BEFORE THE ALASKA OFFICE OF ADMINISTRATIVE HEARINGS ON REFERRAL BY THE COMMISSIONER OF TRANSPORTATION & PUBLIC FACILITIES

MILLER CONSTRUCTION CO., LTD.	)	
	)	
v.	)	
	)	
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES, SOUTHCOAST REGION	)	OAH No. 19-0088-CON

ORDER ON MOTIONS re CARDINAL CHANGE AND ELECTION OF REMEDIES

On July 27, 2020, the Office of Administrative Hearings issued a Decision and Order on Miller Construction Company's five contract claims against the Southcoast Region of the Alaska Department of Transportation and Public Facilities regarding the Shelter Cove Road project. The Decision found that the Region had a duty to amend the contract when Miller Construction had completed the quantity of earthwork that was guaranteed as a maximum quantity under the solicitation. The Region breached that duty when it failed to grant Miller Construction's July 2017 request for an equitable adjustment. The Decision converted the Region's termination for default to a termination for convenience. The Decision deferred an award of damages to the damages phase of the proceedings.

The Decision allowed the parties to file motions for reconsideration. After taking a hiatus to negotiate settlement possibilities, the parties did so. Miller Construction's motion was granted in part, allowing the parties to brief two issues: whether Miller Construction had the option to elect remedies under the contract and whether the deviations from the original bid documents amounted to a cardinal change.

A. Election of Remedies

The July decision permitted Miller Construction to make a claim for damages on a unit-price basis of $10 per cubic yard for excavation and embankment that exceeded the estimated volume. The decision to allow damages based on a unit price appeared to deviate from the contract, which did not provide for payment based on volume, did not require measurement of earthwork, and only allowed damages for claims based on costs. The allowance, however, was based on the determination that "both parties have agreed that the issue of the balance owed for extra quantities of earthwork above contract quantity for bid item 207(1) will be paid at the prices relied on by Miller Construction in its bid."[1] The decision specifically noted that the order

[1] Decision on Claim and Counterclaim and Orders on Further Proceedings at 169.

allowing calculation of damages based on the unit price was not based on an applicable contract term. Rather, it was based on the conduct of the parties, including their representations at the hearing, in the request for equitable adjustment, and in the Contracting Officer's Decision.

As the decision further noted, however, although the Region had bound itself to accept $10 per cubic yard for excavation and embankment, it had never stipulated that damages could be based on an estimate of quantities or a measure that was not identified as an allowable form of measurement under the standard specifications. Therefore, if Miller Construction elected to claim damages based on quantity, the decision required that it prove those damages in a manner consistent with provisions of the standard specifications, including provisions governing measurement that otherwise would not apply to this contract.

Without question, this order contained principles that were in tension with one another. It allowed a noncontractual unit-price remedy while requiring that the quantification of the damages under this remedy be consistent with a contractual provision that was not directly applicable in the first place. My intent in allowing damages to be calculated in this manner, however, was simply to be consistent with how the parties themselves had approached the issue. Nothing in the law of contracts, the terms of the contract, or the conduct of the Region, opened the door to imposing a requirement that the Region accept a "reasonable" (but not contractual) measure of volume (including engineer's estimates) in determining damages for a post-discovery claim.

In its motion for reconsideration, however, Miller Construction argued that it could "elect[] to recover for extra-contractual earthwork at a unit price." Accordingly, I issued an order allowing reconsideration of the requirement that damages based on quantities must be measured in a manner permitted under the standard specifications.[2]

In its brief on reconsideration, Miller Construction conceded that its argument asserting its "right to recover damages based on a unit price for the extracontractual quantities of earthwork" did "not arise from the terms of MCC's Contract."[3] For purposes of reconsideration, that admission ends the inquiry. Reconsideration was limited to whether the *contract* gave Miller Construction the option to elect to pursue damages based on a unit price for quantity. It did not.

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2 Order on Reconsideration at 7 (quoting Miller Construction motion at 2).

3 Miller Construction's Initial Brief on Cardinal Change and Election of Remedies at 2. Although Miller Construction's brief appears to argue that the Region waived any requirement that damages be measured by a contractually-authorized means of measurement, Miller Construction does not cite to any facts or statements that would support a waiver theory. *Id.* Moreover, my memory of the hearing is that the Region frequently asserted that it would require proof of damages consistent with the contract before paying a claim based on a measurement of volume. Therefore, it is not necessary to discuss the issue of waiver here.

Nothing in Miller Construction's motion or brief warrants further exploration into whether the Region's conduct opened the door any further than allowed in the July decision. The July decision's holding regarding damages based on quantity will stand unless the doctrines of cardinal change or *quantum meruit* take us outside the contract's limits on damages. To that inquiry we turn next.[4]

B. Cardinal Change

1. Why does the cardinal change doctrine matter here?

Miller Construction argues that the difference between the plan estimates for earthwork and the actual earthwork required to complete the job was a cardinal change. A cardinal change "occurs when the government effects an alteration in the work so drastic that it effectively requires the contractor to perform duties materially different from those originally bargained for."[5]

Although the cardinal change issue would not affect liability (because the Region was already liable for a breach of contract because it had failed in its duty to amend the contract), it might affect how damages would be calculated. As explained above, the contract has limitations on damage calculations.[6] If those limitations apply here, they will affect how Miller Construction's damages are measured.

As a construction-law treatise explains, however, "[a] change order that goes beyond the scope of work need not be accepted. If the owner insists, then the owner has repudiated the contract."[7] The contractor then can elect either to "refuse performance" or to "perform and claim compensation without limitation from the changes, guaranteed maximum price, or any other price-restrictive clause in the contract."[8]

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4 Given the inherent disjointedness of the measurement of damages under the contract (in part because section 105-1.17 does not adhere until after the contractor becomes aware of the possibility of a claim), if these proceedings reach a damage phase, it may yet prove to be advantageous to both parties to present an accounting of damages based on quantity. If so, I will review any accounting that is consistent with the July decision and this order. Alternatively, the parties could stipulate to a range of acceptable measurements of quantities and present damages on that basis. My point here is that I do not intend to tie the parties' hands, but I am not persuaded that the July decision was in error when it held that damages measured by unit price were allowable, but only if the measurement of volume conformed to the requirements of the standard specifications.

5 1A Bruner & O'Connor Construction Law § 4:16 (quoting *AT&T Communications, Inc. v. Wiltel, Inc.*, 1 F.3d 1201, 1205, (Fed. Cir. 1993). The *AT&T* court further explained that "[b]y definition, then, a cardinal change is so profound that it is not redressable under the contract, and thus renders the government in breach." 1 F.3d at 1205. *See also* 1A Bruner & O'Connor Construction Law § 4:13 ("A 'cardinal' change is a change outside the general scope of the contract, which thus is not governed by the "changes clause," and cannot be remediated under the contract.").

6 SCR 330 at 34 (§105-1.17).

7 Barry B. Bramble and Michael T. Callahan, *Construction Delay Claims* § 13.12 Cardinal Changes (7th ed. 2020).

8 *Id.*

Although cardinal changes often arise from change orders that go beyond the scope of the original contract, cardinal changes can also result from inadequate design specifications. "[W]here drastic consequences follow from defective specifications we have held that the change was not within the contract, i.e. that it was a cardinal change."[9]

Here, Miller Construction has alleged that the change in volume of earthwork from the estimated amount in the plans to the actual amount required was drastic.[10] Thus, Miller Construction is alleging a cardinal change resulting from defective specifications rather than from a change order. It follows that Miller Construction must show that the Region abandoned the contract by requiring quantities so far above those in the specifications.[11] This theory of "abandonment by underestimation of quantities" will figure in the analysis that follows.

2. What is the test for cardinal change?

Nailing down precisely what constitutes a cardinal change is not easy. Both parties have advocated approaches that oversimplify the analysis.

The Region has suggested three tests for determining whether a change is cardinal. First, it argues that changes to a project are never cardinal when "the work performed is otherwise substantially as anticipated."[12] Here, the contract was for the construction of 550 lane stations. Although some modifications of those lane stations occurred during the course of construction, those changes were relatively minor. At the end of the project, the road built was the same road that was put out for bid. To the Region, this means that the changes in quantities could not be cardinal.

The Region is correct that the constancy of the deliverable lane stations in the contract is an important factor in the cardinal change analysis. It is not, however, a litmus test for cardinal change. Indeed, when the issue giving rise to the change is an alleged defective specification, the fact that the product is unchanged is not conclusive. As the Court of Claims explained in *Marden Corp. v. United States,* "[w]here a cardinal change is concerned, it is the entire undertaking of the

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9 *Edward R. Marden Corp. v. United States,* 194 Ct. Cl. 799, 809 (1971).

10 Miller Construction Initial Brief on Cardinal Change and Election of Remedies at 11. The issue of the size of the discrepancy between estimated earthwork and actually required earthwork is discussed in section B(4) of this order.

11 *See* 1A Philip L. Brunner & Patrick J. O'Connor, *Construction Law* § 4:15 (Aug. 2020 Update) ("[t]hese cases reflet that the theories of abandonment and cardinal change frequently are used synonymously").

12 Region Opening Brief at 10 (citing *United States ex rel. Sun Const. Co. v. Torix Gen. Cont. LLC,* 2009 WL 3348287 at *4 (D. Colo. 2009); *Aragona Constr. Co. v. United States,* 165 Ct. Cl. 382, 291 (1964). *See also, e.g., S.J. Groves & Sons v. United States,* 661 F.2d 170, 173 (Ct. Cl. 1981) (noting that cardinal change issue hinges on "whether the modified job 'was essentially the same work as the parties bargained for when the contract was awarded.'" (quoting *Air-A-Plane Corp. v. United States,* 408 F.2d 1030, 1033 (Ct. Cl. 1969))).

contractor, rather than the product, to which we look."[13] Moreover, a significant increase in earthwork can be considered a cardinal change.[14] This tells us that further analysis is necessary, in spite of the constancy of the lane stations.

Second, citing the Bruner & O'Connor construction law treatise, the Region asserts that "an increase by more that 100 percent of the original contract price is typically required" before a change is considered cardinal.[15] The Region maintains that the dollar value of the change in the earthwork quantity here "amounts to an increase of 22.7% over MCC's original bid price of $11,473,390."[16] The Region concludes that Miller Construction fails the 100-percent-increase test and thus fails the cardinal-change test.

The Region is correct that the Bruner & O'Connor treatise recognizes that courts have found a change to be cardinal when the change led to a profound increase—100 percent or more—in contract value.[17] The treatise also advises, however, that the case law only provides "some guidance."[18] It cautions that factors other than the size of the change, such as alteration in the risk or duration of performance, availability of a remedy under the contract, and effect on the competitive bidding process, must also be considered.[19] Rather than adopt a bright-line test, the treatise emphasizes the admonition that "each case must be analyzed on its own facts and in light of its own circumstances."[20]

The take-away from this discussion is that the size of the change is a crucial factor. At some point, if the change is large enough, it would be cardinal. As will be explained, however, here, if we looked only at size, the analysis would tend to favor a finding that the change was cardinal, notwithstanding the Region's arguments about the 100 percent threshold. Because we must look at other factors, the analysis is more complicated.

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13 442 F.2d at 370.

14 *See Saddler v. United States,* 287 F.2d 411, 414–15 (Ct. Cl. 1961) ("We are of the opinion that the nature of this particular contract was so [changed] by the added work, albeit the same kind of work described in the original specifications, as to amount to a cardinal alteration falling outside of the scope of the contract."); *ThermoCor, Inc. v. United States*, 35 Fed. Cl. 480, 492 (1996) ("The court has no choice but to hear evidence on the cardinal change theory limited to plaintiff's claim for an equitable adjustment for increased quantities").

15 Region Opening Brief at 10.

16 *Id.* at 11.

17 4A Brunner & O'Connor § 12:60.

18 *Id.*

19 *Id.;* 1A Brunner & O'Connor § 4:13.

20 4A Brunner & O'Connor § 12:60 (quoting *Wunderlich Contracting Co. v. United States,* 351 F.2d 956, 966 (Ct. Cl. 1965). *See also Id.* at Volume 1A § 4:12 ("legal concepts are too general to be truly helpful. The nature of the inquiry is inevitably fact specific, and judicial results are 'all over the map.'" (citations omitted)).

Third, the Region argues that the test for cardinality requires that the contractor prove that the alleged cardinal change caused a significant change in the methodology or approach to the construction project.[21] It then asserts that as a factual matter, the change in earthwork quantity here did not "change[] the means, methods, or equipment utilized by MCC or its subcontractors."[22]

The effect of the change on a contractor's equipment and labor needs is, indeed, an appropriate inquiry. There is not, however, a clearly-establish demarcation that establishes when the changes in methodology or approach mean that the change in specifications was cardinal. Here, the Region cannot argue that the change in earthwork quantity had no effect on methodology or approach—it can only argue that Miller Construction has not sufficiently alleged or proved that the effect on methodology was cardinal. Indeed, the Region itself emphasized both the quantity of work not done by Miller Construction and the need for larger equipment to accomplish that work. On this record, the Region's argument regarding methodology provides very little support for the conclusion that the change was not cardinal. To the extent that the Region is arguing the broader point that the change must effect a fundamental change in the project, however, that argument is well taken, and will be a factor in the decisionmaking in this order.

Miller Construction makes essentially two claims regarding the test for whether a change is cardinal. First, it, like the Region, asserts that the size of the change is the controlling factor. As explained above, yes, size is a major factor. However, as the Bruner & O'Connor treatise makes clear, the test for whether a change is cardinal requires "consideration of both the magnitude and the quality of the changes."[23] Here, analysis of the quality of the changes will require deep exploration.

Second, Miller Construction argues that the contract itself lays out when a change is cardinal. Miller Construction cites to the change provisions of the contract, and notes that "changes outside the general scope of the Contract shall be made only by Supplement Agreement."[24] It then observes that here, the Region "refused to add the extra earthwork to MCC's Contract by executing an Equitable Adjustment, Supplemental Agreement, or Change

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21 Region Opening Brief at 11; Region Reply Brief at 9.
22 Region Opening Brief at 11.
23 1A Bruner & O'Connor § 4:12 (quotation marks and citation omitted).
24 Miller Construction Initial Brief at 1 n.2 (quoting Standard Specification §104-1.02).

Order."[25] From this, Miller Construction concludes that the changes in earthwork must be cardinal.

The burden Miller Construction's approach would impose on construction contracts, however, is too high. Under this approach, any matter that is left for further negotiation and subsequent agreement would be considered "cardinal" if no agreement were reached. As recognized by the Bruner & O'Conner treatise, however, "[c]ertainty of change is a constant of the construction process."[26] Even in the most painstakingly specific contract, some gaps are inevitable, but that gap does not mean that the contract has been abandoned or made unenforceable.[27]

In construction contracts, the general expectation is that some issues may require renegotiation, and that if no agreement is reached, the unilateral decision of the owner would govern, subject to the claims process.[28] That process does not mean that the failure of the contract to anticipate the matter, or the failure of the parties to reach agreement, makes the issue cardinal.

Miller Construction does make a good point, however, that we also cannot accept that merely because the contract allows for subsequent negotiation, and imposition of the owner's unilateral decision subject to claim if negotiation fails, that the contract provides for *all* eventualities. Because some changes "have the effect of altering work so dramatically that the contractor is required to perform duties materially different from those originally bargained for; courts consider these 'cardinal' changes to a contract."[29]

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25 *Id.* at 1.

26 1A Bruner & O'Connor § 4:1.

27 *See, e.g., Rego v. Decker,* 482 P.2d 834, 837–38 (Alaska 1971) ("courts should fill gaps in contracts to ensure fairness where the reasonable expectations of the parties are fairly clear. . . . Courts would impose too great a burden on the business community if the standards of certainty were set too high. On the other hand, the courts should not impose on a party any performance to which he did not and probably would not have agreed." (citations omitted)).

28 *See, e.g.,* 9 A.L.R. Fed. 2d 565 (Originally published in 2006) ("Construction contracts generally recognize that changes in a project are likely to occur and therefore provide a mechanism by which modifications may be implemented even without the consent of the contractor."). *But see also Marden,* 442 F.2d at 367-68, 370 (holding that under federal law, design flaw was cardinal change because it was drastic, and no specific provision of contract provided complete relief). This decision relies upon *Marden* for the proposition that a design flaw can be a cardinal change, even if the product is the same deliverable as requested in the contract, if the design flaw is a drastic change from the original specifications. The "complete relief" analysis of *Marden*, however, is less useful here because that prong of the analysis appears to be based on the limitations in federal law that prevented the Armed Services Board of Contract Appeals from "fashion[ing] an affirmative remedy for plaintiff" because there was "no provision for a contract adjustment in the event that work or materials are damaged or destroyed." *Id.* at 368. Here, however, the contract allowed for contract adjustment when plan quantities were reached. Further, state law allows this office to address both a claim for additional quantities and a claim for a breach of contract. *See* AS 36.30.620; 36.30.627; 36.30.690.

29 9 A.L.R. Fed. 2d 565.

In sum, to determine whether this change is cardinal, we must analyze the specific facts regarding this contract and the conduct of the parties concerning whether the variation in outcome was so far from what had been expected as to be outside the scope of the contract. "A cardinal change should apply to any conduct demanded by the owner that has gone beyond the reasonable expectations of the contractor and has made the transaction different from what the parties had in mind when they made the contract."[30]

3. Do the contract terms and the general approach taken by the parties support a conclusion that the change in volume was cardinal?

In this case, viewing the contract from the 20,000-foot level tends to support a conclusion that the change in quantity was not a cardinal change. The hallmark of this contract was its flexibility. The contractor was not tied down to a fixed alignment, but instead was allowed to maneuver to find the best alignment to fit the topography. The parties understood that the proposed alignment was based on a LiDAR survey, which would be less precise than other survey methods. They also understood that the geotechnical information was limited, making the plans yet more uncertain.[31] Both of these known limitations, together with the inherent flexibility of the contract as a whole, support a conclusion that the parties knew the plan estimates of earthwork were rough and thus likely to be significantly different from actual earthwork quantities.

Further, significant changes to the road design were in fact effected. For example, the road was moved to avoid an archeological site and to skirt around a steep section prone to landslides, and fish pipes were eliminated and replaced with log-stringer bridges. Miller Construction argues that the cumulative changes add up to make the entire change process cardinal—an argument that, in some circumstances, would be compelling.[32] In the context of a pioneer road in virgin ground where the planning was at best tentative, however, these changes are consistent with the conclusion that significant changes were anticipated. This makes it less likely that the changes in earthwork, or all cumulative changes, were cardinal.[33]

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30 Bramble and Callahan § 13.12.

31 *See, e.g.,* Lester testimony; Kemp testimony (explaining that more information reduces risk and that here information was limited, thus increasing risk that unanticipated changes would occur).

32 *See, e.g.,* Brunner & O'Connor § 4:14 ("[t]he most insidious type of 'cardinal' change is that created by the cumulative impact of numerous changes, none of which individually would be deemed 'cardinal.'"). Although this order focuses on the changes to excavation and embankment, it does not mean that I have lost sight of the other changes to earthwork quantities or to the other changes that occurred during the project. The underestimate of embankment and excavation are so significant, however, that they would constitute a cardinal change on their own without regard to other changes but for the fact that this contract evinces a clear expectation that the plans were not even as accurate as the plans for a garden variety construction project would be.

33 *See, e.g.,* Bramble & Callahan, § 13.12 (noting that courts have rejected cardinal change when "the nature of the problems that caused the delay were within the contemplation of the parties").

Moreover, the very factor that spelled the Region's downfall in its attempt to default Miller Construction—the Region's guarantee of the plan quantities—here serves as a bulwark in its defense against the cardinal change doctrine. By guaranteeing the plan quantities, the Region took the risk that plan quantities were inaccurate. This guarantee provides a buffer to protect Miller Construction from suffering the impact of a change in quantity. It signals that even if change occurs, the impact will be on the Region, not Miller Construction. With this guarantee, any change in quantity would have to be very large indeed to qualify as cardinal.

Finally, we have the evidence of the conduct of the parties. Starting with their conduct before construction began, the parties clearly expected that quantities could change. Indeed, Mr. Landeis in particular foresaw the possibility that plan quantities could be exceeded. He raised the subject at the pre-construction conference, several times asking Miller Construction about how it would quantify earthwork.[34]

Looking at the conduct of the parties after plan quantities were reached, as explained in the July decision, Miller Construction provided notice that it had installed plan quantities of excavation and embankment. Mr. Kemp testified that the matter of excess quantities was an issue that could be resolved by a request for equitable adjustment, without need to resort to the claims procedure.[35] This conduct tends to demonstrate an expectation that the change in quantities was within the contractually-agreed expectations of the parties.

As Miller Construction argues, the owner's "conduct in addressing the change may be considered . . . in determining whether a cardinal change has occurred."[36] Miller Construction's point is that here, the owner denied Miller Construction's request for equitable adjustment, and that this conduct was wrongful. To Miller Construction, this supports a finding that the change was cardinal.

In fact, however, the Region's conduct supports the opposite conclusion. The Region responded to the request for equitable adjustment by undertaking considerable effort to verify that plan quantities had been reached. As documented in the July decision, the Region's August/September survey was a significant undertaking. It shows that the Region regarded its obligation to measure the quantities as a serious obligation flowing from the Region's promise that plan quantities were guaranteed. Although the Region got it wrong (an error that caused

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34 SCR 18.

35 Kemp testimony.

36 Miller Construction Initial Brief at 6 (quoting Bramble and Callahan, *Construction Delay claims* § 13.12.).

significant damages), the effort it expended to get it right supports a conclusion that a change in quantities was plausible and important. Put another way, if the possible variance in quantity was minor, we would not expect the Region to expend so much effort to measure the quantities. The size of the effort taken is commensurate with the possible size of the change. It supports a conclusion that a significant change in quantity was within the range of possible outcomes expected by the parties. It makes it less likely that the change in quantity here was a cardinal change.

In sum, the qualitative factors relating to the expectations of the parties generally favor a finding that even significant changes to the design were within the scope of the contract. It follows, in turn, that significant changes to quantities of earthwork would also be within the scope, up to an uncertain limit of reasonableness. We turn next to that quantitative issue to see if we have reached that limit. Following that inquiry, we will turn back to a qualitative comparison between this case and two cases on cardinal change that figure significantly in the analysis. That comparison will aid in reaching the answer.

4. Was the size of the discrepancy between specification and actual quantity so drastic that it was a cardinal change?

As noted above, the size of the difference between the estimate and the actual is always significant to the cardinal change inquiry. Simply put, even though the qualitative approach here anticipated that original plan estimates would not be accurate, at some point, a discrepancy between anticipated quantities and actual quantities would be so large that it would have to be considered cardinal.

The parties agree that the plan volume was 513,700 cubic yards of excavation and embankment. They disagree on the size of the actual required volume. Miller Construction estimates that the actual volume was 814,141 cubic yards, an overrun of 300,441 cubic yards. The Region estimates the excavation and embankment overrun at 218,550 cubic yards.[37] For purposes of this order, I will not address the discrepancy between the two estimates. I will note, however, that the issue of cardinal change should be based on total excavation and embankment needed to complete the project—not the total installed by Miller Construction. That is because it is the difference between the total actual volume and the estimate that tells us the size of the error that is allegedly cardinal. When Miller Construction left the project in December 2017, some

[37] Region Opening Brief re Election of Remedies and Cardinal Change at 11 (citing Appendix A to the July decision).

additional embankment was still needed. Moreover, as noted above, Miller Construction is entitled to add up all of the errors and underestimates between the plans and actual project to allege that the cumulative effect is cardinal. For Miller Construction, that is a lengthy list, including unidentified steep slopes that led to two landslides, underestimate of rock in the roadway, and failure to identify a fish stream.

Focusing primarily on earthwork, however, suffices to set the stage for the analysis. Regardless of how we measure the gap, the difference between the estimated quantities of earthwork and the actual quantities is significant. Looking at the effect this underestimate had on Miller Construction, the analysis in the July decision concludes that the underestimate was material. Without more money and more time, Miller Construction could not complete the project. Ultimately, the underestimate was a factor that led to the downfall of the business as a going concern.[38]

Looking at the effect of the underestimate on the Region also demonstrates its enormity. The appropriate hypothetical here is to ask how the Region would have been affected if it had known in July 2017 that it needed to provide Miller Construction with an additional $2.5 million (or so) and seven additional months (from the original completion date of October 31, 2017) to complete the job. In general, this record confirms that funding was a concern for the Region.[39] The evidence in this record, including the actual effect on the Region of having to hire a completion contractor, tells us that this news would have created considerable difficulty for the Region.

In sum, if the size of the change were the only factor in the cardinal change analysis, the facts here would favor a finding of cardinality.

This conclusion, however, is mitigated by the knowledge that the line between cardinal and not cardinal is fuzzy and indistinct. In general, changes in earthwork quantities are among the most expected changes in a field where change is a certainty. Given the qualitative analysis described above—the flexibility built into this contract, the Region having taken the risk of estimated quantities being in error, and the parties' conduct—size alone is not determinative. Thus, balancing the qualitative factors analyzed above and the quantitative factor of the size of the

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[38] This order does not address whether the underestimate of earthwork was a legal cause of Miller Construction's demise. It seems clear, however, that it was a one link in the chain of events leading up to that end.

[39] *See, e.g.,* Miller Construction Exhibits 43, 55, 397. These exhibits are not conclusive evidence of a funding shortfall. They are evidence, however, that, as with any project, funding was a concern.

change and its effect on the parties makes this cardinality decision extremely difficult. Further inquiry into the quality of the change is required before reaching a conclusion.

5. Do the two cases most relied upon by Miller Construction—*Marden* and *Saddler* support that the change here is cardinal?

Above, we have analyzed factors that affect the decision on cardinality of the change in earthwork quantities. That analysis leads to the conclusion that it is a close question. Before making a final decision, however, we will look closely at two federal decisions, *Marden* and *Saddler,* that are instructive here.

First, in *Marden*, as here, the issue that gave rise the cardinal change issue was an allegedly defective specification.[40] In *Marden*, the contractor was constructing a large aircraft hangar for the Navy. The alleged defect in *Marden* was the lack of information regarding when the tie rods joining the supporting arches had to be installed.[41] Apparently, the plans did not specify, and the engineer gave misleading advice about, the timing of the tie rods. When the contractor prematurely released the arches from their temporary support without the tie rods in place, the structure collapsed.[42] Damage, death, and injury resulted.[43] The court found that the alleged difference between the specifications and the actual requirement could constitute a cardinal change.[44]

The facts in *Marden,* however, do not compel a finding that the inadequate design specifications here constituted a cardinal inadequacy. At issue in *Marden* was a fundamental omission. Without the tie rods, the parties had nothing but rubble. It was not a case where an inadequate specification of the quantity of tie rods could be easily remedied by adding more tie rods. Here, in contrast, when Miller Construction had completed the earthwork required under the original specifications, the project was an incomplete road.[45] More earthwork was required than specified, but, unlike *Marden*, the project was not in ruins as a result of the error in design specifications. Thus, the quality of the change at issue here is less likely to lead to a finding of cardinality than the quality of the change at issue in *Marden.*

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40 442 F.2d 364.

41 *Id.* at 366.

42 *Id.* at 365.

43 *Id.*

44 *Id.* at 370.

45 I have not returned to the exhibits to review the videos of the road that dated from mid-July 2017—the time that Miller Construction represents that plan quantities had been reached. My memory of those videos, which Toby Miller used to illustrate his testimony that the road was proceeding apace (according to Mr. Miller, Miller Construction was "killing this project"), however, is that they showed a robust road. Toby Miller testimony. This is very different from the picture painted by *Marden* following the release of the arches with no tie rods in place.

Marden, of course, does not compel the opposite conclusion—that the change here was not cardinal. This decision acknowledges that a significant change in quantity of earthwork can be cardinal. For analysis of that issue, we turn to *Saddler*.

In *Saddler*, the contractor was building a levee to prevent flooding of the Methow River, near Twisp, Washington, in 1951.[46] After a severe spring flood inundated the worksite, the parties realized that the levee would have to be redesigned "to withstand a subsequent flood of the same magnitude."[47] The parties agreed to the redesign, but the owner significantly underestimated the quantity of embankment—instead of 7,950 cubic yards, the new levee required 13,264.8.[48] After installing the estimated quantity of embankment, the contractor finished the job under protest.[49] It filed a claim alleging that the change was cardinal and that the limitations on damages should not apply.

The court acknowledged that the estimate of embankment was only an estimate, that the quality and type of work remained the same, and that "the addition or correction of a few feet of embankment cannot be said to be a change which is beyond the scope of the contract."[50] Yet, the court noted a fundamental change from a small contract that a contractor might use to tide itself over between jobs, and a large contract that required a more significant effort late into the construction season.[51] The court concluded that the variation was not "within reasonable limits" and, therefore, was a cardinal change.[52]

Whether the contract here fits the *Saddler* analysis is a close question because the changes here from plan to actual were significant. Here, however, we do not have a small contract escalating into a large one. This project was already a big undertaking, expected to last across two construction seasons. The fact that it could not have been completed on time in October 2017, and needed at least until May 2018, is not unusual in construction cases, and would not, standing alone, make the additional earthwork a cardinal change. Thus, although earthwork is fundamental, and the change in earthwork quantity here was so large that it had to be considered major for the parties, it was not so large as to change the nature of the project.

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46 287 F.2d at 412.
47 *Id.*
48 *Id.* The original contract had estimated 5,500 cubic yards. *Id.*
49 *Id.* at 412, 414.
50 *Id.* at 413-14.
51 *Id.* at 414.
52 *Id.* at 414-15.

Throughout the hearing, Miller Construction argued that changes to the project other than earthwork were also fundamental changes. For example, both parties emphasized the fundamental nature of the fish pipes that had to be installed within the limited window before spawning season. The changes included at first an increase in the number of fish pipes (to eight) then a decrease in fish pipes (to five). The decrease might have been related, in part, to the delay caused by the need for additional earthwork.

At the end of the day, however, the fish pipe issue favors the Region. Although the change in the number of pipes was a significant event, the Region did not require a decrement in the contract price or that Miller Construction return in the following construction season to install the two pipes required under the original contract that could not be installed within the fish window. Thus, the Region undertook (and absorbed) the risk that the changes to the work plan would affect the job. It was willing to accept a change in the project that left it with a product that was not of the same quality as had been originally expected.

The acquiescence of the Region in the fish pipe requirement is a significant event. It shows the Region was able to be flexible and indeed, nimble, in adapting to circumstances. Although this order makes the (hypothetical) point that the Region would have been staggered by a discovery in July 2017 that it owed Miller Construction significant time and money due to an underestimate of earthwork, the evidence also shows that the Region could, when necessary, punt. This makes it less likely that the changes to the project were outside the scope of the contract.[53]

Another issue that Miller Construction saw as fundamental was the effect of the two landslides. To Miller Construction, this was a fundamental omission because the plans did not state that the design required construction on oversteep and unstable ground. Again, however, the Region addressed the issue. It allowed more time and a redesign to fix the issues. Given the inevitability of change in construction projects, which was elevated in this case because of the flexible design based on an uncertain survey and limited geotechnical knowledge, the changes required because of the landslides were not fundamental.

In sum, both *Marden* and *Saddler,* although instructive, are distinguishable. In both of those cases, the fundamental nature of the change between design and reality was profound.

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[53] Miller Construction also argues that the underestimate in the quantity of rock to be encountered on the job was a fundamental change because rock is more costly to excavate than common soil. I do not agree. First, the parties knew that the estimate of rock quantity was an estimate done with very little geotechnical information. A bidder should not have expected the estimate to be accurate. Second, although excavation of the rock in the roadway was more time consuming than excavation of common would have been, having additional rock in the roadway provided a source of rock for embankment.

Here, in contrast, although the size of the change was significant, it did not fundamentally change the nature of the project.

In sum, for all of the reasons described above, the changes at issue here were not cardinal. Therefore, the cardinal change doctrine does not relieve Miller Construction of the burden of proving its damages as required under the contract. Before concluding the issue of cardinal change, however, we turn next briefly to the related issue of whether the changes between estimate and reality allow damages under the doctrine of *quantum meruit.*

6. Does Miller Construction's alternative argument regarding *quantum meruit* lead to a conclusion that the parties had no contract?

Above, this decision has thoroughly discussed the cardinal change analysis using federal decisions as guidance. We note that the cardinal law doctrine has yet to be developed under Alaska law.

In the alternative, Miller Construction has also argued that it is entitled recover under the well-developed state law of *quantum meruit.*[54] "When parties to a contract dispute do not have a valid contract, plaintiffs may generally recover in quantum meruit for services rendered."[55] If *quantum meruit* applies here, then it lands Miller Construction exactly where it wishes to be—outside the limitations on damages found in the Department's Standard Specifications. "The measure of recovery in quantum meruit is the reasonable value of the services rendered to the defendant."[56]

The problem for Miller Construction, however, is that *quantum meruit* requires a finding that the parties had no contract. Thus, the issue here is whether the defective specifications meant that contract was so flawed that the parties never had a contract.[57] Note that under this argument, the defect would have been present from the start. Even if the Region had been willing to negotiate and amend the contract in July 2017, Miller Construction would never have been bound

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[54] Miller Construction Opening Brief at 1 (citing *Fairbanks N. Star Bor. v. Kandik Const., Inc. and Assoc.,* 795 P.2d 793, 799 (Alaska 1990), *vacated in part on other grounds on reh'g,* 823 P.2d 632 (Alaska 1991)). Miller Construction has not, however, explained how the *quantum meruit* analysis is different from the cardinal change analysis or addressed whether the *quantum meruit* doctrine might apply even if it fails the test for cardinal change. The two doctrines may be identical, similar, or different. It may even be that Alaska law does not adopt the cardinal change doctrine (if, for example, cardinal change doctrine is found to be limited to federal law) and that the analysis should be only under *quantum meruit.* The parties do not raise these arguments and I will not address them.

[55] *Krossa v. All Alaskan Seafoods, Inc.,* 37 P.3d 411, 419 (Alaska 2001) (citation omitted).

[56] *Id.* (citation omitted).

[57] We know, of course, from the July Decision that the Region did not have leeway to refuse to negotiate a new contract, and that the Region's failure to grant Miller Construction's request for equitable adjustment meant that the Region had violated its obligations. But that analysis related solely to the Region's wrongful denial of Miller Construction's request. Although Miller Construction has also argued that it is entitled to *quantum meruit* damages based on the Region's refusal to amend, that is a different issue and will be addressed in a later order.

by any provisions of the contract. It would have always been eligible for unjust enrichment damages, measured without regard to the limitations on damages contained in the contract.

The July Decision squarely addressed that question in Section III(D)(3).[58] It noted that estimates "are only estimates, not guarantees of accuracy." It further noted Miller Construction's shared duty to review the bid documents and measure quantities, and that "both parties were very attuned to the possibility that the design quantities could be in error."[59] From this, it concluded that "no breach occurred until the Region wrongly refused to amend the contract when it had reasonable evidence that plan quantities had been reached."[60]

The case cited by Miller Construction, *Fairbanks North Star Borough v. Kandik Construction, Inc., and Associates,* ruled against a jury instruction on the issue of *quantum meruit.*[61] Instead, the court strictly applied the provisions of the contract, and concluded that even though the plans understated the earthwork, at least some of the extra work was "within the scope of the original contract."[62]

Here, because the Region guaranteed the accuracy of the estimated quantities, the contract clearly made installation of the original quantities estimated by the plans a contractual obligation. Thus, the estimated quantities were not extra work outside the scope of the contract. To the extent that Miller Construction is arguing that the extra work made necessary by the inaccuracy of the estimates leads to a conclusion that under state law it had no contract for the extra work, that argument is governed by the terms of the contract (which provide for changes) and by the cardinal change analysis above. *Kandik* provides no support for Miller Construction's argument that the doctrine of *quantum meruit* might lead to a different result than the doctrine of cardinal change with regard to the change between estimate and reality. Indeed, *Kandik,* as well as the Alaska Supreme Court cases *Dep't of Transportation and Public Facilities v. Osborne Construction Company* and *North Pacific Erectors, Inc. v. State, Dep't of Administration,* tend to support the Region's argument that state law generally requires holding the parties to the terms of their

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58 July Decision at 146. Note that the order granting reconsideration was in error when it stated: "The July decision did not discuss the issue of cardinal change." In fact, because the cardinal change alleged here was the same issue as the design specification issue discussed on page 146, the July Decision did, in fact, address, and reject, Miller Construction's allegation that the design flaw was a cardinal change. This does not mean that the order granting reconsideration was improvidently granted. The one-paragraph analysis in the July Decision did not discuss the cases or take into account the facts that make this a close question.

59 *Id.* (citing SCR 18 (transcript of the preconstruction conference)).

60 *Id.*

61 795 P.2d at 799-800.

62 *Id.* at 800.

contract.[63] This is the approach to contract law that I applied in the July decision and continue to apply here.

C. The July decision was in error to the extent that it held that the Region was required to amend the contract in July 2017 to allow for unit price compensation.

In the course of briefing issues on reconsideration, the Region brought to my attention that, in its view, "the issue addressed in the Proposed Decision was . . . SCR's failure to issue a change order under which MCC could bill at a unit rate for work performed in excess of planned quantities."[64] The Region has correctly interpreted the July decision. The decision, however, was in error in part.

To clarify, the holding that the Region was required to amend the contract after receiving notice from Miller Construction in July 2017 that plan estimates had been reached was correct. That holding remains in effect.

The July decision went further, however, and found that the Region's required amendment would have had to include a unit price based on volume.[65] That holding is error and is disavowed. The parties could have agreed on an approach to compensation other than measurement of and payment for volume. For example, the parties could have increased the compensation per lane station based on a new estimate of quantities or on any other reasonable approach. Accordingly, if a final decision is required in these proceedings, the July proposed decision will be amended to reflect this order before it is adopted as a final decision.

D. When does the record-keeping requirement for purposes of a damage claim take effect?

In granting reconsideration on the issues of election of remedies and cardinal change, I asked the parties to address when the specificity requirements of section 105-1.17 begin. As explained above, this question relates to the issues being discussed here because before those requirements take hold, Miller Construction could calculate its claim for damages based on standard contract damage measures, rather than the specific measures required under section 105-1.17.

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63 *See, e.g.,* Region's Opening Brief at 4 (citing *North Pacific Erectors,* 337 P.3d at 506-08); Region's Response Brief at 2 (citing *Osborne*, 462 P.3d at 998).

64 Region's Response Brief at 13.

65 *See, e.g.,* July Decision at 125 ("Once the Region had notice that Miller Construction had reached plan quantity, the Region was obligated to amend the contract to measure, pay for, and allow additional time for additional quantities.").

Under section 105-1.17, the specificity requirement is triggered when the contractor "becomes aware of any act or occurrence that may form the basis for a claim for additional compensation or an extension of Contract time."[66] The Region argues that this occurred in February 2017 because, as the July decision documents, there were significant disputes regarding the differential in pay requests and progress payments at that time. The Region does not, however, cite to evidence that Miller Construction was on notice that the plan estimates of quantity would be exceeded. Indeed, the Region's expert, Mr. Foster, testified that the original dispute regarding the differential had been cleared up by June 2017.

Although the parties have not directed me to evidence regarding when Miller Construction had notice that the plan estimate of quantities was a possible factor in the pay dispute, Miller Construction clearly had figured that out by July, when it submitted its request for equitable adjustment.[67] This order will adopt July 1, 2017, as a tentative start date for the record-keeping requirement. If the parties come forward with evidence that the actual date that Miller Construction became aware that the shortfalls in the plan estimates might form a basis for a claim was earlier or later, that date can be amended.

DATED: June 11, 2021.

[redacted]
Stephen Slotnick
Administrative Law Judge

Certificate of Service: I certify that on June 11, 2021, a true and correct copy of this order was distributed as follows: Garth Schlemlein (by email); Jesse Franklin IV (by email); Allen Benson (by email); Eugene Hickey, AAG (by email); Max Garner, AAG (by email); Dep't of Law Central email (by email). A courtesy copy was also sent to Charles Deininger (by email) and Christopher M. Kennedy, ALJ (by email).

By: [redacted]
Office of Administrative Hearings

66 SCR 330 at 34.
67 *See* Kemp testimony.