

PANAMA CANAL AUTHORITY	VARIATION	PAGE 1 OF 5
1. REQUEST FOR PROPOSAL No.: RFP-76161	2. CONTRACT No.: CMC-221427	3. DATE: September 7, 2015
		4. VARIATION No.: 154

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:

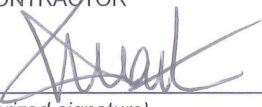
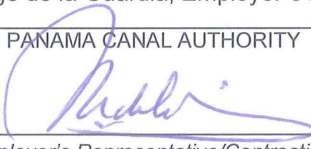
- ☒ The contract referred to in item No. 2 is hereby varied as set forth in item 10, entitled "DESCRIPTION OF VARIATION".
☒ YES. ☐ NO. The contractor shall send a copy, duly signed, of this Variation to the Employer's Representative/Contracting Officer.

	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] and Sub-Clause 13.2 [Value Engineering]]
	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: 29/8/16
	15. PANAMA CANAL AUTHORITY  (Employer's Representative/Contracting Officer's signature)
	16. DATE: 7/IX/2015

This Variation Agreement Number 154, is dated as of 7th day of September 2015 and made

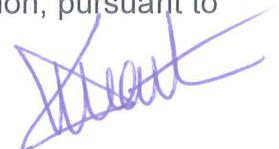
Between: Autoridad del Canal de Panama, Building 740, Corozal, Panama, Republic of Panama (hereinafter called the "**Employer**") on the one part,

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 Contractor requested through RFV No. 255 dated July 30, 2014 a modification to Section 26 50 00 [Lighting Systems] of the Employer's Requirements to change the illumination zones in the approach areas such that there would be more illumination in the areas where the Employer's personnel would be likely to operate, and less illumination in other areas. The proposed change would have no time or cost implications to the Locks Contract.
- (c) In response to RFV No. 255, the Employer by letter dated September 16, 2014 (IAE-UPC-2249) indicated it was not opposed in principle to the proposed change, however there should be a reduction in the Contract Price due to the resulting reduction in the procurement and installation of conduits, wiring, high mast poles assemblies, fixtures and control devices together with a reduction in the civil works required. The Contractor was requested to submit a proposal pursuant to Sub-Clause 13.2 [Value Engineering]. In the event the Contractor's proposal was acceptable, the Employer would modify Paragraphs 1.04 C and 1.04 C.1.b. of Section 26 50 00 of the Employer's Requirements.
- (d) The Contractor by letter dated November 28, 2014 (GUPC-IAE-3285):
 - (i) agreed with the modification of Section 26 50 00 [Lighting Systems] as proposed by the Employer in letter IAE-UPC-2249;
 - (ii) confirmed that the value engineering proposal would have no time implications for the Locks Contract;
 - (iii) submitted a value engineering proposal (Price Details for Illumination Zones around the Approach Areas – VE Proposal) for the variation previously submitted in RFV 255 for Employer's consideration, pursuant to



Design and Construction of the Third Set of Locks

- (iv) Sub-Clause 13.2 [Value Engineering] of the Contract; proposed that the value engineering proposal would result in a reduction of USD 492,617.00 of the Contract Price, being such amount the 50/50 share of the total reduction;
- (e) The Employer, by letter dated December 30, 2014 (IAE-UPC-2370), responded to the Contractor and noted that the reduction in price proposed by the Contractor for all types of high mast pole was USD 12,849.10. However, in the Contractor's Application for Payment Certificate No. 80 the unit price for pole type A1 was \$17,751.33 for the Atlantic and \$17,056.89 for the Pacific. For type B poles the unit price was \$24,032.56 for the Atlantic and \$20,351.97 for the Pacific. The Employer requested the Contractor to revise its proposal or to explain why the unit prices in the Contractor's Application for Payment Certificate No. 80 were not relevant.
- (f) The Contractor by letter dated January 22, 2015 (GUPC-IAE-3347) responded to the Employer stating that:
- (i) the valuation of a variation (including a value engineering initiative) should be based as per the Contract on the expenditures reasonably incurred or to be incurred by the Contractor;
 - (ii) the amounts associated with EMC Plant and Materials in the Payment Certificate have been established as a way to break down the lump-sum Contract Price for interim purposes only and such amounts do not necessarily represent expenditures reasonably incurred or to be incurred by the Contractor and therefore not relevant in the context of variations;
 - (iii) the Contractor stood by its estimate and requested the Employer to proceed accordingly.
- (g) The Employer by letter dated March 24, 2015 (IAE-UPC-2466), responded to the effect that it had decided to accept (on this occasion) the Contractor's proposed reduction of USD 492,617.00 of the Contract Price as the 50/50 share of the total reduction resulting from the value engineering proposal but reserved its right to adopt a different approach in the future.
- (h) Therefore, subject to the terms of this Variation Agreement No. 154, the Parties have agreed to a variation of the Contract as hereinafter stated, but not further or otherwise.

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. Paragraph 1.04 C. of Section 26 50 00 [Lighting Systems] of the Employer's Requirements, which now reads:



"C. Outdoor Area Illumination Level, Configuration and Equipment. The locks outdoor working area to be illuminated shall consist of five zones defined in Table No. 1, and drawing No. 5801-400 "Illumination Zones", (Refer to Vol. VI, Part 1, for location of drawings). Also to be illuminated is the perimeter fence area surrounding the locks, the approach and circulation roads within the locks complex."

will be deleted and replaced with:

"C. Outdoor Area Illumination Level, Configuration and Equipment. The locks outdoor working area to be illuminated shall consist of five zones defined in Table No. 1, and drawings No. 5801-400 R1 and 5801-401 "Illumination Zones". Also to be illuminated is the perimeter fence area surrounding the locks, the approach and circulation roads within the locks complex."

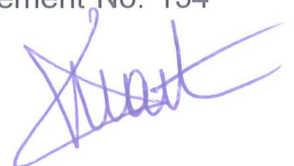
2. Paragraph 1.04 C.1.b. of Section 26 50 00 [Lighting Systems] of the Employer's Requirements, which now reads:

"b. Zone 1 shall consist of a 70 m wide area extending from the edge of each lock wall face towards the east and west shore sides, and extending the overall length of the three chambers. Also, Zone 1 shall also extend along the approach walls, with a width of 50 m for the full length of each approach wall. Refer to drawing No. 5801-400 for details."

will be deleted and replaced with:

"b. Zone 1 shall consist of a 70 m wide area extending from the edge of each lock wall face towards the east and west shore sides, and extending the overall length of the three chambers. Also, Zone 1 shall extend along each wing wall with a width of 50 m for its full length, and along the complete extension of the approach structure. Refer to drawing No. 5801-401 for details."

3. Replace Drawing 5801-400 with the revised Drawing 5801-400R1 and incorporate the new drawing 5801-401, both attached to this Variation Agreement No. 154.
4. Subject to the terms of this Variation Agreement No. 154, the Parties have agreed that the Employer is entitled to a reduction of USD 492,617.00 of the Contract Price as its 50/50 share of the total reduction resulting from the value engineering proposal (Price Details for Illumination Zones around the Approach Areas – VE Proposal) submitted with the Contractor's letter dated November 28, 2014 (GUPC-IAE-3285)
5. All of the Contractor's other existing and ongoing obligations pursuant to the Contract remain unaffected and nothing within this Variation Agreement No. 154



September 7, 2015

Design and Construction of the Third Set of Locks

is intended to be a waiver or relaxation of the Contractor's obligations under the Contract, save only as expressly stated herein.

6. The Parties agree that, save as expressly stated in this Variation Agreement No. 154 the Contractor shall have no claims for additional time or any other relief or entitlement of any kind as a direct consequence of this Variation Agreement No. 154 or arising out of it or in any way in connection with it.
7. This Variation Agreement No. 154 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.

In Witness whereof the Parties hereto have caused this Variation Agreement No. 154 to the Contract to be executed on the 7th day of September of the year 2015 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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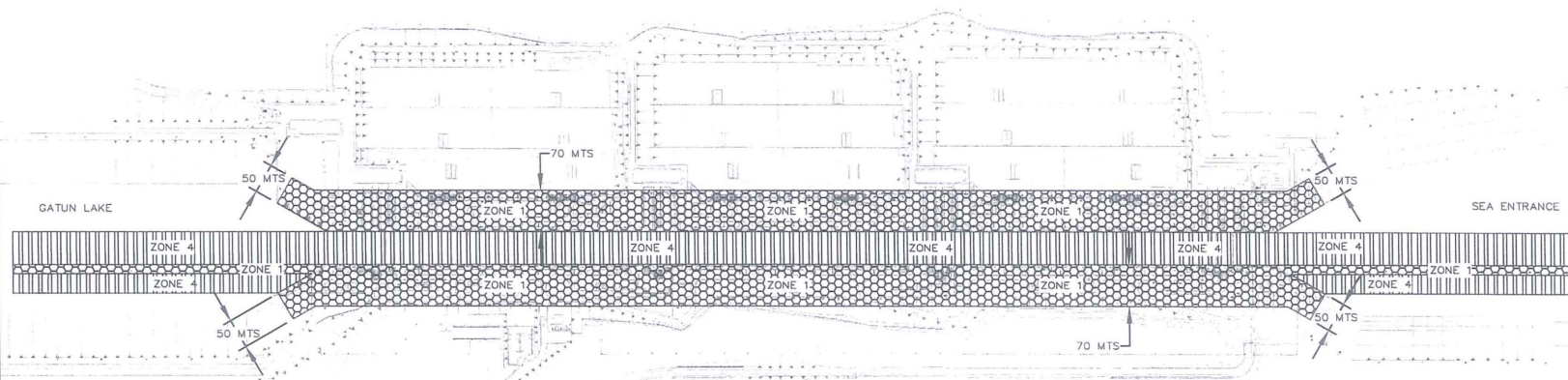
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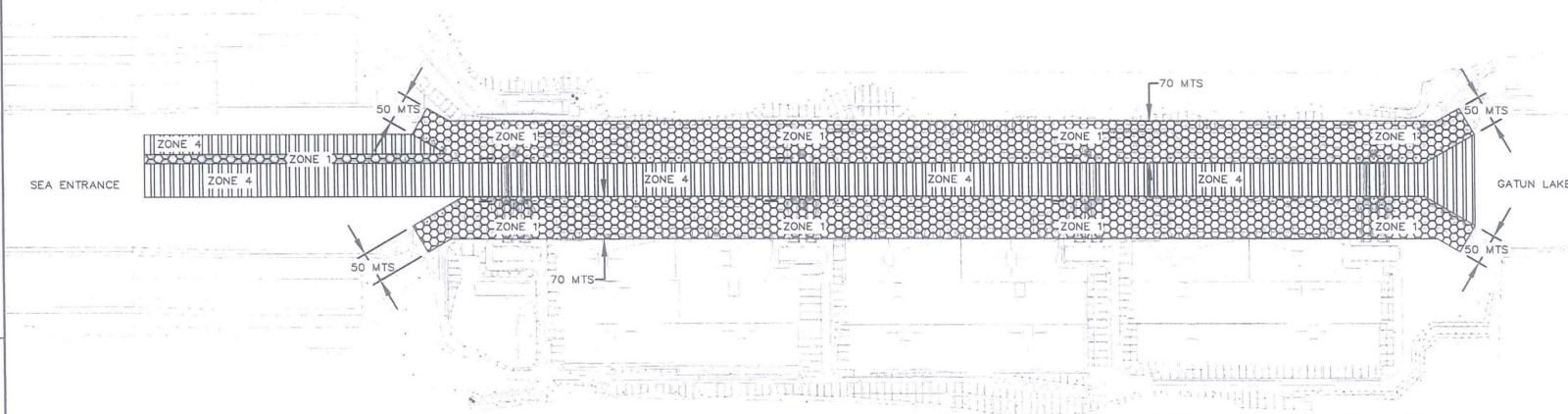
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MARIA DEL C. MORA M.
INGENIERA ELECTROMECANICA
Licencia No. 3064324-04
Firma
Ley 18 del 20 de Enero de 1989
Junta Venezolana de Ingenieros y Arquitectos



ILLUMINATION ZONES
PACIFIC 3RD SET OF LOCKS
NOT TO SCALE













ILLUMINATION ZONES
ATLANTIC 3RD SET OF LOCKS
NOT TO SCALE



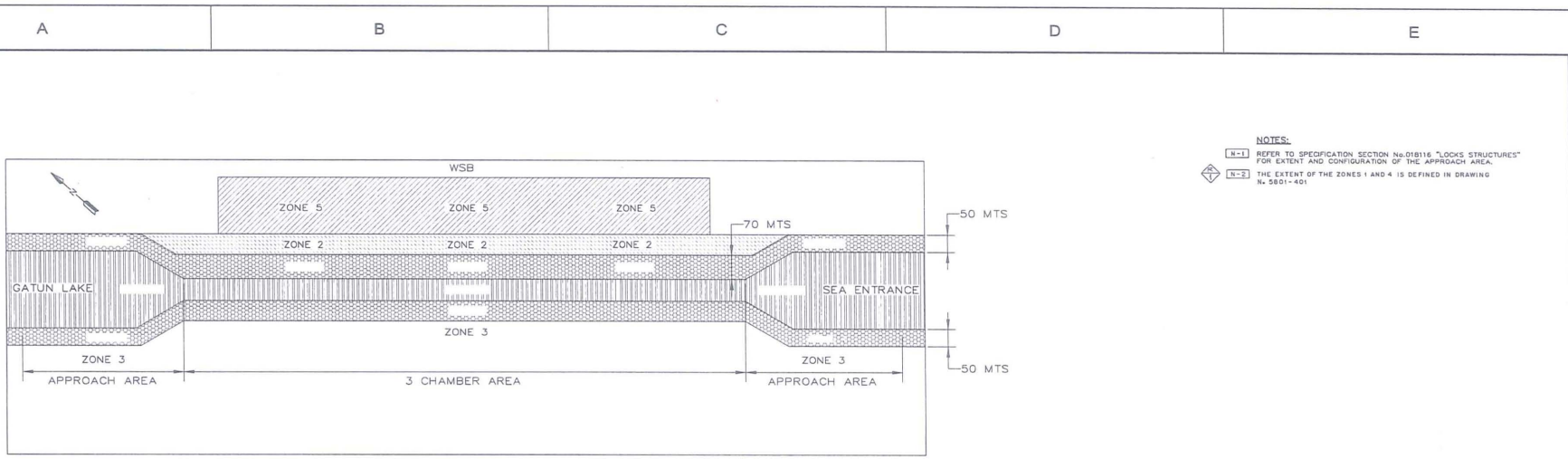
LEGEND

ZONE 1
ZONE 4

REV.	DATE	DESCRIPTION	DESIGNED	CHECKED	APPROVED																								
			NEW	NEW	REVIEWED																								
<div> CANAL DE PANAMA</div> <div>AUTORIDAD DEL CANAL DE PANAMA VICEPRESIDENCIA EJECUTIVA DE INGENIERIA Y ADMINISTRACIÓN DE PROGRAMAS DIVISION DE INGENIERIA EDIFICIO 721, CORONAL, OESTE, REPUBLICA DE PANAMA</div> <div>THIRD SET OF LOCKS PROJECT ATLANTIC & PACIFIC LOCKS COMPLEX</div> <div>ATLANTIC—PACIFIC</div> <div>PANAMA</div> <div>ILLUMINATIONS ZONES</div> <table><tr><td>SCALE</td><td>NOT TO SCALE</td><td>DATE</td><td colspan="3">SEPTEMBER 3, 2014</td></tr><tr><td>DESIGNED:</td><td>M. MORA</td><td>REVIEWED:</td><td colspan="3"></td></tr><tr><td>DRAWN:</td><td>M.C. RODRIGUEZ</td><td>SUBMITTED:</td><td colspan="3"></td></tr><tr><td>CHECKED:</td><td>E. BARAHONA</td><td>APPROVED:</td><td colspan="3"> VICE PRESIDENT, ENGINEERING DIVISION</td></tr></table>						SCALE	NOT TO SCALE	DATE	SEPTEMBER 3, 2014			DESIGNED:	M. MORA	REVIEWED:				DRAWN:	M.C. RODRIGUEZ	SUBMITTED:				CHECKED:	E. BARAHONA	APPROVED:	 VICE PRESIDENT, ENGINEERING DIVISION		
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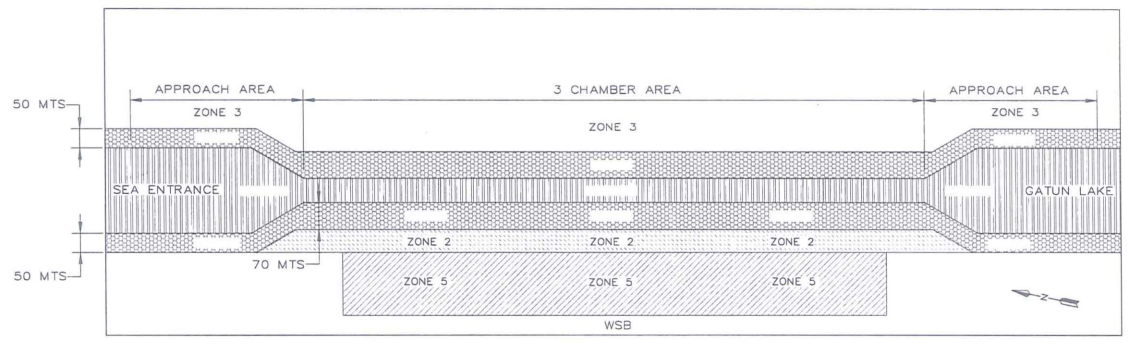


5801-401



NOTES:
 N-1 REFER TO SPECIFICATION SECTION No.01B116 "LOCKS STRUCTURES" FOR EXTENT AND CONFIGURATION OF THE APPROACH AREA.
 N-2 THE EXTENT OF THE ZONES 1 AND 4 IS DEFINED IN DRAWING No. 5801-401

ILLUMINATION ZONES
PACIFIC 3RD SET OF LOCKS
 NOT TO SCALE



ILLUMINATION ZONES
ATLANTIC 3RD SET OF LOCKS
 NOT TO SCALE

REVISOR	DATE	REVISION	REVISOR	DATE	REVISION
ACP AUTORIDAD DEL CANAL DE PANAMÁ DEPARTAMENTO DE INGENIERIA Y ADMINISTRACIÓN DE PROGRAMAS DIVISION DE INGENIERIA EDIFICIO TEL. COMUN. DE LA REPUBLICA DE PANAMÁ					
THIRD SET OF LOCKS PROJECT ATLANTIC & PACIFIC LOCKS COMPLEX ATLANTIC-PACIFIC PANAMA					
ILLUMINATION ZONES					
SCALE: NOT TO SCALE		DATE: DECEMBER 14, 2007			
DESIGNED BY	A. RAVEN	CHECKED BY	J. CABALLERO		
DRAWN BY	J. CABALLERO	APPROVED BY	J. CABALLERO		
CHECKED BY	A. RAVEN	APPROVED BY	J. CABALLERO		