COMMONWEALTH OF PENNSYLVANIA

WOHLSEN CONSTRUCTION	:	BEFORE THE BOARD OF CLAIMS
	:	
VS.	:	
	:	
COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF GENERAL SERVICES	:	
	:	
VS.	:	
	:	
SIMONE COLLINS, INC.	:	DOCKET NO. 4054

FINDINGS OF FACT

Parties, Chronology of Events and Procedural History

1. Petitioner Wohlsen Construction ("Wohlsen") is a Pennsylvania corporation with its principal place of business at 548 Steel Way, P.O. Box 7066, Lancaster, PA 17604-7066. At all times material to this matter, Wohlsen was a contractor providing construction services. (Statement of Claim at ¶ 1 and Exhibit A; Answer to Statement of Claim and New Matter at ¶ 1; Ex. 3.16)

2. Respondent Department of General Services ("DGS") is an administrative department of the Commonwealth, created and deriving its general and specific powers from provisions of the Administrative Code of 1929, as amended, 71 P.S. § 51 et seq. DGS's principal office is at the North Office Building, 401 North Street, Harrisburg, PA 17120. (71 P.S. § 51 et seq.; Statement of Claim at ¶ 2; Answer to Statement of Claim and New Matter at ¶ 2)

3. Additional Respondent Simone Collins, Inc. ("SCI"), is a Pennsylvania corporation providing landscape architecture services. SCI's principal offices are located at 119 E. Lafayette Street, Norristown, PA 19401. (DGS's Second Amended Complaint to Join Additional Respondent at ¶ 3; Simone's Answer and New Matter at ¶ 3)

4. Wohlsen seeks compensation for overexcavation and backfill replacement work it performed on unsuitable/unstable subgrade in the course of performing construction on the campus of Lincoln University. (Statement of Claim; Wohlsen's Post-Trial Brief)

5. On July 1, 2010, Wohlsen and DGS entered into Contract No. DGS 1101-45/46.1, "Landscape and Athletic Fields, Lincoln University, Lower Oxford Township, Chester County, Pennsylvania" ("Wohlsen Contract"). Pursuant to that contract, Wohlsen was to act as the general trades contractor for the "45-46 Project"[1] ("Project") on the campus of Lincoln University. The work consisted of several improvements, including construction of three structures and reconstruction of roadways, pathways, and parking throughout the campus. The Wohlsen Contract's original amount was $16,992,000 (not including subsequently executed change orders). (Statement of Claim at ¶ 2 and Exhibit A; Answer to Statement of Claim and New Matter at ¶ 5; N.T. 27-28, 30-33, 41-45, 318, 409-410; Ex. 3.1-3.16)

6. Wohlsen asserts that the overexcavation and replacement of unsuitable subgrade that it performed on the Project constituted work beyond that included in the lump sum contract amount for which it has not been fully compensated. Alternatively, it asserts that the condition of the subgrade encountered constituted a concealed site condition for which additional compensation is required. Wohlsen also seeks attorneys' fees, penalties, and interest under the Prompt Payment Act, 62 Pa.C.S. 3935. (Statement of Claim; Wohlsen's Post-Trial Brief)

7. DGS denies that the overexcavation and replacement of unsuitable soil on the Project was work beyond that included under the lump sum contract amount and that the unsuitable subgrade constituted a concealed site condition. It also contests the additional damages claimed by Wohlsen under the Prompt Payment Act. (DGS's Second Amended Complaint to Join Additional Respondent; DGS's Post-Trial Brief)

8. In its joinder claim, DGS asserts that, if it is found liable to Wohlsen, then SCI—as the design professional for the Project—should be found liable to DGS for a breach of SCI's contract with DGS ("SCI Contract"). (DGS's Second Amended Complaint to Join Additional Respondent; DGS's Post-Trial Brief)

9. SCI denies liability to DGS on the joinder claim and also asserts that DGS is not liable to Wohlsen on the original claim. (SCI's Answer and New Matter; SCI's Post-Trial Brief)

10. On January 23, 2008, DGS and SCI entered into the SCI Contract. Pursuant to the SCI Contract, SCI was to prepare specifications and other documents "as may be necessary to fix and describe the approximate size and character of the entire project," and to work in concert with DGS to do so. (N.T. 414-417, 464-466; Ex. 3.2; Ex. 144; 145 at 2.3.100; Ex. 146)

[1] DGS originally conceived of the improvements to Lincoln University as two separate projects to be completed under separate contracts, but later consolidated the entire work into a single project known as the "45-46 Project" (reflecting the combination of the two originally conceived projects), to be bid on and completed by a single set of prime contractors. (Exs. 3.1-3.15)

11. DGS originally conceived of the improvements to Lincoln University as two separate projects to be completed under two separate contracts. The "45" project focused on improvements to roadways and paths at the University, and the "46" project focused on construction of the three structures mentioned in Finding of Fact 5. Both projects included parking lot work. However, DGS later consolidated the improvements into a single "45-46" Project to be bid on and completed by a single set of prime contractors. (N.T. 48, 158-159, 318-319, 410; Exs. 3.1-3.16)

12. On February 17, 2010, DGS issued the bid package for the Project as a best value procurement. (Exs. 3.1-3.16)

13. The bid documents issued by DGS that became the Wohlsen Contract included, inter alia, the Instructions to Bidders; Notice to Bidders and Request for Proposals; Standard Form of Contract and General Conditions to the Construction Contract ("General Conditions"); Administrative Procedures for DGS; Earthwork Specifications (separate specifications were issued for the former "45" work and "46" work, but all provisions relevant to this case are identical); and Drawings. (N.T. 81-82, 321-327, 337; Ex. 3.1 Instructions to Bidders; Ex. 3.2 Notice to Bidders and Request for Proposals; Ex. 3.3 Standard Form of Contract and General Conditions; Ex. 3.4 Administrative Procedures for DGS; Ex. 3.6 Earthwork Specifications for 45 portion of Project; Ex. 3.8 Earthwork Specifications for 46 portion of Project; and Ex. 3.15 Drawings)

14. The Wohlsen Contract required extensive earthwork, as set forth in the Earthwork Specifications and the Drawings. (N.T. 82-84; Exs. 3.6, 3.8 Earthwork Specifications; Ex. 3.15 Drawings)

15. Shortly after beginning excavation in or around November 2010, Wohlsen encountered unsuitable subgrade at multiple locations around the Lincoln University campus. These conditions were encountered throughout the campus during the Project. (N.T. 107. 109, 301-302, 319-320, 382; Exs. 8, 10, 12, 25, 35, 37, 40, 53, 56, 66, 67, 68, 69, 72, 74, 81, 123)

16. At several times during the Project, Wohlsen sought extra payment from DGS for the costs associated with the removal and replacement of unsuitable subgrade. (N.T. 107-109, 115-116, 120-122, 246-247, 250-252, 300-301; Exs. 7, 8, 20, 27, 35, 53, 66, 67, 68, 81)

17. In response to Wohlsen's requests, DGS initially refused to make any extra payment, insisting that the overexcavation and replacement of the unstable subgrade was Wohlsen's duty and fully paid for by the original lump sum amount stated in the Wohlsen Contract. (N.T. 108-109, 116-117; Exs. 7, 9)

18. Eventually, DGS relented, in part, and paid for the overexcavation and replacement of soils more than two feet beneath subgrade elevation at the field house, Loop Road, and other locations, but continued to insist that removal and replacement of unsuitable material within the first two feet beneath subgrade elevation was solely Wohlsen's responsibility under the Wohlsen Contract. DGS's internal justification for the extra payment was that the unsuitable soils encountered beyond two feet below subgrade elevation were an "unforeseen condition." (N.T. 101, 117-120, 124-127, 135, 248-250, 363-364, 385-388, 390-392, 425; Exs. 12, 20, 25, 74, 106)

19. The primary dispute in this matter is about which of the parties is responsible for the cost of overexcavation and replacement of material from zero to two feet beneath subgrade elevation. (Board Finding)

Extra Work and Concealed Site Condition Issues

20. Paragraph 1.02 of the Earthwork Specifications provides, in relevant part, as follows:

> 1.02 SUMMARY
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> A. The Work in this Section includes furnishing all materials, labor, supervision, tools, equipment, tools [sic], and performing all operations and incidentals necessary for earthwork. Earthwork activities include but are not limited to subgrade preparation, excavating, backfilling, and compaction for the structures and foundations, pavements, sidewalks, landscape areas, and utilities. The Contractor shall pay for and coordinate the services of a geotechnical engineer and testing agency to perform quality control of the earthworks.
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> ***

(N.T. 338-339; Exs. 3.6 and 3.8 Earthwork Specifications at ¶ 1.02.A)

21. Paragraph 1.05 of the Earthwork Specifications provides, in relevant part, as follows:

> 1.05 QUALITY ASSURANCE
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> ***
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> G. The Contractor shall approve each subgrade and each fill layer before proceeding to the next layer. Any area which does not meet

density, % moisture, or other requirements at any time shall be suitably reworked and retested by the Contractor at his own expense.

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(Exs. 3.6 and 3.8 Earthwork Specifications at ¶ 1.05)

22. Paragraph 1.06 of the Earthwork Specifications provides, in relevant part, as follows:

1.06 DEFINITIONS

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G. Excavation: Removal of material encountered down to subgrade elevations.

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2. Overexcavation: Excavation of existing unsuitable material beyond limits shown on the Drawings for replacement with structural fill as directed by the Professional.

3. Unauthorized excavation: Excavation below subgrade elevations or beyond limits shown on the Drawings without direction by the Professional.

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J. Subgrade. Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below base or topsoil materials.

(N.T. 82-83, 346-347; Exs. 3.6 and 3.8 Earthwork Specifications at ¶ 1.06.G and J (emphasis supplied))

23. Paragraph 3.04 of the Earthwork Specifications provides, in relevant part, as follows:

3.04 GENERAL EXCAVATION

A. Excavate to subgrade elevation. Compact subgrade surface in accordance with Paragraph 3.12.

B. Any soft or unstable material shall be overexcavated and replaced with compacted load bearing fill as directed by the geotechnical engineer. Any

areas of instability shall be overexcavated to a depth of at least 2 feet and replaced with structural fill in accordance with Paragraph 3.12.

(N.T. 84-85; Exs. 3.6 and 3.8 Earthwork Specifications at ¶ 3.04 (emphasis supplied); see also, Ex. 3.1 ¶ 1.02)

24. Paragraph 3.07 of the Earthwork Specifications provides as follows:

3.07 UNAUTHORIZED EXCAVATION

A. Unauthorized excavations shall be filled with satisfactory fill materials and compacted to accordance with the relevant paragraphs of this Section [i.e., the Earthwork Specifications].

B. The Contractor is responsible for furnishing all materials, labor, supervision, tools, equipment, tools [sic] associated with unauthorized excavations without additional compensation.

(N.T. 83-84; Exs. 3.6 and 3.8 Earthwork Specifications at ¶ 3.07)

25. Paragraph 3.15 of the Earthwork Specifications[2] provides, in relevant part, as follows:

3.15 FIELD QUALITY CONTROL

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D. QUALITY CONTROL TESTING

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6. The Contractor shall approved [sic] each subgrade and each fill layer before proceeding to the next layer. Any area which does not meet density, % moisture or other requirements at any time shall be suitably reworked and retested by the Contractor at his own expense.

(Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05.G and 3.15.D.6)

26. Paragraph 6.6 of the General Conditions provide as follows:

6.6 MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION. The Contractor is solely responsible for all construction means, methods, techniques, procedures, and safety programs in connection with the work

[2] Sub-Paragraph 3.15.D.6 appears only in the Earthwork Specifications at Ex. 3.6 which was focused on the "45" portion of the Project (see Footnote 1, supra.). This language was, however, included in Paragraph 1.05 of the Earthwork Specifications for both the "45" and the "46" portions of the Project. (Exs. 3.6 and 3.8)

under the Contract unless the contract documents require other and additional responsibilities from the Contractor. Neither the Professional, the Construction Manager, if one is retained, nor the Department shall have control over or change of and will not be responsible for construction means, methods, techniques or procedures or for safety precautions or programs in connection with the Work, since these are solely within the Contractor's responsibility.

(Ex. 3.3 General Conditions at ¶ 6.6)

27. Paragraph 11.5 of the General Conditions provides as follows:

11.5 UNCLASSIFIED EXCAVATION

A. Excavation, if required for this Project, will be unclassified and will include all types of earth and soil, any pebbles, boulders, and bedrock, municipal trash, rubbish and garbage, and all types of debris of the construction industry such as wood, stone, concrete, plaster, brick, mortar, steel and iron shapes, pipe, wire asphaltic materials, paper and glass. Unclassified excavation does not include unforeseen concrete foundations, walls, or slabs.

B. All materials encountered which are identified as described in the previous paragraph as unclassified shall be removed to the required widths and depths to create a finished product as shown and/or noted on the drawings and as written in the specifications. No additional compensation or time shall be given to the Contractor for this unclassified excavation.

C. Any unclassified items described in paragraphs B and C [sic] above that are discovered during any excavation are not concealed conditions or unknown physical conditions below the surface for purposes of the Concealed Conditions paragraph of these General Conditions.

(N.T. 333-335, 384; Ex. 3.3 General Conditions at ¶ 11.5 (emphasis supplied))

28. Comparing the defined terms "Excavation," "Overexcavation," and "Unauthorized Excavation," while reading these terms in conjunction with the Contract Drawings confirms that "subgrade elevation" identifies the top of the subgrade and begins where "planned depths" for excavation on the Contract Drawings stopped (i.e., the top of the subgrade, "planned depth" and "subgrade elevation" are synonymous). Planned depth of excavation went down to the top of the subgrade and overexcavation of unsuitable subgrade soils was excavation beyond the planned

depths shown on the Contract Drawings. (N.T. 57, 62-70, 75-78, 153-154, 165-166, 173, 257, 320-321, 339-340, 348, 382-384; Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05.G, 1.06.G.3, 1.06.J, 3.04.A-B, 3.06, 3.14, 3.15.B, 3.15.D.6; Ex. 3.15 at Drawing C-901; Board Finding)

29. This same comparison of the definitions in Paragraph 1.06 and Contract Drawings also shows that the extent of soil or earth removal originally planned for the Project went only to the top of the subgrade. (Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.06; Ex. 3.15 at Drawing C-901; Board Finding)

30. Further, the definitions of "Excavation," "Overexcavation," and "Unauthorized Excavation," and the Contract Drawings also establishes that overexcavation and replacement of unsuitable subgrade was not originally authorized by the Contract, but would only be done if subsequently authorized and directed by the Project's geotechnical engineer, at the engineer's discretion. (Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.06 and 3.04.B; Ex. 3.15 at Drawing C-901; Board Finding)

31. David Blackmore & Associates ("Blackmore") was the geotechnical engineer for the Project. While it is not completely clear from the evidence presented in this case whether Blackmore was hired and paid directly by DGS (or, more likely, indirectly as subcontractor to SCI), it is clear that Blackmore was engaged to perform quality assurance for DGS and to act as DGS's geotechnical engineer on this Project. (N.T. 36, 76-80, 101-103, 176-177, 294-300, 302-305; Exs. 2, 3.3 General Conditions at ¶ 1.45, 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05, 3.04 and 3.15; Board Finding)

32. While the foregoing definitions in Paragraph 1.06 indicate it was to be the Project's "Professional" (i.e. SCI) who was to determine and direct the overexcavation and replacement of unsuitable subgrade soils, Sub-paragraph 3.04.B indicates this is to be done by the Project's "geotechnical engineer." This potential contradiction was alleviated by the fact that the Project Professional could, and apparently did, delegate this role to Blackmore. It is equally clear that Blackmore did exercise the authority to determine what soils to overexcavate, to what depths below subgrade elevation this overexcavation was to occur and what materials were to replace those soils back to subgrade elevation. (N.T. 36, 76-80, 101-103, 176-177, 294-300, 302-305; Exs. 2, 3.3 General Conditions at ¶ 1.45, 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05, 3.04 and 3.15; Board Finding)

33. Blackmore, a third-party paid by DGS, exercised substantial control over the means and methods of construction as it pertained to unstable subgrade, dictating not only whether overexcavation and replacement was to take place, but the means and methods used (e.g. locations, depths, fills, use of geotextiles, etc.) on an ad hoc basis during the performance of the Wohlsen Contract. As such, Blackmore was able to unilaterally increase work as well as dictate the means and methods of performing this work. (N.T. 76-80, 101-105, 176-177, 382-384, 400-404; Board Finding)

34. Paragraph 6.6 of the General Conditions explicitly embodies the long-established industry concept that it is the contractor that has exclusive control over the means, methods, and techniques of performing its contract work. (Ex. 3.3 General Conditions at ¶ 6.6)

35. Wohlsen was not in exclusive control of the means and methods by which it would perform the overexcavation and replacement work. (N.T. 76-80, 101-105, 176-177, 382-384, 400-404; Board Finding)

36. Wohlsen would have lacked the ability to foresee how Blackmore would exercise its control over overexcavation and replacement of unstable subgrade soils at the time of bid, as well as the actual quantities and costs of overexcavation and replacement work. (N.T. 101-105, 176-177, 382-384, 400-404; Board Finding)

37. Sub-Paragraphs 1.05.G and 3.15.D.6 (relating to quality control and quality assurance) specified that Wohlsen was required to rework unsuitable soils in certain instances "at [its] own expense." Sub-paragraph 3.07.B (relating to unauthorized excavation) states that the contractor "is responsible for furnishing all materials, labor…associated with unauthorized excavation without additional compensation." (Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05.G, 3.07.B, 3.15.D.6)

38. Among other parts of the Wohlsen Contract, the Earthwork Specifications at Sub-Paragraphs 1.05.G, 3.07.B, and 3.15.D.6, make it abundantly obvious that DGS was well aware of how to clearly and expressly allocate contingent costs (e.g. "reworking" of subgrade and unauthorized excavation) and that, in fact, DGS did this when it wished to do so. (Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05.G, 3.07.B, 3.15.D.6)

39. By contrast, Earthwork Specification Paragraph 3.04.B (relating to authorized "overexcavation" of the type here at issue) does not include language like Sub-Paragraphs 1.05.G, 3.07.B. and 3.15.D.6 assigning the cost of overexcavation and replacement of unsuitable soils to Wohlsen as contractor. (Exs. 3.6 and 3.8 Earthwork Specifications at ¶ 3.04.B)

40. Sub-Paragraphs 1.05.G and 3.15.D.6 also illustrate what was meant by the general term "subgrade preparation" in Paragraph 1.02 which DGS relies upon for its position. Specifically, "subgrade preparation" contemplates that the Contractor will bring the ground to subgrade elevation, perform quality control tests to assure proper compaction and moisture criteria are met, "rework" said subgrade in place if there was found to be a problem with the subgrade initially and then re-test same. (N.T. 167-171, 282-288, 345-347, 399-400; Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.02, 1.05.G, 3.04.A, 3.11.A, 3.12.C, 3.13, 3.15.D.6, 3.16.B.1)

41. Activities that would be considered "reworking" would include moistening or drying of the subgrade by scarification, aeration or other manipulation of the soils done in place, as well as repairing, re-grading, re-shaping and re-rolling as necessary to reach the required density and moisture content, as well as other specified criteria. However, as testified to by witnesses

from both sides, "reworking" does not extend to overexcavation and replacement of soils ultimately determined to be unsuitable. (N.T. 167-171, 282-288, 345-347, 399-400; Exs. 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.02, 1.05.G, 3.04.A, 3.11.A, 3.12.C, 3.13, 3.15.D.6, 3.16.B.1; Board Finding)

42. Brian Laub, Wohlsen's project manager, testified that Wohlsen's understanding of the Wohlsen Contract was that it "owned" (i.e. was obligated for) excavation without additional compensation down to subgrade elevation. Beyond that, Wohlsen believed that DGS was to pay extra for overexcavation and replacement of unsuitable subgrade soil if and when done at the direction of Blackmore, the Project's geotechnical engineer. If done without direction of Blackmore, Wohlsen believed it would be unauthorized excavation for which the Wohlsen Contract specifically said Wohlsen would bear the cost, but, in contrast, when authorized by Blackmore, Wohlsen believed it would be compensated additionally for this extra work. (N.T. 62-70, 75-78, 81-98, 108-109, 168, 175, 276-281, 302, 306-307, 319-320; F.O.F. 28-33)

43. Mr. Laub testified, in essence, that a construction contractor reading the Wohlsen Contract, and Paragraphs 1.06 and 3.04.B of the Earthwork Specifications in particular, would understand that, because the overexcavation and replacement of unsuitable soil below subgrade elevation was initially unauthorized and to be done only if, when and where specifically directed and authorized by the Project's geotechnical engineer, that additional compensation would be provided if and when work under Paragraph 3.04.B was ordered. (N.T. 277-278; F.O.F. 28-33)

44. The Board agrees with the substance of Mr. Laub's testimony and finds that it comports with construction trade usage. Specifically, a reasonable person engaged in the construction trade would understand the Wohlsen Contract, including the language in Paragraph 3.04.B of the Earthwork Specification and the operative definitions of Sub-Paragraph 1.06.G (requiring that overexcavation and replacement of unsuitable soils be performed only upon the authorization and direction of the Project's geotechnical engineer) to mean that this contingent work was not paid for by the original lump sum of the Wohlsen Contract but would be tracked as it was performed and compensated separately. (N.T. 62-70, 75-78, 81-98, 108-109, 168, 175, 276-281, 302, 306-307, 319-320; F.O.F. 28-33; Board Finding)

45. In March 2011, DGS requested some admittedly extra work in the form of construction of a swale and berm required by the Chester County Conservation District. This extra work added an additional portion of the Lincoln University campus to this improvement Project and entailed excavation and road/pathway construction of the type being done on the original Project. Because it was outside the scope of the original Wohlsen Contract, the new work was performed under a change order to that contract. (N.T. 130-133; Ex. 69)

46. Wohlsen, being then aware of DGS's interpretation of Paragraph 3.04.B as requiring performance of overexcavation and replacement of unsuitable subgrade soil for no additional compensation, gave DGS a price which included the cost of potential removal and

replacement of unsuitable soil below subgrade for construction of this new swale and berm required by the Chester County Conservation District. (N.T. 132-134, 149-152; Ex. 69)

47. DGS flatly rejected this proposal and, instead, requested and agreed to a less expensive alternate proposal for this new swale and berm which entailed only the planned work (excavation to top of subgrade), with any overexcavation and replacement of unsuitable soils to be paid by DGS on a contingency basis, if and when needed. Thus, for the foregoing change order, where the parties' positions were made known to one another, DGS clearly sought to avoid paying a higher initial cost with an overexcavation and replacement contingency built into it, but nonetheless insists now that Wohlsen should have built this cost into its bid for the original Wohlsen Contract work. (N.T. 132-133, 149-152, 400-404; Ex. 69)

48. DGS and SCI also assert that the "unclassified excavation" provision at Paragraph 11.5 of the General Conditions makes it clear that additional compensation was not going to be paid for the overexcavation and replacement of unstable subgrade. (DGS's Post-Trial Brief; SCI's Post-Trial Brief)

49. Paragraph 11.5.B of the General Conditions explaining the term "unclassified excavation" refers only to "excavation," and the removal of "materials encountered … down to the required widths and depths," while the Project's Earthwork Specifications (precisely tailored to this Project) defines "excavation" as the removal of soils down to subgrade elevation (i.e. top of subgrade) and the Contract Drawings show the required widths and depths only to the top of subgrade as well. Paragraph 11.5 makes no mention of "overexcavation" or "unauthorized excavation," which are defined as the removal of soils below subgrade elevation (top of subgrade) and the subject of this claim. (Ex. 3.3 General Conditions at ¶ 11.5; Ex. 3.6 and Ex. 3.8 Earthwork Specifications)

50. Paragraph 11.5 of the Wohlsen Contract's General Conditions describing "unclassified excavation" literally applies to "excavation" work not to the "overexcavation" here at issue as defined in the contract specifications. (Ex. 3.3 General Conditions at ¶ 11.5; Ex. 3.6 and Ex. 3.8 Earthwork Specifications)

51. Because the planned depth of excavation went to "subgrade elevation" (i.e. top of the subgrade); because overexcavation and replacement of unsuitable subgrade was originally unauthorized and to be done only if subsequently directed and authorized by Blackmore, the Project's geotechnical engineer paid by DGS; because the means and methods of overexcavation and replacement (i.e. fills and materials used, depth, area and quantities of undercut, etc.) were dictated by Blackmore and were thus outside the exclusive control of Wohlsen; because the Wohlsen Contract contained several provisions expressly assigning the expense of other contingent work (e.g. reworking) and unauthorized excavation to Wohlsen as contractor, but did not contain a similar clarifying provision assigning the cost of overexcavating and replacing unsuitable subgrade to the contractor; because, in line with trade usage, a reasonable bidder in the

construction trade would understand Paragraph 3.04.B of the Earthwork Specifications along with Sub-Paragraph 1.06.G and other terms of the Wohlsen Contract (which left any overexcavation and replacement of unsuitable subgrade to be ordered at the discretion of the owner's geotechnical engineer) to mean that this contingent work was not part of the work paid for by the original lump sum of the Wohlsen Contract but would be paid for separately; because, in the course of performing the Wohlsen Contract, when Wohlsen was asked to bid on a change order to perform work similar to the original Wohlsen Contract work and Wohlsen specifically included the potential cost of overexcavation and replacement of unsuitable soil in its cost structure, DGS specifically asked to remove this contingency from the change order work and agreed only to pay for such subgrade replacement work on an as-needed basis; and because the "unclassified excavation" provision cited by DGS and SCI applies to "excavation" and "materials encountered … down to required widths and depths," rather than overexcavation and replacement of unsuitable material (which by definition occurs below planned depths), the Board finds that a reasonable person in the construction trade would understand that overexcavation and replacement of unsuitable subgrade was contingent work not paid for by the original lump sum of the Wohlsen Contract but was rather to be tracked as performed and compensated for separately, if and as needed. (Exs. 3.1 to 3.16; F.O.F. 16-50; Board Finding)

Concealed Site Condition

52. Section 11.6 of the General Conditions provides, in pertinent part, as follows:

> 11.6 CONCEALED CONDITIONS
>
> A. The Department recognizes two types of concealed conditions which might be encountered during the performance of the Work, namely:
>
> 1. Concealed conditions which are unascertainable from the plans, Contract Documents, visits to the site, or reasonable investigation, and which are at variance with the conditions indicated by the Contract Documents; or
>
> 2. Unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.
>
> B. The Contractor has seven (7) days after the first observance of the concealed condition to provide written notice to the Department.

C. If the Department decides that either of the two concealed conditions described above in (A) has occurred during construction, then the Contract Sum shall be equitably adjusted by Change Order. No adjustment shall be made to the Contract Sum under this paragraph, however, for concealed conditions encountered during the cutting and patching of work.

(N.T. 335-337; Ex. 3.3 General Conditions at ¶ 11.6)

53. The geotechnical boring logs for the Project were made part of the Wohlsen Contract by Bulletin No. 3 and provided to all bidders on the Project. The geotechnical report for the Project was specifically excluded from the Wohlsen Contract but was made available to all bidders on the Project during the bid period. (N.T. 109-115, 147-149, 182-186, 321, 364-373; Exs. 2, 3.11)

54. There was no material difference between the subsurface conditions described in the geotechnical report, the geotechnical boring logs and the subsurface conditions actually encountered by Wohlsen both within and below the first two feet of subgrade. (N.T. 147-149, 182-186, 234-236, 269-271, 366-371; Exs. 2, 3.11; Board Finding)

55. The unsuitable subgrade actually encountered was not extraordinary or materially different in either quality or quantity when compared to the geotechnical boring logs provided to bidders or the geotechnical report made available to the bidders. (N.T. 147-149, 182-186, 234-236, 366-371; Exs. 2, 3.11; Board Finding)

56. Because there was no material difference between the subsurface conditions actually encountered and those described in the geotechnical report and geotechnical boring logs which, respectively, were made available to and given to Wohlsen during the bidding process, and because the unsuitable subgrade actually encountered was not extraordinary or materially different in either quantity or in quality when compared to the geotechnical report and geotechnical boring logs, the Board concludes there is no factual support for Wohlsen's claim based on a concealed site condition. (F.O.F. 52-55; Board Finding)

Damages Sustained by Wohlsen

57. Wohlsen's project manager, Brian Laub, testified as to Wohlsen's costs and the damages it seeks. (N.T. 134-146)

58. The damages claimed by Wohlsen at hearing and in its post-hearing filings were in the amount of $436,539.27. This represents a slight reduction from the amount set forth in the

statement of claim (i.e. $473,924.51). Mr. Laub testified that this difference is due to DGS paying Wohlsen for part of the overexcavation and replacement originally claimed (i.e. that beyond the first two feet below subgrade elevation). (Statement of Claim; Wohlsen's Post-Trial Brief; N.T. 134-135, 268; Exs. 12, 25, 74)

59. Wohlsen tracked the quantities of overexcavation performed and replacement materials supplied for which it now makes claim (referred to hereinafter as "Unit Price Work") as well as other expenses related to this work. (N.T. 115-116, 250-252, 300-301, 305-306, 388-389; Exs. 8, 53)

60. Wohlsen claims it overexcavated and replaced 7,339 cubic yards (CY) of unsuitable subgrade soils on the Project and refers to this as its Unit Price Work. (N.T. 135-137; Ex. 53)

61. Different areas of unsuitable subgrade required different fixes (i.e., different replacement materials) at different unit cost rates. (N.T. 136-137, 297-300; Ex. 53)

62. The following table quantifies what Wohlsen claims to be the amount and worth of the Unit Price Work for which it seeks compensation:

QTY. (Q)	UNITS (U)	DESCRIPTION	MATERIAL UNIT COST (MU)	COST TOTAL (Q x MU)
6309	CY	Unsuitable Soil CY Cost to date Replaced with 2A	$45.00	$283,909.95[3]
425	CY	Unsuitable Soil replaced with On site material	$20.00	$8,500.00
605	CY	Unsuitable Soil CY at Field House replace with 2RC	$41.00	$24,805.00
				$1,574.10
		PRE-MARK-UP MATERIAL COST TOTAL		$318,789.05
		SALES TAX		$0.00
		SUBTOTAL		$318,789.05
		10% OVERHEAD		$31,878.91
		TOTAL MATERIAL COST		$350,667.96

(Ex. 53)

[3] 6,309 CY at $45 per CY would not be $283,909.95 as set forth on the table, but $283,905. This calculation error is immaterial.

63. There is no indication in either the testimony or documents of what the $1,574.10 set forth in Wohlsen's table of Unit Price Work represents. (Ex. 53; Board Finding)

64. The Board found the testimony of Mr. Laub with regard to the quantities of Unit Price Work to be credible. (N.T. 134-146; Board Finding)

65. The table in Exhibit 53 (i.e. Findings of Fact Paragraph 62) represents actual quantities of Unit Price Work which Wohlsen performed with regard to the overexcavation and replacement of unsuitable subgrade on the Project for which has not been compensated. However, the represented rates are drawn from the unit rates agreed upon for this type of work in various change orders, but were not agreed to by DGS for the purpose of this claim. (N.T. 137, 189-190, 248-250, 264-265, 388-389; Exs. 12, 25, 53, 74; Board Finding)

66. On cross examination, Mr. Laub acknowledged that the rates in the Unit Price Work table in Exhibit 53 were not the actual costs paid by Wohlsen, but included an additional mark-up to cover "risk" taken by Wohlsen in performing this work. (N.T. 227-228, 247-248, 267, 273, 280-281; Ex. 53)

67. Further testimony from Mr. Laub (and Exhibit 116) indicate the actual cost Wohlsen paid for overexcavation and replacement with 2A (offsite material), on site material, and 2RC (recycled offsite material), as charged by the subcontractor (Trinity) to Wohlsen, without mark-ups, were $23.13[4] per CY for 2A fill; $17 per CY for on site material; and $35 per cubic yard for 2RC fill. (N.T. 271-274; Ex. 116)

68. The Administrative Procedures for DGS, which the Wohlsen Contract incorporates, permit only a 10% mark-up on extra work performed by subcontractors. This mark-up is to cover the contractor's overhead, general support, and profit for equipment and materials. There is no provision for an additional 15% mark-up for risk. (N.T. 244-245, 247-248, 423-424, 431-433; Ex. 3.4, Administrative Procedures for Department of General Services Construction Contracts ("Administrative Procedures") at p. 10-40; Board Finding)

69. The Board finds the rates set forth on Exhibit 116 (not including the 15% multiplier) to be the actual cost to Wohlsen of the Unit Price Work performed on the Project for overexcavation and replacement of unsuitable materials from zero to two feet below subgrade elevation, not the rates set forth in the table in Exhibit 53. (Exs. 53, 116; F.O.F. 59 - 68; Board Finding)

[4] $23.13 represents the combined cost of the 2A material that Wohlsen separately purchased from a third party and the cost of a subcontractor to place said material on
-site.

70. Adjusting the damages to reflect the actual rates paid by Wohlsen for the Unit Cost Work; allowing for the permitted 10% mark-up for subcontractor work; and omitting the unidentified $1,574.10 line, the Board finds that the actual damages incurred by Wohlsen for the Unit Price Work to be as follows:

QTY. (Q)	UNITS (U)	DESCRIPTION	MATERIAL UNIT COST (MU)	COST TOTAL (Q x MU)
6309	CY	Unsuitable Soil CY Cost to date Replaced with 2A	$23.13	$145,927
425	CY	Unsuitable Soil replaced with On site material	$17.00	$7,225
605	CY	Unsuitable Soil CY at Field House replace with 2RC	$35.00	$21,175
		PRE-MARK-UP COST TOTAL		$174,327
		SALES TAX		$0.00
		SUBTOTAL		$174,327
		10% MARK-UP		$17,433
		TOTAL		$191,760

(N.T. 271-274; Exs. 53, 116; F.O.F. 59-69; Board Finding)

71. Wohlsen also incurred costs other than the Unit Price Work associated with the overexcavation and replacement of unsuitable subgrade on the Project. A second table prepared by Mr. Laub quantifies that work and those expenses as follows:

SUBCONTRACTORS (IF APPLICABLE)

COMPANY NAME	TOTAL COST
Kaks testing/Inspection Cost 69 days	$34,224.00
Roll terragrid	$1,128.90
Burkholder Alumni Lot	$14,281.33
Trinity Premium Time Maple Drive	$4,936.12
Trinity Premium Time Gym Lot	$1,116.23
Trinity Undercut Sidewalk area	$548.58

Burkholder		$11,779.69
Trinity Undercut Sidewalk area		$4185.46
long jump pit undercut		$3,450.55
*TOTAL COST FROM ATTACHED SUB-CONTRACTOR'S DETAILED BREAKDOWN	SUBTOTAL 10% OVERHEAD	$75,650.86
	TOTAL SUBCONTRACTS	$83,213.95

(N.T. 138-146; Ex. 53)

72. With one exception, the Board finds Mr. Laub's testimony regarding the additional expense items listed in the preceding paragraph to be credible and convincing. The exception, as set forth below, regards the $34,224 item for 69 days of "extra" KAKS quality control testing Mr. Laub attributes to testing the subgrade after it had been removed and replaced. (N.T. 138-146; Ex. 53; F.O.F. 71, 73-85; Board Finding)

73. "Kaks testing/Inspection Cost 69 days" represents work done by KAKS, Wohlsen's geotechnical engineering/quality control subcontractor. KAKS did quality control work both in doing original testing of compressed subgrade for suitability, re-testing after subgrade which originally failed to meet requirements was reworked, and testing of subgrade which had been overexcavated and replaced. (N.T. 138-141, 304; Ex. 53)

74. Mr. Laub testified that he had reached the count of 69 days of KAKS testing in an indirect fashion. He did so by simply counting the days on which overexcavation and replacement work was performed as shown by Project invoices and/or work logs identifying the overexcavation and replacement work itself not from KAKS work records. Neither the invoices or work logs themselves were presented as evidence. (N.T. 140, 194-198)

75. On cross-examination, Mr. Laub later acknowledged that KAKS was doing quality control work on site for regular contract work (the testing of subgrade before Blackmore ordered removal and replacement) rather than solely for work on overexcavated and replaced subgrade work on the 69 days for which additional compensation is claimed. (N.T. 198; Board Finding)

76. The Board sees in the record no documentation separating times when KAKS was on site performing general quality control duties on original contract work versus when KAKS was on site providing testing of overexcavated and replaced materials. (F.O.F 71-75; Board Finding)

77. After careful review of the evidence, the Board determines that it is impossible, with the evidence of record, to determine with reasonable certainty that the 69 claimed days were actually wholly devoted to quality control of the overexcavation and removal of unsuitable

subgrade or to apportion the work performed by KAKS on those days between original contract work and testing of overexcavated and replaced materials. (F.O.F. 71-76; Board Finding)

78. "Roll terragrid" refers to a woven mesh geo fabric which DGS's geotechnical engineer would sometimes direct be placed in an undercut area before placement of stone as part of the overexcavation and replacement process to stabilize subgrade. This expense is documented by invoice. (N.T. 141, 299-300; Ex. 53)

79. The "Burkholder Alumni Lot" and "Burkholder" line items in Exhibit 53 refer to work done by Burkholder, Wohlsen's paving subcontractor, to overexcavate and replace the subgrade beneath portions of the work (the Alumni Parking Lot and Loop Road) at a time when the main subcontractor for excavation work (Trinity) lacked manpower to complete the work in sufficient time to allow repaving prior to the arrival of students on campus. The Board finds this expense to be attributable to the overexcavation and replacement of unsuitable subgrade, justified and established with reasonable certainty. (N.T. 141-145, 210-212; Ex. 53; Board Finding)

80. "Trinity Premium Time Maple Drive" and "Trinity Premium Time Gym Lot"—these items constitute work attributable to overexcavation and replacement of unsuitable subgrade below subgrade elevations which required overtime on the part of Trinity. These two items represent the extra overtime required to be paid to Trinity's workers. (N.T. 142-143, 145; Ex. 53)

81. DGS and SCI question the overtime work on grounds that it includes some work that took place on Fridays. Mr. Mr. Laub testified that the excavation subcontractors' normal work week was four ten-hour days. The Board finds Mr. Laub's testimony credible. (N.T. 202; Board Finding)

82. The Board finds this expense for "Trinity Premium Time Maple Drive" and "Trinity Premium Time Gym Lot" to be attributable to the overexcavation and replacement of unsuitable subgrade, justified and established with reasonable certainty. (N.T. 142-143, 145, 202; Ex. 53; Board Finding)

83. "Trinity Undercut Sidewalk Area"—these two items represent an undercutting and subgrade replacement which could not be accessed by typical equipment and thus required specialized equipment. The Board finds this expense is attributable to the overexcavation and replacement of unsuitable subgrade, justified and established with reasonable certainty. (N.T. 143-144; Ex. 53; Board Finding)

84. "[L]ong jump pit undercut"—this item represents an area of work inside the stadium which required specialized equipment due to the completion of other work in that area at an earlier time. The Board finds that this expense is attributable to the overexcavation and

replacement of unsuitable subgrade, justified and established with reasonable certainty. (N.T. 144; Ex. 53; Board Finding)

85. The total expended by Wohlsen for subcontractors outside the scope of the Unit Price Work for overexcavation and replacement of unsuitable subgrade on the Project between zero and two feet of subgrade elevation was $41,427. (Ex. 53; F.O.F. 78 – 84: Board Finding)

86. The 10% mark-up permitted by the Wohlsen Contract would result in a mark-up on this additional subcontractors' work of $4,143. (Ex. 3.4 Administrative Procedures pages 10-39 to 10-40; F.O.F. 85)

87. The total value of Unit Price Work, additional expense and permitted mark-up incurred by Wohlsen for overexcavation and replacement of unsuitable subgrade on the Project between zero and two feet of subgrade elevation is $237,330. (F.O.F. 59-86; Board Finding)

88. The DGS Administrative Procedures, which is incorporated as one of the Contract Documents, provides that "[t]he Contractor shall then apply the adjustment to contract bond which is equal to the Contractor's bond rate times the Change Order cost subtotal." (Ex. 3.4 DGS Administrative Procedures at p. 10-41)

89. The Board finds the amount of the bond adjustment, at the claimed rate of .00612,[5] to be $1,452. (N.T. 146; Exs. 53 and 116; Board Finding)

90. In light of the foregoing, the Board finds that Wohlsen has established $238,782 in damages for the overexcavation and replacement of unsuitable subgrade on the Project between zero and two feet of subgrade elevation on the Project with reasonable certainty. (F.O.F. 59 - 89; Board Finding)

91. Although the Board has concerns over the manner in which the Wohlsen Contract and the Earthwork Specifications were drafted with regard to the implications of the terminology used and the lack of express cost allocation for the overexcavation and replacement of unsuitable subgrade on the Project, and have found Wohlsen's reading of same to be the most appropriate, we find the evidence at this point insufficient to conclude that these drafting problems were purposeful or done in an arbitrary or vexatious manner so as to support a finding of bad faith on

[5] DGS's Administrative Procedures provide that "DGS considers the appropriate bond adjustment rate to be equal the percentage rate used by the Contractor to establish the contract bond amount shown on the Contractor's original cost breakdown GSC-30 previously approved by DGS." While the GSC-30 for the Project shows the cost of the bond (Exhibit 118), it does not show the percentage rate used to establish the amount. The Board's own calculations show that dividing the bid price by the indicated bond cost establishes a rate of .00682, not .00612 as indicated on Exhibit 53. Because Wohlsen has used the .00612 rate; because no party challenged the rate set forth in Exhibit 53; and because there is a process to change the rate set forth in the Administrative Procedures (Exhibit 3.4 at p. 10-41)(though no evidence of whether it was used), the Board sees no reason to recalculate the bond cost adjustment.

the part of DGS in contesting the payment claimed by Wohlsen. (Exs. 3.1-3.16; F.O.F. 18-50; Board Finding)

Joinder Claim against SCI

92. DGS asserts in its second amended joinder claim against SCI that if it is found liable to Wohlsen under the Wohlsen Contract, then SCI breached the SCI Contract in drafting the Project specifications. (DGS's Second Amended Complaint to Join Additional Respondent)

93. DGS, with respect to its joinder claim, presented the testimony of two witnesses, Michael J. Hudzik and Daniel Weinzierl. Mr. Hudzik is the Eastern Regional Director of Construction for DGS. Mr. Weinzierl is the Director of Construction for DGS's Bureau of Construction. (N.T. 315, 464)

94. In his job as Regional Director, Mr. Hudzik oversees construction management and inspection of construction projects in his region. (N.T. 452-453, 456-460)

95. Mr. Hudzik testified generally regarding the contractual obligations of SCI, but did not actually participate in, or have first-hand knowledge of, the creation or drafting of the Wohlsen Contract or the Project specifications which gave rise to the dispute between Wohlsen and DGS. (N.T. 408-409, 414-417, 440-446, 452-453, 456-460)

96. Mr. Weinzierl likewise had no knowledge of the actual roles of DGS and SCI in drafting and preparing the Wohlsen Contract or the Project specifications here at issue. (N.T. 473-475)

97. DGS's presentation of its case against SCI was essentially to present the SCI Contract documents which establish SCI's contractual obligations. However, DGS did not adduce evidence as to who actually drafted and/or finalized which part of the Wohlsen Contract or the Project specifications and, in particular, the specifications here at issue (including Paragraph 3.04.B of the Earthwork Specifications). No evidence was presented as to what SCI actually did or did not do in terms of creating, drafting and/or finalizing any part of the Earthwork Specifications. (N.T. 464-465, 474; Exs. 144, 145, 146; F.O.F. 92-96; Board Finding)

CONCLUSIONS OF LAW

1. Under Section 1724(a)(1) of the Commonwealth Procurement Code ("Procurement Code"), 62 Pa. C.S. §§ 101-4604, the Board has exclusive jurisdiction to arbitrate claims arising from a contract entered into by a Commonwealth agency in accordance with the Procurement Code

and filed with the Board in accordance with Section 1712.1 of the Procurement Code (relating to contract controversies), 62 Pa.C.S. § 1712.1. 62 Pa. C.S. § 1724(a)(1).

2. Because the Wohlsen Contract was entered into by Wohlsen and DGS, a Commonwealth agency, in accordance with the Procurement Code; because the claim arises from said contract; and because all requirements of Section 1712.1 of the Procurement Code have been met, the Board has jurisdiction in this matter with respect to Wohlsen's claim against DGS. 62 Pa.C.S. §§ 1712.1, 1724(a)(1).

3. Under Section 1724(b)(1) of the Procurement Code, the Board has concurrent jurisdiction to arbitrate claims arising from a contract entered into by a Commonwealth agency in accordance with the Procurement Code in which the Commonwealth agency is the claimant. 62 Pa.C.S. § 1724(b). 62 Pa.C.S. § 1724(b)(1).

4. Because the SCI Contract was entered into by SCI and DGS, a Commonwealth agency, in accordance with the Procurement Code; because DGS's joinder claim against SCI arises from said contract; and because DGS, a Commonwealth agency, is the claimant, the Board has jurisdiction in this matter with respect to DGS's joinder claim against SCI. (Id.)

5. The Board is the ultimate finder of fact and is charged with determining the credibility and persuasiveness of witness testimony, including that of expert witness testimony. James Corp. v. N. Allegheny Sch. Dist., 938 A.2d 474, 495 n. 21 (Pa. Cmwlth. 2007).

6. It is within the purview of the Board, acting as finder of fact, to draw all reasonable inferences from the evidence presented at trial. Barylak v. Montgomery County Tax Claim Bureau, 74 A.3d 414, 417 (Pa. Cmwlth. 2013); Warner-Vaught v. Fawn Twp., 958 A.2d 1104, 1109 (Pa. Cmwlth. 2008); Ellis v. City of Pittsburgh, 703 A.2d 593, 594 (Pa. Cmwlth. 1997); see also, Wayne Knorr, Inc. v. Dep't of Transp., 973 A.2d 1061, 1081 (Pa. Cmwlth. 2009) (Board's evidence of damages may consist of probabilities and inferences as long as the amount is shown with reasonable certainty); A.G. Cullen Constr., Inc. v. State Sys. of Higher Educ., 898 A.2d 1145, 1161 (Pa. Cmwlth. 2006) (same).

7. As the finder of fact, the Board is charged with the duty of determining the credibility of evidence and resolving conflicting testimony. It may believe all, part, or none of the testimony of any witness. The Board's findings need not be supported by uncontradicted evidence, so long as they are supported by substantial evidence. Wayne Knorr, Inc. v. Dep't of Transp., 973 A.2d 1061, 1078 (Pa. Cmwlth. 2009); Dep't of Gen. Servs. v. Pittsburgh Bldg. Co., 920 A.2d 973, 989 (Pa. Cmwlth. 2007); A.G. Cullen Constr., Inc. v. State Sys. of Higher Educ., 898 A.2d 1145, 1155 (Pa. Cmwlth. 2006); Commonwealth v. Holtzapfel, 895 A.2d 1284, 1249 (Pa. Cmwlth. 2006); Miller v. C.P. Centers, Inc., 483 A.2d 912, 915 (Pa. Super. 1984).

8. Under Pennsylvania law, in order to recover on a breach of contract claim, the plaintiff must prove by a preponderance of the evidence: (1) the existence of a valid and binding

contract to which plaintiff and defendant were parties; (2) the essential terms of the contract; (3) that plaintiff complied in all material respects with the contract's terms; (4) that the defendant breached a duty imposed by the contract; and (5) that damages resulted from the breach. Technology Based Solutions, Inc. v. Electronics College, Inc., 168 F. Supp. 2d 375, 381 (E.D. Pa. 2001); A.G. Cullen Constr. Co., Inc. v. State Syst. of Higher Ed., 898 A.2d, 1145, 1161 (Pa. Cmwlth. 2006).

9. In asserting a claim for recovery on a breach of contract, it is the asserting party's burden to show that the facts exist to support the requested recovery. Paliotta v. Dep't of Transp., 750 A.2d 388, 390 n.2 (Pa. Cmwlth. 1999).

10. A contractor is entitled to additional compensation for extra work when it demonstrates that work it performed was requested by the owner, and that it was not required by the terms of the contract as agreed to by the parties. A.G. Cullen Constr. Inc., 898 A.2d 1145, 1171 (Pa. Cmwlth. 2006) (citing Dep't of Transp. v. Gramar Constr. Co., 454 A.2d 1205, 1207 (Pa. Cmwlth. 1983); Dep't of Transp. v. Paoli Constr. Co., 386 A.2d 173, 175 (Pa. Cmwlth. 1978); Dep't. of Highways v. S.J. Groves & Sons Co., 343 A.2d 72, 76-77 (Pa. Cmwlth. 1975)).

11. The fundamental rule in interpreting the meaning of a contract is to ascertain and give effect to the intent of the contracting parties. Where the contract is free from ambiguity, the parties' intent is to be determined from the express language of the contract. LJL Transp., Inc. v. Pilot Air Freight Corp., 962 A.2d 639, 647 (Pa. 2009); Chester Upland Sch. Dist. v. Edward J. Meloney, Inc., 901 A.2d 1055, 1059 (Pa. Super. 2006).

12. Under the basic principles of contract interpretation, the entire contract should be read as a whole and in a manner to give effect to all its provisions. See, e.g., Capitol Bus Co. v. Blue Bird Coach Lines, Inc., 478 F.2d 556, 560 (3d Cir. 1973); Pritchard v. Wick, 178 A.2d 725, 727 (Pa. 1962); Harrity v. Continental-Equitable Title & Trust Co., 124 A. 493, 494-495 (Pa. 1924); Ex. 3.3, General Conditions at ¶ 2.2 (relating to contract interpretation; providing that "[t]he Contract Documents are complementary and what is required by any one of the Contract Documents is binding as if required by all").

13. Paragraph 2.2 of the General Conditions of the Wohlsen Contract requires that the Contract Documents be read as complementary. (Ex. 3.3, General Conditions at ¶ 2.2.)

14. A contract must be construed as a whole and the intention of the parties is to be collected from the entire instrument and not from detached portions, it being necessary to consider all of its part in order to determine the meaning of any particular part as well as the whole. Individual clauses and particular words must be construed in connection with the rest of the agreement, and all parts of the writing and every word of it, if possible, will be given effect. Mowry v. McWherter, 74 A.2d 154, 158 (Pa. 1950).

15. In interpreting a contract, a court must give effect to industry terminology and usage as it is understood in the trade. Department of Transp. v. L.C. Anderson & Sons, Inc., 452 A.2d 105, 106 (Pa. Cmwlth. 1980).

16. Wherever reasonable, the manifestations of intention of the parties to a promise or agreement are interpreted as consistent with each other and with any relevant course of performance, course of dealing, or usage of trade. Sunbeam Corp. v. Liberty Mut. Ins. Co., 781 A.2d 1189, 1193 (Pa. 2001)(quoting Restatement (Second) of Contracts § 202(5)).

17. Contracts must receive a reasonable interpretation, according to the intention of the parties at the time of executing them, if that intention can be ascertained from their language. Where the language of a contract is contradictory, obscure, or ambiguous, or where its meaning is doubtful, so that it is susceptible of two constructions, one of which makes it fair, customary, and such as prudent men would naturally execute, while the other makes it inequitable, unusual, or such as reasonable men would not be likely to enter into, the interpretation which makes a rational and probable agreement must be preferred. If one construction would make it unreasonable, while another would do justice to both parties, the latter will be adopted. Wilkes-Barre Twp. Sch. Dist. v. Corgan, 170 A.2d 97, 98-99 (Pa. 1961).

18. Because the planned depth of excavation went to "subgrade elevation" (i.e. top of the subgrade); because overexcavation and replacement of unsuitable subgrade was originally unauthorized and to be done only if subsequently directed and authorized by Blackmore, the Project's geotechnical engineer paid by DGS; because the means and methods of overexcavation and replacement (i.e. fills and materials used, depth, area and quantities of undercut, etc.) were dictated by Blackmore and were thus outside the exclusive control of Wohlsen; because the Wohlsen Contract contained several provisions assigning the expense of other contingent work (e.g. reworking) and unauthorized excavation to Wohlsen as contractor, but did not contain a similar clarifying provision assigning the cost of overexcavating and replacing unsuitable subgrade to the contractor; because, in line with trade usage, a reasonable bidder in the construction trade would understand Paragraph 3.04.B of the Earthwork Specifications along with Sub-Paragraph 1.06.G and other terms of the Wohlsen Contract (which left any overexcavation and replacement of unsuitable subgrade to be ordered at the discretion of the owner's geotechnical engineer) to mean that this contingent work was not part the work paid for by the original lump sum of the Wohlsen Contract but would be paid for separately; because, in the course of performing the Wohlsen Contract, when Wohlsen was asked to bid on a change order to perform work similar to the original Wohlsen Contract work and Wohlsen specifically included the potential cost of overexcavation and replacement of unsuitable soil in its cost structure, DGS specifically asked to remove this contingency cost from the change order work and agreed only to pay for such subgrade replacement work on an as-needed basis; because the "unclassified excavation" provision cited by

DGS and SCI applies to "excavation" and "materials encountered … down to required widths and depths," rather than overexcavation and replacement of unsuitable material (which by definition occurs below planned depths); and because the Board finds that a reasonable person in the construction trade would understand that overexcavation and replacement of unsuitable subgrade was contingent work not paid for by the original lump sum of the Wohlsen Contract but was rather to be tracked as performed and compensated for separately, if and as needed, the Board concludes that the Wohlsen Contract, as drafted and executed, did not require Wohlsen to overexcavate and replace unsuitable subgrade for the original lump sum amount. Exs. 3.1 to 3.16; C.O.L. 11-17, 19-20; Board Finding

19. "Where an agreement involves repeated occasions for performance by either party with knowledge of the nature of the performance and opportunity for objection to it by the other, any course of performance accepted or acquiesced in without objection is given great weight in the interpretation of the agreement." Restatement (Second) of Contracts at § 202(4). However, "such 'practical construction' is not conclusive of meaning. Conduct must be weighed in the light of the terms of the agreement and their possible meanings." Restatement (Second) of Contracts at § 202, Comment g.

20. DGS's course of performance in refusing to accept a change order for the berm and swale work with overexcavating and replacement of unsuitable subgrade included as part of the base price reinforces the Board's determination that it is not appropriate to read the Wohlsen Contract to require Wohlsen overexcavate and replace unsuitable subgrade as part of the original lump-sum payment on the Wohlsen Contract at its own expense. C.O.L. 16

21. Because we find that the overexcavation and replacement of unsuitable subgrade work performed by Wohlsen was not part of the lump sum contract work under the Wohlsen Contract, that Wohlsen performed same at the direction of DGS and incurred additional expense in performing this overexcavation and replacement of unsuitable subgrade, we conclude Wohlsen is entitled to compensation for this extra work. C.O.L. 10

22. The Wohlsen Contract provides for two types of concealed conditions which might entitle Wohlsen, as contractor, to additional compensation: (1) concealed conditions which are unascertainable from the plans, contract documents, visits to the site or reasonable investigation, and which are at variance with the conditions indicated in the contract documents; or (2) unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract. Ex. 3.3 General Conditions at ¶ 11.6.A.1-2

23. Because there was no real difference between the geotechnical information provided to all bidders and the subsurface conditions actually encountered, and because there is no indication in the record that the unsuitable subgrade actually encountered was extraordinary or materially different in either quality or quantity when compared to the geotechnical information

provided, the Board cannot find the factual conditions necessary to apply the concealed site conditions provision of the Wohlsen Contract. Ex. 3.3 General Conditions at ¶ 11.6.A.1-2

24. The plaintiff bears the burden of proof as to damages. The determination of damages is a factual question to be decided by the Board as factfinder. The Board must assess the testimony by weighing the evidence and determining its credibility, and by accepting or rejecting the estimates of the damages given by the witnesses. Although the Board may not render a verdict based on sheer conjecture or guesswork, it may use a measure of speculation in estimating damages. The Board may make a just and reasonable estimate of the damage based on relevant data, and, in such circumstances, may act on probable, inferential, as well as direct and positive proof. Clairton Slag, Inc. v. Dep't of Gen. Servs., 2 A.3d 765, 776 (Pa. Cmwlth. 2010).

25. Damages need not be proved with mathematical certainty. Rather, a contractor need only provide evidence that affords a sufficient basis for calculating damages with reasonable certainty. Acchione & Canuso, Inc. v. Dep't of Transp., 461 A.2d 765, 769 (Pa. 1983); Dep't of Transp. V. James D. Morrissey, Inc., 682 A.2d 9, 16 (Pa. Cmwlth. 1996).

26. Wohlsen has established its damages for overexcavation and replacement of unsuitable subgrade on the Project measured by unit rates (i.e. Unit Price Work) with reasonable certainty. Wohlsen is entitled to the actual cost of the Unit Price Work of $174,327. C.O.L. 10, 24-25

27. Wohlsen is not entitled to the $1,574 in unidentified damages included on its table of Unit Price Work, as the lack of any identification or reason for this charge renders it not credible. C.O.L. 24-25

28. Wohlsen is entitled to a 10% mark-up for overhead and profit on its Unit Price Work under the Wohlsen Contract. The amount of this mark-up is $17,433. Ex. 3.4 Administrative Procedures at p. 10-40; C.O.L. 10, 24-25

29. Wohlsen is not entitled to additional compensation for the extra days on site it claims for its quality control contractor, KAKS, as such damages were not established with reasonable certainty. C.O.L. 24-25

30. With the exception of the KAKS charge, Wohlsen is entitled to the remaining items of subcontractor and other expenses claimed as it has established them with reasonable certainty. The amount of additional cost to which it is entitled is $41,427. C.O.L. 10, 24-25

31. Wohlsen is entitled to a 10% mark-up on the additional cost incurred. The amount of this mark-up is $4,143. Administrative Procedures at p. 10-39-10-40; C.O.L. 10, 24-25

32. Wohlsen is entitled to a bond cost adjustment equal to the bond rate times the total Unit Price Work, additional expense and permitted mark-up. The amount of this adjustment is $1,452. Ex. 3.4, Administrative Procedures at p. 10-41; C.O.L. 10, 24-25

33. The total principal amount of damages to which Wohlsen is entitled for its extra work is $238,782. C.O.L. 10, 24-32

34. Under Section 3935 of the Procurement Code, 62 Pa.C.S. § 3935, the Board may award penalty interest for amounts that were withheld in bad faith, as well as attorney fees if the opposing party acted in bad faith. Payment is deemed withheld in bad faith "to the extent that the withholding was arbitrary or vexatious." "Arbitrary," for purposes of Section 3935, means "based on random or convenient selection or choice rather [than] on reason or nature." "Vexatious conduct" means "that which is committed without sufficient ground in either law or in fact with the purpose of causing annoyance." Dep't of Gen. Servs. v. Pittsburgh Bldg. Co., 920 A.2d 973, 990-991 (Pa. Cmwlth. 2007).

35. Although Wohlsen has prevailed on its claim for extra work, DGS raised cognizable, but ultimately unpersuasive, legal and factual defenses, both in regard to the issue of financial responsibility and the measurement of damages. Because the evidence presented was ultimately insufficient to establish that DGS acted arbitrarily, vexatiously or otherwise in bad faith in this matter, the Board denies damages under Section 3935 of the Procurement Code. C.O.L. 34

36. Because DGS failed to meet its evidentiary burden to show, inter alia, who between DGS and SCI actually drafted and finalized the specifications and contract terms here at issue, the Board concludes that DGS has failed to establish a breach of the SCI Contract on the part of SCI. Accordingly, SCI is not liable to DGS for breach of contract or for the damages DGS owes to Wohlsen. C.O.L. 8

37. Wohlsen is entitled to pre-judgment interest at the legal rate of 6 percent per annum applicable to the foregoing principal amount found due and owing from DGS from the date this claim was filed with the DGS contracting officer, April 24, 2012. 41 P.S. § 202; 62 Pa.C.S. § 1751.

38. Wohlsen is further entitled to post-judgment interest at the legal rate of 6 percent per annum on the outstanding amount of this judgment until paid. 41 P.S. § 202; 62 Pa.C.S. § 1751.

OPINION

Plaintiff Wohlsen Construction ("Wohlsen") seeks compensation for overexcavation and backfill replacement work it performed on unsuitable/unstable subgrade in the course of performing construction on the campus of Lincoln University in Chester County.[6] Wohlsen and Defendant Department of General Services ("DGS"), acting on behalf of Lincoln University, entered into Contract No. 1101-45/46.1 (the "Wohlsen Contract") for several improvements to the Lincoln University campus ("Project" or "45-46 Project"). These improvements included construction of three structures and reconstruction of roadways, pathways and parking throughout the campus. Joinder Defendant Simone Collins, Inc. ("SCI") was the design professional for the Project under a separate contract with DGS ("SCI Contract"). DGS claims that, should the Board find DGS liable to Wohlsen, then SCI should be held liable to DGS for a like amount.

Wohlsen asserts that the overexcavation and replacement of unsuitable subgrade it performed on the Project constituted work beyond that included in the lump sum contract amount, and for which it has not been fully compensated. Alternatively, it asserts that the condition of the subgrade encountered constituted a concealed site condition for which additional compensation is required. Wohlsen also seeks attorneys' fees, penalties and interest under the Prompt Payment Act at 62 Pa.C.S. § 3935.

DGS denies that the overexcavation and replacement of unsuitable soil on the Project is work beyond that included under the lump sum contract amount. It also denies that the unsuitable

[6] The Wohlsen Contract uses the term "unstable" while the parties often utilize the term "unsuitable" to describe the problem soils encountered on the Project. We use the two terms interchangeably to refer to the same conditions in this Opinion.

subgrade constituted a concealed site condition and contests that additional damages are due to Wohlsen under the Prompt Payment Act.

In its joinder claim, DGS asserts that if it is found liable to Wohlsen, then SCI—as Project design professional charged with developing the Project specifications—should be held liable to DGS for a breach of the SCI Contract with DGS. SCI denies liability to DGS on the joinder claim and independently asserts that DGS is not liable to Wohlsen on the original claim.

After careful consideration of the testimony and documents presented at hearing, as well as the post-hearing filings, the Board concludes the following: (1) the disputed overexcavation and replacement of unstable/unsuitable soil below subgrade elevation was work beyond that included under the lump-sum amount stated in the Wohlsen Contract for which DGS must compensate Wohlsen; (2) the unsuitable soil encountered did not constitute a concealed site condition on the Project; (3) DGS is not liable for additional damages under the Prompt Payment Act; and (4) DGS failed to establish liability on the part of SCI for breach of the SCI Contract. Accordingly, Wohlsen is entitled to its actual damages from DGS in the amount of $238,782 for extra work on the Project (plus pre- and post-judgment interest), and SCI is not liable to DGS on the joinder claim.

BACKGROUND

DGS originally conceived of the improvements to Lincoln University as two separate projects to be completed under separate contracts.[7] However, DGS later consolidated this work into a single project to be bid on and completed by a single set of prime contractors and commonly referred to as the "45-46 Project" (reflecting the combination of the two originally conceived

[7] The "45" project focused primarily on improvements to the roadways and paths at the University while the focus of the "46" project was the construction of the three structures noted above. Both included parking lot work.

projects). The documents that became the Wohlsen Contract included the Standard Form of Contract ("Standard Form" Ex. 3.3); General Conditions to the Construction Contract ("General Conditions" Id.); the Administrative Procedures for DGS Construction Contracts ("Administrative Procedures" Ex. 3.4); Earthwork Specifications and other specifications (in volumes titled "Project Manual" Vols. 1 and 2) including Ex. 3.6 (for the "45" portion of the Project) and Ex. 3.8 (for the "46" portion of the project); and Drawings (Ex. 3.15), among other documents.[8]

Shortly after beginning excavation on the pavement construction/reconstruction portion of the Wohlsen Contract, Wohlsen encountered unsuitable subgrade at multiple locations around the Lincoln University campus. When this occurred, Wohlsen was then required to consult with DGS's geotechnical engineer for the Project, David Blackmore & Associates ("Blackmore"), who directed Wohlsen specifically as to where and how these unsuitable soils were to be overexcavated and replaced.[9] More precisely, it was Blackmore who decided where and what soils to overexcavate, to what depths below subgrade elevation this was to occur and what materials were to replace those soils back to subgrade elevation.

"Subgrade elevation" identified the top of the subgrade and began where "planned depths" for excavation on the Contract Drawings stopped (i.e., "planned depth" and "subgrade elevation" are synonymous). That is to say, the planned depth of excavation went down to the top of the

[8] There were minor differences in the two sets of Earthwork Specifications at Exs. 3.6 and 3.8 owing to the different focus of each and drawings for the structures built on the Project were not provided. However, these differences and omissions are not material to the issues before the Board.

[9] While it is not completely clear from the evidence presented in this case whether Blackmore was hired directly by DGS (or, more likely, indirectly as subcontractor to SCI), it is clear that Blackmore was engaged to perform quality assurance for DGS, to act as DGS's geotechnical engineer on this Project, and to determine where, what and how unsuitable subgrade soils were to be overexcavated and replaced. (N.T. 54-58, 294-300, 302-305; Exs. 2, 3.6 and 3.8 Earthwork Specifications at ¶¶ 1.05, 3.04 and 3.15; F.O.F. 31-33)

subgrade and the overexcavation of unsuitable soils was excavation beyond the planned depths shown on the Project drawings.

As it conducted the overexcavation and replacement work directed by Blackmore, Wohlsen sought extra payment for this work from DGS. For a period, DGS refused to pay anything for this overexcavation and replacement work, insisting that the work on the unstable subgrade was Wohlsen's duty and paid for by the original lump sum amount under the Wohlsen Contract. Eventually, DGS relented, in part, and paid for the overexcavation and replacement of soils more than two feet beneath subgrade elevation. However, DGS continued to insist that work on the first two feet beneath subgrade elevation was Wohlsen's cost responsibility under the Wohlsen Contract. DGS's internal justification for the extra payment it did make (as documented by DGS itself) was that the unsuitable soils encountered beyond two feet below subgrade elevation were a concealed site condition. (Exs. 25 and 74) The dispute in this matter is about which of the parties is responsible for the cost of overexcavation and replacement of material from zero to two feet beneath subgrade elevation.

ISSUES

Wohlsen's primary argument is that a fair reading of the Wohlsen Contract, taken as a whole, indicates that the overexcavation and backfill of unsuitable soil below planned depth/subgrade elevation (i.e. the top of the subgrade), if any was required, was to be paid for separately as additional compensation over and above the original contract amount. Wohlsen invokes several basic principles of contract interpretation as well as the parties' course of conduct to support this reading. It also argues, significantly we believe, that because this overexcavation and backfill was initially unauthorized and to be done only if expressly authorized and directed by

DGS's geotechnical engineer (Blackmore) it would be understood by all contractors in the construction industry to mean such work was of a contingent nature to be done only if required at the engineer's discretion and paid for outside the original contract work. Alternatively, Wohlsen asserts that the unsuitable soil from zero to two feet below subgrade elevation, like the unsuitable soil recognized by DGS more than two feet below subgrade elevation, was a concealed site condition entitling it to additional compensation pursuant to Section 11.6 of the Contract.

DGS and SCI respond by arguing that the Wohlsen Contract, and Paragraph 3.04 in particular, is perfectly clear that the first two feet of overexcavation below subgrade was required to be performed at no additional cost. They further assert that there is no course of conduct which lends itself to an interpretation that Wohlsen is owed additional compensation for the disputed work.

Although DGS paid Wohlsen additional compensation for removal and replacement of unsuitable soil more than two feet below subgrade elevation on the basis that it was a concealed site condition, DGS and SCI contend that Wohlsen cannot claim additional compensation for concealed site conditions pursuant to Paragraph 11.6 for the first two feet of overexcavation and replacement below subgrade elevation. DGS's apparent reason for differentiating the soil at the two different levels is not that the soil characteristics were different but because it believes the first two feet were within the Wohlsen Contract's original scope of work and paid for by the lump sum contract price. DGS and SCI also argue that Wohlsen waived this claim because it was required to examine the site under the contract documents but failed to investigate subsurface conditions on the Project prior to bidding. DGS further contends that, even if it is found responsible for the disputed overexcavation and replacement work, it should not be liable for penalty damages under

the Prompt Payment Act because its conduct in refusing Wohlsen's claim for additional compensation is not done in bad faith.

By its joinder claim, DGS asserts that, if it is found liable to Wohlsen, then SCI is responsible for damages to DGS. It reasons that any such liability on its part to Wohlsen will have meant that SCI breached its contract with DGS to provide clear and proper specifications for the Project.

For its part, SCI supports and reiterates DGS's contractual and factual defenses to Wohlsen's claim and raises additional substantive arguments in its own defense. In these additional arguments, SCI contends that DGS will be required to prove a breach of a professional standard of care to prevail against it and has failed to do so; that the damages alleged by Wohlsen, even if proven, fall beneath a 3% threshold for compensable liability due to errors and omissions damages under the SCI Contract; and that no breach of the SCI Contract was proven by DGS.

Finally, both DGS and SCI assert that the damages claimed by Wohlsen are excessive. Among other things, they question the rates charged for the work at issue (including mark-ups beyond what is permitted by the Wohlsen Contract); the potential double counting of work; and the "unjustified" premiums for extended workdays. They also argue that the time claimed for Wohlsen's quality control subcontractor (KAKS) is overstated (being not solely attributable to the required overexcavation and replacement work as distinguished from time when KAKS was already on site doing regular contract work).

DISCUSSION

Overexcavation and Replacement of Unsuitable Subgrade Requires Additional Compensation

Contractual provisions particularly relevant to the first issue of whether or not the Wohlsen Contract contemplated "all-inclusive" versus separate compensation for overexcavation and replacement of unsuitable soils below subgrade elevation include Paragraphs 1.02, 1.06 and 3.04. These state, in relevant part:

1.02 SUMMARY

> A. The Work in this Section includes furnishing all materials, labor, supervision, tools, equipment, tools [sic], and performing all operations and incidentals necessary for earthwork. Earthwork activities include but are not limited to subgrade preparation, excavating, backfilling, and compaction for the structures and foundations, pavements, sidewalks, landscape areas, and utilities. The Contractor shall pay for and coordinate the services of a geotechnical engineer and testing agency to perform quality control of the earthworks.
>
> . . .

1.06 DEFINITIONS

> G. Excavation: Removal of material encountered down to subgrade elevations.
>
> ***
>
> 2. Overexcavation: Excavation of existing unsuitable material beyond limits shown on the Drawings for replacement with structural fill as directed by the Professional.
> 3. Unauthorized excavation: Excavation below subgrade elevations or beyond limits shown on the Drawings without direction by the Professional.
>
> . . .
>
> J. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below base or topsoil materials.

. . .

3.04 GENERAL EXCAVATION

A. Excavate to subgrade elevation. Compact subgrade surface in accordance with Paragraph 3.12.

B. Any soft or unstable material shall be overexcavated and replaced with compacted load bearing fill as directed by the geotechnical engineer. Any areas of instability shall be overexcavated to a depth of at least 2 feet and replaced with structural fill in accordance with Paragraph 3.12.

(Exs. 3.6 and 3.8 Earthwork Specifications) (Emphasis added).

As noted above, Wohlsen asserts that a reasonable person engaged in the construction industry would understand the language in Paragraph 3.04.B of the Earthwork Specifications and the Wohlsen Contract, taken as a whole, to mean that overexcavation and replacement of unsuitable soils below the planned depth of excavation would be performed only upon the authorization and direction of DGS's geotechnical engineer and that the cost of this work would be calculated as it was performed and compensated separately from the original lump-sum amount stated in the Wohlsen Contract. DGS, for its part, wishes the Board to focus on the general summary of work in Paragraph 1.02 and the language of Paragraph 3.04.B while more or less disregarding the definitions of Paragraph 1.06.G, the effects of other provisions in the Wohlsen Contract and the drawings incorporated therein. The essence of DGS's argument is that, because the general summary of work includes "subgrade preparation", "excavating" and "backfilling", and because the procedure for overexcavation and replacement of unsuitable soil below subgrade

is noted in Paragraph 3.04.B, that any and all costs to do this work have been shifted to the contractor.

Although momentarily tempting, we believe DGS's reading runs contrary to several basic principles of contract interpretation, as well as the real world context of the construction industry. For a start, the mere fact that the potential for overexcavation and replacement of unsuitable soils on the site is noted in the specifications is not conclusive that it is intended to be covered by the originally stated contract amount. Many construction contracts contemplate the possibility of unsuitable soils and outline the procedure for dealing with such a contingency without necessarily shifting the cost of replacing same entirely to the contractor. This is especially true where the remedy (and hence the costs) are determined solely at the discretion of the owner or a third-party paid by the owner (e.g. the project design professional and/or geotechnical engineer). While we will expand on this point further along in this opinion, we make this observation now to highlight the importance of looking at accompanying contract provisions and documents, and reading these as a whole, to ascertain the reasonable and appropriate effect of the provision at issue. See e.g., Harrity v. Continental-Equitable Title & Trust Co., 124 A. 493, 494-495 (Pa. 1924); Pritchard v. Wick, 178 A.2d 725, 727 (Pa. 1962); Capitol Bus Co. v. Blue Bird Coach Lines, Inc., 478 F.2d 556, 560 (3d Cir. 1973).

To begin this process, we go first to the pertinent definitions contained at Paragraph 1.06.G. Comparing the defined terms "Excavation", "Overexcavation" and "Unauthorized Excavation" while reading these terms in conjunction with the Project drawings (also part of the Contract documents) confirms that the extent of soil or earth removal originally planned for the Project went only to the top of the subgrade (i.e. top of subgrade, "subgrade elevation", planned depth and "limits shown on the Drawings" are all synonymous). It also establishes that the removal or

replacement of subgrade soils was not originally authorized by the Contract but would only be done if subsequently authorized and directed by Blackmore, a third-party paid by DGS.[10]

The foregoing definitions, when read in conjunction with Paragraph 6.6 of the General Conditions, also support Wohlsen's reading of the Earthwork Specifications and Paragraph 3.04.B. Paragraph 6.6 of the General Conditions explicitly embodies the long-established industry concept that it is the contractor that has exclusive control over the means, methods and techniques of performing its contract work. Under DGS's reading, Paragraph 3.04.B expressly removes all control from the contractor over means, methods, and techniques of performing what DGS says is basic contract work. This mechanism permits a third-party paid by DGS to unilaterally increase "contract" work as well as dictate the kind and means of performing this work. Thus, DGS's interpretation of the Earthwork Specifications would allow a third-party paid by DGS to increase the contractor's cost at its discretion by exercising substantive post-bid control over not only the quantity of work but also the means and methods utilized by Wohlsen, while holding Wohlsen to a fixed price.

Moreover, both the definition of "Unauthorized Excavation" and other parts of the Wohlsen Contract documents make it abundantly obvious that DGS knew perfectly well how to clearly and expressly allocate contingent costs to the contractor when it intended to do so. For instance, Paragraphs 1.05 and/or 3.15, relating to quality assurance and quality control, specified that Wohlsen was required to "rework" unsuitable soils in certain instances "at [its] own expense." Another example occurs at Sub-paragraph 3.07.B which states that the contractor "is responsible

[10] The foregoing definitions in Paragraph 1.05 clearly assign this power to determine, authorize and direct overexcavation and replacement of unsuitable subgrade soils to the Project Professional (i.e. SCI). Just as clearly, this authority was, in practice, delegated to Blackmore as the Project's geotechnical engineer. This apparent delegation conforms Paragraph 1.05 with the otherwise contradictory instruction in Paragraph 3.04.B to perform this overexcavation and replacement at the direction of the geotechnical engineer. See Footnote 9

for furnishing all materials, labor, … associated with unauthorized excavations without additional compensation." In contrast, Paragraph 3.04, and Sub-paragraph 3.04.D in particular, which addresses authorized overexcavation (of the type here at issue) contains no such clarification.

Paragraphs 1.05 and 3.15, among others, also help to illustrate what was meant by the general term "subgrade preparation" in Paragraph 1.02 which is pointed to by DGS. Specifically, this term contemplates the Contractor will bring the ground to subgrade elevation, perform quality control tests to assure that proper compaction and moisture criteria are met, "rework" said subgrade if there was found to be a problem with the subgrade compaction or moisture content initially, and then "re-test" same. This preparation and/or "reworking" might include rolling, drying or other manipulation of the soil done in place but, as testified to by witnesses from both sides, does not extend to overexcavation and replacement of soils ultimately determined to be unsuitable. (N.T. 57, 167-171, 282-288, 294, 338-346, 399-400).

It is one thing to require a contractor to bear a certain risk clearly spelled out. It is quite another to allow an agency to leave the allocation of cost for a contingent liability unstated or expressed in an unclear manner; obtain a lump-sum bid; retain or assign to a third-party paid by it the exclusive right to subsequently determine the extent and cost of such contingent liability, and then expect the Board to favor its interpretation. To the contrary, only a reading which contemplates additional compensation for work ordered by a third-party paid by DGS after bidding and execution appears reasonable to the Board in the context of the construction industry and this contract. As the Pennsylvania Supreme Court has explained:

> Contracts must receive a reasonable interpretation, according to the intention of the parties at the time of executing them, if that intention can be ascertained from their language...Where language of a contract is...susceptible of two constructions, one of which makes it fair, customary, and such as prudent men

> would naturally execute, while the other makes it inequitable, unusual, or such as reasonable men would not be likely to enter into, the interpretation which makes a rational and probable agreement must be preferred. If one construction would make it unreasonable, while another would do justice to both parties, the latter will be adopted.

Wilkes-Barre Twp. Sch. Dist. v. Corgan, 170 A.2d 97, 99 (Pa. 1961) (citations omitted). Given the interpretations offered in this case and reading the Wohlsen Contract as a whole, the Board finds Wohlsen's interpretation to be reasonable while DGS's (and SCI's) proposed interpretation strikes the Board as "inequitable, unusual, or such as reasonable men would not be likely to enter into," as well as "irrational and improbable."

Most convincing, however, was the testimony of Brian Laub, the Project Manager for Wohlsen. Mr. Laub testified to the effect that a contractor reading Sub-Paragraph 3.04.B of the Earthwork Specification would understand that, because the overexcavation, removal and replacement of unsuitable soil below subgrade elevation was to be done only if, when and where specifically authorized and directed by DGS's geotechnical engineer, that additional compensation would be provided if and when work under Paragraph 3.04.B was ordered. (N.T. 277-278). In point of fact, Mr. Laub's testimony is in full and complete agreement with the Board's experience and observation of construction industry practice and terminology. That is to say, the Board agrees with Mr. Laub and finds that, in line with trade usage, a reasonable person engaged in the construction industry would understand the language in Paragraph 3.04.B of the Earthwork Specifications and the operative definitions of Sub-paragraph 1.06.G (requiring that overexcavation and replacement of unsuitable soils be performed only upon the authorization and direction of DGS's geotechnical engineer) to mean that the cost of this work would be tracked as it was performed, and compensated separately from the original lump-sum amount stated in the Wohlsen Contract.

Frankly, it is this aspect of the case which the Board finds disturbing. More specifically, it is our belief that the drafters and/or reviewers of these Project specifications for DGS and/or SCI knew full well how Paragraph 3.04.B would be read by bidding contractors, and anticipated bids without the contingent cost of unsuitable soil removal/replacement included, yet nonetheless come to the Board to argue to the contrary when the contingency arises. That this scenario is a distinct possibility, given the construction industry experience we expect from DGS and its Project professionals, is further suggested by the circumstance described in Wohlsen's last argument, i.e. that the parties' course of conduct adds further support to its interpretation.

On this last point, the evidence presented shows that, sometime following the start of the Project, DGS requested some admittedly extra work. This extra work request added a small but additional portion of the Lincoln University campus to this improvement Project and entailed excavation and roadway/pathway construction of the type being done on the original Project. Wohlsen, being then aware of DGS's interpretation of Paragraph 3.04.B, gave DGS a price which included the cost of potential removal and replacement of unsuitable soil below subgrade. DGS flatly rejected this proposal. Instead, it requested, and agreed to, a less expensive alternate proposal which priced only the planned work, with any removal and replacement of unsuitable soils to be paid for by DGS on a contingency basis, if and when needed. Although, perhaps, not strictly speaking, a "course of conduct" between the parties in performing the original Wohlsen Contract, we find this evidence to be highly indicative of DGS's approach to this Project and supportive of Wohlsen's view of the Earthwork Specifications in the Wohlsen Contract.

For all the reasons set forth above, the Board finds that the Wohlsen Contract, including Paragraph 3.04.B, does not include the cost of removing and replacing unsuitable soil within the first two feet below subgrade elevation in the originally stated lump sum amount. To the contrary,

the Board concludes that the overexcavation and replacement of unsuitable soils performed between zero and two feet below subgrade elevation constitutes extra work which entitles Wohlsen to additional compensation to the extent it can support the reasonable cost of same.

Wohlsen is Not Entitled to Recover on its Concealed Subsurface Condition Claim

While the Board has found that Wohlsen is entitled to recovery for its extra work in overexcavating and replacing the unsuitable subgrade, the Board rejects Wohlsen's claim that it encountered a concealed subsurface condition. Section 11.6 of the General Conditions provides, in pertinent part, as follows:

> 11.6 CONCEALED CONDITIONS
>
> A. The Department recognizes two types of concealed conditions which might be encountered during the performance of the Work, namely:
>
> 3. Concealed conditions which are unascertainable from the plans, Contract Documents, visits to the site, or reasonable investigation, and which are at variance with the conditions indicated by the Contract Documents; or
>
> 4. Unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.
>
> B. The Contractor has seven (7) days after the first observance of the concealed condition to provide written notice to the Department.
>
> C. If the Department decides that either of the two concealed conditions described above in (A) has occurred during construction, then the Contract Sum shall be equitably adjusted by Change Order. No adjustment shall be made to the Contract Sum under this paragraph, however, for concealed conditions encountered during the cutting and patching of work.

(Ex. 3.4 General Conditions at ¶ 11.6)

To begin here, the Board appreciates the apparent logic of Wohlsen's argument that: (a) the subsurface conditions encountered beyond two feet below subgrade elevation were essentially the same as the subsurface conditions encountered between zero and two feet of subgrade elevation and (b) by the executed change order granting additional compensation for work beyond two feet, DGS has acknowledged that the soil encountered more than two feet below subgrade elevation was a concealed site condition and, therefore, compensable under ¶ 11.6 of the General Conditions. However, the evidence presented shows clearly that the geotechnical information provided to all bidders (e.g. the soil boring logs) and that made available (the geotechnical report) indicate there was no real difference between the subsurface conditions described in this geotechnical information and the subsurface conditions actually encountered both within and below the first two feet of subgrade. Furthermore, there is no indication in the record that the unsuitable subgrade actually encountered was extraordinary or materially different in either quality or quantity when compared to the geotechnical information provided to all bidders on the Project. Therefore, regardless of DGS's justification or reasoning for compensating Wohlsen for some of the unsuitable subgrade removal and replacement, the Board cannot find that the factual conditions to invoke Paragraph 11.6 of the General Conditions have been met.

Wohlsen's Damages

Wohlsen contends it removed and replaced 7,339 cubic yards of unsuitable soils for which it has not been compensated. The Board found the testimony and exhibits presented by Wohlsen credible with respect to the claimed unit quantities of unsuitable subgrade removed and replaced. There remains, however, a dispute over the applicable unit rates for this work.

Wohlsen's claimed unit prices for this work are taken from a change order listing identical rates DGS paid for similar work on an executed change order (i.e. unit rates that Wohlsen proposed and DGS accepted in the change order paying for the overexcavation and replacement of soils beyond two feet below subgrade). These rates were as follows: for unsuitable soils replaced with 2A material, $45.00 per cubic yard ("CY"); for unsuitable soils replaced with 2RC material, $41.00 per CY; for unsuitable soils replaced with on site material, $20.00 per CY. (Ex. 74).

Wohlsen's claimed damages, measured by the foregoing unit rates were set forth in a table prepared by Brian Laub. These are as follows:

QTY (Q)	UNITS (U)	DESCRIPTION	UNIT COST (MU)	COST TOTAL (Q x MU)
6309	CY	Unsuitable Soil CY Cost to date Replaced with 2A	$45.00	$283,909.95
425	CY	Unsuitable Soil CY replaced with on site material	$20.00	$8,500.00
605	CY	Unsuitable Soil CY at Field House replace with 2RC	$41.00	$24,805.00
				$1,574.10
		PRE-MARKUP MATERIAL	COST TOTAL	$318,789.05
			SALESTAX	$0.00
			SUBTOTAL	$318,789.05
			10% OVERHEAD	$31,878.91
		TOTAL MATERIAL COST		$350,667.96

(Ex. 53)

There is no evidence of record or indication in Wohlsen's brief what work is represented by the $1,574.10 item listed above.

DGS and SCI adduced evidence on cross-examination indicating that Wohlsen had added a 15% mark-up to the unit rates set forth above, before addition of the 10% mark-up permitted for overhead and profit noted in the chart above. Mr. Laub did not dispute this but testified that Wohlsen's total mark-up in the foregoing table was intended to cover its "risk."

The Administrative Procedures for DGS, which are incorporated into the Wohlsen Contract, permit only a 10% mark-up on extra work to cover overhead, general support, and profit for equipment and subcontractors. (Ex. 3.4, Administrative Procedures at 10-39 to 10-40). There is no contractual support for the additional 15% "risk mark-up" incorporated into the unit rates now claimed by Wohlsen for the still disputed work, nor is there evidence that this additional mark-up covers a cost actually incurred. Thus, while the Board finds the unit price of the contested work claimed by Wohlsen is not unreasonable,[11] neither can we find a justification for this additional mark-up over actual costs incurred. Accordingly, we must conclude that Wohlsen is entitled to the lower 10% mark-up as per the Wohlsen Contract.[12] Modifying the above table to account for the actual unit cost incurred by Wohlsen and the contractually-permitted 10% mark-up (still excluding the unexplained $1,574 item) the corrected unit price work damages table is as follows:

[11] The Board recognizes that this unit rate claimed by Wohlsen was agreed to for purposes of the change orders which covered overexcavation and replacement work below two feet. While the fact that the unit rate now proffered for the contested work was agreed upon for some earlier work would confirm that the unit rate is reasonable, that unit rate was simply not agreed upon for this contested work, and we find it more appropriate to refer to the contractually noted mark-up under these circumstances.

[12] The Wohlsen Contract provides for a 10% mark-up for general overhead and profit for the type of work performed here by its excavation subcontractor(s). Ex. 3.4, Appx. J., Administrative Procedures for the DGS Construction Contract at 10-40 ("'The Prime Contractor may claim mark-up for overhead, general support and profit equal to 10% times the sum of the total costs realized by the Prime's Sub-Contractor in performance of the work.")

UNIT PRICE WORK

QTY (Q)	UNITS (U)	DESCRIPTION	UNIT COST (MU)	COST TOTAL (Q x MU)
6309	CY	Unsuitable Soil CY Cost to date Replaced with 2A	$23.13	$145,927
425	CY	Unsuitable Soil CY replaced with on site material	$17.00	$7,225
605	CY	Unsuitable Soil CY at Field House replace with 2RC	$35.00	$21,175
		PRE-MARKUP MATERIAL	COST TOTAL	$174,327
			SALESTAX	
			SUBTOTAL	$174,327
			10% OVERHEAD	$17,433
		TOTAL MATERIAL COST		$191,760

(Ex. 53)

Wohlsen also incurred other subcontractor costs associated with the disputed work. (Ex. 53, Wohlsen Change Order Worksheet). With one exception, the Board has found the testimony of Mr. Laub regarding the items of additional contractor work (and material, in the case of the roll of terragrid) to be credible and convincing. The one exception is the $34,224 for 69 days of "extra" KAKS quality control testing.

DGS and SCI contend that the KAKS charge should be denied because Wohlsen's witness, Brian Laub, admitted that KAKS was doing quality control work on site for regular contract work rather than solely for work on overexcavated and replaced subgrade on those days. In fact, Wohlsen's witness testified that he had reached the count of 69 days in an indirect fashion, not by specific KAKS invoices, but based on counting the days represented by the invoices in Exhibit 53 (which are for the subcontractors used to perform the overexcavation and replacement work). On balance, the Board does not believe that Wohlsen

has carried its burden to show that the 69 days of time claimed were, in fact, wholly devoted to quality control of only the unsuitable subgrade that was removed and replaced. As this failing prevents this item of damages from being calculated with reasonable certainty, the Board denies recovery of this cost item.

With regard to the remaining non-unit price costs claimed by Wohlsen, we are satisfied that Wohlsen has established it reasonably incurred these charges. As set forth in the Findings of Fact, Wohlsen is entitled to recoup the following items of subcontractor work and materials with the permitted 10% mark-up:

ADDITIONAL CONTRACTOR WORK

COMPANY NAME		TOTAL COST
Kaks Testing/Inspection Cost 69 Days		$0.00
Roll Terragrid		$1,128.90
Burkholder Alumni Lot		$14,281.33
Trinity Premium Time Maple Drive		$4,936.12
Trinity Premium Time Gym Lot		$1,116.23
Trinity Undercut Sidewalk Area		$548.58
Burkholder		$11,779.69
Trinity Undercut Sidewalk Area		$4,185.46
Long Jump Pit Undercut		$3,450.55
* TOTAL COST FROM SUB-CONTRACTOR 'S		$41,426.85
10% OVERHEAD	SUBTOTAL	$4,142.69
	TOTAL	$45,569.54

Wohlsen is also entitled to a corresponding bond cost adjustment.[13] Accordingly, we find that Wohlsen has incurred total damages due to the extra work of overexcavation and replacement

[13] Id. at 10-41 ("The Contractor shall then apply the adjustment to contract bond which is equal to the Contractor's bond rate times the Change Order cost subtotal").

of the first two feet of unsuitable subgrade below planned depth in the amount of $238,782, as itemized (and rounded to the nearest dollar) in the following table:

SUMMARY OF DAMAGES

TOTAL UNIT PRICE WORK		$191,760
TOTAL SUBCONTRACTORS		$45,570
	SUBTOTAL	$237,330
BOND COST ADJUSTMENT (ON SUBTOTAL)	.00612 Bond Cost Adjustment	$1,452
	TOTAL	$238,782

Wohlsen is not Entitled to Penalty Interest and Attorneys' Fees under the Prompt Payment Act

Wohlsen seeks penalty interest and attorney's fees under the Prompt Payment Act, 62 Pa.C.S. § 3935. Under Section 3935, the Board or a reviewing court may award a penalty equal to 1% per month of the payment amount that was withheld in bad faith. Pittsburgh Bldg. Co., 920 A.2d at 990. Payment will be deemed to be withheld in bad faith "to the extent that the withholding was arbitrary or vexatious." Id. (quoting 62 Pa. C.SA. § 3935(a)). Moreover, a prevailing party in an action to recover payment may be awarded reasonable attorney fees if the opposing party "acted in bad faith." Id. (quoting 62 Pa. C.S.A. § 3935(b)). Bad faith for purposes of the foregoing will be found when the withholding of payment was "arbitrary or vexatious." Id. The Commonwealth Court has defined the word "arbitrary," for purposes of Section 3935, as "based on random or convenient selection or choice rather [than] on reason or nature." Id. at 991. Further, the words "vexatious conduct" are defined as "that which is committed without sufficient ground in either law or in fact with the purpose of causing annoyance." Id.

While the Board has found DGS liable for the extra work Wohlsen was required to perform to remove and replace the unstable subgrade on the Project site, the Board does not find that an

award of penalty interest or attorneys' fees is merited. Although we have expressed concern over the language used by those who drafted the Wohlsen Contract, and the Earthwork Specifications in particular, there has not been sufficient evidence introduced for the Board to conclude there was a purposeful attempt to mislead bidding contractors. Therefore, even though Wohlsen has prevailed on its claim, DGS did raise cognizable (if ultimately unpersuasive) legal and factual defenses, both in regard to the issue of financial responsibility and the measurement of damages. Given this, the Board cannot conclude that DGS was either arbitrary or vexatious in its refusal to make payment on Wohlsen's claim for additional compensation.

DGS Fails to Establish SCI's Liability for Breach of Contract

DGS asserted in its second amended joinder claim against SCI that, if DGS were found liable to Wohlsen, then SCI's actions or inactions in performance of the SCI Contract would be the cause of DGS's liability and, hence, any damages experienced by DGS as a result of such liability. Specifically, DGS appears to argue that such a circumstance would mean that SCI had breached the SCI Contract by drafting faulty specifications for the Wohlsen Contract. Now that the Board has given a thorough review of the evidence presented in this case, or more accurately, the lack of evidence presented by DGS on its joinder claim, we must conclude that DGS has failed to meet its burden to show a breach of contract by SCI.

In support of its joinder claim, DGS presented the testimony of two witnesses, Michael J. Hudzik and Daniel Weinzierl. Mr. Hudzik is the Eastern Regional Director of Construction for DGS and held the same position at all times relevant to this matter. In his job as Regional Director, Mr. Hudzik oversees construction management and inspection of construction projects in his region. Although Mr. Hudzik did testify generally with respect to the contractual obligations of

SCI, he did not participate in the drafting of the Wohlsen Contract specifications and offered no testimony as to who actually prepared the Wohlsen Contract specifications which gave rise to the dispute between Wohlsen and DGS. Mr. Weinzierl, Director of Construction for DGS's Bureau of Construction, likewise had no knowledge of the actual roles of DGS and SCI in drafting and preparing the specifications here at issue. Neither Mr. Hudzik nor Mr. Weinzierl knew of any actual discussion, acts or omissions that might have taken place by DGS or SCI in creating the specifications at issue.

DGS's entire presentation in its case against SCI was essentially to present the SCI Contract documents, which identify SCI's contractual obligations, but do not establish what SCI actually did or did not do in terms of drafting Sub-paragraph 3.04.B, the specifications generally, or any other relevant portion of the Wohlsen Contract. Given a complete absence from the record of evidence establishing what SCI actually drafted, the Board must conclude that SCI is not liable for breach of the SCI Contract or for the damages DGS owes to Wohlsen.

In accordance with the foregoing, the Board enters the following Order:

ORDER

AND NOW, this 14th day of July, 2016, it is **ORDERED AND DECREED** that judgment is entered against the Commonwealth of Pennsylvania, Department of General Services and in favor of Wohlsen Construction in the amount of $299,305, comprised of the principal amount of $238,782 plus prejudgment interest of $60,523. Wohlsen Construction is further awarded post-judgment interest at the legal rate of 6% per annum on the outstanding amount of this judgment until paid.

It is further **ORDERED AND DECREED** that a judgment of no liability is entered on the joinder claim filed by Commonwealth of Pennsylvania, Department of General Services against Simone Collins, Inc.

BOARD OF CLAIMS

_____
Jeffrey F. Smith
Chief Administrative Judge

ORDER SIGNED

_____
Harry G. Gamble, P.E.
Engineer Member

_____
Andrew Sislo
Citizen Member