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ARBITRATOR

STATE OF CALIFORNIA

OFFICE OF ADMINISTRATIVE HEARINGS

PUBLIC WORKS CONTRACT ARBITRATION

BAY CITIES PAVING & GRADING, INC. Petitioner, vs. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION Respondent,	Case No.: A-0023-2020 **DECISION ON THE MERITS AFTER MERITS HEARING; FINDINGS OF FACT AND CONCLUSIONS OF LAW [PWCA RULE 1390]** Merits Hearing: August 15-17, 2022 Time: 9:00 a.m. – 5:00 p.m. Location: Sacramento, California State Contract No: 03-0F3514

The Project, Jurisdiction and Merits Hearing

1. The Dispute and Arbitration involves Potential Claim Record No. 2 (PCR 2) submitted by Petitioner Bay Cities Paving and Grading's ("Petitioner", "Contractor" or "Bay Cities") associated with Caltrans Contract 03-0F3514, and now in Arbitration.

2. This is the Arbitrator's Decision on the Merits, Findings of Fact and Conclusions of Law pursuant to PWCA Rule 1390. To follow shall be determination of costs and any other matters under PWCA Rules 1390, 1392 and Final Award under Rule 1393.

3. When awarded by Respondent, State of California, Department of Transportation ("Respondent" or "the Department"), the prime contract #03-0F3514 was for $17,664.853.93. The Prime Contract called for a duration of 135 working days, plus 125 days for Plant Establishment. It included installation of metered onramps onto Highway 99 at 14th Street in Sacramento, as well as at Arden Way. For each onramp, the Department's plans called for installation of a retaining wall to increase the width of the onramps up against side slopes, as Highway 99 in those locations is at a lower elevation than the top of onramp.

4. Following the filing of the Complaint in Arbitration, the parties appointed the undersigned Arbitrator pursuant to the PWCA Rules and enabling Public Contract Code Statutes.

5. Pursuant to stipulation, the Arbitration hearing took place on August 15, 2022 through August 17, 2022, in person, in Sacramento. Witnesses were sworn and testified; documentary exhibits introduced and accepted; and post-hearing briefs, proposed Findings of Fact and Conclusions of Law, and Rebuttal briefs filed and served. The Arbitration proceeded on Petitioner's Claim in Arbitration and Respondent's written answer denying the claim, and its stated affirmative defenses.

Summary of Petitioner's PCR 2, the Complaint in Arbitration, and Department Defenses

6. PCR 2 involved a claim associated with drilling and installation of 69 soldier piles in structural concrete at the Highway 99 onramp at 14th Street in Sacramento, to accommodate metering lights to modulate entrance onto Highway 99 of oncoming traffic. The specified diameter of the structural concrete for the 69 soldier piles was 30 inches. Broadly speaking, the claim is that a differing site condition was encountered, involving higher and more forceful groundwater than anticipated from the bid documents, and requiring a change in drilling method, more costs, and more time.

7. Petitioner's filed Complaint in Arbitration alleges a monetary claim of $931,517.54 in principal as additional compensation. Of this sum, $51,111.11 represented a daily overhead

rate-based time impact claim of 29 days at a daily rate of $2222.22 per day. The rest, $880,406.43, represents a Force Account measure of extra costs for the drilling and installation operation over and above bid prices.

8. In its answer to the complaint, the Department denied the allegations, denied a differing site condition ("DSC") was encountered, and raised affirmative defenses including waiver (notice waiver), failure to exhaust administrative remedies, and claim inconsistency. The Department disagreed with the claimed additional compensation sought. It also disagreed that there was a contractually valid time impact claim, due to Arden Way's own onramp soldier pile work either being the controlling work, or concurrent work; and due to alleged waiver for failure to include a Time Impact Analysis in the Supplemental Notice of Potential Claim, as required by applicable 2015 Standard Specifications, Section 5-1.43C. Exhibits 63, 313. The Department also contended at hearing that the Petitioner's claim theories or arguments beyond a DSC claim, such as "change in the character of the work" found by the DRB in its recommendation report in addition to a DSC, or "defective specification," were not allowed as not consistent with the original Notice of Potential Claim. The Department asserts the Full and Final Claim is untimely.

The Positive Partnering at Partnering Meetings and Overall to Tackle Real Job Challenges

9. At the outset, the Arbitrator remarks that from the evidence of the project partnering and hearing testimony, there was a great deal of project cooperation and focus on addressing and troubleshooting the work itself. This was in keeping with the partnering commitment in the applicable 2105 Standard Specifications and the parties are commended for their achieving that partnering on this project, to work through the challenges with groundwater control, the claim, dispute resolution process through the Dispute Resolution Board ("DRB") hearing, and in their mutually respective and professional conduct at the Arbitration hearing.

5-1.09A General

The Department strives to work cooperatively with all contractors; partnering is our way of doing business. The Department encourages project partnering among the project team made up of significant contributors from the Department and the Contractor and their invited stakeholders.

10. This partnering approach was often conducted in productive, somewhat informal weekly partnering meetings that the Department would memorialize by meeting minutes, most notably the July 6, 2018 and July 12, 2018 meetings discussed in detail below. The minutes of those did not so much seek to "cabin" or characterize the "contract consequences" of the meeting discussions, but in the main, to memorialize just what was said and what was going to happen next "on the ground." These by all accounts were "cooperative" per Section 5-1.09A, and aimed at solutions first, cost allocations over solutions to be addressed later or deferred as the drilling proceeded.

11. While there were differences in testimony, most notably, what meaning to contractually derive from the discussions at the July 6 and July 12, 2018 partnering meetings, the Arbitrator found the witnesses to all be credible and highly professional. What was said was less in disagreement than the contract meaning if any over what was said, and that is the nature of conversations, meetings, discussions, and problem solving – folks do not usually end a positive "resolved a problem" meeting with "now let's write down all the risk allocation implications of what just happened." That was left for later, and ultimately, here.

12. It was acknowledged at hearing that some follow-on paperwork, such as a change order or RFI-RFI response, would have been well to add in, in order to clarify or state how each party viewed the "contractual consequence" or meaning of what was decided or discussed at the partnering meetings. As result, and as not uncommon, Petitioner and the Department's respective witnesses at the meetings, testified differently as to what happened at the meetings, or what in their minds, was the contractual "crease" consequence or outcome from what was discussed. The meeting minutes are not framed in terms of "contract interpretations" or "contract risk allocation" outcomes or agreements based on what was discussed. As such, these differences were not so

much as to what was memorialized in the meeting minutes or what was actually said, but what contractual meaning arose from those meetings.

13. Notably, both Bay Cities' Operations Manager Eric Barker and the Department's Resident Engineer Sushma Lee both in their respective testimony, used the word "brainstorming" to describe the dialogue process at those meetings, and that is consistent with the partnering construct. Unless later coupled with follow on formal paperwork such as formal RFIs and RFI responses, or Change Orders (to accept or protest), this sort of disagreement of the "contract implication" of a partnering meeting discussion may happen. Here, it did. Those unanswered questions of "what does it mean contractually" became deferred first to the claim notice process, then the Dispute Resolution Board (DRB) process, and ultimately, later still, to here in arbitration.

14. California Jury Instruction CACI 107 instructs that such differences in testimony are not unusual. These differences are more often than not, a function the well-known human condition of periodic misunderstandings or legitimate perspective differences brought to light under time and cost pressures, where all parties are professionals in their craft, and see or hear things within different lenses:

> Sometimes a witness may say something that is not consistent with something else the witness said. Sometimes different witnesses will give different versions of what happened. People often forget things or make mistakes in what they remember. Also, two people may see the same event but remember it differently. You may consider these differences, but do not decide that testimony is untrue just because it differs from other testimony.

15. Other factual disagreements include:

- Whether or not a cover letter was included or not with the Petitioner's Supplemental Potential Claim Notice (Ex. 124, compare Ex. 63, the Supplemental Notice of Potential Claim which indicates no TIA is provided);

- And related thereto, whether or not the Supplemental Potential Claim Notice contained or did not contain a time impact analysis (TIA) as required by Standard Specification

5-1.43B, and if absent, such represented a contract waiver of time related costs such as daily field overhead costs;

- What was the critical path on the overall project during the subject soldier pile phase of the overall project and claimed differing site conditions/changes in the character of the work (as there were other project locations) (see among others, Ex. 38);

- And related thereto, what should be made of the Department's Weekly Statements of Working Days as to the Controlling Work (this location or the Arden Blvd. new metered onramp);

- And related thereto, whether the Department's following the Contractor's then existing project schedule's critical path or controlling work presentation, was acceptable for the Department's Weekly Statements of Working Days, or an admission by the Contractor of the Controlling Work or Critical Path;

- Why the Contractor overpoured the piers and whether the chipping work, including chipping at the larger diameter size due to overdrilling and overpouring concrete in two steps, is contractor convenience (to avoid going short and being rejected), workmanship or means and methods, or part of a compensable claim condition.

- Whether the end of the drilling, or the completion of offhaul operations are the correct point to measure the 30-day period of time and deadline for the Contractor to submit its Full and Final Potential Claim Record under Standard Specifications, 5-1.43D.

- Whether the contract LOTBs were "positive indications" to bidders of the groundwater levels and force to be encountered (the "*E.H. Morill*" rule), or whether they were simply statements of groundwater levels on the date and moment taken in April 2016, with any extrapolation by bidders to the time of actual later drilling, at bidder risk as bidder assumptions (the "*Wunderlich*" rule).

- Whether a DSC was encountered or not:

- Whether the Department's statement at the July 6, 2018 meeting that any tremie seal would need to be "cured hard" was a "change in the character of the work" and not a constraint in the groundwater control specification for soldier piles, Section 49-4.03B;

- Whether a requirement to have the tremie seal at bottom of the soldier pile hole "cured hard" before pouring of structural concrete, effectively removed simultaneous use of temporary casings to control side wall caving, due to risk the casing when extracted would damage the tremie or structural concrete seal, or would get stuck (see Ex. 40, July 6, 2018 meeting, and Ex. 313, specifications);

- Whether "overdrilling" as a groundwater control method ultimately used for a majority of the 69 drilled holes, was "imposed" by the Department; or "allowed" and a contractor choice in "relaxation" of the specifications, which otherwise did not allow overdrilling;

- Whether irrespective of the debate over whether overdrilling was "imposed" or "allowed," was it reasonably necessary as a groundwater control technique once the groundwater was encountered at the elevations and force it was, coupled with the lack of other options once casings were off the table if the tremie seal had to be "cured hard." That is, *de facto*, did the groundwater conditions *themselves* more or less "impose" overdrilling as a last resort method despite its extra steps and extra costs (drilling twice, offhauling spoils twice).

- Whether the groundwater monitoring wells nearby and maintained by the State Water Department, and listed as a reference item reviewed by the Department's inhouse geotechnical engineer in his pre-design foundation reports (Ex. 302), was a "positive indication" or added information which bidders should have reviewed when bidding the project in November-December 2017, and which if reviewed, would have led to the belief that groundwater later during

the work itself would be materially higher in elevation, than shown on the April 2016 contract LOTBs.

- Whether (per the expert testimony of Dr. Perri put forth by Petitioner and rejected by the Department's rebuttal witness Brent Bullard) the contract LOTBs shown on contract drawing sheets 15-16 (Ex. 315) were shown at an incorrect location, of some 3 or more feet, when compared to the grading plan elevations at the same 14th Street onramp and coupled with the lack of a topographical survey of the 3 LOTB locations. Ex. 325 is Dr. Perri's report.

- Further as to whether the LOTBs and in combination with the groundwater control method constraints of the specifications at 49-4.03B or "temporary casings or tremie seals" constitute "positive indications" to bidders on which they can reasonably rely in their pricing and choice of equipment and "attack", or whether, along with nearby groundwater monitoring wells referenced in bid materials, the case falls under the rule expressed in *Wunderlich v. State of California* (1967) 65 Cal.2d 777, 784—785, that extrapolations or assumptions beyond the information positively indicated, are at contractor risk. Compare *Warner Constr. Corp. v. City of Los Angeles* (1970) 2 Cal.3d 285, 293–294, which boils down the analysis in a case having some similarity and also involving groundwater control:

> …we conclude that the bidder takes the risk in making deductions from accurate test data, but the city retains responsibility for any inaccuracy in the data. (See *Wunderlich v. State of California* (1967) 65 Cal.2d 777, 784–785 [56 Cal.Rptr. 473, 423 P.2d 545]; *Chris Nelsen & Son, Inc. v. City of Monroe* (1953) 337 Mich. 438, 446 [60 N.W.2d 182].)…

In terms of "positive indications", the decision *E.H. Morrill Co. v. State of California* (1967) 65 Cal.2d 787 - decided the same day by the same California Supreme Court as the *Wunderlich* decision - represents the other "bookend" to California DSC law, itself premised on the US Supreme Court's own line of DSC/implied warranty decisions culminating in *US v. Spearin* (1918) 248 U.S. 132 involving "positive indications" in plans and specifications

which generally cannot be disclaimed, and where "positive indications", upon which bidders can reasonably rely:

> The facts alleged in the instant case, however, place it within the rule declared in Souza & McCue Constr. Co. v. Superior Court, supra, 57 Cal.2d 508, 510, 20 Cal.Rptr. 634, 635, 370 P.2d 338, 339, that '(a) contractor of public works who, acting reasonably, is misled by incorrect plans and specifications issued by the public authorities as the basis for bids and who, as a result, submits a bid which is lower than he would have otherwise made may recover in a contract action for extra work or expenses necessitated by the conditions being other than as represented.'
>
> …
>
> Section 1A—12 did not purport merely to present ***482 **554 the results of the state's own tests and investigations, as in Wunderlich, but flatly asserts that the bidders could expect to confront only specified site conditions. It is clearly a "positive and material representation as to a condition presumably within the knowledge of the government,' * * *.' (Hollerbach v. United States (1914) 233 U.S. 165, 169, 34 S.Ct. 553, 554, 58 L.Ed. 898.)
>
> …
>
> In the instant case, however, nothing in section 1A—12 of the Special Conditions, which purports to make a positive assertion of fact as distinguished from Wunderlich, in any way draws the attention of the bidder to the purported disclaimer of section 4 of the General Conditions. Although, of course, the contract must be read as a whole, the absence of any cross-reference may be of significance in a determination by the finder of fact whether section 4 would justify the bidder in relying upon the unqualified representation of specified site conditions. It 'would be going quite too far to interpret the general language of the other (sections of the contract) as requiring independent investigation of Facts which the specifications furnished by the government as a basis of the contract Left in no doubt. * * * In Its positive assertion of the nature of this much of the work (the Government) made a representation upon which the claimants had a right to rely without an investigation to prove its falsity.' (Emphasis added.) (Hollerbach v. United States, supra, 233 U.S. 165, 172, 34 S.Ct. 553, 556, 58 L.Ed. 898.)
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> The responsibility of a governmental agency for positive *793 representations it is deemed to have made through defective plans and specifications 'is not overcome by the general clauses requiring the contractor to examine the site, to check up the plans, and to assume responsibility for the work * * *.' (United States v. Spearin, 248 U.S. 132, 137, 39 S.Ct. 59, 61, 63 L.Ed. 166.) Accordingly, the language in section 4 requiring the bidder to 'satisfy himself as to the character * * * of surface and subsurface materials or obstacles to be encountered' cannot be relied upon to overcome those representations as to materials and obstacles which the state positively affirms in section 1A—12 not to exist, and plaintiff was entitled to rely and act thereon.

The factual elements of *Wunderlich*, of *E.H. Morrill*, of *Spearin*, and other California DSC/Spearin cases are analyzed below specific to the facts of this case, in order to determine into which "bucket" this case falls, *Wunderlich*, or the *Spearin, E.H. Morrill, McCue, Warner* and *Welsh* line of cases all cited and discussed below.

16. The parties' respective briefing was very valuable to the Arbitrator in sorting out the contract meaning of the groundwater conditions, the overdrilling choice who ever made it (e.g., the Contractor, the Department, or whether in effect, neither – that nature itself, the groundwater conditions encountered, picked the overdrilling method for the parties). The factual, legal and public policy elements, as well as cost measurement, were all fairly complex. The parties and counsel are commended for their working through all of it professionally and properly.

17. Part of the Arbitrator's task here is to evaluate a) the contract meaning or risk allocations of those discussions, if any; b) the nature of the encountered groundwater conditions (e.g., if a DSC or not); c) whether the contract Log of Test Borings (LOTBs), coupled with the limited groundwater control methods specified in Section 49-4.03B, are "positive indications" of materially more manageable groundwater conditions than in fact encountered; d) what to do with the fact coming out of those two meetings, a non-contractual and more costly method of "overdrilling" was used, ostensibly to combat groundwater higher than the contract LOTBs indicated and/or the Section 49-4.03B specified methods of casings and tremie seal could handle; and e) cost and time elements of the DSC claim – extent of any recovery if there is a valid claim.

The First Day of Drilling At 14th Street – A DSC Notice is Given Due to Higher Groundwater

18. Some discussion is merited over the "real time" face-to-face project discussions which occurred just before the drilling, July 6, 2018, and at the afternoon of July 12, 2018 after the first day of drilling at 14th Street, when groundwater was hit, drilling was stopped, and Petitioner provided a DSC notice to the Department (Ex.'s 40, 44, and 43, RFI #32.). Many project events happened quickly within that one and first week. How things are evaluated after the fact in Arbitration remains at the "prism" of real-time decision-making and partnering at the time, not in an artificial "white glove test" manner after the fact with the later 20-20 hindsight.

19. The DSC notice was given mid-day July 12, 2018. Ex. 43. It was promptly acknowledged as received and being evaluated. This was early on the first day of drilling at the

14th Street onramp. At that time, and at the first drilled hole, #3, Petitioner encountered groundwater 10 feet higher in elevation than shown on the LOTBs on contract drawing sheets 15-16. Ex. 315. The work was stopped. Petitioner gave a same day, timely DSC notice to the Department. Ex. 43. As it would occur, a scheduled weekly partnering meeting was to take place later that day July 12, 2012. The subjects of the meeting included "what to do with the groundwater," as well as documenting and tracking any potential claim costs on account of the claimed DSC. Ex.'s 44, 36.

20. A week before, at the July 6, 2018 meeting, groundwater control methods were also discussed going into the work. Ex. 40. Up until that point in time, a week before the scheduled work, there was no approved submittal for the drilling. The initial Decisions had to be made, "asap." Petitioner's initial drilling submittal called for use of drilling fluid to control groundwater, which the Department had rejected, as not a contractually permitted method. Ex. 32L. Under Specification 49-4.03B, for soldier pile work, only "temporary casings or tremie seals" were listed as permitted groundwater control methods. Ex. 313. Then then resulted in the July 6, 2018 predrilling meeting, Ex. 40, and a revised drilling plan which, on arrival, was already foretold to be acceptable to the Department, as an outgrowth of that partnering meeting. Ex.'s 40, 303.

21. Petitioner's general plan of attack at 14th Street was to start with pile holes #1-12, which the contract LOTBs showed as "dry" holes (e.g., where groundwater shown in the LOTBs is below the bottom or tip elevation of the soldier piles); where the groundwater levels per at least the LOTBs were significantly below the bottom or pile tip elevation of those soldier pile locations. From the collective testimony, neither the Contractor nor Department) appeared to anticipate encountering groundwater at that time, or at that height, and not until the later piles, where the LOTBs showed as "wet holes." As to those "wet holes" the LOTBs indicated that a portion of the drilled hole anticipated to encounter groundwater, if using the LOTBs as a "tell-tale" or indicator

of anticipated or "bid baseline" groundwater. According to the driller's manager, Andrew Saint, at hearing, 23 of the 69 holes were anticipated as dry holes, and 43 holes, "wet" holes.

22. The document which captured the "delta" or change in groundwater elevations from the contract LOTBs to the as-built conditions when encountered, was within Ex. 125A, as three sheets of overlay of encountered groundwater levels, onto the contract LOTBs at Ex. 315, pages 15-16 of the contract drawings. There was no dispute over the as-built groundwater elevations, only whether they were "materially different" from the totality of the pre-bid information provided to bidders from which to bid.

23. The meeting minutes of the July 6, 2018 meeting are quoted below. They bear on the means and methods discussions, and whether and to what extent a) casings and tremie could be used *simultaneously* or in tandem, and b) whether the "cured-hard" tremie requirement stated by the Department at that meeting was in the specifications or was a new (and therefore, "imposed") requirement. See Minutes, at Ex. 40:

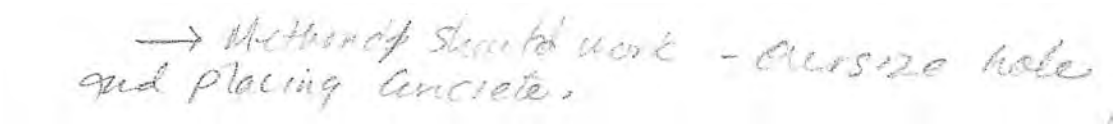
> **Predrill Meeting Notes**
> 7/6/18
> Soldier Pile Wall at 12th Avenue
>
> CT clarified tremie seal interpretation - Tremie Seal is a seal course or tremie plug to control water from entering the shaft.
>
> CT read specification 49-4.03 Drilled Holes of the 2015 Standard Specifications and emphasized the following sentences:
> Furnish and place temporary casings or tremie seals where necessary to control water or to prevent caving of the hole.
> Do not allow surface water to enter the hole. Remove all water in the hole before placing concrete.
> CT informed contractor that shaft shall be a dry hole before placing concrete backfill.
> CT informed contractor that CT maximum infiltration rate of water for a dry hole CIDH pile will apply to these steel soldier piles.
> Sacramento drilling asked the question: How does seal work with extracting the casing ? CT read that Specification says to use tremie seal or casing. CT also stated that tremie seal/tremie plug will be cured/hard and concrete backfill placed later after tremie plug is hard. Brent also stated that he thought tremie plug and temporary casing could be used simultaneously. Contractor asked how he would remove casing with cured lean concrete seal course. Glen said the casing would be removed just like a cofferdam with a seal course.
> Contractor asked why hole must be dry? CT stated If done wet FTB would have to test pile gamma.
> Contractor was informed to submit lean concrete mix for tremie seal. Contractor said they could use the lean concrete pile mix for tremie seal.
> Contractor was informed to revise pile placement plan and resubmit.
> Contractor asked if they needed to have temporary casing on site as Sac Drilling is in town. Caltrans informed contractor that he cannot leave an open hole.

> Contractor was informed to submit a dewatering plan with the revised pile placement plan. Sac Drilling (Andrew) informed Travis of Bay Cities that Bay Cities is responsible for the dewatering plan. Travis said that he will do this and get to Sac Drilling to be part of revised pile placement plan.
> Sac drilling asked if they could wet set the beam in the steel soldier piles. CT said NO.
> Sac drilling seat email on July 4"' asking why drilling fluid is in Special Provisions. CT stated that it was a request from the district to cover electrical CIDHs.

24. By the next meeting, July 12, 2018, higher groundwater was encountered than indicated in the LOTBs, for the first pile drilled, #3, which at least per the nearest LOTB was reasonably anticipated to be a dry hole. Work stopped. Ex. 308, Bay Cities' Daily Report. A DSC notice was given by RFI 32, Ex. 43. Another robust, and project-focused partnering discussion occurred at that afternoon meeting on July 12, 2018. Ex. 44, meeting minutes.

25. By agreement at the meeting of July 12, 2018, the Contractor would keep a record of costs as on a Force Account basis while the Department was evaluating the DSC notice. Thus, both field observations and daily costs were tracked and recorded day-by-day in contemporaneous business and official records to help sort it out later. Those decisions made sense.

26. At the July 2018 meeting, more partnering "brainstorming" occurred, including whether the method coming out of the prior meeting and revised, approved drilling plan, of overdrilling, would work. Ex. 44:



27. The testimony from Bay Cities' Operations Manager Eric Barker, and uncontradicted, was that even within the overdrilling method, to combat groundwater as encountered, the hole size increased from initially 38 inches in diameter (meaning, 8" wider than the specified 30" diameter hole) to 42 inches in diameter (meaning 12" wider, and a 6" thick lean concrete or slurry "cofferdam" to stop caving; and also, the selected sack mix went from a two-sack mix to a four-sack mix, to provide more resistance against the groundwater causing caving of the holes. This testimony matched the daily reports of the Department. So even though overdrilling was selected, after the DSC it was augmented or increased in scope and cost – larger

augur work, more spoils, and thicker, stouter lean concrete mixes. See Barker testimony, day one, pp. 140-141, quoted below, in terms of this process if upgrading the size of overdrilled hole and the sack-mix to confront and battle the groundwater encountered, because lesser means were not working:

Q. And with regard to the concrete --
A. Yes.
Q. -- that was being used for the holes, what strength of concrete was being used?
A. I think they went with -- I believe they started with, like, a two-sack mix. And I don't think that worked. I think they went to a three-sack and possibly even a four-sack. They have different terms that they used for them. But I think they went up to possibly a four-sack mix.
Q. And whose decision was it to go up to three- and four-sack?
A. I -- I think it was -- well, I believe Caltrans -- well, they were ultimately the people who okayed it. Because what happened is they first went with, I believe, a two-sack mix. And then we actually had a partnering meeting a few days later and -- and the first mix that was submitted wasn't working. So I think they when with the oversized hole and then went with a different mix, stronger mix, because it wasn't holding up. And it could have been a combination you had to go with a bigger-size hole. Because they were going with a

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38-inch hole.
So it was originally a 30. They went to a 38-inch hole. It wasn't holding up. They weren't able to get those I-beams back in after they redrilled it out. So they ended up going with a 42-inch hole and went with a stronger mix.
Q. So if you used concrete on a project, there has to be a concrete mix design that Caltrans approves; right?
A. They submitted some sort of mix design, yes.
Q. So Caltrans submits -- Caltrans approves mix designs; correct?
A. Caltrans, sure, yes.
Q. So -- but the question is who directed Bay Cities or Sacramento Drilling to use concrete at that strength.
A. I can't tell you who was the person who directed that.
I think again, the concrete that they were trying at first was not working. There was a lot of brainstorming going on at that time to try and figure out what was going to be the best means and method and with the oversized drilling method.

Q. But like the oversizing of the hole, it's your contention that somebody from Caltrans directed the contractors as to the strength of the concrete?
A. I think the entire oversized drilling was directed by Caltrans because we require -- we requested to do drilling fluid, which is a much cheaper alternative and also a change to the spec.

28. In other words, we have "dual but alternative" perceptions over the change in means and methods away from contract methods in Section 49-4.03B. The Contractor wants to use drilling fluid but that is not permitted by the Specifications. The Contractor contends it is forced to adopt overdrilling, then *increased* overdrilling sizes, and *increased* sack mix strength, due to both the claim of DSC, and also in the Contractor's view, the Department's requirement or contract interpretation that Section 49-4.03B requires a "cured hard tremie" essentially eliminates the alternative contract method of "temporary casings" for caving control, thus forcing overdrilling as de-facto imposed.

29. The Department's perception of the same "brainstorming" in these two meetings is that it was allowing overdrilling, not imposing it, and that casings and tremie seals could be used "simultaneously" and that the Contractor overstated the risk of the casings damaging the tremie seals or getting stuck if the tremie seals had to be "cured hard" before start of the structural concrete pour. All this in a 6-day blur and immediate DSC Notice and higher than anticipated groundwater compared to LOTBs, and while ever-increasing and larger overdrilling attempts, after two-sack lean concrete mixes and a 4" cofferdam (38" augured hole) proved too weak to counter caving from groundwater, and resort was needed to a 6" thick cofferdam (42" augured hole for a 30" diameter structural specified hole) and a 4-sack mix.

30. Ultimately, in sifting the evidence, the Arbitrator found the predominate fact was not the differences in opinion over what the brainstorming meant contractually – "allowed" or "imposed." Rather, and *engulfing* these perceptional differences, the Arbitrator found and finds that the groundwater itself was the *predominant "actor" or force* dictating to the parties to have to "brainstorm" in the first place, and not just the fact the Contractor's initial planned method of drilling fluid was rejected as non a permitted method in Section 49-4.03B. That actor and evidence was the groundwater itself, which then dictated upgrades in method over those specified.

31. The Arbitrator finds that a Reasonable bidder looking at the entire mix of bid documents, would not anticipate needing a 42" oversized hole for a 30" structural concrete hole and a 4-sack mix to combat caving from high groundwater and forceful groundwater. Nothing in the overall mix of pre-bid information suggested to bidders to include such costly and added cycle elements of drilling twice and offhauling twice (structural excavation). Like the Shark in the movie "Jaws," the water here was the dominant evidence and fact; the participants' joint trouble-shooting efforts were in cooperative, partnering reaction to that fact. Just like actor Roy Scheider said when seeing the Shark for the first time – "we need a bigger boat" – here, much more than Section 49-4.03B permitted means was needed to combat, much less "control" groundwater. The "initial boat" - the plans and specifications and soils/groundwater data – were not going to work.

32. The groundwater elevations encountered were significantly higher than on the LOTBs. There is little doubt about that fact; in fact, the height of groundwater as materially higher than the LOTBs was largely undisputed and agreed upon, based on daily project records. Ex. 125A, pages 28, 128. The narrower question posed is whether such increased groundwater elevation when compared to the LOTBs, and the constraints in water control in Section 49-4.03B, were sufficiently strong "positive indications" to make those increases, "materially different" from those indicated in the contract documents.

33. Part of the Department's defense is that no DSC existed. This defense as presented is a combination of application of the *Wunderlich* case to the issue that groundwater, unlike earth, is not static but fluctuates over time and season; and therefore the extrapolation over time of the LOTBs is at contractor risk and not a "positive indication" amounting to grounds for either a DSC finding or a "*Spearin* doctrine" breach of implied warranty of accuracy and completeness of plans and specifications, or both (the evidence of one is often the evidence of the other, as explained below when analyzing case law).

34. A second defense argument that conditions did not materially differ, is that the Department's internal Foundation Reports (Ex. 302) reference that its author had reviewed monitoring data kept by the State's Water Department of nearby dewatering wells, and that had that monitoring well data (item #7) been reviewed at the bid window in November-December 2017, it would have shown groundwater levels 3 feet higher than the April 2016 LOTBs. That is, similar to what was in fact encountered. Therefore, the Department asserted, there is no DSC; a reasonable bidder would and should have looked at those monitoring wells, and known and priced in the higher groundwater levels, and discounted the LOTBs as either superseded or unreliable. Assistant Resident Engineer also testified to an analysis of the groundwater monitoring wells as of the bid opening time in November-December 2017, Ex. 333. The argument being, it should have been reviewed by reasonable bidders, and if reviewed, would lead a reasonable bidder to anticipate the groundwater conditions actually encountered, even if different from the LOTBs alone.

35. In response, Petitioner's expert Dr. Perri indicated that the grading plans showed elevations at the onramp about 3 feet higher than on the LOTBs (plan sheets 15-16) (See his report, Ex.325), and that as a result, in his opinion, the groundwater elevations at the time of the April 2016 LOTBS were in fact 3 feet higher than shown, due to an elevation error. To back this up, in addition to the grading plan drawing's elevation differential, for the same onramp, Dr. Perri (and Petitioner via cross-examination) pointed to internal Department emails (Ex.'s 16, 17) with the outside geotechnical engineering consultant, unmistakably critical of the consultant's not obtaining exact survey locations in space (height, longitude and latitude e.g. elevation, location and offsets) for the three project borings. Dr. Perri also contended the middle boring A-2 was off a number of feet from where it was actually drilled. These internal emails lend some credence to that analysis and indicate that the elevations and locations were "approximated" since they were not exactly marked in the field, and once closed up, they no longer could be found, either due to

lapse of time or repaving of the onramp. Dr. Perri contended the grading plans for the 14th Street offramp showed the same 3 boring locations as 3 feet or more higher in ground surface elevation – meaning if true, that the groundwater was always higher but accidentally shown lower than it was because the roadway was assumed higher than it was on the 14th onramp.

36. Part of the challenge for the Arbitrator was that in those meetings, and in testimony including from the Department, the Department witnesses did not indicate that they expected higher groundwater, including at the first 12 holes, #1-12. It is a fair and reasonable inference, and one drawn by the Arbitrator, that when the Department issued its letter of July 30, 2018 finding a DSC was encountered, and then issued a unilateral Change Order #10 to pay for the first 12 holes going from "dry" to "wet", the Department did not look at those nearby groundwater monitoring wells. It expressly determined a DSC had been encountered based on comparison to the contract LOTBs alone. Meaning the Department's *own initial review* of the bid documents served as a "cohort" and implicit admission that in fact, a review of the LOTBs was a sufficient bidder review, along with constraints in the specifications. That the LOTBs were in fact, "positive indications" upon which a reasonable bidder was entitled to rely in its bid, just like the Department relied on the LOTBs for its soldier pile design and Section 49-4.03B water control specification. Again, in "real time" the Department naturally did what bidders do when bidding – look at the LOTBs for a DSC evaluation, and not distant databases not affirmatively called out as a source of design or bidder's risk.

A Differing Site Condition (DSC) was in Fact Encountered

37. Taking in all the evidence, including the 2015 Internal reports, the contract LOTBs, the above "cohort" evidence, the limited methods allowed by 49-4.03B's groundwater control methods, and the fairly obvious need to use much more severe means of overdrilling, the Arbitrator finds by a preponderance of the evidence, that a DSC had been encountered.

38. While itself a sufficient and substantial evidence of a DSC, the Department's own July 30, 2018 admission of a DSC for his own finding, had further evidentiary value establishing that the contract LOTBs were in fact "positive indications" upon which a bidder could rely; and regarding whether the "*Wunderlich* defense" applies (e.g., where the claim is based not on "positive indications" in the plans and specifications, but on contactor deductions, judgment and assumptions about provided data). The Arbitrator was persuaded that the Department's own, initial analytic process in evaluating the DSC notice, as the first go-round in July 2012, was a "facsimile" "cohort", or fair "replica" of what a reasonable bidder's scope of review would be at bid. The Department did not then focus on the "bid time" November-December 2017 groundwater monitoring well levels. Nor had Petitioner or its anticipated subcontractor Sacramento Drilling at time of bid. So, the Department's initial DSC review, *mirrored* what a bidder would have done, in the Arbitrator's view, and in a similarly, short time window similar to a bidder's pre-bid review. That made sense, and it still makes sense. Bidders will look at the LOTBs and the express constraints of the specifications in combination as saying what to expect, and how to bid. Absent a specific call out or warning, reasonable bidders will assume that the LOTBs were a basis of design, as they were here, and therefore, are also reliable as a basis for bid, method and price.

39. In effect, this same method of analysis as first adopted by the Department's DSC notice review or yardstick, is also expressed in the *Spearin* line of cases in California, beginning with *Spearin* itself, that the project plans and specifications *read as a whole* imply or express certain conditions will be encountered, and that the owner's specifications and plans, if applied, *will work* to get the project done in accordance with them. When that is not true – when contract methods are insufficient and clearly so, in the usual instance there is an entitlement to an equitable adjustment, however labeled. This is on the natural, common-sense theory that had the encountered conditions been known or perceived by the designer, the specifications and plans

would have been different to account for them; overdrilling as an option would have been specified.

40. A more specific "call out" to bidders to expect volatile fluctuations in groundwater, or to "zero in" bidder focus on the State's nearby monitoring wells in addition to the contract LOTBs, would have presented a different bid data mix, and also, may have modified price or not; though the Section 49-4.03B water control limits more or less defined methods. In such a case, bidders would have bid differently, usually meaning, employing more expensive means to combat a different construction challenge than presented by the bid documents. Or, more serious methods of water control would have been specified, or a different wall design not as dependent on dry holes. Nothing in Ex.302's Foundation Reports suggests to the reader that such a deeper dive into listed reference material is needed. Even the two listed prior LOTB logs from two prior projects, while called out more specifically in the September 21, 2016 14th Street Report, are incomplete references ("undated") and not summarized. The well data is only listed as a reference reviewed, and not commented on at all, as more orientation than material to the study.

41. Also, the Arbitrator also finds that Section 49-4.03B is an implied positive indication under case law that the combination of "temporary casings and/or tremie seals" would be adequate to achieve groundwater control; and was not adequate; and hence, a DSC is also proven beyond the contract LOTBs versus encountered conditions, by the abandonment of contract methods and requirement of an upgrade to overdrilling, a noncontractual, more costly and more time-consuming method. More water and more forceful water were encountered that the 49-4.03B methods contemplated as well.

42. At page 77 of the first day's hearing, August 15, 2022, Bay Cities' Operations Manager Eric Barker put the claim basis fairly simply, - more work, and not a specified method:

Q. Did you consider the drilling of all the oversized holes to be extra work?
A. I did.
Q. Why?

A. Because it wasn't in accordance with the approved specifications.

The Cured Tremie Requirement was a Change to the Specification Section 49-4.03B

43. The "Cured Hard Tremie" requirement also moved the needle towards contractor entitlement. The testimony of Department Geotechnical Engineer Brandon Miller, who was not at the July 6, 2018 meeting, answered to a hypothetical that the cured hard tremie if imposed as a requirement was a change; that a risk is called out in the Foundation Manual that casings can get stuck or damage a tremie course and seal if the tremie is cured hard by the time of casing extraction, that is a problem that sometimes occurred, and that on another Department project where casings were used simultaneously with a tremie, the tremies had not been "cured hard." Transcripts, Vo1. 3, 683-684, 713-714; Exhibits 313, 132, p. 21.

44. While the Department indicated casings and tremie seals could be used simultaneously (Ex. 40), the cured hard tremie requirement effectively removed casings from the mix, and by default, threw the discussion and brainstorming session towards overdrilling. *De facto*, overdrilling was all that was left to control water and prevent the holes from caving from groundwater pressure along their sides. In addition to that testimony, the testimony of Dr. Perri, of Bay Cities' Eric Barker, of Sacramento Drilling's Andrew Saint, the Department's Construction Manual, the specifications at 49-4.03B and elsewhere, and the meeting minutes (Ex. 40) sufficed to establish by a preponderance of evidence, that casings were made less viable, and hence effectively removed from practical consideration, by the added "cured hard tremie" requirement, itself not in the specifications at bid day.

45. The fact the casing to structural concrete pour sequence in Section 49-3.02C, referenced in 49-4.03B, involves extracting the casing while the structural concrete being poured is not set, and in a five-foot lag along the freshly poured concrete, tends to reinforce slightly that this is a "wet extraction sequence" not a dry one, even if there is no specific reference to a "cured hard" requirement anywhere in the specifications. Where not required, it is a means and methods

allowed the contractor, and if taken away in order to achieve owner submittal approval, that is a change to the contract, as well as here, evidence of concern of upswell of groundwater surge from the bottom that might infect the hole and structural integrity of the hole.

46. The Arbitrator did not accept, and rejects, Petitioner's further argument that the specification 49-4.03B was defective in its "casing or tremie seal" phrasing, nor that drilling fluid was not permitted, nor that subsequent versions of the Standard Specifications now permit drilling fluid, or that drilling fluid was acceptable in the 2015 Standard Specifications for CIDH piles but not for Soldier Piles. Design choices and later revisions to owner design choices belong to the owner. Such changes in thinking over time do not prove the prior thinking or specification was defective, just a different approach at an earlier time. Had conditions not materially differed, casings and tremie seals alone may well have worked successfully.

The Department's Groundwater Monitoring Well Defense was not Established

47. The Arbitrator has spent time reviewing the groundwater well argument of the Department, and their reference points. They were only referenced in the Ex. 302, internal Department report, dated September 21, 2016, after the LOTBs had been done and logged. The internal foundation report, focused on its narrative not on the groundwater wells at all, but the 3 project LOTBs at 14th Street (and LOTBs at Fruitridge) and called out in the narrative, LOTBs from two prior Department projects (undated – a reference that the author was to insert the date). The narrative focus of those reports also reinforced to the Arbitrator the natural (and invited) tendency to focus on project specific LOTBs (and prior project LOTBs) as the reliable baseline for design, and therefore, for bidders in determining their approach, allowed means, and price.

48. As "positive indications" the LOTBs and Section 49-4.03B constraints were not undercut by the fairly non-descript or oblique reference in the internal Department foundation reports collected at Ex. 302 and provided pre-bid to bidders. The casual reader would believe the wells were not sufficiently material to deserve comment, since they received no comment. Only

two prior projects' own LOTBs were called out as specific to the review, and then again, without description of what they said. Only in the companion Arden Way Report within Ex. 302, is a groundwater database mentioned in the narrative, and then it is the National database, not the State groundwater well database, which is only mentioned in the 14th Street Report.

49. The 14th Street Report and the Arden Report are prepared by different Department geotechnical engineers, so the differences in the source review references could be no more than personal preference or habit within geotechnical and engineering practice, normal, innocuous, and not material. While later in a contentious and large later claim setting small differences in the reports become the source of pages of argument and testimony, they may in the end, mean nothing – two engineers writing two reports and researching slightly differently beyond the LOTBs themselves. The Arbitrator's main take away, thinking about both how a designer would read those reports and a reasonable bidder, is that they just confirm that the LOTBs are considered reliable, and no deeper dive to "second guess" them is needed or invited. That, the contract database is reliable and not drawn into question by the internal review of additional, peripheral databases or prior LOTBs on other nearby projects.

50. To drill down – no pun intended: within Exhibit 302, the internal Department Geotechnical Foundation Report dated September 21, 2016 with respect to the 14th Street onramp, it lists as reference item 7, as items reviewed, the nearby groundwater wells monitored by the State Water Department. It does not "plop in" the online portal "www.xxx" to review them without further bidder google search. Within Ex. 302, there is a companion internal Department Geotechnical Foundation Report with respect to the Arden Way retaining wall for its own metering lights onramp improvements. Based on the LOTBs for each location, it was anticipated that Arden Way's foundation work would not encounter groundwater, as groundwater was shown 40 feet or so deep; but that groundwater would be encountered in most of the soldier pile holes at 14th Street, from between 15 to 30 feet below ground elevation. See below from the 14th St. report:

Rock was not encountered during our subsurface exploration. Groundwater was measured during drilling by measuring the depth at which the drilling auger was wet. See Tables 3 and 4 below for detailed information:

Table No. 3: Groundwater Level Observations – 14th Avenue

Borehole ID	Date	Ground Surface Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)
A-16-001	4-12-16	11	20	-9
R-16-002	4-12-16	12	15	-3
R-16-003	4-11-16	25	30	-5

Table No. 4: Groundwater Level Observations – Fruitridge Road

Borehole ID	Date	Ground Surface Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)
A-16-004	4-6-16	25	34.5	-9.5
A-16-005	4-7-16	29	35	-6
A-16-006	4-7-16	28	35	-7
A-16-007	4-8-16	31	37	-6

51. As highlighted at hearing, only in the Arden Way report is the following observation made, that groundwater may fluctuate seasonally. The same "call out" about risk of seasonal groundwater fluctuation is absent from the September 21, 2016 Report for 14th Street and Fruitridge onramps. In the July 8, 2016 Report concerning the Arden Way onramp foundation, this "call out" was made that "groundwater conditions may fluctuate in response to seasons, storm events, local irrigation, and other factors":

Groundwater Conditions

The data gathered from as-built boreholes near the project site and the web based National Water Information System (Reference No. 10) indicate that the groundwater depth is greater than 40 feet from the ground surface. Groundwater was not encountered during the recent drilling operation performed to complete this report. However, groundwater conditions may fluctuate in response to seasons, storm events, local irrigation, and other factors.

52. Interestingly, item 10 above (the *National* Water Information System) was also reviewed and listed as item 6 in the 14th Street Report. But item 7 in the 14th Street onramp Report at Ex. 302, the State Water Resources Department (DWR) online groundwater database, is *not* listed as a reference item in the Arden Way report. It's a generic reference. "When asked why the 14th Street onramp report did not mention a call out about groundwater fluctuations, the

Department's Geotechnical Engineer at transcripts, Vol. 3, p. 709, 710, while the Arden Way Report did make the call out, the answer given was as follows:

> **Do you have a section in your report**
> **similar to the one that I read aloud from the other report?**
> A. Guidance changes, it does not look like -- I mean, groundwater is right there, yes. So it's within the section above it.
> If you're looking for that statement that's in the other document, which I believe you are --
> **Q. Yeah.**
>
> **Page 710**
> A. -- our guidance was not to have blanket statements that -- and that's what that is.
> So it's purposely not in there.
> **Q. Okay. So it's purposely not in this one?**
> A. Correct.
> **Q. Okay.**
> A. If you put that in every single report, then it doesn't mean anything.

53. These reports were by different authors, so to some degree, the witness Mr. Miller was only able to describe his thinking as to his report for 14th Street, not the thinking of the different author of the separate, July 8, 2016 Arden Report. One can also infer that when the LOTBs for Arden Way showed much deeper groundwater, and below the pile tips at planned Arden retaining wall, that author called out item 10, the Nationwide groundwater database, as just confirming the anticipated, below the foundation depth of groundwater, as a double check. At 14th Street, groundwater was within the foundation pile lengths for most of the holes, so such a double check or call out was not as necessary, as borings will usually be more trustworthy since located at the project foundation location specifically, for that specific purpose. Again, not that this was "much ado about nothing," but the variances in the report just proved the bigger point to the Arbitrator – the stray reference to the local State DWR database was not material to the Department's geotechnical and design team, the borings were, and so too, the bidders would read it as helpful background, but not much more. The report repeats the gist of what the LOTBs and specifications say about groundwater at the 14th Street onramp.

54. This was followed up in questions from the Arbitrator, on the same question, of why a "groundwater fluctuation" call out for Arden Way, and not for the 14th Street report, at pp.716-717:

> THE ARBITRATOR: Okay. And nobody was tasked to sort of cross-compare the groundwater elevations at 14th Street on-ramp to the boring elevations?
> Yeah, on -- yeah, when I looked at the Arden report, which was page 37 of -- no, 64 of 302, whoever wrote the Arden report --
> THE WITNESS: Yeah.
> THE ARBITRATOR: -- went ahead and put in a paragraph. You're saying purposely you didn't do that. And so nobody was tasked to -- to do that.
> Do you remember if you looked at the groundwater elevations at the time you wrote your report in September of 2016?
> THE WITNESS: I know I looked at the wells, monitoring wells. And, I mean, I was not -- I would have stopped by -- I'm sure I stopped by the field investigation.
> But the chances of being the same time they're checking water that I stopped by, I -- very unlikely. I don't think I -- I personally verified water levels with them.
> THE ARBITRATOR: And then why was it purposely not in that -- that report, your --
> THE WITNESS: Yeah. So we have internal guidance.
> THE ARBITRATOR: Yeah.
> THE WITNESS: And that guidance is always changing. So that would have been between us, I suppose. We would have taken different templates that we started with from the guidance. And that's always changing.
> They said -- you know, I think it's -- actually came back now, currently, but they didn't want blanket statements that if you put it in every single report, it loses its importance because it's no longer -- you know, it's just a check the box. That's why it's not in there.

55. There are a few take aways here. One, that the State Department of Water Resources groundwater wells monitoring data was only referenced in the 14th Street Report, and not the Arden Report. That dilutes its materiality. Second, the witness appears to say he looked at thee DWR database cursorily, and not specific to the wells as of the date of the April 2016 LOTBs to truly "cross compare" the groundwater elevations – meaning, here, the Department's defense is suggesting the bidders' bid review go deeper than the Department's internal design review went. And, in the Arden Report, instead, the Nationwide groundwater database was specifically

referenced as verifying the borings as having groundwater below 40 feet and below the foundation zone; the State database is not even cited as a reference.

56. Secondly, the groundwater fluctuation "call out" is in the Arden Report where groundwater is believed below the construction zone but no similar "call out" is in the 14th Street Report where the contract LOTBs anticipate groundwater within the depth of the soldier beams.

57. Third, it's just not very clear why one database and not the other is called out, or not called out, report to report, nor why the groundwater fluctuation "call out" is only in the report showing no anticipated groundwater, and not the one showing groundwater in the pile depth zone. The explanations as to these differences did not clarify things particularly, as to why in one report and not in the other. It could just be two different authors, and the national and state groundwater databases are functional equivalents. Not too much can be drawn from all this, other than, the design for 14th Street is not shown to the Arbitrator as encompassing anything specific about nearby DWR wells, sufficient to impose or imply a duty by bidders to dig deeper than the Department did, to undercut LOTBs the Department expressed with confidence and without disclaimer or qualifier in the drawings and notes on Sheets 14-16 of Ex. 315.

58. It's difficult from these reports, read in isolation, read together, and read with the benefit of testimony, to treat the State's Water Department's groundwater monitoring database as material to those internal reports; much less to bidders in a short bidding window. A bidder would not view that database, only called out as a reference in one of the two foundation reports (and then not even mentioned in the narrative) as being a "rock to overturn" when the contract LOTBs are expressed without qualifier, disclaimer or warning in the plan sheets 14-16 (Ex. 315).

59. A passing reference in the September 21, 2016 14th Street Report, without any commentary, is just that; something someone looked at and said nothing about. It is not sufficient to disclaim or qualify the "positive indications" of the contract LOTBs, and in combination with the limited water control methods of Section 49-4.03B.

60. The 14th Street onramp report (which includes Fruitridge wall location as well) does call out to prior as-built LOTBs from prior nearby projects, though missing their dates (Ex. 302):

> **As-Built Data**
>
> The following As-Built Data was reviewed in the creation of this report:
>
> 1. Caltrans (date), "Log of Test Borings" for Sound Wall No. 47, 03-SAC-99, Contract 03-224101.
> 2. Caltrans (date), "Log of Test Borings" for Fruitridge Road Overcrossing, Br. No. 24-0148.

61. There is no further description to those two prior LOTBs nearby. A reasonable bidder would assume that those LOTBs were consistent with the current contract LOTBS. In contrast, at Arden Way, there are no prior referenced LOTBs. That too could explain why the different author went to the added length of a heightened, specific review of the National groundwater database specific to the Arden Way LOTB dates, since there was no prior LOTB baseline from prior nearby projects. In contrast, the 14th Street location had prior LOTBs from prior projects, and those were called out in the narrative, just not described. Where not material description of the further call out data is made, a reasonable bidder can assume, "no news here" and not waste limited time looking for outlier information as if a designer "peer review."

62. In a *competitive* "low bid" environment, with 30 or so days to assemble a bid, and knowing the rules of "positive indications" a bidder is not going to go "look for trouble" or scour for peripheral data not highlighted by the Department, where the core LOTBs (and impliedly, prior nearby project LOTBs), present a consistent picture of manageable groundwater, and at deeper levels than in fact encountered here.

63. Again, groundwater unlike static soils conditions, present an added analytic challenge to bidders, to designers, and in DSC "positive indications v. *Wunderlich* constructs. This is because, by definition, water moves up and down over time seasonally, and in drought versus non-drought years, and based on permeability of the indicated soil.

64. There is some common-sense logic to the Department's *Wunderlich* arguments. But ultimately, water's up and down also has some predictability from an engineering standpoint, such as tidal tables based on lunar gravitational pull on the earth's surface (See *Welsh* case). The Department has prior projects; its internal reports draws on not just the LOTBs but past data baselines for consistencies or anomalies, all as part of engineering practice.

65. Still, the California case law has consistently treated groundwater (or tidal) indications in LOTBs as positive indications, not bidder extrapolations and assumptions. This it is believed is because it is unavoidable that the project design must also rely on the LOTBs, as the case, for design. Underlying this case law precedent, is a parallel public policy concerning the "bargain" in competitive bidding, that low bids are achieved and needless contingencies are avoided, where a bidder can rely on the plans and specifications, and LOTBs as presented, as the design platform and hence, bid basis. The Arbitrator considers that he is constrained by California law's consistent statements in this area of groundwater indications in contract LOTBs, and further, that treating groundwater as unreliable indications in the same borings were the in situ soils and conditions – non-water portions – are positive indications – would be problematic, if not contrary to state public policy.

***Warner* Held Against the Agency Where a Much Stronger Disclaimer was Involved**

66. In its decision *Warner Constr. Corp. v. City of Los Angeles* (1970) 2 Cal.3d 285, 293–294, the California Supreme Court disagreed with the public agency that the disclaimer that groundwater fluctuates was sufficient to overcome the positive indications of groundwater in the boring. *Warner* was a case, ironically, where drilling fluid (called there, rotary mud or drilling mud) was also not allowed and had to be resorted to, since the clay binder had less resistance to the groundwater than shown in the LOTBs. Its language appears to say that such groundwater variation disclaimers or warnings about groundwater fluctuations *yield* to positive LOTB indications, don't "collide with them" and don't negate them:

> Attached to the test-hole logs was a caveat: "The test-hole information on these plans shows conditions found only at the date and location indicated. Bidders are cautioned that the city in no way warrants that such information is representative of conditions at any other location, ***292*** or at any other time. Groundwater levels, particularly, are subject to change."
>
> Although defendant contends that this note effectively disclaims any warranty, we find, on closer examination, that the warranty and the disclaimer pass each other without collision. The warranty describes the subsurface conditions at the test holes, but says nothing about conditions elsewhere on the site. The disclaimer states that "the test-hole information ... shows conditions found only at the date and location indicated," and cautions bidders that the city does not warrant that the data is representative of other locations, but it in no way disclaims the accuracy of the test-hole logs.[2] Reading the two together, we conclude that the bidder takes the risk in making deductions from accurate test data, but the city retains responsibility for any inaccuracy in the data. (See *Wunderlich v. State of California* (1967) 65 Cal.2d 777, 784–785 [56 Cal.Rptr. 473, 423 P.2d 545]; *Chris Nelsen & Son, Inc. v. City of Monroe* (1953) 337 Mich. 438, 446 [60 N.W.2d 182].)…
>
> The plans and specifications contained 16 "General Notes." Note 7 provides that "holes for the soldier beams and anchor caissons shall be made by boring and/or drilling." Note 8 states: "soldier beams and anchor caissons shall be cast in place within unsupported holes, except that where, in the opinion of the engineer, the holes are subject to caving or sloughing, or are in any way unstable, the walls shall be temporarily supported by steel casings or shells. Before placing the steel casing or shells as much of the loose soil as is practical shall be removed from the holes."
>
> Defendant contends that the language of Notes 7 and 8 does not prohibit the use of rotary mud, but leaves the drilling technique entirely to the contractor's discretion. The rotary mud technique, however, is an unusual and expensive method of drilling, and results in castings of less strength than casting against virgin soil.[3] Plaintiff adduced substantial expert testimony, including not only plaintiff's experts but also Mr. Reader, the city engineer in charge of designing the sidehill bridge, to the effect that the specifications of General Note 8 impliedly excluded the use of rotary mud and that a change order would be required to permit rotary mud drilling.

67. See Ex. 315, sheets 14-16. On Sheets 15-16, containing the contract LOTBs, it references the "additional notes" at Sheet 14 of Ex. 315. Those notes and pages do not contain any disclaimers relating to groundwater fluctuations, or even a statement that groundwater can be expected to fluctuate, unlike the specific disclaimer in *Warner*. The contract documents here, unlike the specifications and LOTBs in *Warner*, don't have such a disclaimer. The Supreme Court in *Warner* involved a precise disclaimer of groundwater levels in its specifications but found it ineffective as "passing without collision" as to the "positive indications" of the boring logs themselves. *Warner* applies and does not negate the positive indications of groundwater levels in

the LOTBs themselves. The term "positive indications" came from the *Wunderlich* case, and often, is cited to distinguish facts from *Wunderlich's* facts, while hewing to *Wunderlich's* statement of the law. The same is the case here. *Warner* cites to *Wunderlich*.

68. Those April 2016 contract borings showed depths of groundwater below the surface elevation at 30 feet at A-16-03 (25'surface elevation above sea level, groundwater at -5' below sea level=30 feet below the surface); A-16-2 boring location, groundwater at 15 feet below the road surface (12' surface elevation, groundwater at -3' = 15' below surface), and at A-16-1, groundwater at 20' below road surface (11' road surface, groundwater at -9 = 20 feet below ground). Ex. 315. There is no express disclaimer, even of the kind in *Warner*. The very distant call out of groundwater fluctuations in the Arden Way Report at a different location, would not suffice under *Warner* and cannot fare better here. That said, it is axiomatic that groundwater fluctuates with seasons, with droughts, with questions about climate modifications over time. But, none of that negates positive indications in the plans and specifications; once made, a bidder can rely on them.

69. If anything, the Exhibits 302 narratives and selections of highlights and call outs, *reinforce* the positive indications of the April 2016 contract LOTBs, rather than call them into question. Nor do those Ex. 302 internal geotechnical foundation reports invite bidder to look into the reference material not affirmatively summarized, or that the groundwater monitoring wells should be specifically consulted before bid or should be considered a bid baseline or positive indication materials and statements. Also, at hearing, there was no evidence presented that the Department used or considered the groundwater monitoring wells in developing the soldier pile design either.

70. The Department's separate "*Wunderlich*" argument is that generally, as is true, groundwater (unlike soils in situ) fluctuates day-to-day, seasonally, and from drought to wet years, and that therefore bidders cannot rely on groundwater tables from one day to the next, or

in between the borings themselves as a representative groundwater profile. The groundwater level in November 2017 would not necessarily be as important to bidders as the groundwater levels when actually drilling in July-September 2018. Usually, April-May in a year would be a peak groundwater moment. No evidence was presented on either side as to what groundwater levels in the monitoring wells was as the as-built drilling period (July 2018-September 2018), or if that as-built drilling period was known was as of the December 2017 bid date as the likely work window.

71. At some point, the designer must take into account the groundwater and if the contract water control choices in Section 49-4.03B are going to be enough or not to do the job. Some judgment is involved about viability of a groundwater table to rely for design, and if the owner relies on it for design, in the usual circumstance, bidders can likewise reasonably rely. Aside from mirroring owner reliance on the LOTBs, the LOTBs serve as an "equal playing field" and "pro-taxpayer, anti-contingency element" to both competitive, low bid, bidding, and the required DSC clause and promise. If all bidders are bidding from the same bid documents, read fairly, then artificial bid contingencies are avoided. Bidders know that being low is what gets the job. And also know, that if conditions do materially differ, the Department promises additional compensation if more work is involved as part of this Legislature intended bargain. That is a contractual, competitive bidding bargain aimed at a "pro-taxpayer" goal over the long run-that across-the-board "fattening" contingencies are avoided in bids.[1]

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[1] As an aside to this *Wunderlich* analysis, conceivably, as an alternative project delivery design, where groundwater is indicated in the contract LOTBs, the State could go to a bid line item system where, just before production drilling the first work line item will be drilling nearby monitoring wells near the LOTB locations to verify groundwater levels, to verify that the bid and design assumptions about likely drilling and water conditions are what is going to be encountered at "point of contact". This is done elsewhere in Section 49 for example when it comes to driven piles, in particular concrete piles, and indicator pile programs are specified of several select pile locations monitored by the project engineer before casting final pile lengths, often bid in a unit price, per foot line items. The indicators help both engineer and contractor by finetuning the conditions post bid and building a pricing mechanism into the bid line items to account for deviations. But, absent that, the question remains whether the LOTBs and specifications positively indicated one thing was going to be encountered, and a different thing was encountered. A different thing was encountered. Or, a bid package can require installation of deep piezometers near the LOTB locations, to track groundwater daily from notice to proceed forward. These are seldom in the specifications, and it is inferred, the added

72. Also, were the Arbitrator to find groundwater elevations in borings to not be positive indications, such would appear to be contradicting the Supreme Court's holding in *Warner* saying the opposite – that they are positive indications and can be relied upon by reasonable bidders. Further, if the Arbitrator found LOTBs were not positive indications for groundwater elevations, but positive indications for *in situ* soil classifications in the borings (sand, silt, clay and gravel, hardness, and the like), a situation of bid data uncertainty would be invited for bidders. Prices would be invited to go up with across the board contingencies, where in contrast, the project design team is expressly relying on the LOTBs as basis for design including groundwater indications. There is a larger public policy to the DSC clause expressed in the case *Condon-Johnson & Associates, Inc. v. Sacramento Municipal Utility District* (2007) 149 CA4th 1384, 1395, citing and quoting or citing *Wunderlich*, *E.H. Morrill,* and *Warner* that also counsels against treating groundwater indications, any differently than other, soil description indications in LOTBs:

> …when the Legislature enacted [Public Contract Code] section 7104 in 1989 and used the word "indicated," the past tense of "indications," rather than "positive assertions" it selected a term recognized in the cases as referring to information "from which deductions might be drawn as to actual conditions...." It follows that section 7104 establishes, as the public policy of California, that a contractor may draw reasonable deductions from the "indications" in a contract of the subsurface conditions that might be found at the site.

Significantly, *Condon-Johnson* cites for its rule, *Wunderlich, E.H. Morrill* and *Warner*. It calls out that the term in *Wunderlich* became the basis of public policy legislation defining when a differing site condition is encountered – "positive indications" as opposed to the stronger terms "assertions" or "representations" that suggest more mental state. This overall case law for the Arbitrator, favored the *Wunderlich* legal standard of "positive indications" to the groundwater levels indicated

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cost is not usually warranted as in most cases, the groundwater levels remain as anticipated, and specified control methods are themselves adequate to task.

in the three LOTBs across the soldier pile wall profile, which applies here, over its factual holding, which is found not to apply here.

Wholesale Change Over to the Non-Specified Overdrilling Method as Cost Recovery Basis

73. The first dry hole was encountered on August 23, 2018, or basically, 42 days after drilling began on July 12, 2022. At that time, a dry hole, #66, was encountered. Ex's 65, 72. As a matter of work sequence and augur tooling, the presented testimony was that nearly all holes had been overdrilled, before a second sequence of then removing the interior of the lean concrete mix of the oversized holes, to offhaul the spoils and then pour the structural concrete and then insert the soldier piles. Once the method was changed to over-drilling, it amounted a "wholesale" change over and resource commitment in terms of cost, equipment, augur size, sack size, tooling and sequence for the 69 piles involved. According to Sacramento Drilling's manager, Andrew Saint, 23 dry holes had been expected, but only the last 4 or 5 of the holes were drilled with the 30-inch augur for the specified diameter; the rest or 64-65 holes were over-drilled. The Department's analysis was that piles 1-12 would be dry.

74. While imperfect, LOTBs where positively asserted as here, serve a purpose as basis of design and generally, along with the plans and specifications, as a basis for reasonable, competitive bid without contingencies. Consider the facts in *Spearin* itself, where an unknown, but man-made underground dam in a known sewer outfall structure in the Brooklyn Harbor and Navy Yard defeated all efforts to dewater. The contractor quit the project and was sued by the Navy for extra cost to complete, and the Supreme Court excused performance due to the hidden, subterranean check dam in the sewer works flowing into the Harbor near the planned drydock. But that unknown, man-made dam was present – in existence - at time project design and at bid,

but just *not known* to the designer and not known to the bidder.[2] A trip up the Brooklyn sewer (or today using a video device driven up the sewer), would have revealed the differing site condition – the hidden dam. While that hidden, subterranean sewer dam "could have been known" with deeper investigation by someone or everyone, it was still a different condition than anticipated at bid time and in design, because there was no indication of it.

75. Here, as to the testimony of Dr. Perri, perhaps the bidders and the design team would or could have cross-referenced the LOTB sheets 14 -16 on the plans with the grading plan. In which case, perhaps it would have been noted if discovered, that a possible discrepancy existed between the two drawing sheets over the elevation of the road, and raised it as an RFI or Bidder's question, or in internal plan check, rather than upon discovery and no doubt prompted by the discovery of internal Department emails with the consultant questioning the lack of precise locating of the LOTBs in elevation, roadway surface, location and offset.

76. The question of elevation, design offsets and location of the borings was on the Department's mind pre-design, since the outside consultant had not had a surveyed topographical map done of its boring locations, top elevations, and offsets. Ex. 16-17, internal emails. The Department's geotechnical engineer wrote he even went out to the site to find the plugged boring holes and could not, in an effort to better define their elevations, heights and offsets, but was unable to, and complained that the consultant had not marked the locations before demobilizing. In looking at these pre-design emails between the Department's geotechnical engineer and outside

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[2] Per *Spearin*, "Both before and after the diversion of the 6-foot sewer, it connected, within the Navy Yard but outside the space reserved for work on the dry dock, with a 7-foot sewer which emptied into Wallabout Basin.
About a year after this relocation of the 6-foot sewer there occurred a sudden and heavy downpour of rain coincident with a high tide. This forced the water up the sewer for a considerable distance to a depth of 2 feet or more. Internal pressure broke the 6-foot sewer as so relocated, at several places; and the excavation of the dry dock was flooded. Upon investigation, it was discovered that there was a dam from 5 to 5 ½ feet high in the 7-foot sewer; and that dam, by diverting to the 6-foot sewer the greater part of the water, had caused the internal pressure which broke it. Both sewers were a part of the city sewerage system; but the dam was not shown either on the city's plan, nor on the government's plans and blueprints, which were submitted to Spearin. On them the 7-foot sewer appeared as unobstructed."

consultant, obtained in discovery (and a clear tone of consternation) they certainly invite some uncertainty as to where the LOTBs were in fact in elevation above sea level and in location along the onramp.

77. The locating of the top of borings in space and along the onramp was uncertain internally at that moment, and seemingly unresolved. Internally, the locations were stated as "approximate," but not so in the LOTBs in the drawings. Dr. Perri's report, Ex. 325, contrasted the grading plan elevations of the onramp with the LOTB elevations as out of sync by 3 feet, to opine that the groundwater was always higher, just that the LOTB sheets showed the onramp three feet higher than in fact the case. The LOTBs do not have a caveat which would lead a bidder to second guess the elevation markings, at top of boring elevations, as accurate from encountered pile locations at the ground surface. While other examples exist, these two, real world examples (*Spearin* and the Grading drawing v. LOTB drawing elevation here) illustrate that a DSC can be something "known or discoverable if we dig deep enough" by someone but still, not in fact known to the design team or bidders without added digging. Sometimes, but not always, that later "digging" in case discovery, when time can be taken to do so, does not defeat its being a DSC, but proves it is a DSC. Again, this is a complex case factually and legally for these reasons.

78. The "deeper dive" into a myriad of emails and data-points that occurs in litigation, uses closer to perfect 20-20 hindsight of all sides. Dr. Perri found this nugget, and the Department found a way to read the DWR monitoring wells as of bid time if consulted, as calling out higher groundwater than shown in the LOTBs by 3 feet or so – the as built conditions. Both may be right, but the groundwater well data could just corroborate Dr. Perri's testimony that the elevations were wrong from the jump; it still means the LOTBs as positive indications were inaccurate and a DSC resulted. All this shows is that the laborious, and necessary, litigation process of later finding that some reference document might have been dug into to second guess a bidder's bid assumptions as astray (or the LOTBs and misplaced in elevation), is not a bidding standard, nor the DSC

standard for entitlement. Bidding is quick and based on positive indications, not worse-case scenarios, when the positive indications later prove inaccurate. So is design. Usually, more is known by the time of a merits hearing. Invariably, we know more later that we wish we knew earlier. Those later discovered pieces of evidence can and often show conditions represented as "positive indications" were in fact, incorrect, and hence, *prove* rather than disprove a DSC. Bidders did not have access to Department internal emails which themselves (Ex.'s 16-17) left it somewhat hanging where in space and elevation, that the borings ultimately were compared to the drilling locations at top of onramp surface. If Dr. Perri's opinion is correct, then the November 2017 groundwater well analysis by the Department's Resident Engineer of higher groundwater would also make sense, insofar as one assumes the DWR groundwater tables have true elevations.

79. At bottom, had the monitoring wells been considered important in the presentation of the contract documents to bidders, the bid documents could have called out, "bidders are expected to take into account the bid time groundwater monitoring well levels" (or, do their own monitoring wells once awarded the project, at the drilling locations, and place in a line- item bid item for that). But, the bid documents did not do that. Since the design was based on the LOTBs, it is not realistic to fault the bidder from doing the same. Ex. 302, 313.

The LOTBs and §49-4.03B are "Positive Indications" for Bid Purposes and Prove a DSC.

80. This combination of factual findings and conclusions of law, including *Wunderlich, Morrill, Warner, Spearin* and *Condon-Johnson*, has led the Arbitrator to find by a preponderance of the evidence, that the contract LOTBs to be "positive indications," not disclaimed, not effectively disclaimed. They combine and are consistent with the limited Section 49-4.03B water control choices, as also positive indications that groundwater was lower and more manageable than the case and conquerable with Section 49-4.03B methods alone. See *Warner, supra.*

The Needed Resort to Non-Specified 42" Wide Overdrilling to Combat Caving Proves a DSC

81. It is also found based on a preponderance of the evidence that non-specified overdrilling was reasonably necessary to combat the actual groundwater encountered. It was not a specified or allowed method. Overdrilling was admittedly more costly and more involved than the specified methods. Overdrilling actually started at 38" augur and 2-sack mix and increased to a 42" overdrilled hole and more costly 4-sack mix. The 38" overdrilling (4" thick slurry cofferdam) and 2 sack mix were inadequate. A thicker, 6" slurry cofferdam (42" augur hole) and 4-sack mix proved necessary. The fact that the overdrilling started at a 38" diameter augur (4" thick slurry cofferdam) and 2-sack mix, and had to upgrade, is also evidence of an unanticipated condition.

82. 2015 Standard Specifications, Section 49-4.03B pertaining to the choice or options of a tremie seal "or" temporary casing to control groundwater. That specification read that:

> Furnish and place temporary casings or tremie seals where necessary to control water or to prevent caving of the hole…
> Do not allow surface water to enter the hole. Remove all water in the hole before placing concrete.
> If temporary casings are used, they must comply with section 49-3.02C (3). Ex. 313.

83. The constraints or limited groundwater control tools permitted in Section 49-4.03B, of temporary casings or tremie seals, are also implied "positive indications" and, related, within the *Spearin* Doctrine's approach as an "implied warranty". Meaning that the specifications make a positive indication or implied warranty that those two methods "temporary casings or tremie seals" alone would be sufficient to achieve groundwater control and allow for compliance for the key requirement, a "dry hole" "before placing concrete" as a matter of structural integrity. Setting aside arguments over groundwater height and whether the monitoring wells nearby should have been researched by bidders or not, Section 49-4.03B alone, even without any borings indicated positively to bidders, says, "these tools alone will work." The evidence is fairly persuasive that

more was needed than just a tremie seal or a casing; that those tools alone would not work. The *battle* with groundwater was plainly more severe than either the Department or the Contractor anticipated.

Petitioner's Subsidiary Argument *is Rejected* that Section 49-4.03B Use of "Or" and Whether "Casings or Tremie Seals" Were "Mutually Exclusive" and Hence a Defective Specification, and is Moot

84. Petitioner made a subsidiary argument that Section 49-4.03B as written was "defective" in forcing the contractor to choose between casings and a tremie seal, hole-by-hole. This argument focuses on the word "or" as in "Furnish and place temporary casings or tremie seals where necessary to control water or to prevent caving of the hole…" Ex. 313. The Arbitrator found this issue was informally resolved when this question was posed at the pre-drilling meeting held July 6, 2018, before piling started, the Department expressly stated both could be used *simultaneously*. Ex. 40:

> Sacramento drilling asked the question: How does seal work with extracting the casing ? CT read that Specification says to use tremie seal or casing. CT also stated that tremie seal/tremie plug will be cured/hard and concrete backfill placed later after tremie plug is hard. Brent also stated that he thought tremie plug and temporary casing could be used simultaneously. Contractor asked how he would remove casing with cured lean concrete seal course. Glen said the casing would be removed just like a cofferdam with a seal course.

85. Again, within the context of a professional partnering meeting, this "back and forth" was tantamount to or a functional equivalent of an "RFI-RFI" response in which the Department allowed the two methods to be used *simultaneously*, turning "or" into "and/or." If the specification was defective for that reason, as *unartfully* expressed, it was *cleared up and rendered not defective* at the July 6, 2018 meeting by the Department's statement that the two methods could be used in tandem – "simultaneously".

86. Case law and the Civil Code's contract interpretation rules together, recognize the importance of reading and interpretating contracts as a whole, in the context of purpose, and with due regard to applicable trade practice and even real-time, applied interpretations made by the parties during contract performance, *before* any dispute arose. If finding an ambiguity, then a step

is taken to evaluate if both interpretations are reasonably susceptible from the text and language of the contract itself. *Mastersine v. Sine* (1968) 68 Cal.2d 222. CACI 317 applies a rule of "practical construction" with an eye to the parties' conduct *before a dispute arose*, along with reading the contract as a whole, in view of its purpose, and as a last resort, , resolving ambiguities against the drafter. See *Crestview Cemetery Assn. v. Dieden* (1960) 54 Cal.2d 744, CACI 317. Specification 49-4.03B could have skipped the "helper word" "or" and just listed, "available groundwater control methods are:

-temporary casing

-tremie seals"

and skipped the joining preposition "or" altogether, as an unnecessary surplusage. The Arbitrator's example of the flexibility of the word "or" here is the Thanksgiving table, when after dinner, it is asked, "pumpkin or pecan pie?" This question politely really means, "do you want one, the other *or both*" and there is no harm in saying "both" so long as there is enough pie to go around. That sometimes in context, the term "both" is implied in the word "or" which in context sometimes means "either/or." This is akin to the trade term "2 x4" which really does not literally mean anymore, 2" x4" but a structural member having the value of a traditional 2x4. This was resolved at the July 6, 2018 meeting in favor of using both, at least, as written.

The Cured Hard Tremie Added Requirement Not in the Specifications

87. Rather, the real "rub" at the July 6, 2018 meeting was the further wrinkle on the Department's contract interpretation that the tremie had to be "cured hard" before placement of structural concrete into the hole, that according to the contractor, then eliminated casings as a practical tool, for fear it would either damage the tremie (preventing a dry hole) or get stuck. That language from the July 6, 2018 meeting is quoted below. Ex. 40:

> "CT also stated that tremie seal/tremie plug will be <u>cured/hard</u> and concrete backfill placed later after <u>tremie plug is hard</u>."

88. This requirement is not in the specifications. As such, it is an added requirement. Here, on the actual groundwater facts, it was likely needed to avoid loss of a dry hole at the bottom of the hole when structural concrete was being poured. But, it also meant increased risk of damage to the tremie concrete if a casing was extracted after a tremie was cured hard or risked the casing getting stuck. As such, whether from groundwater as encountered, or this Department "cured hard tremie" requirement or both, overdrilling became the *de facto* last resort to combat water. as it was not specified, and was more work, it was compensable extra work. That added risk is called out in the construction manual and acknowledged by Department witness Brandon Miller in his testimony as well. Transcript, Vol. 3, pp. 683-684, 713-714.

89. This fact also makes it difficult to view the Contractor's accepted submittal after the meeting of overdrilling as not being "imposed" in some fashion due to the Department's requirement of a "cured-hard" tremie stated unequivocally at the July 6, 2018 meeting. That added requirement per testimony from Petitioner's witnesses and expert made casings iffy, and risky. It also meant there was no other likely way to counteract side caving without a temporary slurry cofferdam, e.g., overdrilling and all its extra costs and steps. So, in a broader sense, it is not accurate to say that the contractor "picked" this overdrilling method without some clear signals from the Department that it wanted a cured-hard tremie, another changed criteria, to Section 49-4.03B, as a way to guarantee a dry hole.

90. It is worth touching on the term "brainstorming," as a word both the Project Resident Engineer Sushma Lee mentioned, and Bay Cities' Operational Manager Eric Barker, to describe the July 6 and July 12, 2018 meeting discussions. It begged for the Arbitrator an underlying question: "*brainstorming what*?" One brainstorms *in response to a problem*. That problem was the DSC and higher, more forceful groundwater. It was also the added "cured hard tremie" condition to Section 49-4.03B and not in Section 49-4.03B. So, to the Arbitrator, the groundwater and its DSC element dictated the method, rather than it being a "favor" from the

Department to the Contractor or for that matter, a formalistic order from the Department to the Contractor.

91. To be sure, in a non-partnering paradigm, the contractor could have submitted a revised drilling plan with the tremie not specified as "cured hard," and after the July 6, 2018 meeting, anticipated a rejection by the Department of the submittal. Such would have guaranteed project or activity delay and standby, awaiting a revised submittal. That then would trigger more paperwork, the Contractor's own protest of the submittal rejection. This would have taken everyone back to square one, two weeks later, with the onramp work idle, to another partnering meeting with the drilling work at a standstill, and a serious risk of souring of the partnering. Partnering meetings and collaborations are supposed to short-circuit those formalistic steps, and here did, albeit, with less certainty over "where are we contractually." And here, the groundwater itself stepped in on July 12, 2018, and made the drilling method call for the parties.

92. Put another way, *the real actor "giving the orders" or "doing the imposing" was the groundwater itself*. Not the contractor picking overdrilling and not the owner so much picking overdrilling; the water *dictated* the solution to stop its infiltration to ensure dry holes for structural integrity. It cost more and took more time. But by all accounts, it was both necessary and worth it and unavoidable. It was the right choice, logical, and is strong evidence proving a DSC was encountered. This precisely because such a discussion or brainstorming was needed, and because the specified Section 49-4.03B methods were not going to work to achieve a dry hole. Even a 38" augur and 2-sack overdrilling approach did not work, so a further upgrade to a 42" augur hole (6" thick slurry cofferdam) and stouter 4-sack mix was needed, and with increased groundwater removal out of the hole a major chore.

93. Essentially, in the Arbitrator's review of the evidence overall, *the predominate fact was the groundwater itself*, and being more than the contractually specified alternatives of "combo pack" of casings or tremie seals could handle. This became especially true when the

Department adding in the limitation imposed by the Department that the tremie seal needed to be "cured hard" before pouring the structural concrete, a constraint not in the specifications (cured hard as a requirement also implies a structural integrity concern over potential upward groundwater surge at the bottom of the hole, and perhaps necessary as another modification to the specifications for the encountered groundwater).

94. Due to the dominance of the water over the words, testimonial differences became somewhat if not largely beside the point. The more powerful, taller groundwater elevation *was the point*. If a boat is getting swamped by water, someone is going to yell "bail first" but everyone is going to bail to avoid being swamped and overcome. The reaction at the meeting that overdrilling might work was sensible and proved to be the right decision collectively when things got worse and even the overdrilling approach was upgraded to a 42" augur and a 4-sack mix. Overdrilling likely would have been listed in Section 49-4.03B as an available method, or a different pile type than soldier pile specified, had the Department believed that the groundwater in fact encountered, was what would be encountered when it crafted its project design.

95. By a preponderance of the evidence, the Arbitrator finds that the Section 49-4.03B methods, as interpreted by the Department (including a "cured hard tremie"), were insufficient and inadequate to accomplish the work for the actual groundwater conditions encountered; and that resort to the more robust overdrilling approach was reasonably necessary to combat water, and even then, the logs reflect this more costly and non-specified method, itself was put to the test by the encountered groundwater, its force and elevation.

96. To remind, "preponderance" means, "more likely than not" – 50.1%. This was not an easy case by any stretch. The defenses were all potentially meritorious depending on considerable factual and legal nuance. The complications associated with Sacramento Drilling bidding using drilling fluid, a non-specified method, then Bay Cities inadvertently not listing Sacramento Drilling, complicated and clouded the analysis, as did the partnering-way the

decisions were made and groundwater changes were so quickly upon the parties. Before they knew it, Petitioner had made an $880,000 claim plus time impacts and the Department had issued a unilateral $30,000 CO #10 – a fiscal gulf on Force Account measurements that inevitably lead to both consternation and hard fought factual and legal issues. These were not easy issues to sort out, at any step of the way, including in the merits hearing context.

Conclusions of Law - Differing Site Conditions Are Proven by the Need To Resort To Non-Contractual Methods, which Same Evidence Shows a *Spearin* Doctrine "Implied Warranty" Failure of the Specifications.

97. By California law, in its adoption of the *Spearin* doctrine, the Contractor here was entitled to rely in its bid and bid price that the Section 49-4.03B specified methods of casings or tremie seal (or both together) would be sufficient to control groundwater – that they will work to do the job at hand. The 49-4.03B specification is also an implied "positive indication" of what amount of groundwater will be encountered, due to the limited methods permitted.

98. Many times, a DSC also *ipso facto* is a *Spearin* claim, as the same thing expressed two ways, but meaning the same thing: that conditions not contemplated by the specifications (and its method limits) were encountered and were sufficiently different that resort to noncontractual means become reasonably needed to get the work done.

99. The evidence was presented and largely without contradiction that even with overdrilling, groundwater was not fully "controlled;" it was an ongoing *battle*. Even the sand/slurry overdrilled lean concrete at times was subject to side wall caving from groundwater force and had to be upgraded in thickness and sack mix. That is, groundwater elevation and behavior drove the means and methods.

Sacramento Drilling's Bid and its Planning Use of Drilling Fluid, Not 49-4.03B Methods

100. Petitioner relied on Sacramento Drilling's bid for drilling but inadvertently failed to list Sacramento Drilling as a subcontractor. Also, an issue to address, Sacramento Drilling's own price to control groundwater was based on using drilling fluid, also a non-contractual

method. These items to the Arbitrator's view invited analytic challenges, proof problems as well as potential "red herring" confusion. These include whether at the two July 6 and July 12, 2018 partnering meetings the Department at the 11th hour before start of drilling was just graciously "bailing out" the contractor for either a nonresponsive drilling bid and having had that drilling method submittal already rejected.

101. Where this issue of the "drilling fluid" bid rears its head materially, concerns damage measure, and proof of proper bid baseline for a Force Account damage measurement, discussed further below in the Damage Section.

102. That is, Petitioner makes its Force Account claim as to the drilling based on project schedule, of an alleged extra 22 days of drilling. However, it is not fully clear that the drilling schedule would have been achieved in 18 days per baseline schedule if, as required, Petitioner had planned casings and/or tremie seals in lieu of Sacramento Drilling's planned method of drilling fluid to combat groundwater. 18 days is 3.83 piles drilled per day for 69 piles. As built, over 40 days of drilling, as built production is less than half that, or 1.725 per day. Some of that is common sense – if you have to drill a 42" hole, then a 30" in hole, each 69 times, that is twice the drilling, and then once cycle of 69 drilled holes which are overdrilled (or 64-65 holes per Andrew Saint) is larger, at 42" which by volume (12" wider x π (3.14) = is about 39% more theoretical volume per hole for the overdrill size. So, 22 more days compared to planned 18 days does not seem out of the ordinary for so much more drilling. The rub is that the specified use of casings and tremie would not be in those planned 18 days, and that time needs to be deducted to avoid overcompensation of drilling's extra time and cost.

103. However, not yet factored into Petitioner's time-based drilling Force Account claim, there was cost savings associated with not having to install and extract casings, and the rental costs of casings. Such was absent from the "added days of drilling" method (40 days less 18 days planned = 22 days of drilling costs claimed) that need to be deducted; or planned days

added to the baseline schedule before determining the "added claim days." The baseline schedule must be based on contract methods under Section 49-4.03B, to be sure there is not overcompensation or reward of a cheaper bid method than allowed for groundwater control. Some measure of reduction is needed to "add back" contract methods not used and not bid. See below.

The Department's Admission That a DSC Was Encountered and Issuance of a Change Order To Pay For Extra Costs For the DSC Where Materially Different From the LOTBS Are Also Substantial Evidence That a Compensable DSC Was Encountered

104. As to PRC #2, the Department by letter dated July 30, 2018 (Ex. 56), acknowledged existence that the contractor had encountered a differing site condition (DSC), due to higher than anticipated groundwater. This was 18 days after notice of the DSC. Since costs were already being tracked and the method resolved to restart the work, the Arbitrator did not find that turnaround slow. It did not slow the work. That letter reads:

> Potential Claim Soldier Pile Wall Differing Site Conditions Submittal," dated July 24, 2018.
>
> The Department has reviewed your initial potential claim and based on the information witnessed in the field we find that additional compensation is justified. Ground water elevations encountered while drilling some soldier piles appear to be substantially higher than shown in the contract log of test borings. All material, labor, and equipment is currently being confirmed by field personnel via "Daily Extra Work Record" forms and will be utilized to determine any additional compensation. Change Order No. 10 will be issued to address the points that have merit. Please provide the cost associated with your notice of potential claim for review and determination of compensation. Within 15 days of submitting the Initial Potential Claim Record form, submit a Supplemental Potential Claim Record form pursuant to Section 5-1.43C Supplemental Potential Claim Record. (emphasis added)

105. The Department then unilaterally issued Change Order (CO) 10, in the sum of $30,273.78 with respect to holes 1-12, as its view of the equitable adjustment and added costs to the contractor from encountering groundwater at those holes for which the LOTBs showed as dry holes. The letter expresses that is not a "be all, end all" Change Order by calling out that it was issued without cost and time data from the Contractor, which the Contractor had yet to provide.

It thus contemplated further dialogue once added costs were presented by the Contractor and a claim cost approach to evaluate baseline v. extra work costs. See CO #10 dated September 27, 2018, (Ex. 80), CO Memorandum dated September 17, 2020 (Ex. 77) and Department letter August 23, 2018 (Ex. 73). Ex. 73 states in part:

> Change Order 010 reserved for this change acknowledges the differing site conditions to be the ground water elevations encountered substantially higher than shown in the contract log of test borings. Departments. response dated July 10, 2018 to the Initial potential claim requested all costs associated with drilling of some soldier piles for any additional compensation. Both the Department and BCPG as agreed have diligently recorded daily extra work records for this claim. BCPG has failed to submit an itemized breakdown of the individual costs stating how the estimate cost was determined and provide a Time Impact Analysis for the additional time claimed.

106. Focusing onto the CO and DSC determination notice language of "ground water elevations encountered substantially higher than shown *in the contract log of test borings"*: The Arbitrator finds it to be relevant that the Department's initial use of that LOTB as its *yardstick* to measure whether a DSC has been encountered. Such is material evidence of what the yardstick is; the LOTBs. By tacit admission, the Department's initial, and natural choice of the LOTBs as the yardstick is itself, evidence that the LOTBs were both "positive indications" which could be relied upon at bid, and the proper or reasonable yardstick to measure if a DSC had been encountered. This admission also undercut the Department's arguments relying on the groundwater wells as within the "yardstick," because the Department did not resort to the groundwater wells in its initial review, but just the LOTBs. That same evidence also undercuts the Department's seeking to apply *Wunderlich*'s rule to these facts, since by tacit admission, the Department viewed the LOTBs as a reliable yardstick to measure anticipated groundwater at bid. The Department's DSC acknowledgement and issued CO 10 also focused on the contract LOTBs *as the baseline for both the DSC entitlement and costing*.

107. The CO 10 amount was not phrased as a "be all, end all" CO. In fact, the Department also noted, "BCPG has failed to submit an itemized breakdown of the individual costs

stating how the estimate cost was determined and provide a Time Impact Analysis for the additional time claimed." This means (or could mean) that the unilateral CO was issued by the Department using its own methods, because the Contractor's costing methods had not been submitted, and awaiting more complete cost and claim analysis from the Contractor. The Contractor's Supplemental Notice of Potential Claim dated August 8, 2018 did estimate costs, but its final cost amount was presented later in the Full and Final Potential Claim Notice, Full and Final Claim Record, and Exceptions to the Engineer's Final Estimate.

Costing Challenges Relative to a "Drilling Fluid" Based Drilling Bid v. As Built Overdrilling

108. There were at least three extra sequences or steps making the process more costly and time consuming. As bid, and as reasonably viewed:

1. drill native dirt at specified 30" diameter

2. Offhaul spoils

3. pour structural concrete

4. place soldier pile

5. perform any cut down of any overpours

Compare the added steps to the as-built overdrilling method – in bold:

1. overdrill native dirt wider than the specified hole diameter (42" v. 30")

2. Offhaul spoils from overdrilled hole

3. Pour lean concrete to fill hole

4. Drill through the lean concrete to the specified diameter hole through slurry lean concrete

5. Offhaul drilled out slurry lean concrete

6. Pour structural concrete

7. Insert soldier pile

8. Perform cut down of any over pours.

Seen this way, overdrilling involves two drilling stages, two concrete pour sequences, and two offhaul stages, for *three added work activities compared to anticipated, reasonable bid sequences*. The volume of offhaul spoils, of drilling, and lean concrete is increased, involving more costs and production time per hole. Also, the Contractor also asserts that its chipping at the top of the piles became more costly due to the 4-sack overdrill slurry seal mix. That last part was also in dispute.

109. The Department sought at hearing (and before the DRB) to walk back these factual admissions, as factually mistaken. This claim of mistake largely involved the fact the Department believed and asserted that a) the nearby groundwater monitoring wells, if consulted, would have revealed that the April 2016 LOTBs were off, or that groundwater would be materially higher at time of later drilling, and diluted the materiality of the contract LOTBs as positive indications; and b) that under *Wunderlich*, as groundwater changes over time and is seasonal, the contractor bears the risk of groundwater fluctuations as "assumptions" by the bidder, over time and between borings, rather than "positive indications" by the owner under the *E.H. Morrill* line of cases.

110. The Arbitrator believes and finds that the Department's initial reaction and decision was not in error and that its initial July 30, 2018 finding of a DSC was correct. Whether the DSC was limited to holes that went from indicated in the LOTBs as "dry holes" which became "wet holes" is a secondary question, and the July 30, 2018 did not specify the expanse of its DSC determination. However, the underlying analysis for CO #10 was based on only holes which were dry holes per the LOTBs which became wet holes - and over the first twelve holes 1-12. In that analysis the Department impliedly (July 30, 2018 letter) and each expressly (CO #10's cost and change order analysis) relied on the contract LOTBs.

The DRB Also Finds A DSC Was Encountered and a Change In Character Of Work

111. The DRB also found both a DSC and a "change in the character of the work." Ex.93. That is admissible evidence but is not binding. It is substantial evidence as well that a DSC was

encountered and cost entitlement is present. While the Arbitrator came to his sorting of the evidence independently without resort to the DRB, he finds the DRB's admissible findings and analysis of a DSC and of a "Change in character" of work also to have merit and as supporting these findings here.

112. That said, rather than the DRB's phrase "change in the character in the work," the Arbitrator is more comfortable with the analytic concepts of the DSC-*Spearin* doctrine adopted in California cases where, as explained, is an integrated analysis. Often at the same time, a DSC is encountered and makes the specifications inadequate, and that same design inadequacy under a *Spearin* analysis also proves a DSC. To the Arbitrator, the work was still drilling, concrete pours and structural excavation, just more of it and more cycles per soldier pile. A "bigger boat" but still a boat, not a submarine, drydock or a waterslide. The Arbitrator thinks of "change in the character of the work" as a more dramatic shift, not just more cost from a second cycle of drilling, when say, an open excavation is forced into a braced cofferdam due to weaker soils; or steel framing has to replace wood framing due to unanticipated structural problems. These variations may just be semantic and synonymous ways to capture the same things - the groundwater conditions changed, so non- specified methods had to be used.

The Claim Remained "Consistent" From When Made at Hearing; Administrative Remedies Were Exhausted

113. The Arbitrator finds that the claim at hearing was factually and legally consistent" with the claim when encountered and presented during the claim process. The core facts were the same; Bay Cities' claim documents largely used factual descriptions on the changes in groundwater elevation and changes of method to overdrilling, in a simple and plain, and understandable statement of claim. The Arbitrator did not consider any of that a surprise, nor a failure to exhaust administrative remedies.

114. The DRB put its own terminology to the claim as both a DSC and a "change in the character of the work" but it was the same core, factual claim: more water, changed method, more cost. The DRB "weigh station" *is part of the Section 5 claim process* as well, even if here both sides rejected its findings or recommendations as to cost measure, and the Department also rejected both its DSC finding and its "change in the character of the work" finding. The DRB recommendations and discussions were also consistent with the claim. The DRB recommendations were also all there for both sides to evaluate and re-evaluate their positions – the very reason for that weigh station. The DRB functions to amplify or zero-in on issues and raise or recast previously discussed issues in ways that may promote rethinking on both sides. The briefing to the DRB, hearing statements and DRB report are part of the claim record for PCR#2 at issue here. Put another way, "consistency" includes what the DRB says about a claim, or teases out of it, so long as within non-surprising parameters, as here.

115. The materials presented to the DRB and the DRB recommendations report are part of the underlying claim record, just as in other "exhaustion" cases, if a planning commission considered the facts in a way that both claimant and agency could evaluate before deciding to resolve the issue, the record is adequately developed. *HILL RHF HOUSING PARTNERS, L.P v City of Los Angeles* (2021) 12 Cal.5th 458; *Coachella Valley Mosquito and Vector Control Distr. V. California Public Employment Relations Board* (2005) 35 Cal.4th 1072. Exhaustion involves whether sufficient information was presented *before resort to Arbitration* that each party had a fair opportunity to consider the issue repeated in Arbitration. "Consistency" is an element of exhaustion of remedies, so the arbitrator is not deciding issues in the first instance; that they have been brought up more or less below. The DRB called this both a DSC and a change in the character of work. That was sufficient for exhaustion. Id. No arguments made were surprising. Each were what zealous advocates analyzing the record would argue, each side fully anticipated

and countered the other side's arguments with their own, and each are premised on the same set of facts – more groundwater than per the LOTBs, different methods than in the Specifications.

116. Also, Exhibit 84 is only the face page of the Petitioner's Full and Final Claim Record after Engineer's Estimate. However, Exhibit 85 includes the full claim record including the attached "Statement of Claim." See also, Ex. 125A. While Petitioner's claim does not use the phrase "change in character of the work," it expresses that concept in several clear places, such that the reader familiar with construction would know that Petitioner was claiming the Department imposed new and different conditions not in the specifications. Such as: "Caltrans Standard Specification provides no methods for placing soldier piles in wet conditions and the method being used was not in accordance with Standard Specification Section 49-4.03B, Drilled Holes." Or: "Caltrans directed a method of work not specified under the Standard Specifications requiring the drilling of oversized holes to the tip elevations and pumping a four-sack slurry mix under the water…**Caltrans' method** resulted in increased labor and equipment for drilling and support, increased material costs, reduction of productivity and inefficiencies and increased offhaul costs as well as other associated costs…The differences in elevations at which the water was encountered…permeable nature of the soil, the substantial increase of the amount of work and time required to drill and the changes in the construction method made the jobsite conditions materially different from what could have been anticipated based on the information Caltrans provided." (emphasis added). The quote from Eric Barker from page 77 of the hearing transcript said it simply – forced change of method to a non-specified method = extra cost = claim.

117. There was no surprise here. Nor was there any prejudice as regards presentation of the claim and its amplification through the DRB, Full and Final Claim Record, and in new evidence uncovered in case discovery not previously available. The Arbitrator considers the addition of more drilling and spoils offhaul costs – the crux of the claim – not so much a change in the character of the work, but the same work just done in more cycles at more cost. Dr. Perri's

analysis was not available prior to arbitration absent discovery into the contentious emails over the lack of exact pinpointing of the elevations at top of the borings, and lack of topographical exactitude. Nor did the Department think about the groundwater monitoring wells as a way to counteract a DSC claim until later in the Claim process. Those are part and parcel to the right of discovery and still retain "claim consistency" – the groundwater was higher than the LOTBs indicated and the contract methods were not good enough, so extra work was incurred.

Contractor Damages, Proof Challenges in Places, and Downward Adjustments

118. Some of Petitioner's cost claim amounts below are curtailed, reduced or denied where burden of proof problems were present.

Petitioner's Time Impact Claim is Denied For Not Meeting Petitioner's Burden of Proof

119. Time impacts damages are *denied*. Time damages are denied due to the lack of a timely TIA within the Supplemental Notice of Potential Claim as required by Section 5-1.43C, potential concurrency of the Arden Way onramp portion of the project, as a burden of proof matter. The Supplemental Notice of Potential Claim under Section 5-1.43C was required to include a TIA. Instead, it stated, "A TIA has not been completed because the affects are ongoing." The Arbitrator did not find that, the fact a changed condition was ongoing, to be a valid excuse for not doing a TIA in graphic, schedule software manner. A TIA is a schedule fragnet. A baseline schedule is done before work starts; so by definition, one can "map up" work in a schedule format as a projection at start of a project and in the middle of a claim condition. Here the overdrilling was known by the time of the Supplemental Notice, August 8, 2018, 20 days after the DSC was encountered. By then the 42" augur was in use and 4-sack slurry concrete mix. There was sufficient learning curve available to provide something in the way of a schedule projection of drilling per day. That was more than halfway through the drilling itself.

120. While there were protests by Petitioner that the Department did not modify its Weekly Statement of Working Days to reflect the controlling work item to have moved from the

Arden Way onramp to 14th Street, the Department's response was proper: The Contractor's schedule updates had not made that change in its own critical path. Overall, on this matter where Petitioner had the burden of proof, the Arbitrator found that burden was not met. Also, the oblique reference in the Supplemental Notice of Potential Claim that there was not sufficient data to do a TIA, is found to be deficient and hence, a waiver under the specifications. A TIA can be attempted and show the elongated critical path. Since a Supplemental Notice is due 20 days after the claim is first made, there is sufficient time to begin to extrapolate a "production rate" based on overdrilling to date. Even if inexact, a TIA is required, and can be presented with caveats or qualifiers and updated as needed. The Supplemental Notice itself has no TIA, and says, none is provided.

121. The Arbitrator also finds that once overdrilling 69 piles were a "locked in" as approved method, and groundwater higher, the contractor was in a position to fairly assess the increased "cycle time" of the added three steps to the soldier pile work, and "give it a go". Doubling the affected schedule length for overdrilling impacts and with caveats, or by slightly more than double in duration would have been easy since the theoretical volume of added drilling of a 42" hole, and extra concrete pour and structural excavation, could be quantified as a fair projection. Instead, things remained a bit "in limbo" in terms of time, time impact analysis, and in turn, which onramp was the controlling item of work. Therefore, Petitioner did not meet its burden of proof for any time-impact damages, which are denied.

Drilling Cost Baseline of a Hypothetical Bidder Contemplating 49-4.03B Methods

122. In the case of drilling and drilling support, downward adjustments to the Force Account claim amounts are made. This is because it was not reasonable to have a baseline for Force Account measurements, or drilling duration schedule, as the bid line-item price or time allotted for drilling on the schedule. This is because Petitioner's line-item price in its bid, and in the prime contract was based on an anticipated subcontractor's own price, involved

noncontractual and admittedly cheaper "drilling fluid" to control groundwater, rather than the 49-4.03B specified methods of casings and/or tremie. As that "drilling fluid" cost at bid was *less* than the specified Section 49-1.03B methods of casings and/or tremie seal, then Petitioner's Force Account compensation formula of "all drilling costs at 14th Street, *minus* the bid line-item price per cubic foot" or baseline schedule will overcompensate the contractor, by understating a proper bid baseline cost and duration. Because, the drilling line item may be too low, and planned duration, too short. It would reward a "bad bid" on the issue of groundwater control; e.g., a bid for drilling not contemplating casings and tremie seals, the Section 49-4.03B methods allowed.

123. The parties were invited to zero in on some of these issues such as more detail on the costs. Both sides rejected the DRB's proposed method. The Arbitrator, having sifted the cost data evidence presented to see if what the DRB suggested was viable, agrees with both parties that the DRB costing method was problematic on the cost capture database kept. In particular, the daily Force Account data base did not break out, by pile hole, as planned versus as built groundwater elevations, real time, to compare "time in the hole" for each. Nor did it break out, in the narratives, specifics such the costs of caving control from tremie, or costs controlling water at or below the LOTB levels, versus above the LOTBs. In the Arbitrator's view, this made it near impossible to pinpoint costs in the way the DRB had proposed to the parties. The Force Account cost tracking and narratives were too general. It could have but did not.

124. Also, analytically, it was hard for the Arbitrator to understand why the DRB continued to place the caving control costs, but not the upward tremie costs, onto the Contractor, when the overdrilling method more or less combined, via slurry, both a 2-foot bottom tremie, and a side wall substitute for casings, and was a "wholesale change" whose costs could not be chopped into increments, foot by foot.

125. An alternative "measured mile" costing approach also appears not workable. This was because the change to overdrilling was from or after day one when the DSC was encountered;

and once overdrilling was adopted path forward. As such, there was no comparable run of drilled holes to compare to as "as planned/as specified" as a cost baseline. So Force Account by default made sense and was tracked daily by both parties and they have agreement on the actual costs and rates.

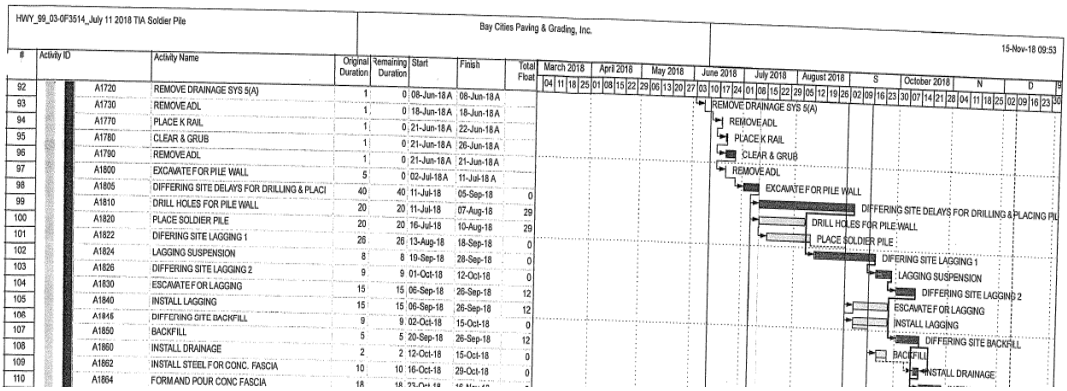
126. In such cases, California law provides two rules: one, if *existence* of damages are certain, as here, but its calculation inexact, damages should be awarded where a reasonable basis exists to do so. Two, *if the fact of damages* is itself uncertain, damages should not be awarded. 'Contract damages seek to approximate the agreed-upon performance. "[I]n the law of contracts the theory is that the party injured by breach should receive as nearly as possible the equivalent of the benefits of performance." ' " (*Copenbarger v. Morris Cerullo World Evangelism, Inc.* (2018) 29 Cal.App.5th 1, 9, internal citations omitted.) "This aim can never be exactly attained yet that is the problem the trial court is required to resolve." (*Brandon & Tibbs v. George Kevorkian Accountancy Corp.* (1990) 226 Cal.App.3d 442, 455, internal citations omitted.). "Where the fact of damages is certain, as here, the amount of damages need not be calculated with absolute certainty. The law requires only that some reasonable basis of computation be used, and the result reached can be a reasonable approximation." (*Acree v. General Motors Acceptance Corp.* (2001) 92 Cal.App.4th 385, 398, footnotes and internal citations omitted; Arbitrator's underline for emphasis). Therefore, based on substantial evidence, knowing from the Force Account claim sums demanded (which were verified costs and not in dispute as costs *per se*), under case law the Arbitrator made reasonable approximations of deductive elements of damages, below.

127. The Arbitrator compared several admitted documents, the testimony over what happened and what changed, and common sense "trier of fact" judgment in making some approximations in reductions of the drilling claim amount. The drilling by definition involving a "doubling *plus then some*" of drilling, concrete work, structural excavation and spoils offhaul, as

well as extra Baker truck water offhaul via extracted groundwater from the tremie tubes and generally. Larger hole, drilled twice, excavated twice, concrete pour twice, versus only once, and offhaul twice, and wetter conditions as the spoils sat to dry out. Setting aside the add on of temporary casings and/or tremie to the baseline schedule as contract specified water control methods, the rest of the work due to the overdrilling choice, more than doubled due to the overdrilling method, added sequences, and larger 42" initial hole, and upgrade to a 4-sack lean concrete mix up from a 2-sack. Drilling costs and time had to double given the larger hole to start with, and having to drill it twice, pour it twice, excavate it twice, and offhaul spoils twice.

128. Ex. 124, a letter dated August 8, 2018 purportedly from Petitioner to Respondent, though claimed not to be received, states from Petitioner than the planned combined Sacramento Drilling/drilling and soldier pile placement duration was 23 workdays on the baseline schedule. It does not break out how much of the 23 days is just drilling, how much is both activities, and how much just structural excavation, concrete pour and soldier pile placement is part of those 23 workdays after drilling is complete, as a predecessor-successor combination. In contrast, the claim cost summary Ex. 96 has a "planned duration" of drilling only, as 18 days. It's not clear if the 5-day delta on the CPM is a "stagger sequence" for follow on work after drilling, or different baselines.

129. The TIA included in the Full and Final Claim Record (p. 170 of 213, Ex. 125A) shows a combined, *planned* activity duration of the drilling and soldier pile placement from July 11-August 7, 2018 for drilling (20 working days) and a staggered 20 working day duration for installation of soldier piles, from July 16, 2018 to August 10, 2018 – a 5 day starting stagger and 3-day closing predecessor-successor stagger at the end of those two work sequences. That 20-day period of time per that schedule it is assumed includes one day mobilization, and one day demobilization for the 18-day baseline assumed in Ex. 96 (20 less 2+18 days). Here is that TIA at Ex. 125A:



#	Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
92	A1720	REMOVE DRAINAGE SYS 5(A)	1	0	08-Jun-18 A	08-Jun-18 A	
93	A1730	REMOVE ADL	1	0	18-Jun-18 A	18-Jun-18 A	
94	A1770	PLACE K RAIL	1	0	21-Jun-18 A	22-Jun-18 A	
95	A1780	CLEAR & GRUB	1	0	21-Jun-18 A	26-Jun-18 A	
96	A1790	REMOVE ADL	1	0	21-Jun-18 A	21-Jun-18 A	
97	A1800	EXCAVATE FOR PILE WALL	5	0	02-Jul-18 A	11-Jul-18 A	
98	A1805	DIFFERING SITE DELAYS FOR DRILLING & PLACI	40	40	11-Jul-18	05-Sep-18	0
99	A1810	DRILL HOLES FOR PILE WALL	20	20	11-Jul-18	07-Aug-18	29
100	A1820	PLACE SOLDIER PILE	20	20	16-Jul-18	10-Aug-18	29
101	A1822	DIFERING SITE LAGGING 1	26	26	13-Aug-18	18-Sep-18	0
102	A1824	LAGGING SUSPENSION	8	8	19-Sep-18	28-Sep-18	0
103	A1826	DIFFERING SITE LAGGING 2	9	9	01-Oct-18	12-Oct-18	0
104	A1830	ESCAVATE FOR LAGGING	15	15	06-Sep-18	26-Sep-18	12
105	A1840	INSTALL LAGGING	15	15	06-Sep-18	26-Sep-18	12
106	A1845	DIFFERING SITE BACKFILL	9	9	02-Oct-18	15-Oct-18	0
107	A1850	BACKFILL	5	5	20-Sep-18	26-Sep-18	12
108	A1860	INSTALL DRAINAGE	2	2	12-Oct-18	15-Oct-18	0
109	A1862	INSTALL STEEL FOR CONC. FASCIA	10	10	16-Oct-18	29-Oct-18	0
110	A1864	FORM AND POUR CONC FASCIA	18	18	23-Oct-18		

130. The cost claim for the drilling portion of the claim (Ex. 96 and 125A) largely side-stepped this "baseline bid" question by pricing the drilling work as a *per diem* cost of $18,441.41 per day (dividing total costs of drilling by 40 as built drilling days) and then multiplying by 22, as the extra days over "as planned" 18 days. There are a couple of analytical problems with this. It does "bleed out" any lower costs of drilling per day of not using drilling fluid; but it does not "bleed out" the added days over planned 18 days for not contemplating use of casings and tremie when the Sacramento Drilling bid contemplated drilling fluid, an admittedly cheaper method with fewer steps than the specified casing and tremie methods in 49-4.03B.

131. The baseline schedule cannot be assumed to have included casings (or tremie) the specified 49-4.03B methods, since Sacramento Drilling's bid did not include them, and instead, planned on drilling fluid, an admittedly cheaper method where drilling and fluid are a combined activity. Drilling fluid takes place within the drilling cycle whereas tremie and casing are added work tasks, meaning, more time and sequences to some extent. The Arbitrator did not find this "add back" has been included, in terms of "added planned days" on a hypothetical bid using specified methods. Once added back, the drilling portion of the claim is few "extra days," since the baseline hypothetical planned drilling schedule would be more than 18 days.

132. With these facts to consider, the Arbitrator was not persuaded that 18 planned drilling days was an accurate baseline for a specified drilling duration, at least not without some reasonable approximation of added time to insert and extract casings and pour tremie seals. Some

part of the work, by either Bay Cities or Sacramento Drilling's operated equipment crew, would involve tremie concrete at bottom of the hole, for wet holes, and casings (installation and extraction).

133. Sacramento Drilling's Andrew Saint testified he anticipated 23 dry holes of the 69 in total. So as to 46 holes, the anticipated wet holes, there should have been allocated within the planned schedule time for tremie and casing in lieu of as bid, drilling fluid. No one priced this time and cost adjustment. The attempted cost adjustment is "factored in" somewhat by the use of a daily rate of drilling premised on the total costs since day one rather than the drilling bid item, overdrilling rather than either drilling fluid or contract water control methods were used. This is somewhat complicated by the fact Bay Cities did not include a TIA in the Supplemental Notice of Potential Claim, which would have (or should have) staked out the three schedules: "as planned based on drilling fluid;" "hypothetical, *as specified*," with casings and/or tremie (and not drilling fluid) for 46 of 69 holes; and "as built", with overdrilling.

134. In light of these facts and case law, to avoid overcompensation therefore, the Arbitrator makes a reasonable approximation that the time to install a casing, extract a casing, set up of equipment for that, and to install a bottom tremie is at least 1.5 crew hours per hole, over and above any time for use of as bid, drilling fluid for those same 46 holes anticipated to encounter groundwater.

135. For 46 anticipated "wet holes", this would be 8.625 more days of as planned drilling/casing/tremie time than planned drilling with fluid (46 holes x 1.5 hours per hole = 69 hours of crew time divided by 8 hours crew shift = 8.625 shifts). The claim is 22 extra days (40 less 18 days). 18 baseline drilling days plus 8.625 shifts are 26.625 shifts. This would mean, 40 as-built drilling days less 26.625 days or 13.375 "claim" days. At $18,441.41 per day drilling cost, as built, that would adjust the claim downward from $405,711.02 by $159,057.16 to $246,653.86. Which the Arbitrator finds as the drilling portion added compensation or equitable

adjustment, and not the full claim amount sought for that item. While the Department calculated 12 dry holes and 57 wet holes, faced with this difference, the Arbitrator went with 46 wet holes as planned and as bid per Mr. Saint, resolving that factual question.

136. The District's CO#10 approach was that the extra costs of overdrilling should be absorbed by the contractor for groundwater levels matching or up to the LOTB level. So, if there is a 13% increase in groundwater measured in a hole over the LOTB groundwater elevations, the Force Account % is 13%. The problem with that approach in the Arbitrator's analysis is that once you start to overdrill, it's a wholesale change over and commitment of equipment and method for the entire hole; the size of augur, the torque and rig. Once you begin to overdrill, it's an added cost for the entire hole. It's not like changing from a salad to a serving fork and back, bite by bite; once a bigger 42" augur was drilling, there was significantly more costs, and a doubling of drilling, structural excavation and concrete, and spoils, by having to drill, pour and excavate twice and starting with a larger holes. Changing augers halfway down a hole is time consuming and inefficient, and having multiple rigs on standby each with different augurs, also an unreasonable cost and clutter.

137. According to Sacramento Drilling's Andrew Saint, only 4 or 5 of the 69 holes were not drilled using a larger augur. This is borne out by the daily reports kept by the Department. The higher groundwater also meant, when reviewing the daily logs, that the soggy spoils were being spread around, and at times, K-rail also used to stave off migration of spoils to the onramp.

138. For these reasons as well, and due to the wholesale change over in method to overdrilling, the Department's cost method (and that of the DRB) in CO#10 of treating a DSC cost impact as limited to the portion of a drilled hole where the groundwater was higher – the groundwater "delta" – also was found by the Arbitrator to be an incorrect measure and would undercompensate for the DSC's true added cost impact. This was due to the fact once there was a changeover in method from contract methods to overdrilling to combat groundwater, the extra

costs and extra cycles involved were "locked in" for the entirety of a drilled hole. The added cost was at 100% of a hole which was overdrilled; not just for the added feet where groundwater was higher than indicated in the LOTBs.

139. The Contractor was damaged, but the Force Account measure alone using the bid item for drilling, priced using drilling fluid, requires an adjustment based on what a reasonable bidder using casings and/or tremie would have as a price.

140. Complicating matters somewhat, while Petitioner intended to list Sacramento Drilling as its drilling subcontractor, inadvertently Petitioner had failed to list Sacramento Drilling as an intended subcontractor. So, with discussions with the Department, Bay Cities had to resort with an open-ended, Time and Materials "operated equipment" arrangement with Sacramento Drilling with Department approval, rather than a subcontract, such that technically, Bay Cities was still "self-performing" the work. This also meant that once drilling fluid was rejected, and the DSC was encountered and overdrilling needed, Bay Cities had lost the usual "cost control tools" of a fixed price subcontract, and "paid when paid" and "wait until claims resolution" and "inefficiency deducts" leverage with its driller. That is, even without a DSC, due to the dual bid errors – no listed drilling sub but relying on a drilling price using non-allowed drilling fluid – Petitioner was more or less locked into a "Force Account" situation as to at least the drilling scope with less contractual cost control than if using a listed, fixed price subcontract.

141. For these reasons below, a "rote" application of Force Account principles – total cost of specific affected bid items, less the pay items – is not appropriate alone. It required adjustment or approximation permitted by CACI and case law to avoid risk of overcompensation, even if it was well established that overdrilling was more expensive that the 49-4.03B methods of casing or tremie, or casing and tremie seal. See above.

Further Legal Analysis and Conclusions – Petitioner is Entitled to an Equitable Adjustment

142. Where conditions are materially worse than anticipated from the contract documents, it often results in resort to more expensive or different, non-specified methods takes place, at added expense. This was the case in *Warner Constr. Corp. v. City of Los Angeles* (1970) 2 Cal.3d 285, 293–294, where the difference in clay-sand combination during drilling went from "clay binder" as indicated in the LOTBs to a weaker, less cohesive "minute binder" resulting in both a differing site condition finding, and a "*Spearin*" breach of the implied covenant of accuracy and completeness of the contract documents, on the same evidence and in the same breadth. *Warner* was quoted above as regards "groundwater fluctuation" disclaimers.

143. Per case law, see *Welsh v. State* (1983) 188 CA3rd 546, at 550 citing the usual rule:

> A contractor of public works who, acting reasonably, is misled by incorrect plans and specifications issued by the public authorities as the basis for bids and who, as a ****729*** result, submits a bid which is lower than he would have otherwise made may recover in a contract action for extra work or expenses necessitated by the conditions being other than as represented." (*Souza & McCue Constr. Co. v. Superior Court* (1962) 57 Cal.2d 508, 510, 20 Cal.Rptr. 634, 370 P.2d 338.) Since tort actions for misrepresentation against public agencies are barred by Government Code section 818.8, however, the rule is "based on the theory that the furnishing of misleading plans and specifications by the public body constitutes a breach of an implied warranty of their correctness." (*Id.*, at pp. 510–511, 20 Cal.Rptr. 634, 370 P.2d 338; see also Warner Constr. Corp. v. City of Los Angeles (1970) 2 Cal.3d 285, 293-294, 85 Cal.Rptr. 444, 466 P.2d 996)

The *Wunderlich* Issue of Extrapolation and Assumption Versus "Positive Indications"

144. The Department also argued in briefing and opening statement that the California Supreme Court decision *Wunderlich v. State of California* (1967) 65 Cal.2d 777, 784—785, that while the public owner is liable for inaccurate "positive indications" such as LOTBs if later encountered conditions are materially different, the public owner does not bear the risk of further assumptions made by the contractor from soils data provided.

145. The Department asserts that variations as encountered in the groundwater did not create a DSC, because the groundwater indications in borings A-16-01, A-160-02 and A-16-03 were only representations or indications of groundwater readings on the days the borings were

done in April 2016, not what level of groundwater could be anticipated later, either at bid opening November-December 2017, or when the actual drilling took place, July-September 2018. The Department adds that groundwater monitoring wells called out in the December 2015 Geotechnical reports by the Department and made available to bidders pre-bid (Exhibits 4-5), would have revealed at bid time, groundwater levels more or less matching what was encountered; e.g., 3 feet higher than the April 2016 LOTBs.

146. In its Full and Final Claim Record (cover page at Ex. 84, contents and narrative within Ex. 85), Petitioner presented in lay words, that the combination with the "overdrilling debate", the "either/or" "tremie seal or casing" specification and the Department's requirement that the tremie seal be "cured hard" before pouring of structural concrete, was a constructive contract change or "change in the character of the work," along with a DSC. Broadly speaking, Petitioner's factual assertions made a claim of DSC and breach of the "implied warranty of contract documents" as accurate and complete, due to the overdrilling method; and also that the need for the overdrilling method was proof of a DSC beyond the LOTBs themselves. This DSC/implied warranty claim theory is most recognized under the decisions *Spearin v. United States*, and California Supreme Court decisions adopting *Spearin* as California public works law. *United States v. Spearin* (1918) 248 U.S. 132, 39 S.Ct. 59, 63 L.Ed. 166; *United States v. Atlantic Dredging Co.* (1920) 253 U.S. 1, 11—12, 40 S.Ct. 423, 64 L.Ed. 735; *Gogo v. L.A. etc. Flood Control Dist.* (1941) 45 Cal.App.2d 334, 338, 341—342, 114 P.2d 65; *A. Teichert & Son, Inc. v. State of Cal.* (1965) 238 Cal.App.2d 736, 756, 48 Cal.Rptr. 225.); *Warner Constr. Corp. v. City of Los Angeles* (1970) 2 Cal.3d 285, 293–294,; *E.H. Morrill Co. v. State of California* (1967) 65 Cal.2d 787, 793–794; (*Welch v. State of California* (1983) 139 Cal.App.3d 546, 556; *Los Angeles Unified School District v. Great American Ins. Co.* (2010) 49 Cal.4h 739; Compare *Wunderlich v. State of California* (1967) 65 Cal.2d 777, 784—785, where "Reading the two together, we conclude that the bidder takes the risk in making deductions from accurate test data, but the city

retains responsibility for any inaccuracy in the data." (Quote from *Warner Construction*, supra, 2 Cal.3rd at 292, comparing the two decisions decided by the California Supreme Court on the same day February 10, 1967, *E.H. Morrill* and *Wunderlich.*)

147. No one including the designer of the project, its specifications and special provisions amending Section 49-4.03B, can be said to have believed overdrilling was in the mix of needed methods. Per *Great American, supra,* 49 Cal.4th at 744, citing various above cases with approval:

> "We have long recognized that "[a] contractor of public works who, acting reasonably, is misled by incorrect plans and specifications issued by the public authorities as the basis for bids and who, as a result, submits a bid which is lower than he would have otherwise made may recover in a contract action for extra work or expenses necessitated by the conditions being other than as represented. (*Souza & McCue Constr. Co. v. Superior Court* (1962) 57 Cal.2d 508, 510, 20 Cal.Rptr. 634, 370 P.2d 338.)"

148. The fact the approved drilling plan called for overdrilling and was just approved a few days earlier than when the DSC was encountered, did not waive the Petitioner's entitlement to a DSC equitable adjustment if a DSC encountered, as it was. Overdrilling, a non-specified and more costly method, proved necessary to combat the DSC, and to work around the "cured hard tremie" added requirement. The overdrilling method was also upgraded from 38" and 2-sack mix to 42" augur and 4-sack mix, as the approved overdrilling itself was not strong enough to prevent caving.

DRB Recommendations as to an Equitable Adjustment and Cost Formula For Damages

149. The DRB in its recommendation held the Department to its initial decision and admission that a DSC was encountered. The DRB found the DSC extended past the first 12 holes thought to be "dry" and extended to extra work necessitated by higher groundwater even in anticipated "wet" holes. The DRB recommended a method of pricing the change that neither party accepted or pursued to ground. Namely, per Ex. 93, last two pages:

"The cost, of each drilled hole with groundwater elevations higher than expected, should be shared between Bay Cities and Caltrans using the following guidelines:

A. Cost to control water and prevent caving for the length of hole below the anticipated groundwater elevation should be borne by Bay Cities.

B. Cost to control the water for the length of hole below actual groundwater and above anticipated groundwater elevation should be borne by Caltrans, however this item should be adjusted per Standard Specification 4-I.05B.

C. Cost to prevent caving for the length of hole below actual groundwater and above anticipated groundwater elevation should be borne by Bay Cities.

D. Cost to prevent caving for the length of hole above actual groundwater should be borne by Bay Cities.

E. Drilling impacts from higher than expected groundwater, include over-drilling, slurry and re-drilling; increased quantities of slurry; and handling of water pumped from drilled holes, should be included in the compensation to Bay Cities. Work to prevent caving, placement of piles, removal of slurry from piles and backfill should not be included.

Any increase in contract time should be based on a Time Impact Analysis (TIA). No TIA is available."

150. The parties did not carry out the DRB's pricing recommendations. This in turn led the contractor to pursue the claim and file this Claim in Arbitration.

The *E.H. Morrill* Case and Facts Versus the *Wunderlich* Case and Facts

151. *E.H. Morrill* involved dispersion of boulder sizes in the subsurface which affected the work; whereas in *Wunderlich*, a potential gravel pit site had been tested for a range of sand versus gravel, but no quantification of the amount of gravel which would be available for use by the contractor as a "borrow pit" for subbase material. In *E.H. Morrill*, a breach of the implied warranty of plans and specifications was found, under the rules of *Hollenbach*, *Spearin* and *Souza & McCue*; not so in *Wunderlich*. This is the framework of California law, two Supreme Court cases, decided the same day. Per *E.H.Morrill*, and citing and distinguishing *Wunderlich*:

> We have concluded that the trial court erred in construing section 4 to be as a matter of law an effective disclaimer of the representation of site conditions in section 1A—12 of the Special Conditions, and that the complaint states a cause of action for recovery on a theory of breach of implied warranty and may be amended to state a cause of action for fraudulent

misrepresentation. (See Souza & McCue Constr. Co. v. Superior Court (1962) 57 Cal.2d 508, 510, 20 Cal.Rptr. 634, 370 P.2d 338 and cases cited.)

2In Wunderlich v. State of California, Cal., 56 Cal.Rptr. 473, 423 P.2d 545 filed this date, it is suggested that the state is not liable for conclusions drawn by a bidder when the state has done little more than represent the results of its investigations and the bidder knew or should have known of the factual bases for the representations. In Wunderlich there was no positive assertion of fact as to condition; in addition, the very section in which the statement was made was prefaced by a reference to disclaimer provisions that clearly sought to avoid the state's responsibility for the factual conclusion which the contractor chose to deduce from the statement. Nor was there a failure on the part of the state to disclose material facts discovered by it. The facts alleged in the instant case, however, place it within the rule declared in Souza & McCue Constr. Co. v. Superior Court, supra, 57 Cal.2d 508, 510, 20 Cal.Rptr. 634, 635, 370 P.2d 338, 339, that '(a) contractor of public works who, acting reasonably, is misled by incorrect plans and specifications issued by the public authorities as the basis for bids and who, as a result, submits a bid which is lower than he would have otherwise made may recover in a contract action for extra work or expenses necessitated by the conditions being other than as represented.'

The state contends that because section 4 of the General ***792*** Conditions refers to the fact that 'investigations * * * are made for the purpose of design,' the specifications were not presented as 'the basis for bids' and that therefore plaintiff does not come within the Souza rule. The language of Souza may not be read so narrowly, and any implications to the contrary in A. Teichert & Son, Inc. v. State of California (1965) 238 Cal.App.2d 736, 48 Cal.Rptr. 225, are disapproved. It is obvious that the entire set of plans and specifications, of which section 4 of the General Conditions was only a small part, was presented by the state to the bidders with the expectation that bids of necessity would be determined by consideration of such plans. Section 1A—12 did not purport merely to present ***482 **554*** the results of the state's own tests and investigations, as in Wunderlich, but flatly asserts that the bidders could expect to confront only specified site conditions. It is clearly a "positive and material representation as to a condition presumably within the knowledge of the government,' * * *.' (Hollerbach v. United States (1914) 233 U.S. 165, 169, 34 S.Ct. 553, 554, 58 L.Ed. 898.)

It appears from the opinion in Wunderlich that disclamatory provisions may be considered in determining whether the statement alleged to constitute a warranty of condition is so in fact, especially when the statement is not cast in the form of a positive assertion of fact. (See also MacArthur Bros. Co. v. United States (1922) 258 U.S. 6, 42 S.Ct. 225, 66 L.Ed. 433.) In the instant case, however, nothing in section 1A—12 of the Special Conditions, which purports to make a positive assertion of fact as distinguished from Wunderlich, in any way draws the attention of the bidder to the purported disclaimer of section 4 of the General Conditions. Although, of course, the contract must be read as a whole, the absence of any cross-reference may be of significance in a determination by the finder of fact whether section 4 would justify the bidder in relying upon the unqualified representation of specified site conditions. It 'would be going quite too far to interpret the general language of the other (sections of the contract) as requiring independent investigation of Facts which the specifications furnished by the government as a basis of the contract Left in no doubt. * * * In Its positive assertion of the nature of this much of the work (the Government) made a representation upon which the claimants had a right to rely without an investigation to prove its falsity.' (Emphasis added.) (Hollerbach v. United States, supra, 233 U.S. 165, 172, 34 S.Ct. 553, 556, 58 L.Ed. 898.)

The responsibility of a governmental agency for positive ***793*** representations it is deemed to have made through defective plans and specifications 'is not overcome by the general clauses requiring the contractor to examine the site, to check up the plans, and to assume responsibility for the work * * *.' (United States v. Spearin, 248 U.S. 132, 137, 39 S.Ct.

> 59, 61, 63 L.Ed. 166.) Accordingly, the language in section 4 requiring the bidder to 'satisfy himself as to the character * * * of surface and subsurface materials or obstacles to be encountered' cannot be relied upon to overcome those representations as to materials and obstacles which the state positively affirms in section 1A—12 not to exist, and plaintiff was entitled to rely and act thereon.
>
> The state's reliance on T. Kelly & Sons, Inc. v. Los Angeles (1935) 6 Cal.App.2d 539, 45 P.2d 223, is misplaced. That case does not stand for the proposition that California does not accept the rules declared by the United States Supreme Court in Hollerbach. The court in T. Kelly & Sons distinguished Hollerbach on the ground that in the California case there was no positive assertion of fact upon which liability could be based. T. Kelly & Sons supports the position taken in Wunderlich but does not hold that a specific statement of fact may be disclaimed in another section of a contract.

152. The fact *Morrill* cites *Wunderlich*, but *Wunderlich* does not cite *Morrill*, even though both are decided the same day in 1967, suggests *Morrill* is the second case to be decided, and in it, *Morrill* restates and frames *Wunderlich*. Like in *E.H. Morrill*, where boulder dispersion by size is called out, the State's LOTBs call out groundwater and groundwater elevations. Here, the nearby groundwater monitoring tables are not called out, not indications, not cross-referenced, and not noted as a key data source for bidder review. They are just on a list of items the Department's internal geotechnical department reviewed along with the 3 LOTBs. This is not sufficient to fall into the *Wunderlich* fact pattern as opposed to the *E.H. Morrill* fact pattern of positive, uncontradicted, and undisclaimed indications in the LOTBs.

153. In *Wunderlich*, the Agency represented its test results, which showed a variable *range* of "sand versus gravel" in the Wilder borrow pit available for contractor use to create subbase. The test data did not quantify how much sand or how much gravel was in the "Wilder pit" at issue; just that there were both and the agency believed some level of useful gravel was available (the sand would not be helpful). There was some useful gravel but not enough to meet the site demands. There was no representation that the Wilder pit had sufficient gravel to meet all side grading demands. The claim which the Supreme Court rejected was the assertion that the agency had represented that the "Wilder pit" had a certain quantity of usable gravel. *It did not say that*. There was gravel, and there was also sand, but no positive statement of how much of each

would be available for use. The samples had a range, but there was no quantification provided or represented. It was a free borrow pit, whatever it was worth.

154. That set of facts in *Wunderlich* is very much different than contract plan sheets pages 15-16, Ex. 315. In borings A-16-01 through A-16-03, in three borings, depth of groundwater is shown, at negative 9 (-9) at station 2 (near piles 1-12), negative 3 (-3) at station 5, at the middle piles (13-52), and negative 5 at station 7, closest to the end group of piles 53-69. Along with Section 49-4.03B's limited groundwater control methods, hose show as positive contract indications, based on the borings and depicting the indicated or anticipated groundwater levels from the April 2016 LOTBs.

155. The accuracy of groundwater levels in the borings is not disclaimed in the contract. At least not sufficiently to place the facts of the case into the *Wunderlich* fact pattern and holding, versus *Spearin, Hollenbach, Great American, Morrill, Souza & McCue, Warner* and *Welch* – cases where the represented soils, groundwater or tidal conditions (or both) were "indications" and sufficiently "positive" to be items both the design team relied on, in selecting a design, and bidders could rely on for their bids and pricing.

Claim Waiver Defenses as o Time of the Notice of Full and Final Potential Claim Notice

156. The Department asserts the claim as a whole was waived in arguing that the Full and Final Potential Claim Record was submitted more than 30 days after completion of *installation* of the soldier pile wall. Section 5-1.43D. The Contractor claims no waiver occurred and asserted that its Full and Final Potential Claim Notice was timely because the "affected work" was not just the drilling and backfilling of the subject 69 soldier piles, which ended on or about September 4, 2018, but also included the cut off and off-haul operations which are also asserted as part of the contractor's claim costs.

157. The Arbitrator finds that increased offhaul from increased overdrilling is a cost included in the claim, and an operation included in the work involved in the claim, and in fact,

increased in scope by the overdrilling involving more spoils. The daily reports reflected Petitioner spreading out the spoils on site to dry out before offhaul, as conditions were very wet in the holes and water trucks were used to withdraw water from the holes. As such, the last day of drilling is not the last day of affected work, it is either the last day of pile chipping or last day of offhaul. Page 28 and 125 of Ex. 125 includes lagging work of November 13, 2018 in the Full and Final Claim Record, submitted the next day, and claims work involved in the claim continued to October 16, 2018, but the evidence suggests even later. The spoils removal was also within 30 days of the Full and Final Potential Claim Record. The Contractor's claim includes added lagging cost on the view that it spent more time chipping a 4-sack mix at the overdrilled portion, than a 2-sack mix. This argument over timeliness over the Full and Final Potential Claim Notice is rejected.

158. The Arbitrator has reviewed the spread of bids for the drilling line item, included in Department Exhibits 316 and 96, and Petitioner's 125 and 125A, as well as the DEWR's and Daily logs in some detail. Starting with Petitioner's Ex. 96, Claim sum summary:

Drilling & Support cost:		
Number of actual days	• NO Time Impact Analysis submitted.	40
Number of days planned		18
Additional days.	• Contract finished on time.	22
Cost per day		18,441.41
	Sub Total	**405,711.02**
Lagging:		
Number of actual days		25
Number of days planned	• No Time Impact Analysis Submitted.	15
Additional days		10
Cost per day	• Contract completed on time.	9,605.07
	Sub Total	**96,050.70**
Additional Material cost:		
Additional Concrete cost (less credit for material in BI 41 & 41)		121,340.93
Additional Structure backfill (39 cy @ BI #39 Unit Price)		22,464.00
Additional Structure Excavation (719 cy @ BI #37 Unit Price)		234,839.78
Subtotal		378,644.71
	Total Cost $	**880,406.43**

159. The following sums are awarded Petitioner, by line item, as equitable adjustment:

A. As to the $405,711.02 in claimed Drilling costs, $159,057.16 is not awarded; instead, **$246,653.86** of that claim amount is awarded for the reasons stated above. Also, with the billing relationship with Sacramento Drilling converted to rented operator, daily rate, and not a fixed price contract, Petitioner lost some of the usual cost control with a listed subcontractor to hold them to price pending claim resolution, and not pay inefficiencies. This is factored into that adjustment.

B. As to additional concrete costs, **$121,340.93**, it is awarded. There was more concrete and it was proximately caused by the DSC and change in method to overdrilling.

C. Additional structural backfill, **$22,464**, it is awarded. There was more structural backfill and it was proximately caused by the DSC and change in method to overdrilling.

D. As to Additional Structural Excavation, **$234,839.76**, this sum is awarded.

E. As to the added lagging cost claim, of $97,050.70, for ten added days of lagging, this is largely claimed as due to extra chipping cost. The theory associated with added cost was not clear other than, as testified to, a 4-sack slurry mix takes longer to chip than a 2-sack mix, because harder or denser. This issue was never fully vetted to the Arbitrator with reasonable certainty that it was damages proximately caused by the overdrilling method or the DSC. Chipping could be caused by excess pours and pour site control, and the Department's challenge to some of the site inefficiency was taken into account here. Therefore, nothing is awarded for the added lagging claim, meaning, increased chipping and cost.

F. These total **$641,298.55** in principal as the interim award under PWCA Rule 1390 before consideration of any claim for costs or interest. Please refer to PWCA Rules 1390, 1392 and 1392 for further case procedures.

G. On the delay claim, insufficient evidence was presented to persuade the Arbitrator that 14th Street had become or was defined in contractor schedule updates, the critical path or controlling path of work, as opposed to Arden Way onramp, or their being concurrent. The

Supplemental Notice of Potential Claim does not comply with the TIA requirement either and is a waiver.

H. It is acknowledged that on a multi-site or multi-location project this sort of critical path or concurrency analysis has no easy "textbook." The Department properly places nearby locations of similar work inside a single project for convenience. As built, it becomes a sequencing matter and a "race" over which impacted location pushes out the end date. There was a lot of back and forth over the "Weekly Statement of Controlling Workdays." The Arbitrator agrees with the Department that the Contractor "must commit" real time which it is, Arden Way or 14th Street, especially just after the Arden Way critical path had garnered some added days as the critical path just shortly before the DSC notice.

To State the Interim Award:

1. The Arbitrator finds a DSC to exist; that the methods employed were extra work to counteract the DSC; and that the equitable adjustment proven by a preponderance of the evidence to a reasonable certainty was the sum of **$641,298.55**, in principal, for the added cost of the work itself; and with no award for time impact claims.

2. The parties are referred to PWCA 1390, 1392 and 1392 for further procedures, costs, and any interest or not in accordance with the PWCA Rules.

SO ORDERED.

Date: December 12, 2022

MARK J. RICE, Arbitrator

PROOF OF SERVICE

The undersigned hereby declares that I am over eighteen (18) years of age and not a party to the above-entitled action. I am employed by the Law Offices of McNeil Silveira Rice & Wiley, and my business address is 55 Professional Center Parkway, Suite A, San Rafael, California 94903.

On the below-mentioned date, I served the document described as: **DECISION ON THE MERITS AFTER MERITS HEARING; FINDINGS OF FACT AND CONCLUSIONS OF LAW [PWCA RULE 1390]**

[xx] BY E-MAIL I caused electronic copies of the above-referenced document(s) in PDF format to be transmitted from e-mail address nina@msrwlaw.com and/or from the Superior Court electronic service list to be transmitted to each known party at the e-mail address as indicated below.

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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration was signed on, December 14, 2022, at San Rafael, California.

NINA VALLINDRAS