

PANAMA CANAL AUTHORITY		VARIATION	PAGE 1 OF 3
1. REQUEST FOR PROPOSAL No.:	2. CONTRACT No.:	3. DATE:	4. VARIATION No.:
RFP-76161	CMC-221427	May 4, 2012	36

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)	7. CONTRACTOR'S TELEPHONE NUMBER:
Grupo Unidos por el Canal, S.A. Building 22B, Brujas Road Cocoli, Republic of Panama	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], 4 <sup>th</sup> Paragraph
	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)	12. NAME AND TITLE OF THE EMPLOYER'S REPRESENTATIVE/CONTRACTING OFFICER (Type or print)
Bernardo Gonzalez Contractor's Representative	Jorge de la Guardia, Employer's Representative
13. CONTRACTOR	14. DATE:
 (Authorized signature)	15. PANAMA CANAL AUTHORITY
	16. DATE:
	 (Employer's Representative/Contracting Officer's signature)
	4/10/2012

11/05/2012

Variation No. 36 is issued to incorporate the following:

1. **Volume II, Part 1, Section 40 95 13 [Process Control Hardware]**- Delete Paragraph 1.03 B.22.c entirely and replace it with the following:

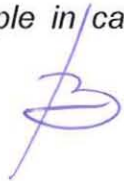
*“c. Two monochrome (black ink) laser units shall be furnished for each one of the following maintenance shops: Atlantic and Pacific Locks.”* (RFI-370)
2. **Volume II, Part 1, Section 40 95 13 [Process Control Hardware]**- Delete Paragraph 1.03 B.28.b entirely and replace it with the following:

*“b. Units shall be furnished as required for each control building. Also, one unit shall be furnished for each engineering user location (one Pacific and one Atlantic locks), and two units for each maintenance shop (two for Atlantic and two for Pacific Locks).”* (RFI-370)
3. **Volume II, Part 1, Section 40 95 13 [Process Control Hardware]**- Delete Paragraph 1.03 D.3 entirely and replace it with the following:

*“3. Workstations:*

  - a. **Engineering Workstations:** *Shall be located at the new locks main office, at the engineering section.*
  - b. **Maintenance Workstations:** *Shall be located at the new locks’ maintenance buildings.*
  - c. **Software Deployment Workstations:** *Shall be located at the new locks.*
  - d. **Software Development Workstations:** *Shall be located in the new locks.”* (RFI-370)
4. **Volume II, Part 1, Section 40 95 13.13 [Process Control Hardware for LMCS]**- Delete Paragraph 1.03 D entirely and replace it with the following:

*“D. **Backup Sites:** A remote control terminal shall be installed in an adjacent existing locks “control house” for backup operation capability: one at Miraflores Locks for the Pacific Locks Complex, and one at Gatun Locks for the Atlantic Locks Complex. These remote terminals shall follow strict cyber security standards allowing only communications to meet critical business needs, for example in case of evacuation, and shall be part of a BCP or DRP.”* (RFI-370)



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Design and Construction of the Third Set of Locks

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- 5. **Volume II, Part 2, Section 40 96 45 [Process Control Software]**- Delete Paragraph 1.03 F.5 entirely and replace it with the following:

*"5. **PCS Operations Console Software Architecture:** The console operators shall use operator HMI software application clients each running on MCS, WLD, MDS and PDS application servers respectively. PCS workstations shall use multiple application clients running as necessary. Operator HMI software applications shall communicate with PLCs using Factory Talk Services (or latest software) provided by PLC programming software. Other sources of data not compatible with PLC programming software shall communicate with the operator HMI software applications through an OPC server. All application server and OPC server software shall be configured for redundancy and failover in case of a fault."* (RFI-370)

- 6. **Volume II, Part 2, Section 27 21 00 [Data Communications Equipment (DCE)]**- Delete Paragraph 1.03 B.3.a entirely and replace it with the following:

*"a. Data switches shall enable 10/100/1000 Mbps Ethernet networking, provide multiple simultaneous paths, and be SNMP compliant."* (RFV-112)

There is no time or cost impact to the Locks Contract as a consequence of this Variation.

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May 4, 2012

DCN: IAE-UPC-1067

Mr. Bernardo Gonzalez  
Grupo Unidos por el Canal, S.A.  
Building 22B, Brujas Road  
Cocoli, Republic of Panama

Reference: Contract No. CMC-221427, Design and Construction of the Third Set of Locks,  
Panama Canal

Subject: Variation No. 36

Dear Mr. Gonzalez:

Enclosed is Variation No. 036 to the above referenced contract. Please sign Item 13 and complete Item 14 (Date Signed) on the Variation form enclosed and return it promptly to Ms. Tere Abadia, Contract Specialist.

Sincerely yours,

Jorge de la Guardia  
Employer's Representative  
Locks Project Management Division

Enclosure

c.  
Joe Cazares/IAE  
Tere Abadia/IAE