

DISPUTE REVIEW BOARD REPORT AND RECOMMENDATIONS

**Project: US 287: SH 1 to LaPorte Bypass
PROJECT NO. STA2873-1**

Dispute Regarding Liquidated Damages

Hearing Date: March 10, 2020

Hearing Location: CDOT Region 4 Materials Lab - 3961 W Service Rd - Evans, CO 80620

Party Attendees: **Lawson Construction**
Kenneth T. Lawson - President
Lloyd Lawson - Vice President
T.J. Turner - Project Manager

CDOT
Justin Pipe - Project Engineer
Chris Boespflug - Resident Engineer
James Usher – Program Manager
Corey Stewart - Program Engineer
Mark Straub – Area Engineer
Stephanie Gramberg - Observer

Background

On December 17, 2015, the Colorado Department of Transportation (CDOT) and Lawson Construction Company (Lawson or Contractor) signed a contract (Contract) for \$21,324,377.30 for Project No. STA 2873-100, which provided for the reconstruction of US 287 from State Highway 1 (Terry Lake Road) to the intersection of CR 54G (LaPorte Bypass) (the Project). (CDOT and Lawson are hereafter sometimes individually referred to as a “Party” or collectively as the “Parties”).

The existing two-lane asphalt road was replaced with four through lanes, a center turning lane, and 10-foot-wide shoulder/bike lanes, all constructed of concrete pavement with concrete sidewalks. The LaPorte Bypass intersection was replaced with a 228-foot roundabout (Roundabout). A sound wall was installed adjacent to the Terry Lake Mobile Home Park.

The contract time for the Project provided for 633 working days to complete all work (Contract Time) and the Contract Time commenced on January 25, 2016:

- The originally forecast completion date was June 27, 2018.
- The forecast completion date—through the combination of change orders that added working days and days that would normally have been workable days counted as non-workable days—resulted in a Project completion date of April 26, 2019.

During the work, 31 change orders were executed by the Parties which collectively:

- Increased the Contract price by 8.8%
- Added 40 working days

Throughout the Project, quarterly meetings of the Standing Dispute Review Board (DRB or Board) were held. The DRB received Project status reports and heard of issues, challenges and potential disputes, among other things:

- At the first standing DRB meeting on March 14, 2016, the DRB was advised that both Parties agreed that utilities (water lines, gas lines, Century link lines) that were not relocated prior to the start of Contract work “present a major obstacle and potential for delay” and specifically noted that design grades and storm pipe designs were not correct. A work suspension occurring during that time resulted in the Parties’ request for an Advisory Opinion which was later issued (see the discussion below regarding the December 2016 Advisory Opinion).
- Concerns over delay and timely completion continued to be raised during the remaining DRB meetings, but it appeared that there were no major disputes.
- The final regular DRB meeting was held on December 5, 2018. At that meeting, the DRB was advised that the Project was 89% complete and that the forecasted completion date was five days ahead of the then-current completion date.
- A DRB meeting was scheduled for March 6, 2019, but was later cancelled after both Parties advised the DRB that there were no disputes.

December 2016 DRB Advisory Opinion

Between February 22, 2016, and April 6, 2016, Project work was suspended (Suspension Period) when it was discovered that the originally designed Storm System #1 conflicted with a known City of Greeley waterline. Additional design errors were thereafter discovered that affected Storm Systems #2, #3, and #4.

On November 11, 2016, the DRB received a request from CDOT for an Advisory Opinion of the Board regarding the Parties’ disagreement on Lawson’s request for additional time and compensation for the time count Suspension Period. During the Standing DRB Board meeting on December 5, 2016, the Board heard and considered the positions of the Parties. The primary issue presented was whether time and cost impacts to the Contractor arising from the Suspension Period were limited to the time period of the suspension:

- Lawson requested additional time and monetary compensation for additional costs for field office overhead, home office overhead, general, administrative, labor and equipment due to the Suspension Period.
- CDOT’s position was that the Suspension Period was an independent delay to the critical path that occurred at the same time as separate critical delays caused by Lawson.

When delays by both Parties occur at the same time and impact the critical path for the same or substantially same period such that each would have independently delayed the Project about the

same amount of time, it is termed a concurrent delay, and therefore excusable, although not compensable.

The Parties agreed that the re-design of Storm Sewer #1 resulted in an Excusable Delay as defined by Contract Section 108.08 (c) 1. The Parties asked the Board to consider whether four events occurring during the Suspension Period (Lab Trailer, R-50 Material, Embankment Quality Control Plan and Dewatering Permit) constituted a Concurrent Delay as defined by Contract Section 108.08 (c) 3.

The DRB issued an Advisory Opinion on December 7, 2016, finding that the Suspension Period constituted an Excusable and Compensable Delay as defined by the Contract. The DRB further opined that the four events that occurred during the Suspension Period were not Concurrent Delays as defined by the Contract.

Project Events During 2019

Beginning March 26, 2019, and continuing through May 7, 2019, the Weekly Progress Meetings reflect that the one disputed item regarded payment for the Monotube Cantilever. During these meetings, CDOT advised Lawson that it did not think Final Acceptance would be achieved before the end of Contract Time and liquidated damages (Liquidated Damages or LDs) would be assessed. At the Weekly Progress meeting of April 23, 2019, CDOT asked Lawson if Lawson anticipated achieving Final Acceptance by the April 26, 2019, Completion Date. Lawson responded that it was trying to finish by the end of Contract Time.

The record reflects that:

- Lawson did not complete the Project prior to exhaustion of the working days as shown on the Weekly Time Count Report.
- CDOT thereafter began assessing LDs on April 27, 2019.

Subsequent correspondence indicates that:

- On May 22, 2019, CDOT accepted the work.
- On May 24, 2019, CDOT advised Lawson that it was assessing 26 days of Liquidated Damages at \$25,000 per day for a total of \$650,000.

On December 17, 2019, the DRB was advised that, per Contract Section 105.23 (d), CDOT was initiating the DRB review process due to Lawson's dispute regarding Liquidated Damages. The letter stated that an impasse had been reached after following Contract Section 105.22 of the dispute resolution process. Thereafter, the Parties and DRB agreed to establish March 10, 2020, as date for the dispute hearing regarding Liquidated Damages.

Joint Statement of the Dispute

By email dated February 18, 2020, the DRB members were advised that the Parties were unable to agree on the wording for a joint statement of the dispute. Pursuant to Contract Section 105.23

(e) 1, if the Parties are unable to agree on the wording of the joint statement, each Party's position paper shall contain both statements, and identify the Party authorizing each statement. The joint statement, which contains separate statements of both Parties, reads as follows:

Lawson Construction Statement of Dispute

LAWSON CONSTRUCTION DISPUTES THE ASSESSMENT OF LIQUIDATED DAMAGES AND LAWSON CONTENDS IT IS ENTITLED TO RECOVER MONEY FROM CDOT.

Specifically, Lawson is raising the following issues:

1. Is the application of Liquidated Damages justified?
2. Is \$25,000 per day a reasonable estimate of expected damages?
3. Is CDOT's method used to apply and/or determine damages proper, including how CDOT counted Contract Time?
4. Was reasonable time allowed for change orders, major plan revisions and unforeseen conditions encountered?
5. How, and to what degree, did utilities affect the progress or cause disruption?
6. When critical path work cannot be progressed as planned, is CDOT entitled to count time against the Contractor?
7. When inclement weather impacts work progress and/or damages material deposits, sub-grade and embankment saturation, is CDOT entitled to count time against the Contractor?
8. If the Liquidated Damages are not reasonable, must CDOT prove its actual damages?
9. Who is responsible for the delays?
10. Is Lawson entitled to any additional compensation?

Questions of quantum are not presented to the DRB.

CDOT Statement of Dispute

Lawson Construction is disputing the dollar amount of Liquidated Damages assessed over 26 Calendar Days. Specifically, Lawson is disputing:

1. The overall applicability of Liquidated Damages,
2. The Contractual value of a day of Liquidated Damages, and
3. The method of applying Liquidated Damages on a Calendar Day basis.

We respectfully request that the Dispute Review Board preside over a hearing and issue a written recommendation on the following questions:

1. Is the Loveland Ready-Mix Court Order a delay? If so, is this Excusable or Nonexcusable?
2. Is the Terry Lake Reservoir Toe Drain ("Reference SM 343") item a delay? If so, is this Excusable or Nonexcusable?
3. Is the Bicyclist Damage to Concrete Pavement ("Reference SM 483") item a delay? If so, is this Excusable or Nonexcusable?
4. Is the Greeley Waterline Conflict a delay? If so, is this Excusable or Nonexcusable?
5. Is the Inclement Weather (R50) item a delay? If so, is this Excusable or Nonexcusable?

6. For items above determined to be Excusable delays, did Lawson Construction follow contractual requirements [in Contract Section] 108.08 (d) for requesting Contract Time extension(s)?
7. Did CDOT apply Liquidated Damages correctly?
8. Is the value of a Day of Liquidated Damages appropriately determined to be the contractual value of \$25,000? If not, what is the correct value of one day of Liquidated Damages?
9. Is CDOT contractually required to show actual costs for Liquidated Damages [additional construction engineering costs] incurred by CDOT after contract time elapsed?
10. Were Liquidated Damages correctly charged on a Calendar Day basis? If not, what is the appropriate method to charge Liquidated Damages?

Pre-Hearing Submittals

Both parties provided the DRB with joint Pre-Hearing Submittals per Contract Section 105.23 (e) which included Position Papers and documentary evidence relevant to the issues. No Common Reference Documents were submitted by the Parties. No witnesses were listed by either Party. Both Parties provided the DRB with their lists of attendees.

Pre-Hearing Conference Call

On February 24, 2020, a Pre-Hearing Conference Call was held between the Parties and DRB members in accordance with Contract Section 105.23 (e) 4. There was discussion over whether answering the Parties' questions posed in the joint position statement would help resolve the issues:

- The Parties indicated that they wanted the DRB to answer the questions made by each Party in the joint statement of the dispute.
- The DRB requested that, during the hearing, the Parties better define what they are looking for, focusing on days and time counts.
- The DRB also asked that, during the hearing, CDOT explain the basis for the Liquidated Damages amount, and specifically, explain the rationale for the large increase in the amounts from the time the Project was originally bid to the time of this Project bid.

It was agreed that no rebuttal position papers would be submitted, but to aid in its preparation and review, the Board asked that, for each of the questions posed, the Parties provide the DRB a reference / citation to the documents supporting their position.

During the call:

- It was confirmed that the dispute regarded merit only and quantum would not be determined.
- It was agreed by all that the presentation would be made on a point-by-point basis with each question posed constituting a "Point."
- It was noted that, since there was overlap and duplication of some questions, questions could be combined during the presentations by the Parties at the hearing.

Additional Submittals and Related Issue

On February 28, 2020, CDOT provided the DRB its “CDOT Position Paper references to supporting documents”.

On March 6, 2020, Lawson provided the DRB its “Updated Position Paper”.

On March 7, 2020, CDOT sent the DRB a letter voicing its strong opposition to Lawson’s Updated Position Paper, citing the fact that it submitted new and additional information in violation of Contract Section 105.23 (f) 9. CDOT’s letter stated that “Lawson’s arguments have morphed significantly from the Request for Equitable Adjustment to such an extent that CDOT is prejudiced in its defense...” and thereafter requested that the Board reschedule the Dispute Hearing for a future date and require the Parties to begin anew at the Request for Equitable Adjustment stage of the dispute process.

On March 8, 2020, the DRB responded to CDOT’s March 7, 2020, letter saying that during the hearing Lawson would not be allowed to introduce, nor would the DRB consider, any new information provided by Lawson that was not in its original position paper. The DRB indicated that it saw no contractual basis for a continuation of the hearing, but that, in accordance with the DRB Operating Procedures applicable to this Project, if new information was provided during the hearing, the hearing could potentially be adjourned and reconvened at a future date.

Summary of Lawson’s Position

Lawson is requesting:

- That the \$650,000 in Liquidated Damages assessed by CDOT (\$25,000 per day x 26 days) be removed from the final pay estimate
- That CDOT pay Lawson that amount

Lawson argues that the delay in completion of the Project should be classified as a Compensable Delay per Contract Section 108.08 (c), specifically requesting in its position paper 120 days of time for certain delay-causing activities be added to the Contract Time as follows:

Roundabout underdrain suspension	14 days
Inclement weather	45 days
Terry Lake Reservoir sidewalk alteration	16 days
Bicycle damage	30 days
Loveland Ready Mix Court Order	15 days

Lawson asserts that the daily amount of Liquidated Damages (sometimes cited as \$26,500 and other times cited as \$25,000 per day) is excessive, egregious, unreasonable and therefore unenforceable. The Liquidated Damages amount contained in the specifications for the Project when it was bid in 2014 would have been \$5,700 per day for the amount of Lawson’s bid on this Project. There were other CDOT projects before and after the Project where the amounts of Liquidated Damages are markedly lower.

Summary of CDOT’s Position

CDOT argues that:

- Lawson has not identified any Contract specifications to support its position, indicating that per Contract Section 105.22 (b) 3, Lawson's Request for Equitable Adjustment (REA) should have explained in detail the specific provisions of the Contract which support the dispute.
- Lawson failed to follow the contractual requirements for notices of delay, time extension requests, schedule analyses, time count disagreements, or dispute resolution process.

CDOT further argues that:

- All delay impacts and changes were agreed to by Lawson and CDOT during construction and with the execution of the 31 changes orders for this Project and by Lawson's acceptance of daily time counts.
- Lawson has not provided a schedule or schedule analysis to support its position. There is no support within Lawson's Project schedules that work was delayed by factors that were not reasonably foreseeable or within its own control.

CDOT points out that, during the course of construction, Lawson repeatedly stated there were no disputes. CDOT maintains that the schedule of Liquidated Damages in the Contract was used to calculate the amount of Liquidated Damages and that the Contract clearly states that Lawson and CDOT agree that the Liquidated Damages amount shown in Contract Section 108.09 reasonably represents additional construction engineering costs as Liquidated Damages.

DRB Hearing

The DRB stated that this would be a one-day informal hearing and gave an overview of the hearing format. The DRB cautioned the Parties on the introduction of new information not provided in their original position papers.

The Parties did not agree on a joint statement of the dispute and each presented their respective statements of their positions in question form. All agreed that some of the questions were similar enough that it was appropriate to combine them during the presentations.

CDOT recommended and the Parties and DRB agreed to a procedure whereby the Board, after hearing Lawson's and CDOT's opening statements, would hear and consider the Parties' question in the following order:

- Delay-related issues
- Liquidated damages-related issues

This procedure provided for the sequencing for how the questions / issues were combined and presented. The Party whose question is being addressed presents first. Where two questions were combined, Lawson, as the requesting / disputing Party, presented first.

The order of the meeting, with a recitation of events and a factual description of each issue as it was presented, follows.

Because of time constraints, most rebuttals to positions were brief and toward the end of the hearing, waived. As such, for each issue/question or set of issues/questions (“Point(s)”) described below, the rebuttal position of each Party, if any, is included in the position statement or response regarding the issue. DRB member questions during the hearing, and DRB observations, if any, are noted. To assist the reader, we are including the DRB’s findings with regard to each Point at the end of the discussion of the Points. A summary of the DRB Findings and DRB Recommendations are at the end of this Report.

During the hearing:

- The primary presenter for Lawson was Ken Lawson
- The primary presenter for CDOT was Justin Pipe

Lawson Opening Statement

Lawson stated that the road was originally a wagon road to Laramie, and it has been there for quite a while. Lawson said it worked on the road in 1992. During construction, there were a lot of challenges, including:

- Homeowner issues
- The procurement of the railroad permit
- Utilities conflicts
- Design defects that resulted in suspensions of work
- The trailer park

There were 17 utilities to coordinate with. Permits took three to eighteen months to procure. The Greeley water line was a huge impact on Lawson’s work. The challenges encountered caused Lawson to have to re-sequence its work. Everything had to be scheduled linearly. Lawson had to deal with vandalism (Bicycle Damage described herein) and theft of materials. Per the Contract requirements, one lane of the road was always kept open.

CDOT Opening Statement

Lawson has not identified any Contract specifications to support its positions. Per Contract Section 105.22 (b) 3, Lawson’s REA was to provide a statement explaining in detail the specific provisions of the Contract which support the dispute. This was not done in the REA, and in fact, each item of the REA only states that Lawson is requesting time.

During the November 8, 2019, meeting between the Parties to discuss the merit of Lawson’s REA:

- Lawson stated that all of the items in the REA were a request as opposed to contractually required.
- CDOT stated that, since the last DRB meeting (December 5, 2018), all Lawson’s submitted schedules showed finishing within the Contract Time.

During progress meetings after that, CDOT warned Lawson that it did not appear that

Lawson would complete the work during the Contract Time. CDOT stated that Lawson's position paper was unclear as to whether [the five items cited above from its REA] are disputed. No schedule was submitted to support any of Lawson's claim for delay.

POINT NO. 1

Lawson Question No. 4: Was reasonable time allowed for change orders, major plan revisions and unforeseen conditions encountered?

Lawson Position

The amount of time added for additional work in the change orders, for major plan revisions and for unforeseen conditions encountered was not reasonable. A total of 31 change orders were executed by the Parties for this Project. Lawson stated that for the 31 change orders, it requested time and provided a schedule analysis for each one.

On May 20, 2016, Lawson wrote CDOT indicating that the Storm Sewer plans provided at the time of bid were not constructible due to defective plans and utility conflicts and that this was preventing the Contractor to proceed as originally planned. Lawson requested time count reviews and consideration of monetary and time impacts created by the significant changes to Lawson's work plan. Lawson stated that every time it asked for additional time, it got "shot down." The Greeley waterline had a great impact.

In approximately the third quarter of 2016, after questioning its ability to honor its quoted prices in its bid, Lawson states that it was advised by CDOT Engineer Johnny Olson:

- That Lawson was not cooperating
- That CDOT might have to so advise Lawson's bonding company

Because of that threat and the assertion that there was too much time in the Contract, Lawson "put its head down" and quit asking for time, even when there were delays to the critical path resulting from changes to design and work plans.

There were 80 days of float in the schedule at the start of the Contract, and in March of 2017, Lawson's schedule showed it would complete 68 days early. The early completion that was envisioned at the start of the Project progressively diminished with each change to the work. Even toward the end of the Project, CDOT suggested that too much time had been provided for in the Contract.

On March 17, 2017, a re-baselined schedule was prepared in response to the DRB's Recommendations following the December 5, 2016, Advisory Hearing.

CDOT Response

Reasonable time was allowed for change orders, major plan revisions, and changed conditions encountered. While "reasonable time" is not defined, all Contract Modification Orders (CMOs) and Contract Modification Requests (CMRs) considered schedule impacts

and were agreed to by Lawson as indicated by signature.

Workdays were added (or not added) based upon input from Lawson, reviews of the current schedule in effect at the time of the modified work, and relevant information available.

All impacts and activities were considered in Lawson's monthly progress schedules which showed finishing within the Contract Time. For both the suspension of work for the revision of storm sewer design and for the Roundabout revision, there were no schedule impacts beyond the number of days the work was suspended.

CDOT stated that it is not aware of any requests for additional time for change order work that were not granted. All CMOs and CMRs considered work on the critical path and considered the impact to the schedule. Lawson's schedules were required to show all activities. Lawson's final four schedules all showed Lawson finishing within Contract Time.

DRB Questions and Responses

The DRB questioned whether the definition of "Delay" under Section 108 is applicable to weather days. The Parties all looked at the Contract but there was no immediate answer to the question.

The DRB also questioned whether the Contractor should get schedule relief pursuant to Section 108 for events constituting "Excusable Days" after the Contract Time runs. CDOT did not directly answer the question but stated that it is clear that the Contractor should be charged calendar days during the period after the Contract Time runs.

The DRB also questioned whether the Contractor attempted to reserve the right to request delay time later. Lawson answered that it did.

The DRB questioned why no working days were added in Change Order 17 which:

- Revised the plan sheets for the Roundabout
- Added \$834,931.66 to the Contract Price
- Suspended the work

CDOT responded that essentially there was time allowed because during the Suspension Period, the time count of working days was halted and therefore no additional time was warranted.

CDOT did not address how not counting workdays during a suspension accounts for the time required after the end of the suspension to perform added work.

Lawson stated that it thought it would complete on time.

DRB Findings

The final Contract price was \$23,211,294.46, which is an increase of \$1,886,917.16 or 8.8%

to the original Contract price. Of 31 change orders, two added a total of 40 working days.

CMO No. 17, Roundabout Revision, dealing with the Suspension Period resulting from defective design, added \$834,931.66 to the Contract Price but did not add workdays.

In the Advisory Opinion dated December 7, 2016, the DRB considered the issue of whether time and cost impacts to the Contractor arising from the Suspension Period were limited to the time period:

- The DRB found that Suspension Period time period to be an Excusable and Compensable delay as defined by the Contract.
- The Board also opined that the four events occurring during the Suspension Period (Lab Trailer, R-50 Material, Embankment Quality Control Plan and Dewatering Permit) did not constitute a Concurrent Delay as defined by Contract Section 108.08 (c) 3.

Contract Section 108.08 (c) 1 defines an Excusable Delay as a delay that was beyond the Contractor's control and was not due to the Contractor's fault or negligence and for which a Contract Time extension may be granted by CDOT.

Contract Section 108.08 (c) 1 A defines a Compensable Delay as a delay that CDOT, not the Contractor, is responsible for, entitling the Contractor to a time extension and monetary compensation. This definition of "Compensable Delay" makes it clear that, for a Compensable Delay, a contractor is entitled to a time extension.

Based on our December 7, 2016, Advisory Opinion and per the Contract requirements, Lawson should have received a time extension for the Suspension Period.

Based on the DRB's collective experiences and observations, a contract with the number and magnitude of changes that there were in this Contract would be expected to be impacted more than the 40 additional workdays that were granted. Many of the issues underlying the 31 change orders would be expected to take additional time and result in added workdays.

A common way to perform a quick, rough order of magnitude look at additional time is to examine the increase in time relative to the increase in contractual work. If the increase in the time of performance was proportional to the increase in the work, an 8.8% increase in work corresponds to 55.7 workdays—16 workdays more than the 40 that were granted. Such a quick, rough order of magnitude calculation assumes cost and time are directly proportional. While there is a relationship between cost and time, it is not always proportional.

It is the finding of the DRB that reasonable time was not allowed for change orders, major plan revisions and unforeseen conditions encountered.

POINT NO. 2

Lawson Question No. 5: How and to what degree did utilities affect the progress or cause disruption?

Lawson Position

Pursuant to the Contract, Lawson was required to communicate with utilities during the work. There were many utilities and coordination efforts were difficult. Some of the utilities did not meet their commitments to Lawson as to what they were going to do and when.

Several utility conflicts affected the critical path:

- Critical path storm sewer work could not commence until utilities were relocated.
- Lawson could not progress work because of the Greeley Waterline conflict.
- Lawson could not perform work concurrently and had to do work linearly.

Lawson was delayed in the execution of the Phase 1 work because of utility conflicts.

CDOT Response

CDOT agreed that utilities did affect the progress of work and cause disruptions. CDOT and Lawson agreed to the degree of impacts with execution of change orders. Approved progress schedules showed finishing within Contract Time. Utility delays resulted in a Standing DRB Advisory Opinion and Change Order No. 21 which compensated Lawson and re-baselined the Project schedule.

CDOT considers this question too general. It is not up to the DRB to evaluate an entire project to find and justify schedule impacts arising out of utility conflicts. Lawson presented no schedules, analysis, or contractual basis to support this issue.

DRB Questions and Responses

The DRB questioned whether there should have been a request for time for delays caused by utility conflicts.

Lawson responded that it could have inserted a fragnet into the schedule and should have requested additional workdays.

DRB Findings

The Parties agree that the utility conflicts encountered during construction impacted Lawson and the progression of Lawson's work. The DRB finds that the utility conflicts did cause disruption that would result in Excusable Delay as defined by Section 108.08 (c) 1. The degree of such disruption could not be determined from the information and materials provided.

POINT 3

Lawson Question No. 6: *When critical path work cannot be progressed as planned, is*

CDOT entitled to count time against the Contractor?

Lawson Position

Lawson stated that out of phase work had an impact on its progression of the Project work. With the redesign of Storm Systems #3 and #4, Lawson was directed to commence Storm Sewer construction out of sequence with the phasing, which delayed the work as Lawson was not prepared to initiate the out of phase construction.

Utility conflicts and design defects prevented the construction of critical path work. Throughout the work and in response to ongoing changes, Lawson worked on non-critical path items where possible and prudent.

CDOT Position

CDOT's position is that this question is too general and not specifically connected to the Project. The answer depends on the reason critical path work could not be progressed:

- If critical path work cannot be effectively prosecuted for reasons within the control of the Contractor or is reasonably foreseeable, time charges will be assessed per Contract Section 108.08 (a) 1.
- If critical path work cannot be effectively prosecuted for reasons beyond the Contractor's control and not due to its fault or negligence, then time charges will not be assessed.

CDOT maintains that:

- It counted Contract Time in accordance with Contract Section 108.08.
- Lawson indicated agreement when it signed weekly time count statements for the entire Project, including those after Liquidated Damages began to be assessed.

The contractual deadline for disagreeing with time counts was June 23, 2019, which is 30 days after the final time count statement was provided to Lawson. Lawson did not submit a request for review or detail the reasons time changes were correct.

DRB Findings

Delays to individual work activities, as opposed to delays to critical path activities, typically have relatively little or no distinguishable impact to the schedule. Delays for which time extensions should be granted are incurred when the overall project duration is extended as a result of a delay to the critical path work.

When assessing the impact of a particular event that delays some aspects of the construction work, the first step is to assess that event's effect on the project's overall completion schedule—in other words, to the critical path.

The longest sequence of required construction activities to complete the project is its critical

path. By definition, delay to any of the critical path activities will extend the overall project duration, unless remedial steps can be taken, such as:

- Resequencing activities
- Reducing other critical path activity durations

When critical path work cannot be progressed as a result of actions for which the Contractor is not responsible, either:

- Workdays should not be counted, as is the case with weather delays
- Additional workdays should be granted, as in the case of added work

The DRB finds that during the work, where critical path could not be progressed by Lawson as planned, workdays should not have been counted, or in the case of added work, additional days should have been added.

POINT 4

Lawson Question No. 7: When inclement weather impacts work progress and/or damages material deposits, sub-grade and embankment saturation, is CDOT entitled to count time against the Contractor? AND CDOT Question No. 5: Is the Inclement Weather (R50) item a delay? If so, is this Excusable or Nonexcusable?

Lawson Position

Lawson is asking for 45 days for inclement weather which appears to arise out of Lawson's REA which references 45 days lost due to moisture in Lawson's borrow site:

- Several rain and snowstorms occurred during February, March, April, and May of 2017 which saturated on-site R-50 material and Lawson's borrow source.
- Days were lost processing the R-50 materials hauled on site. Lawson noted that it was charged days during the period when it was processing the material to dry it out.
- Lawson alleges that CDOT did not accurately calculate the time count during this time as Lawson was charged full days when it was only able to work partial days on the critical path work because the material needed to dry.

Lawson stated that it should have been given 22 extra days under the Contract provisions, because on 45 days when it was working on processing the R-50, it lost a half day per day.

Lawson stated that the real dates of the delay are not in the time period covered by CMO No 21 (April 2017 Revised Baseline Schedule), but in the sequencing documents. The borrow pit was a designated source and approved a year earlier. Lawson did not request these weather days on the day count, as it was trying to get the work done and felt confident it would finish on time. Lawson did not want to continue to question day counts, which typically resulted in a half-day meeting to argue over the day count.

During the period where Liquidated Damages were being assessed, Lawson could not work for five days as it had to have dry pavement to be able to stripe. The critical path work was striping, and the weather prevented the work.

CDOT Position

CDOT states that the answer regarding inclement weather impacts depends on many factors that are not identified in the question. Examples of these factors include:

- Is the work on the critical path per the schedule in effect at the time?
- Were the impacts reasonably foreseeable and within the control of the Contractor?
- Is the impact at the supplier's stockpile or within Project limits?
- Were the impacts due to the Contractor's failure to maintain the roadbed so it is well drained at all times per Contract Section 203.06?

CDOT stated:

- That it counted Contract Time correctly per Contract Section 108.08.
- That Lawson indicated agreement with the CDOT's Day Count when it signed the weekly time counts, including those after Liquidated Damages began to be assessed.

The contractual deadline for disagreeing with the time counts was June 23, 2019. Lawson did not submit a review or detail the reasons the time counts were incorrect.

CDOT also notes that during the November 8, 2019, "Merit Meeting" between the Parties:

- That the date of this dispute was clarified to be between February and May 2017.
- That Lawson released CDOT from any claims occurring prior to March 31, 2017, per CMO No. 21 (Schedule Re-Baseline).

CDOT also notes that no schedule analysis was provided, and therefore there is no support for this item as a delay. If there is a delay, it must be a Nonexcusable Delay as it was reasonably foreseeable and within the control of the Contractor. The borrow pit is a materials issue, and once it is approved by CDOT, it becomes a "designated source."

DRB Questions and Answers

The DRB inquired about the interplay and apparent inconsistency in the application of Section 108 in working day contracts and the Liquidated Damages provision if a contractor is prohibited from working after the Contract Time had run. How can charging the contractor Liquidated Damages for days he cannot work because of inclement weather be fair or logical?

The DRB noted that the answer given by CDOT—that Liquidated Damages are assessed on calendar days—did not address the apparent contradiction with applying the provision related to Excusable Delay in Section 108.

DRB Findings

Contract Section 108.08 (d) provides a two-part procedure and submittal process for a Contractor's request for a time extension. There is no evidence that the Contractor complied with these contractual requirements. Without an impact statement and schedule analysis, the number of days Lawson may be owed is impossible to determine.

The DRB finds that Inclement Weather—an Excusable, Noncompensable Delay as defined by Contract Section 108.08 (c)—may entitle the Contractor to workdays not being counted or to a Contract Time extension.

The DRB also finds that Inclement Weather impacts to the schedule can extend to the period after the weather event stops, such as the time required to dry subgrade. For those days where Inclement Weather affected the time period after the allowed workdays have been consumed, see DRB Findings for Point 11.

POINT 5

CDOT Question No. 1: Is the Loveland Ready-Mix Court Order item a delay? If so, is this Excusable or Nonexcusable?

Lawson indicated it was withdrawing this Question/Issue. Therefore, it was not addressed.

POINT 6

CDOT Question No. 2: Is the Terry Lake Reservoir Toe Drain ("Reference SM 343") item a delay? If so, is this Excusable or Nonexcusable?

Lawson Position

Lawson is requesting a 16 working day extension for an urgent, unplanned installation of underdrain (or toe drain) at the toe of Terry Lake Reservoir. After installing a considerable amount of drainage pipe, it was discovered that the drainage system would not work as designed. CDOT notified Lawson to suspend work and to remove the pipes and inlets that had been constructed.

Excavation, R-50, and base course were nearly complete, and the paver was headed toward this section of work when the work suspension was ordered. Work was stopped for 2 ½ weeks. Lawson was forced to stop paving, which was critical path work, and it kept losing time.

The installation of the reservoir toe drain was done by a contractor hired by the reservoir contractor. The underdrain contractor employed Lawson's work area to stockpile his material and for a work platform. This Project is a paving project. The paving work is typically critical path work on a paving project. The toe drains delayed paving work.

CDOT Position

There is no schedule analysis to support this claim. During the November 8, 2019, merit

meeting, Lawson clarified that this item was not a delay.

DRB Questions and Answers

How can the DRB consider delays to the Project that weren't substantiated at the time and aren't substantiated now?

Why wasn't a schedule analysis done and presented?

DRB Findings

The DRB finds that Lawson's critical path work was likely impacted due to the fact the paving work had to be re-sequenced. But the fact that Lawson clarified that this was not a delay means there is no reason for the DRB to make a finding on this Point.

POINT 7

CDOT Question No. 3: Is the Bicyclist Damage to Concrete Pavement ("Reference SM 483") item a delay? If so, is this Excusable or Nonexcusable?

CDOT Position

The Bicyclist Damage to the freshly poured paving is not a Delay as defined by Contract Section 108. According to approved progress schedules after this item, there were no impacts arising from this incident to extend work beyond Contract Time. Per Contract Section 107.17, Lawson was responsible for:

- All Contract work and protecting it against damage from all causes until final written acceptance
- Repairing or replacing all damaged work at no cost to CDOT

No schedule analysis has been provided and there is no support for this item as a delay. It is a question of fact whether Lawson protected the freshly poured paving properly and CDOT believes that Lawson did not. Any delay would be considered Nonexcusable as it was reasonably foreseeable and within the control of the Contractor.

Lawson Position

During the evening of November 8, 2018, a person who must have been watching the paving occurring on the highway and aware that it was wet, rode a bicycle through the freshly poured pavement while Lawson's watchman went to the restroom.

Lawson took reasonable care to prevent damage: the area had signage, was barricaded and had string lines. Blankets were not down as the poured pavement was not set enough.

By Speed Memo 483 dated November 13, 2018, CDOT advised Lawson that portions of South PCCP were deemed unacceptable because of bicycle tracks. Lawson was directed to remove and replace some areas of the paving. For other areas, it was allowed to grind the pavement in lieu of removal at the Contractor's expense.

After that, Lawson attempted to stay on schedule, but it became impossible.

Lawson stated during the hearing it was just asking for reasonableness with this issue. Lawson lost 30 days for something it did not cause. The incident is an Excusable, Noncompensable Delay as defined by Contract Section 108.08 (c) 1 B for which Contract Time for the performance of the work may be extended.

DRB Findings

CDOT did not identify what actions Lawson should have taken to prevent the Bicyclist Damage that it did not take. Essentially, CDOT has argued that the existence of damage is proof that Lawson did not properly protect the freshly placed paving. We do not find CDOT's position, which asserts a strict liability standard, as convincing.

The Bicyclist Damage falls within the definition of an Excusable, Noncompensable Delay as defined by Contract Section 108.08 (c) 1 B, which, by definition, may entitle the Contractor to a Contract Time extension.

Considering this is a paving Project, the work to remove and repair the damaged paving is likely to be on the critical path. Delay to critical path activities will extend the overall Project duration.

At the last meeting of the DRB held on December 5, 2018, it was reported that the work was 89% complete and that pursuant to Lawson's October schedule, it was five days ahead of Contract Time. CDOT noted that it was waiting for Lawson's November schedule and "there were possible issues regarding the correction of bike tire tracks on freshly poured paving."

During the progression of the work, the Project float was consumed to accommodate delays. At the point in time when the Bicyclist Damage occurred, any Project float had been exhausted or nearly exhausted as evidenced by the report at the December 5, 2018, DRB meeting. It would have been evident that the delay caused by removing and replacing the damaged paving was going to extend the Contract Time.

The event's effect on the Project's overall completion schedule should have been assessed contemporaneously. It is unfortunate that apparently neither Lawson made a claim for, nor did CDOT allow for, additional time in response to the Bicyclist Damage which was obviously going to cause a Project delay due to the time required to remove and replace paving.

We find no evidence that the Contractor's actions or inactions fell below the standard of care to establish negligence. Based on the question asked, we find that the Bicyclist Damage to the concrete pavement is an Excusable Delay.

POINT NO. 8

CDOT Question No. 4: Is the Greeley Waterline Conflict ("Reference CO 28") item a delay? If so, is this Excusable or Nonexcusable?

CDOT Position

The Greeley waterline conflict is not a delay. During the November 8, 2019, merit meeting, Lawson clarified there was not a conflict between the Greeley waterline and CDOT's storm sewer system, but that "conflict" refers to available work areas.

Coordination meetings were held with CDOT, Lawson, Greeley, and BT Construction prior to the work to plan the phasing for CDOT and Greeley work. Lawson accommodated the waterline work at its own discretion. At no point did CDOT direct Lawson to change its schedule or not work in an area to accommodate utilities. The City of Greeley also changed its schedule to accommodate the mutually agreed to phasing plan.

No schedule analysis has been provided and therefore there is no support for this item as a Delay as defined by the Contract. If there was a Delay, it must be considered Nonexcusable as within the control of Lawson since CDOT would not allow the City of Greeley waterline to delay the Project.

Lawson Position

The original Contract drawings did not detail all conflicts found or encountered regarding the designed storm sewer, the Greeley water line, water problems, and the schedule for BT Construction. The conflicts resulted in CMO No. 28 which:

- Added 247,000 FA of 8" underdrain pipe and a cost of \$247,000 to the Contract
- Did not change the Contract Time

Lawson proposed to start the Greeley waterline work the first week of September 2018. But because of the conflicts that were discovered, Lawson did not start the work until late October 2018 and finished mid-December 2018. Lawson is requesting 14 working days for this impact.

DRB Findings

It appears that the waterline work actually delayed Lawson's work. However, we find the Delay Nonexcusable, because Lawson agreed to the Delay instead of insisting that Greeley not perform the work.

POINT NO. 9

CDOT Question No. 6: For items above determined to be Excusable Delays, did Lawson follow contractual requirements 108.08 (d) for requesting time extensions?

CDOT Position

There is no support for Lawson's REA items as Excusable Delays. Additionally, Lawson did not follow Section 108.08 (d) for requesting extensions of Contract Time and failed to provide two-part submittals for the REA items. No written notices of delay were provided by Lawson within seven days of delay occurrences. This failure to submit written notice constitutes waivers of entitlement to additional time or compensation.

Lawson Position

The REA items are all Excusable Delays per the definition of the Contract. CDOT had actual notice of all of the REA items and witnessed first-hand their impact on Lawson.

DRB Findings

On May 20, 2016, Lawson wrote a well-reasoned letter to CDOT detailing the impacts of defective plans and utility conflicts. These impacts included:

- Out-of-phase work
- Extra work
- Required mitigation efforts

In that letter, Lawson asked for a review of time counts impacted by time suspension, defective plans and utility conflicts. Lawson specifically stated:

- That “underlying causes for delay and/ or suspension presently continue and are ongoing”
- That “Lawson understands that additional Project time will be added to account for the delays and suspensions associated with these issues”

It appears it was around this time that Lawson was admonished by and warned by CDOT Engineer Johnny Olson that a non-satisfactory work notice may be given to Lawson’s bonding company.

Thereafter, it appears from the record that Lawson quit providing notices of delay issues. Lawson failed to assert its contractual rights in accordance with the Contract terms, even though it saw Contract Time in the form of float being consumed by delay events out of its control.

Lawson’s May 20, 2016, request for a review of time counts was subsequently withdrawn on July 15, 2016. At the quarterly DRB meeting of September 12, 2016, Lawson Project Manager T.J. Turner stated that “...Overall it looks like they can complete by September 2018... But because it seems every day something comes up and because of the sheer magnitude of design changes and other issues, Lawson is hesitant to say that they are giving up their request for review of time”. It appears that Lawson was not giving notices and requesting additional time because it thought it would not need the time.

The events described in the REA as well as others that affected the progression of the work created early concerns about Lawson’s ability to complete the work on time, as was reflected in minutes of Standing DRB meetings.

At the DRB meeting of September 12, 2016, the DRB was advised that Lawson had written a letter dated May 20, 2016, requesting an official review of time counts. Per Speed Memo 85 on July 15, 2016, CDOT considered the official time count request withdrawn. Lawson stated “that overall it looks like they can complete by [the then-effective completion date of] September 2018. But

because it seems every day something comes up and because of the sheer magnitude of design changes and other issues, Lawson is hesitant to say they are giving up their request for review of time.” Again, it appears that Lawson was not exercising its rights because it believed it wouldn’t need the days and did not want to irritate CDOT.

During the DRB meeting held on March 13, 2017, concerns were expressed over whether work tasks were weather-related and what schedule was to be followed. Lawson stated that it was very difficult because there had been so many issues.

At the June 5, 2017, Standing Meeting of the DRB, Lawson stated that, although “there was plenty of time [left in the Contract], time might be needed and would like to keep open for negotiation at the end”.

At the December 11, 2017, DRB meeting, the DRB was advised that all the utility conflicts had been resolved with re-sequenced work.

During the September 12, 2018, meeting of the DRB, it was noted:

- That both CDOT and Lawson had been listed as defendants in a lawsuit by Loveland Ready Mix, which owns property south of the Roundabout
- That the Parties were not sure if this would impact the Project

At the last standing meeting of the DRB held on December 5, 2018, it was reported:

- That the work was 89% complete
- That pursuant to Lawson’s October schedule, it was five days ahead of Contract Time

CDOT noted that it was waiting for Lawson’s November schedule and there were possible issues regarding the correction of bike tire tracks on freshly poured paving.

The statements made during DRB meetings show that CDOT had actual knowledge that Lawson was being delayed during construction of the Project. We find that Lawson did not follow the contractual notice requirements in all cases.

POINT NO. 10

Lawson Question No. 9: *Who is responsible for the Delays?*

Lawson Position

CDOT is responsible for the Delays. Lawson asserts that for those delays deemed to be Excusable Noncompensable Delays, the Contract allows the owner to grant Contract Time, and since Lawson is not responsible for the Delays, CDOT should grant additional workdays.

Lawson repeatedly warned CDOT of anticipated and future Delays based on significant

problems with the Project. These problems included, but were not limited to:

- Lack of effective communication channels
- Incorrect plans
- Onsite owner representatives who had no authority to make important decisions

CDOT Position

CDOT states that this question is too general to determine an answer. CDOT is unclear to what Lawson refers to by Delays. The REA lists five items which CDOT interprets is meant by the Delays since Lawson has not submitted any other specific Delays. For those five items, none are either a Delay or must be considered a Nonexcusable Delay.

DRB Findings

This question is extremely general. See DRB Findings for Points 4, 7 and 8.

POINT NO. 11

Lawson Question No. 1: *Is the application of Liquidated Damages justified? AND CDOT Question No. 7: Did CDOT apply Liquidated Damages correctly?*

Lawson Position

No. Lawson was impacted by many events for which it was not responsible which delayed the Project. Contract Time was not provided by CDOT for many of these events which should have been. Time should not have been counted against the Contract on days where clearing snow was required to start work. CDOT did not consider the ripple effects of being regularly forced to stop work in one area and unexpectedly move to another area, including the effect on material supply and time needed to reallocate resources to a new area of the Project.

CDOT Position

The Contract was followed appropriately in the application of Liquidated Damages per Contract section 108.09. Contract Time elapsed on April 26, 2019, and work was not completed.

A daily charge of the Liquidated Damages amount included in Contract Section 108 was made against Lawson beginning April 27, 2019, until final inspection and acceptance on May 22, 2019.

DRB Findings

With regard to Lawson Question No. 1, "Is the application of Liquidated Damages justified?", this question is extremely broad and covers more than the application of the Liquidated Damages formula in the Contract. The question really goes to CDOT's administration of the Contract.

Regarding Lawson's Question 1, the DRB notes the following:

- It does not appear that CDOT considered the cumulative effects of all the non-Contractor caused Delays during the management of this Project, especially when Lawson had stated many times early on in the Project that it did not at that time know the full impact that some of these types of Delays would have on the completion time.
- For those items we find to be Excusable Delays (Utilities, Point 2) and Excusable and Noncompensable Delays (Inclement Weather, Point 4, and Bicycle Damage, Point 7), and to the extent that critical path work was impacted, we find that either:
 - The day count should have reflected unworkable days (Inclement Weather)
 - The addition of working days for Excusable Delay (Bicycle Damage) should have been granted

The matters raised above make us question the appropriateness of applying Liquidated Damages when time wasn't granted when critical path work was affected.

With regard to CDOT Question No. 7, "Did CDOT apply Liquidated Damages correctly?", we note the following:

The application of Liquidated Damages is the combination of the Liquidated Damages amount per day multiplied by the number of days of delay. The question of whether the Liquidated Damages amount is \$25,000 per day as asserted by CDOT, or is a different value, is the subject of another point, Point 12, and will not be addressed in this answer. The determination of the number of days against which Liquidated Damages will be applied is the subject of this answer.

Based upon our review of the materials submitted by the Parties, there are discrepancies in CDOT's calculation of the number of days of Liquidated Damages. CDOT's calculation starts on Saturday, April 27, and proceeds on a calendar day basis through May 22, 2019. Discrepancies observed in this calculation are as follows:

CDOT charged May 8, 2016—a Sunday—as a workable day in the weekly time count reports. The narrative description for entry says "weekend; no time charged". During the hearing, CDOT admitted that that day should not have been charged, and that it was an error. CDOT asserted, however, that this error was waived by Lawson in Change Order No. 21. Change Order No. 21's applicable language is as follows:

"Evaluation for changes in delays occurring after 3/31/17 shall be based on this new baseline and shall not refer to any previous schedules. LAWSON CONSTRUCTION hereby releases, acquits, and forever discharges The Colorado Department of Transportation (CDOT) from all claims arising out of any alleged change or loss occurring prior to 3-31-2017 as a result of reconstruction work located on US287 from SH 1 to LaPorte Bypass, in the state of Colorado under a contract between Lawson Construction and CDOT".

This language does not waive an admitted clerical error. We find that the effect to the day count as a result of this error in day count is significant:

- On the CDOT day count, the last workday was exhausted on Friday, April 26, 2019, making the weekend days Liquidated Damage Days.
- By having one workday remaining as of April 26, 2019, the two following weekend days after are non-workdays and are uncharged as Liquidated Damage days. The next workday, which would be day 673 in the day count, would normally be Monday, April 29. However, Monday April 29, is listed as a no time-charge day in the day count.
- April 30, 2019, is also listed as a no-time charged day, which would make the first day upon which work could be performed and hence a workday, May 1, 2019, so the first day that Liquidated Damages could have been charged would have been May 2, 2019.

It must be noted that the financial impact of CDOT's clerical error is the imposition of \$125,000 in Liquidated Damages. To not remedy that admitted error is unjust.

There are additional days that are listed as no-time charged days in the day count weekly time count report:

- May 7, 2019
- May 8, 2019
- May 9, 2019
- May 20, 2019
- May 21, 2019

During the period before the expiration of the number of working days for performance, such weather events would result in the day not being counted as a workday. The question arises as to whether those provisions stating that if work cannot be performed, there will be not be a working charged day count, apply during periods of bad weather after the allowed workdays have been consumed.

The applicable provision would be Contract Section 108.08 (c) 1, Excusable Delay. The definition of Excusable Delay is "a delay that was beyond the contractor's control and was not due to the contractor's fault or negligence. The department may grant a Contract time extension for an excusable delay."

There are two kinds of Excusable Delays:

- Compensable Delay
- Noncompensable Delays

The applicable type of delay is in Contract Section 108.08 (c) B, Noncompensable Delay, which states "An excusable delay that neither the Contractor nor the Department is responsible for that may entitle the contractor to a Contract time extension, but no additional monetary compensation. Contract time allowed for the performance of the work may be extended to the delays due to force majeure (i.e. acts of God, acts of the public enemy, terrorist acts, fire, floods, area wide strikes, embargos, or unusually severe weather)." Excusable, Noncompensable Delay is not restricted by the Contract to only events occurring before the exhaustion of the Contract workdays.

We find that the days identified above from the weekly time count report are days for which Noncompensable Delay would be appropriate and that the granting of Noncompensable Delay days is not restricted to weather events that happen during the period prior to the exhaustion of the working days. The effect would be to the day count for Liquidated Damages, which would be reduced by 5 calendar days.

Therefore, we find that Liquidated Damages were not correctly applied as follows:

- The day count error for May 8, 2016, when corrected, results in the exhaustion of the workdays occurring 5 days later.
- Not charging Liquidated Damages on Non-workable Days—which would qualify as Excusable, Noncompensable Delay under Section 108.08 (c)—would reduce the Liquidated Damages by another 5 days.

The number of calendar days the Project would have finished late after accounting for Noncompensable Delay would be 16 days, not the 26 days alleged by CDOT.

This answer does not consider other matters for which Excusable, Noncompensable Delay could be granted which are addressed in other Points, including Points 1, 2, 4, and 7. A full answer to this question requires applying our answer to these Points, the result of which could cause the elimination of part or all of the Liquidated Damages assessment.

POINT NO. 12

Lawson Question No. 2: Is \$25,000 per day a reasonable estimate of estimated damages? AND CDOT Question No. 8: Is the value of a Day of Liquidated Damages appropriately determined to be the contractual value of \$25,000/day? If not, what is the correct value of one Day of Liquidated Damages?

Lawson Position

\$25,000 per day is not a reasonable estimate of CDOT's estimated damages. The Liquidated Damages amount is excessive, egregious and unreasonable. To be enforceable, the daily amount, when viewed at the time of the Contract, must be a reasonable estimate of the future actual damages which the owner will incur.

The high Liquidated Damages amount is simply an attempt to penalize and punish the contractor which makes the Liquidated Damages provision unenforceable:

- On other projects before and after this Project, CDOT used Liquidated Damages amounts of less than \$10,000 per day for projects of similar sizes.
- There was nothing presented about this Project that would require \$25,000.00 per day.
- At the merit meeting of November 8, 2019, CDOT was unable to provide justification for the Liquidated Damages amount or explain the specific circumstances which show this Project needed a much higher daily figure than other jobs of similar size being done over the same time.

This Project was previously bid in November of 2014 using CDOT Revised Specifications dated May 2, 2013. The Liquidated Damages table contained in revised Section 108 used for that first bid resulted in a daily liquidated damages amount of \$5,700 per day for amount of Lawson's bid. The advertisement for bids for the subject Project was less than a year later. The increase in the amount of daily Liquidated Damages from the first to second bid of Project STA2873-100 is approximately 437%.

CDOT's Liquidated Damages provision is not only void because it is not a reasonable estimate of actual damages but also because the amount of Liquidated Damages that CDOT assessed against Lawson was disproportionately in excess of the actual damage incurred by CDOT. CDOT has asserted:

- That the contractual completion date was April 26, 2019
- That Lawson did not finish until May 22, 2019

Per the Affidavit of T.J. Turner, Lawson's Project Manager, CDOT's work on the Project from April 27, 2019, to May 22, 2019, was carried out by no more than six people. They would have worked no more than 8 hours per day. The individuals would not have worked on the four Sundays occurring between April 27, 2019, and May 22, 2019.

Assuming that all of them worked on Saturdays—which very likely did not happen—this means they worked 21 days from April 27 to May 22 for a total of 168 hours (21 x 8). This further means that CDOT would need to incur \$30,952.38 per day or \$3,869.04 per hour for each of them to equal \$650,000 of damages. In reality, CDOT would not have incurred charges of even \$1,000 per day to keep them on the Project—meaning CDOT's actual costs were less than 1/30 of the Liquidated Damages assessed. The DRB should state that CDOT is not entitled to enforce its Liquidated Damages clause.

CDOT did not incur any costs for traffic control, erosion control, CDOT's office, and CDOT's office equipment. Throughout the Project, Lawson, not CDOT, provided these items. CDOT cannot claim that the Liquidated Damages were not disproportionate to its actual damages by pointing to these items.

CDOT Position

\$25,000 is a reasonable estimate of expected damages, as agreed to by both Parties in Contract Section 108.09. The schedule of Liquidated Damages was used to calculate the amount of daily charge based on the original Contract amount, per Contract Section 108.09. The Contract clearly states that Lawson and CDOT agree the amount shown in Section 108.09 reasonably represents additional construction engineering costs as Liquidated Damages. The Contract was signed by both Parties. The DRB cannot determine this schedule to be unreasonable, as Lawson and CDOT already contractually agreed that the schedule reasonably represents damages.

CDOT explained that, by federal regulation, the Federal Highway Administration (FHWA) has the ability to set the rates which underlie the Liquidated Damages table for CDOT projects contained in Section 108, Failure to Complete Work on Time. The Liquidated

Damages rates are regulated by and subject to the review and approval of FHWA using calculations which include CDOT direct and indirect costs for previous two years

DRB Observations

CDOT's Method of Calculating LDs for this Project

There was no evidence presented (nor was it even suggested) by CDOT that either the calculation of or amount of Liquidated Damages for this Project was determined by estimating actual damages that CDOT would incur if the Project failed to complete on time.

During the hearing, CDOT offered an exhibit to demonstrate how the Liquidated Damages for this Project were calculated using CDOT's actual overhead expenditures for the administration of contemporaneous projects during the previous two years. CDOT explained that the calculation had been reviewed and approved by the CDOT Chief Engineer and the FHWA, as was standard practice every two years, and was included in Standard Special Provisions (SSPs) that were applied to the LaPorte Project. CDOT acknowledged that the calculation was significantly affected by the denominator in the calculation. The denominator used is the value of construction work, which varies over the year, versus the overhead, which is relatively constant.

Based upon CDOT's explanation, this calculation's purpose would appear to be primarily for allocating CDOT overheads to construction projects, so that CDOT can recover its overhead costs from FHWA funds, not for determining Liquidated Damages. Since CDOT's overall overhead costs are relatively constant and not affected by the early or late completion of a project, there does not appear to be a link between the CDOT calculation for FHWA and the actual damages.

Lawson objected to and the DRB questioned whether it should accept the introduction of new information not previously submitted, so CDOT did not circulate the exhibit, and the DRB did not review it. The DRB has no reason to believe that CDOT improperly advertised or disseminated Contract provisions, including Liquidated Damages, to bidders in advance of the Project letting on November 5, 2015.

However, it is relevant and noteworthy that CDOT's website reveals that CDOT had in effect at the time of the Project bid more than one calculation of LDs simultaneously:

- One for projects using the Standard Specifications
- Another, including substantially different LDs, on projects subject to SSP

The resulting LD amounts—using the Liquidated Damages amounts in each of these different specifications being utilized at the same time—is astonishing. The applicable LDs for a project valued at \$21,000,000, such as this Project, would have been:

- As low as \$7,000/day had the Standard Specification been applied
- \$25,000/day if subject to SSPs

CDOT stated that it evaluates which SSPs are needed based on the type of project without reference to actual costs that would be incurred. This general application of LDs makes the reasonableness suspect.

Liquidated Damages Amount in previously bid Project No. STA2873-1

This Project was previously bid in November of 2014 using CDOT Revised Specifications dated May 2, 2013. The Liquidated Damages table contained in revised Section 108 used for that first bid resulted in a daily Liquidated Damages amount of \$5,700 per day for the amount of Lawson's bid amount in the re-bid Project. The advertisement for bids for the subject Project was less than a year after the first bid of the Project and CDOT offered no explanation for the over 400% increase in the Liquidated Damages.

The difference between the Liquidated Damages in the bid package for the Project in November 2014, \$5,700, and the \$25,000 per day used in the rebid less than a year later is astounding. It suggests on its face, when considered with the rates on other projects, that the amount is not reasonable.

The DRB finds that CDOT's testimony regarding the development of LDs every two years is inconsistent with information contained on the CDOT website.

No explanation was given by CDOT as to why administrative costs would have varied by more than 350% for calculations being made for the same time period or over 400% from 2014 to 2015. Consequently, Liquidated Damages do not appear to represent a reasonable estimate of CDOT's costs of a day of Project delay.

The amount of LDs is based on additional construction engineering costs

The language in Contract Section 108.09 indicates that the LDs amount contained in the schedule represents "additional construction engineering costs" incurred by CDOT if the Contractor fails to complete performance within the Contract Time. This assertion—that the LDs are to compensate CDOT for additional construction engineering costs—is significant, as that definition would define and limit the amount of actual damages CDOT would suffer. It is impossible to fathom that \$25,000 per day is remotely close to the actual additional construction engineering costs that CDOT would incur for a day delay to the striping.

There was no evidence set forth that CDOT's projected/estimated additional construction engineering costs had any relationship to the LDs in the Contract. In fact, CDOT stated that the amounts include all CDOT administrative costs, not just construction engineering costs.

The DRB finds that there was no evidence offered to substantiate or verify that the underlying calculation of LDs for this Project was a reasonable estimate of actual damages that CDOT would have incurred if there were a Project delay.

We find that the LDs in this Contract are far in excess of what CDOT's actual additional construction engineering costs would have been.

DRB Findings

Based on the wide variation of Liquidated Damages for the same Project, between similar projects during the same time period, and the apparent wide deviation between the Contract Liquidated Damages amounts and what CDOT's actual additional engineering costs could possibly have been, the DRB finds that \$25,000 per day is not a reasonable estimate of either CDOT's estimated or actual damages.

POINT 13

Lawson Question No. 3: Is CDOT's method used to apply and/or determine damages proper, including how CDOT counted Contract time? AND CDOT Question No. 10: Were Liquidated Damages correctly charged on a Calendar Day basis? If not, what is the appropriate method to charge Liquidated Damages?

Lawson Position

As stated in Lawson's position in Point 12, CDOT's method used to apply and/or determine the Liquidated Damages was not proper. CDOT's method of counting time is unjustified and unfair.

A contract which provides for Liquidated Damages should be precise in terms of specifying how to count each day's delay. If a contract fails to specifically set forth how Project days will be counted when snow, abnormal rainfall, material shortages and other outside forces impact the Project, then the Contract is going to be interpreted against the Owner on these points. Unless the Contract specifically says so, the Owner does not have the absolute discretion to count a whole day against Lawson if outside factors only allowed Lawson to work 10% of that day. Time should not have been counted against the Contractor on days where clearing snow was required to start work.

Lawson acknowledged that not enough time was spent by Lawson debating the time counts. It was charged for days when it only worked a portion of a day. It got "sloppy" thinking there was enough Contract Time.

CDOT Position

The Contract was followed appropriately in the application of Liquidated Damages per Contract Section 108.09. CDOT counted Contract Time per Contract Section 108.08 and Lawson indicated agreement with how CDOT counted Contract Time by signing the weekly time count statements for the entire Project, including those after Liquidated Damages began to be assessed.

The contractual deadline for disagreeing with time counts was June 23, 2019, which is 30 days after the final time count statement was provided to Lawson. Lawson did not submit a request for review or detail the reasons time charges were incorrect.

DRB Findings

This Point asks two questions:

- Did CDOT properly count Contract Time? This is addressed in Points 4, 7 and 11.
- Were Liquidated Damages properly applied on a calendar-day basis? This is addressed in Point 11.

The DRB finds also that, in accordance with Contract Section 108.09, Liquidated Damages are appropriately charged on a calendar-day basis. This does not change our answer on Point 11, that the correction of the day count and application of Excusable Delay would alter the number of days to which Liquidated Damages apply.

POINT 14

Lawson Question No. 8: *If the Liquidated Damages are not reasonable, must CDOT prove its actual damages? AND CDOT Question No. 9: Is CDOT contractually required to show actual costs for Liquidated Damages [additional construction engineering costs] incurred by CDOT after Contract time elapsed?*

Lawson Position

It is Lawson's position that, to assist with the determination of whether or not the Liquidated Damages amount are reasonable, CDOT should have to prove its actual damages.

CDOT Position

There is no contractual section requiring CDOT to show actual damages incurred after the elapse of Contract Time. Per Section 108.09, Lawson and CDOT agree that the schedule of Liquidated Damages reasonably represent additional construction engineering costs incurred by CDOT after elapse of Contract Time. Therefore, CDOT is not required by the Contract to show actual costs of additional construction engineering costs.

DRB Findings

The DRB finds no contractual basis for requiring that CDOT show actual costs for Liquidated Damages incurred by CDOT after Contract Time elapsed.

POINT 15

Lawson Question No. 10: *Is Lawson entitled to additional compensation?*

Lawson Position

In its Position Paper, Lawson indicated that it expects to see:

- Some financial losses that include equipment mobilization, project management staff, general overhead, field facilities and home office expenses
- A substantial decrease in overall revenue for 2016 affecting its bonding capacity

Lawson concluded by saying that “Unfortunately contract pricing does not allow a way for Lawson to recover from the delays.”

CDOT Position

No. Lawson has not identified any contractual basis or arguments for which additional compensation must be considered:

- Lawson has not identified any estimated quantum in the REA as required by Contract Section 105.22 (b) 4.
- No written notices of delay were provided by Lawson within seven days of delay occurrences.

This failure to follow Contract Section 108.08 (d) constitutes waivers of entitlement to additional compensation. Lawson’s statement of dispute also states that questions of quantum are not being presented to the DRB. Therefore, there is no support for additional compensation being owed to Lawson.

DRB Findings

Since the parties agreed that the DRB will only hear and consider merit and not quantum, the DRB finds that it is not appropriate to address this point.

DRB SUMMARY OF FINDINGS

POINT 1:

Lawson Question No. 4: *Was reasonable time allowed for change orders, major plan revisions and unforeseen conditions encountered?*

DRB Findings

The DRB finds that reasonable time was not allowed for change orders, major plan revisions and unforeseen conditions encountered.

POINT 2:

Lawson Question No. 5: *How and to what degree did utilities affect the progress or cause disruption?*

DRB Findings

The Parties agree that the utility conflicts encountered during construction impacted Lawson and the progression of Lawson’s work. The DRB finds the utility conflicts did cause disruption that would result in an Excusable Delay as defined by Section 108.08 (c) 1. The degree of such disruption could not be determined from the information and materials provided.

POINT 3:

Lawson Question No. 6: *When critical path work cannot be progressed as planned, is CDOT entitled to count time against the Contractor?*

DRB Findings

The DRB finds that during the work, where critical path could not be progressed by Lawson as planned, workdays should not have been counted, or in the case of added work, additional days should have been added.

POINT 4:

Lawson Question No. 7: *When inclement weather impacts work progress and/or damages material deposits, sub-grade and embankment saturation, is CDOT entitled to count time against the Contractor? AND CDOT Question No. 5: *Is the Inclement Weather (R50) item a delay? If so, is this Excusable or Nonexcusable?**

DRB Findings

The DRB finds that Inclement Weather—an Excusable, Noncompensable Delay as defined by Contract Section 108.08 (c)—may entitle the Contractor to workdays not being counted or to a Contract Time extension.

The DRB also finds that Inclement Weather impacts to the schedule can extend to the period after the weather event stops, such as the time required to dry subgrade.

For those days where Inclement Weather affected the time period after the allowed workdays have been consumed, see DRB Findings for Point 11.

POINT 5:

CDOT Question No. 1: *Is the Loveland Ready-Mix Court Order item a delay? If so, is this Excusable or Nonexcusable?*

DRB Findings

Lawson indicated it was withdrawing this Question/Issue. Therefore, it was not addressed.

POINT 6:

CDOT Question No. 2: *Is the Terry Lake Reservoir Toe Drain (“Reference SM 343”) item a delay? If so, is this Excusable or Nonexcusable?*

DRB Findings

The DRB finds that Lawson’s critical path work was likely impacted due to the fact the

paving work had to be re-sequenced. But the fact that Lawson clarified that this was not a delay means there is no reason for the DRB to make a finding on this Point.

POINT 7:

CDOT Question No. 3: *Is the Bicyclist Damage to Concrete Pavement (“Reference SM 483”) item a delay? If so, it this Excusable or Nonexcusable?*

DRB Findings

We find no evidence that the Contractor’s actions or inactions fell below the standard of care to establish negligence. Based on the question asked, we find that the Bicyclist Damage to the concrete pavement is an Excusable Delay.

POINT 8:

CDOT Question No. 4: *Is the Greeley Waterline Conflict (“Reference CO 28”) item a delay? If so, is this Excusable or Nonexcusable?*

DRB Findings

It appears that the waterline work actually delayed Lawson’s work. However, we find the Delay Nonexcusable, because Lawson agreed to the Delay instead of insisting that Greeley not perform the work.

POINT 9:

CDOT Question No. 6: *For items above determined to be Excusable Delays, did Lawson follow contractual requirements 108.08 (d) for requesting time extensions?*

DRB Findings

We find that Lawson did not follow the contractual notice requirements in all cases.

POINT 10:

Lawson Question No. 9: *Who is responsible for the Delays?*

DRB Findings

This question is extremely general. See DRB Findings for Points 4, 7 and 8.

POINT 11:

Lawson Question No. 1: *Is the application of Liquidated Damages justified? AND CDOT Question No. 7: *Did CDOT apply Liquidated Damages correctly?**

DRB Findings

With regard to Lawson Question No. 1, “Is the application of Liquidated Damages justified?”, this question is extremely broad and covers more than the application of the Liquidated Damages formula in the Contract. The question really goes to CDOT’s administration of the Contract.

We find that Liquidated Damages were not correctly applied as follows:

- The day count error for May 8, 2016, when corrected, results in the exhaustion of the workday occurring 5 days later.
- Charging Liquidated Damages on non-workable days—which would qualify as Excusable, Noncompensable Delay under Section 108.08 (c)—would reduce the Liquidated Damages by another 5 days.

The number of calendar days the Project would have finished late after accounting for Noncompensable Delay would be 16 days, not the 26 days alleged by CDOT.

This answer does not consider other matters for which Excusable, Noncompensable Delay could be granted which are addressed in other Points, including Points 1, 2, 4, and 7. A full answer to this question requires applying our answer to these Points, the result of which could cause the elimination of all or part of the Liquidated Damages assessment.

POINT 12:

Lawson Question No. 2: Is \$25,000 per day a reasonable estimate of estimated damages? AND CDOT Question No. 8: Is the value of a Day of Liquidated Damages appropriately determined to be the contractual value of \$25,000/day? If not, what is the correct value of one Day of Liquidated Damages?

DRB Findings

Based on the wide variation of Liquidated Damages for the same Project, between similar projects during the same time period, and the wide deviation between the Contract Liquidated Damages amount and what CDOT’s actual additional engineering costs could possibly have been, the DRB finds that \$25,000 per day is not a reasonable estimate of either CDOT’s estimated or actual damages.

POINT 13:

Lawson Question No. 3: Is CDOT’s method used to apply and/or determine damages proper, including how CDOT counted Contract time? AND CDOT Question No. 10: Were Liquidated Damages correctly charged on a Calendar Day basis? If not, what is the appropriate method to charge Liquidated Damages?

DRB Findings

This Point asks two questions:

- Did CDOT properly count Contract Time? This is addressed in Points 4, 7 and 11.
- Were Liquidated Damages properly applied on a calendar-day basis? This is addressed in Point 11.

The DRB finds also that, in accordance with Contract Section 108.09, Liquidated Damages are appropriately charged on a calendar-day basis. This does not change our answer on Point 11, that the correction of the day count and application of Excusable Delays would alter the number of days to which Liquidated Damages apply.

POINT 14:

Lawson Question No. 8: If the Liquidated Damages are not reasonable, must CDOT prove its actual damages? AND CDOT Question No. 9: Is CDOT contractually required to show actual costs for Liquidated Damages [additional construction engineering costs] incurred by CDOT after Contract time elapsed?

DRB Findings

The DRB finds no contractual basis for requiring that CDOT show actual costs for Liquidated Damages incurred by CDOT after Contract Time elapsed.

POINT 15:

Lawson Question No. 10: Is Lawson entitled to additional compensation?

DRB Findings

Since the parties agreed that the DRB will only hear and consider merit and not quantum, the DRB finds that it is not appropriate to address this point.

DRB RECOMMENDATIONS

CDOT and Lawson Construction Company are to be complimented on the successful completion of the US 287: SH 1 to LaPorte Bypass Project, which was by design a complex reconstruction effort that suffered numerous utility and groundwater problems, redesign necessities, work suspensions, weather delays, and added work in an active highway corridor. The Parties worked well together to complete work within the general parameters of the Contract budget and schedule.

At Project end, Lawson Construction did not complete all work within the Contract Time, causing work to continue beyond the 673 working days provided. The reasons for delay and the justification of Liquidated Damages were the focus of the hearing conducted by the standing Dispute Review Board and the subject of this Report and Recommendation.

Based on presentations by the Parties, the DRB has found that both Parties made errors in the management of the work, in the procedural exercise of contractual requirements, or in the calculation and application of Liquidated Damages.

The Liquidated Damages assessment on this Project is 26 days. There was evidence presented of:

- Errors in counting days (5 days).
- Unworkable days that meet the Contract definition for Excusable, Noncompensable Delay after the expiration of working days (5 days).
- Other Excusable Delays, such as Inclement Weather and the Bicyclist Damage.
- Days to perform extra work.

The findings of the DRB regarding the reasonableness and calculation of the Liquidated Damages is significant.

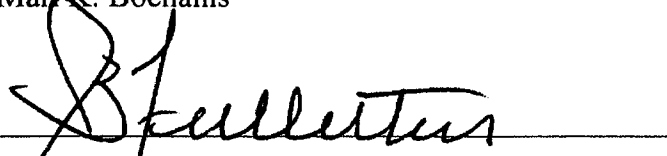
While Lawson did not always comply with the Contract requirements for Notice and providing schedule analysis, CDOT had actual notice of the delay.

Lawson's request is for remission of Liquidated Damages. Our findings provide a basis to remit some, if not all, of the Liquidated Damages. The DRB recommends that CDOT and Lawson Construction use the findings contained herein to negotiate the resolution of all outstanding differences.

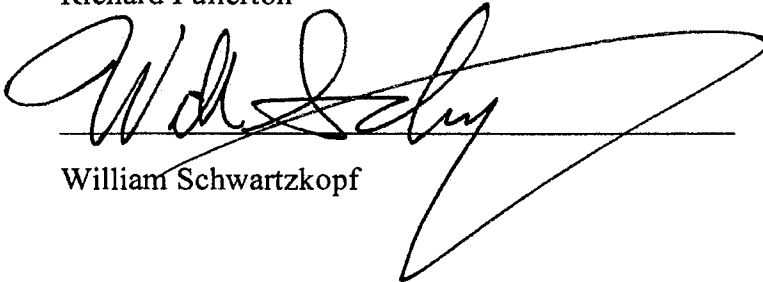
^{31st}
Respectfully submitted by the DRB this 30th day of March, 2020:



Mari K. Bochanis



Richard Fullerton



William Schwartzkopf