

930-2015 ADDENDUM 2

WILKES RESERVOIR NORTH CELL REHABILITATION

URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

 ISSUED:
 December 11, 2015

 BY:
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THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

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

PART A - BID SUBMISSION

Replace: 930-2015 Bid Submission with 930-2015 Addendum 2 – Bid Submission. The following is a summary of the Changes incorporated in the replacement Bid Submission:

Form B(R1) Delete Item A.9i) Concrete Spall Repairs – Pile Caps and renumbered Item A.9

Revised quantity for Item B.8 Wall Expansion Joint Replacement

Revised Item B.10 to read Gel Injection at Suction Pits

Revised quantity for Item B.10ii) Gel Injection at Suction Pits – Supply and Inject Gel

PART D – SUPPLEMENTAL CONDITIONS

- Revise: D3.2.1(g) to read: Gel injection at suction pits;
- Revise: D3.2.2(g) to read: Gel injection at suction pits;

PART E - SPECIFICATIONS

- Delete: E4.2.2(b)
- Add: E4.2.3(g) to read: Supply and installation of the EPDM roofing membrane in accordance with E14 and Supplemental Architectural Specifications 07 53 23.
- Revise: E8.3.1 to read: The Contractor will be issued three (3) sets of keys to the Site under the following conditions:
 - (a) The Contractor shall provide the name and contact information for the person in charge and responsible for the Site;
 - (b) The Contractor is to return all keys prior to Substantial Performance (Stage 2 Critical Date). On return of all keys including damaged keys, a ten thousand dollar (\$10,000.00) holdback will be released. The Contractor is advised that the holdback will not be released after the completion of Stage 1;
 - (c) The Contractor is to immediately report any lost keys and return any damaged or non-functioning keys for replacement.

- Add: E8.3.2 to read: The Contractor will be responsible for supplying the lock for the laydown area south gate. The Contractor shall provide the Contract Administrator with two (2) sets of keys to the lock prior to placement of the lock on the south gate.
- Add: E8.3.3 to read: The Contractor will be permitted to store the site office facilities and other construction material in the laydown area between the end of Stage 1 (October 31, 2016) and commencement of Stage 2 (April 1, 2017) in strict accordance with E9. During this period, the Contractor will be responsible for maintaining security for their property stored in the laydown area.
- Add: E9.3.1 to read: The Contractor will be permitted to store the site office facilities and other construction material in the laydown area between the end of Stage 1 (October 31, 2016) and commencement of Stage 2 (April 1, 2017). The Contractor is advised that only the site offices and materials required for this Work may be stored in the laydown area between Stages. The Contractor shall not use the laydown area as a storage yard for materials or equipment for any other works. The Contractor is advised that storage of any materials, equipment, or any other property will be at his sole risk. The Contract Administrator and the City will not be responsible, financially or otherwise, for any damage or theft that may occur.
- Add: E10.8.5 to read: The Contractor is advised that a lockout/tag-out procedure will be a required component of the Contractor's Safety Plan. The Contractor shall provide a lock box at each access location similar to the one shown in 930-2015_Addendum_2_Picture_Lock Box-R0. The Contractor's Supervisor shall place his lock on the main lock box located inside the access building. The key to this lock shall then be placed inside the Contractor's lock box at the temporary access location. Personnel entering the cell shall place their locks on the Contractor's lock box. In this case, all locks would have to be removed from the Contractor's lock box prior to accessing the key which can then be used to remove the Supervisor's lock on the main lock box. If additional lock box capacity is required, the Contractor shall expand the lock box with the use of lockout hasps. Supply and installation of the lockboxes is incidental to the Contract Lump Sum Price for Mobilization and Demobilization and no separate measurement or payment will be made for this Work.
- Add: E10.8.6 to read: Personnel working on-site for a prolonged period of time are only required to remove their lock(s) from the temporary lock box once they will no longer be entering the Cells.
- Add: E12.3.2 to read: Hydrophilic Waterstop
 - (a) The Contractor shall submit manufacturer's data sheets for the hydrophilic waterstop to be used as part of the specifications.
 - (b) The Contractor shall submit NSF/ANSI 61 documentation providing compliance for contact with potable water.
- Add: E12.4.12 to read: Hydrophilic Waterstop

i.

- (a) Hydrophilic waterstop shall be:
 - Volclay Waterstop-RX[®] RX-102 By Cetco[®] Building Materials Group 2870 Forbs Avenue
 - Hoffman Estates, IL 60192; or,
 - ii. Approved equivalent in accordance with B8.
- (b) The hydrophilic waterstop shall be NSF/ANSI 61 compliant for contact with potable water.
- Add: E14.7.5(b) to read: Provide 2-component expanding polyurethane foam, "Enerfoam" or approved equivalent in accordance with B8 between the hollowcore/EPDM plane and the underside of the metal roof panels including, but not limited to, the interior of the HSS sleep connections and spaces around the sensors.
- Delete: E16.2.1(e)
- Delete: E17.2.1(c)
- Add: E18.4.1(h) to read: All hydraulic equipment used within the Cells shall operate on NSF 61 compliant food grade lubricants. The Contractor shall submit NSF/ANSI 61 documentation indicating compliance for contact with potable water to the Contract Administrator for approval prior to using any proposed lubricant within the Cells. The lubricants shall be supplied by:
 - i. Lubriplate Lubricants Company

- 129 Lockwood Street Newark, NJ 07105; or,
 ii. Clarion[®] Lubricants P.P. Box 4689 Houston, TX 77210-4689; or,
- iii. Approved equivalent in accordance with B8.
- Add: E18.4.1(i) to read: The Contractor shall only jack up the roof structure as much as required for the bearing rehabilitation works. The Contractor is advised that any damage to the structure, including but not limited to, the supporting columns, the beams being jacked, and the hollowcore panels and joints in the vicinity of the jacking location, shall be repaired at the Contractor's expense to the satisfaction of the Contract Administrator. No additional payment or compensation will be made for any repair to damage caused during the jacking operation.
- Revise: E18.5.2(a) to read: Bearing pads shall be plain elastomeric, homogenous fabric fiber reinforced pads supplied by:
 - Series ER by Goodco Z-Tech Canam Group Inc. 807 Rue Marshall Laval, Quebec H7S 1J9; or,
 Series L-FR by LCL-Bridge Products Technology Inc.
 - 1 Provost Street
 - Lachine, Quebec H8S 4H2; or,
 - iii. Approved equivalent in accordance with B8.
- Add: E18.7.3 to read: The Contractor is advised that there is a network of pipes suspended from the precast hollow core roof and supporting beams as shown in 930-2015_Addendum_2_Reference Drawing_WIL-36-R0. The Contractor shall temporarily remove and reinstall the suspended pipes as required for the Works. The Contractor shall take care not to damage the pipes and supporting hardware. The Contractor will be required to repair or replace any damage to the pipes and supporting hardware at his own expense if they are damaged during the Works.
- Revise: E18.9.2(b) to read: The supply of the sample bearing pads in accordance with E18.4.3(c) will be considered incidental to the Contract Lump Sum Price for "Supply Elastomeric Bearing Pads". No additional payment or compensation will be provided for this work.
- Add: E19.2.1(d): Removal, disposal, and replacement of concrete floor slab for installation of new expansion joint assembly.
- Add: E19.4.1(f) to read: E12 Structural Concrete
- Add: E19.4.1(g) to read: E13 Reinforcing Steel
- Add: E19.5.4 to read: Concrete Mix Design
 - (a) The Contractor shall submit a concrete mix design in accordance with E12.
- Add: E19.5.5 to read: Reinforcing Steel
 - (a) The Contractor shall submit Shop Drawings (including bar lists) in accordance with E4/E5 and E13.
- Add: E19.6.5 to read: Structural Concrete
 - (a) Structural Concrete shall conform to the requirements of E12.
- Add: E19.6.6 to read: Reinforcing Steel
 - (a) Reinforcing Steel shall conform to the requirements of E13.
- Add: E19.8.2 to read: The concrete slab at the expansion joint shall be removed and replaced in accordance with the slab replacement procedures provided on the Drawings. The slab shall be removed to existing floor joints.

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- Revise: E19.10.1 to read: Wall expansion joint repairs, including supply and installation of all expansion joint components and removal, disposal, and replacement of the concrete floor slab will be measured on a unit basis and will be paid for at the Contract Unit Price for "Wall Expansion Joint Replacement", which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.
- Revise: E21.5.5 to read: Injection gel shall be:
 - i. Stratathane ST-504 Vari-Gel Injection Resin
 - By Strata-tech Inc.; or,
 - ii. SikaFix[®] HH+
 - By Sika Canada Inc.; or,
 - iii. Specton Flex F1000
 - By Specton Construction Products Ltd.; or,
 - iv. Approved equivalent in accordance with B8.
 - (b) Injection gel shall meet the requirements of NSF/ANSI 61 for use in contact with potable water.
- Revise: E23.2.1(f) to read: Supply and installation of cementitious grout dowels.

NMS SPECIFICATIONS

Section 07 41 13 Metal Roof Panels

- Delete: 2.1.2 MR 100 Series Insulated Roof Panels
- Add: 2.1.1.1 to read: "Kingzip 1000", 100 mm (4") thick, complete with 65 mm standing seam lateral seal.
- Delete: 2.2.2.11 Factory applied membrane
- Revise: 2.2.2.12.3.3 to read: Panel lengths: As indicated on the Drawings (minimum 12,192 mm (40 feet)).
- Revise: 3.6.1 to read: The Contractor shall arrange and pay for the metal roof panel Manufacturer's representative to be on-site periodically during progress of Stage 1 and Stage 2 to ensure the installation is in accordance with the Manufacturer's instructions and requirements. The representative shall visit the site a minimum of two (2) times per Stage of work.

Section 07 42 13 Metal Wall Panels

- Revise: 3.6 to read: Field Quality Control
 - 1. The Contractor shall arrange and pay for the metal wall panel Manufacturer's representative to be onsite periodically during progress of Stage 1 and Stage 2 to ensure the installation is in accordance with the Manufacturer's instructions and requirements. The representative shall visit the site a minimum of one (1) time per Stage of work.

Section 07 53 23 Ethylene Propylene Diene Monomer (EPDM) Roofing

- Revise: 1.2.3.1 to read: Submit Shop Drawings for approval to the Contract Administrator in accordance with 1.2.3.2 prior to commencing EPDM related works.
- Revise: 1.6 Guarantees to read: Warranty
 - 1. The Membrane manufacturer shall provide a pro-rated written warranty against manufacturing defects in the membrane materials for a period of twenty (20) years from the date of Total Performance. The Manufacturer shall complete and sign the enclosed Form W1: Manufacturer's Warranty Agreement upon Award of Contract. The Manufacturer shall indicate his written approval on Form W1 of the selected EPDM Applicator for the installation of the membrane system.
 - 2. The approved Applicator shall provide a written warranty stating that the membrane system will provide leak-free service for a period of five (5) years from the date of Total Performance. The Applicator shall complete and sign the enclosed Form W2: Applicator's Warranty Agreement upon Award of Contract.

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- Revise: 2.1.1.1 to read: EPDM membrane shall be 1.5 mm (60 mil) felt-backed EPDM synthetic rubber air and vapour barrier (AVB) membrane applied with hot Type III asphalt for the roof and rubberized asphalt for the walls. Membrane shall be:
 - 1. Lexcan Design D By Lexcan 3275 Orlando Drive Mississauga, Ontario L4V 1C5; or,
 - 2. Carlisle Sure-Seal[®] AFX By Carlisle Syntec Systems PO Box 7000 Carlisle, PA 17013; or,
 - 3. Approved equivalent in accordance with B8.
- Revise: 3.4.6.4 to read: Install metal flashings in accordance with Section 05 50 00 Metal Fabrications.
- Add: 3.4.7 to read: Sealing of Penetrations through EPDM Membrane
 - 1. Ensure seal of all penetrations through EPDM AVB membrane, including, but not limited to, threaded rods supporting HSS connectors. Effect seal by:
 - 1. Creating "X" cut to allow insertion and grouting of threaded rods.
 - 2. Applying bituminous mastic to edges of cuts and joints to rods.
 - 3. Provide additional EPDM gasket complete with appropriately sized hole for the rod, laid over and sealed with bituminous mastic.

Revise: 3.5.1 to read: Inspection

- 1. Inspection and testing of EPDM membrane application will be carried out by a testing laboratory designated by the Contract Administrator. Required testing shall include:
 - 1. Air lance testing in accordance with ASTM D4437 Standard Practice for Non-Destructive Testing (NDT) for Determining the Integrity of Seams Used in Joining Flexible Polymeric Sheet Geomembranes. Testing shall include:
 - 1. 100% of field seams shall be tested in accordance with ASTM D4437 in the presence of the Contract Administrator. Any loose edges, riffles or other undesirable seam conditions shall be repaired at the Contractor's expense to the satisfaction of the Contract Administrator.
- 2. Costs for testing specified in 3.5.1.1 shall be incidental to the Contract Lump Sum Price for "Removal and Replacement of Building Envelope". No additional payment or compensation will be made for any costs incurred as a result of the testing requirements.

Section 07 92 00 Joint Sealants

- Add: 3.6.4 to read: Sealing of Metal Panel Overlaps
 - 1. Provide continuous caulk seal outboard of "Emseal" material at toe of panel laps. Caulking to be DOW 790 silicone or approved equivalent in accordance with B8.

ATTACHMENTS

930-2015_Addendum_2_Attendance_List_Wilkes-Bidder's-Conference_1-R0

- 930-2015_Addendum_2_Attendance_List-Wilkes-Bidder's Conference_2-R0
- 930-2015_Addendum_2_Attendance_List-Wilkes-Site-Investigation-R0

930-2015_Addendum_2_Presentation_Mandatory-Bidders-Conference-R0

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PICTURES

Add: 930-2015_Addendum_2_Picture_Access-Building-Electrical-R0

Add: 930-2015_Addendum_2_Picture_Lock-Box-R0

DRAWINGS

- Replace: 930-2015_Drawing_1-0650R-B0005-003_Sh44-R1 with 930-2015_Addendum_2_Drawing_1-0650R-B0005-003_Sh44-R2
- Replace: 930-2015 _Drawing_1-0650R-S0007-001_Sh15-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0007-001_Sh15-R2
- Replace: 930-2015_Drawing_1-0650R-S0008-001_Sh16-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0008-001_Sh16-R2
- Replace: 930-2015 _Drawing_1-0650R-S0009-001_Sh17-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0009-001_Sh17-R2
- Replace: 930-2015_Drawing_1-0650R-S0009-002_Sh18-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0009-002_Sh18-R2
- Replace: 930-2015_Drawing_1-0650R-S0009-003_Sh19-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0009-003_Sh19-R2
- Replace: 930-2015_Drawing_1-0650R-S0019-001_Sh29-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0019-001Sh29-R2
- Replace: 930-2015_Drawing_1-0650R-S0022-001_Sh32-R1 with 930-2015_Addendum_2_Drawing_1-0650R-S0022-001_Sh32-R2
- Add: 930-2015_Addendum_2_Reference Drawing_SK-1-R0
- Add: 930-2015_Addendum_2_Reference Drawing_SK-2-R0
- Add: 930-2015_Addendum_2_Reference Drawing_WIL-4-R0
- Add: 930-2015_Addendum_2_Reference Drawing_WIL-9-R0
- Add: 930-2015_Addendum_2_Reference Drawing_WIL-22-R0
- Add: 930-2015_Addendum_2_Reference Drawing_WIL-20-R0
- Add: 930-2015_Addendum_2_Reference Drawing_WIL-33-R0
- Add: 930-2015_Addendum_2_Reference Drawing_WIL-36-R0

QUESTIONS AND ANSWERS

The following questions were asked at the Mandatory Bidder's Conferences, Site Investigation, and through emails.

1.0 General Exterior Work Questions

- Q1.1 What are the dimensions and thickness of the concrete pavers on the roof that have to be removed?
 - A1.1 Existing concrete pavers are approximately 610 mm x 610 mm x 45 mm thick. All pavers are square except for those around the exterior of the Reservoir and along expansion joints which are approximately half the size.

- Q1.2 Reference: Detail 8 on Sheet 44. Detail 8 notes sleeper must not be longer than 6096 mm and end at a connection with a 3 mm gap. Can the "butt joint" be centered directly on a connection or do you require a connection on each side of the butt joint?
 - A1.2 Connections are not required on each side of the butt joint. I.e., the butt joint can be centered directly on a connection. Sleepers ends will have to be detailed to accommodate this connection.
- Q1.3 Reference: Detail 3.42 on Sheet 43 and Detail 5 on Sheet 43. What type of insulation and R-value is required for insulation between hollowcore slabs? Note 5 on Sheet 42 indicates foil back insulation and mineral fiber insulation, no R-value is stated.
 - A1.3 Interstitial rigid insulation to be double-foil-faced Polyisocyanurate rigid board (50 mm thick) with an R-value of 14.4. Interstitial batt insulation to be medium-density mineral fibre with an R-value of 3.5/inch and thickness as required to infill shall voids due to hollowcore cambers.
- Q1.4 What is the installation application for the 2" Foil Face Iso and 1" Compressible Insulation within the roof system?
 - Q1.4 Insulation in question to be loose-laid.
- Q1.5 Reference: Note 3 on Sheet 45. In regards to removal of the exterior wall cladding for the entrance building, to what extent is striated concrete block to be removed?
 - A1.5 Please see 930-2015_Addendum_2_Reference Drawing_WIL-33-R0. The striated concrete block shall be removed in its entirety.
- Q1.6 Reference: Note 5 on Sheet 45. To what extent are we to remove and reinstall existing electrical infrastructure as directed by the Contract Administrator?
 - A1.6 Please see 930-2015_Addendum_2_Picture_Access-Building-Electrical-R0. The Contractor shall remove and reinstall the existing electrical infrastructure as required for the installation of the replacement building envelope in accordance with the Contract Documents.
- Q1.7 When we fold back the existing EPDM membrane to expose the hollowcore to be either removed and replaced or repaired, how much time do we have before we have to fold the EPDM membrane back over the hollowcore? Can we remove a few hollowcore one day and install new hollowcore the next day leaving openings in the roof?
 - A1.7 The existing EPDM membrane to be folded back can be held down with surplus pavers. As long as there is no impending rainfall, it can remain folded back while the hollowcore slab is repaired or replaced. However, there should not be a large amount of holes in the roof left open as this is a safety hazard, will allow water to enter the cells, and may potentially allow water to get under the EPDM membrane and travel downstream of the work area or travel into the adjacent cell in operation. There shall be <u>no</u> holes left open in the roof at the end of the working day. A potential approach would be to fold back the EPDM at several locations, cut free the hollowcore slabs but leave them in place, cover with the folded back EPDM, seal with appropriate tape, and then replace several locations in one operation when ready. A similar approach can be followed for the repair.
- Q1.8 When repairing the hollowcore with the folded back EPDM membrane, how much time are we allowed to repair the hollowcore and cure the exposed concrete before we fold back the membrane and re-seal?
 - A1.8 This is weather dependent. You have to allow for the SCC to set up sufficiently so that you can finish it smooth with a trowel. Once it is trowelled, it can be treated with curing compound and then the EPDM membrane can be folded back over the repair and the seams sealed with appropriate tape. All work areas (hollowcore replacement or repairs) are to be resealed by the end of each working day to avoid the potential for any water getting under the EPDM membrane and travelling downstream.
- Q1.9 Reference: Plan 8 and Notes on Sheet 44. Maximum sleeper length specified as 6096 mm (20 feet) and anchors need to be at 2134 mm (7 feet) with splicing to occur at an anchor bolt location. To accommodate this, can be sleeper length be increased to 6400 mm (21 feet)?

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- A1.9 Yes, as long as the sleepers are anchored at a maximum spacing of 2134 mm (7 feet) or two (2) times the width of the metal roof panel (whichever is less), the sleeper length can be extended to 6400 mm (21 feet).
- Q1.10 Reference: Detail 4 on Sheet 43. Does this detail only occur on grid lines G and 9, at the expansion joints, at the perimeter edge, and around access hatches?
 - A1.10 This detail also applies at the double beam grid lines (grid lines 5 and 14).
- Q1.11 Can you provide a more complete specification for the data loggers? What is the storage medium and capacity and what are the acceptable products?
 - A1.11 The City of Winnipeg's SCADA system does the "polling" of the sensors meaning that it is the City's SCADA system that accesses the temperature data provided by the sensor whenever it is programmed to do so. That said, there is no storage medium or storage capacity required at the data logger. The specification requires Contractors to select the sensors based on the performance criteria outlined on the Drawings.
- Q1.12 Can you clarify if the hollowcore slab voids run right through the slabs? If they are running through the slabs, can you provide details for plugging the ends of the hollowcore slabs that are to be repaired so that the SCC doesn't flow into the adjacent hollowcore slab?
 - A1.12 Due to the manner in which the hollowcore slabs are grouted at the supporting beam lines, the slab voids have effectively been plugged at the ends. As a result, loss of SCC at the ends of the slabs should not be of concern.
- Q1.13 During beam jacking for the bearing replacements, there is a concern of cracking of the grout keys at the adjacent hollowcore. Who is responsible for grout repairs should cracking occur?
 - A1.13 Please see E18 in the Specifications.
- Q1.14 Can crushed concrete be used as an equal to the crushed limestone for the crane pads?
 - A1.14 Yes, crushed concrete meeting the requirements provided on the Drawings can be used at the crane pad locations.

2.0 General Interior Work Questions

- Q2.1 Construction Procedure Restrictions Item 10 on Sheet 2 of the Drawings refers to cell dividing wall isolation. Can you please provide the height and length of the opening for the overflow weir?
 - A2.1 Please see 930-2015_Addendum_2_Reference Drawing_WIL-22-R0 for overflow weir dimensions.
- Q2.2 Does the existing Cell interior have lighting underside the precast hollowcore roof?
 - A2.2 No, there is no existing lighting inside the Reservoir Cells. The Contractor will be required to provide lighting as required for completion of the Works. See E10 Mobilization and Demobilization.
- Q2.3 What are the floor elevations (i.e., heights from slab to underside of the hollowcore)?
 - A2.3 Please see 930-2015_Addendum_2_Reference Drawing_WIL-4-R0 and 930-2015_Addendum_2_Reference Drawing_WIL-20-R0 for elevations.
- Q2.4 Please confirm that the temperature monitoring system sensors are to be at the top and bottom edges of the hollowcore slabs?
 - A2.4 Sensors are to be located as indicated on the Drawings.
- Q2.5 At the Bidder's Conference, it was stated that the conduits coming back to the temperature monitoring panel were to largely be done on the East Cell, not the West Cell. Detail 1 on Sheet 47 implies that each sensor location should have its own conduit run.

- A2.5 Conduit runs are to be largely on the East Cell as indicated on the Drawings. Each sensor location shall have an independent conduit run as per the Drawings.
- Q2.6 Would you consider installing the conduit runs for the sensors on the beam underneath the hollowcore?

A2.6 No, conduit runs shall <u>not</u> be within the Reservoir and shall be as shown on the Drawings.

- Q2.7 Would you consider using "cor-line", a plexible PVC conduit for the conduit runs?
 - A2.7 No, conduit shall be rigid PVC as specified on the Drawings.
- Q2.8 Reference: Note 2 on Sheet 13. Can you provide the details and locations of bearing plate Mk. P-6?
 - A2.8 Please see 930-2015_Addendum_2_Drawing_1-0650R-S0005-002_Sh13-R2.
- Q2.9 Please clarify the scope of work for the gel injection work at the suction pits as it is unclear within the tender documents. Is the sequence of construction to complete the gel injection prior to reconstructing the slab or do we inject it through the new slab once cured?
 - A2.9 Please see the Sub-Floor Soil Modification for Leakage Control Construction Procedures provided on Sheet 14. Sequence of work is provided in the notes.
- Q2.10 Reference: Note 3 on Sheet 14. Will the General Contractor be responsible for the pumping operation outlined?
 - A2.10 Yes, the pumping operation will be the responsibility of the Contractor.
- Q2.11 Reference: Tables on Sheet 13. Do the numbers in the tables refer to the Construction Procedure Notes at the top of the page or are they intended to indicate something else?
 - A2.11 The numbers in the tables indicate the quantities of beam spalls at each location. For example, at location B-2, there is one beam end spall located at the bottom of the beam.
- Q2.12 Reference: Tables on Sheet 13. There appears to be two sets of C3, F3, G3, H3 and L3 locations. Is the second set supposed to refer to grid line 7?

A2.12 Please see 930-2015_Addendum_2_Drawing_1-0650R-S0005-002_Sh13-R2.

Q2.13 Reference: Section 2 on Sheet 17. Please confirm the elevations of Platform B and Platform C.

A2.13 Please see 930-2015_Addendum_2_Drawing_1-0650R-S0009-001_Sh17-R2.

Q2.14 Reference: Section 1 and 2 on Sheet 32. Please confirm the bearing plate thickness.

A2.14 Please see 930-2015_Addendum_2_Drawing_1-0650R-S0022-001_Sh32-R2.

Q2.15 What is the required surface finish and wall thickness or pipe schedule for the 38 mm diameter stainless steel railing for the access stairway system?

A2.15 Schedule 40 standard finish stainless steel pipe.

Q2.16 For the cell clean-up, how clean do you mean? Is the intent to remove the build up from over the years or just clean to where the Cells were before construction started?

Q2.17 For the cell clean-up, can the water used for the clean-up be pumped to the yard outside the Cell or does 100% of the water have to be removed from the Reservoir compound?

A2.16 The Cells shall be cleaned to their pre-construction condition.

A2.17 Water used for cleaning the Cells can be discharged to the reservoir drains provided that the drains are protected, as indicated in the Contract Documents, to prevent construction debris and other foreign material from entering the drainage system. Please see E24 of the Specifications.

Q2.18 Reference: Sheet 12. Can you confirm the elevation of the top of the pile cap and of the top of the floor slab. This is required to determine the excavation depth.

A2.18 Please see 930-2015_Appendex_2_Reference Drawing_SK-2-R0

- Q2.19 Reference: Note 4 on Sheet 14. Base slab replacement is to be installed on undisturbed clay. Due to over excavation to install the forms, this is not possible. Will the same granular material that is specified for the underside of pile cap be acceptable below the slab replacement?
 - A2.19 Yes, the specified granular would be acceptable.
- Q2.20 Reference: Sheet 15. Notes indicate that subsurface gel may be required. Is this part of the base bid? Also, is the required slab replacement part of the wall joint unit?
 - A2.20 Please see 930-2015_Addendum_2_Drawing_1-0650R-S0007-001-R2. The subsurface gelling has been deleted and approximate quantities for the concrete slab replacement are provided. Please see the revised E19 specifications for payment details.

3.0 Questions Regarding Record / Reference Documents

- Q3.1 Would it be possible to get a copy of the as-builts of the existing hollowcore/precast structure?
 - A3.1 Please see E2 Reference Reports and Drawings regarding how this info can be obtained.
- Q3.2 Can you provide the geotechnical report?
 - A3.2 A geotechnical investigation has not been conducted for the detailed design. However, the geotechnical information from the 1980 construction works is provided. Please see 930-2015_Addendum_2_Reference Drawing_WIL-9-R0.