#### COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, SS.

SUPERIOR COURT DEPARTMENT Civil Action No.: 23-1777

GLX CONSTRUCTORS by and through its members FLUOR ENTERPRISES, INC., THE MIDDLESEX CORPORATION, HERZOG CONTRACTING CORP., and BALFOUR BEATTY INFRASTRUCTURE, INC.,

Plaintiffs,

STV INCORPORATED,

Defendant.

2023 AUG -3 P-2: 05

JOHNE POWERS III
ACTUS OF FEB MAGISTRATE

#### **COMPLAINT**

Plaintiff GLX Constructors, by and through its members Fluor Enterprises, Inc., The Middlesex Corporation, Herzog Contracting Corp., and Balfour Beatty Infrastructure, Inc. brings this action for professional negligence, breach of contract, and contractual indemnity against Defendant STV Incorporated ("STV"). GLX Constructors seeks damages in excess of \$35 million for losses suffered as a result of STV's failure to comply with the requisite standard of care and its contractual obligations when performing services in connection with the Green Line Extension project to extend the Massachusetts Bay Transportation Authority Green Line light rail system into Somerville and Medford (the "GLX Project" or the "Project").

#### The Parties

1. Plaintiff GLX Constructors is an unincorporated joint venture, with a principal place of business at 35 Charleston Street, Somerville, MA 02143. GLX Constructors was formed to manage and deliver the GLX Project and is comprised of Fluor Enterprises, Inc., The Middlesex

Corporation, Herzog Contracting Corp., and Balfour Beatty Infrastructure, Inc.

- 2. Plaintiff Fluor Enterprises, Inc. ("Fluor") is a California corporation with its principal office at 6700 Las Colinas Boulevard in Irving, Texas. Fluor provides engineering, procurement and construction services. Fluor is a member in GLX Constructors.
- 3. Plaintiff The Middlesex Corporation ("Middlesex Corporation") is a Massachusetts corporation with its principal office at One Spectacle Pond Road in Littleton, Massachusetts. Middlesex Corporation is in the business of heavy and civil infrastructure construction. Middlesex Corporation is a member in GLX Constructors.
- 4. Plaintiff Herzog Contracting Corp. ("Herzog Contracting") is a Missouri corporation with its principal office at 600 S. Riverside Road in St. Joseph, Missouri. Herzog Contracting is a transportation infrastructure contractor. Herzog Contracting is a member in GLX Constructors.
- 5. Plaintiff Balfour Beatty Infrastructure, Inc. ("Balfour Beatty") is a Delaware corporation with its principal office at 300 Galleria Parkway SE, Suite 2050 in Atlanta, Georgia. Balfour Beatty is in the business of general contracting, at-risk construction management and design-build services for public and private sector clients. Balfour Beatty is a member in GLX Constructors.
- 6. Defendant STV Incorporated is a New York corporation with its principal office at 225 Park Avenue South in New York, New York and a Massachusetts office at One Financial Center, 3<sup>rd</sup> Floor, Boston, MA 02111. STV is an engineering firm, specializing, among other fields, in rail transportation infrastructure planning, design and construction management.

#### Jurisdiction and Venue

7. This Court has personal jurisdiction over STV under G.L. c. 223, § 38 and G.L. c. 223A, § 3 as STV does business in the Commonwealth of Massachusetts.

- 8. The Superior Court has subject matter jurisdiction over this matter under G.L. c. 212, § 3 because the matter in controversy exceeds \$50,000, exclusive of interest, costs and attorneys' fees.
- 9. Venue is proper pursuant to G.L. c. 223, § 8 because STV's usual place of business in Massachusetts is located in Boston.

### **Facts Common to All Counts**

## A. The Teaming Agreement and Design Contract with STV

- 10. The GLX Project entailed among other things the design and construction of two distinct branches serving as an extension to the Massachusetts Bay Transportation Authority's ("MBTA") Green Line: a branch beginning south of a relocated Lechmere Station in Cambridge and travelling north to Medford, and a branch line operating within the existing right-of-way of the MBTA Fitchburg Line to Union Square in Somerville. It also involved construction of seven new stations, as well as associated electrical and signal systems, bridges, retaining walls, noise barriers, a community path, tracks, and a vehicle storage and maintenance facility.
- 11. On October 5, 2016, the MBTA advertised and issued a Request for Letters of Interest inviting firms or teams interested in providing design build services for the GLX Project. The MBTA announced that it would enter into a design-build contract with "the best-value" entity identified through a two-phase selection process including a Request for Qualifications with a subsequent Request for Proposals.
- 12. A design-build project provides responsibility for design and construction services within a single contract. Proposals for design-build projects typically comprise of two components: a submission of the proposed design of the project known as a "technical proposal" (based on information and requirements from the owner) and a separate "price" component.
  - 13. On December 15, 2016, the MBTA issued a Request for Qualifications (the "RFQ")

inviting interested design-build entities to submit a statement of qualifications for the GLX Project.

- 14. On January 25, 2017, GLX Constructors responded to the RFQ by submitting its Statement of Qualifications.
- 15. On February 17, 2017, the MBTA selected GLX Constructors as one of the three proposers determined to be the most qualified to complete the design and construction of the GLX Project.
- 16. On May 23, 2017, the MBTA issued a final Request for Proposals (the "RFP") to the three selected proposers, one of which being GLX Constructors. In the RFP, the MBTA made it clear that the cost of the GLX Project was of significant concern and bidders' proposed cost would be a significant criterion in determining the relative 'best value' of the proposals. In that context, the RFP required that the proposals submitted in connection with the design-build contract be for a lump sum/fixed fee not to exceed the established affordability limit.
- 17. In connection with the anticipated response to the RFP, Fluor, Middlesex Corporation, Herzog Contracting and Balfour Beatty entered into a teaming agreement with STV on or around January 18, 2017 (the "Teaming Agreement") under which STV was to provide certain professional design and engineering services in respect of the GLX Project. Pursuant to the Teaming Agreement, STV was responsible for preparing preliminary design drawings to be submitted as part of the technical proposal (the "Ready for Estimate Drawings" or the "Preliminary Design Documents").
- 18. The Teaming Agreement required STV to perform the design services "in accordance with the standards of skill and care followed by recognized engineering firms performing similar services in the same area at the same time...".
  - 19. Further, under the terms of the Teaming Agreement, STV agreed to indemnify GLX

Constructors and its members and to hold them harmless from "any claims, loss, damage or expenses arising from its failure to adhere to such standards."

- 20. At all times, STV understood that GLX Constructors was preparing a response to the MBTA's RFP and that GLX Constructors would rely on and use the Ready for Estimate Drawings to calculate the cost of the GLX Project, which would be submitted as part of its price proposal to the MBTA.
- Drawings could change the quantities and nature of the materials GLX Constructors had included in its price proposal, which, in turn would increase the costs of constructing the GLX Project, and that such increased costs would not be paid by the MBTA. In that context, STV agreed in the Teaming Agreement that it would be "responsible for costs and damages incurred by [GLX Constructors] as a result of errors in such quantities caused by the failure of [STV] to comply with the standards of skill and care..." set out in the Teaming Agreement.
- 22. STV issued its preliminary Ready for Estimate Drawings to GLX Constructors from June 2017 through September 2017. GLX Constructors relied on these drawings to estimate the cost of the GLX Project and to prepare a price proposal it subsequently submitted to the MBTA.
- 23. On September 28, 2017, GLX Constructors submitted its technical and price proposals to the MBTA. The pricing proposal contained a lump sum pricing proposal which was based on the Ready for Estimate Drawings prepared by STV.
- 24. On or about November 17, 2017, following its evaluation of the three proposals, the MBTA selected the GLX Constructors proposal as one providing the best value and the MBTA decided to award GLX Constructors the design-build contract for the GLX Project.
  - 25. On December 11, 2017, the MBTA and GLX Constructors entered into a design-

build contract, pursuant to which GLX Constructors agreed to complete the GLX Project for a lump sum price (the "MBTA Contract"). In order to limit the risk of cost overruns, the MBTA Contract contained restrictions affecting GLX Constructors' ability to make claims for additional compensation or extensions of the milestone deadlines.

- 26. On December 11, 2017, GLX Constructors and STV entered into a written agreement, pursuant to which STV agreed to perform certain design and engineering services in connection with the MBTA Contract and the GLX Project (the "Design Contract").
- 27. The Design Contract Signature Document, Article 7.0, provides that, among other things, STV represents, as of the effective date of the Design Contract, that "the Project shall be free of design defects, and shall be free of Design Exceptions not previously approved by the MBTA in accordance with the Contract Documents."
- 28. The Design Contract Part I, Article 2.0, provides that "[a]ll Work shall be performed in strict conformance with the following described specifications, drawings, and other documents, which by this reference are made a part hereof." The drawings and documents referred to in the foregoing section of the Design Contract included, among others, the Ready for Estimate Drawings.
- 29. Pursuant to the Design Contract Part III, Article 1.0, Section 1.1., STV agreed to render its services "with due skill, care, efficiency and diligence in accordance with the standard of care followed by recognized engineering firms performing similar services for design-build contractors constructing large civil works projects for public owners under time certain, fixed priced contracts in the United States ("Standard of Care")."
- 30. The Design Contract Part III, Article 1.0, Section 1.6 provides that STV "acknowledges that [GLX Constructors] gave [the MBTA], as part of [GLX Constructors'] overall

proposal, a Prime Contract lump sum price developed in a material part from the Preliminary Design furnished by [STV] in connection with [GLX Constructors'] Technical Proposal submitted to the [MBTA] on or about September 28, 2017." It further provides that "[i]n performing the Services, [STV] shall avoid deviation from the Preliminary Design that may materially impact the quality or materially deviate from the quantities or cost estimates used by [GLX Constructors] for the purposes of tendering the Prime Contract lump sum price to the [MBTA]."

- The Design Contract Part III, Article 1.0, Section 1.8 provides, in relevant part, that "[i]n addition, (i) [STV] understands and acknowledges that [GLX Constructors] will rely (or has relied, as the case may be) in material part upon the Preliminary Design provided by [STV], including material quantities developed by [GLX Constructors] based upon preliminary engineering services to be provided (or previously provided, as the case may be) by [STV], and (ii) [STV] will be responsible for costs and damages incurred by [GLX Constructors] as a result of errors and omissions caused by [STV's] failure to meet the Standard of Care (including errors in such quantities to the extent resulting from [STV's] failure to meet the Standard of Care in development of the Preliminary Design)."
- 32. Pursuant to the Design Contract Part II, Article 8.0, Section 8.1, STV agreed to be liable for additional costs, expenses and damages sustained by GLX Constructors as a result of STV's breach of its obligations under the Design Contract, including, without limitation, costs resulting from:
  - 8.2.2 "Costs sustained by [GLX Constructors] as a result of [STV's] non-compliance with the provisions of this Contract or [STV's] negligent act, error, or omission."
  - 8.2.3 "Costs incurred by [GLX Constructors] to fix defects, deficiencies or errors that may appear in the Services during the warranty period."
  - 8.2.4 "Rework associated with design including the costs of [GLX Constructors] or any person acting on [GLX Constructors'] behalf, to complete or correct [STV's]

- Services, in excess of the sum paid to [STV] under this Contract for [STV's] Services."
- 8.2.6 "Re-work, rip-and-tear, demolition, removal and replacement of work to the extend caused by [STV's] negligent acts, errors or omissions, or breach of this Contract."
- 33. Pursuant to the Design Contract Part III, Article 14.0, Section 14.1, STV agreed, to "release, defend, indemnify and hold harmless [GLX Constructors], including its constituent members and their affiliated companies...from and against any claims, losses, demands, causes of action, liabilities, judgments, penalties, costs, expenses, and damages and including attorney and expert consultant fees and costs in connection with the enforcement of this indemnity arising out of, relating to or resulting from the following:"
  - 14.1.1 "The breach or alleged breach of this Contract or the Contract Documents by [STV]..."
  - 14.1.4 "The alleged negligent act or omission or willful misconduct of [STV]..."
  - 14.1.8 "The claim or assertion by any contractor of inconvenience, disruption, delay, or loss caused by interference by [STV]... with or hindering the progress or completion of work being performed by other contractors or failure of [STV]....to cooperate reasonably with other contractors in accordance with the requirements of the Contract Documents."

# B. STV's Preliminary Design Documents were Replete with Errors and Omissions, which when Corrected Resulted in Substantial Cost Overruns for GLX Constructors

34. As stated above, to prepare its pricing proposal for the MBTA, GLX Constructors relied on the scope of work reflected in the Preliminary Design Documents. Unbeknownst to GLX Constructors at the time, the Preliminary Design Documents prepared by STV contained numerous and significant errors and omissions (described below), which were caused by STV's breach of the standard of care and which STV had to correct by revising the subsequently issued design documents. STV's revisions on account of these errors and omissions materially impacted the quantities and cost estimates GLX Constructors had used in tendering its lump sum pricing

proposal to the MBTA, and resulted in substantial cost overruns that GLX Constructors could not recover from the MBTA.

# a. Ballast Retaining Walls BR-1, BR-2, BR-3, BR-4, BR-5, BR-6 (WLL-001)

- on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 36. Unbeknownst to GLX Constructors at the time, these drawings failed to identify the full extent and scope of ballast retaining wall BR-1 required and did not comply with National Fire Protection Association 130, Standard for Fixed Guideway Transit and Passenger Rail Systems. In order to correct these errors and omissions in the Preliminary Design Documents, and years after the GLX project proposal was submitted to and accepted by the MBTA, STV issued new design drawings that reflected extensive revisions to the extent and scope of the ballast retaining walls. Specifically, STV significantly revised the design of ballast retaining wall BR-1 for the light rail of the Medford Branch outbound track, and included new ballast retaining walls BR-2, BR-3, BR-5, and BR-6 for the Medford Branch and BR-4 for the Union Square outbound track, and precast concrete curb that were not depicted on the Ready for Estimate Drawings.
- 37. The revisions to the drawings added approximately 6,534 feet of new ballast retaining wall, representing an 800% increase in scope from the Preliminary Design Documents, approximately 5,300 feet of cast-in-place concrete coping and 12,680 feet of track guard rail. This additional scope of work significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

#### South Abutment of the Medford Street Bridge (STR-015)

b.

- 38. On August 22, 2017, STV submitted its Ready for Estimate Drawings for the work required on the south abutment of the Medford Street Bridge. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 39. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. In order to correct these errors in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted by the MBTA, STV significantly augmented the scope of work to include roughening of the surfaces of the existing south abutment pier wall and wall footing, and strengthening of the existing south abutment pier wall and wall footing with drilled-in and epoxy grouted steel rebar dowels on both sides of the pier wall along the entire length of the wall. These corrections resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

#### Soldier Pile and Lagging Retaining Wall ME-2 and Noise Barrier N-7 (WLL-012)

- 40. On June 29, 2017, STV submitted its Ready for Estimate Drawings for a certain soldier pile and lagging retaining wall and noise barrier, which were revised on July 26, 2017 and August 28, 2017. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 41. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. In order to correct these errors in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted

by the MBTA, STV significantly modified the design of that wall and noise barrier.

42. Specifically, STV's Ready for Estimate Drawings depicted a typical soldier pile and lagging wall consisting of drilled, cast-in-place concrete shafts with wide-flanged beam soldier piles for the entire length of the retaining wall ME-2 from one light rail of the Medford Branch outbound station to another. In contrast, the revised submittal introduced a modified retaining wall with permanent ground anchors in front of the Somerville Department of Public Works building involving two other stations. Moreover, the revised design drawings increased the overall length of the soldier pile and lagging retaining wall ME-2 and noise barrier N-7, increased the diameters for the drilled, cast-in-place concrete shafts, increased the spoils resulting from the shaft drilling, increased the number, sizes and the weights of the soldier piles. The revisions resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

## d. Soldier Pile and Lagging Retaining Walls ME-2.4 and Noise Barrier N-14B (WLL-002)

- 43. Between June 28, 2017, through August 28, 2017, STV submitted its Ready for Estimate Drawings for certain noise barriers and soldier pile and lagging walls east of the Ball Square Station platform. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in in tendering its pricing proposal to the MBTA.
- 44. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. Specifically, the Preliminary Design Documents depicted an inaccurate scope of work for noise barrier N-14B, while depicting no scope of work for soldier pile and lagging retaining walls ME-2.4 or ME-2.4E. In order to correct these errors and omissions in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted by the MBTA, STV significantly modified the drawings. The

revised submittal included, without limitation, an addition of a soldier pile and lagging retaining wall and integrated noise barrier, extension of the newly added retaining wall to retain a section of track fill and to prevent damage to the existing 86 Morton Avenue building, and other changes. These revisions, which involved an addition of approximately 338 feet of retaining wall, resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

### Red Bridge Traction Power Substation Walls (WLL-007)

- Bridge Traction Power Substation Civil site plan and grading. The Ready for Estimate Drawings (STV's sheet C-152) depicted a graded slope from elevation 22' on the north side of the Red Bridge Traction Power Substation site to elevation 10' adjacent to the right-of-way. While the site plan showed that the slope was supported on its west side by an existing retaining wall, it did not depict how the fill was retained at the slope's east side beneath the viaduct. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 46. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. In order to correct these errors and omissions in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted by the MBTA, STV significantly modified the design to add a Mechanically Stabilized Earth retaining wall on the north and northeast sides of the Red Bridge Traction Power Substation with a top of wall elevation at 23.67 feet. The revised design also required GLX Constructors to construct a temporary retaining wall to support the permanent Mechanically Stabilized Earth

retaining wall during pre and surcharge loading of the wall during construction. These revisions resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

### f. Retaining Wall ME-3 (WLL-004)

- 47. Between July 26, 2017, and September 19, 2017, STV submitted its Ready for Estimate Drawings for retaining wall ME-3. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 48. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. In order to correct these errors and omissions in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted by the MBTA, STV significantly revised its designs for retaining wall ME-3. The revised design split retaining wall ME-3 into two distinct wall sections with increased length of pile shafts, and increased length, size and weight of piles to account for additional surcharge loading, the increased height of top mounted noise barrier, and for the design life of the existing support of excavation for an existing fiber optic duct bank. The existence of the fiber optic duct bank was or should have been known to STV at the time the Ready for Estimate Drawings were prepared and should not have required a change of design. These revisions resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

## Pearl Street Traction Power Substation Retaining Walls (WLL-008)

g.

49. On July 17, 2017, STV submitted its Ready for Estimate Drawings relating to the

design of the Pearl Street Traction Power Substation Civil site plan and grading. The Ready for Estimate Drawings only indicated a proposed fence around the transformer yard and did not depict any site grading, any retaining walls adjacent to the right-of-way or containment walls at the transformer pads at the southeast side of the site. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.

of the work required. In order to correct these errors and omissions in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted by the MBTA, STV significantly revised its designs to add approximately 207.2 feet of new cast-in-place concrete retaining wall adjacent to the right-of-way and approximately 102 feet of new cast-in-place concrete containment wall surrounding the new transformer pads at the power substation. These revisions resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

#### h. Retaining Wall MW-5 (WLL-014)

- 51. On June 28, 2017, STV submitted its Ready for Estimate Drawings relating to the design of the Community Path between School Street and Central Street, which were revised on July 19, 2017, July 27, 2017, and August 25, 2017. These drawings depicted a typical soldier pile and lagging retaining wall MW-5 as supporting the Community Path. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
  - 52. Unbeknownst to GLX Constructors at the time, these drawings included significant

errors in the scope and quantity of the work required. In order to correct these errors and omissions in the Preliminary Design Documents, and years after the GLX project proposal was submitted to and accepted by the MBTA, STV revised its design for the soldier pile and lagging retaining wall MW-5 by increasing the sizes of the soldier piles, changing pile elevations, adding built-up plate girder piles at 8 locations and significant detailing for a new precast concrete pile cap beam between piles, and introducing a new detailed construction sequence to allow GLX Constructors to install new drain pipes and structures associated with a design package for a certain drainage watershed. These revisions resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

#### i. Retaining Wall ME-1.5 (WLL-015)

- Drawings relating to the grading at the existing Rogers Foam parking lot. These drawings did not include a retaining wall adjacent to the existing Rogers Foam parking lot to support the parking lot because STV assumed (incorrectly) that the ground surface could be finish graded from the right of way track bed to the parking lot edge without the need for a retaining wall to support the existing parking lot. The drawings also did not include a vehicular guard rail as a safety barrier. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 54. STV's Release for Construction drawings (submitted on February 27, 2019) similarly did not depict a retaining wall or a guardrail at the Rogers Foam parking lot.
- 55. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. In drawings submitted years after the project

proposal has been submitted to and accepted by the MBTA (and even after STV's issuance of Release for Construction drawings), STV revised the design and added a cast-in-place concrete retaining wall ME-1.5 and a vehicular guard rail. These corrections resulted in additional scope of work that significantly increased the cost of construction and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

### Retaining Wall ME-0.5 (WLL-019)

j.

- 56. Between June 28, 2017, and September 19, 2017, STV submitted its Ready for Estimate Drawings relating to a certain retaining wall ME-0.5 adjacent to the parking lots on Inner Belt Road. These drawings depicted a 6-8-foot-high modular precast block retaining wall adjacent to certain buildings on Inner Belt Road. GLX Constructors relied on and used these drawings to estimate the cost of the work and materials, and schedule in tendering its pricing proposal to the MBTA.
- 57. Unbeknownst to GLX Constructors at the time, these drawings included significant errors in the scope and quantity of the work required. Specifically, the design of retaining wall ME-0.5 failed to account for the minimum required horizontal offset from the centerline of the adjacent Yard Lead 2 track to the facing of the retaining fall within the available right of way, the required vertical elevation of Yard Lead 2 adjacent to the retaining wall, and the extent of parking lots requiring support. In order to correct these errors and omissions in the Preliminary Design Documents, and after the GLX project proposal was submitted to and accepted by the MBTA, STV had to completely redesign the retaining wall by replacing it with a more complex cast-in-place cantilever retaining wall, shifting its stationing, and increasing its length and height. These corrections resulted in additional scope of work that significantly increased the cost of construction

and adversely impacted project logistics, causing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA.

# C. STV's Omissions and Errors in Release for Construction Documents Result in Costly Corrections by and Additional Costs for GLX Constructors

- 58. As stated below, STV also submitted Release for Construction design stage documents that contained errors or omissions. As a consequence of these design defects, GLX Constructors incurred additional design, labor and other costs it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.
- 59. STV's Release for Construction design stage documents relating to the plate girder shear stud embedment depths within the concrete deck slabs for the Union Branch Eastbound Viaduct Spans ("UEV") 2 and 3 included significant errors. Specifically, STV denoted that the fixed height of the shear studs welded to the top flanges of the plate girders for UEV Spans 2 and 3 was equal to 6 inches. Additionally, STV tabulated fixed elevations for the top of the stay-inplace forms for the concrete deck slab above the top flange of the plate girders for all UEV spans, including Spans 2 and 3. STV also provided the cambers for each of the plate girders. Upon installing the plate girders with the given design cambers and fixed height shear studs and the stayin-place forms with the fixed top of form elevations, all within acceptable construction tolerances per the specifications, GLX Constructors learned that STV's design for certain portions of UEV Spans 2 and 3 included significant errors. Specifically, although STV initially determined that the embedment depths of shear studs were acceptable, the MBTA determined that the embedment depths were not acceptable and required GLX Constructors to repair all study with an embedment depth of less than 2 inches. GLX Constructors performed the required corrections, thereby increasing the cost of construction and adversely impacting project logistics and forcing GLX

Constructors to incur additional losses and expenses it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors

- 60. STV's Release for Construction design of the Vehicle Maintenance Facility also included significant errors. Specifically, the yard light pole locations conflicted with the Overhead Catenary System (OCS) overhead spans, cross braces, contact and direct current wires requiring relocation of some pole foundations and replacement of thirty-foot poles with twenty-foot poles. GLX Constructors performed the required corrections, thereby increasing the cost of construction and adversely impacting project logistics and forcing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA. Moreover, due to limitations on access to the operating area, this corrective work had to be conducted on night shift, with significant premium cost and productivity impacts due to access and safety considerations. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.
- 61. STV's Release for Construction design relating to the Auxiliary Power Stations at the Vehicle Maintenance Facility also included significant errors. Specifically, STV's design did not include negative ground return for Track #4 as specified by the Contract requirements. This deficiency required field corrective action in an operating area, concrete demolition, and replacement as well as installation of 500kcmil negative return. GLX Constructors performed the required corrections, thereby increasing the cost of construction and adversely impacting project logistics and forcing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.

- Concrete and Egress Ramp also included significant errors. STV failed to coordinate its design with other disciplines and the elevations reflected in its civil/structural drawings varied from the architectural drawings. Moreover, the elevations reflected in STV's drawings did not meet ADA slope requirements required by the MBTA Contract. Due to these elevation variances, additional design modifications were required after construction was complete to revise grading at the station entrance and revise layout of the bollards and outdoor bike hoops. In addition, the emergency egress ramp at the intermediate and street level landings did not satisfy the landing clearance required by the Massachusetts regulations (521 CMR Section 24.4), requiring corrective actions by GLX Constructors after construction was complete. GLX Constructors performed the required corrections, thereby increasing the cost of construction and adversely impacting project logistics and forcing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.
- 63. STV's Release for Construction design relating to the Additional Smoke Detectors at the Pearl Street Traction Power Substation also included significant errors. Specifically, STV's design did not include smoke detectors required by the National Fire Alarm and Signaling Code and the MBTA Contract. Due to these omissions, GLX Constructors was required to install twelve additional smoke detectors after construction was complete. These required corrections increased the cost of construction and adversely impacted project logistics, forcing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.

- Furthermore, STV's Release for Construction design relating to the Pearl Street 64. Traction Power Substation did not adequately protect the first-floor electrical equipment from water damage due to the proximity of electrical equipment to overhead drains and vertical water supply piping as required by the National Electrical Code ("NEC"). Section 110.34 (F) of the NEC states "pipes or ducts foreign to the electrical installation and requiring periodic maintenance or whose malfunction would endanger the operation of the electrical system shall not be located in the vicinity of the service equipment, switchgear, or industrial control assemblies. Protection shall be provided where necessary to avoid damage from condensation leaks and breaks in such foreign systems. Piping and other facilities shall not be considered foreign if provided for fire protection of the electrical installation." STV's design did not satisfy the foregoing code requirements. As a consequence of STV's error, GLX Constructors sustained costs to design a containment and capture system for the overhead drain piping and vertical water piping in the vicinity of the AC Switchgear including reconfiguring the existing water meter pit, installation of a sump pump with battery backup, alarms, reworking installed water meter and corresponding piping, installation of drip pan and containment piping. These required corrections increased the cost of construction and adversely impacted project logistics, forcing GLX Constructors to incur additional losses and expenses it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.
- 65. STV's Release for Construction design relating to the Fire Standpipe details in design package 34E also included significant errors. STV's design as installed did not adequately support the hose station pipe and valve configuration, and did not account for spatial limitations and required thrust and movement. The design configuration allowed for supports to be secured

to the 4" vertical pipe with a riser clamp (PS-3) but did not provide for securing 2 1/2" valve connection on the west side. The design also did not provide a means of support on the east side as the track structure does not allow for installation of a PS-3 support. When GLX Constructors reached out to STV for guidance, STV directed GLX Constructors to install supports on the east side as close to the top of the concrete walkway as possible for all hose valve stations and install a Tolco Fig 4L support on the west side for each hose connection, stating that only one sway brace support is needed for each hose station and that the unsupported distances are within NFPA 13 requirements. GLX Constructors subsequently learned that STV's proposed solution for the east side configuration did not take into account the as built design configuration and the Tolco Fig 4L support proposed on the west side could not be installed due to spatial limitations. Therefore, an alternate hanger support was proposed and accepted by STV. After installation of the alternate hanger support accepted by STV, the system failed a flow test due to a lack of adequate support for the standpipe. As a consequence of STV's errors, GLX Constructors sustained costs and expenses for additional design services and corrective work it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.

66. STV's Release for Construction design relating to plumbing design at the Red Bridge, Pearl Street, and Ball Square Traction Power Substations also included significant errors. Specifically, STV's design for trough to floor drain did not provide pitch in any direction. As a consequence of these design defects, GLX Constructors was required to perform corrective work including cutting concrete, concrete removal, adjusting drain height and repouring floor around floor drain to allow water to flow toward and into the floor drains. These required corrections increased the cost of construction and adversely impacted project logistics, forcing GLX

Constructors to incur additional losses and expenses it could not recover from the MBTA. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.

67. STV's Release for Construction design relating to the Vehicle Maintenance Facility Shop Office Ceiling Fireproofing also included significant errors. STV's design did not provide sufficient clearance to install specified fire proofing. As a consequence of this error, GLX Constructors will have to provide the 1-hour fire rating either above the structural deck or change the entire drop ceiling design at significant expense to GLX Constructors. These required corrections will increase the cost of construction and adversely impact project logistics. GLX Constructors notified STV of these defects and additional costs and that it was going to backcharge STV for those costs, but STV refused to reimburse GLX Constructors.

# D. STV Rebuffs GLX Constructors' Attempts to Satisfy Conditions Precedent to Litigation

- 68. Prior to commencing this action, GLX Constructors has in good faith undertaken efforts to resolve the claims advanced to STV.
- 69. In that regard, Part III, Section 32.0 of the Design Contract sets out a dispute resolution provision and the conditions to either party's ability to commence litigation. Pursuant to the Design Contract, the parties are required to engage in executive negotiations and in mediation prior to commencing a lawsuit. The Design Contract does not provide for any discovery or exchange of expert reports to be conducted in advance of the mediation, much less impose an obligation on GLX Constructors to engage in any discovery or exchange of expert reports as a condition precedent to mediating with STV.
- 70. Consistent with its obligations under the Design Contract, GLX Constructors provided notices of claim to STV, setting out the legal and factual basis for its claims in an effort

to engage in negotiations with \$TV's executives (the "Notices of Claims"). GLX Constructors also sent a notice of additional potential claims to STV (the "Notice of Additional Claims"). At no time has STV provided GLX Constructors with a meaningful or written response to the Notices of Claims or the Notice of Additional Claims.

- 71. On or about March 24, 2020, GLX Constructors and STV entered into a Tolling Agreement, which they amended on March 18, 2022 and December 31, 2022. Pursuant to the Tolling Agreement, GLX Constructors and STV agreed to toll the statute of limitations and statute of repose with respect to the claims asserted by GLX Constructors in the Notices of Claims and the Notice of Additional Claims from March 24, 2020 through May 1, 2023.
- Following agreement on the identity of the mediator, the location and duration of the mediation and the date of the mediation, on or about February 23, 2023, STV demanded that GLX Constructors produce numerous documents and provide expert reports as a condition of participating in the mediation. As STV's demand was contrary to the provisions of the Design Contract, GLX Constructors declined to engage in burdensome pre-mediation document and expert discovery.
- 73. STV's attempts to unilaterally impose a condition on mediation that is not provided for in the Design Contract constitute a breach and/or waiver of the mediation requirement and has left GLX Constructors no choice but to commence litigation.
- 74. Notwithstanding the commencement of this litigation, GLX Constructors remains ready and willing to mediate its dispute with STV upon the terms specified in the Design Contract.

#### Count I - Professional Negligence

75. GLX Constructors repeats and re-alleges the foregoing paragraphs as though fully set forth herein.

- 76. As a professional engineering firm, STV had a duty to perform its services in accordance with the professional standard of care. The Teaming Agreement required STV to perform the design services "in accordance with the standards of skill and care followed by recognized engineering firms performing similar services in the same area at the same time...". Similarly, the Design Contract defines the standard of care applicable to STV's services as "due skill, care, efficiency and diligence in accordance with the standard of care followed by recognized engineering firms performing similar services for design-build contractors constructing large civil works projects for public owners under time certain, fixed priced contracts in the United States."
- 77. STV breached its duty to provide design services in connection with the GLX Project in compliance with the contractual standard of care. STV breached the standard of care by, amongst other things, providing the Preliminary Design Documents with significant errors and omissions concerning the scope and quantity of the required work. STV also breached the standard of care by, amongst other things, providing Release for Construction Documents with significant errors and omissions.
- 78. As a direct and proximate result of STV's breaches of its duty to perform design services in accordance with the contractual standard of care, GLX Constructors suffered significant damages in an amount to be determined at trial.

#### Count II - Breach of Contract

- 79. GLX Constructors repeats and re-alleges the foregoing paragraphs as though fully set forth herein.
- 80. Fluor, Middlesex Corporation, Herzog Contracting, and Balfour Beatty entered into a Teaming Agreement with STV whereby STV agreed to provide certain professional design and engineering services in respect of the GLX Project.
  - 81. GLX Constructors and STV entered into the Design Contract whereby STV agreed

to provide certain professional engineering services in connection with the GLX Project.

- 82. STV breached the Teaming Agreement and/or the Design Contract by, among other things:
  - a. providing professional services that failed to comply with the standard of care;
  - b. failing to provide accurate Ready for Estimate Drawings upon which GLX Constructors based its pricing proposal to the MBTA;
  - c. failing to perform its services in strict conformance with the Ready for Estimate

    Drawings;
  - d. issuing post-award design drawings which deviated significantly from STV's Ready for Estimate Drawings; and
  - e. failing to accept responsibility and reimburse GLX Constructors for the incurred additional costs as a result of errors and omissions in the Release for Construction design stage documents.
- 83. As a direct and proximate result of STV's breaches of the Teaming Agreement and/or the Design Contract, GLX Constructors suffered significant damages in an amount to be determined at trial.

#### Count III - Contractual Indemnification

- 84. GLX Constructors repeats and re-alleges the foregoing paragraphs as though fully set forth herein.
- 85. Under the terms of the Teaming Agreement, STV agreed to indemnify GLX Constructors and its members, and to hold them harmless from "any claims, loss, damage or expenses arising from its failure to adhere to such standards" of skill and care specified under the agreement.
  - 86. In accordance with the Design Contract, STV agreed to indemnify GLX

Constructors and its members from all losses, costs, expenses, and damages and including attorney and expert consultant fees and costs, arising out of its "breach or alleged breach" of the Design Contract or the "alleged negligent act or omission" by STV.

- 87. STV's design documents for the GLX Project upon which GLX Constructors relied in forming its GLX project proposal that was submitted to and accepted by the MBTA and/or performing work in connection with the GLX project contained errors and omissions in breach of the contractual standard of care and its contractual obligations.
- 88. As a result of STV's errors, omissions, negligence, and breaches of the Teaming Agreement and/or the Design Contract, GLX Constructors has suffered and will continue to suffer significant costs, expenses, losses, and damages. GLX Constructors is contractually entitled to indemnification for costs, expenses, losses, and damages as a result of STV's errors, omissions, negligence and breaches of the Teaming Agreement and the Design Contract.

### **Prayer for Relief**

WHEREFORE, GLX Constructors by and through its members Fluor Enterprises, Inc.,
The Middlesex Corporation, Herzog Contracting Corp., and Balfour Beatty Infrastructure, Inc.
requests that this Court:

- A. Enter judgment against STV and in favor of GLX Constructors on each of the claims;
- B. Award GLX Constructors its damages in an amount to be determined at trial, plus interest and attorney's fees and costs; and
- C. Grant such other and further relief as the Court deems just and proper.

Respectfully Submitted,

GLX CONSTRUCTORS by and through its members FLUOR ENTERPRISES, INC., THE MIDDLESEX CORPORATION, HERZOG CONTRACTING CORP., and BALFOUR BEATTY INFRASTRUCTURE, INC.

By their attorneys,

/s/ Mariana Korsunsky

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