is highly unlikely and quite unreasonable if the regulator ever tried to challenge this. Additionally, we constantly instructed workers [as per policy] to clean their work stations and tools. However, if it is a matter of evidence, we also note Valard filmed a professional video to help document cleaning procedures now on the SharePoint site.
5. Lost time associated with employees using hand sanitizer, replacing masks, adjusting masks [Sanitizing hands is common sanitary practice, replacing and adjusting masks is not quantifiable and takes a negligible amount of time] Strongly disagree. Same comment above. We are confident that every third party reviewing this claim will not object that increased time spent on hand washing, disposing of masks

and adjusting masks while working was unprecedented. The comment suggests that workers did not spend more time sanitizing hands during the pandemic as compared to pre-pandemic conditions.

6. Supervisors monitoring signage as crews move locations [Supervisors are responsible for ensuring signage is properly placed at all sites regardless of a pandemic] Additional signage specific to the pandemic mitigation measures was required as witnessed by NextBridge when onsite. However, if any additional evidence was needed, Valard can provide several great screenshots from the video that would be support this.
7. Valard's out of province resources, including executive leadership, was restricted from attending site to provide guidance and support to the Project. [Out of province resources were utilized during construction for the length of the project] Please clarify this comment. There was a significant period of time where all Valard leadership could not attend the Project. It is not contentious that leading a project to successful completion is much better accomplished from site, as opposed to being half a country away. In-person oversite from executive leadership has a significant impact both in enabling the executive to understand the conditions of the worksite and to more effectively direct operations. This is another unique impact of this Project.
8. Valard's Project management and supervision team members have repeatedly stated that they have never seen this state of work staff, [VC continuously placed pressure on its employees to work long shifts to meet deadlines] This comment suggests that Valard did not work longer hours. This comment is concerning to Valard since pressure to complete this job on time came directly from the client. While we are trying to avoid using the term 'acceleration', there should not be any disagreement that the pressure was at NextBridge's direction.

As stated above, we cannot only outline the portion of factors that do not apply. If that were the case, we need to add additional loss percentage for all of the factors specific to EWT, most noteworthy the remoteness, the interaction with First Nation Communities, and the span of the Project (meaning each individual region / municipality would have its own rules and procedures). The position Valard continues to hold is that the loss of productivity on this job was significantly more than the 24.7%. However, we are more than happy to explore better ways to quantify this loss with the NextEra team.

Additional Time Lost

NextEra also disagrees with Valard's quantification of "additional time lost on a daily basis as a result of having to perform additional tasks.

Activity	Time Impact Range (minutes)		Notes
Daily truck cleaning checklist	20 [0]	30 [5]	[redacted] [This is a 5-minute task at most. VC outsourced vehicle cleaning and this was included in the COVID-19 hard costs submission. This protocol was not implemented throughout the entire duration of the project and should not be applied to all working hours. Further, the cleaning of trucks was subcontracted and the cost is included in the "Hard Costs" claim]
Wait time at security gate	10 [0]	15 [10]	[redacted] [Wait times are not accurate and realistically varied from 0-10 minutes at the very high end]
Additional time related to COVID checklist on crew tailboard	8 [.5]	12 [1]	[redacted] [Tailboard meetings are extended by a maximum of 60 seconds for leads to remind crew members to follow protocols. 10 minutes is an absurd increase in meeting time and is inaccurate]
Additional wait time for entry and exit screening	5 [0]	10 [0]	[redacted] [Screening is done at the security gate – please explain why this is an additional time delay]
Extra lunch time due to truck rotation	5 [0]	10 [0]	[redacted] [This policy was in place for a limited length of time and was seldom followed by crews. Lost time cannot be accurately quantified

Activity	Time Impact Range (minutes)		Notes
			as work was always ongoing. This should not be applied to all working hours on the project. We to identify the dates that this measure was implemented and lifted]
Impact of daily COVID Impacts (minutes)	**48**	**77**	
Total Shift (minutes)	660	660	Standard work day is 11 hours for EWT
Daily Impacts (calculated %)	7.3%	11.7%	
Other Impacts	2%	3%	[redacted] [Please explain these "other impacts"]
Total	**9.3%**	**14.7%**	

Daily Truck Cleaning: Valard does not understand why NextBridge, the regulator or any party be of the view that truck cleaning which occurs multiple times a day take zero to five minutes. Subsequent to COVID-19 there were specific checklists, and it was stressed how thorough our team needed to be in order to prevent a breakout leading to Project shutdown, which would jeopardize the end date stressed by NextBridge. Note that if we were ever challenged on this, Valard has available great supporting evidence. It is outlined not only in a professionally produced video, but also demonstrated through the Vehicle and Equipment Cleanliness Checklist (which is very onerous). In addition, this would occur multiple times a day (and was mandated at start and end of shifts).

Security Gate Wait Time: This time as claimed is appropriate. While wait times fluctuated based on how long the lineup would be, the information used to substantiate the time resulted from discussions with individuals who attended the Project every day, which we suggest is the best information available. This can be easily substantiated: we have copies of the security gate sign in sheets and procedures as well as video support of this.

Tailboards: There is some merit to this comment. This time fluctuated. There could be lengthy discussions around COVID-19 or minimal discussion. A range of one minute does not accurately capture it in the least, as this was always the most talked about subject on the Project, as it had the potential for the most significant Project impacts. However, what needs to be considered is this included asking each crew member individually if they have any of the following: new or worsening cough, shortness of breath or difficulty breathing, temperature equal to or over 37.5°C, feeling feverish, chills, fatigue or weakness, muscle or body aches, new loss of smell or taste, headache, gastrointestinal symptoms (abdominal pain, diarrhea, vomiting). In addition, this changed numerous times as we learned more information. This required us to update our procedures and re-educate everyone on new procedures.

Screening: This is the actual time for screening and going through the checklist. The above category was outlined to be wait time – due to the lineup. We can have a large number of employees to provide evidence should this be required, but also have great examples in a video. This should also be an easy one as the Ontario government required this every day which was more onerous than several other jurisdictions.

Lunch rotations, Valard can investigate dates this was implemented. If the intent is to look for further ways to substantiate this loss, we will also provide other potentially relevant loss time components that may increase this figure.

Additional 2%-3%: If we wanted to personalize some of the studies to this Project, we can certainly build this up significantly more than 2%-3%.

- Training and paperwork: Supervisors were responsible for monitoring and reporting on their staff. This included completing significant daily paperwork. To help evidence this we have uploaded all the relevant COVID-19 forms to the SharePoint site.
- Additional COVID training and response drills – completed monthly.
- Pre-Travel Screening Form - Additional time for employees to fill out the form. Completed prior to travelling to access to site.
- Time lost going back and forth and interpreting health orders (complying with ThunderBay Health Authority was onerous; we received Orders that were difficult to interpret, let alone follow – everything was a moving target). It is important to highlight the overall liaison work that is required with health authorities, municipalities, union reps, and indigenous communities.
- Dealing with significantly more worker complaints (e.g., Valard went so far as to change ventilation and filtration on site). Valard was required to constantly take steps to reduce COVID risk and keep workers safe while also psychologically ensuring workers felt safe.

Work Inefficiencies

NextEra disagrees with the claim that the following contributed to work inefficiencies throughout the project.

1. Office management and supervisory staff had to be moved around to respect physical distancing requirements [Valard's PMT selected to move to an adjacent office in the Marathon camp] This is highlighting an example of requirement to ensure physical distancing. We certainly would have preferred the team to not be spread out and everyone to be working closely together on the Project. In all offices and in all aspects of work, this was a hinderance.
2. Assembly crews unpacking steel from bundles have had to be extra cognizant of physical distancing [Everyone on the project was mindful of physical distancing. This is not a burden to productivity] We strongly disagree with this statement. Generally, being able to move wherever to perform necessary work compared to having to be cognizant of where a coworker was, and either wait or move around them throughout a day was absolutely a barrier to productivity. Physical distancing was governmental direction.
3. Distancing requirements are an ongoing obstacle on the tower erection and stringing crews. Many of the activities associated with this work require 2 or more employees working in direct proximity (ladders, splice locations, man baskets, puller/tensioner sites), so masks are required if distancing is not possible. [Workers seldom wore masks during any of these activities] We disagree with this statement. What is the basis for this comment? Is it anticipated to be challenged by the regulator?
4. The 2-person per vehicle protocol resulted in increased congestion on site [This protocol was only in place for a limited amount of time - please specify] The time when 2-person per vehicle policy was implemented will be provided by Valard.
5. Physical weight and inconvenience caused by wearing such additional personal protective equipment
6. Increased multitasking [Added restrictions did not increase multitasking] There are significant tasks required to ensure compliance with Project protocols and governmental restrictions. These must be done throughout the day, and certainly would lead to multitasking. Workers must perform their tasks while also being worried about unplanned PPE, physical distancing, testing, sanitation, who is high risk of having COVID, etc.
7. Organizational stress (e.g., inefficient communication, interpersonal conflicts, lack of rewards). [Please explain how the pandemic resulted in a lack of rewards being provided to workers or inefficient communication] Masks are a hindrance to verbal communication, which is only increased by associated distancing protocols. However, not all communication is verbal. Inability to read expressions leads to less effective communication. Anxiety and stress, lead to conflicts – we do not believe that is contentious. Workers were asked to work in remote areas without additional compensation (financial or time off), often away from major medical centers for fearing for themselves and their family at home. This does not lead to high moral, and as outlined morale has a direct correlation to productivity.

CONCLUSION

We recognize there is a significant amount of information and dialogue on this claim. As NextEra acknowledges, and as every study acknowledges there is a significant productivity loss that comes with COVID-19. Valard agrees that no single report directly correlates to this Project due to its unique nature.

If the overall request from NextEra is to personalize the analysis specifically more towards the EWT Project, we are able to provide additional narrative to address this with the regulator as the target audience. As noted above, this job included many different elements: from dealing with various municipalities, to all the different health agencies, to union reps to First Nation Communities that most studies do not even consider. Additionally, being an Ontario based Project included not only stronger regulations, but a full list of rules given specifically to the Construction industry. Emphasizing this and the fact this was a remote camp job adds credibility to the claim.

Specific to the comments on camps, our workers described camp life as a 'jail cell' based on the added restrictions intended to keep workers safe. All rules that were implemented at camps will be uploaded to the SharePoint site. Noteworthy about this Project is the substantiation Valard currently has on these topics. This includes a 400-page

COVID-19 Management plan, a plethora of checklists and forms workers needed to complete every day, and professionally produced video (~20 minutes long) to provide evidence of impacts and lost time.

We are assuming that trying to argue-cost plus models or use of other Projects Valard completed in the past is still not acceptable to NextEra. However, we are prepared to further personalize this analysis specifically to this Project, as well as continue to upload all the documentation including plans, handouts, videos to the SharePoint site to ensure NextEra has adequate evidence to substantiate figures brought forward to the regulator.

I would be happy to get on a call to walk through my notes, but I believe there is work to be done by Valard to clean up this claim and also focus on building a more in depth narrative on where the COVID-19 loss of productivity affected this exact project. The current approach is high level and very broad.

Regards

Jeff

Lowe, Amy

From: Merrifield, Scott
Sent: Thursday, March 9, 2023 10:29 AM
To: Damen, Jeff; Feniuk, Jessie
Subject: RE: EWT - Appendix A

Is this what you are looking for:

July 12, 2022 Change Order Appendices

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Thursday, March 9, 2023 7:17 AM
To: Feniuk, Jessie <JFeniuk@valard.com>; Merrifield, Scott <SMerrifield@valard.com>
Subject: EWT - Appendix A

[EXTERNAL]

Good morning gentleman,

Could you please send me the latest version of “Appendix A” for the EWT claims. We don’t see a copy uploaded onto SharePoint and I want to make sure I am working with the latest copy you fellows have on file. We are starting work on our OEB rate case.

Thanks in advance.

Lowe, Amy

From: Merrifield, Scott
Sent: Thursday, April 28, 2022 2:00 PM
To: Damen, Jeff
Cc: Sousa, Steve; Feniuk, Jessie
Subject: RE: EWT - C2G Delay Period Cost Review
Attachments: CUSW OEWTL Rates - May 1 2019-April 30 2020.pdf; OEWT May 1-2020 Rates.pdf; EWT&Wataay Rates - revised 2020-12-09 (2020&2021).pdf

Hi Jeff,

Thank you for your comments. We have provided additional narrative/responses in red text for further context and explanation; following your review, a meeting is likely warranted to achieve the necessary alignment.

Please see below.
Thanks,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Wednesday, April 27, 2022 1:14 PM
To: Merrifield, Scott <SMerrifield@valard.com>
Cc: Feniuk, Jessie <JFeniuk@valard.com>; Sousa, Steve <SSousa@QuantaServices.com>
Subject: EWT - C2G Delay Period Cost Review

[EXTERNAL]

Good afternoon Scott,

Please see below a summary of the Delay Period Claim, along with attached comments identifying missing information pertaining to the C2G Delay Period Claim.
Nextbridge does not agree with the calculation methods that were implemented to determine damage amounts, and requests that Valard provide specific backup to quantify the actual costs incurred by the contractor during this period.

Initial Delay Standby: $3,079,246

This section of the claim is based on equipment that was on standby as a result of permitting delays at the beginning of the project. While it seems straightforward at a glance, much of the equipment in question was located in Headingley, Manitoba at Valard's head office and shop. The equipment was staged in MB either for the full duration in question (August 2019-December 2019), or only select months. Equipment that was not located within the OEWTL boundaries should not be charged on standby.

Valard is asked to remove all equipment that was not located in the project area (Wawa - Thunder Bay), and specify the day that all equipment in question was mobilized to the OEWTL project to more accurately track standby time. This should be easily accessible through Valard's equipment GPS data.

The Claim of standby is based on the premise that equipment was dedicated to the Project and could not be used elsewhere. As reflected by the initial delay situation, both NextEra and Valard were kept in a constant state

of imminent project commencement where the impression and expectations were established that the barriers preventing project commencement were anticipated to be resolved at any moment. All the equipment in question was allocated to this project and could not be reasonably used elsewhere (i.e., on another project to generate revenue) to ensure that the OEWTL project could commence immediately once impending approvals were acquired.

Equipment was held on standby 8 hours away from the Project ready for immediate project mobilization. This resulted in a real cost to Valard through lost opportunity. The location of the equipment should not form the basis of consideration, but rather that the equipment was allocated to the Project and could not be used elsewhere due to an imminent anticipated start date that continued to be delayed.

Per the above, Valard respectfully cannot agree to remove the equipment from the claim that was dedicated to the project but not physically located within the OEWTL project boundaries.

VC is claiming that material management equipment remained on standby throughout the month of October, although steel deliveries began arriving on October 2nd, 2019. Valard's yard crews would have been supporting the delivery of contractor furnished materials (ROW materials, foundation materials, bridges...) throughout September and October. The narrative and respective costs that crews and equipment were sitting idle during these months should be revised.

Valard has **not** claimed that all the "material management equipment remained on standby throughout the month of October". However, there is materials management equipment included in the initial standby calculations as most material management equipment was idle. Valard accounting system tracks working equipment charged to materials management during the initial 3-month period. This equipment that was working for this period is acknowledged in the backup to the field overhead delay calculations. This equipment cost ($30,352.50) is considered in the field overhead delay calculation. We ensured that Valard was not charging the same equipment in the standby calculations that was actually operating to perform work (i.e., it represents different equipment; Valard is not requesting cost recovery for the same equipment in both calculations).

Field Overhead Delay: $23,754,420

In summary, Valard is claiming that substantial overhead costs were incurred during the 6 month delay period at the beginning of the project. Instead of providing actual figures for the months in question, Valard took an average of their field overhead costs over the duration of the project (August 2019-February 2022), and attributed this monthly average to standby months. This does not seem like an accurate method of calculating the delay costs that VC actually incurred in the time period in question. Overhead calculations total $137,549,908 over the duration of the project. These costs include items such as camp costs, fuel costs, float and mobilization costs for equipment, management costs, apprenticeship and safety training, field survey costs, traffic control, and mobilization costs for crews. The concern here is that these costs were inevitably higher during the busier months of the project when significantly more personnel and equipment were being utilized for construction, especially during erection and stringing activities. There would have been a minimal amount of overhead costs to float nearly vacant camps and facilities during minimum construction during the 6 month delay period.

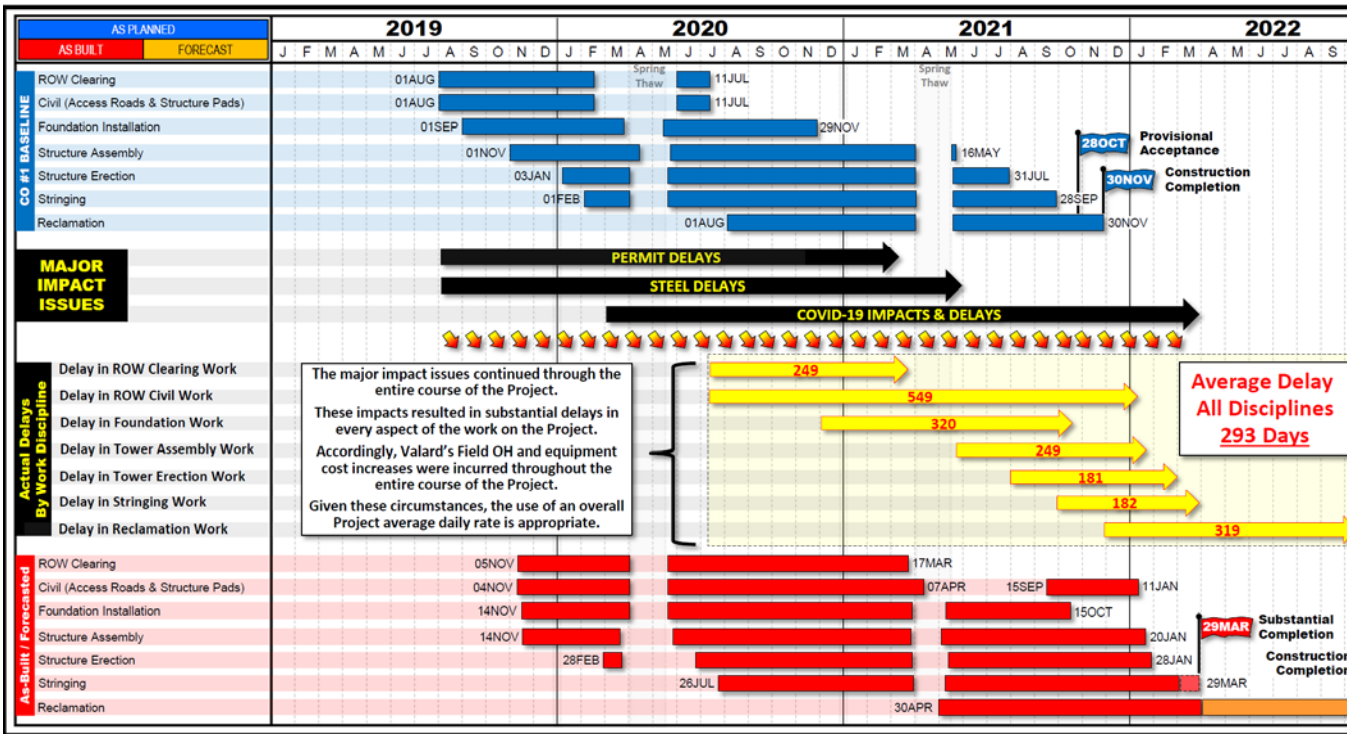
Taking the total overhead costs ($137.5 Million) and dividing by working months on the project, does not accurately depict the actual costs incurred by the contractor during a delay period. Valard is going to have to provide backup pertaining specifically to the delay period before I can perform an adequate review of this claim.

It is not accurate that all the delay costs were attributed to the start of the Project. There was an initial delay to start the job, and then a schedule extension on the backend. The delay itself was not just the result of the failure to start on time, but factors that occurred during the completion of the work (steel, ongoing access issues and COVID-19). This is not only viewed as an initial work start delay, but also a schedule extension. The delay

occurred throughout the whole Project, and should be measured on that basis. Note that this also allows the delay to be attributed to a wide variety of causes which should be beneficial.

As outlined, this is not just for an initial delay, but also for ongoing delays throughout work that resulted in a schedule extension – Valard does not view it as proper to only look at one portion of time and not the entire period when delays were being incurred. While we view this as schedule extension on the backend (the true period when Valard was not supposed to be working), Valard also believes it unreasonable to only calculate costs during the backend of the Project (even through this would lead to a significantly higher claim value).

Also note that the delay in question cannot be simplified to 'start of Project' compared to 'end of Project'. While the start and end of the Project may have only changed by months, it needs to be recognized that work scopes were delayed and extended by significant time period (almost a full year as outlined in the chart below). For example, the time it took to complete foundation work in reality had an extension of 320 days – that is 320 additional days of field overhead and equipment specific to that scope that was on the Project. Valard would have preferred to claim delay based on each workfront (which would have resulted in higher total claim values), however were initially advised to move away from this approach which would highlight 'acceleration' efforts (a term that NextEra prefers to avoid for regulatory reasons).



Overall, this approach recognizes that the delays in question occurred throughout the entire Project. It accounts for the fact that individual work scopes were extended significantly more than the period being claimed. Maybe most significant, this calculation approach is the commonly accepted methodology for calculating delay costs in these circumstances – as accepted by Courts and tribunals, and less subject to challenge by any competing expert witnesses.

Valard's approach was to employ this practice and ensure the presentation of data is in a format that will be supportable in front of a regulatory body. Regardless, it is not appropriate to only focus on those costs accruing in the first six months (which is inconsistent with reality of the delay was caused throughout the Project) and leads to a failure to recover all of Valard's field overhead costs associated with delay.

Direct Equipment Cost Delay: $5,768,073

Similar to the narrative for the "Field Overhead Delay", Valard failed to provide accurate backup to quantify the actual costs incurred by the contractor. Taking the sum of equipment costs and averaging it to a daily figure is not an accurate representation of the actual expense to Valard during the period in question. Once again, equipment costs during high productivity periods is undoubtedly going to be substantially higher than slower production periods. Valard is going to have to provide specific backup pertaining to the actual costs incurred during this claim period as a result of the delay before I can accurately review this information.

Similar to the comments for 'Field Overhead'. Valard was advised C2G that the methodology employed is common practice and reflects what has been accepted in several other proceedings in Canada – confirmed by internal and external legal, but also consistent with what our operations and commercial teams views as likely to be accepted. This approach has also been used by Valard and accepted by 3rd parties on other matters.

Escalation Delay Cost: $4,380,755

In summary, Valard is claiming an increase in union rates and an increase in material and equipment costs between the planned start date and the actual start date of the project.

The Consumer Price Index (CPI) is used to calculate the equipment and material increases. Valard has provided no backup to accurately depict the actual increase in costs that the contractor incurred. I am going to need specific backup pertaining to the increase in cost that was incurred during this period. Please provide backup including the following;

1. Invoices for materials and equipment rentals purchased at the delayed start date
2. Quotes from the supplier had the equipment and material been acquired at the planned start date.

Valard is claiming an increase in CUSW union wages of 2% from the planned start date to the actual start date, however no backup was provided. Please provide specific documentation from CUSW to demonstrate the increase in rates, along with timesheets or documentation for all union employees to quantify the cost increase.

Valard notes that there is a specific formula in the Contract outlining how to quantify this loss for the significant material and equipment price inflation experienced throughout this project. Providing the requested invoices/quotes would be an onerous task and is highly anticipated to result in a higher claim value. However, employing this approach would be contrary to the Contractual formula. Valard equated the approach used in this claim similar to using Exhibit B rates. The approach used in the Escalation Delay claim used the contractual formula which was also used as part of CO1.

Note that Valard can easily provide the CUSW agreements (see attached) which contains one of the inputs for the contractual formula.

Regards,
Jeff

CUSW Ontario East West Tie Line Rates
Schedule "C"

Valard Construction LP
Wage Schedule
Effective May 1 2019 to April 30 2020

Classification(s)	%	[redacted]	VP	UNION FUNDS H&W	RRSP	Training	Total Wage Pkg	JAC
			10.0%		$	$		$
Non-Civil Certified Trades								
Line Senior Foreperson Electrician Senior Foreperson	1	[redacted]						
	01-May-19							
Line Foreman Electrician Foreperson	1							
	01-May-19							
Line SubForeperson Electrician SubForeperson	1							
	01-May-19							
Powerline Technician Electrician Welder	1							
	01-May-19							
Electrician Appprentice								
1st Period	4							
	01-May-19							
2nd Period	5							
	01-May-19							
3rd Period	6							
	01-May-19							
4th Period	7							
	01-May-19							
5th Period	8							
	01-May-19							
PowerlineTechician Apprentice								
1st Period	5							
	01-May-19							
2nd Period	6							
	01-May-19							
3rd Period	7							
	01-May-19							
4th Period	8							
	01-May-19							
Ground work Supervisor Senior Foreperson	1							

	01-May-19	[redacted]
Groundwork Supervisor Foreperson	01-May-19	
Groundwork Supervisor Subforeperson (Multi-Disciplinary)	01-May-19	
Groundwork Senior Foreperson	01-May-19	
Groundwork Foreperson	01-May-19	
Groundwork Subforeperson	01-May-19	
Groundperson		
1st Period	01-May-19	
2nd Period	01-May-19	
3rd Period	01-May-19	
Utilityperson	01-May-19	
Electricial Forester	01-May-19	
Electricial Forester Apprentice		
1st Period	01-May-19	
2nd Period	01-May-19	
3rd Period	01-May-19	
4th Period	01-May-19	
Certified Civil Trade Senior Foreperson Heavy Duty Mechanic Senior Foreperson	01-May-19	
Certified Civil Trade Foreperson Heavy Duty Mechanic Foreperson	01-May-19	
Certified Civil Trade Subforeperson Heavy Duty Mechanic Subforeperson	01-May-19	
Certified Civil Tradesperson Heavy Duty Mechanic		

	01-May-19	[redacted]
Heavy Duty Mechanic Apprentice		
1st Period	01-May-19	
2nd Period	01-May-19	
3rd Period	01-May-19	
4th Period	01-May-19	
5th Period	01-May-19	
Certified Civil Trade Apprentice		
1st Period	01-May-19	
2nd Period	01-May-19	
3rd Period	01-May-19	
4th Period	01-May-19	
Equipment Operator (Non Certified Trade)		
1st Period	01-May-19	
2nd Period	01-May-19	
3rd Period	01-May-19	
Crane Operator	01-May-19	
Craning Apprentice		
1st Period (2000hrs)	01-May-19	
2nd Period (2000hrs)	01-May-19	
3rd Period (2000hrs)	01-May-19	
Truck Driver (Class A-Z)		
	01-May-19	

Overtime Rate
Monday - Friday: First 8 hours paid at Straight time - all hours beyond 8 paid at 1.5 times

Saturday: 1.5 times all hours worked

Sunday & Holidays: 2 times all hours worked

Union Funds

Union funds include the following

Welfare: [redacted] per hour worked

Training Trust Fund: [redacted] per hour worked

GRSP: [redacted] per hour worked

- Welfare includes [redacted] for Bill 162 benefits and [redacted] for Member and Family Assistance
- RST is payable on the Welfare and Bill 162 portions ([redacted] per paid hour of the [redacted] Welfare amount)

Joint Apprenticeship Council (JAC) Funds

[redacted] per hour worked

Union Dues:

Union Dues Checkoff : [redacted] per hour paid

Union Dues Checkoff:is not included in above noted Union Funds

Union Dues Checkoff is to be deducted from the Base Hourly Rate

Union Funds/ Due Remittances:

All remittances (Union Dues, H&W, Training and JAC) are to be sent to:

Power Sector Retirement & Benefit Plan

10 Carlson Court, Suite 802

Toronto, Ontario, M9W 6L2

Phone: 416-245-9270

Fax: 416-240-0993

E-mail: remittances@psbt.ca

Website : www.psbt.ca

CUSW Ontario East West Tie Line and Watay Rates
Schedule "C"

Valard Construction LP
Wage Schedule
Effective January 5 2020 to April 30 2021

				UNION FUNDS				
Classification(s)	**%**	[redacted]	**VP**	**H&W**	**RRSP**	**Training**	**Total Wage Pkg**	**JAC**
			10.0%	**$**	**$**	**$**		**$**
Non-Civil Certified Trades								
Line Senior Foreperson	1	[redacted]						
Electrician Senior Foreperson								
	01-May-19							
	01-May-20							
Line Foreman	1							
Electrician Foreperson								
	01-May-19							
	01-May-20							
Line SubForeperson	1							
Electrician SubForeperson								
	01-May-19							
	01-May-20							
Powerline Technician								
Electrician								
Welder	1							
	01-May-19							
	01-May-20							
Electrician Appprentice								
1st Period								
	01-May-19							
	01-May-20							
2nd Period								
	01-May-19							
	01-May-20							
3rd Period								
	01-May-19							
	01-May-20							
4th Period								
	01-May-19							
	01-May-20							
5th Period								
	01-May-19							
	01-May-20							
PowerlineTechician Apprentice								
1st Period								
	01-May-19							
	01-May-20							
2nd Period								
	01-May-19							
	01-May-20							

	3rd Period		
		01-May-19	[redacted]
		01-May-20	
	4th Period		
		01-May-19	
		01-May-20	
Ground work Supervisor Senior Foreperson			
		01-May-19	
		01-May-20	
Groundwork Supervisor Foreperson			
		01-May-19	
		01-May-20	
Groundwork Supervisor Subforeperson (Multi-Disciplinary)			
		01-May-19	
		01-May-20	
Groundwork Senior Foreperson			
		01-May-19	
		01-May-20	
Groundwork Foreperson			
		01-May-19	
		01-May-20	
Groundwork Subforeperson			
		01-May-19	
		01-May-20	
Groundperson			
	1st Period		
		01-May-19	
		01-May-20	
	2nd Period		
		01-May-19	
		01-May-20	
	3rd Period		
		01-May-19	
		01-May-20	
Utility Person			
		01-May-19	
		01-May-20	
Assembler Foreperson	Of Groundman 3 rate		
		01-May-19	
		01-May-20	
Assembler Subforeperson	Of Groundman 3 rate		
		01-May-19	
		01-May-20	
Assembler			

1st Level		[redacted]
	01-May-19	
	01-May-20	
2nd Level		
	01-May-19	
	01-May-20	
3rd Level		
	01-May-19	
	01-May-20	
4th Level		
	01-May-19	
	01-May-20	
Certified Civil Trade Senior Foreperson		
Heavy Duty Mechanic Senior Foreperson		
	01-May-19	
	01-May-20	
Certified Civil Trade Foreperson		
Heavy Duty Mechanic Foreperson		
	01-May-19	
	01-May-20	
Certified Civil Trade Subforeperson		
Heavy Duty Mechanic Subforeperson		
	01-May-19	
	01-May-20	
Certified Civil Tradesperson		
Heavy Duty Mechanic		
	01-May-19	
	01-May-20	
Heavy Duty Mechanic Apprentice		
1st Period		
	01-May-19	
	01-May-20	
2nd Period		
	01-May-19	
	01-May-20	
3rd Period		
	01-May-19	
	01-May-20	
4th Period		
	01-May-19	
	01-May-20	
5th Period		
	01-May-19	
	01-May-20	
Certified Civil Trade Apprentice		
1st Period		
	01-May-19	
	01-May-20	
2nd Period		

	01-May-19	[redacted]
	01-May-20	
3rd Period		
	01-May-19	
	01-May-20	
4th Period		
	01-May-19	
	01-May-20	
Equipment Operator (Non Certified Trade)		
1st Period		
	01-May-19	
	01-May-20	
2nd Period		
	01-May-19	
	01-May-20	
3rd Period		
	01-May-19	
	01-May-20	
Crane Operator		
	01-May-19	
	01-May-20	
Craning Apprentice		
1st Period (2000hrs)		
	01-May-19	
	01-May-20	
2nd Period (2000hrs)		
	01-May-19	
	01-May-20	
3rd Period (2000hrs)		
	01-May-19	
	01-May-20	
Truck Driver (Class A-Z)		
	01-May-19	
	01-May-20	
Truck Driver (Class D-Z)		
	01-May-19	
	01-May-20	

Overtime Rate

Monday - Friday: First 8 hours paid at Straight time - all hours beyond 8 paid at 1.5 times

Saturday: 1.5 times all hours worked

Sunday & Holidays: 2 times all hours worked

Union Funds

Union funds include the following

Welfare:	[redacted]	per hour worked
Training Trust Fund:		per hour worked
GRSP:		per hour worked

- Welfare includes [redacted] for Bill 162 benefits and [redacted]r Member and Family Assistance
- RST is payable on the Welfare and Bill 162 portions ([redacted] per paid hour of the $[redacted] Welfare amount)

Joint Apprenticeship Council (JAC) Funds

[redacted] per hour worked

Union Dues:

Union Dues Checkoff : [redacted] per hour paid

Union Dues Checkoff:is not included in above noted Union Funds

Union Dues Checkoff is to be deducted from the Base Hourly Rate

Union Funds/ Due Remittances:

All remittances (Union Dues, H&W, Training and JAC) are to be sent to:

Power Sector Retirement & Benefit Plan

10 Carlson Court, Suite 802

Toronto, Ontario, M9W 6L2

Phone: 416-245-9270

Fax: 416-240-0993

E-mail: remittances@psbt.ca

Website : www.psbt.ca

CUSW Ontario East West Tie Line and Watay Rates
Schedule "C"
Valard Construction LP
Wage Schedule
Effective January 5 2020 to April 30 2022

Classification(s)	%	[redacted]	VP 10.0%	UNION FUNDS H&W $	RRSP $	Training $	Total Wage Package $	AGC $
Non-Civil Certified Trades								
Line Senior Foreperson								
Electrician Senior Foreperson	1							
	01-May-20							
	01-May-21							
Line Foreman								
Electrician Foreperson	1							
	01-May-20							
	01-May-21							
Line SubForeperson								
Electrician SubForeperson	1							
	01-May-20							
	01-May-21							
Powerline Technician								
Electrician								
Welder	1							
	01-May-20							
	01-May-21							
Electrician Appprentice								
1st Period	4							
	01-May-20							
	01-May-21							
2nd Period	5							
	01-May-20							
	01-May-21							
3rd Period	6							
	01-May-20							
	01-May-21							
4th Period	7							
	01-May-20							
	01-May-21							
5th Period	8							
	01-May-20							
	01-May-21							
Powerline Techician Apprentice								
1st Period	5							
	01-May-20							
	01-May-21							
2nd Period	6							
	01-May-20							
	01-May-21							

Classification(s)		%	[redacted]	VP 10.0%	UNION FUNDS H&W $	RRSP $	Training $	Total Wage Package $	AGC $
3rd Period									
	01-May-20								
	01-May-21								
4th Period									
	01-May-20								
	01-May-21								
Ground work Supervisor Senior Foreperson									
	01-May-20								
	01-May-21								
Groundwork Supervisor Foreperson									
	01-May-20								
	01-May-21								
Groundwork Supervisor Subforeperson (Multi-Disciplinary)									
	01-May-20								
	01-May-21								
Groundwork Senior Foreperson									
	01-May-20								
	01-May-21								
Groundwork Foreperson									
	01-May-20								
	01-May-21								
Groundwork Subforeperson									
	01-May-20								
	01-May-21								
Groundperson									
1st Period									
	01-May-20								
	01-May-21								
2nd Period									
	01-May-20								
	01-May-21								
3rd Period									
	01-May-20								
	01-May-21								
Utility Person									
	01-May-20								
	01-May-21								
Assembler Foreperson	Of Groundman 3 rate								
	01-May-20								
	01-May-21								
Assembler Subforeperson	Of Groundman 3 rate								
	01-May-20								
	01-May-21								

Classification(s)		%	[redacted]	VP 10.0%	UNION FUNDS H&W $	RRSP $	Training $	Total Wage Package $	AGC $
Assembler									
	1st Level								
		01-May-20							
		01-May-21							
	2nd Level								
		01-May-20							
		01-May-21							
	3rd Level								
		01-May-20							
		01-May-21							
	4th Level								
		01-May-20							
		01-May-21							
Certified Civil Trade Senior Foreperson Heavy Duty Mechanic Senior Foreperson/ Truck and Coach Technician Senior Foreperson									
		01-May-20							
		01-May-21							
Certified Civil Trade Foreperson Heavy Duty Mechanic Foreperson/ Truck and Coach Technician Foreperson									
		01-May-20							
		01-May-21							
Certified Civil Trade Subforeperson Heavy Duty Mechanic Subforeperson/ Truck and Coach Technician Subforeperson									
		01-May-20							
		01-May-21							
Certified Civil Tradesperson Heavy Duty Mechanic/ Truck and Coach Technician									
		01-May-20							
		01-May-21							
Heavy Duty Mechanic Apprentice/ Truck and Coach Technician Apprentice									
	1st Period								
		01-May-20							
		01-May-21							
	2nd Period								
		01-May-20							
		01-May-21							
	3rd Period								
		01-May-20							
		01-May-21							
	4th Period								
		01-May-20							
		01-May-21							

Classification(s)		%	[redacted]	VP 10.0%	UNION FUNDS H&W $	RRSP $	Training $	Total Wage Package $	AGC $
5th Period									
	01-May-20								
	01-May-21								
Certified Civil Trade Apprentice									
1st Period									
	01-May-20								
	01-May-21								
2nd Period									
	01-May-20								
	01-May-21								
3rd Period									
	01-May-20								
	01-May-21								
4th Period									
	01-May-20								
	01-May-21								
Equipment Operator (Non Certified Trade)									
1st Period									
	01-May-20								
	01-May-21								
2nd Period									
	01-May-20								
	01-May-21								
3rd Period									
	01-May-20								
	01-May-21								
Crane Operator									
	01-May-20								
	01-May-21								
Craning Apprentice									
1st Period (2000hrs)									
	01-May-20								
	01-May-21								
2nd Period (2000hrs)									
	01-May-20								
	01-May-21								
3rd Period (2000hrs)									
	01-May-20								
	01-May-21								
Truck Driver (Class A-Z)									
	01-May-20								
	01-May-21								

Classification(s)		%	[redacted]	VP 10.0%	UNION FUNDS H&W $	RRSP $	Training $	Total Wage Package $	AGC $
Truck Driver (Class D-Z)		7	[redacted]						
	01-May-20								
	01-May-21								
Electrical Forester		8							
	01-May-20								
	01-May-21								
Electrical Forester Apprentice									
1st Period		5							
	01-May-20								
	01-May-21								
2nd Period		6							
	01-May-20								
	01-May-21								
3rd Period		7							
	01-May-20								
	01-May-21								
4th Period		8							
	01-May-20								
	01-May-21								

Overtime Rate

Monday - Friday: First 8 hours paid at Straight time - all hours beyond 8 paid at 1.5 times

Saturday: 1.5 times all hours worked

Sunday & Holidays: 2 times all hours worked

Union Funds

Union funds include the following

Welfare: [redacted] er hour worked

Training Trust Fund: [redacted] er hour worked

GRSP: [redacted] er hour worked

- Welfare includes [redacted] or Bill 162 benefits and [redacted] for Member and Family Assistance
- RST is payable on the Welfare and Bill 162 portion [redacted] 0 per paid hour of the [redacted] Welfare amount)

Apprenticeship Governance Council (AGC) Funds

[redacted] per hour worked

Union Dues:

Union Dues Checkoff : [redacted] 5 per hour paid

Union Dues Checkoff:is not included in above noted Union Funds

Union Dues Checkoff is to be deducted from the Base Hourly Rate

Union Funds/ Due Remittances:

All remittances (Union Dues, H&W, Training and AGC) are to be sent to:

Power Sector Retirement & Benefit Plan

10 Carlson Court, Suite 802

Toronto, Ontario, M9W 6L2

Phone: 416-245-9270

Fax: 416-240-0993

E-mail: remittances@psbt.ca

Website : www.psbt.ca

Lowe, Amy

From: Merrifield, Scott
Sent: Wednesday, April 20, 2022 9:53 PM
To: Damen, Jeff
Cc: Sousa, Steve; Feniuk, Jessie
Subject: RE: EWT Claims Summary

Hi Jeff,

The following is now available on the SharePoint site:

7. **Right of Way Changes:**
   a. OEWTL - ROW Changes v2.xlsx
   b. Supporting Information: Includes invoices to support the claim summary
   c. ROW Narrative.docx: This narrative has been compiled to provide appropriate context of the overall claim. This narrative is not as extensive as the previous C2G narrative, as we tried to make it more concise. As requested, we did include additional graphics to better articulate the details/complexity to help the NextEra team.
8. **Water Crossings:**
   a. OEWTL - Water Crossings V3.xlsx
   b. Backup Documentation: Includes Anjigami Bridge invoices and supporting evidence for the basis of rates used in the overall claim calculation.
   c. Water Crossing Claim Narrative.docx
9. **Carrying Costs:**
   a. OEWT - Carrying Costs.xlsx:We have included initial graphs and data to illustrate the impact of carrying charges. Valard is expecting that additional conversation between parties may be necessary.

We are happy to arrange a call between you and any of our SMEs who prepared the claims to walk through the documents provided if that is of value to you.

Thank you,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Merrifield, Scott
Sent: Monday, April 18, 2022 12:29 PM
To: 'Damen, Jeff' <Jeff.Damen@nexteraenergy.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Feniuk, Jessie <JFeniuk@valard.com>
Subject: RE: EWT Claims Summary

Hello Jeff,

We have provided the backup excel documents for the C2Gi calculations [COVID-19 loss of productivity, Delay Claim and Structure Work Inefficiency Claim]. As per your request when we were together in Calgary, we have included links throughout the excel documents to make them a little easier navigation/reference. In addition to the backup excel

documents, we have included the costing narratives for each component regarding how pricing is being performed. Please refer to the following links on SharePoint:

4. **C2G Analysis - Major Impacts:**
    a. Delay Period:
        i. << OLE Object: Picture (Device Independent Bitmap) >> 1. Delay Period
        ii. Note that delay escalation costs have been included in this folder
    b. COVID Loss of Productivity
        i. << OLE Object: Picture (Device Independent Bitmap) >> 2. COVID Loss of Productivity
        ii. Valard also talked about updating the sources / support for a productivity calculation of 24.7%. This has been completed in the following report: << OLE Object: Picture (Device Independent Bitmap) >> COVID-19 Loss of Productivity - 24.7%.docx. the report includes summaries indicating the percentage being sought as the midpoint of academic and industry studies. All new studies have also been included: << OLE Object: Picture (Device Independent Bitmap) >> Supporting Research and Reports
    c. Structure Work Inefficiency
        i. << OLE Object: Picture (Device Independent Bitmap) >> 3. Structure Work Inefficiency

Note: depending on how the Right of Way Claim is finalized, the productivity numbers may be impacted (albeit not significantly). We hope to have the Right of Way Claim completed in the next day for your review.

Can you please indicate a time tomorrow that we can have a call to discuss 'standby costs'?. We want to ensure that our approach to calculating this element aligns with your perspective.

Thank you,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Merrifield, Scott
Sent: Thursday, April 14, 2022 3:48 PM
To: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Feniuk, Jessie <JFeniuk@valard.com>
Subject: RE: EWT Claims Summary

Hi Jeff,

In addition to the information provided previously (as per the below email), we have now uploaded additional information as follows:

5. **Forest Fires:**
    a. << OLE Object: Picture (Device Independent Bitmap) >> OEWT - Forest Fire V3.xlsx
    b. << OLE Object: Picture (Device Independent Bitmap) >> Supporting Documents - Invoices
    c. << OLE Object: Picture (Device Independent Bitmap) >> Supporting Information (Fire Implementation Orders)
6. **Foundations:**
    a. << OLE Object: Picture (Device Independent Bitmap) >> OEWTL - Foundations - V2.xlsx
    b. << OLE Object: Picture (Device Independent Bitmap) >> Foundations Supporting Information

The claims for 'ROW Changes', 'Water Crossings', and 'Carrying Costs' are subject to final review and will be uploaded on SharePoint for early next week.

We used a similar format to the other claim categories; let us know if you have any issues navigating the document or would like a walkthrough.

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Merrifield, Scott
Sent: Monday, April 11, 2022 1:25 PM
To: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Feniuk, Jessie <JFeniuk@valard.com>
Subject: EWT Claims Summary

Hi Jeff,

Updated or new information has been uploaded to the SharePoint site as per below:

1. **Kama Cliffs:**
   a. << OLE Object: Picture (Device Independent Bitmap) >> OEWTL - Kama Cliffs v10.xlsx
      i. Note that aside from updated narrative and organization, one 3rd party invoice for Hidden Valley Manufacturing was removed (see Document Change Log)
2. **White Lake Narrows:**
   b. << OLE Object: Picture (Device Independent Bitmap) >> OEWTL - White Lake Narrows - Structure Change Cost _v5.xlsx
   c. << OLE Object: Picture (Device Independent Bitmap) >> Construction Scope - Timesheets - R1.xlsx
3. **COVID Direct Costs**
   d. << OLE Object: Picture (Device Independent Bitmap) >> OEWT - COVID-19 Direct Costs v14.xlsx
   e. New Invoices: << OLE Object: Picture (Device Independent Bitmap) >> COVID Direct Cost Supporting Documentation - 2022.04.08
4. **C2G Analysis - Major Impacts:**
   Since these claims deduct amounts paid in other claims, the final numbers will be dependent on how we calculate all the items currently being reviewed (example – forest fires, Right of Way Claim etc.). Final numbers are subject to adjustment, but the methodology will not change unless agreed to with NextBridge. Therefore, we have put concise narratives together on how each C2G claim is being quantified:
   - << OLE Object: Picture (Device Independent Bitmap) >> C2G Costing Methodology Narratives

   Note the following:
   1) Delay Period:
   - In terms of the delay calculation, there were a couple of scenarios we presented. We can either separate the delay into the front-end delay and back-end, or combine it into one overall delay period - ~180 days. The latter may have some advantage when attributing a cause to the delay.
   - We also do have the calculations for determining the front-end delay based on contract standby rates. The number goes up significantly if we take this approach, but it may be simpler as we are using Exhibit B rates.
   - Calculation of these delay items (equipment and overhead) always follow the same methodology:
     - Determine Valard's total Project costs for these items, which may require some adjustments depending on how costs were coded during the job.
     - Next, make reductions out of this amount for costs paid (to be paid) in other claims, to lower the total value.

- Take this reduced total value and find a daily average; apply that average against the amount of delay days.

2) **Escalation Costs:** It is based on a formula in the Contract and is calculated on the same methodology that was agreed to in CO1.
3) **COVID-19 loss of Productivity:** Approach is now summarized in a two-page document.
4) **Structure Work Inefficiency:** The calculation looked at Valard's budget to outline how many manhours we expected to complete per structure and compare that against actuals. We outline a period of good productivity (with the exception of the 24% COVID-19 inefficiency) to support a contention that without supply chain disruption we could have met our budget for the entire project. We use this premise to claim the delta between what we could have done and our actuals. We are still preparing a few visual aids. The interim costs

Interim Summary of Major Impacts (subject to adjustment following finalization of other claims)	
Delay (initial Equipment Standby, daily OH and Equipment Costs and Escalation):	
Initial Work Start Delay (Aug-19 to Oct-19 idle equipment only - at reduced rates)	$3,079,246
Remaining Delay (daily OH costs x 182 days delay & daily EQ costs x 91 days delay)	$29,522,493
Escalation Delay Costs (per form used in C.O. #1)	$4,380,755
Total	**$36,982,494**
COVID (calculated at 24.7% - includes labor & Equipment losses)	**$87,768,742**
Structure Work Impacts	**$21,364,790**
Grand Total	**$146,116,026**

Please let us know if you would like a walkthrough of any of the documents.
Remaining claims are being reviewed/finalized and will be available on SharePoint for the end of this week.

Regards,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
4209 99th Street NW | Edmonton, Alberta T6E 5V7 | www.valard.com
Main: 780.436.9876 ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com
<< OLE Object: Picture (Device Independent Bitmap) >>
Quanta Services, Inc. (NYSE: PWR) | www.quantaservices.com
<< OLE Object: Picture (Device Independent Bitmap) >> << OLE Object: Picture (Device Independent Bitmap) >> << OLE Object: Picture (Device Independent Bitmap) >> << OLE Object: Picture (Device Independent Bitmap) >>

Lowe, Amy

From: Merrifield, Scott
Sent: Tuesday, May 3, 2022 6:54 PM
To: Damen, Jeff
Cc: Sousa, Steve; Feniuk, Jessie
Subject: RE: Forest Fire Claim Review R1

Hello Jeff,

We sincerely appreciate the collaborative effort on this - from working with us initially to allow payment for these costs of $20.5M last year, to our meeting in Calgary where we collectively went through a due diligence process to ensure costs were accurately categorized and initial payment was appropriate.

Valard addresses your further questions aimed at ensuring costs are substantiated in red text below.

On SharePoint, we have included an updated version of the claim (OEWT - Forest Fire V5.xlsx) which includes a change log of all modifications from the previous version.

Thank you,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Thursday, April 21, 2022 8:31 PM
To: Merrifield, Scott <SMerrifield@valard.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Feniuk, Jessie <JFeniuk@valard.com>
Subject: Forest Fire Claim Review R1

[EXTERNAL]

Good evening Scott,

Please see below and attached my first round review comments on the "Forest Fire" claim submission. I am going to require significant more supporting documentation before a final review can be completed on this particular claim.

Mobilization Events: $5,064,600

1. VC to review and provide backup for mobilization claims. Identify crew leads and locations at the time the order was implemented, and the new locations the crews mobilized to. Please provide the same for the re-mobilization claims. We will need this for all affected foundation, assembly, and erection crews to perform our due diligence. The correct number and type of crews need to be vetted before this claim can be brought forward to the OEB. I understand using the contractual mob/demob rate as we discussed in Calgary, but accuracy still needs to be vetted. Even if you give me the crew lead name and locations before and after the order was implemented, I can vet the accuracy from there.

2. VC to justify nearly $2,000,000 in mobilization claims for helical pile crews. Only 1 structure on the entire project (F013) utilized this foundation type and it was located outside of the restricted areas. Please explain how 6 helical pile crews were affected during the MNRF order and how the $2 Million dollar figure was derived.
3. VC to justify and identify the 5 drilled pier (drilled shaft) crews that were affected during the MNRF order. Please identify crew leads and work locations at the time the order was implemented.
4. Please provide time sheets to support mobilization costs incurred due to the MNRF order.

Your comments make sense. We did come to agreement on this item in Calgary, but fully recognize that the same things we discussed in Calgary need to be organized so a third party can easily follow and verify.

When you say, "provide timesheets to support mobilization costs" in comment (4), we assume the intent here is to provide support that there was actually a justifiable mobilization – not support the actual "costs", as the costs are instructed by Exhibit B. We understand the need to demonstrate that we are dealing with crews who did in fact move from the west to the east. This requires tracking crew movement. The best way to track crew movement is to identify the individual representative of that crew (either a supervisor or foreman). We did this for each work activity. This allowed Valard to identify the location of crew leads on the west side of the Project shortly before the Order, and follow that same lead to the East side of the Project during the fire restriction period. This can all be satisfied by timesheets or daily reports, which will be uploaded to the share site (Mobilization Timesheets and Daily Reports). The second mobilization is satisfied by the need of a crew to return to the location in the west where the initial demobilization occurred [justifying the first mobilization presupposes the requirement to return for the second mobilization].

A more detailed summary of these mobilizations is now provided below:

Description					Prior to Shut D
Team #	**Name**	**Functional Group**	**Mobilization Type**	**# of Mobs**	**Date**
1	Clarke, Barry Edward	Assembly	Mob/Demob - Lattice Assembly Crew	2	7/17/2021
2	Scott, Darren E	Assembly	Mob/Demob - Lattice Assembly Crew	2	7/20/2021
3	Clarke, Travis Anthony	Assembly	Mob/Demob - Lattice Assembly Crew	2	7/20/2021
4	McCreith, Michael V	Assembly	Mob/Demob - Lattice Assembly Crew	2	7/13/2021
1	Thomas Howes	Erection	Mob/Demob - Tower Erection Crew	2	7/20/2021
2	Patrice Lalancette	Erection	Mob/Demob - Tower Erection Crew	2	7/20/2021
1	Joshua Thibodeau	Foundations	Mob/Demob - Helical Pile Installation Crew	2	7/19/2021
2	Scott Cougnon	Foundations	Mob/Demob - Helical Pile Installation Crew	2	7/7/2021
3	Roland Bruce	Foundations	Mob/Demob - Helical Pile Installation Crew	2	7/14/2021
4	Bradley Rose	Foundations	Mob/Demob - Helical Pile Installation Crew	2	7/11/2021
5	Nathanial McNutt	Foundations	Mob/Demob - Helical Pile Installation Crew	2	7/20/2021

6	John Power	Foundations	Mob/Demob - Helical Pile Installation Crew	2	7/4/2021
7	Mike Brushett	Foundations	Mob/Demob - Drilled Pier Installation Crew	2	7/20/2021
8	Ryan Ballard	Foundations	Mob/Demob - Drilled Pier Installation Crew	2	7/19/2021
9	Shelden Hardiman	Foundations	Mob/Demob - Drilled Pier Installation Crew	2	7/18/2021
10	Wayne Hiscock	Foundations	Mob/Demob - Drilled Pier Installation Crew	2	7/13/2021
11	Dakota Lloyd	Foundations	Mob/Demob - Drilled Pier Installation Crew	2	7/19/2021

This has now been included as an additional Tab in our claim document (OEWT - Forest Fire V5.xlsx). You are absolutely correct these were not helical pile crews. On Exhibit B there was no rate specifically applicable to certain foundation types such as rock drilling. When there was no precise Exhibit B, we used the rate which was most comparable in our view (another foundation installation crew rate). While we covered a significant amount of material in two short days in Calgary, this was a concept we did discuss in an effort to make sure the number put forward covers all costs incurred.

We trust this provides the additional detail necessary to finalize pricing as proposed in Calgary. The use of Exhibit B rates should make this category relatively easy, but out of an abundance of caution we did provide the requested information tracking crew leads.

Erection Crew Standby: $1,957,357

1. VC to provide backup supporting this claim. Supplied spreadsheet is not detailed or specific enough to review. Please provide details on crew leads, locations, and justification on the reason for standby for each day.

We have provided some further context here, and look forward to working with you to make sure this claim is not overly complex so it can be followed in future regulatory proceedings.
While the request seems to be aimed at a day-by-day analysis of standby, this is not the basis of the claim. The request for compensation here is linked to lack of workfront. The MNRF Order makes it clear that Valard lost half of the available working area. As indicated in our excel document, while some erection crews were able to be relocated to the East side of the Project, there was simply not enough work space available for all erection resources. Filling a limited space with fulsome resources is not prudent and would have been further contributing to a congested worksite problem caused by the MNRF Order.
While congestion due to the Order was a real problem, Valard has (and continues) to agree with NextBridge that there needs to be a fair resolution to these issues, and an additional claim for loss of productivity due to a congested work site caused by the forest fires is not being put forward. However, one thing that continues to need to be compensated is the inability to deploy all available erection resources. In terms of quantifying this, we outlined that a fair methodology would be comparing the planned amount of erection crews to the actual crews, and turning lost crew days into lost crew weeks so that the Contractual Exhibit B standby rate could be used. To your point, this still should be substantiated where possible.

- ***Substantiating the Planned Amount of Crews***: Our team has indicated what the planned crews would be. While there should be no reason to doubt the Valard plan, this plan was consistent with the amount of crews Valard had working immediately prior to and immediately after the fire Order. Valard had three crews working leading up to the fire shutdown - three crews working every day, except for one day where there were two crews

working. After the fire restrictions were eased, Valard was able to utilize four crews. Substantiation is provided for this.

- ***Substantiating the Actual Crews***: This can be demonstrated through review of timesheets. Please advise if you would like Valard to submit all timesheets for erection workers for the period in question.

The claim is based on the notion that our plan was achievable (consistent with resourcing immediately prior to and after the fire restrictions), but the plan could not be followed due to the restricted workfront. Overall, to substantiate this claim we have now provided backup not only indicating that our as-planned schedule was achievable (consistent with resourcing immediately prior to and after the fire restrictions), we also provide documentation indicating those crews that were working. The rationale for the delta is not a day by day narrative, but an overall narrative that having only half of the workfront available (due to the Order), we did not have workfront for all resources. Loading an area with resources leads to congestion and would not have been a prudent course of action.

If you need any further detail for regulatory proceedings, as outlined in the mobilization tab – crews can be tracked by crew leads. In the case of erection, this is erection supervisors. Specifically, Daniel Lavhey, an erection supervisor for a crew was working at Structure B216 prior to the fire restrictions, and did not return until after the fire restrictions. In addition, Raphael Foster, Erection Supervisor likewise was not working July 17, 2021 – August 4, 2021. This further supports that Valard did not have workfront for all our available erection crews.

Equipment Standby: $298,078

1. VC to provide backup to support this claim. Please identify the locations of any stranded equipment that was unable to be collected and utilized elsewhere on the project during the order.

All stranded equipment was moved to a fire safe zone, which would be to a heading. Our team has confirmed this at the time of the fire and stored equipment in a safe location. Proving all equipment was stranded and not used could be somewhat challenging, as the request is to prove a negative (i.e., prove something did not happen). However, Valard can provide all timesheets for all employees working during the period, which will clarify none of this equipment appears on the same and was operational if NextBridge is of the view that is helpful.

Direct Activity Supervision: $1,695,308

1. VC to identify additional personnel and provide specific backup for the 10 supervisors that Valard estimates were necessary during the implementation of the MNRF order. Please provide names, work locations, and timesheets to support this claim. No backup provided.

Valard has now uploaded a document (Direct Supervision Support.xlsx) outlining all supervisors working at the time. Additional effort and costs resulted, as:

1. The Order suspending work resulted in Valard's team having to plan resources in a reactionary manner, which resulted in putting smaller amounts of crews spread out along the east side of the Project in a piecemeal manner. Not having the lengthy stretches of workfront, resulted in supervision not being able to be allocated in a profitable manner; and
2. The fire contributed to delay and there would be some schedule extension for these supervisors remaining on the Project.

We continue to assume it is accurate to capture some of these costs and tie them directly to the forest fire claim (as opposed to moving them to the Delay Claim). This is not only accurate, it leads to a total cost consistent with the total figure we initially executed for the Forest Fire Claim.

Valard had provided the requested information in the 'backup information'. If NextBridge would like to discuss this portion of the claim further please reach out to our team, as it may be beneficial to have a discussion regarding how these were quantified based on the discussions Calgary.

Fire Mitigation: $403,252

1. The procurement, maintenance, and mobilizations of fire suppression equipment, as well as basic fire training for field staff is an industry standard practice during fire season. Please justify why this cost is included in the Forest Fires claim and how the implementation of the MNRF order resulted in extra or additional costs being incurred.

Valard is of the view that all of this goes above base scope. This was training and equipment not performed in general for the Project, but was taken specifically due to the extreme conditions existing in Northern Ontario in the 2021 summer [80 – 100 active fires at the time]. We do not think any party will have trouble understanding that this fire season was far outside of the norm, as an Emergency Order was issued, and extra training and supplies was required.

The easiest way to demonstrate that is to reference only costs incurred during the 2021 summer are being charged, indicating these were not costs for the Project as a whole but were specific to the Emergency situation that arose.

2. Invoice #ESI10336 to be reviewed by VC

The invoice does identify its relation to "fire cache" on page 2. However, our team does note that the total portion of this invoice includes base scope work as well. The only costs relating to the fire cache is $1,426.92 out of the initially indicated $14,633.99. This has been updated and reduced accordingly. The specifics are now highlighted in the invoice in the backup folder [Northern Mat & Bridge - #ESI10336 W_ Highlights.pdf].

3. Fire Mitigation - All Labour" tab includes time with unspecific or no notes to backup. Please review and provide locations and further detail to each highlighted line item to backup.

In terms of how the parties can be confident that only appropriate costs are captured, a lot of assurance can be provided through reference to the steps taken by Valard at the time of the event. Our team created separate cost codes and instructed workers to bill time only related to extra work necessitated by the fire and resulting Order. Generally, appropriate accounting procedures and a strong organizational system put into place can always be relied on to infer recorded time relates to the specific event the worker outlined at the time (workers' knowledge will always be deemed to be best on the date time was entered). That being said, we have completed a further audit and removed items identified which arguably do seem out of place; this helps address the concern with employees improperly recording time. While we are confident that some of these costs were related to fire extras, to take a conservative approach and minimize disallowance risk identified, these costs were removed.

Camps: $980,280

1. VC to justify a nearly $1,000,000 claim to operate and maintain a nearly vacant camp during the MNRF order. Please provide backup to accompany the justification.

Valard believes that a reduction of the previously used camp rate by half was reasonable. This approach recognizes that although some costs are reduced by having a vacant camp, there are still significant ongoing costs being incurred regardless of the vacancy rate. However, we have provided additional backup (Camp Cost Back Up.xlsx) outlining the actual cost of this camp which, if used, would increase the total claimed amount.

All Season Access: $10,504,333

Let us know if you think it helpful to book a working session with our Right of Way Team. We could add answers live time as we discuss this to ensure any finalized documents clearly articulates this portion of the claim.

1. VC to clean up "LEM Backup" and remove accesses that are out of the scope of the MNRF order such as; Dorion.... etc.

The "LEM Backup" has data associated with three different Workfronts, with WF6/7 being directly related to all-season access within Caribou Zone and WF10 all-season access maintenance (including Dorion). WF10 all-season access maintenance was required to support construction activities relocated to WF10 due to the Fire ban on the west side. Progress had to continue as best possible; this included opening up WF10 to avoid sending additional resources on standby and risk missing the completion date that was stressed could not be missed. As indicated below, the result was performing all scopes of work (i.e., foundation / structure work) prior to winter, which involved additional maintenance costs which have been outlined in greater detail below. We continue to view this portion of the claim as more properly outlined to the forest fire claim, as opposed to a general acceleration claim.

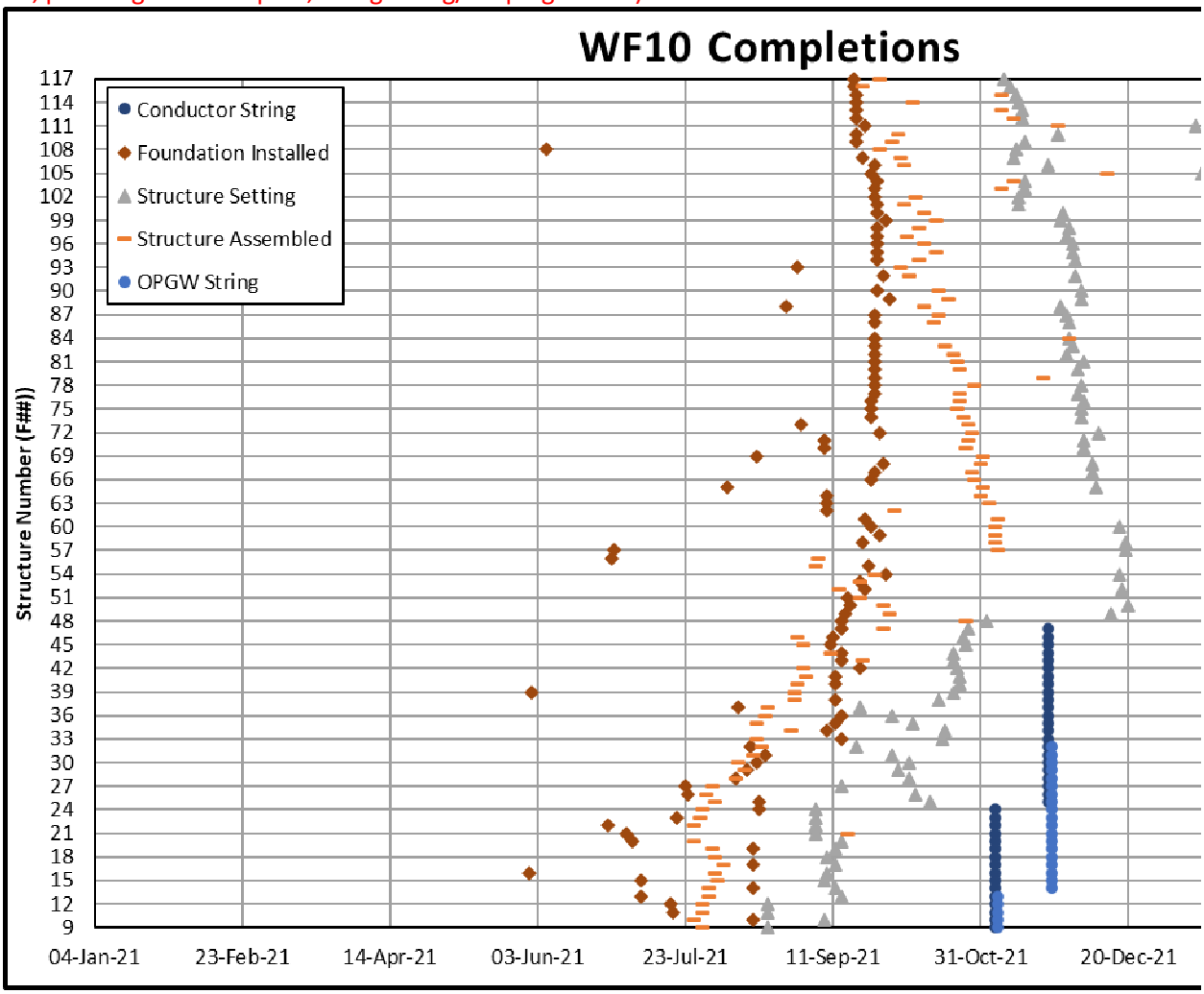
2. Referring to the contract TILOS "VC7556 OEWTL Construction Schedule Rev03", Valard intended to string through Paint Lake 2 in August and September of 2021. All season access construction and maintenance would have been unavoidable to mobilize stringing equipment into these structures. Refer to attached "Paint Lake 2 Access" sketch.

Please see comments for WF10 below, which indicate that the only charges being sought here are for increased maintenance. Below is also a full description as to why maintenance costs increased when performing all these scopes of work.

3. VC to justify nearly $2.5 Million in road maintenance (nearly the cost of the construction of the accesses) across 42km of all season access road in WF6 over a few months.

The $2.5M covers four subsections, including all-season ($255k) and winter ($619k) maintenance within the Caribou zone; all-season maintenance within WF10 ($1.4M) and forecasted maintenance required for reclamation within the Caribou zone ($120k). Additional information for each item is detailed below:

- All-season maintenance ($255k). Includes fixing ruts, soft spots and shaping newly built access during Sept/Oct 2021.
- Winter maintenance ($619k) – WF6/7 received over 2 meters of snowfall during the last winter, requiring snow clearing and sanding every 2 to 3 days. The maintenance cost was further exacerbated due to rugged and hilly terrain requiring upkeep of numerous road headings to support multiple construction crews (e.g., up to 2-3 stringing crews at once).
- The figure below shows the acceleration of construction activities within WF10, wherein the entire Workfront had several crews working starting end of July and leading into winter. Valard is claiming for maintenance efforts required between July to Sept as these activities were planned for winter conditions with access to frozen ground. For example, with the arrival of assembly crews in July, the access roads were significantly affected by increased rutting caused by higher pickup traffic. Compared to tracked equipment, using pickup trucks damages access relatively quickly. With one-stop pickup traffic starting July, Valard was required to keep repairing the access (fixing ruts, patching the soft spots, and grading/shaping access).



Forecasted maintenance ($120k) – WF6/7 will require re-installing water crossings to access all-season roads within the Caribou zone. The reclamation of all-season roads is planned for Sept 2022 and will require over a month of reclamation effort.

4. No backup provided for "All Season Access Detail". Please provide invoices from Corbiere and Sons Contracting to accompany this claim. "LEM Backup" tab is not specific and cannot be verified without proper backup documentation.

There are two sets of data associated with all-season access: 1) “AllSeason Roads Built” info and 2) “LEM backup”. The (1) “AllAseason Road Built” includes GIS export of all the roads that were built as all-season roads, and said export is used to give “Winter-only” credit. The winter credit was calculated in this manner as Valard had unit rate agreements to build winter roads at $15,444/km (WF6) and $12,040 (WF7) with E. Corbiere and Kabi Lake, respectively. In other words,

no backup would exist because the All-Season Access Detail Tab was only used to provide a credit (i.e., calculate the price that would have incurred without the changes). This was done to NextBridge's benefit to ensure that the claim off-sets savings as against costs.

"LEM Backup" has extensive documentation relating to completed work. For instance, LEM descriptions showcase the work completed by each crew and hours/equipment utilized. Furthermore, "Specific IDs" and "Locations Worked" columns also indicate the location of work for each crew for the given day. Finally, each LEM is linked to an invoice paid to the corresponding vendor. Valard can walk through the "LEM Backup" in a meeting with NextBridge to better explain if required.

Lowe, Amy

From: Merrifield, Scott
Sent: Friday, April 1, 2022 7:47 PM
To: Damen, Jeff
Cc: Feniuk, Jessie; Sousa, Steve; Wilkins, Lisa
Subject: RE: Kama Cliffs - Back up documentation

Hi Jeff,

See the updated file on SharePoint:
Kama Cliffs Cost Review - NB comments and VC responses - 4-01-22.xlsx

Note the additional Valard comments in column 'L'. See additional responses in **purple text** below:

ROW Costs: $1,912,563.97

1. Several flags with backup documentation not matching claim amount. [additional comments provided in document] **[VC to remove irrelevant invoices from backup document submission] [done; see revised invoices in , we have adjusted several of the invoices included in the Kama Supporting Documents folder to remove irrelevant details. Each invoice that ends in "- R1" is a modified invoice; the remaining invoices have not been changed. Example:**

2020-08 - E. Corbiere & Sons # Inv#047-R1.pdf

- $890,356.98 in rig matt purchases??? [Valard constructed a temp road on the ROW from the Mazukama Falls Hiking Trail access road to the park boundary (approximately 80m). An additional 130m length double layer matted road for the remaining distance was required to access this site. Also, to reduce costs, a staging area was required between str B147/B146, which was matted for the helicopter landing and storage area, materials staging, and general working area. Due to the ground conditions being soft and full of debris, it was also double layered.] **[VC to further backup matting costs - scope or work is primary helicopter access. VC to provide some basic area calculations of fly yard / sketch of matting area to justify in the event of a 3rd party review] [we seem to have a different total; the total amount for matting purchases we included is $512K…can you confirm what line items you included to summate to $890K?]**

2. $16,000 in consulting fees for a 1-day trip - mostly travel time from BC - ON. [additional comments provided in document] **[VC to provide additional backup (ex. pictures of the challenging terrain attached to invoice) to justify costs] [Additional pictures have been added in the excel document of the area that]**

Foundation Installation / Material: $1,678,282.46

- Foundation installation costs (CRUX) are well recorded and accurate.
- COVID costs included in the Crux invoice to be cross referenced against COVID-19 claim. [Yes, these costs have not been included in the Kama Cliffs component, but have been included in the COVID claim] **[Approved]**

Costs to justify / review: $568,708.98

- Please justify 37 submissions including excessive rig mat purchases, misc. tools and ppe, rigging, and costs unrelated to Kama Cliffs work. Majority of these are deemed capital costs. [additional comments provided in document. Upon the Kama Cliffs change, specific Project Accounting Codes were created for costs applicable to the Kama Cliffs work. The construction team was instructed that only costs directly attributable to this work were coded to Kama Cliffs Project Codes. In some cases, these costs include consumables (e.g., PPE, minor tools and tool rentals, supplies, etc.) that are typical for the execution of this type of work. VC included actual costs rather than applying a 'consumables factor'.] **[No issues with consumable cost justification]**

Additional Management & Planning: $817,468.00

- Cost does not match backup provided in "Planning & Management Backup" sheet (Kama Cliffs Heli Estimate v9) [Please reference the "Summary Tab" within the 2. Self-Perform Timesheets.xlsx document. The "Planning & Management Backup" sheet was a working document that does not provide the best context for the line item as it does not reflect all applicable items] **[Vc to review "Planning & Management Backup" & "Self-Perform Timesheet - Construction Labour" documents. Both backup documents reference daily timesheets in excess of 40 hours per day (up to 115 hours/day). Duplicate items are present across different documents resulting in a false total cost] [For salaried employees, there is a single line item representing the total hours worked in an entire month attached to the last day of the month. Therefore, there will line items in excess of 8 hours per day on that given line item. The Duplicate items have been removed and are reflected in the 2. Self-Perform Timesheets.xlsx document].**

- Lodging costs backup shows 4 decimal points on hotel costs - where are the receipts for these accommodations? [These accommodations are for salaried individuals staying at camp locations. Lodging reflects additional camp nights. The calculation is based on total additional days for these salaried employees using a standard camp rate of $210/night; there are no 3rd party receipts for this line item.] **[Please present costs in 2 decimal points] [Done]**

Thanks,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Wednesday, March 30, 2022 7:09 PM
To: Merrifield, Scott <SMerrifield@valard.com>
Cc: Feniuk, Jessie <JFeniuk@valard.com>; Sousa, Steve <SSousa@QuantaServices.com>; Wilkins, Lisa <Lisa.Wilkins@nexteraenergy.com>
Subject: RE: Kama Cliffs - Back up documentation

[EXTERNAL]

Good evening Scott,

Please see the attached updated file with additional NB comments in response to your teams comments on 3-29-2022. This should be the last revisions required.

ROW Costs: $1,912,563.97

- Several flags with backup documentation not matching claim amount. [additional comments provided in document] **[VC to remove irrelevant invoices from backup document submission]**

- $890,356.98 in rig matt purchases??? [Valard constructed a temp road on the ROW from the Mazukama Falls Hiking Trail access road to the park boundary (approximately 80m). An additional 130m length double layer matted road for the remaining distance was required to access this site. Also, to reduce costs, a staging area was required between str B147/B146, which was matted for the helicopter landing and storage area, materials staging, and general working area. Due to the ground conditions being soft and full of debris, it was also double layered.] **[VC to further backup matting costs - scope or work is primary helicopter access. VC to provide some basic area calculations of fly yard / sketch of matting area to justify in the event of a 3rd party review]**
- $16,000 in consulting fees for a 1-day trip - mostly travel time from BC - ON. [additional comments provided in document] **[VC to provide additional backup (ex. pictures of the challenging terrain attached to invoice) to justify costs]**

Foundation Installation / Material: $1,678,282.46

- Foundation installation costs (CRUX) are well recorded and accurate.
- COVID costs included in the Crux invoice to be cross referenced against COVID-19 claim. [Yes, these costs have not been included in the Kama Cliffs component, but have been included in the COVID claim] **[Approved]**

Costs to justify / review: $568,708.98

- Please justify 37 submissions including excessive rig mat purchases, misc. tools and ppe, rigging, and costs unrelated to Kama Cliffs work. Majority of these are deemed capital costs. [additional comments provided in document. Upon the Kama Cliffs change, specific Project Accounting Codes were created for costs applicable to the Kama Cliffs work. The construction team was instructed that only costs directly attributable to this work were coded to Kama Cliffs Project Codes. In some cases, these costs include consumables (e.g., PPE, minor tools and tool rentals, supplies, etc.) that are typical for the execution of this type of work. VC included actual costs rather than applying a 'consumables factor'.] **[No issues with consumable cost justification]**

Additional Management & Planning: $817,468.00

- Cost does not match backup provided in "Planning & Management Backup" sheet (Kama Cliffs Heli Estimate v9) [Please reference the “Summary Tab” within the 2. Self-Perform Timesheets.xlsx document. The “Planning & Management Backup” sheet was a working document that does not provide the best context for the line item as it does not reflect all applicable items] **[Vc to review "Planning & Management Backup" & "Self-Perform Timesheet - Construction Labour" documents. Both backup documents reference daily timesheets in excess of 40 hours per day (up to 115 hours/day). Duplicate items are present across different documents resulting in a false total cost]**

- Lodging costs backup shows 4 decimal points on hotel costs - where are the receipts for these accommodations? [These accommodations are for salaried individuals staying at camp locations. Lodging reflects additional camp nights. The calculation is based on total additional days for these salaried employees using a standard camp rate of $210/night; there are no 3rd party receipts for this line item.] **[Please present costs in 2 decimal points]**

From: Merrifield, Scott <SMerrifield@valard.com>
Sent: Tuesday, March 29, 2022 7:31 PM
To: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Cc: Feniuk, Jessie <JFeniuk@valard.com>; Sousa, Steve <SSousa@QuantaServices.com>; Wilkins, Lisa <Lisa.Wilkins@nexteraenergy.com>
Subject: RE: Kama Cliffs - Back up documentation

Hi Jeff,

As discussed on the phone, we have uploaded a new file on the SharePoint site in response to your Kama Cliffs comments:

Kama Cliffs Cost Review - NB comments and VC responses.xlsx

We are also updating the backup invoices to highlight specific line items (where only parts of the invoice were charged back to Kama Cliffs) and removing unnecessary pages that do not apply to the line items (e.g., streamlining the Corbiere invoices).

We have also included the following responses to your comments included in your email (in red text):

ROW Costs: $1,912,563.97

- Several flags with backup documentation not matching claim amount. [additional comments provided in document]
- $890,356.98 in rig matt purchases??? [Valard constructed a temp road on the ROW from the Mazukama Falls Hiking Trail access road to the park boundary (approximately 80m). An additional 130m length double layer matted road for the remaining distance was required to access this site.

  Also, to reduce costs, a staging area was required between str B147/B146, which was matted for the helicopter landing and storage area, materials staging, and general working area. Due to the ground conditions being soft and full of debris, it was also double layered.]

- $16,000 in consulting fees for a 1 day trip - mostly travel time from BC - ON. [additional comments provided in document]

Foundation Installation / Material: $1,678,282.46

- Foundation installation costs (CRUX) are well recorded and accurate.
- COVID costs included in the Crux invoice to be cross referenced against COVID-19 claim. [Yes, these costs have not been included in the Kama Cliffs component, but have been included in the COVID claim]

Costs to justify / review: $568,708.98

- Please justify 37 submissions including excessive rig mat purchases, misc. tools and ppe, rigging, and costs unrelated to Kama Cliffs work. Majority of these are deemed capital costs. [additional comments

provided in document. Upon the Kama Cliffs change, specific Project Accounting Codes were created for costs applicable to the Kama Cliffs work. The construction team was instructed that only costs directly attributable to this work were coded to Kama Cliffs Project Codes. In some cases, these costs include consumables (e.g., PPE, minor tools and tool rentals, supplies, etc.) that are typical for the execution of this type of work. VC included actual costs rather than applying a 'consumables factor'.]

Additional Management & Planning: $817,468.00

- Cost does not match backup provided in "Planning & Management Backup" sheet (Kama Cliffs Heli Estimate v9) [Please reference the "Summary Tab" within the 2. Self-Perform Timesheets.xlsx document. The "Planning & Management Backup" sheet was a working document that does not provide the best context for the line item as it does not reflect all applicable items]
- Lodging costs backup shows 4 decimal points on hotel costs - where are the receipts for these accommodations? [These accommodations are for salaried individuals staying at camp locations. Lodging reflects additional camp nights. The calculation is based on total additional days for these salaried employees using a standard camp rate of $210/night; there are no 3rd party receipts for this line item.]

We can chat more tomorrow, but please let us know if there are any other concerns with this information.

Thanks,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Sousa, Steve <SSousa@QuantaServices.com>
Sent: Tuesday, March 29, 2022 10:46 AM
To: Feniuk, Jessie <JFeniuk@valard.com>; Shewfelt, Mike <MShewfelt@valard.com>; Merrifield, Scott <SMerrifield@valard.com>; O'Sullivan, Colum <cosullivan@valard.com>
Subject: FW: Kama Cliffs - Back up documentation

FYI – please see below.

Mike, can we get Jeff's points looked into.

Thanks

Steve

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Date: Tuesday, March 29, 2022 at 10:23 AM
To: Sousa, Steve <SSousa@QuantaServices.com>
Cc: Tidmarsh, Jennifer <Jennifer.Tidmarsh@nexteraenergy.com>, Tenan, David <David.Tenan@nexteraenergy.com>
Subject: RE: Kama Cliffs - Back up documentation

[EXTERNAL]

Steve,

I finished the Kama Cliffs review (Last night was the backup documentation review) and below is the remaining cost review. Overall the remaining documentation matched claim amounts on most big-ticket items. The Self-Perform timesheets for high-priced equipment (light duty and heavy lift helicopters) appears accurate and reasonable.

Attached is a copy of the Heli program 3rd party invoice summary with my comments added and also a copy of 3rd party invoice summary also with my comments added.

3rd Party / Contractor Costs Overview:

- **Helicopter Rental + Fuel:** $4,843,988.50
- Documentation from Wisk air was extremely well tracked and included structure specific notes - no issues with Wisk air costs or Air span costs. Fuel trailer rental and aircraft fuel is well tracked and accurate.
- Vortex helicopters documentation includes deficiency work and time at A086 - Valard to identify time spent in the Kama Cliffs.

- **ROW Costs:** $1,912,563.97
- Several flags with backup documentation not matching claim amount.
- $890,356.98 in rig matt purchases???
- $16,000 in consulting fees for a 1 day trip - mostly travel time from BC - ON.

- **Foundation Installation / Material:** $1,678,282.46
- Foundation installation costs (CRUX) are well recorded and accurate.
- COVID costs included in the Crux invoice to be cross referenced against COVID-19 claim.

- **Costs to justify / review:** $568,708.98
- Please justify 37 submissions including excessive rig mat purchases, misc. tools and ppe, rigging, and costs unrelated to Kama Cliffs work. Majority of these are deemed capital costs.

- **Additional Management & Planning:** $817,468.00
- Cost does not match backup provided in "Planning & Management Backup" sheet (Kama Cliffs Heli Estimate v9)
- Lodging costs backup shows 4 decimal points on hotel costs - where are the receipts for these accommodations?

Hope this helps your team this afternoon to clean things up and send back.

From: Damen, Jeff
Sent: Tuesday, March 29, 2022 8:57 AM
To: Sousa, Steve <SSousa@QuantaServices.com>
Cc: Tidmarsh, Jennifer <Jennifer.Tidmarsh@nexteraenergy.com>; Tenan, David <David.Tenan@nexteraenergy.com>
Subject: RE: Kama Cliffs - Back up documentation

Good morning Steve,

I am still pushing forward and reviewing all the other documentation to make sure our meetings next week are productive. If I see anything else major that needs to be cleaned up, I will let you know as it comes up.

We need to continue to work together to get this completed.

From: Sousa, Steve <SSousa@QuantaServices.com>
Sent: Monday, March 28, 2022 11:16 PM
To: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Cc: Tidmarsh, Jennifer <Jennifer.Tidmarsh@nexteraenergy.com>; Tenan, David <David.Tenan@nexteraenergy.com>
Subject: Re: Kama Cliffs - Back up documentation

Jeff

Apologies for this, I'm not going to provide you with an excuse. I know there's a lot of information to sift through and had specifically asked the team to audit and review the details before uploading them.

Please take a pause on further reviews until I go through this with the team tomorrow. I'm going to roll up my sleeves and get involved in the process to make sure this doesn't continue on.

I'll personally give you a call in the morning.

Again, my apologies and appreciate the patience as I work through this.

Regards

Steve

Get Outlook for iOS

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Monday, March 28, 2022 8:32 PM
To: Sousa, Steve <SSousa@QuantaServices.com>
Cc: Tidmarsh, Jennifer <Jennifer.Tidmarsh@nexteraenergy.com>; Tenan, David <David.Tenan@nexteraenergy.com>
Subject: Kama Cliffs - Back up documentation

[EXTERNAL]

Good evening Steve,

I wanted to send you a quick note as I spent the majority of my day sorting through the E. Corbiere & Sons Invoices provided by your team in the Kama Cliffs backup documentation folder. The folder included 9 invoices from Coribere that range from **200** pages to almost **600** pages long. I had to go through each invoice and read every single Field Ticket to find the "description of work performed" that even referenced Kama Cliffs or structures B149-B158. Once I finished going through the massive documents, I then only pulled out around **5-10** pages that referenced Kama Cliffs at all.

For Example: Invoice#052 is 586 pages for a total of $1,198,613.55 and Kama Cliffs was only referenced on 11 pages (Pgs. 69, 109, 148, 176, 238, 285, 347, 424, 476, 521, 535) totaling $157,507.50.

As you can imagine, this was incredibly time consuming and after all said and done, I could only find Kama Cliffs references on 4 of the 9 invoices that actually matched the cost claim.

I haven't reviewed the rest of the claim or subsequent folders yet, but it will help me tremendously if only documentation direct related to the claim at hand was included in the folders like we discussed. I had a good call with Scott today and we walked through the updated COVID claim and that looked very organized this time around.

I want to get through these claims and be ready to discuss in detail next week in Calgary, but you can certainly appreciate that me wasting my time like I did today doesn't help.

Again, just wanted to send this note to you directly and not your team so you understand what was submitted. I will let you know as I make progress through the rest of the backup this week.

Thanks
Jeff

Lowe, Amy

From: Merrifield, Scott
Sent: Monday, June 27, 2022 3:16 PM
To: Damen, Jeff
Cc: Feniuk, Jessie; Sousa, Steve
Subject: OEWT Change Orders / Claims
Attachments: Form of Scope Change Order - COVID-19 Direct Costs.doc; Form of Scope Change Order - COVID-19 Loss of Productivity.doc; Form of Scope Change Order - Kama Cliffs.doc; Form of Scope Change Order - Forest Fire Order.doc; Form of Scope Change Order - Whitelake Narrows.doc

Hey Jeff,

Thanks for all the help you have been providing to move these claims forward.

It sounds like both NextBridge and Valard received a similar message to start by getting sign-off and payment on an initial 157MM. It seems that both sides can agree the cleanest categories are COVID-19 direct costs, COVID-19 loss of productivity, Kama Cliffs, Whitelake Narrows and Forest Fires. We certainly want to do whatever we can to get these progressed to payment as soon as possible.

We have provided responses to your "OEWTL Claim – Next Steps Missing Documentation – 6-22-22" which are available on SharePoint here:
OEWTL Claim - Next Steps Missing Documentation - 6-22-22 (RESPONSE).docx
Several supporting documents have also been added and are referenced in the .doc document with links to the locations on SharePoint. Please indicate if you have any difficulties accessing the links.

While we acknowledge that you may be continuing your review, we have attached draft CRs relating to Kama Cliffs, COVID-19, and Whitelake Narrows, so that we can proceed with the formal process once NextBridge's due diligence is complete.

The majority of your questions were related to the Forest Fires claim and we want to ensure we answer the same to your satisfaction before finalizing a supplemental CR. We were directed that the next categories which should be looked at are ROW costs and structure inefficiency. In terms of next steps, Valard sees the following:

1) Focus attention on attempting to finalize COVID-19, Kama Cliffs and Whitelake narrows CRs.
2) Finalize Forest Fire CR and final cost
    a. NextBridge to confirm if the answers provided by Valard alleviates concerns.
    b. Valard to finalize forest fire CR for NextBridge review.
3) Valard to provide a resubmitted ROW claim – including answering all questions from NextBridge.
    a. Discussion on ROW.

Please let us know if it is beneficial to take another quick walkthrough of the responses or if you have any other immediate questions.

Thanks,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
4209 99th Street NW | Edmonton, Alberta T6E 5V7 | www.valard.com
Main: 780.436.9876 ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com

Quanta Services, Inc. (NYSE: PWR) | www.quantaservices.com

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

SCOPE CHANGE ORDER NO. _____

Contractor:	**Title:**	**Date:**
CONTRACT CHANGE: (Detail)		**Amount (Circle Credits)**

This Scope Change Order No. [___], effective February ___, 2022, is issued to amend the Engineering, Procurement and Construction Agreement for 230 kV transmission facilities to be located in the Province of Ontario (the "Project") between NextBridge Infrastructure LP ("Owner") and Valard Construction LP ("Contractor") dated December 5, 2021 (the "Agreement") as specified below. The initial capitalized terms used herein, unless otherwise defined in this Scope Change Order, shall have the meanings ascribed to them in the Agreement.

At the beginning of 2020 the world began to experience problems associated with the COVID-19 virus. As concerns grew over the rapid spread of this contagious and dangerous disease, the World Health Organization declared the COVID-19 virus a pandemic on March 11, 2020. On March 12, 2020, Valard provided notice to NextBridge that the pandemic was going to severely impact the ability to complete the Project.

The remainder of the Project has been completed in an unpredictable environment. Municipalities have been declaring a state of emergency. Government agencies were providing ongoing instructions and directions designed to protect the workforce by curbing the spread of COVID-19. Specific to Ontario, a state of emergency was declared under the *Emergency Management and Civil Protection Act*, which resulted in widespread restrictions on businesses and construction activities.

In order to continue construction in a timely manner and comply with new governmental direction, Valard had to incur direct expenses as well as increased costs associated with mitigation efforts. These costs were crucial to allow the Project to proceed in a manner that protected workers and members of the public living in nearby remote communities.

The total costs resulting from the pandemic and associated governmental instructions and guidelines requires a complex and detailed analysis. While portions of the COVID-19 Costs will be addressed in further Change Orders, the Owner and Contractor agree to provide the Contractor with a lump sum payment of **$21,586,103** in relation to the following specific costs ("***COVID-19 Direct Costs***") for this Project. Backup has been provided by Valard and reviewed by the NextBridge team, and is summarized in the excel document included as Appendix A.

Safety Costs

To proceed with construction during the pandemic and follow all government directions as well as the agreed COVID-19 procedures implemented by the Owner and Contractor, Valard created new financial cost codes for the Project team to account for tasks related solely to COVID procedures.

One such cost code tracked additional manhours spent on safety, such as managing and executing COVID-19 screenings and inspections. The labour hours for increased safety personnel have been fully quantified by Valard.

Safety supplies were required for Valard's team. Compensation is being requested for this, and is outlined in detail in Appendix A.

As Nextbridge is aware, it was determined to be beneficial to the Project to purchase testing and training equipment. The benefit of having this equipment and potentially preventing an outbreak is unmeasurable.

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

The cost of this as outlined on Appendix A.

Additional testing costs were incurred to complete on site COVID-19 Testing and Vaccinations in accordance with the agreed Project Coronavirus Management Plan / Pandemic Protocol. The full quantification of these costs is included in Appendix A.

Specific governmental guidelines were put into place in regard to social distancing. This included restrictions when travelling in vehicles, and as such, Valard required additional vehicles which were provided for the Project. This cost is quantified and outlined on Appendix A.

Subcontractor Costs

Subcontractors were willing to proceed with work in accordance with the new site COVID-19 procedures and new governmental regulation, however, had their own costs. Subcontractor costs are outlined in Appendix A.

Security and Camp Operations

Key to proceeding with work during the pandemic was restriction of site access. To do this properly, the Project site needed to be secure, sanitary and self-sufficient. There are additional costs with security, cleaning costs and catering outlined below and further detained in Appendix A.

Quarantine / Self-Isolation

Canadian, provincial and municipal governments all created regulation surrounding the pandemic. The same included mandatory self-isolation periods. In order to ensure compliance with government instruction, and consistent with our organizations' emphasis on safety, Valard strictly enforced quarantine of its workers. During quarantine, workers were paid LOA. Furthermore, while an employee was in isolation, his or her equipment (primarily work vehicle) was unable to be utilized. These costs are quantified in Appendix A.

Travel Costs

The pandemic has had a drastic impact on the commercial flight market. Valard leadership directed to our travel team to take all efforts available to secure favorable prices, however, there nonetheless was a drastic increase in flight costs incurred for the Project during the pandemic. Valard has calculated the loss due to the increased costing of travel during the pandemic.

Contract Start Date:	_____	**Total Authorized Amount This Scope Change Order (CAD)**	
Contract Completion Date:	_____		

Schedule of Prices:

WORK/SERVICE START DATE:	**WORK/SERVICE END DATE**:

COST HISTORY	**Primary Cause of Change (Check One)**	**SCHEDULE**

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

Original Contract Price (CAD) $ _____
Total Previous Changes Auth. (CAD) _____
This Change (Net Amount) (CAD) _____
[X] **Firm** [ ] **Estimate**
Total Contract Price (CAD) $ _____
(Including this change)

Could this Scope Change Order Impact Other Contracts?
[ ] **Yes** [ ] **No**

[ ] **Variance from Quantity Estimate**
[X] **Regulatory Requirements**
[ ] **Construction Changes**
[ ] **Engineering Changes**
[ ] **Other Department Requests**
[ ] **Vendor Caused (Identify Back Charges)**
[ ] **Constructability**
[ ] **Other (Specify)** _____

[ ] **Change Does Not Affect Guaranteed Substantial Completion Date**

[ ] **Change Does Affect Guaranteed Substantial Completion Date**

COVID Direct Costs
COVID Travel Costs
COVID Subcontractor Claims

Accepted by Contractor: [INSERT CONTRACTOR LEGAL NAME]		**Owner Authorization:** [_____]	
Signature:	_____	**Signature:**	_____
Name (Print)	_____	**Name (Print)**	_____
Title (Print)	_____	**Title (Print)**	_____
Date:	_____	**Date:**	_____

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

SCOPE CHANGE ORDER NO. _____

Contractor:	**Title:**	**Date:**

CONTRACT CHANGE: (Detail)	**Amount (Circle Credits)**
This Scope Change Order No. [___], effective January ___, 2022, is issued to amend the Engineering, Procurement and Construction Agreement for 230 kV transmission facilities to be located in the Province of Ontario (the "Project") between NextBridge Infrastructure LP ("Owner") and Valard Construction LP ("Contractor") dated December 5, 2021 (the "Agreement") as specified below. The initial capitalized terms used herein, unless otherwise defined in this Scope Change Order, shall have the meanings ascribed to them in the Agreement. At the beginning of 2020 the world began to experience problems associated with the COVID-19 virus. As concerns grew over the rapid spread of this contagious and dangerous disease, the World Health Organization declared the COVID-19 virus a pandemic on March 11, 2020. On March 12, 2020, Valard provided notice to NextBridge that the pandemic was going to severely impact the ability to complete the Project. The remainder of the Project has been completed in an unpredictable environment. Municipalities have been declaring a state of emergency. Government agencies were providing ongoing instructions and directions designed to protect the workforce by curbing the spread of COVID-19. Specific to Ontario, a state of emergency was declared under the *Emergency Management and Civil Protection Act*, which resulted in working inefficiencies for the Contractor. The Owner and the Contractor agree that Valard is to be provided with compensation for loss of productivity for all Valard self-performed work after March 1, 2020. Compensation will be quantified by applying a 24.7% loss of efficiency factor (the "***Loss of Productivity Percentage***"). It does not address any loss of inefficiency resulting from non-linear sequencing of work, or necessary modifications to the Project schedule. This amounts to a total increase in the Contract Price of **$89,014,103**. Backup for this quantification is provided in the attached Schedule 1.	

Contract Start Date: _____ **Contract Completion Date**: _____	**Total Authorized Amount This Scope Change Order (CAD)**	

Schedule of Prices:

WORK/SERVICE START DATE: _____ **WORK/SERVICE END DATE**: _____

The Change Order provides a payment towards the costs associated with COVID-19. For greater certainty, the Contractor maintains the right to claim further costs incurred or schedule relief required as a result of the pandemic and the associated governmental and Owner direction that followed.

COST HISTORY

Original Contract Price (CAD) $ _____
Total Previous Changes Auth. (CAD) _____
This Change (Net Amount) (CAD) _____
[ ] **Firm** [ ] **Estimate**
Total Contract Price (CAD) $ _____
(Including this change)

Could this Scope Change Order Impact Other Contracts?
[ ] **Yes** [ ] **No**

Primary Cause of Change (Check One)

[ ] **Variance from Quantity Estimate**
[X] **Regulatory Requirements**
[ ] **Construction Changes**
[ ] **Engineering Changes**
[ ] **Other Department Requests**
[ ] **Vendor Caused (Identify Back Charges)**
[ ] **Constructability**
[ ] **Other (Specify)** _____

SCHEDULE

[ ] **Change Does Not Affect Guaranteed Substantial Completion Date**

[ ] **Change Does Affect Guaranteed Substantial Completion Date**

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

Accepted by Contractor: **[INSERT CONTRACTOR LEGAL NAME]**	**Owner Authorization:** **[_____]**
Signature: _____	**Signature:** _____
Name (Print) _____	**Name (Print)** _____
Title (Print) _____	**Title (Print)** _____
Date: _____	**Date:** _____

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

SCOPE CHANGE ORDER NO. _____

Contractor:	**Title:**	**Date:**

CONTRACT CHANGE: (Detail)	**Amount (Circle Credits)**
This Scope Change Order No. [___], effective September 20, 2021, is issued to amend the Engineering, Procurement and Construction Agreement for 230 kV transmission facilities to be located in the Province of Ontario (the "Project") between NextBridge Infrastructure LP ("Owner") and Valard Construction LP ("Contractor") dated December 5, 2021 (the "Agreement") as specified below. The initial capitalized terms used herein, unless otherwise defined in this Scope Change Order, shall have the meanings ascribed to them in the Agreement. Effective July 19, 2021 newly imposed restrictions applicable to the Project were mandated by the Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry (MNRF) due to forest fires in the Project area. On July 22, 2021, Valard provided notice that the forest fires were considered a Force Majeure Event, and the Project would be subject to the governmental direction and restrictions of the MNRF, as more fully outlined under Emergency Area Order 2021-13 (EAO-13). This resulted in the Contractor resequencing construction activities, unanticipated mobilization of resources and equipment, procurement of fire caches, construction of all-season access roads in the west section, additional supervision, increased camp and personnel days, standby time and construction inefficiencies associated (collectively, the "Forest Fire Costs"). The Forest Fire Costs are outlined in detail in Appendix A. The Owner and the Contractor executed a Change Order identifying that the value of the Forest Fire Costs was estimated at $20,526,459 (the "Initial Estimate"). Valard was provided with payment in the amount of the Initial Estimate, and the Owner and the Contractor agreed that a contract reconciliation could be performed to provide the Contractor with compensation for any deviation between the Initial Estimate and the final assessment of the Forest Fire Costs. The Contractor and the Owner agree that the total impact to the Project resulting from the Ontario forest fires and the associated MNRF restrictions amounts to $_____. This Change Order is executed to provide payment representing the difference between the Initial Estimate and the final assessment of the Forest Fire Costs, amounting to $_____.	

Contract Start Date:	_____	**Total Authorized Amount This Scope Change Order (CAD)**	
Contract Completion Date:	_____		

Schedule of Prices:

WORK/SERVICE START DATE:	**WORK/SERVICE END DATE**:

The Change Order provides a payment towards Forest Fire Costs, the final value of which will be assessed and agreed between the parties. For greater certainty, the Contractor maintains the right to claim further costs incurred or schedule relief required as a result of the experienced forest fires and resulting MNRF Order.

COST HISTORY	**Primary Cause of Change (Check One)**	**SCHEDULE**

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

Original Contract Price (CAD)	**$**		**Variance from Quantity Estimate**	☐ **Change Does Not Affect Guaranteed Substantial Completion Date**
Total Previous Changes Auth. (CAD)		X	**Regulatory Requirements**	
This Change (Net Amount) (CAD)			**Construction Changes**	
☐ **Firm** ☐ **Estimate**			**Engineering Changes**	
Total Contract Price (CAD) (Including this change)	**$**		**Other Department Requests**	☐ **Change Does Affect Guaranteed Substantial Completion Date**
			Vendor Caused (Identify Back Charges)	
Could this Scope Change Order Impact Other Contracts?			**Constructability**	
☐ **Yes** ☐ **No**			**Other (Specify)** _____	

Accepted by Contractor:
[INSERT CONTRACTOR LEGAL NAME]

Signature: _____
Name (Print) _____
Title (Print) _____
Date: _____

Owner Authorization:
[_____]

Signature: _____
Name (Print) _____
Title (Print) _____
Date: _____

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

SCOPE CHANGE ORDER NO. _____

Contractor:	**Title:**	**Date:**

CONTRACT CHANGE: (Detail)	**Amount (Circle Credits)**
This Scope Change Order No. [___], effective February 10, 2022, is issued to amend the Engineering, Procurement and Construction Agreement for 230 kV transmission facilities to be located in the Province of Ontario (the "Project") between NextBridge Infrastructure LP ("Owner") and Valard Construction LP ("Contractor") dated December 5, 2021 (the "Agreement") as specified below. The initial capitalized terms used herein, unless otherwise defined in this Scope Change Order, shall have the meanings ascribed to them in the Agreement. The Agreement identified that the Contractor was to have conventional access to the tower sites (B149 to B158) located in the area known as the Kama Cliffs. The Owner and Contractor jointly sought permission from the Ministry of the Environment, Conservation and Parks ("MECP") to allow conventional access in accordance with the initial Project design documents. The MECP issued a letter dated July 27, 2020 refusing to provide approval for conventional access to the Kama Cliffs, necessitating changes to the Project, procurement and construction work, inclusive of a newly required helicopter program (the "Kama Cliffs Changed Work"). The Owner and the Contractor executed a Change Order identifying that the value of the Kama Cliffs Changed Work was estimated at $9,091,760 (the "Initial Estimate"). Valard was provided with payment in the amount of the Initial Estimate, and the Owner and the Contractor agreed that a contract reconciliation could be performed to provide the Contractor with compensation for any deviation between the Initial Estimate and actual costs incurred in performing the Kama Cliffs Changed Work. The forecasts used to create the Initial Estimate underrepresented of the actual labor and costs required to perform the Kama Cliffs Changed Work. The total increased cost of the Kama Cliffs Changed Work amounted to $12,069,736, a summary of which is provided in ***Appendix A***. This Change Order is executed to provide payment representing the difference between the Initial Estimate and the Kama Cliffs Changed Work costs incurred as of February 1, 2022 in the amount of **$2,977,976**.	

Contract Start Date: _____ **Contract Completion Date**: _____	**Total Authorized Amount This Scope Change Order (CAD)**	

Schedule of Prices:

WORK/SERVICE START DATE: _____ **WORK/SERVICE END DATE**: _____

COST HISTORY

Original Contract Price (CAD) $ _____
Total Previous Changes Auth. (CAD) _____
This Change (Net Amount) (CAD) _____
[ ] **Firm** [ ] **Estimate**
Total Contract Price (CAD) $ _____
(Including this change)

Could this Scope Change Order Impact Other Contracts?
[ ] **Yes** [ ] **No**

Primary Cause of Change (Check One)

[ ] **Variance from Quantity Estimate**
[X] **Regulatory Requirements**
[ ] **Construction Changes**
[ ] **Engineering Changes**
[ ] **Other Department Requests**
[ ] **Vendor Caused (Identify Back Charges)**
[ ] **Constructability**
[ ] **Other (Specify)** _____

SCHEDULE

[ ] **Change Does Not Affect Guaranteed Substantial Completion Date**

[ ] **Change Does Affect Guaranteed Substantial Completion Date**

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

Accepted by Contractor: **[INSERT CONTRACTOR LEGAL NAME]**		**Owner Authorization:** **[_____]**	
Signature:		**Signature:**	
Name (Print)		**Name (Print)**	
Title (Print)		**Title (Print)**	
Date:		**Date:**	

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

SCOPE CHANGE ORDER NO. _____

Contractor:	**Title:**	**Date:**

CONTRACT CHANGE: (Detail)	**Amount (Circle Credits)**
This Scope Change Order No. [___], effective December 17, 2021, is issued to amend the Engineering, Procurement and Construction Agreement for 230 kV transmission facilities to be located in the Province of Ontario (the "Project") between NextBridge Infrastructure LP ("Owner") and Valard Construction LP ("Contractor") as specified below. The initial capitalized terms used herein, unless otherwise defined in this Scope Change Order, shall have the meanings ascribed to them in the Agreement. On July 31, 2020, Valard was informed that the Owner made changes to the Project routing at White Lake Narrows ("WLN") as a result of Owner negotiations with the Pic Mobert First Nation ("PMFN") for this location that passes through their traditional territory. The WLN is a section of the Project site located at or near the Pic Mobert First Nation Reserve. On October 22, 2020, Valard was informed that construction was to proceed by completing construction activities during the winter construction season only, under supervision of the Owner's 3rd party archeologist and PMFN representative. Proceeding on this basis included/required the following changes to the work (the "WLN Changed Work"): • Deletion of str. E003 • Re-routing of str. D148, E001, E002, E004 & E005 • Tower type changes of str. E002 & E004 to SSW type (on December 11, 2020) • Foundation type changes as a result of tower type changes • Owner-supervised, winter-only construction upon approval from the PMFN • Changes to construction methodology due to items listed above • Multiple remobilizations due to seasonality constraints and requirement for PMFN approval prior to commencement of construction activities The Owner and the Contractor agree that the total cost of the performing the WLN Changed Work amounts to $3,961,420. Additional details are provided on Appendix A.	

Contract Start Date: _____	**Total Authorized Amount This Scope Change Order (CAD)**	
Contract Completion Date: _____		

Schedule of Prices:

WORK/SERVICE START DATE: **WORK/SERVICE END DATE**:

The Change Order provides a payment covering design change, construction methodology change, and construction delay resulting from Owner negotiations with the Pic Mobert First Nation on the topic of line design and construction seasonality at the White Lake Narrows (structures D148 to E005).

COST HISTORY

Original Contract Price (CAD) [redacted]
Total Previous Changes Auth. (CAD) _____
This Change (Net Amount) (CAD) _____
☐ **Firm** ☐ **Estimate**
Total Contract Price (CAD) [redacted]
(Including this change)

Could this Scope Change Order Impact Other Contracts?
☐ **Yes** ☐ **No**

Primary Cause of Change (Check One)

☐ **Variance from Quantity Estimate**
☐ **Regulatory Requirements**
☐ **Construction Changes**
☐ **Engineering Changes**
☐ **Other Department Requests**
☐ **Vendor Caused (Identify Back Charges)**
☐ **Constructability**
☐ **Other (Specify)** _____

SCHEDULE

☐ **Change Does Not Affect Guaranteed Substantial Completion Date**

☐ **Change Does Affect Guaranteed Substantial Completion Date**

EXHIBIT V-1
FORM OF SCOPE CHANGE ORDER

Accepted by Contractor: **[INSERT CONTRACTOR LEGAL NAME]**		**Owner Authorization:** **[_____]**	
Signature:		**Signature:**	
Name (Print)		**Name (Print)**	
Title (Print)		**Title (Print)**	
Date:		**Date:**	

Lowe, Amy

From: Merrifield, Scott
Sent: Friday, May 6, 2022 11:18 AM
To: Damen, Jeff
Cc: Sousa, Steve; Feniuk, Jessie
Subject: RE: Valard - Right of Way Changes Claim Review#1

Hi Jeff,

We have uploaded a new version of the excel document on SharePoint including changes as noted below in red text (OEWTL - ROW Changes V2.xlsx).
We trust that the additional context in response to your questions/comments included below in red text will aid in your review. Please reach out if you have any questions or would like our team to walk through any of the items in detail.

Thank you,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
4209 99th Street NW | Edmonton, Alberta T6E 5V7 | www.valard.com
Main: 780.436.9876 ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com
Valard | Connecting People. Powering Communities.
Quanta Services, Inc. (NYSE: PWR) | www.quantaservices.com

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Wednesday, May 4, 2022 9:10 AM
To: Merrifield, Scott <SMerrifield@valard.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Feniuk, Jessie <JFeniuk@valard.com>
Subject: Valard - Right of Way Changes Claim Review#1

[EXTERNAL]
Good morning Scott,

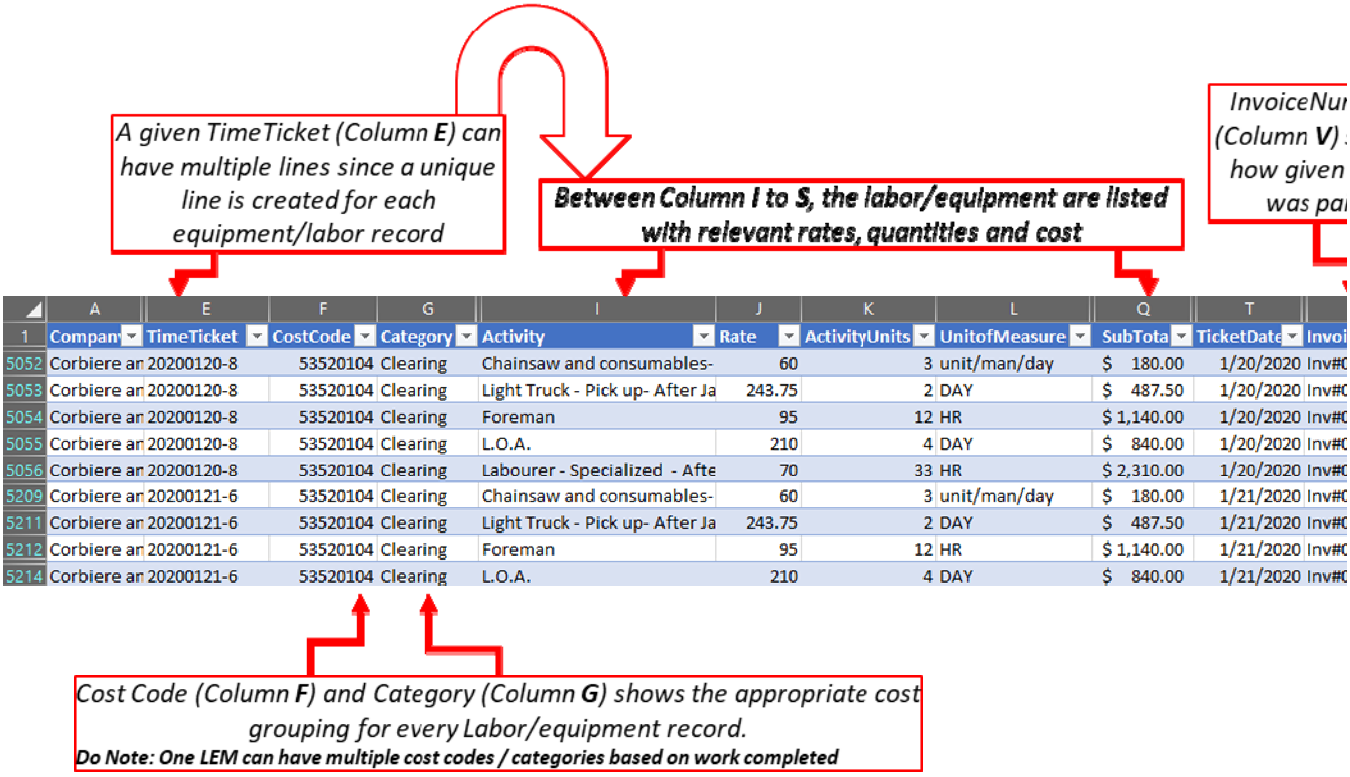
Please see below my comments in relation to Valard's "ROW Changes" Claim ($21,900,470). From the initial review, there is no detailed backup to support nearly all of the subcontractor costs. Narratives and calculations on additional access construction do not align with Valard's client submission production tracker.

- Export tab includes Corbiere time related to the Kama Cliffs. This has already been included in the Kama Cliffs change order - please remove and review the included backup.

  While there were Kama Cliffs LEMs included with the export please note they were not being charged in this claim with one exception. LEM 20200817-09 was identified as being part of the Kama Cliffs Claim and was charged ($12,658). This has now been removed as we agree it was improperly charged. All other LEMs relating to Kama Cliffs (which were not charged) have now been removed for clarity and to avoid any confusion.

- All invoices and backup submitted are not specific enough - They do not identify work locations, tasks performed, or any mention of out of scope activities. Please review all backup documents and ensure that these items are included. –

We can upload copies of the PDF copies of these LEMs if requested, however this will be a very onerous task. It should be noted that the pivot tables are linked to LEM exports which did include work locations and task performed. For example, please see a screenshot of the below.



	A	E	F	G	I	J	K	L	Q	T	
1	Compan	TimeTicket	CostCode	Category	Activity	Rate	ActivityUnits	UnitofMeasure	SubTota	TicketDate	Invoi
5052	Corbiere an	20200120-8	53520104	Clearing	Chainsaw and consumables-	60	3	unit/man/day	$ 180.00	1/20/2020	Inv#0
5053	Corbiere an	20200120-8	53520104	Clearing	Light Truck - Pick up- After Ja	243.75	2	DAY	$ 487.50	1/20/2020	Inv#0
5054	Corbiere an	20200120-8	53520104	Clearing	Foreman	95	12	HR	$ 1,140.00	1/20/2020	Inv#0
5055	Corbiere an	20200120-8	53520104	Clearing	L.O.A.	210	4	DAY	$ 840.00	1/20/2020	Inv#0
5056	Corbiere an	20200120-8	53520104	Clearing	Labourer - Specialized - Afte	70	33	HR	$ 2,310.00	1/20/2020	Inv#0
5209	Corbiere an	20200121-6	53520104	Clearing	Chainsaw and consumables-	60	3	unit/man/day	$ 180.00	1/21/2020	Inv#0
5211	Corbiere an	20200121-6	53520104	Clearing	Light Truck - Pick up- After Ja	243.75	2	DAY	$ 487.50	1/21/2020	Inv#0
5212	Corbiere an	20200121-6	53520104	Clearing	Foreman	95	12	HR	$ 1,140.00	1/21/2020	Inv#0
5214	Corbiere an	20200121-6	53520104	Clearing	L.O.A.	210	4	DAY	$ 840.00	1/21/2020	Inv#0

We are attempting to make this as easy as possible for a third party to follow. If what we have provided still does not address your concern, please reach out and we can talk through other ways to present this information.

- Export backup tab includes COVID-19 which has already been claimed on previous deviations.

Valard did not add any COVID cost as it was filtered out using PIVOT tables; no double charging occurred. However, for the sake of clarity we have remove these items to prevent any confusion (as it does not effect the amount being claimed).

Conversion of Winter Access Roads to All-Season Access Roads (WF5,10,11): $6,116,915

VC claims the initial delay period caused some access roads that were anticipated to be constructed as winter access to be converted to all-season. This is true for WF5, but is inaccurate for WF10 and WF11.

- WF5: TILOS reflects that only winter access and construction were anticipated - no issues with WF5.
- WF10: TILOS reflects that while Clearing, Foundation, Assembly, and Erection work were anticipated to be completed in winter, Stringing and Reclamation activities are scheduled during the summer and fall of 2021.

It appears that NextBridge is using the wrong TILOS. The last agreed upon schedule was Change Order 1 (Base TILOS.pdf). We trust this will address many of NextBridge's concerns and questions relating to the planned work.

However, even with using the TILOS Change Order 1 schedule, we do acknowledge that there was some stringing work indicated to be performed outside of winter months. That being said, performing stringing work does not require the same level of access as performing other construction tasks (foundations and structure work). Access is only required to pull sites or tension sites with our stringing methodology. Meaning only a portion of the access needs to be established so long as all predecessor work is completed.

If it was the case that stringing work required full access, it would look poorly on both Valard and NextBridge to ever agree to a plan where we perform all predecessor work in winter, and then decide to do all-season roads right at the end of the job. While the initial plan would not have required full creation of all-season roads to perform stringing, some portion of these roads would still be required to be all-season. To your point, we do think that a credit should be calculated for the portion of the roads in WF10 that would have had to been established to be all-season regardless of any initial delays. Our team is currently calculating this and will incorporate this credit once you confirm agreement.

- WF11: TILOS reflects that while Clearing was anticipated to be completed in the winter months, there are Foundation, Assembly, Erection, Stringing and Reclamation activities scheduled during the fall of 2020, as well as the summer and fall of 2021.

  As a clarification point, Valard's claim was based only on the portion of WF11 containing structures F117-F159 – this area did not have foundation, assembly or erection work being performed in non-winter months. There was stringing work being performed outside of the winter month.

  Similar to the above answer, stringing does not always require full access. However, we acknowledge that a fair resolution would involve a credit being provided with an aim at providing a calculation for the all-season access that would be required solely for stringing in structures F117-F159 compared to the actual expense of having to do full all-season access to support all work scopes.

It is unreasonable to assume that construction activities in WF10 and WF11 could have ever proceeded with winter access only, as it is impossible to maintain winter roads and snow fills during the summer. Every activity including stringing requires the use of access roads (puller, tension, OPGW sites - see Paint Lake 2 sketch). Please revise this narrative and remove irrelevant work fronts before NB can continue review.

Double Construction of Access Roads (WF1,2,5,7,8,9): $849,989

It is important to understand the limitations of the production tracker. Valard was providing information to the production tracker in batches (not real-time), meaning it would not show an accurate representation as to when work was actually completed. Therefore, the production tracker is not accurate. Work outpaced reporting, meaning the production tracker usually revealed less production and inaccurate dates. This is because it was updated in batches. For instance, the team would periodically collect Right of Way data and submit it all at once. In addition, we would often submit areas as a group. As an example, this is best demonstrated by the following inaccuracies which is indicated in the Production tracker:

- The production tracker shows clearing taking place during the timespan May.15 to Aug.31, outside the known clearing period.

Recognizing that the production tracker was not appropriate to capture when work was completed, Valard relied on subcontractor invoices. These were cross referenced against Field Data Manager (FDM) system (an internal GIS tool) to provide more accurate data.

VC claims that the initial delay period caused some all season access roads in WF1,2,5,7,8,and 9 to be constructed as winter access, then again as all season access, causing an increase in cost and resulting in inefficiencies. A review of Valard's "Production Tracker (Client Submission)" reveals that only the following accesses were constructed in the winter months of 2019, and early winter months (Jan-March) of 2020;

Nov / Dec 2019 access date
A003-A035
A040-A061
A098-A114
B001-B013

Jan / Feb / March 2020
A036-A039
A062-A097
A128-A130
A135
B045-B073
B165-B167
E045-E048
E068-E069
E082
E150

It is apparent that winter access was constructed to 119 structures in WF1, 27 structures in WF2, 3 structures in WF3, 6 structures in WF8, and only 1 single structure in WF9.

This reveals some major discrepancies between the included narratives and backup when compared to the access that Valard actually built during this time period.

See attached tracker for reference.

Water Crossings (WF5,10): $767,705

VC is claiming a cost increase to install all season water crossings (bridges, culverts) when compared to the planned winter access crossings (snow fills).

- All season water crossing installation in WF5 is reasonable due to access plan change and aligns with TILOS.
- Please remove WF10 from all water crossing calculations. Stringing was originally planned to take place in Summer and Fall of 2021. See above comments - all season access would have been required (reference Paint Lake 2 sketch)

Our comments on WF10 are outlined above and trust this clarifies this issue. As outlined above, while it would be inconsistent with the TILOS and the construction plan to eliminate the entirety of WF10 due to just stringing work being planned, there should be an applied credit. This will be calculated by our team upon agreement.

Triple Access in WF6 (WF6, beginning of 7): $1,289,774

VC claims that the original plan would have allowed all civil, foundations, and structure work to be completed in 1 winter season in WF6. VC also claims that a combination of the initial delay period and seasonal access restrictions resulted in VC having to return to WF6 for 3 winter seasons. It should be noted that Valard had the entire 2020/2021 winter season

to complete work in WF6 without any obstructions, and even brought in additional resources from WATAY in an attempt to meet baseline figures.

The following item should be emphasized: Even with bringing in additional resources from Watay, Valard still required an additional season. Respectfully, Valard highlights that taking resources from Watay to meet the target date stressed by NextBridge significantly hindered our relationship with that client and is directly harming our ability to seek delay claims on that Project. Our team takes significant issue with the reference to taking resources from Watay as an indication that the claim should be disallowed, as it is in our mind an extreme example of the acceleration efforts that were necessary to overcome the delay experienced. This was done because NextBridge indicated that appropriate compensation for claims would be related to meeting the stressed completion date.

VC failed to meet their baseline projections for work across the board in WF6 year after year, and was well aware of the seasonal restrictions prior to the start of construction as outlined in the contract TILOS. NB rejects the narrative that these factors resulted in Valard having to construct access in WF6 for 3 seasons instead of 1. Additional seasonal access construction was self-inflicted by failing to complete these structures as per Valard's own baseline schedule. VC implemented and provided a weekly "Caribou Zone Recovery Schedule" at the request of NB and we do not believe the “entire” cost of the additional access seasons should fall on NextBridge.

While we recognize merit to previous points raised, our team is in strong disagreement with this statement. We have now provided multiple narratives regarding why the delay occurred. It also needs to be highlighted that the initial delays caused delays in every workfront. We were attempting to catch-up on the whole construction program and narrowing in one workfront indicating “Valard could have got this done” (with no rationale behind that statement) is problematic for our team.

Contrary to most of our responses, we are far more assertive in our disagreement on this issue. This is because again, Valard was asked to overcome significant delays (100s of pages of analysis to that effect), and did go as far to take resources off Watay to meet the stressed completion date.

Time and Material instead of Unit Rates (WF1): $3,929,355

VC claims that Corbiere was unwilling to proceed on the pre-negotiated unit rates due to permitting in WF1 being released in a piecemeal manner. Forced account rates were implemented so work could continue.

- Please justify a nearly $4 Million dollar increase in Valard’s planned analysis vs actual costs. While it is understandable that some additional mobilization costs may have been incurred due to permitting, this is not a reasonable figure and strays quite far from the planned analysis.

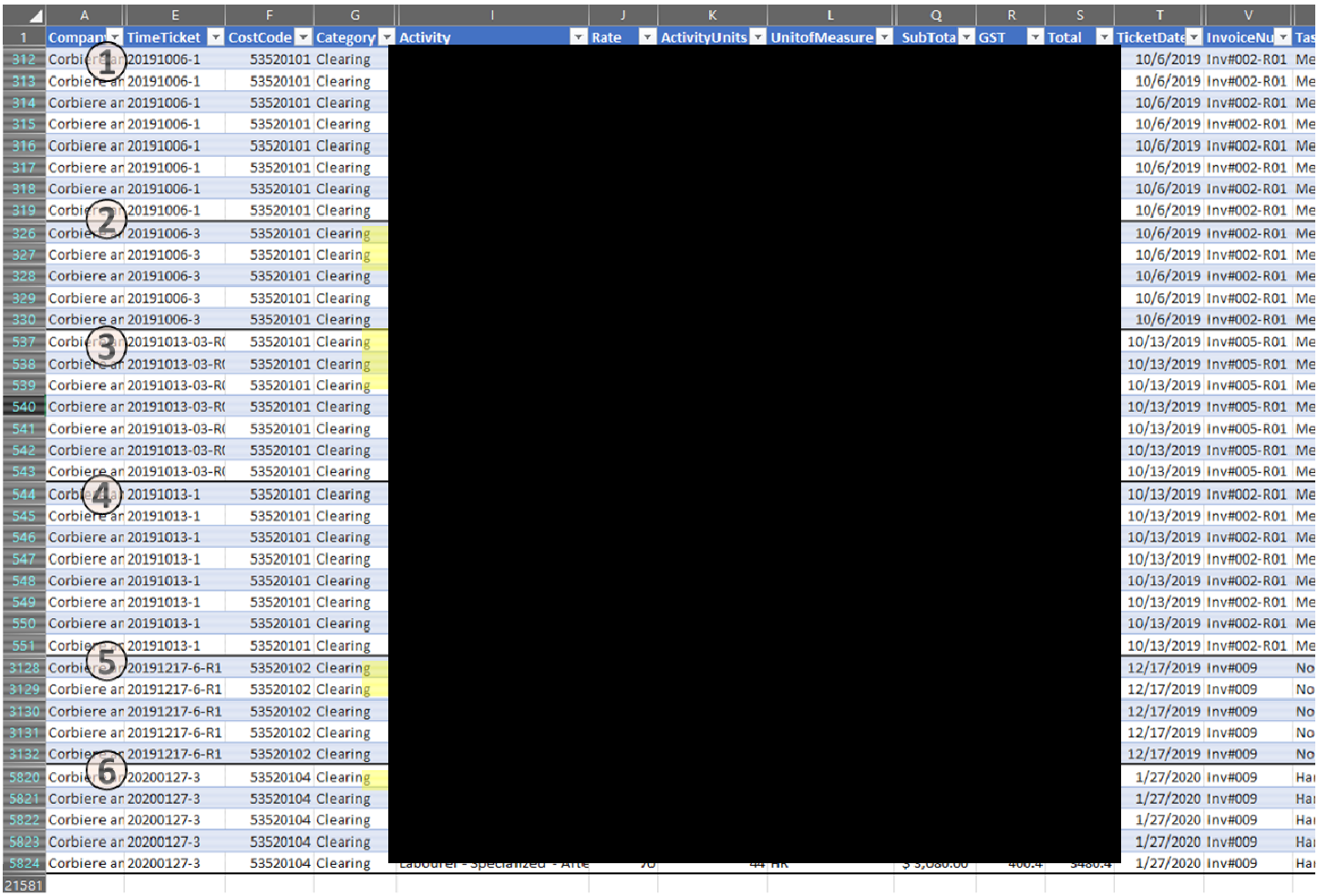
Can you clarify this comment? This was performed as a simple calculation. LEMs were provided and paid demonstrating our actual costs. The costs of the plan (unit rates) are straightforward to calculate. This was raised at the start of the Project, and also outlined in detail in every claim presentation provided by Valard from the initial powerpoints to the lengthy claim document last year, and it is the first occasion we have heard it not being agreeable.

The previously provided report indicated that without starting work in any fashion, there could have been over a year delay on this Project. We took acceleration measures which did save delay and some delay costs, however, not providing full compensation for those costs does not seem reasonable to our team.

- Backup does not detail work locations or activities performed and is not specific enough to conduct a proper review.

The majority of LEMs have work locations and activities (see screenshot below). There are only 6 LEMs without descriptions, however, these LEMs were coded specifically to this this scope and location. Expanding on this point, WF1 cost was filtered using unique cost codes associated with various type of clearing methodologies. Here, the allocation of

cost codes to LEMs was based on work completed and field feedback for the given day. Finally, based on the equipment included in the LEMs it is clear that the work scope is related to clearing. The breakdown of costs relating to these 6 LEMs is outlined below:



	A	E	F	G	I	J	K	L	Q	R	S	T	V
1	Compan	TimeTicket	CostCode	Category	Activity	Rate	ActivityUnits	UnitofMeasure	SubTota	GST	Total	TicketDate	InvoiceNu
312	Corbi	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
313	Corbiere an	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
314	Corbiere an	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
315	Corbiere an	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
316	Corbiere an	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
317	Corbiere an	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
318	Corbiere an	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
319	Corbi	20191006-1	53520101	Clearing								10/6/2019	Inv#002-R01
326	Corbiere	20191006-3	53520101	Clearing								10/6/2019	Inv#002-R01
327	Corbiere an	20191006-3	53520101	Clearing								10/6/2019	Inv#002-R01
328	Corbiere an	20191006-3	53520101	Clearing								10/6/2019	Inv#002-R01
329	Corbiere an	20191006-3	53520101	Clearing								10/6/2019	Inv#002-R01
330	Corbiere an	20191006-3	53520101	Clearing								10/6/2019	Inv#002-R01
537	Corbi	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
538	Corbiere an	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
539	Corbiere an	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
540	Corbiere an	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
541	Corbiere an	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
542	Corbiere an	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
543	Corbiere an	20191013-03-R(	53520101	Clearing								10/13/2019	Inv#005-R01
544	Corbi	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
545	Corbiere an	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
546	Corbiere an	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
547	Corbiere an	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
548	Corbiere an	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
549	Corbiere an	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
550	Corbiere an	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
551	Corbi	20191013-1	53520101	Clearing								10/13/2019	Inv#002-R01
3128	Corbi	20191217-6-R1	53520102	Clearing								12/17/2019	Inv#009
3129	Corbiere an	20191217-6-R1	53520102	Clearing								12/17/2019	Inv#009
3130	Corbiere an	20191217-6-R1	53520102	Clearing								12/17/2019	Inv#009
3131	Corbiere an	20191217-6-R1	53520102	Clearing								12/17/2019	Inv#009
3132	Corbi	20191217-6-R1	53520102	Clearing								12/17/2019	Inv#009
5820	Corbi	20200127-3	53520104	Clearing								1/27/2020	Inv#009
5821	Corbiere an	20200127-3	53520104	Clearing								1/27/2020	Inv#009
5822	Corbiere an	20200127-3	53520104	Clearing								1/27/2020	Inv#009
5823	Corbiere an	20200127-3	53520104	Clearing								1/27/2020	Inv#009
5824	Corbiere an	20200127-3	53520104	Clearing								1/27/2020	Inv#009
21581													

All other 5,315 line items indicate a locations and workscope.

As you are aware, with our industry you will receive LEMs of various detail. This is especially so while working with First Nation contractors with less experience as required by this Project. However, all LEMs with the exception of 6 indicate work performed and location. We do not view this as attracting any regulatory risk but can discuss further.

Please provide the signed contract between Valard and Corbiere outlining unit rates. This is now included in the backup. (EWT E. Corbiere & Sons Contracting Contract - Redacted.pdf)

If Corbiere did in fact have to proceed with work because they were unwilling to continue with unit rates, please provide the change order from Corbiere to prove that this was the reason for the unit rate vs forced account rate change.

This did not occur via Change Order. Individual LEMs were submitted for this work. The lack of linear workfront stopped the entire subcontract process, and to begin work the parties moved forward on a T&M basis through issuing LEMS.

Maintenance Costs (All WF's): $2,262,047

VC claims that the alteration to the original schedule required access roads to stay open longer and additional maintenance costs were incurred.

Exhibit B pricing was used for these calculations instead of providing backup for the actual costs Valard incurred.

Actual cost is provided and is subtracted against the Exhibit B. In other words, Exhibit B indicates the plan and how much maintenance costs were planned. We are claiming the delta between that and our actual costs. If this does not present clearly we can arrange a call with our team to get instructions regarding how to present this in a more user friendly format.

While project COD was pushed in line with the initial delay, This did not result in any actual duration extension that Valard would have been required to maintain any access roads.

This is an oversimplification of the situation. As a linear job, the plan was to proceed workfront by workfront in the normal sequence of construction activities. The result would be completing work in a workfront for a period of time and move on to the next area. For this reason, access in each workfront would only be required to be open for the period where work was planned.

However, Valard was required to move where workfront was available (piecemeal manner), and complete work based on available steel. This led to almost all workfronts being open for the entire duration of the project which is a significant deviation from the original plan).

We continue to view Valard's approach of comparing each workfront individually as more appropriate to simply indicating how long the job ran, which is a generalization and not an accurate reflection of maintenance costs. We trust this clarifies the issue, however, can reference the prior visuals created if it would help provide required context.

"Maintenance Costs" sheet reveals an error in calculations. The cost of a pickup truck is entered at $243.75 / hour, and not per day (totaling $5362.50 per day). Please review these calculations. This is a fair comment and the claim document has been updated.

Bridge Rental Duration Increase (WF1,2,3,6): $716,571

VC is claiming an increase in bridge rental duration due to the change in the construction program. Bridge rentals for WF1-WF3 are accurate.

Please remove additional bridge rentals for WF6 - see above comments. Bridge rentals were extended as a direct result of Valard failing to hit production targets in WF6. NB requested a weekly update on the CZ and VC provided the "Caribou Zone Recovery Schedule".
NB believes there should be some shared responsibility on the CZ schedule overruns.

Please see our comments on WF6 above. Valard suggests if further discussion on this item is required, a call between teams is necessary, as we are struggling with the shared responsibility noting our efforts of overcoming this delay [which has put our company in a very difficult spot with the Watay Project].

Indirect and Management: $2,556,854

- No proper documentation was provided by to back up this claim.

We can provide the names of all indirect and management. This may be a discussion point between out teams. A portion of the overrun for these costs were assigned by Valard to this claim [thus, deducted from the delay claim]. We could discuss potential to move them with the indirects in the overall delay claim.

- COVID-19 related costs to be removed from Export backup tab. COVID was not charged but have been removed from the export data to avoid any confusion.

- NB review is on hold until backup is provided.

As with all other claims, our team is happy to make ourselves available at a time of your convenience to discuss.

Thanks
Jeff

Lowe, Amy

From: Merrifield, Scott
Sent: Friday, April 1, 2022 7:52 PM
To: Damen, Jeff
Cc: Sousa, Steve; Wilkins, Lisa; Feniuk, Jessie
Subject: RE: White Lake Narrows Claim - Review #1

Hi Jeff,

Please refer to the "Cover Page" tab of the following file for responses to your last comments: OEWTL - White Lake Narrows - Structure Change Cost VC_RESPONSE_2022.04.01.xlsx

We have also added additional ROW supporting docs in the White Narrows Supporting Documentation folder. All these new documents have the prefix "ROW-" in the filename.

Thank you,

Scott Merrifield, P.For | Sr. Project Manager | **Valard Construction LP**
Main: 780.436.9876 – ext. 3186 | Mobile: 780.499.2320 | Email: smerrifield@valard.com | www.valard.com

---

From: Damen, Jeff <Jeff.Damen@nexteraenergy.com>
Sent: Tuesday, March 29, 2022 7:35 PM
To: Merrifield, Scott <SMerrifield@valard.com>
Cc: Sousa, Steve <SSousa@QuantaServices.com>; Tidmarsh, Jennifer <Jennifer.Tidmarsh@nexteraenergy.com>; Tenan, David <David.Tenan@nexteraenergy.com>
Subject: White Lake Narrows Claim - Review #1

[EXTERNAL]

Good evening Scott, Steve,

See below a high-level review summary of the WLN costs submitted. Additional work will be required on your end to clean up and specify the backup documentation. We are also going to need a narrative to be provided to justify a significant dollar amount in mobilization costs, stringing, assembly, erection, and forestry activities when compared to the original scope. Foundation installation cost increases are well recorded and are specific.

The detailed comments can be found in the attached file, but I have listed the high level items below:

- **ROW**

VC to justify an additional $46,606.00 in clearing less than 1 hectare.
VC to justify $62,359.00 in processing costs not included in original scope.
Multiple backup documents unrelated to the WLN scope of work.

- **Foundations & Anchors**

No credit seems to be provided for the removal of anchor installation at E003 - only the foundation hub is referenced.
VC to justify claim that FN reps, archeologist, ground disturbance restrictions resulted in added costs. Need a good narrative here.

- **Assembly & Erection**

VC to provide backup for claims that crews were delayed due to environmental staff not being on site at times.
Assembly and erection costs to be broken down separately for visibility purposes.
Sarens crane invoice to be reviewed and clarified.

- **Stringing**

VC to justify "significant operations costs" increase when hanging travelers at E002 + E004.
Additional stringing costs to be portrayed per structure and not per KM for visibility.

- **Mobilization**

VC to justify nearly 1.5 Million in mobilization costs, provide narrative on the reason for the mobilizations and backup documents to support OEB review

Thanks
Jeff