

DISPUTE REVIEW BOARD REPORT AND RECOMMENDATIONS

I-70 over Havana Bridge Replacement: Design/Build

Denver, CO

CDOT PROJECT NO. IM070-222

DISPUTE No. 1 – Roadway Maintenance

Hearing Date: May 15, 2018

Hearing Location: North Holly CDOT Office - 4670 Holly St, Denver, CO

Party Attendees: Lawrence Construction Company

Rick Lawrence – Executive Sponsor

Anne Lawrence – Project Manager

David Morris – Chief Operating Officer

CDOT

Kurt Kionka - Resident Engineer

Mike Bean – Project Engineer

Andy Stratton – Program Engineer

Mark Straub – Area Engineer

Background

On March 26, 2015, Lawrence Construction Company (LCCO) (Contractor) and the Colorado Department of Transportation (CDOT) signed a Contract with for \$24,975,352.00 for the design and construction for the replacement of the I-70 Bridge over Havana Street, the construction of a railway overhead structure for the Union Pacific Arsenal Lead Track and the resurfacing of approximately 4,000 LF of I-70.

On July 8, 2016, LCCO sent a letter to CDOT concerning the responsibility for maintenance costs which contained calendars showing maintenance work that LCCO had performed in 2015 and 2016. CDOT responded to the letter with a Form 105 Speed Memo dated July 25, 2016 denying LCCO's request. On December 27, 2017, LCCO sent a Request for Equitable Adjustment – Project Maintenance Costs to CDOT. CDOT sent a letter dated January 25, 2018 disagreeing with LCCO's opinion based on the maintenance during construction being a part of the Work.

Since the parties were not able to settle the dispute, both parties requested a DRB Hearing on merit and quantum.

Joint Statement of the Dispute

CDOT and Lawrence Construction disagree on whether the contract for the I-70 Design-Build project requires payment separate from the contract price for maintenance performed during

construction. CDOT interprets maintenance as part of the required work and included in the lump sum price. Lawrence Construction interprets maintenance as separate from the required work and deserving of additional compensation.

Pre-hearing Submittals

Both parties provided the DRB with joint Pre-hearing Submittals per Subsection 105.23(e) which included Position Papers and documentary evidence relevant to the issues. A set of Common Reference Documents was submitted by the parties. Both parties provided the DRB with their lists of attendees.

Summary of Contractor Presentation on Roadway Maintenance

LCCO said that in preparing its Design/Build Proposal it studied the Request for Proposal (RFP) documents to determine the Scope of the Work. Book 1 Section 11.1.2 – Items Included in the Contract Price makes no mention of roadway maintenance and the cost of roadway maintenance. This Section states:

Contract Price includes:

- 1. Performance of each and every portion of the Work.*
- 2. All designs, equipment, materials, labor, insurance and bond premiums, home office, jobsite and other overhead, profit and services relating to the Contractor's performance of its obligations under the Contract Documents (including all Work, Warranties, equipment, materials, labor and services provided by Subcontractors and intellectual property rights necessary to perform the Work).*

Book 1 Section 10.2 – Maintenance and Repair of Work and On-Site Property in Subsection 10.2.1 - Responsibility of Contractor states, *Additional requirements regarding maintenance of Highways during construction are set forth in Book 2, Section 18.*

Book 2 Section 18.0 - Maintenance During Construction discusses the required maintenance. LCCO performed all the maintenance work that was required. Subsection 18.1.7 - Payment for Maintenance during Construction states, *Progress payments for maintenance during construction shall be according to Book 2, Section 2, Project Management.* This states how maintenance will be paid and LCCO did not include the costs in its bid.

Book 2, Section 2, Project Management Subsection 2.1.2.3 - Invoice Document Content: Inclusion 5 - Monthly Maintenance Progress Report states, *The Contractor shall submit to CDOT the current Monthly Maintenance Progress Report, as required in Book 2, Section 18. No invoice will be reviewed or processed until all invoice documents and certifications, as identified in 2.1.2.3 are received by CDOT.*

Based on the review of the RFP requirements, LCCO did not include any maintenance in its bid. Maintenance is a separate bucket of work and requires separate invoices.

The Contract Order of Precedence is listed in Book 1 Section 1.3. Book 1 controls over Book 2. However, Book 1 says nothing about payment and directs you to Book 2. This is very difficult to figure out. If CDOT wanted maintenance included in the bid, it should have clearly defined such to level the playing field for all bidders.

Nowhere in the Contract Documents does it state the Contractor is responsible for paying for maintenance activities unless caused by the Contractor. Payment for maintenance is not incidental and is not included in the Contract Price. Invoices for payments for maintenance are to be submitted to CDOT for approval and then paid to LCCO per Book 2, Section 2.

LCCO, its subcontractors and suppliers, performed maintenance throughout the project including on weekends and holidays to ensure a safe Project site. Monthly Maintenance Progress Reports were supplied with estimates and CDOT was aware of all maintenance activities that occurred on the Project. LCCO could not have foreseen the required maintenance costs prior to its bid since onsite conditions were unknown. LCCO performed its work under the Contract and maintained the entire project site throughout construction and would like to be compensated for the work it performed outside the Contract scope.

Summary of CDOT Presentation on Roadway Maintenance

At the start of its presentation, CDOT handed out copies of documents from its pre-hearing Submittal to speed its presentation. LCCO was agreeable to using the handout for the hearing.

This was a Design/Build project and allowed for innovation by LCCO and TSH (Designer) which reduced the structure depth and lowered the profile grade which reduced costs. The Project was a success.

This dispute involves Contract language concerning maintenance and could be a landmark decision because maintenance is not specific to just this Contract. The RFP documents were reviewed by the Attorney General's office and have been used on other Design/Build projects. This is the first time the question on maintenance has come up. Design-Bid-Build and Design/Build contracts both include maintenance. On the I-70 Viaduct, CDOT only received one bid and CDOT met with the Colorado Contractors Association (CCA) because CDOT wanted to see competitive bids. CCA said the risks for such things as weather, accidents and other crews could not be quantified and then priced.

Book 1 Exhibit A defines Work as, *All duties and services to be furnished and provided by Contractor as required by the Contract Documents, including the administrative, design, engineering, quality control, Relocation, procurement, legal, professional, manufacturing, supply, installation, construction, supervision, management, testing, verification, labor, materials, equipment, documentation and other efforts necessary or appropriate to achieve Final*

Acceptance except for those efforts which the Contract Documents specify will be performed by CDOT or other Persons. In certain cases the term is also used to mean the products of the Work. This definition is very similar to the definition of Work in the new Red Book (Standard Specifications for Road and Bridge Construction - 2017).

Book 1 Section 1.7 - Omission of Details; Clarification by CDOT states, *The fact that the Contract Documents omit or mis-describe any details of any Work which are necessary to carry out the intent of the Contract Documents, that are customarily performed under similar circumstances, shall not relieve the Contractor from performing such omitted Work or mis-described details of the Work, and they shall be performed as if fully and correctly set forth and described in the Contract Documents, without entitlement to a Change Order hereunder except as specifically allowed under Section 13 or Section 19.* LCCO never brought up payment for maintenance during the proposal period.

Book 2 Section 2.1.1 Work Breakdown Structure (WBS) does not contain an element for maintenance. Instruction to Bidders Section 2.9.2 – Negotiations states, *The CDOT Project Director may request authorization to proceed with negotiations prior to Award. Such negotiations shall be limited to allocation of the proposer price among the various Work Breakdown Structure (WBS) items desired by CDOT, or any factors affecting the Project which have become known after the last Addendum to this RFP is issued.* LCCO never brought up payment for maintenance during the negotiations and just because the WBS list of elements does not include a cost for maintenance does not mean LCCO is entitled to payment.

Book 2 Section 2.1.2.3 does not refer to payment but to reasons payment can be held.

Maintenance is covered in Work. Book 2 Section 18.1.3 – Maintenance Responsibilities of Contractor states: *...the Contractor shall perform all required maintenance Activities for all Roadways within the Project limits, including, but not limited to:*

- 1. Patching and repair of existing pavements*
- 2. Patching and repair of all existing Structures included as a part of the Project*

CDOT does not normally put a pay item for maintenance in its bids.

Per the terms of the Contract, maintenance during construction is defined as Work and each and every portion of the Work is included in the Contract Price. CDOT is under no contractual obligation to pay LCCO an additional payment for maintenance work performed during construction.

Contractor Rebuttal

Rick Lawrence said he has been doing work for CDOT for over 40 years and never included unknown work in bids. In the past, CDOT has accepted the risks. Most CDOT projects have a Bid Item for asphalt patching by the ton. If the amount of maintenance work cannot be anticipated, it cannot be bid. Book 2 says maintenance will be paid differently from the other Work.

You need to look in detail at the Contract Documents. If an item is not in the WBS, it is not in the bid. The Contract leads the contractor to think maintenance will be paid Force Account. The total of the WBS elements equals the Contract amount. There should be a red flag in the bid documents if maintenance is incidental to the Work.

Under the Work listing there is no reference to maintenance. Omission of details in the Contract Documents is CDOT's problem. Book 2 clearly defines a different method of payment for maintenance.

CDOT Rebuttal

Per Book 1 Section 11.1.1, LCCO is obligated to perform the Work for the Contract Price and maintenance is included in the Work. There is nothing in the Documents that excludes maintenance from the Work and nothing that states maintenance will be paid by Force Account.

Contractors have to understand the risk of loss and should mitigate the risks. LCCO could have talked to CDOT Maintenance about past maintenance. CDOT might need to review providing maintenance records. When Asphalt Patching is included as a Bid Item, the dollar amount is not a guess but is estimated based on past history.

The Maintenance Reports were to be submitted with the monthly Pay Application. LCCO never submitted any dollar amounts until the Project was half done. The actual amount of maintenance could have been more than expected but the bridge deck was in poor condition. If LCCO would have notified CDOT earlier of the maintenance problems, CDOT might have looked at some mitigation like an overlay.

Discussions by Parties

1. CDOT said LCCO did a fantastic job and the Project is second to none.
2. LCCO said they did not want to add an unknown amount to their bid for an unknown amount of maintenance and maybe lose the job.
3. CDOT said when an Asphalt Patch Bid Item quantity was included in the Bid Items, it was based on an educated guess. LCCO said the Bid Item takes the risk away from the contractor and establishes a Unit Price for the work that is included in the total bid.
4. CDOT said the Asphalt Patch quantity is estimated by the designer. TSH was the designer and was retained by LCCO.

DRB Questions

1. **To Both:** Were the Escrow Bid Documents opened and reviewed?
Both parties said they were not.

2. **To Both:** What was included in LCCO's proposal under Section 4.1.3.2 – Safe and Efficient Maintenance During Construction?

CDOT said they would provide the DRB a copy of this section after the hearing.

CDOT provided a copy of this section of LCCO's proposal to the DRB on May 15, 2018 but there is no mention of cost and payment in the write-up, only the maintenance procedures.

3. **To Both:** Were the Monthly Maintenance Project Reports submitted per Book 2 Section 2.1.2.3 Inclusion 5? When were the invoices submitted?

Both parties said they were. CDOT said LCCO did not bring the maintenance payment issue up until half way through the job. The first cost data was received in January 2017.

4. **To CDOT:** Where on Form J – Maximum Price Allocation Form is maintenance included?

CDOT said there is no element for maintenance but the WBS is called out in Book 2 Section 2.1.1

NOTE: LCCO had asked for quantum to be heard. CDOT said they had made some comparisons with what LCCO had submitted with its daily reports but had not gone through an audit of each day. Accordingly, the parties said they would wait on any quantum analysis pending resolution of the merit issue.

Findings

1. Book 1 under Obligations of Contractor, Section 2.2.1 states, *The Contractor shall... construct the Project and **maintain it** (emphasis added) during construction in accordance with the requirements of the Contract Documents.* During the hearing, both parties said LCCO did perform the maintenance as required.

2. Book 1, Section 11.1.2 states:

... *the Contract Price includes:*

1. *Performance of each and every portion of the Work.*
2. *All designs, equipment, materials, labor, insurance and bond premiums, home office, jobsite and other overhead, profit and services relating to the Contractor's performance of its obligations under the Contract Documents (including all Work,*

Warranties, equipment, materials, labor and services provided by Subcontractors and intellectual property rights necessary to perform the Work).

Work is also defined in Book 1, Exhibit A – Acronyms and Definitions but there is no mention of maintenance.

3. Book 1, Section 10.2 is titled Maintenance and Repair of Work and On-Site Property. Subsection 10.2.1 – Responsibility of Contractor states:

*The Contractor shall maintain, rebuild, repair, restore, or replace all Work (including Design Documents, Released for Construction Documents, As-Built Documents, materials, equipment, supplies, and maintenance equipment which are purchased for permanent installation in, or for use during construction of, the Project, regardless of whether CDOT has title thereto under the Contract Documents) that is injured or damaged prior to the date of acceptance of maintenance liability by CDOT or third parties as specified in Section 10.2.2. All such work shall be at no additional cost to CDOT except to the extent that CDOT is responsible for such costs as provided in Section 13. The Contractor shall also have full responsibility during such period for rebuilding, repairing and restoring all other property at the Site, whether owned by the Contractor, CDOT or any other Person. **Additional requirements regarding maintenance of highways during construction are set forth in Book 2, Section 18** (emphasis added).*

The reading of this subsection appears to be addressing the maintenance of Work installed by the Contractor except for the last sentence which makes reference to Book 2. The above Section 10,2 wording is very similar to Standard Specification 105.19.

Book 2, Section 18 is titled Maintenance During Construction. Subsection 18.1.3 - Maintenance Responsibilities of the Contractor states:

Except as specifically assigned to CDOT in Section 18.4 below, the Contractor shall perform all required maintenance Activities for all Roadways within the Project limits, including, but not limited to:

1. *Patching and repair of existing pavements*
2. *Patching and repair of all existing Structures included as a part of the Project*

Subsection 18.1.7 - Payment for Maintenance during Construction states, **Progress payments for maintenance** (emphasis added) *during construction shall be according to Book 2, Section 2, Project Management.*

Book 2, Section 2 is titled Project Management and Subsection 2.1.2 is titled Cost Management. Subsection 2.1.2.2 - Invoice Submittals states, **The Contractor shall submit invoices to CDOT each month** (emphasis added).

Subsection 2.1.2.3 Invoice Document Content, Item 5 - Monthly Maintenance Progress Report states:

The Contractor shall submit to CDOT the current Monthly Maintenance Progress Report, as required in Book 2, Section 18.

No invoice will be reviewed or processed until all invoice documents and certifications, as identified in 2.1.2.3 are received by CDOT.

Based on the foregoing discussion, it is quite clear that progress payments will be made for maintenance during construction and that invoices shall be submitted monthly.

4. Book 2, Section 2 is titled Project Management. Subsection 2.1.1 - Work Breakdown Structure (WBS) states, *The Contractor shall submit to CDOT, along with its Preliminary Initial Schedule, a detailed Work Breakdown Structure (WBS) for Acceptance. The Preliminary Initial Schedule shall include a detailed, organized hierarchical division of the (WBS) for completing each element of the Work. The Accepted WBS shall be the basis for organizing all Work under the Contract Documents, and shall be used as a basis for the Contract Schedules, and **other cost control systems** (emphasis added).*

Subsection 2.1.1 goes on to state, *Exhibit B of Book 2, Section 2 – Project Management shall be used for determination of segment limits and cost proposal preparation of WBS Activities further described herein and on Form J.* Form J is included in the Instructions to Proposers and is titled Maximum Price Allocation Form and contains two listings of all the Work items that total to the proposer's Total Project Cost. It should be noted that there is no WBS item for maintenance.

5. CDOT cited Book 2, Section 18.1.3.2 which requires the patching and repair of all structures as a part of the Project. Subsequent items in Section 18.1.3 define those maintenance work responsibilities that shall be performed by the Contractor. LCCO said that they were responsible to perform the maintenance work but that they should be paid for it in Progress Payments as stated in the Contract.
6. In most Design-Bid-Build contracts there is a unit price bid Item for Hot Mix Asphalt (Patching) which is described in Standard Specification 403.01 and paid for under Standard Specification 401.22 and 403.05. The payment for patching protects both the contractor and CDOT. There is no way for a contractor to estimate the quantity of maintenance/patching work that **might be required** from the roadway deterioration due to weather, accidents and traffic. If a contractor cannot determine a quantity for an item of work, he cannot reasonably determine a price for it. CDOT on the other hand, only pays for the maintenance that is actually needed. CDOT said that LCCO could have gone to CDOT Maintenance to see what has been done in the past. Any records that CDOT would have would be based on normal

highway operations which would be far different from placing the normal traffic onto reduced lanes to meet phasing requirements.

During the hearing, CDOT said LCCO could have contacted the CDOT Maintenance Department to get past maintenance data. The DRB can see no reason that LCCO should have contacted the Maintenance Department prior to submitting its Proposal since LCCO believed it would be compensated for maintenance through Progress Payments.

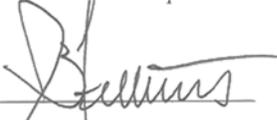
Recommendations:

1. Although Maintenance during Construction is defined in the Contract Documents, it is not clearly called out in the Work and nothing can be found in the Contract Documents to indicate that Maintenance during Construction is incidental to the Work. As discussed in Finding 3 above, it is clear that LCCO was to submit Monthly Maintenance Progress Reports and that Progress Payments would be made by CDOT.
CDOT said that LCCO performed the required maintenance and both parties said that the Monthly Maintenance Progress Reports had been submitted.

Based on the foregoing discussion, LCCO should be paid for the required maintenance it performed on the Project.

2. Although the quantum issue was not reviewed during the hearing as discussed in the **NOTE** above, LCCO should make sure all invoicing is in accordance with Book 1, Section 13.7 – Time and Materials Change Orders. Should the parties not be able to reach agreement on the maintenance performed by LCCO and the resulting costs, the dispute can be submitted to the DRB.
3. During the hearing, CDOT said that it had not experienced payment for maintenance problems on other projects using the same or similar documents. It is the duty of the DRB to make its Findings and Recommendations relying on what is contained in the “four corners of the Contract”. Accordingly, what has been done on other projects was not considered by the DRB and the Findings and Recommendations are based on what is contained in the Contract between the parties.

Respectfully submitted this 5th day of June 2018.


Richard Fullerton


William P. Caldwell


W. H. Hinton II