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February 23, 2018

Via Email: <u>LesW@SJLouis.com</u> & CMRRR 7013 2630 0001 4891 9471

Les V. Whitman, Executive Vice-President S.J. Louis Construction of Texas, Ltd. 1001 Capital of TX Hwy S, Bdg L, Suite 250 Austin, Texas 78746

Via Facsimile (817) 477-0552 & CMRRR 7013 2630 0001 4891 9495

Les Whitman, Executive Vice-President S.J. Louis Construction of Texas, Ltd. 520 South 6<sup>th</sup> Avenue Mansfield, Texas 76063

Via Email: <u>John.O'Donnell@LibertyMutual.com</u> & CMRRR 7013 2630 0001 4891 9501

John O'Donnell Liberty Mutual Fire Insurance Company Senior Surety Counsel 2815 Forbes Avenue, Suite 102 Hoffman Estates, Illinois, 60192

Via Facsimile (952) 563 0529 & CMRRR 7013 2630 0001 4891 9488 Amy M. Burns 450 Plymouth Road, Suite 400 Plymouth Meeting, PA 19462

Re: City of Austin Waller Creek Tunnel & 4<sup>th</sup> Street Inlet Facility Project, CIP ID No. 6521.005 ("Contract"); Performance Bond No. 190-023-404

Dear Mr. Whitman:

This is your notice that we intend to terminate the Contract pursuant to the General Conditions to the Contract and declare you in default should you fail to pay the City of Austin within seven (7) calendar days of receipt of this letter. Should you fail to perform your obligations, we will seek payment from your surety.

The City is entitled to the following payments from S.J. Louis: (1) a diminution of value in the amount of \$16,000,000, (2) liquidated damages of \$5,900,000, and (3) \$419,764 to reimburse the City for the cost of forensic engineering & testing related to the defects. For the reasons more fully described below, the City hereby demands \$22,342,171.00 from S.J. Louis, minus the amount left in retainage, approximately \$1,500,000, which the City will withhold from any remaining payments due S.J. Louis to offset damages to the City.

After seven (7) days of receipt of this letter and the failure of S.J. Louis to issue a check to the City in the amount of \$22,342,171.00, S.J. Louis is hereby declared to be in default of its contract with the City of Austin for the Waller Creek Tunnel & 4<sup>th</sup> Street Inlet Facility Project, and the City of Austin notices Liberty Mutual Fire Insurance Company of the City's claim on Performance Bond No. 190-023-424.

# CITY OF AUSTIN NOTICE OF CLAIM ON PERFORMANCE BOND NO. 190-023-424

Dear Mr. O'Donnell:

The purpose of this letter is to provide notice of the City of Austin's claim on Performance Bond No. 190-023-424 (the "Bond"), in connection with City of Austin Waller Creek Tunnel & 4<sup>th</sup> Street Inlet Facility Project, CIP ID No. 6521.005 (the "Project"), effective immediately upon the date of default of S.J. Louis Construction of Texas as provided above and the City of Austin's Notice of Declaration of Default as provided above.

Upon S. J. Louis's default of its contract with the City of Austin for the Waller Creek Tunnel & 4<sup>th</sup> Street Inlet Facility Project as provided above, the City of Austin hereby demands \$22,342,171.00 of Liberty Mutual Fire Insurance Company for S.J. Louis Construction of Texas's failure to perform all covenants, conditions, and agreements agreed to be performed as part of the Project.

#### I. The Bond

1. On February 21<sup>st</sup>, 2011, S.J. Louis Construction of Texas ("SJL" or "S.J. Louis") and Liberty Mutual Fire Insurance Company ("Liberty Mutual") executed the Bond, whereby Liberty Mutual, agreed to act as surety on the Project. Pursuant to the Bond, Liberty Mutual became held and firmly bound unto the City of Austin (the "City"), in the amount of Forty-Eight Million Six Hundred Eighty-Three Thousand Five Hundred Dollars and Zero Cents (\$48,683,500.00). The Bond is attached as **Exhibit 1**. The second paragraph of the Bond provides that Liberty Mutual's obligation to the City remains in "full force and effect" if SJL, as the Principal, fails to perform all "covenants, conditions and agreements" agreed to as part of the Project:

Now, therefore the condition of this obligation is such, that <u>if said</u> <u>Principal</u> shall faithfully perform said Agreement and <u>shall in all</u> respects duly and faithfully observe and perform all and singular <u>covenants</u>, conditions and agreements in and by said contract agreed and covenanted by Principal to be observed and performed, and according to true intent and meaning of said Agreement hereto

annexed, then this obligation shall be void; otherwise to remain in full force and effect.

(emphasis added)

2. The Bond was made pursuant to Section 2253.021 of the Texas Government Code, which required that SJL, before beginning work on the Project, execute to the City a performance bond that is "(1) solely for the protection of the state or governmental entity awarding the public work contract; (2) in the amount of the contract; and (3) conditioned on the faithful performance of the work in accordance with the plans, specifications, and contract documents." Tex. Gov't Code § 2253.021(b) (emphasis added).

## II. The Project

In February 2011, the City of Austin entered into an approximately \$48 million contract with S.J. Louis to construct the Waller Creek Tunnel. The Tunnel is critically important to the City's efforts to control flooding in the Waller Creek flood plain. The tunnel was designed to allow the development of a major portion of downtown that is currently in the Waller Creek floodplain.

S.J. Louis' portion of the Project consisted of the excavation of a one-mile long tunnel from Waterloo Park to the Colorado River, the construction of a steel reinforced concrete liner, the construction of a storm water inlet at 4<sup>th</sup> street, and other landscaping improvements along the creek. The cost of the entire Tunnel Project is more than \$160 million. The City has previously provided all requested project documents to John O'Donnell on August 25, 2016 via electronic mail, a copy of which is attached as **Exhibit 2**.

# III. Summary of Claim

- 3. The City contracted with SJL to construct a tunnel in accordance with the Project's design plans and specifications. However, SJL did not construct that tunnel. The design called for circumferential rebar spacing of 12 inches on center. The design also called for a smooth tunnel liner finish to ensure hydraulic performance. Instead, SJL constructed a tunnel with significant missing rebar, numerous surface imperfections, and a patchwork of repairs.
- 4. The defects have required extensive repairs and have caused significant delays. Since November 2016, the City and SJL have worked together to implement a repair plan to correct the construction defects as best as possible. Those repairs are now complete. However, even the repaired tunnel cannot recapture the structural integrity and the intended service life of the contracted for design. Additionally, the tunnel as built has lost 67.3% of the tunnel's flood design factor of safety, measured by the loss of "freeboard" at the primary intake in Waterloo Park.
- 5. The economic impacts of the reduced service life costs and the loss of the freeboard will impact the City for the life of the tunnel. The as-built tunnel will require additional maintenance, earlier capital repairs, more frequent inspections, and more significant repair work than would have been incurred with a contractually compliant tunnel. In addition, the loss of freeboard reduces the primary purpose of the tunnel, flood protection.

6. The City will never be made whole and is forced to accept a tunnel with a diminished value. Under the contract, the City is entitled to the diminution of value of the tunnel as-designed compared with as-built, estimated to be \$16,000,000. The City is also entitled to \$5,900,000 in liquidated damages incurred due to the delays caused by SJL's defective work. Finally, the City is entitled to \$419,764 in forensic engineering costs it incurred to uncover and test SJL's work and assist in repair design.

## IV. Timeline of Tunnel Construction

- 7. On February 27, 2011, the City of Austin entered into a "time is of the essence" contract with SJL to construct the Waller Creek Tunnel. The Contract requires that "all Work associated with the tunnels and shaft . . . including the construction plans and specifications" shall be substantially completed within 1,098 days after the Notice to Proceed ("Milestone #1"), i.e., April 13, 2014. The Contract further requires that all remaining work, including work related to the creek side inlet, debris screening facility, and creek restoration, must be completed within an additional 155 days after the substantial completion date of the tunnels and shaft ("Milestone #2"), i.e., September 15, 2014. The Contract provides that the City is entitled to liquidated damages in the amount of \$20,000 per day for failure to timely complete Milestone #1 and \$5,000 per day to timely complete Milestone #2.
- 8. Two important specifications in the Contract are:
  - 410S.25 Defective Work. Any defective work discovered after the forms have been removed shall be repaired as soon as possible in accordance with "Finishing Exposed Surfaces" . . . If the surface of the concrete is bulged, uneven or shows excess honeycombing or form marks, which in the opinion of the Engineer or designated representative, cannot be repaired satisfactorily, the entire section shall be removed and replaced at the expense of the Contractor."
  - 410S.26 Finishing Exposed Surfaces. Concrete finish in tunnel is critical to hydraulic performance of the Project. Final lining must be smooth steel form finish. Any form fins or other defects greater than 1/16-inch in height must be ground smooth to adjacent surfaces. Any depression greater than 1/16-inch in depth and/or 10 square inches in area must be repaired in accordance with 410S.25 Defective Work."

Additional relevant Contract provisions are attached as Exhibit 3.

9. <u>In June 2013, after excavation had been completed, SJL began its first concrete pours. The defects were obvious and significant.</u> During inspections of the worksite, the City and its Project Engineer and Architect, Kellogg Brown & Root Services ("KBR") and Espey Consultants ("Espey") (collectively, the Joint Venture or JV) discovered numerous defects. For example, concrete was inconsistently placed leaving large voids, segregation, exposed rebar, clumps, honey combing, and more. Attached as **Exhibit 4** are pictures of some of the defects discovered by the City and the project engineers. Additionally, the poured concrete was of such poor quality that a

new mix had to be created to meet ACI specs. SJL asked for and was granted an 8-day extension to formulate a new mix.

- 10. The City and the JV immediately notified SJL of the defects and issued multiple requests for SJL to submit a repair plan. In addition to multiple e-mails, letters, and meetings to discuss the defects, the City and the JV sent a letter on July 23, 2013 requesting that SJL submit a comprehensive plan to repair the installed concrete including a forensic approach to determine the coverage and location of the reinforcement within poured segments. The letter stated that SJL would be required to develop a plan on how to correct all areas of insufficient coverage.
- Between July 2013 and April 2014, the City was forced to hire Wiss, Janny & Elsner Associates ("WJE") to perform forensic tests to determine the scope of the defects and their effect on the Tunnel's performance capacity. WJE put together a hydraulic report, finding that the construction defects had caused a decrease in freeboard capacity. Through multiple site visits, the City and the JV also discovered that the scope of defects was greater than originally thought. The City and the JV exchanged multiple correspondences with SJL, outlining a forensic plan review process to address non-compliant work. In April 2014, the City sent a letter to SJL, detailing the deficiencies in the tunnel lining as well as corresponding repair work, including (a) non-compliant structural rebar (less than 2 ½ inches of cover), (b) spall repairs, (c) cold joints, (d) honeycombing, (e) major depressions in concrete, (f) concrete brick repairs, (g) block-out repairs, (h) crown wedges, (i) voids, and (j) cracks.
- 12. <u>In subsequent months, new and significant defects in the tunnel lining continued to be discovered, and the scope of the earlier-discovered defects was greater than previously thought.</u> Attached as **Exhibit 5** are pictures of some of the construction defects identified by the City and the JV. Throughout this time, the City and the JV were working with SJL to develop comprehensive plans to repair the defects. One obvious defect was circumferential depressions in the tunnel wall located at regular intervals consistent with the end of each concrete form ("lap bands"). These lap band depressions varied from several inches in depth and width and in no way conformed with the plans or specifications.
- 13. On August 30, 2014, SJL issued a Notice of Delay to "Project Substantial Completion #1." In the letter, SJL stated that it was providing notice of the "potential expedient recovery of lost time associated with the final lining repairs and finishing of the tunnel lining." The letter also indicated that SJL would not be able to finish the work necessary to make the "voluminous" repairs of defects identified by the City in prior communications.
- 14. <u>In November 2014, the City and the JV discovered that the tunnel lining was missing structural rebar</u>. Discussions in the field indicated that rebar had not been placed because of the conflict between SJL's concrete form and rebar placement. See **Exhibits 6, 7**. SJL is still unable to provide any explanation for the missing rebar. The City and the JV performed forensic investigations and discovered numerous areas that called for rebar at 12" on center to actually be spaced at 24" to 48" spans. It was necessary to hire a third-party forensic firm to analyze the scope of the missing rebar and the effect on the tunnel project.
- 15. On November 9, 2014, the contractual Tunnel and Shaft Milestone (Milestone #1) substantial completion deadline arrived. Given the extensive defects discovered over the course

of construction, the Tunnel was not complete. Indeed, given the recent discovery of the missing rebar, the scope of the defects was still unclear. Significant repairs remained necessary to complete the tunnel. In a meeting with the City and the JV, SJL acknowledged as much, indicating that it was "out of time to complete all necessary repairs to the tunnel lining." SJL further requested a change to the repair plan addressing the contractually required amount of cover over the rebar that had been installed.

- 16. On December 10, 2014, the Tunnel Inlet Contractor, Oscar Renda, was ready to accept water. Also in December, the City's independent forensic expert, WJE, performed Ground Penetrating Radar ("GPR") testing to determine the placement of reinforcing steel within and adjacent to each of the 207 lap rings. The GPR testing shows missing rebar affects "far more locations than reported by SJL" and that there are "still areas of concern related to rebar cover beyond those SJL has accepted which still need to be investigated before final report." See Exhibit 8.
- 17. On or about March 13, 2015, SJL wrote an e-mail to the City, stating that the "concerns with rebar, etc., can be resolved after the tunnel is flooded."
- 18. On April 4, 2015, SJL removed the Tunnel bulkhead and achieved completion of the contractual Tunnel and Shaft Milestone. With removal of the bulkhead, the Tunnel was subsequently flooded. Although not complete, the City has agreed to accept this date as completion of Milestone 1 for purposes of liquidated damages.
- 19. On October 15, 2015, the City's independent forensic expert, WJE, found a significant reduction in structural capacity between the as-designed tunnel and the as-built tunnel. WJE concluded that the long-term serviceability of the liner would likely be compromised due to the omission of reinforcement, misplaced reinforcement, the presence of concrete cracking, and the poor quality of the concrete. See **Exhibit 9**.
- 20. On November 12, 2015, the City issued a Notice of Claim in the amount of \$7,466,191.80 in damages and \$2,400,000 in liquidated damages. In subsequent months, SJL issued its own Notice of Claim and engaged engineering experts to analyze WJE's findings.
- 21. <u>In August 2016, the City's independent forensic expert, WJE, concluded that it was necessary to strengthen all locations where circumferential bar spacing exceeds 36 inches.</u> The City further learns that 24 of the 107 tested locations in the tunnel have gaps of 36+ inches between existing sections of rebar. See Exhibit 10.
- 22. On February 28, 2017, the parties agreed to a Reservation of Rights Agreement. The parties agreed to work together to repair the identified defects, both the City and SJL reserved their rights to seek adjustments, damages, etc. under the Contract. See Exhibit 11. By this time, WJE had determined that, where the sections of missing rebar met or exceeded 36 inches in width, repairs were necessary in order to avoid violating the modulus of rupture for unreinforced concrete. In consultation with Pivot, SJL's engineering consultant, WJE and Pivot recommended a repair strategy to imbed new sections of rebar in the crown of the tunnel.

- 23. <u>In April 2017, the City issued a Warranty Letter to SJL for correction of the unrepaired lap bands and other remaining defects</u>. In subsequent months, SJL performed the repairs as determined by the independent engineers.
- 24. <u>In August 2017, the JV concluded that even after repair of the lap bands, the tunnel will have lost much of the designed freeboard</u>. With the lap bands unrepaired, all freeboard would be lost (-0.91 feet), but with all of the lap bands corrected, a positive 1.03 feet of freeboard would be recovered. The original tunnel design provided for 3.15 feet of freeboard. See **Exhibit 12**.
- 25. On September 15, 2017, the City issued an Amended & Restated Notice of Claim for diminution of value, liquidated damages, and reimbursement of the cost of forensic engineering and testing. See Exhibit 13.
- 26. On October 16, 2017, the City issued a close-out letter acknowledging completion of repairs concerning the missing rebar and the lap band depressions. The letter also stated that core sampling and testing had indicated no remaining air voids.

# V. The City's Claims

The City is entitled to the following payments from Liberty Mutual under the Bond: (1) a diminution of value in the amount of \$16,000,000, (2) liquidated damages of \$5,900,000, and (3) \$419,764 to reimburse the City for the cost of forensic engineering & testing related to the defects.

## A. Diminution of Value

27. SJL is responsible for accurately completing all work in compliance with the Contract Documents, including all specifications, drawings, and design requirements. SJL also has warranted that "all Work will conform to the plans and specifications, be performed in a good and workmanlike manner in accordance with the Contract Documents and will not be defective." The Contract expressly provides that SJL shall be responsible for compensating the City for the diminution of value of any defective work:

Acceptance of Defective Work: If, instead of requiring correction or removal and replacement of defective work, OWNER decides to accept it, OWNER may do so. CONTRACTOR shall pay all claims, costs, losses, and damages attributable to OWNER's evaluation of a determination to accept such defective work. If any such acceptance occurs prior to recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Document and compensating OWNER for the diminished value of the defective Work. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER after a calculation by OWNER of the diminution in value of the defective work.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Contract General Conditions §§ 6.1.1, 1.14, 1.35.

<sup>&</sup>lt;sup>2</sup> Contract General Conditions § 6.13.1.

<sup>&</sup>lt;sup>3</sup> Contract General Conditions § 6.13.8 (emphasis added).

28. The City is receiving a tunnel with diminished value. SJL has executed the repairs for sections of missing circumferential rebar greater than or equal to 36 inches in accordance with the repair plan. SJL has also modified the remaining "lap band" depressions. However, even with the repairs, the Tunnel has lost the structural integrity and the intended service life that the designed tunnel would have provided. ACI 385 indicates that insufficient bar spacing negatively impacts service life: reduced bond, increased deflection and cracking, and increased corrosion risk. The lost freeboard represents a loss of the factor of safety that the city paid for. Even with all of the lap bands modified, the City has lost 67.3% of the tunnel's designed freeboard. This impacts the entire purpose of the tunnel. Altogether, the diminished value resulting from SJL's defective work impacts not only the tunnel component of the overall project, but also the value of the overall \$160,000,000 tunnel project. A nominal ten percent reduction in the value of the entire tunnel project equals \$16,000,000 in damages.

## **B.** Liquidated Damages

- 29. The City is entitled to \$2,300,000 in liquidated damages for the delay in completing the Tunnel and Shaft Milestone. The contractual Tunnel and Shaft Milestone completion date was November 9, 2014. The WCT Inlet Contractor, Oscar Renda, was ready to accept water as of December 10, 2014. However, SJL did not reach the Tunnel and Shaft Milestone until April 4, 2015, which was 115 days after Oscar Renda was ready to accept water. The amount of this demand forgives SJL for the additional 1 year of repair time. The Contract provides for \$20,000 in liquidated damages per day of delay. Accordingly, the city is entitled to \$2,300,000 in liquidated damages for the delay in completing the Tunnel and Shaft Milestone.
- 30. The City is entitled to \$3,600,000 in liquidated damages for the delay in completing the Creek Side Inlet, Creek Restoration and Other Remaining Work Milestone. The Contract provides for \$5,000 per day in liquidated damages for failure to timely achieve this milestone. The deadline for substantial completion was September 16, 2015. Accordingly, as of September 5, 2017—the date of the City's Amended and Restated Claim—there has been a delay of 720 days, resulting in \$3,600,000 in liquidated damages.

## C. Cost of Forensic Engineering & Testing

31. The City is entitled to \$442,171 for the costs of forensic engineering and testing. To date, the City has paid WJE \$419,764 and the JV \$22,407 for their services in addressing SJL's defective work. The City is entitled to be reimbursed for these costs under section 13.6 of General Conditions of the Contract.

## VI. Conclusion

For the reasons described above, the City of Austin hereby demands \$22,342,171.00 of Liberty Mutual Fire Insurance Company for S.J. Louis Construction of Texas's failure to perform all covenants, conditions, and agreements agreed to be performed as part of the Project. The obligations on the Bond are mature and payable. Please notify me immediately if Liberty Mutual Fire Insurance Company claims that there are any further conditions, requirements, or other contingencies that must be met before payment on the Bond is due.

RICHARDS RODRIGUEZ & SKEITH LLP PAGE 9

Sincerely,

Richards Rodriguez & Skeith, LLP

Daniel R. Richards

Representing the City of Austin

Enclosures: Exhibits 1-13