Brighton Wastewater Treatment System Upgrades

ADDENDUM NO. 005
June 9, 2025

Tender Closing Date: June 24, 2025

This Addendum forms part of the Contract Documents and amends the original drawings and specifications. Tenderers are reminded to acknowledge on the Form of Tender that this Addendum has been received.

SPECIFICATIONS

General

Item No. 1 Section 00300

1.1 Statement 'D' – Breakdown of Items and Prices:

.1 **Revise** Table 2 - Unit Price Breakdown as per the attached.

Item No. 2 Section 01210

2.1 **Delete** Section 01210, Item 1.1.4 "This allowance is only for materials not identified in the Designated Substance Report."

Item No. 3 Section 01520

3.1 **Delete** the following sentence from Section 01520, Item 1.6.2.9, "Provide one phone line capable of conference calling".

3.2 **Delete** Section 01520, Item 1.6.2.13.2.

3.3 **Delete** Section 01520, item 1.6.13.4.

Item No. 4 Section 01560

4.1 **Revise** Section 01560, item 1.2.1 to read "Erect temporary security and safety site fencing to maintain site security during construction. Contractor shall submit temporary security fencing shop drawings for review."

Civil

Item No. 5 Section 02140

5.1 **Revise** Section 02140, Item 3.1.4 to read "Install Clay Dyke as indicated on Civil Drawings, to mitigate groundwater inflow in the trenches."

Item No. 6 Section 02450

6.1 **Revise** Section 02450, Item 1.6.1 to read "as a lump sum, all inclusive, with a monthly payment schedule."

6.2 **Delete** Section 02450, Item 1.6.1.1 to 1.6.1.3.

Item No. 7 Section 02641

7.1 **Delete** Section 02641.

Structural

Item No. 8 Section 03200

8.1 **Add** clause to Section 03200, Item 2.1.9: "Galvanizing of non-prestressed reinforcement: To ASTM A123/A123M, average minimum thickness of zinc coating to be 100 mils.

.1 Conduct bending tests to verify galvanized bar fragility in accordance with ASTM A143/A143M."

Item No. 9 Section 03370

9.1 **Revise** Section 03370, Item 1.1 to read: "Section includes: this section specifies material and performance criteria required to supply and install thermoplastic liner of high-density polyethylene (HDPE) cast into the walls and ceilings as specified on the Drawings. Provide thermoplastic lining suitable for sulfate exposures and liquid-tight applications at maximum pressure of 75 kPa and maximum temperature of 30°C."

Mechanical

Item No. 10 Section 15091

10.1 **Add "**2.9 Specified Products

.1 Johnson Controls

.2 Delta Controls

.3 Siemens

.4 Honeywell"

Process Mechanical

Item No. 11 Section 15349

11.1 **Add** "2.15 FLEXIBLE PIPE COUPLING (RESTRAINED BELOW GRADE)

.1 Flexible connection of plain end pipes in a restrained below grade application.

.2 All yard piping connections to the new building must have a flexible coupling installed within 1.0 m of the foundation wall. The flexible coupling must provide axial restraint and transition between the pipe material used for interior piping, which passes through the foundation wall, and yard piping. this applies to all gravity and pressure piping.

.3 Construction

.1 Centre Sleeve: ASTM A536 ductile iron.

.2 Ending Ring: ASTM A536 ductile iron.

.3 Gaskets: EPDM

.4 Coating: Epoxy coating per AWWA C213

.5 Protective sleeve – polyethylene 8 mil, refer to manufacturer's installation instructions for backfill.

.6 Restrained grip rings compatible with pipe type

.4 Pressure Rating: 2415 kPa. (350psi)

.5 Specified Product: Romac FJ Restraint

.6 Alternate Manufacturers:
.1 Approved Alternate."

Item No. 12 Section 11347

12.1 Item 2.10.2, **Replace** "Monitoring system will be enclosed in a fibreglass Type 4X wall mounted panel and is to be located less than 12 feet (3.66 m) from the LED end of the UV module." **with** "Monitoring system will be enclosed in a fibreglass Type 4X wall mounted panel located less than 12 feet (3.66 m) from the LED end of the UV module or integrated into the UV module PDC."

12.2 Item 2.10.5, **Replace** "Both displays will utilize LEDs and will be visible through the panel door." **with** "Both displays will utilize LEDs and will be visible through the panel door or on the HMI screen main display."

Item No. 13 Section 17506

13.1 Item 1.1.1.4, **Replace** "In Remote Mode, banks can be operated in Off, Hand or Auto operational modes." **with** "In Remote Mode, banks can be operated in On, Off or Auto operational modes".

13.2 Item 1.1.1.6, **Replace** "In Hand operational mode, UV banks will activate for a set warm-up cycle and then power level will drop to a manually entered setpoint." **with** "In On operational mode, UV banks will activate for a set warm-up cycle and then operate at a fixed 100% power level".

13.3 Item 1.1.1.7.1, **Replace** "Bank power level will be modulated by the SCC to maintain the design UV dose of 30 mJ/cm2, determined based on the measured UV transmittance of the water. UV transmittance is measured by analyzers AIT-4002 and AIT-4002 for the duty and standby UV bank respectively." **with** "Bank power level will be modulated by the SCC to maintain the design UV dose of 30 mJ/cm2, determined based on the measured UV intensity of the water. UV intensity is measured by analyzers AIT-4002 and AIT-4003 for the duty and standby UV bank respectively."

13.4 Item 1.1.1.7.2, **Replace** "If there is a failure in a UV transmittance analyzer, an alarm will be triggered, and the UV bank will operate at full power" **with** "If there is a failure in a UV intensity analyzer, an alarm will be triggered, and the UV bank will operate at full power".

Item No. 14 Section 15261

14.1 **Add** Section 15261 EQUIPMENT INSULATION provided herein.

Item No. 15 Section 11424

15.1 **Add** VERTICAL MULTI-STAGE PUMP SCHEDULE provided herein.

Item No. 16 Section 15100A

16.1 **Add** "provide epoxy coating" to the comments column for the following valve tags: VAR 7301, VC 7301, VC 7302, VF 7301, VF 7302 and VTS 7301.

16.2 **Replace** "E1" with "E2" in type column for valve tags VC 7301 and VC 7302.

.1 **Add** valve specification 15100-E2 as attached.

Item No. 17 Section 11382.01

17.1 **Change** column header "Design Head" to "Inverts", column sub-headers "Seating" to "Operator" and "Unseating" to "Gate". Change column header "Inverts" to "Design Head", column sub-headers "Gate" to "Unseating" and "Operator" to "Seating".

17.2 **Change** "SG 4004" to "SG 4001". Replace the following information for SG 4001: Replace "UV Disinfection Bypass Outlet Slide Gate" with "UV Disinfection Inlet Slide Gate". Replace "N/A" with "Rising" for stem type. Replace "N/A" with "84.0" for operator invert. Replace "N/A" with Hand Crank" for operator type. Replace "N/A" with "Open/Close" for actuator operation. Add "High Performance Gate" to the comments.

DRAWINGS

Civil

Item No. 18 Drawing DC001

18.1 **Add** clearing and grubbing, as required, for proposed outfall installation.

18.2 **Add** removal and reinstatement of post and wire fence, as required, for proposed outfall installation.

18.3 **Add** removal of existing gravel driveway, as required, for proposed outfall installation.

Process Mechanical

Item No. 19 **Drawing P601**

19.1 Callout of section 1/P603 provided in attached sketch.

Item No. 20 **Drawing PID051**

20.1 **Replace** "UVI" on AE-4001 and AIT-4001 **with** “UVT".

Item No. 21 **Drawing P501**

21.1 **Replace** both instances of "Valve and PVC pipe by Civil. Coordinate with Civil" to "Valve to be provided by Division 15 and PVC Pipe to be provided by Civil. Coordinate with Civil.”

Item No. 22 **Drawing Detail 8/PM003**

22.1 **Add** the following note " Flexible pipe joint to be provided by Division 15".

QUESTIONS

Questions from Bidders

Item No. 23 **Items No. 6 and 7 of Addendum 1 are clear, but does the allowance cover any removal of hazardous material if any is discovered on the DSR? Also it states in 01210.1.1.4 that the allowance only covers materials not identified in the DSSR. Please clarify what materials have been identified and not included in the allowance.**

23.1 The allowance covers the removal cost of any designated substance discovered. Refer to Addendum No. 005, 0.

Item No. 24 **Can allowances be made in the contract for building permits and other permits where the costs are not known before the tender close?**

24.1 The Owner will cover the cost for building permit (contractor will be responsible for pulling permit and meeting requirements), conservation authority permits, ECA Sewage/Air. Contractors will be responsible for all other permits fees.

Item No. 25 **Section 01560 speaks of 3m security fencing. Is this required as this site is already under lock and key?**

25.1 Refer to Addendum No. 005, Item No. 4 . The site is partially fenced off. Therefore, security fencing around active construction area is required.

Item No. 26 **Confirm that there are no Owner-approved subcontractors.**

26.1 Confirmed.

Item No. 27 **Please confirm that we are not responsible to handle any of the sludge in the existing lagoons other than for installing the lines for the new WAS and Equalization storage lagoons.**

27.1 Confirmed.

Item No. 28 **Will you be extending the question deadline, given that the tender close is now June 24th?**

28.1 Per 00170, item 1.9.2, inquiries will be accepted up to five (5) business days prior to bid close. The question deadline has been updated to June 17th at 1:30 PM.

Item No. 29 **Reference drawing Addendum #2, Drawing DE002 and the Mechanical Demolition. Please provide details of the existing aerators within the existing lagoon, in particular, as we are not to desludge (section 01810, clause 1.10.4.11) how we are to remove any anchor systems.**

29.1 Currently the aerators are anchored by wire rope and Clevis to eye bolts along the catwalks as well as a couple guy wire anchors along the berms. Typically the operators remove the aerators with a backhoe and hook from the closest access point around the berm and reinstall in a similar manner.

Item No. 30 **Reference Section 00170, Instructions to Bidders, item 1.9.1.1. It states all questions to be submitted via email. On Bids and Tenders there is a 'Submit a Question' button. Currently, we have been submitted questions via both options. Please clarify preferred choice for RFI submittal during the tender phase.**

30.1 Preferred method is by email to brighton@jlrichards.ca. Questions submitted by Bids and Tenders to date have been forwarded to brighton@jlrichards.ca

Item No. 31 **Section 02641 speaks of galvanized corrugated steel or corrugated HDPE pipe for culverts. Please clarify or point out where the culverts are on the drawings.**

31.1 Refer to Addendum No. 005, Item No. 7.

Item No. 32 **Section 02641 – Culverts. Is this section required? We cannot locate the culverts on the drawings.**

32.1 Refer to Addendum No. 005, Item No. 7.

Item No. 33 **The removal plan (DC001) shows no fence removal/replacement or clearing and grubbing that is required to install the new water service and sanitary outfall shown on C003 close to the main entrance gate. Please clarify.**

33.1 Refer to Addendum No. 005, Item No. 18.

Item No. 34 **Drawing C003. Confirm that a cofferdam is not required in the aerated cells lagoon.**

34.1 Confirmed. Refer to Section 01810, item 1.10

Item No. 35 **Bollards are to be placed at frost depth; can you clarify what that depth is in Brighton?**

35.1 1.4 mbgs, refer to Geotechnical Report.

Item No. 36 **Drawing C006 Detail Match line to C006. There is no C006 on drawing C001. Is this referring to the C003 box on the right side of the page?**

36.1 Yes.

Item No. 37 **Section 02716.2.1.3 states to coordinate with the local fire department for the riser box, draw pipe, and/or blue hydrant. Is there an allowance for this, as this is an unknown?**

37.1 Contractor to carry cost for coordination with fire department. Contractor should coordinate with fire department prior to ordering tank and fittings.

Item No. 38 **Asphalt not scheduled to be placed this calendar year. Can the MTO Performance Graded Asphalt Cement Price Index be used for this contract?**

38.1 Contractors shall indicate Asphalt mix price per Tonne based on current Ontario AC Index of $1191.05 (May 2025) assuming 5.0% AC content. Refer to Addendum No.5, Item No. 1.

Item No. 39 **Dwg C003 shows M/H 21 and refers to 1C008; C008 is for the ditch realignment. Please clarify.**

39.1 Refer to Detail 1/C009 for MH 21.

Item No. 40 **Can you please provide details of the Decant SPS as depicted on dwg C003, or is this existing?**

40.1 The Decant SPS shown on C003 is not existing. Refer to 1/P701 for detail.

Item No. 41 **Drawings C003 and C009. Is shoring not required for the installation of MH21 (Telescopic Valve Manhole)?**

41.1 Refer to Addendum No. 005, Item No. 34.

Item No. 42 **Section 02140 – Dewatering, item 3.1.4. Mentions to provide clay trench barriers as indicated on civil drawings. We cannot locate their locations on the drawings.**

42.1 Refer to Addendum No. 005, Item No. 5.

Item No. 43 **Section 02450 – Vibration Monitoring, item 1.6. Vibration Monitoring companies invoice on a monthly basis. Please revise the measurement for payment terms.**

43.1 Refer to Addendum No. 005, Item No. 6.

Item No. 44 **Section 02716, item 2.1.9. Mentions the “City of Ottawa”?"**

44.1 "City of Ottawa" is correct and is based on 02716 Item 1.2.2. as the Municipality does not have a standard available.

Item No. 45 **Section 02450 Confirm that vibration and settlement monitoring is required during the excavation of the main plant only.**

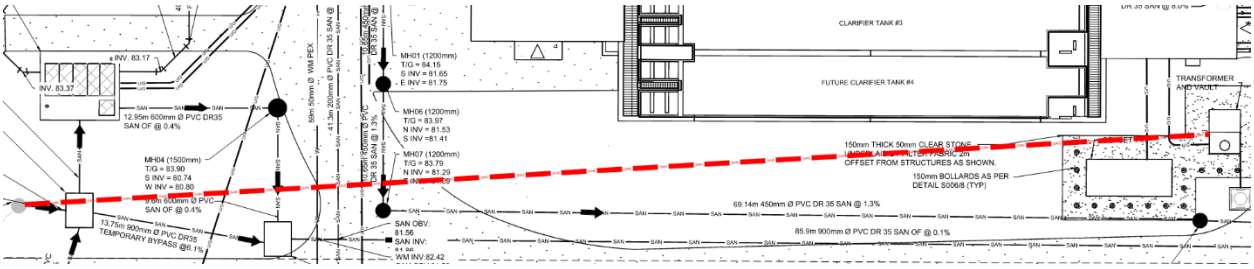
45.1 Confirmed.

Item No. 46 **Detail # 8 on drawing S006 makes mention of a surface mounted bollard. Please confirm that this is not required on this project, or provide their locations."**

46.1 Move bollards on west side of tunnel to be mounted on tunnel slab. Bollards to be 300mm from edge of tunnel slab, spacing as shown.

Item No. 47 **Referencing Item 33 on Addendum #4, we are asking that the existing plant influent pipe be shown on C002, to determine potential conflicts with open excavations and new overflow pipe installation. I.e, can MH03 be installed while existing flows are maintained? This will also assist in determining plant by-pass requirements. Please overlay the existing pipe onto C002.**

47.1 Refer to sketch below – red line indicating approximate location of existing influent pipe. The location of influent pipe is close enough to the building footprint that diversion of flow is necessary.



Item No. 48 **Drawing C009, Detail 1 - Provide further detail on the vent pipe's construction.**

48.1 Vent pipe opening to be 600mm from top of structure. Bottom of vent should be flush with under side of top slab.

Item No. 49 **Section 02583 – Pole Lines and Hardware, item 1.3.1. Clarify "General Contractor's Structural Engineer".**

49.1 Refer to Section 02583, Item 1.2.2

Item No. 50 **On Dwg GA01, it shows that the generator pad and the transformer pads are part of 000 series drawings. There are none. Please clarify what the sizes of the generator pad and transformer pads are. It also appears that it is sitting on concrete with surface-mounted bollards. Is this the case, or are they sitting on clear stone with filter cloth under it?**

50.1 Refer to Note 3 on drawing E003. Transformer is mounted on Vaulted base sized on detail 1/E007. Refer to detail 1/S006 for the typical exterior pad detail. Pad should be sized to extend beyond the contractor selected generator as indicated. Bollards are freestanding (Per detail 8/S006) in clear stone with filter fabric as indicated in drawing C002.

Item No. 51 **Exterior Piping Jacket Material:Some exterior lines are defined with PVC jacketing. As aluminum jacketing is generally preferred for such applications, please confirm whether PVC is indeed the intended material or if aluminum should be used.**

51.1 All exterior insulated pipe requires aluminum weatherproof jacketing. Refer to 15251.3.5 "Apply aluminum cover to insulated piping exterior to building. Caulk and seal all joints to make weatherproof."

Item No. 52 **Do you have a preferred BAS Controls Contractor?**

52.1 Refer to Addendum No. 005, Item No. 10.

Item No. 53 **Flexible duct work: Contractor assuming that flexible duct works will be under supplier scope.**

53.1 Contractor to coordinate scope of supply between vendors and subs.

Item No. 54 **Section 15782, item 1.1.1 makes mention of a BAF Building?**

54.1 The noted reference is incorrect. The section applies to air handling units in the headworks and administration buildings (AHU-9801 & MUA 9201).

Item No. 55 **Reference section 11581, clause 3.4.4, as the system will be fully operational, please confirm the operator will retrieve the samples and analyze them**

55.1 The manufacturer is responsible for collecting media samples post construction as indicated in 3.4.1.

Item No. 56 **6. Section 03200, item 2.1. Does not mention galvanized reinforcing bars as noted in detail # 11 of drawing S005.**

56.1 Refer to Addendum No. 005, Item No. 8.

Item No. 57 **Please provided the estimated quantities for Table 2 unit pricing in the form of tender?**

57.1 The contractor is expected to develop the quantities for both rock excavation and lean concrete fill. In the event that additional quantities are encountered during construction, the unit price submitted in Table 2 will be used as the base for assessing additional costs.

Item No. 58 **Can you please provide qty for rock removal?**

58.1 Refer to Addendum No. 005, Item No. 57.

Item No. 59 **1. Please confirm that the lean concrete fill on page # 13 of the form of tender is for all areas noted on drawings S010 and S011, as well as for all mud slabs.**

59.1 Confirmed.

Item No. 60 **2. Please confirm that all rock overbreak is to be replaced with lean concrete fill from that elevation to the underside of the raft slabs.**

60.1 All raft slabs are to bear directly on bedrock or on lean concrete fill overlaying bedrock.

Item No. 61 **Section 03411, item 2.6.1 states "Provide testing and analysis of all site-placed concrete and grout associated with the hollowcore planks." Please clarify what tests are required.**

61.1 Material testing for cast-in-place concrete and/or grout placement occurring during hollowcore slab installation to conform with Section 03300 clause 1.9.

Item No. 62 **Please confirm that Section 09800 - Acoustic Treatment (Cementitious Wood Fiber Ceiling Panels) are for the acoustic wall panels in the Blower Room, and that no panels are in fact required on the ceiling.**

62.1 Correct, no Acoustic Panels are required for the ceiling. Refer Section 09800 - Acoustic treatment for acoustic panels on wall.

Item No. 63 **Section 07121- Provide specifications for the underslab waterproofing.**

63.1 Refer to 07260 -Vapour retarder specification for under slab waterproofing.

Item No. 64 **For tendering/coordination purposes. Can the details of the support stack mentioned under Section 15891 be provided on the architectural and structural drawings?**

64.1 References to the stack in the documents are conceptual only and the detailed design is the responsibility of the Supplier. Refer to section 15891 Hume Hood Self Supporting Stack.

Item No. 65 **I'm following up regarding the Brighton Wastewater Treatment Upgrades project, which is closing on the 10th. We're specified as the clay brick supplier, but the product colours still need to be selected and confirmed from the spec.**

65.1 Product Colours will be confirmed following the award

Item No. 66 **Question from Fume hood supplier - Assume LED light fixture in lieu of Fluorescent is suitable.**

66.1 Correct, LED light fixture is suitable

Item No. 67 **Question from Fume hood supplier - 1-1/4" epoxy is non-standard and very expensive; would the client entertain 1" thick standard epoxy work surface in lieu.**

67.1 Correct, 1" is acceptable for epoxy countertop.

Item No. 68 **Confirm that only link seals are to be used at detail 8/PM003. Link seals are a much better seal than grout.**

68.1 Refer to amended process and mechanical standard detail 8/PM003 for a waterproof penetration sleeve through a new concrete wall.

Item No. 69 **Confirm that sleeves at detail 8/PM003 are to be fabricated of stainless steel.**

69.1 Refer to specification section 15056, item 2.1 for pipe sleeve material requirements.

Item No. 70 **Drawings P101, P501, P503 and P601. Provide stainless steel to SDR pipe connection details.**

70.1 Refer to process and mechanical standard detail 6/PM003 for pipes entering/leaving building or tanks below grade and Addendum No, 005, Item No. 11 for coupling details.

Item No. 71 **Drawing P501. Provide stainless steel to PVC pipe connection details.**

71.1 Refer to process and mechanical standard detail 6/PM003 for pipes entering/leaving building or tanks below grade and specification 15349 Section 2.15 in the addenda for amended coupling details.

Item No. 72 **Drawing P501 mentions that Civil is to provide the 200 mm PVC pipe. Civil contractors do not work with PVC, its best that this be left for the Mechanical contractors to provide. Contractors do not work with glued PVC pipe, only PVC-DR, bell & spigot pipe. Therefore should it be required that they provide this pipe then please indicate the DR type on the Civil drawings. Another item to consider is to ensure that the 200 mm valves specified in Division 15 are compatible with DR pipe.**

72.1 Contractor instructed that this pipe should be SDR 35 PVC sewer pipe and within the civil contractor's scope.

Item No. 73 **Drawing P601, Section 1/P603 is not shown.**

73.1 Refer to Addendum No. 005, Item No. 19.

Item No. 74 **Drawing P701. Provide stainless steel to HDPE connection details, and stainless steel to SDR connection details.**

74.1 Refer to Addendum No. 005, Item No. 71.

Item No. 75 **11347 1.3.7.9 Please clarify if this requirement entails the submission of a complete program? Kindly note that this will require the end user to sign a Non-Disclosure Agreement (NDA) and parts will be locked.**

75.1 Complete program is not required. Information such as communications with plant SCADA system via ethernet/IP connection to local network switch is sufficient. This can be provided post tender as required by systems integrator.

Item No. 76 **11347 2.10 Monitoring System (.2): Please note that the UV Intensity sensor is integrated into the module/PDC for the UV 3000+. A fiberglass Type 4X wall-mounted panel is not included as part of the standard offering for a UVI sensor. Please clarify what this is referring to.**

76.1 UV intensity sensors integrated into the module/PDC is acceptable. Refer to amended specification in addenda.

76.2 Refer to Addendum No. 005, Item No. 12.

Item No. 77 **11347 2.10.3-5 - For the UV3+ 22, both the UV intensity and lamp hours are displayed exclusively on the UV HMI. Please confirm if that is the intent here.**

77.1 Display of both UV intensity and lamp hours on the HMI screen is acceptable.

77.2 Refer to Addendum No. 005, Item No. 12.

Item No. 78 **16010 2.9.1 - Please confirm whether this labeling information is required for each panel supplied with the UV equipment, or if it pertains to the plant's electrical infrastructure and will be provided by others on-site.**

78.1 Yes, this labeling is required and will be provided by the electrical general contractor.

Item No. 79 **17506 1.1.1.4 In Remote Mode, banks can be operated in Off, Hand or Auto operational modes. Exception requested - Please note that for the UV3+, only Remote ON, OFF, and AUTO modes are available for the banks. A Hand mode is not supported.**

79.1 Inclusion of ON, OFF and AUTO mode for Remote operation is acceptable.

79.2 Refer to Addendum No. 005, Item No. 13.

Item No. 80 **17506 1.1.1.6 In Hand operational mode, UV banks will activate for a set warm-up cycle and then power level will drop to a manually entered setpoint. Exception Requested - In the UV3+ 22 system, only Remote ON, OFF, and AUTO modes are available for UV banks. A Remote Hand mode is not supported. When in Remote ON mode, the UV bank operates at a fixed power level of 100%.**

80.1 Inclusion of ON, OFF and AUTO mode for Remote operation is acceptable.

80.2 Refer to Addendum No. 005, Item No. 13

Item No. 81 **17506 1.1.1.7.1 UV transmittance is measured by analyzers AIT-4002 and AIT-4002 for the duty and standby UV bank respectively. A UVT analyzer measures the water quality across the entire system or channel, while a UVI sensor measures the light intensity within a specific UV bank. Based on the context, it appears this requirement may be referring to UVI rather than UVT. Please clarify/confirm if a UVT meter is to be part of XXX's scope. This can be provided, but it is not required for the equipment to run normally and will add significant cost.**

81.1 Analyzers AIT-4002 and AIT-4003 are to be provided as part of the UV disinfection system supplier's scope of supply. They should be specified to measure UV intensity (UVI) with respect to UV disinfection bank 1A and 1B respectively. Analyzer AIT-4001 will measure UV transmittance and is provided by Division 17.

81.2 Refer to Addendum No. 005 Item No. 13 and Item No. 20.

Item No. 82 **Section 11253 Chemical Storage tanks specifies the tanks to be Double-Walled with built integral secondary containment. Drawing S600 and S620 detail a containment area for these tanks. If this containment area is designed for at least 110% of the tank volume, is a Double Walled tank still required? A Single-Walled tank will be less overall footprint for the same capacity.**

82.1 Please provide both a double-walled tank and containment area as indicated.

Item No. 83 **With regards to specification 11382.01 (Gate schedule), There appears to be only 1 high performance (Zero Leakage) sluice gate SG 4004. We can not locate this gate in the drawings. Please confirm the following: design head seating and unseating pressures for the gate. The table shows 81.29m design pressure. This seems extremely high.**

83.1 Sluice gate tag SG 4004 to be revised to SG 4001.

83.2 Refer to Addendum No. 005, Item No. 21.

Item No. 84 **With regards to specification 11382.01 (Gate schedule), There appears to be only 1 high performance (Zero Leakage) sluice gate SG 4004. We can not locate this gate in the drawings. Please confirm the following: Required operator, manual or electric.**

84.1 Refer to Addendum No. 005, Item No. 83.

Item No. 85 **With regards to specification 11382.01 (Gate schedule), There appears to be only 1 high performance (Zero Leakage) sluice gate SG 4004. We can not locate this gate in the drawings. Please confirm the following: the elevations for this gate.**

85.1 Refer to Addendum No. 005, Item No. 83.

Item No. 86 **Factory-Fabricated Removable Insulation: For valves and fittings requiring periodic maintenance, the specification mentions factory-fabricated, easily disassembled insulation. We need more details on this to quantify the scope accurately. Could you please provide further information?**

86.1 Refer to Addendum No. 005, Item No. 14.

Item No. 87 **Schedule: Please let us know when you expect insulation installation to begin and completion schedule, as well as any key milestones or deadlines we should be aware of**

87.1 Scheduling of trades and sub-trades is the responsibility of the General Contractor

Item No. 88 **Drawing C009, detail # 1 - Confirm that the telescopic valve is to be supplied and installed by Division 15100.**

88.1 Refer to Specification 15100 and 15100-L for details on the telescoping valve.

Item No. 89 **Confirm that the vent pipe is to be supplied and installed by Divisions 11/15.**

89.1 Confirmed

Item No. 90 **Section 11424, item 3.3 - Provide the pump schedule.**

90.1 Refer to Addendum No. 005, Item No. 15.

Item No. 91 **Section 15100 - Mentions that valves VF4001 and VF4002 are provided by this Section, however drawing P501 states that they're by Civil.**

91.1 Valves VF 4001 and VF 4002 shall be line size and provided in accordance with specification 15100-B3.

91.2 Refer to Addendum No. 005, Item No. 21.

Item No. 92 **Upon review of Section 15349 it would appear that all of the process piping is non-ferrous, further to this, individual Sections of Division 11 mention that the pumps and valves are to painted with a factory finish. As a result would you please confirm that Section 09960, item 2.1.2 does not apply to this project. Should it apply then please outline what it is exactly that requires a high performance coating on a steel surface.**

92.1 Refer to Addendum No. 005, Item No. 16.

Item No. 93 **Exception Requested - Section 11427 - subsection 2.7.2 - Aerzen requests to supply their standard controller, the AERtronic 2.0, a CPU-based controller, along with a NEMA 12 enclosure.**

93.1 Aerzen's standard controller in a NEMA 12 enclosure is acceptable. It should be noted that blower is to be controlled by an MCC mounted VFD provided by others. Refer to drawing PID031 for required PLC based controls.

Item No. 94 **Exception Requested - Section 11472 - subsection 1.8 - Testing takes place at the Aerzen plant in Germany; witnessed testing is not feasible. SAT testing will be completed, and it is possible to arrange a tour of the facility in Vaudreuil-Dorion to inspect the units before shipping. Please confirm if this is acceptable.**

94.1 Witnessed Factory Acceptance Testing (FAT) in Germany is required to be conducted by the Commissioning Manager and a Consultant representative as per specification 01021, Section 1.4. The cost associated with travel need to be carried for two people. Provide additional rational and explanation for consideration on this requirement.

Item No. 95 **Clarification Requested - Section 11472 - Could you please verify that the contractor will supply the blower intake filter silencer, which is located outdoors?**

95.1 Yes, the general contractor is responsible for supplying the blower intake filter silencer on the combined inlet pipe to both aeration blowers as delineated on drawing PID031.

Item No. 96 **Reference drawing Addendum #2, Drawing DE002 and the Mechanical Demolition. As we are not in control of the existing systems, please confirm the owner will draw down the existing Ferric tanks, or confirm how much we should allow for disposal.**

96.1 Contractor to assume responsibility of ferric removal and disposal in coordination with the owner.

END OF ADDENDUM NO. 005

Prepared by:

J.L. RICHARDS & ASSOCIATES LIMITED

Susan Shi

Susan Jingmiao Shi,
Associate; Senior Environmental Engineer;
Practice Lead, Regional Market

SJS:rc

cc: All Plan Takers

Addenda to Date:	None
Addendum 001	May 12, 2025
Addendum 002	May 20, 2025
Addendum 003	May 26, 2025
Addendum 004	June 2, 2025
Addendum 005	June 9, 2025

TENDERER'S CHECK SHEET

Tenderer is to complete and submit this Check Sheet with its Tender.

Before submitting your Tender, check the following points (which is a non-exhaustive list):

Is your tender in ink or typed?..... ☐

Is your tender complete? ..... ☐

Is your tender irrevocable for sixty (60) days?..... ☐

Has your tender been signed and your seal affixed? ..... ☐

Have you enclosed the required Security? ..... ☐

Have you enclosed the required Agreement to Bond signed and sealed by your proposed surety?..... ☐

Have you completed and included the Statutory Declaration Form?..... ☐

Have you completed and included Statements A, B, C, D, E, F? ……..... ☐

Have you acknowledged the number of Addenda received where required to do so, and where appropriate, including the information included in Addenda in your total Tender Price? ..... ☐

Have you completed and included CCDC11-2019 Contractor's Qualification Statement? ……..... ☐

Have you initialed erasures, overwriting or strikeouts, if any? ..... ☐

Confirm that your tender is not made conditional by a statement added to the Tender Form or by a covering letter, by checking this box: ..... ☐

Confirm that you were able to access and download the following files from www.bidsandtenders.com website as it relates to this Tender:

Drawings ……..... ☐
Specifications ……..... ☐

Checklist Form (to be completed by Tenderer)

COMPANY: _____

NAME: _____

TITLE: _____

SIGNATURE: _____

DATE: _____

MUNICIPALITY OF BRIGHTON

BRIGHTON WASTEWATER TREATMENT SYSTEM UPGRADES
TENDER No. PW 2025-08

From: .....

.....

.....

.....

(Name and Address of Tenderer)

To: Municipality of Brighton

35 Alice Street

Brighton, Ontario K0K 1H0

1. I/We, the undersigned, hereby offer and agree to furnish all required labour, materials, equipment and supervision and to execute the work set out in the Tender Documents, including all Addenda, and including all fees, permits, and taxes, but excluding HST, for the Stipulated Price of the core bid. (This number shall match line A in Schedule 1 – Schedule of Items and Prices).

.....

..... DOLLARS $(.....)

2. .1 I/We acknowledge receipt of and have included for in our Stipulated Price the requirements of the following Addenda:

Addendum No. .....dated .....

Addendum No. .....dated .....

Addendum No. .....dated .....

Addendum No. .....dated .....

Addendum No. .....dated .....

Addendum No. .....dated .....

Addendum No. .....dated .....

Addendum No. .....dated .....

.2 I/We have included for in our Stipulated Price the following Allowances as set out in the Schedule of Items and Prices.

.1 Cash Allowance for materials testing.
.2 Cash Allowance for Designated Substance Survey and Removal of Designated Substances.
.3 Cash Allowance for Furniture.
.4 Cash Allowance for System Integration with Harbour Street Sewage Pump Station.

.5 Contingency Allowance.

3. .1 I/We declare that this Tender is made without knowledge, comparison of figures or arrangement with any other Company, Firm or Person making a Tender for this same work and that no officer or employee of the Owner has any direct or indirect interest in the performance or work of this Contract.

.2 I/We further declare that no member of the Municipal Council and no officer or employee of the Ministry or of the Crown or of the Consultant is or will become interested directly or indirectly as a contracting party, partner, surety or otherwise in or in the performance of the Contract or in the supplies, work or business to which it relates, or in any portion of the profits thereof, or in any of the monies to be derived therefrom.

.3 I/We recognize the right of the Owner to reject any or all Tenders and to waive informalities as the interests of the Owner may require.

.4 I/We have visited and carefully examined the site of the work and have satisfied and informed myself/ourselves as to all the existing conditions, limitations and difficulties which may arise and govern the completion of the work.

4. I/We agree that, if this Tender is accepted by the Owner,

1) I/We will carry out any additional or extra work (including the supplying of any additional materials or equipment pertaining thereto) or will delete any work as may be required by the Owner in accordance with the Contract;

2) the carrying out of any work referred to in paragraph 1) above or the issuance by the Owner of a Contract Change Order relating to such work or the acceptance by the Tenderer of such Contract Change Order shall not, except as expressly stated in such Contract Change Order, waive or impair any of the terms of the Contract or of any Contract Change Order previously issued by the Owner or any of the rights of the Owner or of the Consultant under the Contract;

3) I/We will pay to the Owner the sum specified in the Contract as liquidated damages for each calendar day that the work under the Contract as expressly modified by all Contract Change Orders issued by the Owner remains uncompleted after the expiry of the Time for Completion specified in the Contract or the extended time for completion allowed in writing by the Owner.

The prices applicable to work referred to in paragraph 1) above shall be determined as follows:

(a) The Schedule of Items and Prices shall apply where applicable;

(b) If the above Schedule is inapplicable the prices shall be determined in accordance with the General Conditions.

I/We agree that we are not entitled to payment of the Contingency Allowance except for additional work carried out in accordance with the Contract and only to the extent of such additional work, as authorized by the Owner in writing.

5. .1 I/We include herewith the following documents:

.1 I/We agree to furnish to the Owner copies of all required Subcontractor Performance

Bonds and Labour and Material Payments Bonds forthwith upon execution of subcontracts with our Owner-approved subcontractors and further agrees that no payment will be due and payable for work done by any subcontractor whose work is required to be bonded until such time as the required bonds have been filed with the Owner.

.2 I/We agree that, if so requested in writing by the Owner, we will enter into a Contract with the Owner based upon our Tender but jointly in the names of the Tenderer and the Tenderer's parent company, if any. I/We further agree that any request by the Owner as indicated above is not and shall not be deemed to be a counteroffer by the Owner.

.3 A Bid Bond or Certified Cheque in the amount of 10% of the Bid made payable to the Owner. I/We understand that this Bid Security will be returned to me/us following the award of a Contract, if this Tender is not accepted by the Owner, or, if this Tender is accepted by the Owner, following my/our execution of the Agreement.

.4 An Agreement to Bond from an approved surety company licensed to carry on business in the Province of Ontario.

.2 I/We agree to submit a List of Proposed Subcontractors (Statement 'C'), as specified, within 24 hours of Tender closing.

6. .1 I/We agree to hold this Tender in full force and effect for a period of 60 days from the closing date for Tenders and agree that if my/our Tender is revoked during this period, my/our Bid Security will be forfeited to the Owner to use for his purposes.

.2 I/We agree, if this Tender is accepted, to execute the specified Agreement and provide the specified Bonds within ten (10) days of notification by the Owner to do so.

.3 I/We agree that within seven (7) days after written authorization from the Consultant to proceed, I/We will commence the work, assembling all necessary labour forces and equipment on the site, and will continue the work with the utmost diligence until completion.

I/We agree to have the works "Substantially Performed" by August 31, 2027, based on an award date that is no later than August 15, 2025. Should the award be issued following August 15, 2025, the date of Substantial Performance shall be extended by the same number of days.

I/We agree that we will furnish the Owner a copy of the latest financial statement within 4 days after being requested to do so by the Owner.

The "Agreement to Bond" of the ....., a company lawfully doing business in the Province of Ontario, to furnish a performance bond and a labour and material payment bond in the form acceptable to the Owner Performance Bond and Labour and Material Payment Bond each in an amount equal to 50% of the Contract price, or in such greater amount as may be required by the Owner, if this Tender is accepted, is enclosed herewith.

Dated at ..... this ..... day of

....., 20....

....

....
Signature of Witness Signature of Tenderer

Note: If the Tender is submitted by or on behalf of a corporation, it must be signed in the name of such corporation by the duly authorized officers and the seal of the corporation, or wafer seal, must be affixed. If the Tender is submitted by or on behalf of an individual or a partnership a seal must be affixed opposite the signature of the individual or of each partner and each signature shall be witnessed.

Signed, sealed and submitted on behalf of:

.....

.....

.....

.....
(Name and Address of Tenderer)

.....
(Signature of Tenderer)

.....
(Name and Title) Corporate Seal

.....
(Signature of Witness)

Dated at ....., ... this ..... day of .....20...
(Town/City) (Province)

SCHEDULE 1

SCHEDULE OF ITEMS AND PRICES

Item	Description	Amount
1.	Mobilization and demobilization at the job including temporary offices and conveniences, other temporary facilities, hoarding, reinstatement and other items not required to form part of the permanent works (60% to be paid upon complete mobilization and 40% to be paid upon complete demobilization).	$.....
2.	Lump Sum for the upgrades, excluding Items 1. All Tenderers will be requested to submit a breakdown of this item as per the attached Breakdown of Items and Prices Tables 1 per the Information for Tenderers.	$.....
3.	Bonding per Instructions to Bidders.	$.....
4.	Insurance per Instructions to Bidders.	$.....
5.	Cash allowance for materials testing.	$ 20,000.00
6.	Cash allowance for designated substance survey and removal of designated substances.	$ 35,000.00
7.	Cash allowance for furniture.	$ 10,000.00
8.	Cash allowance for system integration with Harbor Street SPS.	$ 20,000.00
9.	Contingency Allowance.	$ 3,500,000.00
	(A) Total stipulated lump sum – Core Bid	**$.....**
	(B) HST (13%)	**$.....**
	(C) Total Price Including HST	**$.....**

AGREEMENT TO BOND

**……..……..

……..……..

Date: ..... 20....

Municipality of Brighton

35 Alice Street

Brighton, Ontario K0K 1H0

To Who It May Concern:

Re: Brighton Wastewater Treatment System Upgrades

In consideration of the Municipality of Brighton's (hereinafter referred to as "the Owner") accepting the Tender of and executing and Agreement with: .....(hereinafter referred to as "the Tenderer") for the construction of: Brighton Wastewater Treatment System Upgrades subject to the express conditions that the Owner receive the Performance Bond and the Labour and Material Payment Bond in accordance with the said Tender, we the undersigned hereby agree with the Owner to become bound to the Owner as surety for the Tenderer in a Performance Bond and a Labour and Material Payment Bond each in an amount equal to 50% of the Contract price or other such greater amount as may be determined by the Owner, in the forms of Performance Bond and Labour and Material Payment Bond and in accordance with the said Tender, and we agree to furnish the Owner with said Bonds within ten (10) days after notification of the acceptance of the said Tender and execution of the said Agreement by the Owner has been mailed to us.

Yours very truly,

.....

(Seal)

NOTE: This Agreement to Bond must be executed on behalf of the Surety Company by its authorized officers under the company's corporate seal. Of the two forms bound herein, one shall become a part of the Tender and the other shall be retained by the Surety Company.

**** **Enter the name and address of the Surety Company at the top of the page.**

STATUTORY DECLARATION RE: TENDER

JLR PROJECT NO. JLR 32296-001

DOMINION OF CANADA

IN THE MATTER of a Proposed Contract
for the Construction of:
Municipality of Brighton
Brighton Wastewater Treatment System Upgrades
in the ***Municipality of Brighton***
in the Province of Ontario.

TO WIT

..... DO SOLEMNLY SWEAR THAT the several matters stated in the foregoing Tender are in all respects true, AND ..... make this solemn declaration, conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of "The Canada Evidence Act".

DECLARED before me at

the .....)
.....)
.....)
of .....)
in the County of .....)
.....)
this ....., day of)
.....20 ….)

.....
Tenderer

.....
Commissioner, etc., (or Notary Public)

Section 2 of the General Conditions requires that the Tenderer complete and submit this declaration with his Tender. Failure of the Tenderer to include the properly completed Statutory Declaration with his Tender may result in the Tender being ruled invalid by the Owner.

STATEMENT 'A'

QUALIFICATIONS OF TENDERER'S SENIOR SUPERVISORY STAFF TO BE EMPLOYED ON THIS CONTRACT.

Name	Appointment	Qualifications and Years of Experience
General Contractor's Project Manager		
General Contractor's Site Foreman		
Mechanical Contractor's Project Manager		
Mechanical Contractor's Site Foreman		
Electrical Contractor's Project Manager		
Electrical Contractor's Site Foreman		
Civil Contractor's Project Manager		
Civil Contractor's Site Foreman		
Systems Integrator's Project Manager		
Systems Integrator's Site Foreman		
Commissioning Manager		

STATEMENT 'B'

PROPOSED MAJOR CONSTRUCTION EQUIPMENT TO BE UTILIZED ON THIS CONTRACT.

EQUIPMENT/AVAILABLE: .....

.....

.....

.....

.....

.....

.....

.....

EQUIPMENT/TO BE RENTED: .....

.....

.....

.....

.....

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.....

.....

EQUIPMENT/TO BE PURCHASED: .....

.....

.....

.....

.....

STATEMENT 'C'

LIST OF PROPOSED SUBCONTRACTORS

The information for Tenderers requires the Tenderer to list on this Statement Sheet the name of each proposed subcontractor. For the Tenderer's convenience and to ensure that a complete list is submitted with the Tender, a list of possible subtrades has been printed below. The Tenderer shall make an entry against each possible subtrade listed either by naming the proposed subcontractor or by entering "by own forces", whichever applies. No blank spaces are to be left.

If, in addition, the Tenderer proposed to sublet a part of the work which is not listed below, the Tenderer shall add the subtrade and the proposed subcontractor's name to the list.

FAILURE BY A TENDERER TO COMPLY WITH THE FOREGOING REQUIREMENTS MAY RESULT IN THE TENDER BEING DISQUALIFIED BY THE OWNER.

SUBTRADE SUBCONTRACTORS	PROPOSED (1)	VALUE OF SUBCONTRACT (2)
Concrete		
Civil		
Mechanical		
Electrical		
Instrumentation		
By-Pass Pumping System		
Other		

(1) Enter full legal name of subcontractor.
(2) Value of Subcontract entered shall be for the core bid only.

STATEMENT 'D'

BREAKDOWN OF ITEMS AND PRICES

The following tables (Table 1, 2 and 3) shall be submitted **within 24 hours of tender closing to brighton@jlrichards.ca**. A further possible breakdown of these items will be determined with the successful Contractor after execution of the Contract for the purpose of progress payment certificates.

The Total at the end of the Table 1 should equal Item (A) Core Bid (in Schedule 1) for all associated works as identified in Form of Tender.

TABLE 1 – TENDER BREAKDOWN

Item	Description	QTY	Units	Total Amount
1	Division 1 – General	1	LS	
2	Division 2 - Site Works	1	LS	
3	Division 3 - Concrete	1	LS	
4	Division 4 – Masonry	1	LS	
5	Division 5 – Metals	1	LS	
6	Division 6 – Wood and Plastics	1	LS	
7	Division 7 – Thermal and Moisture Protection	1	LS	
8	Division 8 – Doors and Windows	1	LS	
9	Division 9 – Finishes	1	LS	
10	Division 10 – Specialties	1	LS	
11	Division 11 - Equipment	1	LS	
12	Division 12 (Furnishings)	1	LS	
13	Division 13 (Special Construction)	1	LS	
14	Division 14 (Conveying Systems)	1	LS	
15	Division 15A (Mechanical Process)	1	LS	
16	Division 15B (Mechanical HVAC)	1	LS	
17	Division 16 (Electrical)	1	LS	
18	Division 17 (Instrumentation, Control)	1	LS	
19	Bonding	1	LS	
20	Insurance	1	LS	
21	Cash Allowance – Material Testing	1	LS	$20,000
22	Cash Allowance – Designated Substance Survey and Removal of materials	1	LS	$35,000
23	Cash Allowance – Furniture	1	LS	$10,000
24	Cash Allowance – System Integration with Harbour St SPS	1	LS	$20,000
25	Contingency Allowance	1	LS	$3,500,000
26	**TOTAL (Excl. HST)**	**-**	**-**	

TABLE 2 – UNIT PRICE BREAKDOWN

	Estimated Quantity	**Unit Price**	**Total Amount ($)**
Rock Excavation	_____ m^3	_____ $/m^3$	
Lean Concrete Fill	_____ m^3	_____ $/m^3$	
Asphalt Mix ***(based on current Ontario AC Index of $1191.05, as of May 2025, assuming 5% AC content)***	_____ ***tonne***	_____ ***$/tonne***	

TABLE 3 – MAJOR EQUIPMENT SUPPLY COST BREAKDOWN

	Supplier	**Unit Price - Supply Only ($/ unit)**
11240/11253 – Ferric System		
11304 – Sludge Pump		
11306 – Raw Sewage Pump		
11306 – Decant Pump		
11312 – Prefabricated Pump Station		
11330 – Mechanical Screen		
11347 – UV Disinfection		
11375 – Surface Aspirator		
11378 – Fine Bubble Diffuser System		
11380 – Clarifier Equipment		
11427 – Rotary Lobe Blower		
11581 – Odour Control System		
16276 – Pad Mounted Transformer TX0001		
16414 – Automatic Transfer Switch ATS0001		
16445 – Switchboard SEB0001		
16622 – Standby Power GEN0001		
16800 – MCC6000A Process Building		

16800 – MCC6000B Process Building		
16800 – MCC5000 UV Building		
16471- Panelboards DP-2001 Headworks Building		

STATEMENT 'E'

RESPONDENT IDENTIFICATION

RESPONDENT:

_____
Company Name

_____
Address

_____

_____

_____
Telephone Number

_____
Fax Number

_____
Email Address

_____
Name of Person Signing

_____
Position of Person Signing

_____
Signature

Person signing must be authorized to sign on behalf of the Company/Individual represented, and to bind the Company/Individual to statements made in response to this Contract.

STATEMENT 'F'

ACCESSIBILITY ACKNOWLEDGEMENT FORM

In accordance with Ontario Regulation 429/07, Accessibility Standards for Customer Service, every provider of goods and services shall ensure that every person who deals with a member of the public or participates in the developing of the Municipality's policies, practices and procedures governing the provision of goods and services to members of the public, shall be trained as follows:

1. How to interact and communicate with persons with various types of disability.
2. How to interact with persons with disabilities who use assistive devices or require the assistance of a guide animal, or a support person.
3. How to use equipment that is available on the premises that may help in the provision of goods or services.
4. What to do if a person with a particular type of disability is having difficulty accessing the provider's goods or services.
5. Information on the policies, practices and procedures governing the provision of goods and services to people with disabilities.

Proponents are required to complete the attached Accessibility Form. Contract employees, third party employees, agents and others who deal with members of the public on behalf of the Municipality of Brighton must also meet the requirements of Ontario Regulation 429/07 with regard to training.

If a training policy is not yet in place, please go to the Ontario Access Forward Website: https://accessforward.ca/ and complete the free training modules found therein. Certificates for competent and supervisory staff certifying that accessibility training has been completed shall be provided to the Municipality before the provision of goods and services. Certificates may be from inhouse O.Reg 429/07 compliant programs or from modules found on accessforward.ca.

Accessibility for Ontarians with Disabilities Act (AODA)

Accessible Customer Service Training

Company Name: _____

I acknowledge that all staff employed by _____ who may undertake any duties and interact with any persons with disabilities, in the course of this company's contractual obligations with The Municipality of Brighton, have received adequate instruction pertaining to the Accessibility for Ontarians with Disabilities Act (AODA) regulations.

As a principle of the contractor employed by The Municipality of Brighton, I understand the Municipality's requirements to comply with the Customer Service Standard. I will ensure that all future staff hired to assist with this company's contractual obligations will receive similar training as soon as they are hired, to meet these ongoing requirements.

Name: _____

Signature: _____

Date: _____

BENCHMARK 1: SURVEY SPIKE
ELEV = 79.61 (NORTH SIDE OF DRIVEWAY ENTRANCE)

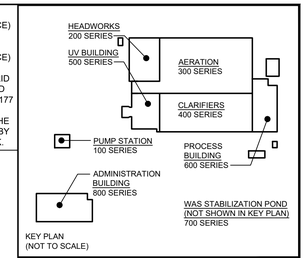
BENCHMARK 2: SURVEY SPIKE
ELEV = 79.12 (NORTH SIDE OF DRIVEWAY ENTRANCE)

COORDINATE VALUES AND DIGITAL FILE ARE IN GRID SYSTEM, UTM ZONE 18 (75° WEST LONGITUDE), NAD 83(CSRS)(2010). COMBINED SCALE FACTOR = 1.000177

ELEVATIONS ARE GEODETIC AND REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM (CGVD28) BY DIRECT MEASUREMENT TO A REAL TIME NETWORK.

LEGEND

- EXISTING VEGETATION LINE
- PROPERTY LINE
- EXISTING UNDERGROUND SERVICE
- EXISTING FENCE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING FORCEMAIN
- EXISTING GRAVEL ROAD
- EXISTING CULVERT
- REMOVE AND/OR ABANDON
- EXISTING TREE
- EXISTING UTILITY POLE
- CLEARING AND GRUBBING
- FENCE REMOVAL



KEY PLAN
(NOT TO SCALE)

DESIGN DOCUMENTS HEREIN HAVE BEEN DESIGNED UNDER THE ONTARIO BUILDING CODE 2012.

No.	ISSUE / REVISION	DD/MM/YY
2	ISSUED FOR ADDENDUM NO. 5	09/06/25
1	ISSUED FOR ADDENDUM NO. 4	02/06/25
0	ISSUED FOR TENDER	25/04/25

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VERIFY SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25MM IF THIS IS A FULL SIZE DRAWING. 0 25mm

SCALE: 1:750

CLIENT: MUNICIPALITY OF BRIGHTON

CONSULTANT: www.jlrichards.ca
J.L.Richards ENGINEERS · ARCHITECTS · PLANNERS

CONSULTANT:

PROFESSIONAL STAMP

PROJECT NORTH

PROJECT:

BRIGHTON WASTEWATER TREATMENT SYSTEM UPGRADES

100 COUNTY ROAD 64, BRIGHTON ONTARIO

DRAWING:

CIVIL
SITE-WIDE
EXISTING CONDITIONS & REMOVALS

DESIGN: RC	
DRAWN: DT	DRAWING #:
CHECKED: SS	DC001
JLR #: 32296-001	

File Location: P:\32000\032296-001 - Brighton WWT System Upgrades\03-Production\01-Civil\DC001 EXISTING CONDITIONS.dwg

PLOT DATE: Thursday, June 5, 2025 12:15:53 PM

PART 1 - GENERAL

1.1 SCOPE DESCRIPTION SUMMARY

.1 The following specification pertains to all Division 11 and Division 15 equipment requiring insulation as noted on the drawing and herein.

1.2 REFERENCES

.1 The following is a list of standards utilized in this section. Unless otherwise specifically noted, the references indicated shall be the latest standard adopted by the regulatory agency as of tender date.
- .1 Thermal Insulation Association of Canada (TIAC).
- .2 TIAC Best Practices Guide.
- .3 American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE):
  - .1 ASHRAE 90.1-SI Edition, Energy Standard for Buildings except Low-Rise Residential Buildings.
- .4 American Society for Testing and Materials (ASTM):
  - .1 ASTM C411 Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation.
- .5 National Fire Protection Association (NFPA):
  - .1 NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems.
  - .2 NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Material.
- .6 Canadian General Standards Board (CGSB):
  - .1 CGSB 51.9, Mineral Fibre Thermal Insulation for Piping and Round Ducting.
  - .2 CGSB 51-GP-52MA, Vapour Barrier, Jacket and Facing Material for Pipe, Duct and Equipment Thermal Insulation.
  - .3 CGSB 51.53, Poly (Vinyl Chloride) Jacketing Sheet, for Insulated Pipes, Vessels and Round Ducts.
- .7 Health Canada/Workplace Hazardous Materials Information System (WHMIS):
  - .1 Material Safety Data Sheets (MSDS).
- .8 Underwriters Laboratories of Canada (ULC):
  - .1 CAN/ULC-S102, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
  - .2 UL-723 Standard for Test for Surface Burning Characteristics of Building Materials.

1.3 INFORMATIONAL SUBMITTALS

.1 Provide submittals in accordance with Divisions 1 and 15.

.2 In addition to the submittal requirements identified in the above-noted sections, submit the following:
- .1 Performance data for the blanket insulation.
- .2 TIAC installation method from published standard clearly listing which service each installation method will apply to. Edit to reflect variances from standard.
- .3 Copies WHMIS MSDS - Material Safety Data Sheets in accordance with Division 1 where material specified has MSDS Sheets.

.3 Dimensioned illustration of proposed insulation blanket for a typical piece of equipment requiring insulation (i.e., plate and frame heat exchanger). Submit samples where requested.

1.4 CLOSEOUT SUBMITTALS

.1 Refer to Division 1 for General Closeout Requirements.

1.5 MAINTENANCE AND SPARE PARTS

.1 Not Applicable.

1.6 QUALITY ASSURANCE

.1 Provide insulation to NFPA Standard 90A, and 255, Latest edition; as well as UL-723 Latest edition fire hazard ratings.

.2 Unless indicated otherwise, all insulation to be installed to published standards of Thermal Insulation Association of Canada (TIAC).

.3 Flameproofing treatment to withstand high humidity conditions without deterioration.

.4 Performance Requirements defined: Catalogued or published ratings for manufactured items obtained from tests carried out by manufacturer or those ordered by manufacturer from an independent testing agency signifying adherence to codes and standard and standardized testing of performance criteria.

.5 The contractor performing the work of this section shall be a recognized installer of insulation systems and have a minimum of five (5) years experience which can be documented and verified. The contractor shall be a current and listed member of TIAC (Thermal Insulation Association of Canada).

.6 Where applicable, products shall bear a ULC or UL label.

1.7 WARRANTY

.1 Refer to Division 0, Division 1 and Section 15010 for Warranty Requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Material not to soften, corrode or otherwise deteriorate in either wet or dry state and be type recommended by manufacturer as suitable for proposed application.

.2 Insulation blanket to consist of:
- .1 Outer cover: 0.5 kg Silicone impregnated fiberglass.
- .2 25 mm Firwin 1200 fibreglass insulation.
- .3 Inner Cover: Firwin 0.5 kg Silicone impregnated fiberglass.

.3 Insulation to be encapsulated into a silicone impregnated fiberglass high temperature sewn blanket

to protect the insulation from moisture and abrasion.

.4 The silicone coating shall:
- .1 Be inert and not cause staining, corrosion or deterioration of other material with which it comes into contact.
- .2 Not support growth of fungus.
- .3 Be resistant to weathering, all typical chemicals found in rain water, soils and cleaners.

.5 The insulation shall be:
- .1 Mechanically bonded and reliable performance up to 120°C.
- .2 Non-combustible.
- .3 Thermal conductivity: 72.1 W/m*K.

.6 Closure shall be stainless steel wire lacing over stainless steel capstan rivets.

.7 Rivets shall be fastened through outer cover cloth only.

.8 Kevlar drawcords in drawstring flaps to be provided to clinch down at heat exchanger ends, pipe penetrations and heat exchanger frame.

.9 The covers shall be made from preformed sections, customized for the application.

.10 Standard of Acceptance: Firwin Corp.

PART 3 - EXECUTION

3.1 INSTALLATION

.1 Insulation blanket may be used to insulate valves on services required to be insulated.

.2 Insulate all equipment on piping system requiring insulation. Refer to Specification Section 15251.

.3 Confirm all equipment dimensions prior to manufacturer of blanket.

.4 Prior to installation, ensure that:
- .1 Hydrostatic tests have been completed.
- .2 Surfaces to be covered are clean and dry.
- .3 Insulation is clean and dry.

.5 Installation to be in accordance with Manufacture’s written instructions.

END OF SECTION

BRIGHTON WASTEWATER TREATMENT
SYSTEM UPGRADES
JLR No.: 32296-001

VERTICAL MULTI-STAGE PUMP SCHEDULE

SECTION: 11424

SHEET 1 OF 1

I.D.	DESCRIPTION	OPERATING POINT 'A'			OPERATING POINT 'B'			FLUID TYPE	RPM	MOTOR			FIELD WORK				COMMENTS
		FLOW	TDH	EFF.	FLOW	TDH	EFF.			RATING	VOLT	PH	SUPPLIED BY	INSTALLED BY	WIRED BY	COMM. BY	
		L/s	m	%	L/s	m	%			HP	V						
P 9903	EFFLUENT WATER PUMP NO.1	7.1	46.4	71.1				EFFLUENT WATER	3530	7.5	600	3	PS	M	E	G	PROVIDE INVERTER DUTY MOTOR SUITABLE FOR USE WITH A VFD
P 9904	EFFLUENT WATER PUMP NO.2	7.1	46.4	71.1				EFFLUENT WATER	3530	7.5	600	3	PS	M	E	G	PROVIDE INVERTER DUTY MOTOR SUITABLE FOR USE WITH A VFD
P 9906	EFFLUENT WATER PUMP NO,3	7.1	46.4	71.1				EFFLUENT WATER	3530	7.5	600	3	PS	M	E	G	PROVIDE INVERTER DUTY MOTOR SUITABLE FOR USE WITH A VFD

FIELD WORK NOTATION

M = MECHANICAL CONTRACTOR
E = ELECTRICAL CONTRACTOR
G = GENERAL CONTRACTOR
EX = EXISTING EQUIPMENT

PS1 = VEOLIA (SCREEN EQUIPMENT SUPPLIER)
PS2 = VEOLIA (GRIT REMOVAL SUPPLIER)
PS3 = ENV TREATMENT (SCUM EQUIPMENT SUPPLIER)
PS4 = EVOQUA (SLUDGE COLLECTION SUPPLIERS)
PS5 = XYLEM (BW AND PE PUMP SUPPLIER)
PS6 = VEOLIA (BAF EQUIPMENT SUPPLIER)
PS7 = SLUDGE DEWATERING SUPPLIER
PS8 = EFI CONCEPTS (ODOUR CONTROL SUPPLIER)
PS12 = BOILERSMITH LTD. (BOILER SUPPLIER)

PLOT DATE: Thursday, June 5, 2025 1:41:00 PM

General	Rubber flapper, zero leakage, swing check valve. Valve sizes per drawings and valve schedule. End connections: Flanges to ASME B16.1 Class 125.
Code/Standard Compliance	AWWA C508 (latest edition). NSF 61 for Potable water applications.
Pressure/Temperature Rating	Pressure rating: 1200kPa. Temperature rating: -40ºC to 82ºC.
Body	ASTM A126 Class B Cast Iron or A536 Ductile Iron. Provide a bottom plug for field addition of a backflow device.
Cover	ASTM A126 grade B Cast Iron or A536 Ductile Iron. Designed to allow removal of disk without valve removal.
Flapper	Buna-N coated steel disk c/w reinforcing bar and molded high strength fabric. Flapper to have an integral O Ring seal. Rubber hardness to be 45 durometer for valves 50-200mm and 70 durometer for valves 250mm and larger.
Seat	Constructed at 45 degrees to the centre line of the valve to reduce slamming potential.
Coating	Exposed valves to be coated to Division 09900 and 15020 standards. Provide interior and exterior coating of 8 mil 2-part epoxy or heat activated fusion bonded epoxy, conforming to AWWA C550.
Accessories	Refer to valve schedule and specifications for additional requirements. Valve tag denoting specific valve identity number consistent with the project P&ID drawings and Specification Section 15020 requirements.
Specified Product	**Apco Series CRF**
Approved Alternates	**Golden Anderson Figure 200** **Valmatic Series 500**
Application	Where indicated on drawings and in the valve schedule. Water and Wastewater (liquid train) services.
Execution: • Install valve to manufacturer’s recommendations.	

150-SS-PA
B.O.P. 81.450 m

6.4

100-SS-RSE
T.O.P. 82.600 m

REFER TO DRAWING P401
FOR CONTINUATION

6.3

40-SS-EW
UP TO HOSE BIBB.

2
P603

6.2

AUTOMATIC AIR
RELEASE VALVE

HOUSE KEEPING PAD
1750mm x 700mm x 100mm
(TYP.4)

REFER TO DRAWING P301
FOR CONTINUATION.

6.1

6.A

6.B

6.C

300-SS-SL
B.O.P. 81.700 m

VF-5101

100-SS-RSE
T.O.P. 82.600 m

FE 5101 MAG
M P-5101
B.F.
VF-5115
VF-5107
SLUDGE PUMP NO. 1

VF-5104

1700

FE 5102 MAG
M P-5102
VF-5108
VF-5116
SLUDGE PUMP NO. 2

300-SS-SL
B.O.P. 81.700 m

300-SS-SL

1700

150-SS-SL

M P-5103
VF-5109
VF-5117
FE 5103 MAG
SLUDGE PUMP NO. 3

1700

1500

FE 5104 MAG
M P-5104
VF-5110
VF-5118
B.F.
SLUDGE PUMP NO. 4
B.F.

150-SS-SL

3400

FUTURE SLUDGE PUMP

VF-5103

1
P603

PARTIAL PROCESS BUILDING BASEMENT FLOOR PLAN

1
SKP601-1

SCALE: 1:50

0 1 2 3 4m

PROJECT:

BRIGHTON WASTEWATER TREATMENT SYSTEM UPGRADES

100 COUNTY ROAD 64, BRIGHTON ONTARIO

DRAWING:

PARTIAL PROCESS BUILDING BASEMENT FLOOR PLAN

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J.L.Richards
ENGINEERS-ARCHITECTS-PLANNERS

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DESIGN:	KP
DRAWN:	JV
CHECKED:	CW
JLR #:	32296-001

ADDENDUM NO. 5

DRAWING #:
SKP601-1

File Location: P:\32000\32296-001 - Brighton WWT System Upgrades\03-Production\04-Process\P601 PROCESS BUILDING PLAN.dwg

PLOT DATE: Monday, June 2, 2025 11:53:14 AM