

COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX, SS

SUPERIOR COURT
CIVIL ACTION
NO. 07-04549D

TLT CONSTRUCTION CORP.,
Plaintiff
v.

TOWN OF READING,
Defendant.

**MASTER'S DRAFT REPORT TO COUNSEL PURSUANT TO
MASS. R. CIV. P. 53(g)(2) RE: STADIUM LIGHTS**

Pursuant to the Master's Status Report to the Court dated July 30, 2015, and
Mass. R. Civ. P. 53(g)(2), the Master submits to counsel this Draft Report Re: Track.¹

Findings of Fact

I. Background

R1. Installation of stadium light poles was not originally part of the scope of the
Reading – TLT Contract. (Dunlap, Tr. 16: 9:22 – 10:4)

[895 duplicates the above.]

¹ For purposes of this draft, and for counsel's reference, I have retained the paragraph numbers of the parties' proposed findings from which my findings were, at least in part, drawn. (A paragraph number without a letter prefix ("168") indicates that the paragraph references that paragraph from TLT's proposed findings; references to Reading's proposed findings are indicated as, e.g., "R75.") I have edited, often heavily, the parties' proposed findings, and omitted a number on both sides for various reasons, including because they were duplicative, denied, or subsumed in other findings. (Pursuant to counsel's request, I have attempted to indicate, as to many if not every one of their proposed findings, my rulings thereon.) On occasion, for clarity, I have indicated new text by underlining it, and portions of deleted text, by striking through it. I have also retained, for the most part, and with editing and supplementation, the parties' citations to the record. TLT exhibits are listed as, e.g., "T123," Reading exhibits, as "R1-123."

R2. In 2005 there were discussions among Reading, DPC and TLT regarding the addition of stadium light poles to the Contract. (Dunlap, Tr. 16: 10:4 – 11)

898. The field lights were to be funded by outside sources, and thus funds for completion of this work were limited to purchase and installation costs. (Cormier, Tr. 7: 171-172)

899. On March 28, 2005, DPC provided Reading with a proposal for additional design services “to add sports lighting at Reading High School football field” in the amount of \$18,850. T9196. (Capaldo, Tr. 26: 252-256)

900. In order to save money, Reading elected to not engage DPC or Ai3 to design and administer the work related to the field light installation. (R6-282 to R6-283; Capaldo, Tr. 26: 255)

901. Instead, Reading elected to pay only “the direct cost of their electrical engineers’ design for the minimum amount of electrical infrastructure.” R6-282

902. TLT made Reading aware that the cost and work involved in adding the lights would greatly increase after the new artificial field itself was installed because, among other issues, all electrical service would have to be routed around the field (instead of under it), and great care would have to be exercised in excavating for installation of the light pole bases so as not to damage the new artificial turf field. (Cormier, Tr. 7: 172-173)

903. Accordingly, Reading directed TLT, and TLT directed its subcontractor, East Coast, to install conduit running underneath the proposed artificial football field prior to installation of the field, and to excavate initial holes for the installation of the football stadium field lights. (R6-4; Cormier, Tr. 7: 176-178)

On July 12, 2005, Capaldo emailed to Cormier the following (all sic):

Did we (Griffin [Wayne J. Griffin Electric, Inc., TLT's electrical subcontractor] or TLT) coordinate with the Musco Lighting [a stadium field lights supplier] on the requirements for thier pole bases. I understand that they are pre-cast bases that will set-in to your holes??? The Contact person at Musco is Brian McCarthy 508-260-1414

R6-12

[904, R7, and R8 duplicate the above.]

905. Cormier then inquired of James Gardner of Griffin as to whether or not he had been able to find a standard sleeve (for installation of pole bases) to allow TLT to perform deep earthwork in preparation for installation of the pole bases without limiting the selection of suppliers of the light system. (R6-12; Cormier, Tr. 7: 173-175)

R3. On or about July 14, 2005, DPC issued to TLT an Architect's Supplemental Instruction (ASI) No. 91 that included two sketches showing the location of future light poles to be installed at the stadium (football field) on the Project site. (R6-1 – 3; Capaldo, Tr. 17: 25:11 – 26:16)

[906 duplicates the above.]

907. ASI 91 directed TLT to install light poles at the indicated locations. (R6-1)

910. ASI 91 did not specify any depth for excavation for the light pole bases. (R6-1 to R6-3; Capaldo, Tr. 30: 132)

[R4 duplicates the above.]

The printed ASI form contains the following text: "These instructions have been determined by the Architect to be minor changes to the work not involving adjustment in Contract Sum or Contract Time. The Contractor is directed to proceed immediately with the changes in the Work described herein." Capaldo used ASI No. 91 to forward to TLT

a sketch indicating the locations of the future light poles which he had been discussing with Cormier, and to instruct TLT to proceed, on a time and materials basis, to excavate holes at those locations. Cormier understood as much.

In view of the foregoing finding, TLT's proposed finding 909 is denied.

R5. Long prior to ASI 91, DPC had provided TLT with documents from a Medway High School Project consisting of a cover sheet entitled "Drilled Shaft Foundation Calculations 40' & 80' Sports Lighting Pole" dated August 26, 2004, a pole layout assembly drawing for CHM Sports Lighting dated 03/06/04, a lap detail drawing, and a sheet with information for drilled shaft dimensions, design notes and material specifications dated 08/26/04. (Capaldo, Tr. 17: 44:9 – 46:13; R6-5 – 8)

R6. Capaldo provided the Medway High School documents to TLT for budgetary pricing purposes only in connection with the discussions regarding possible installation of light poles for the stadium. (Capaldo, Tr. 17: 44:9 – 21, 57:20 – 59:11)

896. The Reading Conservation Commission Order of Conditions for the Project described the area around the football stadium as follows:

These areas were once an extensive swamp bordering the Aberjona River stream channel, which ran through the center of the playing field area from east to west. The swamp was filled by the Town to create the present facilities in the 1950's and 1960's, and over 700 feet of the Aberjona channel was diverted into a 64" by 42" arch culvert and buried under the fields. Two open sections of the stream channel remain within the site. The eastern, upstream channel runs along the side and end of the football/track stadium and then enters the arch culvert.

T227-T228

897. Although the Project specifications did include two geotechnical reports (see T48-T87), they did not provide any geotechnical report, or soil boring data, relating to the stadium light poles. (Capaldo, Tr. 30: 131)

912. Reading did not provide TLT with any authorization to proceed with a specific stadium field lights manufacturer until 2006. (Capaldo, Tr. 30: 135-136; T3411-3419 (Change Order 44 dated July 25, 2006))

R9. By letter dated July 21, 2005, TLT directed its subcontractor, East Coast Contractors, to proceed on a time and material basis to perform work for the future stadium lights, including installation of conduit, and to excavate and provide five foot diameter sleeves 12 linear feet deep to receive the light poles. (R6-4)

913. TLT did so without having specific direction from Reading as to the selection of a supplier, and without having authorization to purchase field lights. (Cormier, Tr. 7: 177-178; Tr. 8: 69-70)

961. In August 2005, when TLT began excavation for the stadium light poles, TLT had authorization from Reading only to dig holes and run conduit at locations identified in ASI 91.

TLT did not have specific direction from Musco or DPC with regard to the depth of the holes it was excavating. Capaldo's email to Cormier of October 2006 – after the need for sixteen foot deep holes had become apparent – inaccurately states that “on July 12, 2005, I gave you contact information for the Musco rep and asked you to coordinate the depth requirements with Musco.” R6-96. Rather, as quoted above, Capaldo's email of that date asks, “[d]id we (Griffin or TLT) coordinate with Musco Lighting on the requirements for thier [sic] pole bases,” and gives the number of the Musco contact person. Depth is not specifically mentioned, nor does ASI 91 address depth. In any event, TLT did not charge Reading for re-mobilization, the following year, when TLT excavated the holes to the sixteen foot depth. See R6-281.

As will be seen below, the sixteen-foot-depth requirement for Musco lights was not presented as an issue by TLT's failure to excavate to that depth in August of 2005; Cormier understood that it was the diameter, not the depth, that was critical in TLT's initial excavation of four holes as, essentially, place-holders for eventual installation of the lights. Depth of the holes became an issue because, when it later became apparent that the sixteen-foot-depth was required, and the necessary additional excavation was done, the unknown soil condition – rock – was discovered, and necessitated additional expense. All parties were on notice of the potential issue regarding soil conditions: as Capaldo testified, Musco “specifically took exclusion to responsibilities for soil conditions . . .” Tr. 30: 158.

914. TLT directed East Coast to provide a depth of twelve feet for the holes because that was the depth to which the machinery on site could excavate. In addition, it was Cormier's understanding that the product which Reading would eventually select would likely require a twelve foot excavation. (Cormier, Tr. 27: 5)

915. TLT was more concerned with the width of the holes than the depth, because it would have done more damage to the field (once it had been installed) to widen the holes, than to excavate deeper. (Cormier, Tr. 27: 6)

916. As Dunlap later stated to Supt. Schettini, “[t]hese were ‘generic’ holes placed expeditiously, just prior to the installation of the track base, in an effort to aid in future pole installation.” R6-282

R10. East Coast Contractors performed the excavation for the conduits on July 25, 2005, and performed the excavation for the light pole sleeves on August 4, 2005, at a depth of 12 feet. (Capaldo, Tr. 17:53:8 – 53:22, 76:6 - 12; T2545 – 2546; R6-96)

911. At the time the excavation was done, there was no definitive plan for pole installation and no commitment to a specific manufacturer. (R6-282)

917. TLT performed the excavation work on a time and materials basis, and was paid by Reading on that basis. (R6-107 to R6-120; Cormier, Tr. 7: 179-181; Capaldo, Tr. 30: 146; R6-282)

918. East Coast's time and materials summaries were endorsed by Steven Shaughnessy, the Project Clerk of the Works in that period. (R6-109, 111, 115, 117 and 119)

919. DPC approved the time and materials excavation work for payment. (Capaldo, Tr. 30: 146)

920. Such work was completed by August 10, 2005. (R6-120)

R11. On August 23, 2005, DPC issued Request for Proposal (RFP) No. 081 to TLT, with attached electrical specifications, requesting a price proposal to complete the stadium field lighting, specifically requesting pricing for both Musco and G.E. lighting systems, both with 16-foot depth requirements. (Capaldo, Tr. 17:27:2 - 27:13, 48:13 - 49:8; R6-16 - 56)

[921 and 922 duplicate the above.]

923. As of August 23, 2005, thirteen days after the completion of East Coast's excavation work, neither DPC nor Reading had selected their desired manufacturer for the stadium field lights. (R6-16; Capaldo, Tr. 30: 134-135)

924. The August 23, 2005 Request for Proposal included a specification dated August 22, 2005. (R6-16 - R6-56; Capaldo, Tr. 30: 137-139)

925. That specification included a section for foundations of the light poles. (R6-44; Capaldo, Tr. 30: 139)

The specification provided, under “D. Light-Structure System,” that “[t]he Light-Structure System as manufactured by Musco Sports Lighting, Model #LSS-80B/#13-1500-LSG or approved equal shall consist of the listed equipment featured below.” R6-38.

926. The foundation section of the specification was, in Capaldo’s words, “boilerplate.” DPC neglected to change a reference from “New Hampshire” to “Massachusetts” when issuing the specification in connection with the Project. (Capaldo, Tr. 30: 139-140; R6-44)

927. The foundation section of the specification instructed that, “[t]he design criteria for these specifications are based on soil design parameters as outlined in the geotechnical report,” despite the fact that no such geotechnical investigation or report had been conducted in connection with the stadium field lights. R6-44. (Capaldo, Tr. 30: 139-141)

That section continues: “If a geotechnical report is not provided by the owner, the foundation design shall be based on soils that meet or exceed those of a Class 5 material as defined by 1997 UBC, Table 18-I-A.” R6-44. TLT was thus on notice that minimum soil conditions were necessary for installation of the light base.

R12. Change Order No. 31 to the Contract, dated September 13, 2005, included the work of COR#209a to add conduit for future work at the stadium field in the amount of \$17,658.69, and COR#225 for installation of sleeves for future poles at stadium in the amount of \$11,948.14. (Capaldo, Tr. 17:27:15 – 28:5; T2499)

931. On September 29, 2005, TLT responded to the RFP with prices broken out for both Musco and G.E. systems. (R6-258 to R6-272; Cormier, Tr. 7: 183-188)

932. TLT's response to the RFP included a quotation from Musco Lighting. (R6-265)

933. Musco's quotation, dated September 28, 2005, stated that, "Contractor should be prepared to use caissons and should take into account the potential need for deeper foundations based on soil conditions." R6-265. (Capaldo, Tr. 30: 144-145)

934. TLT's September 29, 2005 response to the RFP was not acceptable to Reading. On October 6, 2005, TLT formally rescinded its bid and invited Reading to procure pre-negotiated draft purchase orders for the stadium field lights directly from suppliers and then add the work to TLT's contract through change order with no markup and no supervision. (R6-273; Cormier, Tr. 8: 66)

[R13 duplicates the above.]

935. Reading proceeded to engage in direct negotiations per TLT's invitation. (R6-282 to R6-283)

936. A flood on Mother's Day in 2006 had caused the excavated holes to be filled in somewhat; by the fall of 2006, the holes were no longer 12 feet deep. (Cormier, Tr. 8: 69, 106-107; T12038)

R14. Change Order No. 44 to the Contract, dated July 25, 2006, in the amount of \$145,799.18, added the work of COR # 329 to the Contract, i.e., to furnish, only, the light fixtures for stadium lights, based on a Musco lighting package which included 52 LSG light fixtures. (T3411 – T3419)

937. “[The] final documentation issued by the lighting manufacturer indicated that a 16’-0” deep hole was required.” R6-283

R15. In or about October 2006 it was discovered that the holes for the light poles and the sleeves that had been excavated in 2005 as part of the Change Order No. 31 work were too shallow to accommodate the required depth of the light poles. (Capaldo, Tr. 17:28:6 – 29:17)

R16. In an e-mail exchange of October 18, 2006, Capaldo notified Cormier of the depth issue, stating that the hole depth should have been 16 feet instead of 12 feet. (Capaldo, Tr. 17: 29:22 – 31:1; R6-96)

R17. As a result, the holes and the pole sleeves were too shallow, and needed to be redone at a deeper dimension and coordinated with the other activities going on around them. (Capaldo, Tr. 17: 31:15 – 32:21)

938. Despite the fact that TLT had performed the excavation of the holes for the light pole bases on a time and materials basis, TLT agreed to re-mobilize at no cost when the decision was made to excavate deeper, again on a time and materials basis. (R6-122; R6-283)

R18. The light pole sleeves were corrugated metal caissons placed in the excavated holes; the light poles were to be installed into the sleeves. (Capaldo, Tr. 17: 32:13 – 33:14)

R19. TLT chose to deepen the light pole holes by using an excavation technique with a vacuum truck known as flow jetting or hydroblasting. (Capaldo, Tr. 17: 36:2 – 36:9; Dunlap, Tr. 16: 19:16 – 20:4; Cormier, Tr. 8: 68:12 – 20)

939. On or about October 20, 2006, Suresh Bhatia notified Capaldo that TLT intended to employ water jet streaming, or rapid flow excavation, in order to increase the excavation depth. (Capaldo, Tr. 30: 148)

940. Capaldo did not object to the use of water jet streaming or rapid flow excavation upon notice that TLT intended to employ the same. (Capaldo, Tr. 30: 149-150)

R20. The hydroblasting caused the earth surrounding the entire area around the original excavation hole, including the vacuum truck itself, to sink down, creating a significant amount of debris in the area and leaving it in a very loose and wet condition. (Capaldo, Tr. 17: 36:10 – 20; Dunlap, Tr. 16: 16:6 – 17:17)

[942 is subsumed in the above.]

R21. By a letter incorrectly dated October 5, 2006, but sent in response to a TLT letter of October 25, 2006 regarding soil conditions at the light poles, DPC notified TLT that Musco Lighting was responsible for structural design and engineering of the light poles and the foundations around the poles, stating that if TLT's corrective excavation techniques had generated concerns, DPC would expect TLT to coordinate with Musco to maintain satisfactory conditions for the installation of the lights. (Capaldo, Tr. 17: 34:7 – 36:1; R6-95, 97)

R22. TLT's letter of October 25, 2006 stated that TLT was coordinating the additional caisson work and hydroblasting with Musco and the installer, Island Lighting & Power Systems, and requested DPC to have DPC's soils engineer review the field conditions due to the conditions of the soil encountered after the hydroblasting. (R6-97)

TLT's request of October 25, 2006 to have DPC's soils engineer review the field conditions "[d]ue to the conditions of the soil encountered, previously as well as now [i.e., after TLT's excavation by hydroblasting]," R6-97, is evidence that TLT, Musco, and Island Lighting & Power Systems were concerned that the excavation which TLT had just completed had created soil conditions that were unsuitable for installation of the light poles. As noted below, Dunlap reported a month later the "conditions at the site" – i.e., the soil conditions – caused "the lighting manufacturer's engineers [to be] uncomfortable proceeding without additional involvement from TDPC's geotechnical engineer." R6-283. Cormier agreed that Dunlap's report is "an accurate description of what happened." Tr. 8: 73-74. I conclude, on the basis of the above findings, that TLT's method of hydroblasting to excavate the holes to the required 16-foot depth created soil conditions that were unsuitable for installation of the bases for the light poles, and that required a geotechnical evaluation and remediation the cost for which TLT is responsible.

[941 is denied as contrary to the above.]

R23. DPC 's response to TLT's October 25 letter stated DPC's understanding that Musco was satisfied with the actual soil conditions on-site prior to the corrective excavation work. (R6-95)

928. TLT contends that the August 22, 2005 specifications for field lighting essentially called for TLT to design the foundation for the stadium field light poles. (R6-44; Capaldo, Tr. 30: 139-144)

929. It is true, as TLT contends, that Reading did not want to pay DPC to design the stadium field light pole foundations or Ai3 to administer their construction. (R6-282)

930. However, it does not follow that the August 23, 2005 Request for Proposal was calling for TLT to submit a “design-build” proposal to construct the stadium field lights. [n.12] (R6-16 to R6-56; Capaldo, Tr. 30: 139-144)

[TLT’s proposed finding 930, n. 12:] Nor does it follow that, as TLT argues, the combination of (1) Reading’s demand for Musco Lights, (2) Musco’s disclaimer regarding “the potential need for deeper foundations based on soil conditions” and (3) Reading’s refusal to pay the Design Team to design the light pole foundations put TLT in a position wherein Reading was putting forth an illegal proprietary specification in violation of G.L. c. 30 § 39M, where the selected proprietary supplier was unwilling to provide the services demanded, which ultimately included comprehensive geotechnical investigation and design.

Rather, the understanding of all parties is accurately set forth in Dunlap’s report and recommendation to Supt. Schettini of November 8, 2006, in which Dunlap notes that, after the School Committee decided not to accept DPC’s proposal for “overseeing the design, procurement, and installation of all aspects of the Field Lighting,”

several parties worked on behalf of the Town and the School Department to develop strategies that would provide the Athletic Field Lighting at a lower cost. These strategies included:

. . . 7. Utilizing the lighting manufacturer’s pre-engineered precast foundation and base in order to avoid the cost of engineering, designing, and placing a custom foundation and base.

R6-282-283. (Dunlap’s letter of November 8, 2006 was admitted, as a TLT exhibit (T9211), for notice. It also appears in Reading’s exhibits as R6-282-284. Dunlap testified that, “[i]n general, the purpose of this letter was to summarize the activities related to the light pole installation at the field to date and to make a recommendation

with regard to what the owner should do in the future if they wished to continue to pursue the light pole installation.” Tr. 16: 13. Dunlap further testified that, in late October or early November, and before he wrote this letter, he observed that “the excavation had been increased in several of the previously excavated holes, and I observed that there was a significant amount of soils, debris around the area of the excavations.” He testified that he learned that the excavation had been done by means of hydroblasting. (Tr. 16: 14-16.)

Dunlap’s report accurately summarizes the course of events surrounding the installation of the stadium lights:

The approach taken for installation of the Field Lighting did result in initial costs savings. Unfortunately, when unanticipated conditions were encountered, no one was contractually responsible for coordinating, supervising, or resolving the unanticipated conditions.

The first unanticipated condition occurred when the pole installer uncovered the excavated holes and reported that they were not deep enough. The holes were approximately 10’ to 12’ deep and the final documentation issued by the lighting manufacturer indicated that a 16’-0” deep hole was required. . . . Unfortunately, rock was encountered in two of the excavation holes, stopping work and requiring more expensive and complicated excavation.

The second complication came when the lighting manufacturer’s engineers reviewed the conditions at the site and became uncomfortable proceeding without additional involvement from TDPC’s geotechnical engineer. Two of the light poles have been installed. However, prior to pole installation on the bases, the lighting manufacturer’s engineers want the advice/input of the geotechnical engineer.

The third complication involves the limited amount of funds that have been committed to this specific project.

Id. Dunlap closes by recommending that the School Committee approve \$2,000 for involvement of DPC’s geotechnical engineer, and direct DPC to solicit a fixed cost proposal from TLT for the additional excavation required at the two remaining holes and related work.

963. Cormier agreed with Dunlap's assessment and description in the November 8, 2006 letter. (Cormier, Tr. 8: 73-75)

II. Change Order Request 329B: Additional Costs re: Field Lights Depth

943. On November 21, 2006, Capaldo sent an email to Cormier requesting that TLT provide a change order request for "the additional excavation work performed to-date" as soon as possible. R6-281 (T9219; Cormier, Tr. 8: 70-71; Capaldo, Tr. 30: 147)

Capaldo's email also stated that "I want to make sure that BEFORE we send proposals for additional services to complete the work, that everyone understands where we are currently, and that funds are made available to pay TLT for work previously [sic] performed BEFORE funds are made available for the new design work." R6-281.

944. On December 6, 2006, TLT submitted Change Order Request 329B requesting payment for additional excavation work to increase the depth of the light pole holes, in the total amount of \$20,999.98. (R6-122 to R6-124; Cormier, Tr. 8: 67-68)

[R24 duplicates the above.]

945. Specifically, Change Order Request 329B included line-items for "Rapid Flow" excavation, totaling \$6,895. (R6-122)

946. TLT's accounting records show that TLT paid for the Rapid Flow excavation in the total amount of \$6,895. (T11948; Cormier, Tr. 8: 102-103)

947. Change Order Request 329B also included an October 30, 2006 invoice from Island Light and Power Systems, Inc. in the amount of \$7,160. (R6-124)

948. The Island Light and Power invoice described the work as "'assisting' Rapid Flow the excavation contractor TLT hired to remove the 6 feet of dirt inside the 60" caisson." R6-124

949. TLT's accounting records show that TLT paid Island Light and Power in the amount of \$7,160. (T11948; Cormier, Tr. 8: 102-103)

950. Change Order Request 329B also included additional line-items of work totaling \$4,115. (R6-122 to R6-123)

951. TLT's accounting records further show that TLT paid Vellano Brothers, Inc. in excess of \$4,115 for work related to Change Order Request 329B. (T11948; Cormier, Tr. 8: 102-103)

952. Change Order Request 329B also included a 15% markup for TLT's overhead and profit on the amounts paid to Rapid Flow Excavation, Island Light and Power Systems, Inc., and Vellano Brothers, Inc., calculated in the amount of \$2,725.50. (R6-122 to R6-123)

953. Change Order Request 329B also included a 0.05% markup for TLT's additional bond costs for the amounts paid to Rapid Flow Excavation, Island Light and Power Systems, Inc., and Vellano Brothers, Inc., calculated in the amount of \$104.48. (R6-122 to R6-123)

954. Reading rejected Change Order Request 329B and forced TLT to submit a claim to be paid for the additional excavation. (Cormier, Tr. 8: 68, 77)

R25. COR 329B was rejected by DPC because the work was not sufficient for its intended purpose, and in itself caused a number of issues that required ~~replacement~~ repair by Reading. (Capaldo, Tr. 24:13:15 – 14:13; R6-241)

Accordingly, Reading does not owe TLT the total of \$20,999.98 for Change Order Request 329B.

[955 is denied as contrary to the above.]

III. Disputed Portion of Change Order 57 Re: Deletion of Change Order 49

956. On October 19, 2006, DPC issued Change Order 49 to complete the installation of stadium light poles. (T3841; Capaldo, Tr. 30: 135-136, 170-171)

R26. Change Order 49 included the work of COR 329A in the amount of \$42,800 for “complete install of stadium light poles (Musco).” T3841

957. TLT did begin the work of completing the installation of the light poles. See R6-283, wherein Dunlap reported, “Two of the light pole bases have been installed.” Cormier, Tr. 9: 177-179; Dunlap, Tr. 16: 40)

958. However, as Dunlap also reported, unanticipated sub-surface soil conditions (rock) were encountered in the course of the excavation of two of the holes for the field light bases that required TLT to stop work. (R6-282 to R6-284)

[959-960, 962, and 964 duplicate the above.]

965. On October 25, 2006, despite Musco’s ~~express disclaimer~~ statement concerning “the potential need for deeper foundations based on soil conditions,” Capaldo wrote to TLT that “Musco Lighting was and remains responsible for the structural design and engineering of the poles and foundations for them.” R6-95. (Capaldo, Tr. 17: 34)

966. On December 4, 2006, DPC transmitted a proposal to Reading to perform design services to “Complete Sports Lighting Pole Installation” for a fee of \$29,762. R13-1005 to R13-1006. (Capaldo, Tr. 30: 123)

967. On December 6, 2006, Capaldo wrote to Schettini identifying eleven steps necessary towards installing the field lights. (R6-125)

968. In his December 6 email to Schettini, Capaldo also recommended that Reading, “[g]et the geotech[nical engineering] to begin the sub-surface exploration and testing.” R6-125.

969. The second step identified in Capaldo’s email involved reviewing TLT’s costs-to-date for additional excavation already performed. (R6-125; Cormier, Tr. 8: 76-78)

970. Eight of the eleven steps (all but the second, last and penultimate steps) required work by Reading or the Design Team. (R6-125)

971. On December 4, 2006, DPC offered Reading a reduced fee for the completion of the stadium field light pole installation design and geotechnical services. (Capaldo, Tr. 30:123)

972. DPC’s December 2006 proposal included required subsurface exploration borings under the observation of a geotechnical engineer. (Capaldo, Tr. 30:123)

973. Because Reading had declined to retain the services of any design professional, TLT was ~~essentially~~ directed to perform excavation and foundation construction work for the stadium light poles on a ~~trial-and-error~~, time and materials basis, ~~operating in the blind~~ without any geotechnical data. ~~in a swamp that had been filled by the Town decades earlier.~~ [The stricken language overstates the matters described.]

974. In directing TLT to proceed on that basis, Reading proceeded with a project that lacked ~~assumed the risk that the lack~~ of the very design services which Dunlap and Capaldo identified as necessary in March of 2005 and November and December of 2006,

enhancing the possibility of ~~might result in~~ the need for re-work and additional cost.

[The stricken language states a legal conclusion, and to that extent is denied.]

975. On March 1, 2007, Reading accepted DPC's December 2006 proposal for design and geotechnical services for the stadium field lights. (Capaldo, Tr. 30:124)

R27. As of April, 2007 DPC had received a report from a geotechnical engineer as to the suitability of the subsurface areas around the proposed stadium lights locations, and the lights were under redesign due to the conditions that had been created on the Project site. (Capaldo, Tr. 17:81:2 - 81:9 and 84:14 - 85:4)

R28. On or about May 1, 2007 Reading issued bid documents for installation of extended stadium light pole bases. (Dunlap, Tr. 13:129:21 – 132:15; R7-1-243)

[976 duplicates the above; 977 is denied as stated.]

978. -Rather than include the field lights pole base installation in TLT's contract by way of change order, Reading elected to solicit bids for the field lights project together with the track repair/replacement project. See generally R-7 category of documents.

R29. May 30 was the due date for bids under the May 1, 2007 invitation, but Reading did not receive any bids. (Dunlap, Tr. 13: 137:24 – 138:13)

R30. Thereafter, Reading decided to rebid the installation of the light pole bases with the same bid documents. (Dunlap, Tr.13:137:24 – 138:13).

R31. The Reading School Committee took a vote on June 4, 2007 regarding required repairs to the track at the stadium and the stadium light poles, which were both the subject of the May 1 bid invitation, to allow TLT to complete the work of the track repairs subject to certain contingencies, including TLT's providing an acceptable price for the stadium lights pole base installations, and submitting a signed agreement for the

track repairs and light pole installation, by June 8, 2007. (R5-135; Dunlap, Tr. 13: 138:24 – 141:5)

R32. By letter dated June 6, 2007, TLT agreed to submit a stadium lights price proposal within 10 days. (R5-137)

R33. In response to Reading's re-bid of the stadium light pole bases work, TLT submitted a bid dated June 25, 2007, in the amount of \$221,436 to remove the existing light pole bases and perform work required for installation of new bases. (R5-117-124; Capaldo, Tr. 17: 86:6 – 22)

R34. On July 6, 2007, the Superintendent of Schools wrote to TLT advising TLT that on July 3, 2007 the Reading School Committee had voted to reject the bids for the track reinstallation and stadium lights installation, and to direct Ai3 and DPC to draft a change order with TLT for the installation of the stadium field lights. (R5-160 – 161)

R35. TLT responded by letter of July 9, 2007 to DPC, stating that it needed a change order to proceed with the installation of the light poles. (Dunlap, Tr. 16:30:24 – 31:5; R5-158 – 159)

R36. DPC issued Change Order No. 53 to TLT on July 12, 2007 in the amount of \$221,436 for all work required to install the stadium lights as indicated in the construction documents issued for bidding on May 1, 2007. (Dunlap, Tr. 16:32:11 – 32:24; Capaldo, Tr. 17: 85:14 – 86:5; T4235)

[979 duplicates the above; 980 is denied as ambiguous and an incomplete statement of the above findings.]

R37. TLT did not perform the work of Change Order 53, and in September of 2007 TLT informed DPC that TLT had lost its subcontractor and would not follow

through with the stadium lights installation. (Dunlap, Tr. 16: 33:1 – to TLT 34:17; Capaldo, Tr. 17: 90:24 – 91:8)

R38. On or about November 5, 2007, DPC issued to TLT Change Order No. 57, which deleted the previously approved Change Order 49 for installation of sports lights poles (\$42,800) and Change Order 53 for completion of sports lighting (\$221,436), resulting in a total deduction from the Contract of \$264,236. (Dunlap, Tr. 16:38:13 – 39:12; T4430 – 4432)

[981 duplicates the above.]

982. TLT does not dispute the deletion of Change Order 53.

983. TLT does dispute the deletion of Change Order 49.

984. TLT paid \$22,000 to its subcontractor, Island Light and Power Systems, towards the performance of the work of Change Order 49. (T11948)

985. TLT was prevented from completing the work of Change Order 49 due to unforeseen subsurface soil conditions that resulted in recommendations by both Ai3 and DPC that Reading conduct geotechnical exploration and analysis, which in turn resulted in a revised specification.

986. Accordingly, with regard to the deletion of Change Order 49 in Change Order 57, Reading is not entitled to a credit of \$42,800 for work that TLT performed under Change Order 49, less the \$22,000 that TLT paid to its subcontractor under Change Order 49, yielding a net credit to Reading of \$20,800. ~~but was frustrated by a penny-pinching lack of foresight, planning, investigation and design by Reading, in violation of statutory mandates applicable to public construction.~~ [Language is stricken to conform proposed finding 986 to above findings.]

IV. Disputed Construction Change Directive 12

R39. Change Order 57 included DPC's letter to TLT dated November 5, 2007 in which Capaldo summarized all previously approved change order items for the stadium lights as follows: COR #209 (Change Order 29) conduit for future systems in the amount of \$14,207.26; COR # 225 (Change Order 31) sleeves for future poles in the amount of \$11,948.14; COR # 209a (Change Order 31) conduit for future work in the amount of \$17,658.69; COR # 304a(Change Order 39) restore stream bank, cons-com in the amount of \$919.98; COR # 287a (Change Order 41) permanent power for lights in the amount of \$21,074.71; COR # 186 (Change Order 43) site work at pole bases, cons-com in the amount of \$4,673.42; COR # 329 (Change Order 44) furnish-only light poles/fixtures in the amount of \$145,799.18, and; COR # 734 (Change Order 51) for site work at pole bases, cons com, in the amount of \$2,848. (T4431 – 4432)

Capaldo's November 5, 2007 letter listed each of the above Change Orders as "Completed," except for Change Orders 49 and 53. T4431

[987 and 988 duplicate the above.]

R40. Reading contends that the work performed that related to installation of the sleeves for future sports lighting was deficient and needed to be removed or abandoned for the completion of the sports lighting installation, and was rejected by Reading and DPC as follows: installation of sleeves for future poles (COR#225, Change Order 31 in the amount of \$11,948.14); sitework for pole bases (COR#329, Change Order 43 in the amount of \$4,673.42); restore stream bank (COR#304a, Change Order 39 in the amount

of \$919.98), and; sitework for pole bases (COR#734, Change Order 51 in the amount of \$2,848.08). (Capaldo, Tr. 24: 91:13 – 94:4; R9-29).

Reading's contentions in proposed finding R40 with regard to Change Orders 31, 43, and 39, are not supported by the above findings, and Reading's proposed finding is in that regard denied. Nor has Reading established by reference to the record that Change Order 51 was required as a result of TLT's excavation in October 2006.

R41. DPC issued Construction Change Directive No. 12, dated November 9, 2007, to TLT for a credit against the Contract in the amount of \$20,389.62 for the previously approved Change Order work to provide sleeves for the future sports lighting, being COR#225, COR#329, COR#304a, and COR#734. (Capaldo, Tr. 24:91:13 – 94:4; R9-29)

[989 duplicates the above.]

990. CCD 12 states that "[t]he work completed by TLT [under the listed Change Orders] has been rejected, and will need to be removed or abandoned for completion of the sports lighting project. The rejection of the sleeves has been documented on prior correspondence." R9-29

991. Reading has not established that such work did not have to be removed or abandoned due to anything TLT did or failed to do; rather, such work was for naught because of the unforeseen sub-surface soil conditions and lack of foresight, planning, investigation and design by Reading. ~~in violation of statutory mandates applicable to public construction, as described in Mr. Dunlap's November 8, 2006 letter.~~ (R6-282 to R6-284)

992. Accordingly, Reading is not entitled to a credit of \$20,389.62 as claimed in CCD 12. ~~for such work that was performed by TLT.~~

993. Further, Section 4.3.6 of the General Conditions of the General Contract for Construction (“[t]here shall be no adjustment of the Contract Sum on account of other costs resulting from subsoil or water conditions including, without limitation, costs on account of delay, administration, operations, temporary construction, cave in or collapse of excavations or pumping”) bars Reading’s claim for damages resulting from the need to remove or abandon work performed by TLT because of soil or water conditions not caused by TLT.

V. Disputed Construction Change Directive 16

1. Reading’s Contract with Blais Electrical Corp. to Install Stadium Lights

R42. After TLT had informed DPC that it would not perform the stadium lights work authorized by Change Order 53, Reading again solicited bids for the stadium sports lighting, on or about November 19, 2007. (Capaldo, Tr. 17: 92:23 – 93:24; R7-244-454)

R43. In response to the November, 2007 bid invitation, Blais Electrical Corp. was the low bidder at \$253,480.00; the Town contracted with Blais for that amount. (Capaldo, Tr. 17: 96:2 – 23, Tr. 24: 96:19 – 97:6; Dunlap, Tr. 16: 37:11 – 38:12; R6-274, R9-33)

R44. Blais Electrical performed the work for the sports lighting under the contract and also performed change order work additional to the contract. (Capaldo, Tr. 17: 96:2 – 96:23; Dunlap, Tr. 16: 38:7 – 12)

R45. By letter dated December 19, 2007, DPC issued a back charge notice to TLT in the amount of \$57,750 for the costs to Reading for additional work required to

install the stadium lights under the contract with Blais Electrical as a result of the initial installation attempt by TLT that was rejected, including mobilization, demolition and replacement of pole bases, restoration work and bond premium, and stated that the amount would be withheld from contract payments to TLT. (Capaldo, Tr. 17: 97:1 – 98:9, Tr. 24: 119:12 – 120:12; R6-239 – 240)

996. On December 27, 2007, Cormier wrote to Capaldo disputing the December 19, 2007 letter from Capaldo concerning the stadium field lights contract deduction. (R6-278; Cormier, Tr. 8: 78-80)

997. Rather than performing his own estimate of the portion of the Blais Electric contract that he believed represented a fair and equitable backcharge to TLT, Capaldo simply adopted Blais's schedule of values (without being able to analyze what Blais's profit margin was in various sub-items identified thereon or whether the schedule of values was "front loaded," i.e., laden with values scheduled earlier in the work to yield additional payment up front), and utilized such values to compute the backcharge. (Capaldo, Tr. 30: 177-179)

998. Capaldo testified that his basis for apportioning ~~was not able to present at trial any reasonable rationale for his apportionment of~~ half of the mobilization costs to TLT, ~~as his stated basis~~ was that, "some of the work was part of TLT's original scope and some of it wasn't." (Capaldo, Tr. 30: 179)

R46. By letter dated January 2, 2008, DPC notified TLT that, after DPC had indicated that TLT should be paid for "all work performed on the stadium lights," DPC had subsequently determined that "the work performed by TLT was of poor workmanship and was subsequently rejected. As you are aware the methods performed

by TLT caused damage to the adjacent areas of the site, and the work installed was not sufficient for its intended use.” ~~the work performed by TLT to provide sleeves for future sports lighting was of poor workmanship and had therefore been rejected, and that the methods used by TLT had caused damage to the adjacent areas of the site and the work installed was not sufficient for its intended use.~~ R6-241

2. Blais Contract Change Order #1

R47. Blais Electrical advised DPC that the existing Musco electrical enclosures that had been stored on the site from the work previously performed under TLT were damaged based on improper storage and handling, and needed to be replaced. (Capaldo, Tr. 24: 102:8 – 104:1; R6-310; R9-34 – 37)

R48. ~~There was a~~ On February 11, 2008, DPC issued Change Order #1 to Reading’s contract with Blais Electrical in the amount of \$14,542 for the replacement of the damaged Musco electrical components. (Capaldo, Tr. 17: 106:21 – 108:22, Tr. 24: 100:18 – 108:15; R6-309 – 310, R9-33 – 37)

R49. Blais Electrical performed the work of Change Order #1 and Reading paid Blais the stated amount of \$14,542, which DPC determined to be fair and reasonable. (Capaldo, Tr. 17: 109:21 – 110:8)

999. On February 13, 2008, Ciccolo of DPC wrote to Dunlap regarding Change Order #1. ~~a change order to Blais Electric for the damaged Musco electrical components and cabinets.~~ (R6-285; (Capaldo, Tr. 30: 166)

1000. The materials referenced in Ciccolo’s letter had been stored outside for approximately one year, flat on the ground with no protection from weather, causing the materials to be damaged. (R6-285; (Capaldo, Tr. 30: 166-167)

1004. TLT had purchased these materials pursuant to Change Order 44 to its Contract. (T3411-3419)

1001. DPC was unable to determine how the materials were stored. (Capaldo, Tr. 30: 168-169)

1002. ~~Rather than conducting its own fair and impartial investigation, as is required of the Project Architect evaluating a claim pursuant to Section 4.2.12 of the General Conditions for the Contract for Construction between TLT and Reading,~~ DPC requested that Ai3 identify the party responsible for improperly storing the materials, and simply adopted Ai3's identification of TLT as the basis for ~~into~~ the backcharge in CCD 16. (R6-285; R9-30; Capaldo, Tr. 30: 174)

1003. Neither the Design Team nor Reading gave any direction to TLT as to how to store the materials referenced in Ciccolo's letter while Reading sorted out the design issues with the field light poles. (Capaldo, Tr. 30: 169-171)

1005. Change Order 44 specifically incorporated Change Order Request 329, which included Griffin Proposal #112; the latter explicitly stated that the Change Order was limited to "[f]urnish only the MUSCO lighting package per the attached quote. Receive lights and place in Owner's storage." T3411-3413 (emphasis added). (Capaldo, Tr. 30: 169-171)

1006. Pursuant to Change Order 44, Reading took possession of the materials upon delivery. (Capaldo, Tr. 30: 174-175)

1007. Accordingly, Reading is not entitled to backcharge TLT for damage to materials caused by improper storage, where Reading was in possession of such materials

and did not give TLT any direction, and TLT had no other obligation, to store or protect materials in Reading's possession.

1008. Moreover, Reading was aware of the improper storage, at the latest, prior to February 11, 2008, the date on which Change Order #1 was issued, but waited until March 6, 2008, to send a notice to TLT asserting a claim therefor. Reading thus failed to provide TLT with timely notice, i.e., within 21 days of the alleged improper storage of ~~the same~~, as required by Section 4.3.3 of the General Contract for Construction between TLT and Reading. (Capaldo, Tr. 30: 167-168; R9-43 (notice of the claim to TLT, dated March 6, 2008))

[R50 is denied in light of the above findings; R51 duplicates the above.]

3. Blais Contract Change Order #3

R52. On May 5, 2008, Reading issued Change Order # 3 to Reading's contact with Blais Electrical in the amount of \$23,623 for the work of wiring the stadium press box building, additional labor and equipment for both removal and installation of bituminous patches at all four light pole locations, and installation of one missing Musco light fixture, of the 52 listed in TLT's Change Order 44 (the latter had never delivered by TLT. (Capaldo, Tr. 24: 110:1 – 116:24; R9-38 – 42; T3411, 3416 – 3417)

[1009 duplicates the above.]

1011. The first item ("Item #3") identified on Blais Electric Change Order 3 was to perform work that TLT had not performed as part of the time and materials change order requests previously agreed to by Reading. (Capaldo, Tr. 30: 119)

1012. As TLT had not performed such work as part of the time and materials change order requests, TLT had not been paid to perform such work.

[1013 is denied because it is based on hypothetical facts not in evidence.]

1014. Reading backcharged TLT for Blais's performance of work that TLT had not been paid to perform and did not perform. (R9-30, R9-38)

1015. Capaldo was unable to identify on cross-examination his basis for asserting that the work of Item #3 of Blais Electric Change Order 3 was part of TLT's scope of work. (Capaldo, Tr. 30: 177)

1016. Like Item #3, Item #7 on Blais Electric Change Order 3 was also a backcharge to perform work which (according to Reading) TLT had failed to perform. ~~despite only having been awarded time and materials change orders, which Reading later sought to negate by way of the unilateral credit of CCD 12.~~ (R9-38 to R9-40)

R53. The remaining items of bituminous work in Change Order #3 included: "Item #4. Additional labor & equipment to sawcut, remove and dispose of 5" thick existing bituminous patches at light pole locations F1 & F2;" "Item #5. Additional labor & equipment to sawcut, remove and dispose of existing bituminous at the light pole locations F3 and F4 along the Aberjona River;" and "Item #6. Additional labor and equipment to furnish and install bituminous binder and top coat at all four light pole locations." R9-38. ~~were work to expose and remove the existing deficient sleeves for the light poles installed under TLT.~~ (Capaldo, Tr. 24: 111:24 – 112:12) [The stricken language is denied as it is not supported by the cited reference. See also Capaldo, Tr. 30: 175: "Q. The issue wasn't that the sleeves were rejected, it was that there was a concern with the hole depth; is that correct? A. Yes." And at Tr. 30:176: "Q. Prior to making payment to TLT for installing the sleeves at the depth they installed them, you reviewed the work? A. I observed the work. Q. And you approved payment? A. Yes."]

1017. Capaldo further identified Items #4, #5 and #6 of Blais Electric Change Order 3 as related to costs necessary to complete the installation of the light poles, which work TLT had begun on a time and materials basis before having to stop due to unforeseen subsurface conditions. ~~and for which Reading had taken a credit.~~ (Capaldo, Tr. 24: 120-122)

1018. Accordingly, Reading is not entitled to backcharge TLT for Blais Electric Change Order 3.

R54. Blais Electrical performed the work of Change Order # 3 to its contract; Reading paid Blais for the work. (Capaldo, Tr. 24: 116:6 – 24)

R55. DPC issued Construction Change Directive No. 16, dated July 2, 2008, to TLT in the amount of \$91,333, representing a credit to Reading against the TLT Contract for work of the Blais Electrical contract attributable to TLT's alleged failure to perform stadium lights work in accordance with the Contract, and consisting of the Blais base contract costs outlined in DPC's letter to TLT of December 19, 2007, and Change Orders #1 (\$14,542) and #3 (\$23,623) to the Blais contract. (Capaldo, Tr. 24: 118:3 – 21, 119:1 – 4; R9-30, 33 – 42)

[994, 995, and 1010 duplicate the above.]

R56. Capaldo adjusted the CCD 16 item for Blais base contract costs, reducing it from \$57,750 to \$53,168.50, because he determined that the amount of the Blais bond costs and mobilization costs chargeable to TLT should be reduced to reflect the portion of those costs attributable to the portion of the Blais contract work attributable to TLT, in order to try to fairly capture the portions attributable to TLT. (Capaldo, Tr. 24: 119:5 – 124:6; R9-31 – 32, R6-239 – 240)

The foregoing findings do not support a backcharge of \$53,168.50 to TLT for Blais' base contract costs, as asserted in CCD 16.

Rulings of Law

To the extent that it remains pertinent in view of the above findings, TLT's contention that "Reading's initial 2005 and 2006 administration of the stadium field lights was in violation of Massachusetts public construction laws [G.L. c. 7C, sec. 46(e); c. 149, sec 44A ½(a)]," TLT's Requested Rulings, at 40 et seq., is unsupported by the record. Rather, Reading elected to use "the lighting manufacturer's pre-engineered precast foundation and base in order to avoid the cost of engineering, designing, and placing a custom foundation and base." R6-282-283. In other words, to the extent that design was required, Reading specified precisely which design was to be employed.

The above findings render unnecessary consideration of TLT's requested supplemental rulings regarding impossibility of performance and in pari delicto: the only claims against TLT upon which Reading has succeeded are those having to do with the adverse soil conditions which TLT created by employing the hydroblasting procedure to deepen the holes for the light pole bases.

The awarding authority for a public building construction project may deduct from periodic payments to the contractor the fair value of the awarding authority's claims against the contractor. See G.L. c. 30, sec. 39K. That provision explicitly contemplates retention of monies for unsatisfactorily completed work, even after full or substantial completion, as long as the awarding authority provides notice of its dissatisfaction within 65 days.

The above findings on the individual claims relating to the stadium lights, and the Master's recommended rulings thereon, are summarized as follows.

Reading does not owe TLT the sum of \$20,999.98 claimed under Change Order Request 329B.

Reading is entitled to a credit of \$42,800 under Change Order 57's deletion of Change Order 49, less the \$22,000 that TLT paid to its subcontractor under the latter change order, for a net credit to Reading of \$20,800.

Reading is not entitled to a credit of \$20,389.62 as claimed in CCD 12.

Reading is not entitled to the backcharges levied against TLT in CCD 16, totaling \$91,333.50.

To the extent that they are inconsistent with the foregoing, the parties' respective proposed findings and rulings are denied.



Stephen F. Neel, Master

Date: April 18, 2016