

PANAMA CANAL AUTHORITY	VARIATION	PAGE 1 OF 9
1. REQUEST FOR PROPOSAL No.: RFP-76161	2. CONTRACT No.: CMC-221427	3. DATE: July 14, 2016
		4. VARIATION No.: 171

5. ISSUED BY:

PANAMA CANAL AUTHORITY
Employer's Representative
Locks Project Management Division
Building 740, Corozal
Panama, Republic of Panama

6. NAME AND ADDRESS OF CONTRACTOR (INCLUDE PHYSICAL & POSTAL ADDRESS) Grupo Unidos por el Canal, S.A. Building 22B, Brujas Road Cocoli, Republic of Panama	7. CONTRACTOR'S TELEPHONE NUMBER: 507-316-9900
	8. CONTRACTOR'S FACSIMILE NUMBER:

9. VARIATION:

The contract referred to in item No. 2 is hereby varied as set forth in item 10, entitled "DESCRIPTION OF VARIATION".


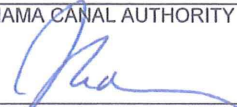
YES. NO. The contractor shall send a copy, duly signed, of this Variation to the Employer's Representative/Contracting Officer.

	9 A. THIS VARIATION IS EXECUTED ON THE BASIS OF: (Specify the legal authority). THE VARIATION DESCRIBED IN ITEM 10 IS HEREBY INCORPORATED AND MADE A PART OF THE CONTRACT.
	9 B. THE CONTRACT REFERRED TO IN ITEM NO. 2, IS VARIED TO INCORPORATE ADMINISTRATIVE CHANGES (such as the paying office, account numbers, etc.).
X	9 C. THIS BILATERAL AGREEMENT IS SIGNED AND INCORPORATED INTO THE CONTRACT REFERRED TO IN ITEM NO. 2 OF THIS FORM, ON THE BASIS OF: (Specify the legal authority) Volume III, Conditions of Contract, Sub-Clause 1.16 [Entire Agreement],]
	9 D. OTHER. (Specify manner and the legal authority).
	9 E. ACCOUNT NUMBER (If required):

10. DESCRIPTION OF THE VARIATION (List in accordance with the order of the Contract. If additional space is required, use blank sheets).

See attached

Except for the variation(s) herein specified, all other terms and conditions of the Contract remain unchanged.

11. NAME AND TITLE OF THE PERSON AUTHORIZED TO SIGN (Type or print) Giuseppe Quarta Contractor's Representative	12. NAME AND TITLE OF THE EMPLOYER'S REPRESENTATIVE/CONTRACTING OFFICER (Type or print) Jorge de la Guardia, Employer's Representative
13. CONTRACTOR  (Authorized signature)	14. DATE: 15/VII/16
	15. PANAMA CANAL AUTHORITY  (Employer's Representative/Contracting Officer's signature)
	16. DATE: 14/VII/2016

July 14, 2016

Design and Construction of the Third Set of Locks

This Variation Agreement Number 171, is dated as of 14th July 2016 and made

Between: Autoridad del Canal de Panama, Building 740, Corozal, Panama, Republic of Panama (hereinafter called the "**Employer**") on the one part,

and

Grupo Unidos por el Canal, S.A., of Building 22B, Brujas Road, Cocoli, Panama, Republic of Panama, a corporation organized under the laws of the Republic of Panama, registered under microjacket number 682266, document number 1683284 of the Mercantile Section of the Public Registry Office of the Republic of Panama (hereinafter called the "**Contractor**" and together with Employer, the "**Parties**") on the other part.

Whereas:

- (a) The Employer and the Contractor are party to Contract CMC-221427 for the Design and Construction of the Third Set of Locks, dated August 11, 2009 (as the same has been or may be varied, amended, supplemented or otherwise modified (the "**Contract**")).
- (b) The Employer took over the whole of the Works pursuant to Sub-Clause 10.1 [*Taking Over of the Works*] on June 24, 2016.
- (c) By RFV 0317, RFV 0322 and RFV 325 the Contractor requested a number of modifications to the Employer's Requirements. The Employer and the Contractor have (by the correspondence referred to in this Variation Agreement No 171) subsequently agreed to make the modifications set out in this Variation Agreement No 171 on the basis that there would be no increase in the Contract Price in respect of such modification nor any time implications save that Employer is entitled to a reduction of USD 9,593.17 of the Contract Price as its 50/50 share of the total reduction resulting from the value engineering proposal submitted by way of the Contractor's RFV 0322 but subject always to the Parties agreeing a formal variation to reflect such revised arrangements.
- (d) Therefore, subject to the terms of this Variation Agreement No. 171, the Parties have agreed to a variation to the Contract as hereinafter stated, but not further or otherwise.

THE PARTIES HEREBY AGREE AS FOLLOWS:

The Employer and the Contractor agree to vary the Contract as follows:

- 1. In this Variation Agreement No. 171, the words and expressions shall have the same meanings as are respectively assigned to them in the Contract, save as amended below or as expressly stated.

A handwritten signature in dark ink, appearing to be 'J. Smith', is located in the bottom right corner of the page.

July 14, 2016

Design and Construction of the Third Set of Locks

2. It is agreed that this Variation Agreement No. 171 and the modifications contained herein are approved and dated in writing by the authorized representatives of the Contractor and the Employer and in doing so the Parties acknowledge and identify that this is done in accordance with Sub-Clause 1.16 [*Entire Agreement*] of the Contract.
3. The Parties acknowledge and agree that this Variation Agreement No. 171 shall not be deemed to settle any outstanding issues, claims, demands, actions, disputes or proceedings between the Parties including but not limited to those in relation to any delay to the Works (both as to time and costs) and all such issues, claims, demands, actions, disputes or proceedings remain in contention between the Parties and all respective rights, remedies, claims and defenses of the Parties including but not limited to those concerning and arising out of any delay and/or responsibility for delay and the consequences thereof remain fully reserved. The Parties expressly agree that no Party is waiving, making an admission with respect to, or intending to prejudice any claims, defenses, arguments or remedies that any of them has or may have arising out of events up to and including the date of this Variation Agreement No. 171 or in the future concerning their respective performance under and in relation to the Contract. For the avoidance of doubt, all delay-related issues between the Contractor and the Employer, and their respective rights and remedies regarding responsibility for delay and the consequences thereof, remain fully reserved. Nothing in this Variation Agreement No. 171 will have the effect of changing or extending the Time for Completion or any Milestone Dates under the Contract or entitle the Contractor to Excusable Delay. For the avoidance of doubt, this Variation Agreement No. 171 is without prejudice to each Party's position in any current or future DAB and/or arbitration proceedings pursuant to Sub-Clauses 20.4 [*Obtaining Dispute Adjudication Board's Decision*] and/or 20.6 [*Arbitration*] respectively (including but not limited to ICC References 20910/ASM, 20911/ASM and 19962/ASM).
4. Save where expressly stated in, and/or in relation to breaches of, or failure by either Party to comply with, the terms of this Variation Agreement No. 171, the Parties agree that:
 - a) they shall have no claims for additional time or money or any other relief or entitlement of any kind as a direct consequence of this Variation Agreement No. 171; and
 - b) nothing in this Variation Agreement No. 171 is intended to or does increase the Contract Price or the Time for Completion.
5. Further, the Contractor's obligations as to the progress of the Works and to complete the Works and comply with the Contract remain in all respects unaffected and nothing within this Variation Agreement No. 171 is intended to be a waiver or relaxation of the Contractor's obligations under the Contract, save only as expressly stated herein and the Contract shall remain fully effective as varied



July 14, 2016

Design and Construction of the Third Set of Locks

herein and the Contract shall have effect as though the provisions contained in this Variation Agreement No. 171 had been originally contained in the Contract.

6. The Parties hereby agree to add the following definition to Sub-Clause 1.1 [Definitions] of the Contract under Sub-Clause 1.1.6 [Other Definitions] (which shall be added in proper alphabetical order but without any number):

"Variation Agreement No. 171" means Variation Agreement Number 171, dated July 14, 2016, between the Employer and the Contractor.

7. **Volume II, Part 1, Paragraph 1.05.G.2 [Final Part Lists, Instruction and Maintenance Manuals] of Section 01 81 19 [Lock Gates]** which currently reads:

*"2. **Final Part Lists, Instruction and Maintenance Manuals:** Final instruction and maintenance manuals including parts lists shall be provided to the Employer's Representative in their original format as delivered by the manufacturers of the relevant items, one set (7 copies) in the English language and one set (7 copies) in the Spanish language. All instruction and maintenance manuals, produced by the Contractor shall also be provided to the Employer's Representative in a digital format (PDF or other) on DVD/CD-ROM."*

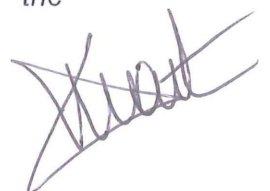
shall be deleted and replaced with:

*"2. **Final Part Lists, Instruction and Maintenance Manuals:** Final instruction and maintenance manuals including parts lists shall be provided to the Employer's Representative in their original format as delivered by the manufacturers of the relevant items, one set (2 copies) in the English language and one set (2 copies) in the Spanish language. All instruction and maintenance manuals, produced by the Contractor shall also be provided to the Employer's Representative in a digital format (PDF or other) on DVD/CD-ROM. "*

(RFV 322; IAE-UPC-3026)

8. **Volume II, Part 1, Paragraph 1.05.H of Section 01 81 23[Culvert and Conduit Valves]** which currently reads:

*"H. **Documents and Manuals:** Instructions, operation, installation, and maintenance books, manuals, part lists, etc. of all machinery and installations shall be submitted to the Employer's Representative in 4 sets of paper copies. Instruction books and parts lists shall be provided to the Employer's Representative in the original format delivered by the manufacturers of the relevant items, one set (7 copies) in the English and one set (7 copies) in the Spanish language. All instruction books produced shall also be provided to the Employer's Representative in a digital form (PDF or other). Manuals shall be provided to the Employer's Representative for review at least 63 days before shipping the*



July 14, 2016

Design and Construction of the Third Set of Locks

equipment. The Contractor shall include in the manuals complete fabrication, operation, maintenance, and installation procedures of all major components."

shall be deleted and replaced with:

"H. Documents and Manuals: Instructions, operation, installation, and maintenance books, manuals, part lists, etc. of all machinery and installations shall be submitted to the Employer's Representative in 4 sets of paper copies. Instruction books and parts lists shall be provided to the Employer's Representative in the original format delivered by the manufacturers of the relevant items, one set (2 copies) in the English and one set (2 copies) in the Spanish language. All instruction books produced shall also be provided to the Employer's Representative in a digital form (PDF or other). Manuals shall be provided to the Employer's Representative for review at least 63 days before shipping the equipment. The Contractor shall include in the manuals complete fabrication, operation, maintenance, and installation procedures of all major components."

(RFV 322; IAE-UPC-3026)

9. **Volume II, Part 2, Paragraph 1.05.I. of Section 01 86 13 [Plant Mechanical Systems and Equipment] which currently reads:**

"I Instruction Books, Spare Parts List, Inventory List, and List of Special Tools: Nine copies, in English and Spanish, of the instruction books, spare parts list, inventory list, and list of special tools shall be submitted no later than the date the equipment is shipped from the factory."

shall be deleted and replaced with the following:

"I Instruction Books, Spare Parts List, Inventory List, and List of Special Tools: Two copies, in English and Spanish, of the instruction books, spare parts list, inventory list, and list of special tools shall be submitted no later than the date the equipment is shipped from the factory."

(RFV 322; IAE-UPC-3026)

10. **Volume II, Part 1 Paragraph 1.05 H. 3. [Documents in their Final Form] of Section 01 81 29 [Electrical and Lighting System] which currently reads:**

3. **"Documents in their Final Form:** Instruction books and parts lists shall be provided to the Employer's Representative in the original format as normally delivered by the manufacturers of the relevant items, one set (7 copies) in the



July 14, 2016

Design and Construction of the Third Set of Locks

English and one set (7 copies) in the Spanish language. All instruction books, produced by the Contractor shall also be provided to the Employer's Representative in a digital form (PDF or other, as approved by the Employer's Representative) on DVD / CD-ROM. Manuals shall be provided to the Employer's Representative for approval in hard copy and electronic editable form, at least 56 days before shipping the equipment."

shall be deleted and replaced with the following:

- "3 Documents in their Final Form:** *Instruction books and parts lists shall be provided to the Employer's Representative in the original format as normally delivered by the manufacturers of the relevant items, one set (2 copies) in the English and one set (2 copies) in the Spanish language. All instruction books, produced by the Contractor shall also be provided to the Employer's Representative in a digital form (PDF or other, as approved by the Employer's Representative) on DVD / CD-ROM. Manuals shall be provided to the Employer's Representative for approval in hard copy and electronic editable form, at least 56 days before shipping the equipment."*

(RFV 322; IAE-UPC-3026)

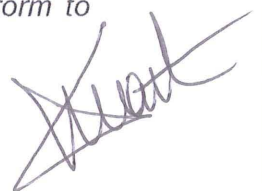
11. **Volume II, Part 2 Paragraph 1.03.B.1.b [Fences] of Section 01 89 16 [Site Construction]** previously agreed upon in Variation Agreement No. 84, which currently reads:

- "b.** *Shall be located a minimum of 50 m from all structures within the facility and a minimum of 150 m from the face of the lock wall, with the following exceptions:*

b. 1 Due to the construction of the Atlantic Locks Visitors Center, and the fact that access to the area is controlled, the fence in the vicinity of the Visitors Center shall be located a minimum of 30m from all structures within the facilities. The section to which the 30m requirement for the east perimeter fence applies has the following coordinates:

- | | | |
|----|----------------|---------------|
| a. | N 1024196.5525 | E 619721.0308 |
| b. | N 1024168.1110 | E 619647.7017 |
| c. | N 1024047.0259 | E 619666.6544 |
| d. | N 1023999.6979 | E 619757.9335 |

b. 2 Due to the geometrical constraints of the west inlet and the side slope of Borinquen Dam 2W of the Pacific Locks, and the fact that access to the area is controlled, the fence in the vicinity of the FER2 building shall be located a minimum of 20 m from all structures, and shall be aligned along the dam crest and wing wall top platform to



July 14, 2016

Design and Construction of the Third Set of Locks

avoid contact with water. The fence access gate located at the dam crest shall be 150 m measured from the wing wall knuckle, and the north west perimeter fence shall be aligned with the following coordinates:

a.	N 993453.1602	E 654573.2699
b.	N 993437.2515	E 654613.2923
c.	N 993399.9550	E 654566.1047
d.	N 993397.4493	E 654548.9672
e.	N 993415.9845	E 654502.3575
f.	N 993396.9317	E 654494.7809
g.	N 993387.6395	E 654491.0857
h.	N 993370.0008	E 654484.0233
i.	N 993354.3531	E 654523.3719"

shall be deleted and replaced with the following:

- b. *"Shall be located a minimum of 50 m from the Control Building and the rest of the fence shall be located as shown on sketch SK-A-A-1882 for the Atlantic and SK-P-A-6324 for the Pacific both drawings as set out in Appendix 1 to this Variation No 171."*

(RFV 317; IAE-UPC 3052)

12. **Volume II, Part 2 Paragraph 1.03.D.4.d [CCVS Cameras for Security Surveillance (OPP)] of Section 28 23 00 [Closed Circuit Video Systems]** which currently reads:

- "d. All perimeter cameras shall be installed on a mast or pole at 6 m (20 feet) above ground. These masts or poles shall be installed at 6 m (20 feet) from the perimeter fence, inside the protected area."*

shall be deleted and replaced with the following:

- "d. All perimeter cameras shall be installed on a mast or pole at a minimum of 6 m (20 feet) above ground. These masts or poles shall be installed at a minimum distance of 2m (6.56 feet) from the perimeter fence, inside the protected area."*

(RFV 317; IAE-UPC 3052)

13. **Volume II, Part 3 Paragraph 1.04.A [Main Assets (Plant)] of Section 01 77 00 [Taking-Over Procedures]** which currently reads:

"A Main Assets (Plant): *The following data shall be included.*

1. *Asset number.*

July 14, 2016

Design and Construction of the Third Set of Locks

2. *Asset short description.*
3. *Asset long description.*
4. *Asset location.*
5. *Parent asset number.*
6. *Top level asset number.*
7. *Asset serial number.*
8. *Manufacturer code.*
9. *Vendor code.*
10. *Purchase price.*
11. *Installation date.*
12. *Total installed price.*
13. *Warranty expiration date.*
14. *Inventory item number.*
15. *Criticality value."*

shall be deleted and replaced with the following:

"A Main Assets (Plant): *The following data shall be included.*

1. *Asset number.*
2. *Asset short description.*
3. *Asset long description.*
4. *Asset location.*
5. *Parent asset number.*
6. *Top level asset number.*
7. *Asset serial number.*
8. *Manufacturer code.*
9. *Vendor code.*
10. *(Deleted).*
11. *Installation date.*
12. *(Deleted).*
13. *Warranty expiration date.*
14. *Inventory item number.*
15. *Criticality value."*

(RFV 325; IAE-UPC-2989; GUPC-IAE-4834; IAE-UPC-3018; GUPC-IAE-4879; IAE-UPC-3043)

14. **Volume II, Part 3 Paragraph 1.04 [Cost Accounting Data]] of Section 01 77 00 [Taking-Over Procedures]** shall include the following new Paragraph 1.04 F at the end of Paragraph 1.04:

"F. *Information as to the purchase price and total installed price in relation to each asset shall be included within the Contractor's cost breakdown structure (CBS) and the Contractor's Accepted Baseline Programme, in accordance with the format set out in transmittal TRX 501 08 dated June 15, 2016. All of the information listed in sub-paragraphs (tabs) A, B, C, D and E of Paragraph 1.04 shall be delivered to the Employer by July 31, 2016."*



(RFV 325; IAE-UPC-2989; GUPC-IAE-4834; IAE-UPC-3018; GUPC-IAE-4879; IAE-UPC-3043)

15. The Employer shall be entitled to a reduction of USD 9,593.17 of the Contract Price as its 50/50 share of the total reduction resulting from the value engineering proposal submitted with the Contractor's RFV 0322 dated May 17, 2016.
16. This Variation Agreement No. 171 shall be governed by the Laws of the Republic of Panama and is deemed to be incorporated into and form an integral part of the Contract.
17. Each Party shall from time to time (at its own cost) do, perform, sign, execute and deliver all such acts, deeds, documents and things (or procure the doing, performance, signing, execution or delivery of them) to give full effect to this Variation Agreement No. 171 and secure the full benefit of the rights, powers and remedies conferred upon it in this Variation Agreement No. 171.

In Witness whereof the Parties hereto have caused this Variation Agreement No. 171 to the Contract to be executed on the 14th day of July 2016 by their duly authorized representatives.

For ACP

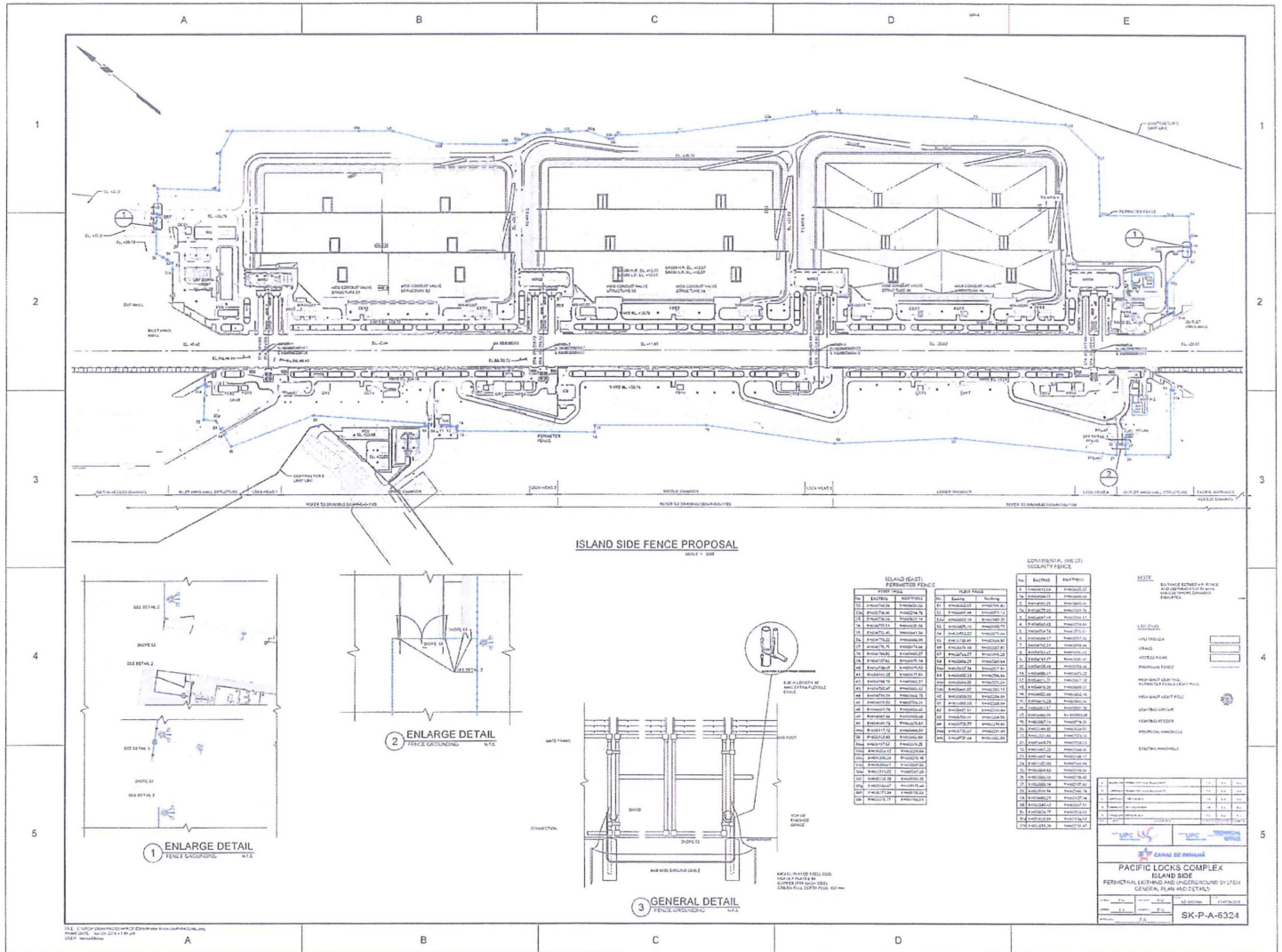


Jorge de la Guardia
Employer's Representative

For GUPCSA



Giuseppe Quarta
Contractor's Representative



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