

SECTION 01 14 00 - WORK RESTRICTIONS

1.01 ^{A17}**SCOPE:** This section details the programming, coordination, and scheduling obligations of the Contractor concerning existing Canal and utility operations.^{A17}

1.02 ^{A16}**REFERENCE STANDARDS:** ^{A16}

A. Autoridad del Canal de Panamá (ACP):

^{A17} 2600SEG-121	Norma de Seguridad de Señalización y Barricadas
2600SEG-301(R2)	Norma de Uso del Código de Colores para Tuberías en los Equipos Flotantes Y Terminales Marítimos de la ACP
2600SEG-303	Identificación de Tomas de Corriente Exterior (“Shore Power”) y Conexiones Telefónicas Exteriores en Equipos Flotantes, Atracaderos y Similares
2600SEG-306(R2)	Norma de Seguridad de Trabajos Sobre o Cerca del Agua
2600SEG-309(R4)	Norma General del Programa de Inspecciones a Equipos Flotantes
2600SEG-310(R1)	Deficiencias Mayores y Menores de Equipos Flotantes
2600SEG-312(R1)	Equipos de Prevención, Detección y Extinción de Incendios Requeridos a Bordo de los Equipos Flotantes
2600SEG-313	Condiciones de Navegabilidad y Equipos de Navegación Requeridos a Bordo de los Equipos Flotantes
2600SEG-314	Norma para la Estabilidad del Equipo Flotante de la Autoridad del Canal de Panamá
2600SEG-330	Norma para el Manejo de Basura en los Equipos Flotantes de la ACP ^{A17}
	Reglamentos Marítimos para la Operación del Canal de Panamá (RMOCP)

^{A8}Note: The RMOCP is available in Spanish at:

<http://www.pancanal.com/esp/maritime/regulations/index.html> and in English at:

<http://www.pancanal.com/eng/maritime/regulations/index.html>

The RMOCP comprises the following publications:

Reglamento de Arqueo de Buques para la Fijación de Peajes por el Uso del Canal de Panamá.

Reglamento sobre Procedimiento para el Cambio de las Reglas de Arqueo y de los Peajes del Canal de Panamá.

Reglamento para la Navegación en Aguas del Canal de Panamá.

Reglamento de la Junta de Inspectores de la Autoridad del Canal.

Reglamento de Sanidad y Prevención de Enfermedades Contagiosas.^{A8}

1.03 PROGRAMMING AND SCHEDULING REQUIREMENTS:

- A. ^{A16}**General:** The work under this Contract requires special attention to the scheduling, programming, and implementation of all activities in connection with the Employer's Operations.^{A16} ^{A17}The Contractor shall identify on all programmes including the Accepted Baseline Programme [See Section 01 31 00 (*Project Management and Coordination*)] each event that constitutes a potential interruption to Operations, roads, utilities, navigational or terrestrial traffic.^{A17}
1. The Employer’s Representative will coordinate each potential event with the affected stakeholders as part of the programme review and secure either denial or endorsement with the event. ^{A16}Approved event schedules will be documented in the Accepted Baseline Programme and Current Programmes.^{A16}
 2. The Contractor shall reschedule denied events to a mutually-acceptable date or period. ^{A17}As the Works progress, the Contractor will continuously coordinate schedules with the Employer’s Representative, so that when the event arrives, all stakeholders are aligned and prepared to support or accommodate the event.^{A17} The Contractor shall ensure that the durations of interruptions do not exceed those approved. ^{A16}The conditions listed below apply:^{A16}
- B. **Existing Operations:**
1. ^{A16} The Gatun, Pedro Miguel and Miraflores Locks, and other supporting facilities will remain in normal operation throughout the Works and during the entire Contract period. The Contractor shall conduct his operations without interfering or hindering any of the Employer’s Operations.^{A16} ^{A17}The Contractor shall scrutinize and consider existing programmed work at the existing locks, including major lane outages, planned Overhauls, and maintenance work.^{A17} The Employer’s “Departamento de Operaciones” (OP) provides details on lock lane outages through its Advisories to Shipping, which may be reviewed by accessing the URL <http://www.pancanal.com/common/maritime/advisories/index.html>.
 2. As a further precaution, the Contractor shall set up weekly liaison meetings with the Employer’s Representative to ensure he is aware of such activities. The Employer’s Representative will keep the Contractor informed of other work by the Employer that could interfere with the Contract. ^{A16}The Contractor shall take any such activities into consideration when programming the Works.^{A16}
- C. ^{A16}**Work by Others:** The Contractor shall scrutinize and consider work performed by others engaged in relation to the Panama Canal Expansion Program.^{A16} Refer to Section 01 10 00 (*General Project Requirements*) of the Employer’s Requirements.

- D. ^{A16}**Utility Cutovers and Interruptions:** Interruptions shall be made so as to minimize their impact on Operations, government and private entities, and affected communities. ^{A16}
1. For operators other than the Employer, the Contractor shall coordinate utility cutovers and interruptions with the respective owner or operator. This coordination shall determine, among other things, the exact location of the affected utilities, the capacity/characteristics of the affected utilities, the required reliability of temporary utility service, and the acceptable utility cutovers and interruptions times and durations. The Contractor shall keep the Employer's Representative informed about these details and shall copy the Employer's Representative regarding all such communications. ^{A16}The Contractor shall issue a 14-day advance notification to the Employer's Representative of the expected date for the utility interruption to begin. The required 14-day notification shall be made to include the time for deactivation and reactivation. ^{A16}
 2. ^{A16}Utility cutovers and interruptions shall be made after normal working hours; on days other than Business Days or as indicated by the respective owner or operator. ^{A16}
 3. The Contractor shall ensure that new utility lines and temporary utility lines are complete, except for the final connection, before interruption of the existing service.
 4. Interruption to water, sanitary-sewer, storm-sewer, communications (telephone, internet, etc.), electric, air-conditioning, fire-alarm, and compressed-air services shall be considered utility cutovers and shall be performed as specified in Subparagraphs 1., 2., and 3., above. The Contractor shall provide utility service to key users during cutovers, by means of temporary utility lines, portable generators, water tanks, etc. as needed. As used in this Section, key users are those that, because of the nature of the work carried out in their facilities, cannot afford utility interruptions, e.g., locks and hospitals.
 5. ^{A16}In order to minimize the impact of utility cutovers and interruptions on Operations, government and private entities, and affected communities, the temporary utility service shall be of equal or better quality and reliability as the interrupted utility service. ^{A16}
 6. ^{A17}**Location of Underground Utilities:** The Contractor shall meet with the Employer's Representative to coordinate all utility-location activities at least 28 days in advance of the commencement of the corresponding activities. The Contractor shall prepare a plan for utility location, incorporating all available as-built and record drawings as supporting documentation, and the overall plan shall be reviewed during the meeting. Similarly, identified utilities that are expected to be encountered within the affected areas shall be reviewed.
 - a. For utilities owned or operated by entities other than the Employer (see the examples listed in point 7, below), the Contractor shall carry out the necessary coordination in advance in order to be able to report on the results during the meeting.

- b. For any excavation in the vicinity of the Employer's utilities, the Contractor shall contact the Employer's Representative to request a clearance at least 14 days in advance of the planned excavation. The Employer will stake out his own utilities in this situation, but will not be responsible for staking other utilities that may be in the same area.
 - c. In both circumstances described in a. and b. above, the Contractor shall use electromagnetic or sonic equipment to scan all areas that will be traversed by piping, ducts, or other infrastructure to be installed or that will be disturbed by work to be conducted. The Contractor shall mark the surface of the ground or the paved surfaces in places where underground utilities, utilities encased in pipe structures or any other type of underground or encased obstructions are discovered. The Contractor shall verify the elevations of any such piping, utilities, or obstructions not previously shown in the records, but discovered during scanning.^{A17}
7. ^{A17}For information purposes, the Employer has identified the following government and private entities which own or operate utilities at or near the Site; however, the Contractor retains full responsibility for and must satisfy itself and make its own inquiries as to all utilities present at or near the Site.^{A17}
- a. **Instituto de Acueductos y Alcantarillados Nacionales (IDAAN):** IDAAN provides the potable water distribution service and collects the sewage. URL: <http://www.idaan.gob.pa/>
 - b. **Empresa de Transmisión Eléctrica S.A., (ETESA):** ETESA provides the transmission service of high voltage electrical energy. URL: <http://www.etsa.com.pa/>
 - c. **Unión Fenosa EDEMET-EDECHI:** Unión Fenosa provides the distribution service of electrical energy in the Pacific area. URL: <http://www.ufpanama.com/>
 - d. **Elektra Noreste:** Elektra Noreste provides the distribution service of electrical energy in the Atlantic area. URL: <http://www.elektra.com.pa/>
 - e. **Cable & Wireless Panamá:** Cable & Wireless Panamá provides fixed line telephone service. URL: <http://www.cwpanama.net/cwp/index.asp>
 - f. **Global Crossing:** Global Crossing operates telecommunication facilities which run through transisthmian duct line. URL: <http://www.globalcrossing.com/default.aspx>
 - g. **Atlantic Pacific S.A., (APSA):** APSA operates the fuel and oil lines, which are owned by the Autoridad Marítima de Panamá (AMP); URL: <http://www.amp.gob.pa/newsite/english/home.html>^{A7}
 - h. ^{A8}**Panama Canal Railway Company (PCRC):** PCRC is the concessionaire grantee that operates the Panama railroad — URL: <http://www.panarail.com/home.html>.^{A8}

8. ^{A8}**Protection of Existing Underwater Telecommunication Facilities:** The Contractor shall manage the disposal of excavated materials from the construction of the Works as required to protect existing underwater telecommunication facilities. The Contractor shall meet all applicable requirements of Section 01 81 26 (*General Requirements for Communications, Control, Safety, and Security Systems*). Dumps in the North Monte Lirio disposal area shall not affect the underwater portions of the Trans Isthmian duct line, which runs parallel to the railroad, typically on the west side. The Contractor shall be responsible for determining the location of this duct line and implementing protective measures before commencing any construction or disposal activity in the vicinity of the line. The Trans Isthmian duct line is owned by the Employer and other owners.^{A8}

E. Aids to Navigation:

1. ^{A17}Existing Employer navigational aids, such as fluorescent bank lights and range targets, at or near the Site and in the way of the Works will be removed/relocated by the Employer.^{A17} ^{A10}The Contractor is expected to identify the navigational aids in the way of the Works and to notify immediately the Employer's Representative, so that a reasonable amount of time is allowed to the Employer for its relocation.^{A10}
2. ^{A16}The Contractor shall coordinate the relocation of existing aids to navigation with the Employer's Representative, both in the programme review and 28 days prior to the desired relocation date. Navigational aids will be relocated to their permanent position on the bank after the dry excavation and required electrical work is completed. Existing targets will be relocated to their final positions by the Employer to ensure no interference occurs with Operations.^{A16} These targets may be located at intermediate locations before setting them at the final location, in which case the Contractor shall protect them from damage. The Contractor shall not block the line of sight along the line of targets when performing the work and shall consider this restriction when planning the work.

1.04 ^{A16}COORDINATION PRIOR TO ACCESS TO THE SITE AND USE OF PREMISES:
Refer also to Section 01 50 00 (*Temporary Facilities, Accesses and Controls*).^{A16}

A. Obstacle Removal:

1. ^{A17}The Contractor shall coordinate with the Employer's Representative regarding the commencement of the Works at each part of the Site so that any obstacles therein that will remain the property of the Employer can be removed by the Employer.^{A17} For this purpose, the Contractor shall give written notice to the Employer's Representative at least 28 days in advance of his intended date to start the construction work.
2. ^{A16}Properties that belong to the Employer or third parties and that are to remain within the Site shall be protected from damage that might otherwise result from the Works.^{A16} If any such property is in the way of the Works, the Contractor shall coordinate with the Employer's Representative and allow a reasonable amount of time for the Employer or third parties to remove it.^{A10}

- B. **Work Area:** ^{A17}All Goods shall be left in an orderly manner by the Contractor when they are not being used. Areas of the Site (in both the Permanent Works and Temporary Works) where work is not being performed shall be kept in a clean condition.^{A17}
^{A16}When trenches are excavated along or across roads, planks or steel plates capable of supporting at least 13 tons of weight or the maximum estimated weight of any equipment to be used (whichever is greater) shall be placed to cover those trenches when work is not being performed or when required to allow vehicular and pedestrian circulation^{A16}. The Contractor shall post signs nearby to indicate the actual weight the planks or steel plates are capable of supporting. Where trenches are excavated in public roads or high traffic areas, the Contractor shall take all the required measures to prevent temporary planks or steel plates from shifting position due to moving traffic.^{A13}The Contractor may use another equivalent approved system to support the loads.^{A13}
- C. ^{A9}**Safety Signs:** Refer to Section 01 50 00 (*Temporary Facilities, Accesses and Controls*).^{A9}
- D. ^{A17}**Working Hours:** The Works may be carried out at the Site in accordance with the Conditions of Contract Sub-Clause 6.5 [*Working Hours*] and the Accepted Baseline Programme.^{A17}

^{A8}[text transferred to Section 01 50 00 (*Temporary Facilities, Accesses and Controls*)]^{A8}

1.05 OCCUPIED BUILDINGS: The Contractor shall be working near and around existing buildings.
^{A16}The Contractor shall not enter buildings outside the Site without prior approval of the Employer’s Representative.^{A16} ^{A17}For the use of buildings inside the Site, refer to Subparagraph 1.10 J. of Section 01 50 00 (*Temporary Facilities, Accesses and Controls*).^{A17} The Contractor shall take all necessary actions to avoid damage to Employer buildings which have been designated to remain. Any needed repair costs will be charged to the Contractor.

1.06 ADDITIONAL REQUIREMENTS WHEN THE CONTRACTOR USES FLOATING EQUIPMENT: ^{A16}The Contractor’s floating equipment shall not interfere with Operations.^{A16}
^{A17}The Contractor shall remain up-to-date and comply with Notices to Shipping and Advisories to Shipping, as available through the URL <http://www.pancanal.com/eng/op/index.html>. Additionally, the Contractor shall meet Employer’s safety and environmental requirements for floating equipment, i.e., ACP 2600SEG-301, 2600SEG-303, 2600SEG-306, 2600SEG-309, 2600SEG-310, 2600SEG-311, 2600SEG-312, 2600SEG-313, 2600SEG-314, and 2600SEG-330.^{A17}

A. Inspection of Contractor’s Vessels:

- ^{A16}In order to carry out any part of the Works for the Employer in the Canal, the Contractor shall have the floating equipment scheduled to be used in such work inspected and approved for operation in accordance with requirements specified in the Employer’s “Reglamentos Marítimos para la Operación del Canal de Panamá” (RMOCP), Notice to Shipping No. N-1-2008 (Vessel Requirements), as well as in any subsequent revisions (see <http://www.pancanal.com/eng/maritime/notices/index.html>). Requests for authorization to operate within the Canal shall be submitted to the Employer’s Representative at least 28 days in advance, to allow sufficient time for the certification of operators, inspection of equipment, and the correction of any identified deficiencies prior to transiting or commencing any phase of work.^{A16}
The related inspection shall be coordinated through the Employer’s

Representative and will be performed by the Employer's "División de Operaciones de Tránsito" (OPT) or "Unidad de Seguridad e Higiene Industrial" (RHSI).

2. ^{A8}Inspection of Contractor's vessels shall be at no cost to the Contractor, except that any re-inspection carried out as a result of discrepancies found concerning the information provided on the vessels or deficiencies encountered with the vessels will be charged to the Contractor in accordance with the official tariffs.^{A8}
3. Vessels are subject to boarding and inspection by Employer's Personnel at any time for compliance with these requirements. Vessels found not in compliance will have their authorization to operate revoked.

B. Permits Issued to Contractor's Vessels: ^{A16}To operate in the Canal, each commercial vessel shall be registered with the Employer on a yearly basis and shall have an operation permit as issued by the Employer to carry out commercial or non-commercial activities in Canal waters.^{A16} All applicable fees will be charged to the Contractor. The Employer will inform the Contractor of the current fees. ^{A10}Refer to URL addresses <http://www.pancanal.com/esp/maritime/tariff/index.html> for details in English or <http://www.pancanal.com/eng/maritime/tariff/index.html> for Spanish.^{A10} To register and obtain a permit for each vessel to operate in Canal waters:

1. The owner of the vessel shall certify that the vessel has an insurance policy covering liability to third parties;
2. The vessel shall pass a physical inspection, which will be carried out by the Employer;
3. ^{A8}The vessel shall have safety and communication equipment as required by Employer regulations, including an AIS (Automatic Identification System) in accordance with current vessel requirements as stated in N-1-2008;^{A8 A10} as well as with any subsequent revisions.^{A10}
4. The vessel shall bear a label on a visible location, which shall include the vessel-identification number (the Employer will furnish this label at the time the vessel is registered); and
5. At least 14 days in advance, the Contractor shall submit the proposed routes to the Employer's Representative for approval by the Employer's (OPT).

C. License to Operate Small Craft:

1. ^{A8}In addition to requirements specified elsewhere, the following requirements apply to vessels of less than 20 meters (65 feet) in length.^{A8} The Contractor shall comply with the Employer's RMOCP and the Employer's Notice to Shipping ^{A7}N-11-2008 ^{A7}(Operation of Commercial and Non-Commercial Small Craft in Panama Canal Waters), as well as with any subsequent revisions. Small-craft operators shall have a valid Employer license.
2. ^{A8}At least 28 days prior to the date when the operation of a small craft will be required, the Contractor shall submit the curriculum vitae of the license candidates, detailing their training, degrees attained, and experience operating in

Canal waters (as well as in other maritime settings) and providing evidence that they comply with the requirements specified in Notice to Shipping N-11-2008 to operate small crafts.^{A8} This information will be used by the Employer’s Personnel to evaluate candidates.

3. ^{A16}The Contractor will be charged such fees as may be pertinent at the time (as of the Base Date, such fees are \$500.00 evaluation and license-issuance fee for each highly experienced operator; a \$1,000.00 evaluation, training, and license-issuance fee for each intermediate-level experienced operator; and a \$1,500.00 evaluation, training, and license-issuance fee for each inexperienced operator.)^{A16} The evaluation test will be administered by the Junta de Inspectores of the Employer’s OP. Training will be provided by the Employer’s “Unidad de Adiestramiento Marítimo” (RHSM).

- D. **Pilotage:** The Contractor shall comply with “Capítulo V – Practicaje” of the Employer’s RMOCP. ^{A17}An Employer pilot or a Transit advisor will be required whenever the Contractor is operating in Canal waters, except as provided in the second section of this chapter of the RMOCP and in the Employer’s Notice to Shipping No. N-2-2008 (Harbor Operations), or in any subsequent revisions. The Employer will waive pilotage or Transit-advisor fees to the Contractor when incurred in the execution of the Contract, except as specified in Subparagraph G.2.f., below. Tolls and other Transit-related fees will be charged to the Contractor.^{A17} The Contractor shall submit a justification to the Employer’s Representative for approval 28 days in advance of when he will need this service.
- E. **Navigational and Radio Equipment:** The Contractor’s Equipment shall have valid navigational and radio equipment licenses, according to Autoridad Marítima de Panamá (AMP) regulations (see URL <http://www.amp.gob.pa/>). Proof of such licenses shall be provided to the Employer’s Representative within 7 days of receipt.
- F. **Marine Tariffs:** Official Tariffs are published by the Employer and kept up to date as changes occur. See URL <http://www.pancanal.com/eng/maritime/tariff/index.html>.
- G. **Vessel Navigation between the Y just North of Pedro Miguel Locks and the Atlantic Site for the Third Set of Locks:** The following regulations will apply in this area.
 1. Self-propelled vessels measuring less than 27.7 m (91.0 feet) in beam will be allowed to transit simultaneously with vessels transiting in the opposite direction, i.e., two-way traffic. Self-propelled vessels measuring more than 27.7 m (91.0 feet) in beam will be allowed to transit only among vessels transiting in the same direction.
 2. In order to qualify for two-way traffic eligibility, vessels assisted by tugboats shall not exceed 25.9 m (85.0 feet) in beam.
 3. In all cases, vessels shall be capable of sustaining a minimum speed of 8 knots and shall comply with all navigation requirements stated herein.
 4. Subject to scheduling constraints, two round-trip passages will be allowed per day. Total time for each round-trip passage shall not exceed 10 continuous hours, including unloading.

5. ^{A17}Requests for each round trip passage shall be submitted to the Employer at least 24 hours before the expected Transit time; however, the Employer cannot commit to complying with a precise departure and arrival schedule other than fitting the two daily 10-hour round-trip passages somewhere into the daily schedule.^{A17} Therefore, no claims shall be accepted for any related scheduling delay.
6. ^{A9}The ACP will waive normal pilotage charges if the round trip is performed within the 10 hours established herein. The 10-hour limit is intended to enable a single pilot to complete the entire assignment, so that additional compensation for a second pilot is avoided. It is based on an estimated sailing time of 4 hours for each leg of the round trip, which leaves 2 hours for unloading between legs. If the unloading time exceeds 2 hours or if the Contractor is responsible for any other delay that causes the entire round trip to extend beyond 10 hours, the Contractor will be charged for any extra pilotage fees that may be required under pilot-compensation regulations. Such fees will be charged in accordance with established commercial tariffs.^{A9A8}

^{A8}[text transferred to Section 01 33 00 (*Submittal Procedures*)]^{A8}

1.07 ^{A8}AFRICANIZED BEE CONTROL:^{A8} ^{A16}The Contractor shall be responsible for controlling Africanized bees found during the execution of the Contract.^{A16} An orientation course on Africanized bee control will be available to the Contractor's Personnel. The course, which shall be coordinated through the Employer's Representative, lasts about two hours. The Contractor will be instructed in the required equipment and insecticide for controlling the bees. Both the equipment and the insecticide are locally available. The Contractor shall inform the Employer's Representative of all related incidents.

1.08 ^{A16}CONTRACTOR'S SUPERVISION, PERSONNEL, AND EQUIPMENT:

- A. **General:** ^{A17}For the execution of the Works, the Contractor shall employ competent, suitably qualified personnel in each of the required construction trades. When catalogues, handbooks, manufacturers' instructions, maintenance instructions, reference drawings, or other documentation are in languages other than the Contract language, the Contractor shall be responsible for all actions necessary for the appropriate understanding of the work to be performed in accordance with the Contract.^{A17}
- B. **Superintendence:** The Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Works in accordance with the Contract. The Contractor shall keep on the Site at all times during the performance of the Works a competent resident superintendent, or superintendents, who shall not be replaced without prior written approval from the Employer's Representative. If at any time during performance of the Works a designated superintendent leaves the Site, the Employer's Representative shall be notified and provided with the name of the Contractor's designated representative having responsible charge prior to the superintendent's departure.^{A17} All superintendents shall be able to read, understand, and proficiently communicate in the language of the Contract.^{A17}
- C. **Foremen:** Notwithstanding the conditions of the Contract, the superintendent(s) shall have an adequate number of assistants or foremen for the different phases of work to be

accomplished simultaneously at the Site. Each work crew shall be under the direction of a full-time, competent foreman.

- D. **Certifications:** ^{A17}Any certifications required to satisfy the Employer's Requirements and the applicable Laws shall be submitted to the Employer's Representative prior to beginning the corresponding work.^{A17}
- E. **Contractor's Equipment, Machinery, And Tools:** All Contractor's Equipment, machinery, and tools used in the Works shall be kept in satisfactory working and safe conditions and shall be subject to the review of the Employer's Representative at any time during performance of the Works. The Contractor shall keep copies of certifications for Contractor's Equipment, machinery, and tools at the Site and shall attach copies of such certifications to the daily report on Contractor's Equipment whenever there is a change in Contractor's Equipment.^{A16}

END OF SECTION