



## 463-2022 ADDENDUM 3

### NEWPCC PRIMARY CLARIFICATION UPGRADE PROJECT

#### **URGENT**

**PLEASE FORWARD THIS DOCUMENT TO  
WHOEVER IS IN POSSESSION OF THE  
BID/PROPOSAL**

ISSUED: November 7, 2023  
BY: Matt Kowalski  
TELEPHONE NO. 204-477-5381

**THIS ADDENDUM SHALL BE INCORPORATED  
INTO THE BID/PROPOSAL AND SHALL FORM  
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2021-03-05

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**Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.**

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#### **FORM B: PRICES**

Replace: 463-2022 Addendum 2 Form B: Prices with 463-2022 Addendum 3- Form B: Prices. The following is a summary of changes incorporated in the replacement Bid/Proposal Submission:

Form B(R3): Revised to merge line items 10 and 11.

#### **PART B – BIDDING PROCEDURES**

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, November 17, 2023.

#### **PART D – SUPPLEMENTAL CONDITIONS**

Revise: D21.1 to read: The Contractor shall achieve Substantial Performance by **May 31, 2025**.

#### **NMS SPECIFICATIONS**

##### **Section 01 40 00 Measurement and Payment**

Revise: 1.4.11.2: to read Basis of Payment: Electrical and instrumentation and control shall include electrical work, instrumentation and controls, SCADA systems, computer systems, and permits coordination for electrical power supply on a lump sum basis. Permit costs are paid as a separate line item. Routing the electrical service from the Customer Service Terminal Enclosure (CSTE) to the scum building and all other site electrical works is considered incidental to this item; coordination as required with Manitoba Hydro is considered incidental to this item. Installation of Internet and Phone Service from the property line to the scum building is considered incidental to this item. Internet and phone service installation shall be coordinated with Valley Fiber as needed. Coordination with Valley Fiber as required shall be considered incidental to this item. Electrical Instrumentation & Controls Works shall include but is not limited to the works defined in **Divisions 26 and 40**.

##### **Section 07 21 00 Thermal Insulation And Below Slab Vapour Barrier**

Revise: 2.1.1.2 to read: Stego Wrap Vapour Barrier 0.38 mm thick (15 mil) by Stego Industries or **W.R. MEADOWS Perminator 15mil Underslab Vapour Barrier.**

**Section 07 52 00 Modified Bituminous Membrane Roofing**

Revise: 2.9.1: to read **CAN/ULC-S701 Type 2 POLYISOCYANURATE board with skin surface. Thickness as indicated.**

Add: 2.9.2 **Sloped, Type 2 polyisocyanurate board. Minimum thickness: 25 mm.**

**Section 21 05 01 Common Work Results for Mechanical**

Revise: 1.18.5.4 to read: Air Handling Units - Indoor or Outdoor Pre-manufactured  
Trane, Engineered Air, McQuay, Haakon, Scott Springfield, **Daikin, Solution Air**

Revise: 1.18.5.13 to read: Condensers - Air Cooled Refrigerant  
Trane, Carrier, Engineered Air, Keeprite, **Daikin/Aaon, Solution Air**

Revise: 1.18.5.18 to read: Dampers - Backdraft  
Aiolite, Vent-Aire, Penn, T.A. Morrison, **Nailor**

**Section 33 05 05 Excavation, Trenching and Backfilling**

Add: 3.1.5: **Use soft dig excavation method around all existing utilities.**

**Section 41 12 13.37 Bin Covers**

Revise: 1.3.1.5: to read **Manufacturer to provide anchor bolt pattern.**

Delete: 1.3.1.28

Delete : 1.3.1.29

Delete : 1.3.1.32

Delete : 1.5.3.14

Revise: 1.5.12.1: to read **Equipment to be fabricated from pickled/passivated material. Weld and bend areas to be cleaned and passivated after fabrication.**

Revise: 1.6.4: to read **The solids distribution cover shall be manufactured by Shafted Level LODOR™ or approved equal with a minimum of ten (10) operating installations of the automatic bin covers in North America.**

Revise: 2.2.1: to read The bin cover system shall be designed to meet the following minimum performance and design requirements. **The standards for conveyor selection shall be based on the operational experience of the manufacturer with shafted screw conveyors.**

Revise: 2.3.1: to read Unless otherwise specified or permitted, the materials used in the fabrication of the equipment under this section shall conform to the following:

Inlet Chutes	AISI 316, ASTM A167, 18-8
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End Plates, Covers	AISI 316, ASTM A167, 18-8
Container Supports	<b>AR 36 steel, galvanized or equal</b>
Spiral Flighting	High Strength Alloy Carbon Steel with scheduled 40 center support shaft
Bolts, Nuts, and Washers for Conveyor Supports	AISI 316, ASTM A167, 18-8
Conveyor Channel Stiffeners	AISI 316, ASTM A167, 18-8
Container Guide Rails	AISI 316, ASTM A167, 18-8

**Section 09 97 23 Concrete and Masonry Coatings**

Revise: 2.1.5.1.2.1: to read Caroguard 890 by Carboline **or Stonkote HT4**

Revise: 2.1.5.2.2.1: to read Semstone 145 by Carboline **or Stonchem 555**

**Section 26 41 13 Lightning Protection for Structures**

Add: 463-2023 NMS Format Specification-Section 26 41 13-R1

**Section 31 23 23 Excavation And Backfill For Structures**

Revise: 3.5.1.1: to read Engineered fill beneath slab on grade: Type 1S **engineered** fill placed in 150 mm lifts, compacted to 98% SPD.

**Section 40 05 24 Detailed Process Valve Specification Sheets**

Replace: Section 40 05 24 with 463-2023 NMS Format Specification 40 05 24-R1

**Section 40 15 13.01 Detailed Piping Specification**

Replace: Section 40 15 13.01 with 463-2023 NMS Format Specification-Section 40 15 13.01-R1

**Section 40 23 13.03 Electric Motor Actuators And Appurtenances**

Revise: 2.2.8.3.1.2: to read Limitorque; LY or L75 Series, **only for solenoid valve actuators; small HVAC damper actuators; and electric valve actuators with a power supply < 120 VAC**

Revise: 2.2.8.3.1.3: to read Valvcon Corporation; V Series, **only for solenoid valve actuators; small HVAC damper actuators; and electric valve actuators with a power supply < 120 VAC**

Revise: 2.2.8.3.2.1: to read Valvcon Corporation; V Series with 4-20 mA option card, **only for solenoid valve actuators; small HVAC damper actuators; and electric valve actuators with a power supply < 120 VAC**

Revise: 2.2.8.3.3.2: to read Valvcon Corporation; V Series, **only for solenoid valve actuators; small HVAC damper actuators; and electric valve actuators with a power supply < 120 VAC**

## **Section 40 90 01 Automation – Process Measurement Devices**

Replace: Section 40 90 01 with 463-2023 NMS Format Specification 40 91 01-R1

## **DRAWINGS**

Replace: 463-2022 Drawing 1-0101-CLYT-Y003 R00 with 463-2022 Addendum 3 - Drawing 1-0101-CLYT-Y003 R01

Replace: 463-2022 Drawing 1-0101-AGAD-P002 R00 with 463-2022 Addendum 3 - Drawing 1-0101-AGAD-P002 R01

Replace: 463-2022 Drawing 1-0101-AIFS-P004 R00 with 463-2022 Addendum 3 - Drawing 1-0101-AIFS-P004 R01

Replace: 463-2022 Drawing 1-0101-AILD-P909 R00 with 463-2022 Addendum 3 - Drawing 1-0101-AILD-P909 R01

Replace: 463-2022 Drawing 1-0101-AILD-P910 R00 with 463-2022 Addendum 3 - Drawing 1-0101-AILD-P910 R01

Replace: 463-2022 Drawing 1-0101-EFAS-P002 R00 with 463-2022 Addendum 3 - Drawing 1-0101-EFAS-P002 R01

Replace: 463-2022 Drawing 1-0101-ESCY-P001 R00 with 463-2022 Addendum 3 - Drawing 1-0101-ESCY-P001 R01

Replace: 463-2022 Drawing 1-0101-PPID-P302 R00 with 463-2022 Addendum 3 - Drawing 1-0101-PPID-P302 R01

Replace: 463-2022 Drawing 1-0101-MPID-P606 R00 with 463-2022 Addendum 3 - Drawing 1-0101-MPID-P606 R01

Replace: 463-2022 Drawing 1-0101-MPID-P901 R00 with 463-2022 Addendum 3 - Drawing 1-0101-MPID-P901 R01

Add: 463-2022 Addendum 3 - Drawing 1-0101-ECBD-P101 R00

## **APPENDICES**

Add: Addendum\_3-Appendix K SD-01-Dewatering Press Package

## **QUESTIONS AND ANSWERS**

Q1: Parapet Assembly PW1 on 1-0101-BAAA-A001 appears to be missing batt insulation fill to steel stud cavity. Please add to assembly description or confirm batt is not required.

A1: Revise and Replace: Batt insulation is required and will be added to ASSEMBLIES.

Q2: Is excavation into the existing site roads acceptable (beyond excavation limits shown on Civil drawing 1-0101-CRSW-Y016)?

A2: No that is why limits were identified.

- Q3: Spec 31 50 00 notes "Provide excavation support systems as indicated and in compliance with Contract Documents." No excavation support systems are indicated in the documents. Please clarify.
- A3: Shoring design is the Contractors responsibility. Drawings are part of the contract documents, and it is clearly stated on the General Notes page that construction contractor is to take responsibility for the required methods for any shoring, bracing, excavation, etc., to complete the construction. In addition, the required construction methods shall be site specific and submitted under the seal of contractor's engineer per project documentation.
- Q4: Spec section 31 23 23 indicates: "Unless otherwise as indicated or as directed by Contract Administrator, remove sheeting and shoring from excavations." It also states: "Upon completion of substructure construction: .1 Remove shoring and bracing." Spec section 31 50 00 indicates: "Extraction of steel sheetpile wall, timber sheetpile wall, or soldier piles are not permitted unless otherwise indicated, specified or approved by the Contract Administrator." It also states: "Sheeting shall be left in place unless otherwise indicated."
- Please clarify if the Contractor is required to remove sheeting or shoring from the main building excavation or not.
- A4: The Excavation support systems are meant to help retain the soil during excavation/construction process. Therefore, it is meant to be removed after completion of substructure construction except the construction contractor feels otherwise due to maybe difficulty of removal. We have information in the spec. as regard any excavation support system that may be planned to be left in place by the construction contractor. In summary, removal of the excavation support systems are expected after completion of the substructure construction.
- Q5: Please refer to Section 08 11 00; Item 2.1.2.5: "Fire-rated frames and corresponding doors shall be provided for those openings requiring fire protection and temperature rise ratings, as determined and scheduled by the Contract Administrator." Please note that TRR is not listed on the door schedule. And the specification is for steel stiffened cores. You cannot have a temperature rise and steel stiffened core – must be either or.
- A5: The fire ratings are specified on the Door/Opening Schedule. Temperature rise can be derived from the FRR ratings.
- Q6: In reference to specification section 08 71 00: there is no architectural finish specified for the kickplates or exit devices (i.e. Satin Chrome, Stainless, Aluminum, etc.). Please specify a finish.
- A6: Stainless Steel.
- Q7: In reference to specification section 08 71 00 clause 2.1.9.1 specifies standard weight hinges. For this application of steel stiffened heavy gauge doors we strongly recommend either heavy weight butt hinges or continuous hinges.
- A7: Revise and replace with heavy weight butt hinges.
- Q8: In reference to specification section 08 71 00 clause 2.1.9.4 does not indicate where the 180 degree swing will be required. Please indicate location.
- A8: No locations required.

- Q9: In reference to specification section 08 71 00 clause 2.2 states that the cost of the locksmith must be included in the tender. The Medeco system specified is proprietary so we require the contact name for the locksmith that is authorized for this property.
- A9: Russ Hayes is the owner to contact with the specifics so he can provide an accurate quote.  
204-228-4312  
Active Lock and Key  
activelockandkey@shaw.ca
- Q10: In reference to specification section 08 11 00 clause 2.1.2.4.3 requests stiffeners to be 18 gauge. Several door suppliers only have 20 gauge stiffeners. Can the spec please be revised to include for a minimum stiffener of 20 gauge (same as 2.1.2.3.3)?
- A10: Leave as specified.
- Q11: Drawing 1-0101-SGAD-P016 (sheets 1, 2 and 3) indicate "32 mm x 280 mm GALV. STAIR TREAD c/w ABRASIVE NOSING, TYPICAL." A note at the bottom of the page reads "ALL STAIR FRAMING, STRINGERS, GRATING, TREADS ALUMINUM." Please confirm all stair treads should be aluminum rather than galvanized.
- A11: All Stair Treads are to be 32 mm X 280 mm type 11W4 Alum. Stair Tread c/w abrasive nosing.
- Q12: Spec Section 31 23 19 - states:  
".2 Lower the water table in advance of excavation using wells, well points, or similar methods. .3 Maintain the water level, as measured in piezometers, a minimum of 1000 mm below the prevailing excavation level for structure or pipeline under construction, unless otherwise noted."  
  
For an excavation of this size and depth (not significantly greater than a residential basement), it is not typical to require the water table lowered in advance, nor to 1 m below U/S excavation. Please advise if these requirements can be removed, allowing the Contractor to develop their own means and methods?
- A12: The spec does not cover means and methods and states "or similar methods". The spec outlines the conditions required to be met for the works. Means and methods is at contractor's discretion.
- Q13: Drawing 1-0101-SGAD-P001 as well as several others show "SAFETY TIE-OFF D-RING". Please provide a specification and drawing detail for these items.
- A13: This is provided within Specification 05 50 00 clause 2.1.17.
- Q14: The Detailed specification for Chemical feeds, Drains, Vent to Outside, Flushing Water in new building lists pipe and fittings to be PVC and joints are listed as grooved or butt welded. Can socket solvent welded joints be used?
- A14: No socket welding or butt welding for pressure pipes (mixed polymer, flushing water). Drains and vents can be socket solvent welded. See attached revised Section 40 05 13.01.

- Q15: The Detailed spec for Process piping inside buildings lists pipe and fittings to be SS and joints to be welded. There is also grooved joint and fittings listed at the bottom of the page. Please clarify if SS grooved pipe and fittings can be used or if all piping under this spec needs to be welded?
- A15: Stainless steel piping inside building can be butt welded or grooved. See attached revised Section 40 05 13.01.
- Q16: Can you please provide specifications for these instruments? We can't seem to find info for these in the tender specifications in Addendum 1.
- o TE-P51011 shown on Drawing 1-0101-MPID-P605-001
  - o AE-P61008 shown on Drawing 1-0101-MPID-P604-001
  - o GDC-P69010, AIT-P69011, AIT-P69012, AIT-P69013, AIT-P69014, AIT-P69015, and
  - o AIT-P69016 shown on Drawing 1-0101-MPID-P606-001
- A16: TE-P51011 shown on Drawing 1-0101-MPID-P605-001. Part of the Domestic hot water storage tank.
- AE-P61008 shown on Drawing 1-0101-MPID-P604-001. Smoke detector: air duct with sampling tubes with protective housing. Acceptable product: Edwards model SIGA-SD to match existing fire alarm system, or current equivalent Edwards model if not longer available.
- GDC-P69010, AIT-P69011, AIT-P69012, AIT-P69013, AIT-P69014, AIT-P69015, and AIT-P69016 shown on Drawing 1-0101-MPID-P606-001. Gas detection system is part of CoW standardized agreement shown in tender document Part D and appendix A. Also, refer to Loop drawings 0101-AILD-P601 to P606.
- Q17: Drawing 1-0101-MPID-P605-001 shows FSL-P51201 and FSL-P51101. Can you please confirm that these are the flow switches for emergency eye/face wash?
- A17: Refer to spec section 22 42 03 clause 2.4 .4.
- Q18: Drawing 1-0101-MPID-P604-001 shows FIT/FE-P61004. Can you please confirm that this flow meter falls under the specification Section 40 90 01 clause 2.9 Flow Element and Transmitter, Thermal Mass Flow?
- A18: Yes, Endress and Hauser 65l or approved equal.
- Q19: Drawing 1-0101-MPID-P601-001 shows TT-P66001, TT-P66003, and TT-P66005. Can you please confirm that these instruments fall under the specification Section 40 90 01 clause 2.3 HVAC Temperature Element and Transmitter (Pipe mount)?
- A19: Yes, this product was standardized by the City via RFP 449-2014.
- Q20: Please provide an equipment list of all process equipment and skids that is required to be installed or removed.
- A20: Please refer to Process Drawings for all process equipment to be installed or removed. A separate list will not be provided.
- Q21: Specifications call for Software for PLC and SCADA. I'm assuming City of Winnipeg already has their own software onsite, does these new Software are still required to be supplied as part of this project?

- A21: Per spec section 40 94 43 2.1 2, PLC software is required for new PLCs in De watering building, and Section 40 95 34 clause 2.1 6, SCADA software is required for the desktop client in the de watering building.
- Q22: Existing NP-9900 Network Panel was shown on the following listed Drawings numbers. Can you please provide the Bill of Materials for this existing panel?
- o 1-0101-ANET-P002-001
  - o 1-0101-AWDG-P001-001
  - o 1-0101-AIFS-P003-001
  - o 1-0101-AIFS-P004-001
  - o 1-0101-AIFS-P005-001
  - o 1-0101-AUTY-A002-001
- A22: Refer to drawing 1-0101-ACBD-P001, there is a typo in the title block for the panel name tag, it shows NP-P9000.
- Q23: Drawings 1-0101-EWDG-P001 001 and 1-0101-EWDG-P002 001 shows the Ground Fault Detection Panel but these are the only two (20 drawings that shows it, and this is not listed or indicated in the tender specifications provided in Addendum 1. Can you please provide more information for this new Panel?
- A23: Refer to following drawings and spec sections.
- 1-0101-EWDG-P001 001
  - 1-0101-EWDG-P001 001
  - 1-0101-EGAD-P001-001
  - 1-0101-ANET-P801-001
  - 1-0101-AILD-P711-001
  - 1-0101-ECBD-P101-001 (attached)
- Spec section 26 12 19 clause 2.3 .4 .3 .6
- Q24: Are the embedded wear plates shown on drawing SGAD-P015-001 existing or do they need to be included under the process mechanical SOW?
- A24: They need to be supplied and installed.
- Q25: Is the Rotary Press installation part of the mechanical scope and if so have they been rough placed by others?
- A25: Yes, the rotary press package will be delivered and stored on site, general contractor is responsible for full installation.
- Q26: Is installation of the Flocculators a part of the mechanical scope?



A26: Yes, included in the rotary press pre-purchase package.

Q27: Is the supply and installation of the four monorail beams part of the mechanical scope?

A27: Yes.

Q28: Is the structural platform/hoist support steel existing or does this steel need to be supplied & installed in this SOW?

A28: It needs to be supplied and installed.

Q29: Please advise if any of the below custom fabricated equipment is being supplied by the City of Winnipeg.

A. Bin covers.

B. Truck Scales.

C. Carbon Adsorption System.

D. SS Chutes.

A29: None of the above is supplied by the City. All is in the GC scope of work.

Q30: Would an option for a CDP be acceptable rather than modifying MCC-1P and MCC-2P? This would prevent down time of this equipment and the cost of new sections and modifications.

A30: Per City of Winnipeg electrical Design Guide, the Power distribution system shall be through MCC. CDP is not acceptable for this application.

Q31: It appears that the cable tray that transitions from outside to the interior of the building located in the grit removal building is undersized for the cables required to be pulled in it. Please confirm the size of tray in the drawings is accurate.

A31: The cable run from outside to the interior of Grit building is through duct bank and no cable tray, not all existing cable trays inside Grit building cable gallery are shown on this drawings, refer to 1-0101-ECTR-G001 for additional cable tray sizes.

Q32: Manitoba Hydro does not have services downstream of NEWPCC's main electrical service connections on site. On existing sites a location where the Contractor can access temporary power for construction is typically provided. If this is not available, please indicate a corridor from Main Street that we can run overhead Manitoba Hydro lines and poles inside of.

A32: Temporary power is available in the laydown area to supply power to construction site trailers and offices. Contractor shall coordinate with Manitoba Hydro to obtain temporary power for construction purposes as per spec section 01 51 00 clause 1.6. However, provide estimate for temporary power demand for construction site to evaluate the available power in NEWPCC existing Primary Clarifiers building 600 Volt electrical distribution system to determine if the City can supply the temporary power.

- Q33: Please provide delivery timeline for City's pre-purchased equipment (rotary presses and polymer feed systems).
- A33: Goods shall be available for delivery within three hundred and fifty (350) Calendar Days of the award of contract, DDP (Delivery Duty Paid) destination. The contract was awarded in May 2023.
- Q34: Please provide any minimum distances that need to be maintained from the Methane Dome.
- A34: Flare – 15 m offset, Sphere – 10 m offset.
- Q35: Has the building permit been applied for yet? If not, and delays are incurred because of the building permit not being available by December 1, 2023. Please confirm that the Contractor will be granted an extension to the Substantial Completion date equivalent to the delay in permit issuance.
- A35: Application for building permit is in GC's scope of work and has not been applied for. The substantial completion date will be postponed to May 2025. No additional delay will be granted with regards to building permit.
- Q36: E4.7 – Please confirm the markups apply to the entire value of the additional work.
- A36: The markups apply to both materials and workmanship.
- Q37: What happens if any equipment movement and/or piling operation exceeds the specified vibration threshold? Is mitigation work considered an unforeseen delay that is subject to extras?
- A37: It's not subject to extras. The contractor shall modify means and methods accordingly.
- Q38: Please confirm if any laydown areas are available between PC1 and PC2 or near the existing digestion facility. None are shown in these areas on 1-0101-CLYT-Y003.
- A38: The space between PC1 and PC2 or near the existing digestion facility is available for laydown. However, we would encourage the contractor to use the space on the far west side of Parcel A. The space between the clarifiers is above an existing tunnel so the contractor should consider the loads for what the space is used for.
- Q39: Item 2. of Form B is not calculating correctly. Regardless of the Unit Price entered, the Amount result is \$0.
- A39: Leave Item 2.0 empty, there is no separate quantity for item 2, it's composed of the line items below.
- Q40: Existing Primary Clarifier 1 drawings indicate a Lawn Sprinkler line running through the future Scum Dewatering building location. Please confirm if this line needs to be decommissioned or relocated or neither.
- A40: The sprinkler line is not in use. Contractor shall remove. Contractor to make sure the hydrant valve is closed.
- Q41: The specified Substantial Completion date of January 31, 2025 will be impossible to meet. Final Mechanical, Electrical, and Process installs as well as final tie-ins and commissioning are expected to run into May 2025. Please consider revising the Substantial completion date to May 15, 2025. If the substantial completion date remains unchanged, bids received may be inflated with liquidated damages.

- A41: The substantial completion date will be postponed to May 31, 2025.
- Q42: Is a 24V rated system required for the emergency exit combo units and battery banks or is 12V acceptable?
- A42: Refer to spec section 26 52 13 clause 13 2.1. it is rated for 24VDC battery bank.
- Q43: If 24V system is required, can the exit sign combo units be broken down into separate stand alone battery banks, exit signs and DC heads?
- A43: Space restriction might not allow separate standalone battery banks, exit signs and DC heads.
- Q44: Regarding application of bituminous paint on all aluminum surfaces in contact with concrete (SDTL-A001-003 Note 1). Up to what extent should we paint? Is it only the portion in contact with concrete or the whole aluminum item (i.e. guardrails, 31/SDTL-A001-003)?
- A44: Surfaces in direct contact.
- Q45: Stair 2 galvanized handrails and stringers. Are these to be painted?
- A45: No, left as galvanized.
- Q46: In Mechanical Room 2-202, galvanized guardrail and gratings are these to be painted? If yes, are the structural frames/supports needs to be painted too?
- A46: No, all to be left Galvanized.
- Q47: With reference to drawing BSCH-P001-Schedule and Specs Section 08 51 13, it seems that the specified Window System-Alumicor Rain Blade 1990 series will not work on tall Windows, type SCN 4 & SCN 5 because of the wind load requirement. Please clarify if curtain wall system, Alumicor VersaWall Midline 2200 series or equal from Kawneer 1620 Curtain Wall series is acceptable.
- A47: SCN 4 and SCN 5 are intended to span horizontal and attached to a vertical galv. L102x102x6.4 angle on each side.
- Q48: Please clarify if Curtain Wall system for Windows, type SCN 1, 2 & 3 would also be acceptable. We noticed that these Windows, type SCN 1, 2 & 3 are located in the staircase which looks likes has a very tight working space as the Window system is to be glazed from the inside of the building.
- A48: Specified windows to be used.
- Q49: The aluminum window specs calls for split finish as per below snip from the specs; Clear Anodized Finish for Interior and Painted Finish for Exterior. Please confirm the finish/colour for the exterior.

## 2.4 Aluminum Finishes

- .1 Exterior exposed aluminum surfaces: To AAMA 2604, 2-coat, thermal setting enamel consisting of primer and topcoat, 0.03 mm (1.2 mil) minimum total thickness. Colour: custom colour as directed by the Contract Administrator.
  - .1 Acceptable material: PPG Industries Inc., Duranar.
- .2 Interior exposed aluminum surfaces: To AA DAF-45-M12C22A31, Architectural Class II, clear anodized 10 µm (0.0004 inches) minimum thickness.
  - .1 Acceptable material: Alumicor Ltd., Class II Anodic Finish.

A49: Exterior color Gray Timber Wolf UC115419

Q50: Please confirm if structural steel columns require intumescent coating?

A50: No, intumescent coating s not required.

Q51: Regarding 31 63 19.11 item 5.1 Static Load Testing: Please verify the intended location of the static load test. What is the desired concrete strength for the static load test? Wait for 7 or 28 Days?

A51: Preferably Pile mark P7 with the maximum load. The desired concrete strength for the static load test is 35 MPa. Once strength is attained, possible at 28 Days.

Q52: Regarding 31 63 19.11 item 6. Integrity Testing of Piles: What is the desired concrete strength for pile integrity testing? Wait for 7 or 28 Days?

A52: Not particular with the strength attained for the integrity test but random selection shall be used after all the piles are in place. At least 7 days, however, random selection of the piles shall be used after all the piles are in place.

Q53: Regarding 31 63 19.11 item 6. Integrity Testing of Piles: Ten (10) piles are specified for pile integrity testing. Are these random piles OR piles that are installed at the early part of pile installation having achieved a certain concrete strength?

A53: Piles to be selected randomly in coordination with the Contract Administrator after all the piles are installed.

Q54: Regarding 31 63 19.11 item 6. Integrity Testing of Piles: What is the implication for a failed pile having necking, bulging, voids, honeycombing, discontinuities, etc.? Are any of the remedial measures and/or replacement pile(s) subject to extras?

A54: Refer to section 31 63 19.11, Clause 6.1.2. No, this would be contractor's responsibility.

Q55: Regarding 31 63 19.11 items 1.5.2 and 4.3.2: Will permanent steel casings required to complete the work be considered as an Extra (outside of the Weathered Rock Zone)?

A55: Permanent steel casings are not expected to be required aside the weathered rock zone. This is not considered an Extra.

- Q56: Regarding 31 63 19.11 item 2.4.3: Some local piling trades do not typically use open-end cutting shoe for caisson sleeves. Please verify if conventional sleeve / coring teeth will be acceptable?
- A56: Yes, as long as installation is not impeded in any way or form.
- Q57: Regarding drawing 1-0101-SFDW-P001 – 001: The rock socket diameter is 600 mm. Please verify the shaft diameter above the rock socket. Historically in Winnipeg, rock socketed caissons often require a larger shaft diameter (+150 mm (6")) for constructability reasons. A 750 mm (30") DIA. shaft would be ideal in this case. A ledge is formed for sealing and/or suspending the temporary casing allowing for the 600 mm (24") DIA. rock coring below.
- A57: We have had success with the use of same diameter in the past, however, to minimise the risk, we are OK with the proposed slight increase of the shaft diameter above the rock socket.
- Q58: Could the design loads on the caissons please be provided?
- A58: The critical loads are specified in the schedule (Dwg No: 1-0101-SFDW-P001-001) for 3 pile types. The idea is to have all piles to bear on same strata (rock socketed).
- Q59: Access Control
- 1) Drawing 1-0101-ESCY-P001 shows 5 Doors going back to a life safety power supply. Is there where the Genetec Controller (Access Control Platform) will also be located? If so how is the Genetec Controller wired to the other buildings Access Control (direct feed, network, etc.)?
  - 2) We assume the readers at the 5 doors on the drawing are to be same HID Signo readers being used at other buildings?
  - 3) Is there a need for Request to Exit and Door Contacts at these doors (like the other doors at the other building)?
- A59:
- 1) The security network access cabinet will be provided by the city to connect door access controls. refer to drawing 1-0101-ESCY-P001 in addendum 3.
  - 2) Refer to spec section 40 90 01 2.26 for Card access reader information.
  - 3) The door contacts shall be part of Access control.
- Q60: Public Address
- 1) Which speakers are ceiling mount, paging horns (15W & 30W), and the Hazardous Location speakers?
  - 2) Is the Network Audio Adapter to be a TOA as well?
- A60:
- 1) Contractor to determine the use of (15W or 30W) speakers based on area layout and noise level, both models have ceiling mount option. Refer to Notes on drawing 1-0101-ESCY-P001 for type of speakers.
  - 2) Refer to Spec section 40 90 00 2.1.5, "Use products of one manufacturer and of the same series or family of models to achieve standardization for appearance, operation, maintenance, spare parts, and manufacturer's services"

- Q61: On the Instrument location drawing, it shows field hand stations in specific locations. In the specifications there is no information regarding field hand stations. On the wiring diagrams it shows the hand stations apart of the bucket. Please confirm if there is a required field hand station. If there is field hand stations required please provide details and a spec.
- A61: The Hand Stations that are shown in the location plans and P&IDs are part of package units and shall be provided as part of package system.
- Q62: Please provide the specifications for gas detection. We want to ensure the correct items are being provided within our tender. In past projects the specified gas detection manufacture was MSA. please confirm the manufactures spec'd for this tender.
- A62: Per City of Winnipeg Automation Design Guide (Appendix A) section 16.3.1, the gas detection system is standardized per RFP-123-2014 for MSA manufacture equipment. Tender document contract drawings 1-0101-AILD-P601 to P605 provide model numbers and types for gas detection equipment.
- Q63: Please provide an itemized equipment list for "all mechanical related equipment" being supplied and/or installed under the Process Mechanical scope of work.
- A63: Please refer to Process Drawings for all process equipment to be installed or removed. A separate list will not be provided.
- Q64: Provide missing loop drawings and instruments in the instrument list.
- A64: No loop diagram is required for package unit instrument as the interface would be through Profibus or Modbus. Also, no loop diagram is required for Profibus instrument, Profibus segment drawings are provided.

Individual lights and switches are shown in loop drawings and listed in the specifications, only major instruments are included in the instrument list.

Area	Type	Tag	S	P&ID	Response
P	AAH	69050	1,2	606	Refer to addendum 3 drawings 1-0101-AILD-P909 and P910
P	AE	61008		604	No loop is required, it is vendor package
P	FIT	33111		305	No loop is required, it is vendor package
P	FIT	33211		306	No loop is required, it is vendor package
P	LC	52000		605	It is part of the schematic 1-0101-EMCL-P501
P	LS	34112		305	No loop is required, it is vendor package
P	LS	34212		306	No loop is required, it is vendor package

Area	Type	Tag	S	P&ID	Response
P	AA	93000			Occupancy time out strobe light
P	AA	94000			Occupancy time out strobe light
P	AAH	69020	1,2	606	Strobe and horn
P	AAH	69030	1,2	606	Strobe and horn
P	AAH	69040	1,2	606	Strobe and horn
P	AAH	69050	1,2	606	Remove per Addendum 3
P	AAH	95010	1,2		Strobe and horn
P	AAH	95011	1,2		Strobe and horn
P	AAH	95020	1,2		Strobe and horn
P	AAH	95021	1,2		Strobe and horn
P	AE	61008		604	Part of Package system

P	FE	33111		305	Part of Package system
P	FE	33211		306	Part of Package system
P	FE	35002			Refer to addendum 3 drawings
P	FI	6630		601	Rotameter
P	FIT	33111		305	Part of Package system
P	FIT	33211		306	Part of Package system
P	FIT	35002			Refer to addendum 3 drawings
P	LC	52000		605	Part of a sub-system to control a motor
P	MS	95203		901	Motion Sensor Basement
P	MS	95204		901	Motion Sensor Loading bay D
P	PG	33116			PI 33116 , vendor package
P	PG	33216			PI 33216 , vendor package
P	PIT/PE	33115		305	Part of Package system
P	PIT/PE	33215		306	Part of Package system
P	TE	51011		605	Part of Package system
P	XE	34133		305	surveillance camera
P	XE	34233		306	surveillance camera
P	XV/ZS & HSx2	32119		302	this is 32121, "32119" appears in only the PIDs
P	XV/ZS & HSx2	61003		604	Part of Package system
P	XV/ZS & HSx2	61004		604	Part of Package system
P	ZL	34132	1	305	STROBE LIGHT - BIN PRESENT LB1
P	ZL	34132	2	305	STROBE LIGHT - BIN PRESENT LB1
P	ZL	34134		305	STROBE LIGHT - BIN 1 FULL
P	ZL	34232	1	306	STROBE LIGHT - BIN PRESENT LB2
P	ZL	34232	2	306	STROBE LIGHT - BIN PRESENT LB2
P	ZL	34234		306	STROBE LIGHT - Bin 2 FULL
P	ZS	34132	1	305	Proximity Switch T BIN PRESENT LB1
P	ZS	34132	2	305	Proximity Switch R BIN PRESENT LB1
P	ZS	34232	1	306	Proximity Switch T BIN PRESENT LB2
P	ZS	34232	2	306	Proximity Switch R BIN PRESENT LB2

Q65: The Spec mentions lightning protection in the scope of work. With reviewing the drawing package there is nothing indicating lightning protection. Is lightning protection required? If so, please provide specs and the design/ requirements.

A65: Lightning protection is required as per contract scope. Spec section 26 41 13 Lightning Protection for Structures is attached.

Q66: Ref Drwg 1-0101-ECTR-P701, 1-0101-ECTR-P702, 1-0101-ECTR-P703 & 1-0101-EDTL-A004 Detail 1, 1-0101-EDTL-A007 Detail 4) For all the interior concrete wall penetrations, what type of seal do these require? Fire Bricks or Roxtec?

A66: Refer to spec section 26 05 34 3.5, all exterior penetrations shall be Roxtec sealing system, interior penetrations shall be firestopping brick seals.

Q67: Where is control panel CP-P8001-A located? This does not appear on any layout drawing.

A67: CP-P8001 is the PLC panel for Existing primary clarifiers, located in existing primary clarifiers building automation room.

- Q68: Ref Spec (40 90 00 Item 1.5.1.4) states to see 40 91 01 Instrumentation and Control Components for details on data sheets. Please supply this spec section along with the instrument data sheets.
- A68: All instrument and control components details are shown in the specification "Automation – Process Measurement Devices" the spec section is shown 40 90 01 instead of 40 91 01. See Addendum 3 for corrected spec section number.
- Q69: Please confirm that any additional work which results from a utility, hazardous material, or subsurface condition which was not indicated in the tender documents provided by the City, will be considered by the City under Changes in Work, regardless of whether such information was available elsewhere. All Public office records are not practicably discoverable during a tender period of this nature.
- A69: The City confirms that any additional work which results from a utility, hazardous material, or subsurface condition which was not indicated in the tender documents provided by the City will be considered by the City under Changes in Work.
- Q70: Regarding Termination for Non-Payment. Please add a provision to the Supplemental conditions which provides the Contractor the right to terminate or suspend the contract in event of non-payment by the City.
- A70: The City had earlier considered and addressed such requests the construction industry before. At that time, we had advised that the City would not modify our payment terms due to impending industry wide changes as a result of Provincial Prompt Payment legislation. In any event, we will do our best to make payment within 45 days of an approved invoice, and are actively working on improvements to our payment systems. Our position remains the same.
- Q71: Regarding General Condition C18.1. The list of events that triggers a default is quite extensive and does not limit an event to a material breach of the contract. Please change the list of default events to be based on material breaches of contract only.
- A71: The City had earlier received this request from the construction industry before. In response to concerns that the City's powers to declare an event of default were too broad, we included the requirement that, in order to declare an event of default under C18.2, the City must act reasonably. We believe this should provide some comfort that the City cannot arbitrarily declare events of default, but stand by our original decision that a limitation to material breach would be too restrictive for the City.
- Q72: Regarding Supplemental Condition D34.6. On a Unit Price project such as this, the city should not have the right to audit the Contractor's incurred costs. Please remove the City's right to audit the Contractor's subcontracts and internal cost records.
- A72: As of this date (Oct 23.23) no third party funding is applicable to this project and accordingly we can agree to withhold the application of D34.6 at this point, but if third party funding becomes applicable to this project then the City has no choice but to flow this audit provision through to the Contractor and accordingly D34.6 would need to remain applicable in the contract.
- Q73: Reference Form B addendum 2
- Please consider adding specification section 26 for electrical and specification section 40 for automation and instrumentation to bid item 10. 'E & I & Controls Work (Complete Project)', as specification section 26 appears once only on the entire bid form in bid item 11 for the Scum Dewater Building. This would also separate the specification section 40 for 'automation & instrumentation' from bid item 8. 'Process Works (Complete Project)' which is all common to process mechanical.



10.	Electrical and Instrumentation & Controls Works (Complete Project)	26.40 Division 21, 22, 23	Lump Sum	1	\$ -	\$ -
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Ref Spec (01 40 00 1.4.11.2) Basis of payment includes divisions 23, 26 & 40. Should Division 23 only be included in .10 (Mechanical Works) and not .11 (Electrical and Instrumentation & Controls Works)?

A73: From B was revised. Refer to Addendum 3-Appendix C Form B-Prices\_R2

Q74: For the workstation, I would like to ensure compatibility with the existing system, Do you know the version of the AVEVA / EcoStructure Control Expert eXtra Large system?

A74: The system being tied into is not existing as of yet, but will be installed prior to the integration of this work. Due to this, we do not know the specific version, however we are working directly with Schneider on this and is expected to be the latest stable version at the time it is installed.

Q75: In terms of the hardware, do you know what the existing PC's manufacturer is? I'm thinking it would be in the interest of the plant IT group to maintain the same hardware.

A75: Similar to the above, all of the Operating workstations are being replaced as part of the control system upgrade. The project replacing the PCs has the same specification as included in this project, however that project award is pending and shop drawings for the workstations have not started yet.

Q76: Similarly for the network rack, I would like to see if there's any preference of brand as there is an existing network rack on site and I feel it would benefit the site if all fibre/ethernet patch panels are of the same manufacturer/model, as this would aid the maintenance of the facility.

A76: Important to note that the below is a list of what is currently used in the plant as requested for information only and does not modify the requirements detailed on the drawings and specifications:

The existing networking racks manufacturers' include:

- nVent Hoffman Proline (custom part number BY454ASY)
- Hammond Manufacturing Adjustable Rack Mount DIN Rail Kit (RMHD19003BK)
- MOXA Network Switches (EDS-G512E-4GSFP)
- MOXA SFP Modules (SFP-1GSXLC)
- Corning Pigtailed Splice Cassette (CCH-CS24-E4-P00TE)
- Corning Closet Connector Housing (CCH-01U/CCH-02U/CCH-03U/CCH-04U)
- Corning Fibre Optic Patch Cables (050502T5120003M-BL)
- Corning Fibre Optic Cables (024TUL-T3680D2M)
- Belden CAT 6 Ethernet Patch Panel (RVMPFF2U48BK, RV6MJKSMEB24)
- UPS Sola HD (SDN-5-24-100P) and Emerson (SDU-850B)

Q77: Please provide a detailed specification for the FOA piping.

A77: Refer to Section 44 31 10 Odour Control Ductwork And Accessories.

Q78: Please confirm if roofing insulation is 20psi ISO or 30psi XPS. The drawings (R1 and R2 assemblies) show 2.5" ISO however the specifications mention 30psi XPS.

A78: Revise and Replace 07 52 00 2.9

.1 CAN/ULC-S701 Type 2 POLYISOCYANURATE board with skin surface. Thickness as indicated.

.2 Sloped, Type 2 polyisocyanurate board. Minimum thickness: 25 mm.

Q79: In reference to drawing P1-M101: Control Chamber (Lower Level): What type of pipe building penetration sealing (per dwg A0-D005) is required between gridlines 16 & 16A?

A79: The penetration shall be according to Detail 3.

Q80: In reference to drawing P1-D101A: Control Chamber Building: What type of pipe building penetration sealing (per dwg A0-D005) is required between gridlines 15A & 16?

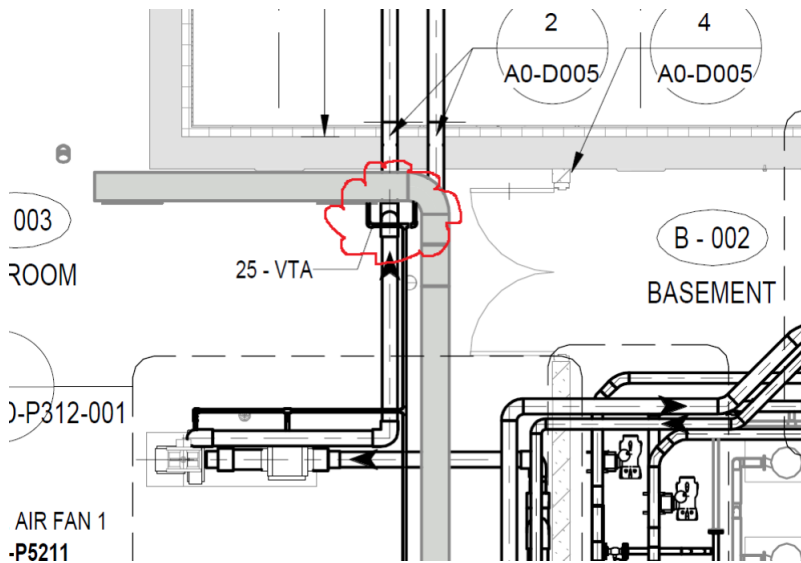
A80: The penetration shall be according to Detail 1.

Q81: In reference to specification 40 05 13.01: FSW & FLT pipe systems are both mentioned in "Piping inside buildings" which uses SS 316 and "Piping in new building" which uses PVC sch80. Please advise and clarify.

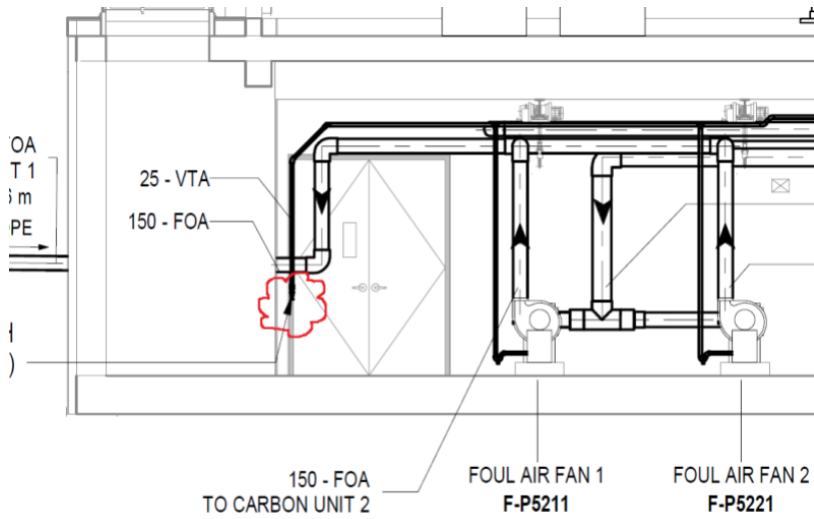
A81: Refer to Addendum 3-Appendix\_A 40 05 13.01 Detailed Piping Specification\_R1

Q82: In reference to drawings P3-D101 & P3-D301: Please refer to the partial drawings below. Please clarify where the clouded 25 VTA piping is connected to or where its continuation. We couldn't seem to find a dwg that will show a clear pipe layout (connection or continuation) for this section of the piping.

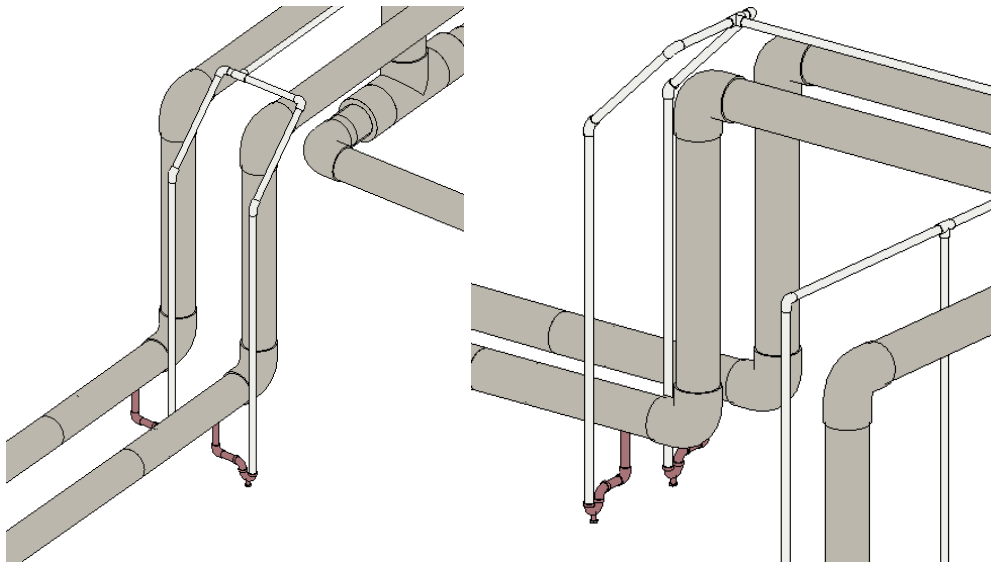
Dwg1 (P3-D101):



Dwg1 (P3-D301):



A82: Please see below for clarity.



- Q83: In reference to drawing P3-D101: Compressed air system: drawings show two 5HP air compressors, there is no information about the estimated load of the system. What would it be? What would be the operating schedule? Both parameters mentioned before will influence the selection of the air compressor type.
- A83: The compressors would operate in duty/standby mode. On average 8 h per day. The required air delivery is 17 cfm @ 175 psig.
- Q84: In reference to drawing P3-D101 & P0-X602: Compressed air system: drawings indicate compressors are for "Instrument Air Supply", is there any specification for compressed air quality? Special required dew point? Those parameters mentioned before will influence the selection of the air dryer and air filters (air treatment).
- A84: The following parameters shall be met: +3C dew-point and 2-stage coalescing filter, liquid water and oil aerosol 0.001 ppm, particles 0.01 micron.
- Q85: In reference to drawing P3-D101: Compressed air system: Is the required air receiver to be the standard size that comes with the air compressor, or is there a specific size requested?
- A85: Standard size that comes with the compressor. Atlas Copco CR5-TSP-80GV-460V 3PH-IS, FX10 non cycling refrigerated air dryer and UD15+ oil removing filter were used as basis for design.
- Q86: On Drawing 1-0101-PPID-P305 001 shows ZL-P34132-1 and ZL-P34132-2. Can you please confirm that ZL-P34132-1 is a strobe and ZL-P34132-2 is a horn?
- A86: Both ZL-P34132-1 and ZL-P34132-2 are strobe light as shown in 1-0101-PPID-P305 001, refer to drawing 1-0101-AILD-P322 for more details. Strobe light locations are updated on Drawing 1-0101-AGAD-P001 and issued in Addendum 3.