

DRAWING LIST
ALTERNATIVE PACIFIC (3x2WSB)

3/2/2006

FINAL REPORT

x Rev. Title

TASK 2

D2- 0 -306 B Levels in the lock chambers

TASK 3

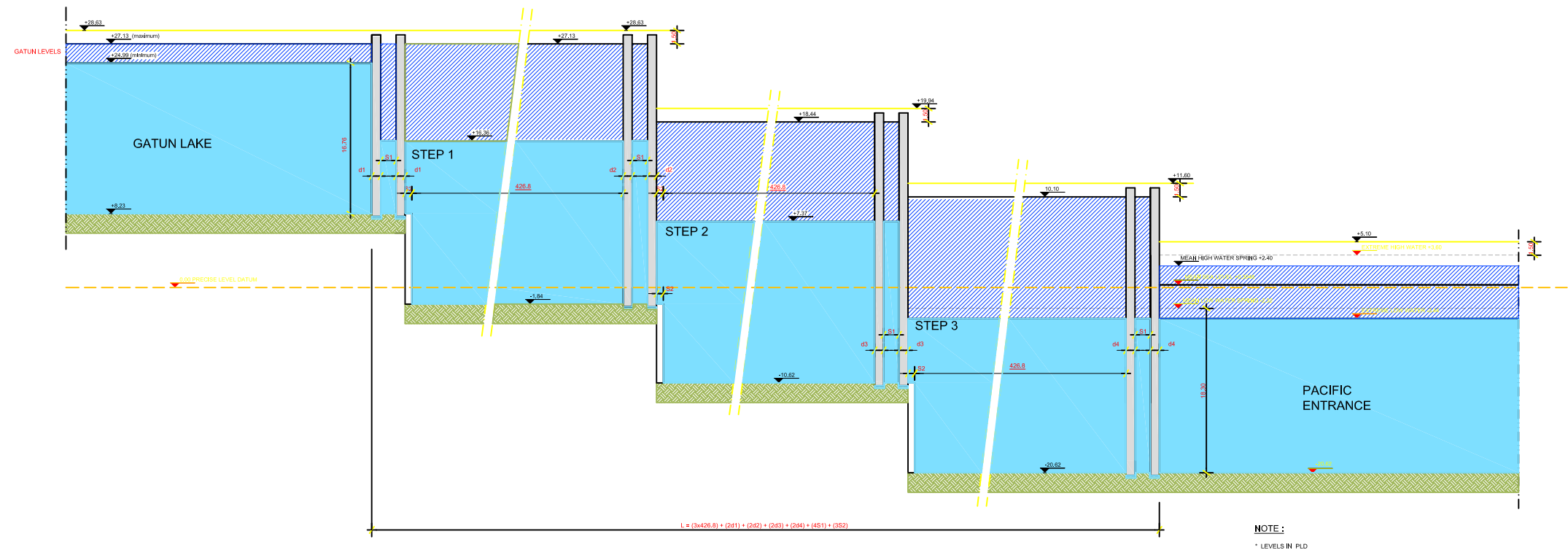
D3- 0 -301 B Lock Alignment P1A : geotechnical situation
D3- 0 -303 B Lock Alignment P1A : nautical design

TASK 4

Lay-out
D4- A -303 B General plan view

Lock Walls
D4- B -301 B Eastern Lock Wall : longitudinal view
-302 B Western Lock Wall : longitudinal view
-303 B Plan view on lock chamber 1
-304 B Plan view on lock chamber 2
-305 B Plan view on lock chamber 3
-306 B Cross sections lock walls

Filling and Emptying System
D4- C -303 B Side by side conduits disposition



CPP
Consortio Post Panamax

Tractebel Development Engineering

TECHNUM

COYNE ET BELLIER
Compagnie Nationale de Eléctricité

Asociados con:

FIA AASO

SBE

ACP
Autoridad del Canal de Panamá

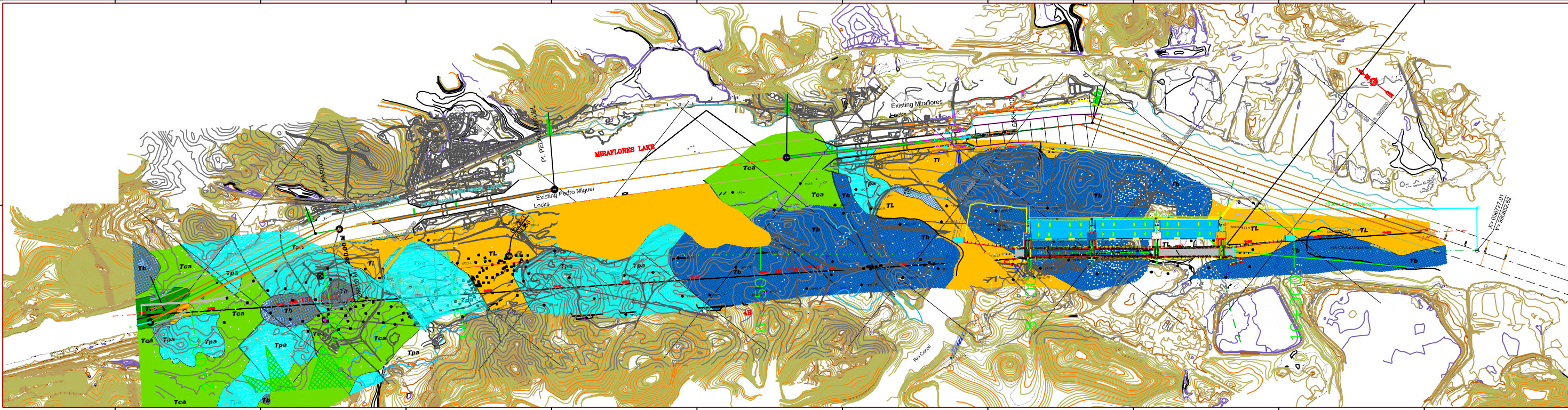
Clayton de Proyectos de Capacidad del Canal
Autoridad del Canal de Panamá
Estadío 101
CORSONAL
República de Panamá

Diseño Conceptual de las Esclusas Post Panamax
Alternative Conceptual Design of
Pacific & Atlantic Post-Panamax Locks - 3x2 WSB

PACIFIC LOCKS COMPLEX (3x2 WSB)
LEVELS IN THE LOCK CHAMBERS

Rev.	Fecha	Descripción
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Contract	Scale	Drawing n°:	Rev.:	Folio
SM-15055	1/200	D2- 0 - 306	8	1 / 1



Simbología Formaciones

Tca	Formación Tertiary
Tpa	Formación Pleistocene
Tlb	Formación Quaternary
Tl	Formación Lacustrine
Tm	Formación Marine

Simbología Obras

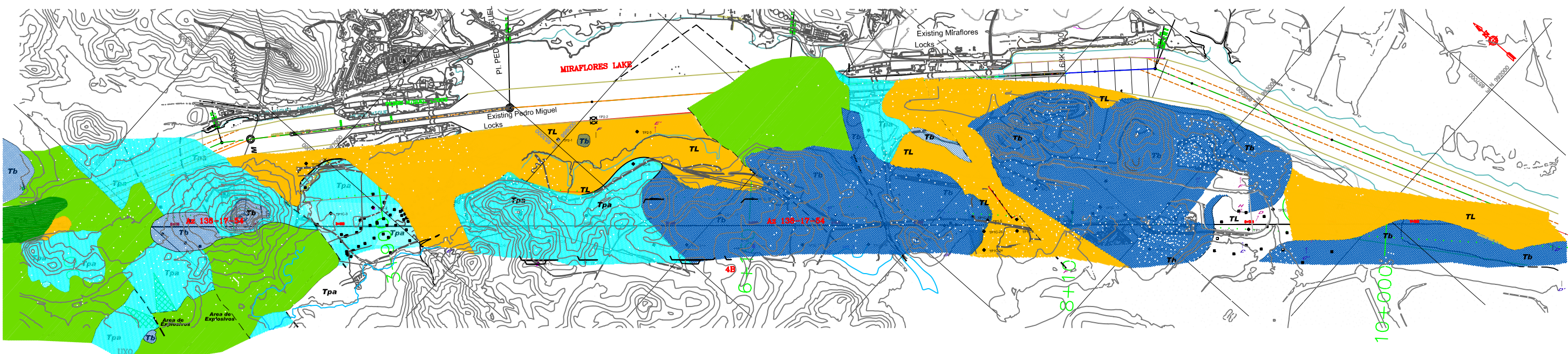
●	Punto A.C.P.
■	Punto Control
—	Canal
—	Canal Externo
—	Canal Interno
—	Canal de Bypass
—	Canal de Emergencia
—	Canal de Mantenimiento

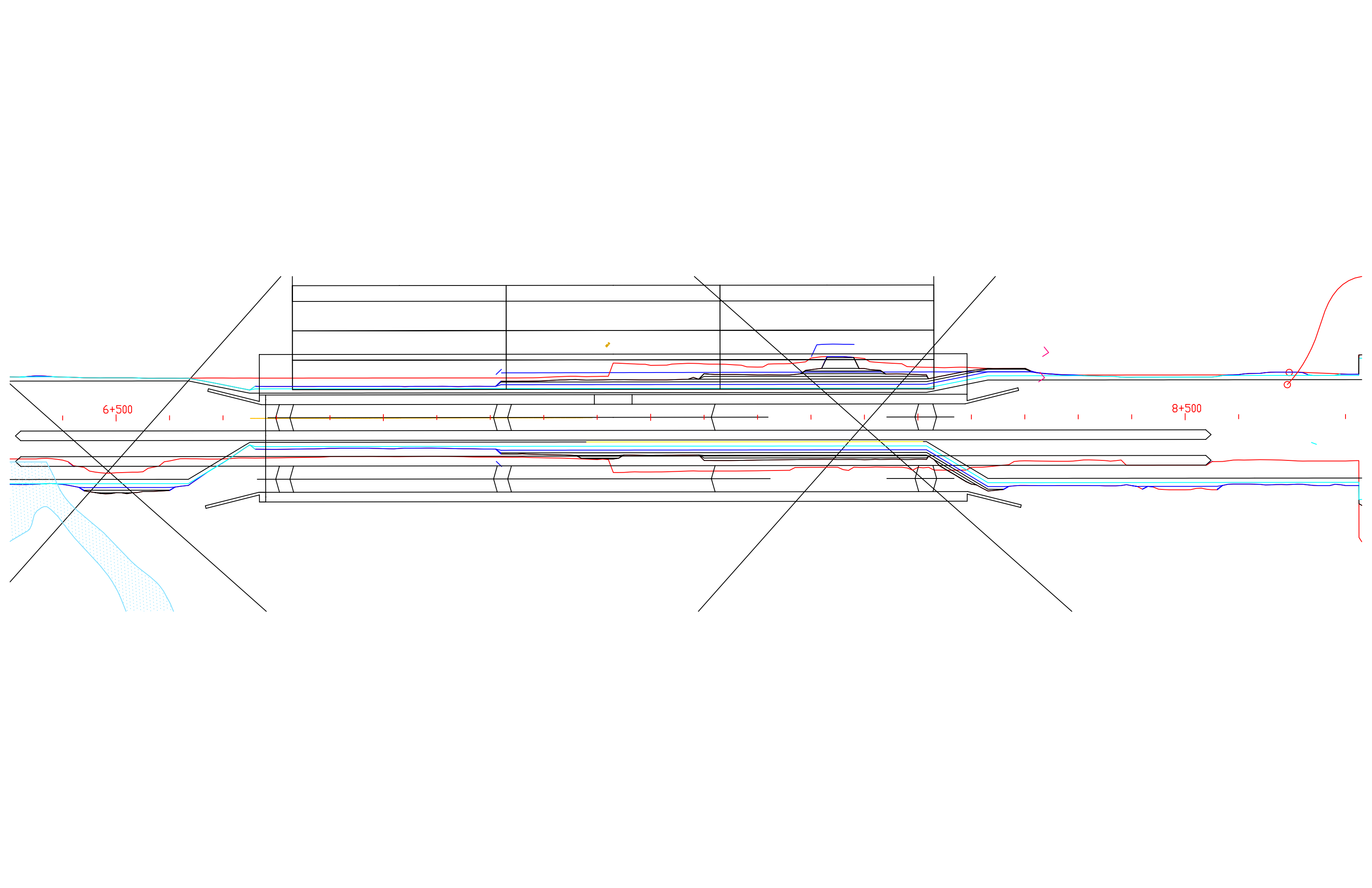
Logos: CPP Condorcio Post Panam, Tractebel, ACP, CONINTEC, SBE, and others.

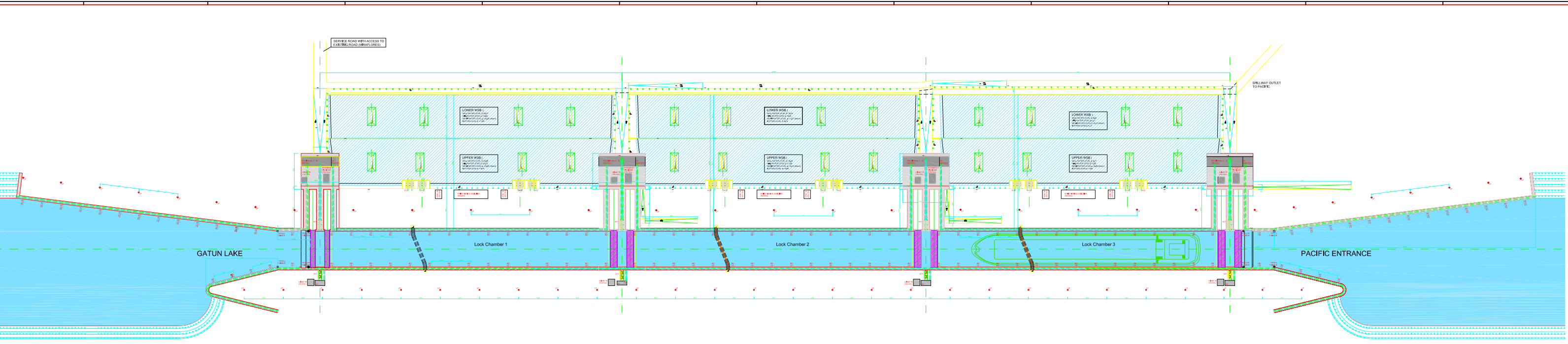
Titulo Conceptual de las Bases Post-Panam:
 Ilustración Conceptual de las Bases y Almacén Post-Panam Locks - Ant 000

PACIFIC LOCKS COMPLEX (3G WSB)
 LOCK ALIGNMENT - GEOTECHNICAL SITUATION

Scale	1:500
Sheet	03-0-301
Date	1/11







- Legend**
- FD: Fender
 - LD: Ladder
 - BD: Bollard
 - LP: Lighting Pole
 - CS: Control Building
 - TB: Technical Building
 - HV: High Voltage building
 - VC1: Valve Chamber on culvert
 - VC2: Valve Chamber water saving basins
 - CD: Cable Duct
 - TD: Traffic Direction

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED

CPP
 Consorcio Post Panamax

ACP
 Autoridad Costarricense de los Puertos de la Cuenca del Atlántico

TECHNUM
 Ingeniería y Construcción

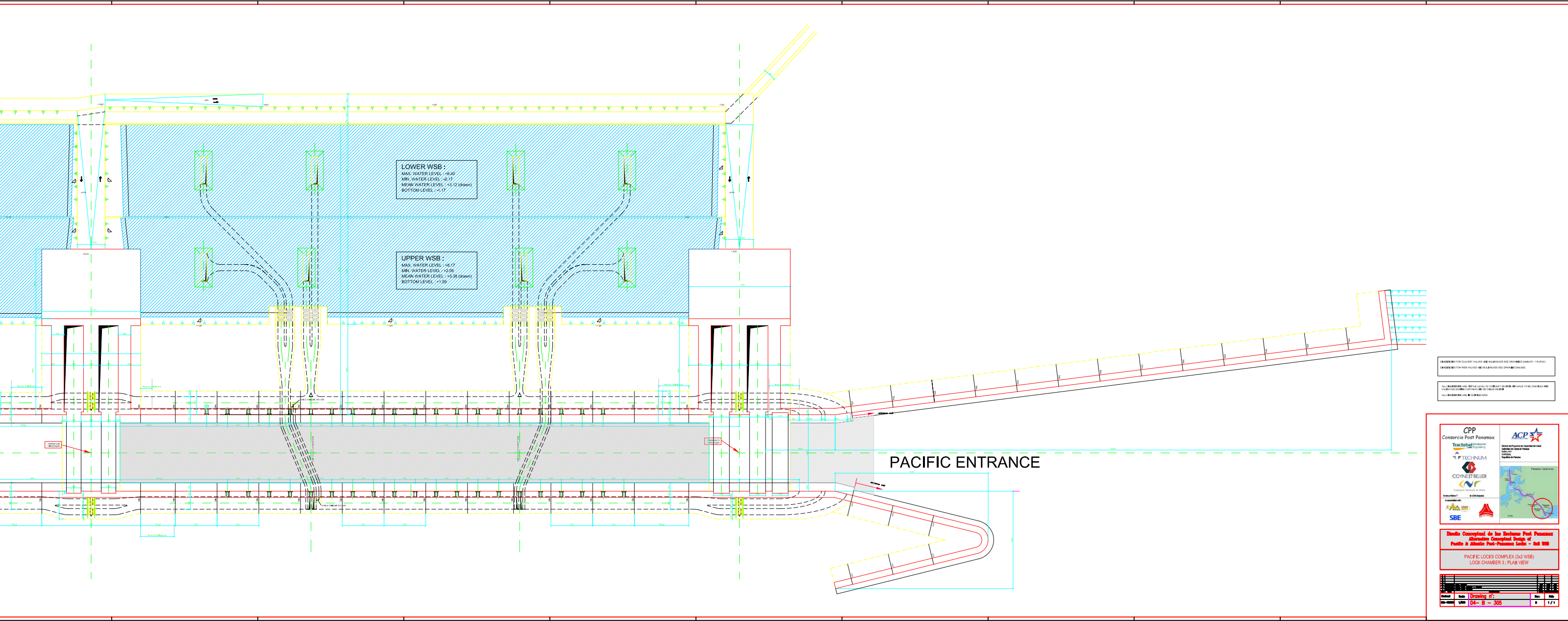
COMETRELLER
 Ingeniería y Construcción

SBE
 Ingeniería y Construcción

Mapa Conceptual de los Bunkers Post Panamax
 Situación Conceptual de los Bunkers Post-Panamax en el Canal de Panamá

PACIFIC LOCKS COMPLEX (incl. WSB)
 General Plan View

Scale	Drawing #	Rev	Date
1:1000	D4-A-303	B	1/11



LOWER WSB :
 MAX. WATER LEVEL : +8.40
 MFC WATER LEVEL : +8.77
 MEAN WATER LEVEL : +8.12 (2000)
 BOTTOM LEVEL : +1.17

UPPER WSB :
 MAX. WATER LEVEL : +8.07
 MFC WATER LEVEL : +2.06
 MEAN WATER LEVEL : +5.58 (2000)
 BOTTOM LEVEL : +1.30

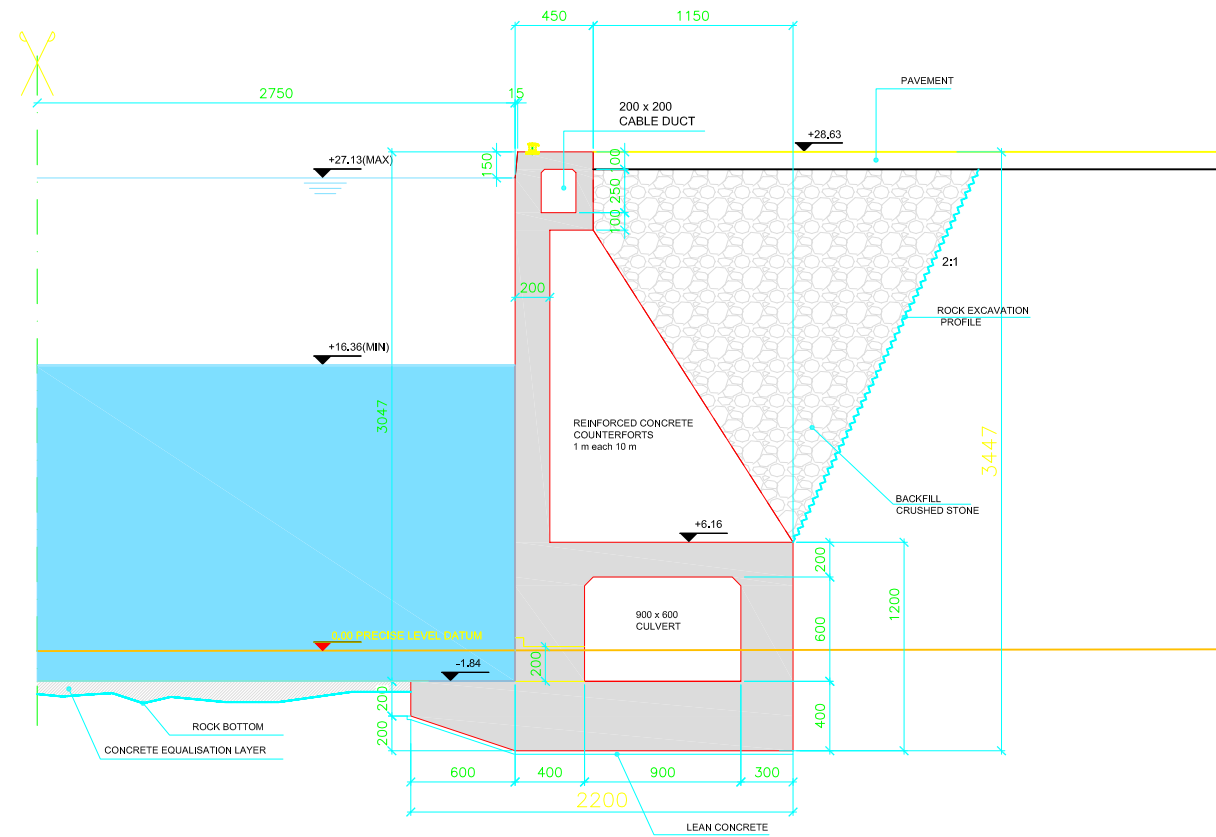
PACIFIC ENTRANCE

ORDER NUMBER VALUES ARE IN METERS SEE DIMENSIONS IN METERS
 ORDER NUMBER VALUES ARE IN METERS SEE DIMENSIONS IN METERS
 ALL DIMENSIONS ARE METERS UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE METERS UNLESS OTHERWISE SPECIFIED

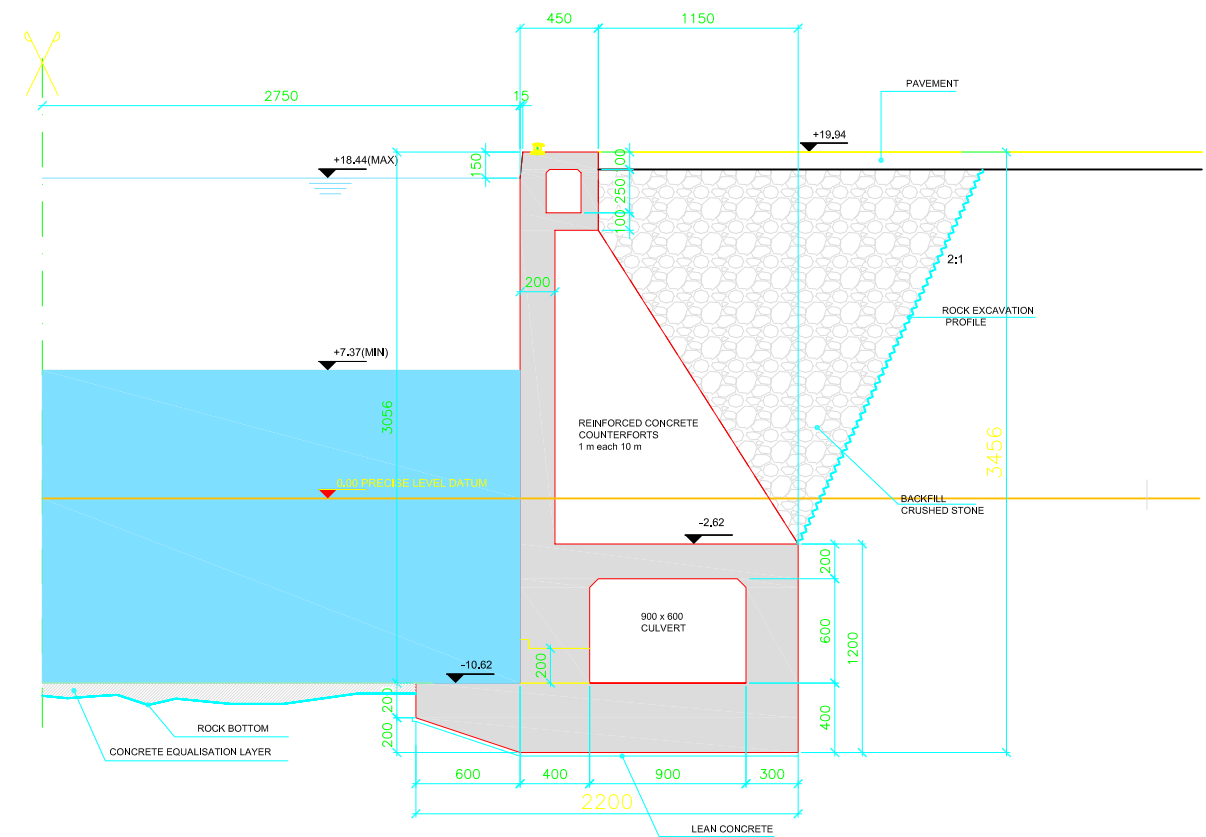
Diseño Conceptual de los Buzos Post-Panamax
Conceptual Design of Post-Panamax Locks - Sub 100
 PACIFIC LOCKS COMPLEX (2nd WSB)
 LOCK CHAMBER 3, PLAN VIEW

Rev.	Scale	Drawing #	Date	Author
01	1:1	D4-B-305	01/11/2011	

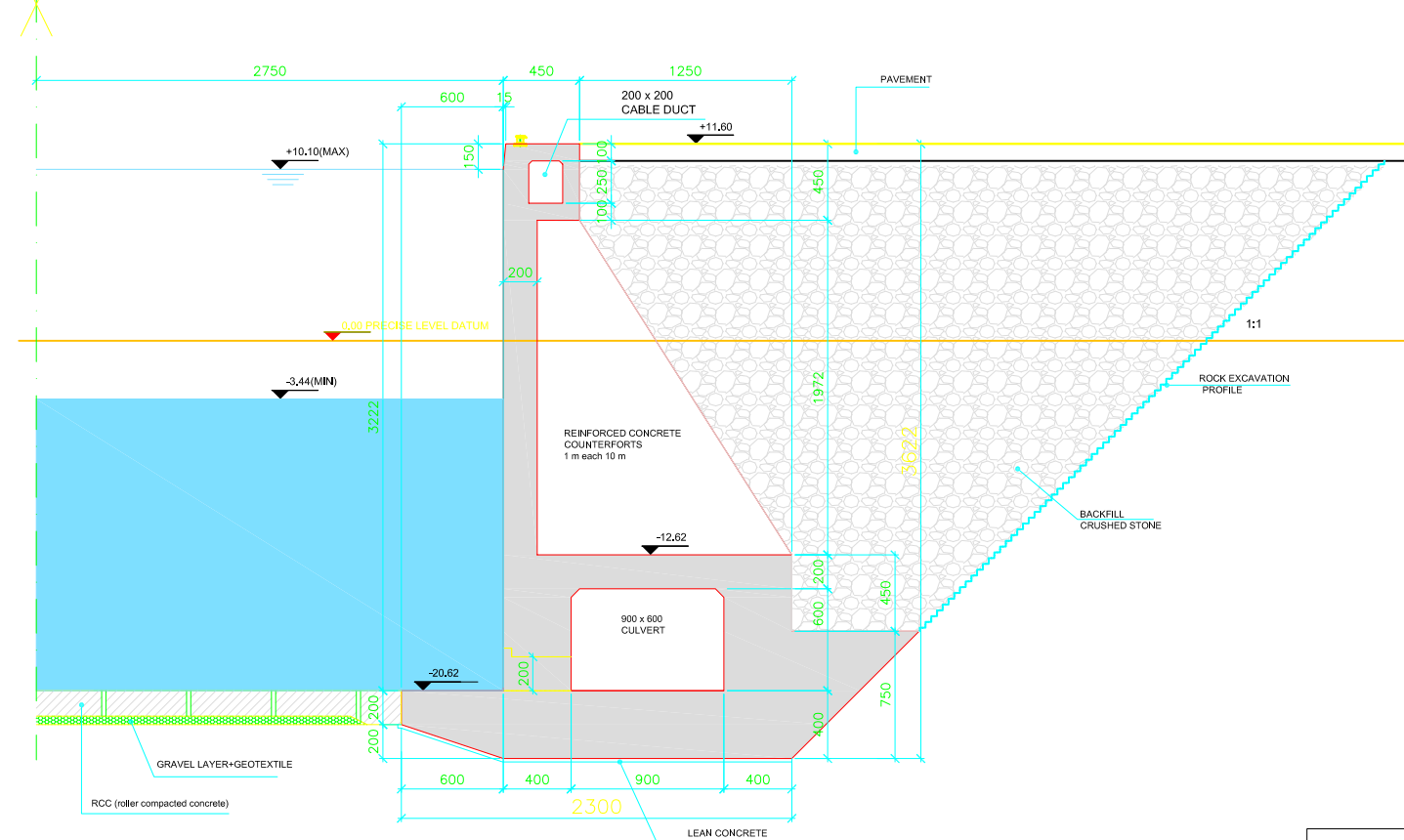
lock chamber 1: basalt rock



lock chamber 2: basalt rock



lock chamber 3: la boca



ALL DIMENSIONS ARE ON THE LEVEL OF CONCEPT DESIGN AND HAVE TO BE CHECKED AND VALIDATED DURING FURTHER AND DETAILED DESIGN
ALL DIMENSIONS ARE IN CENTIMETERS

CPP
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SBE

PORT OF ANTWERP

ACP
AUTORIDAD DEL CANAL DE PANAMA

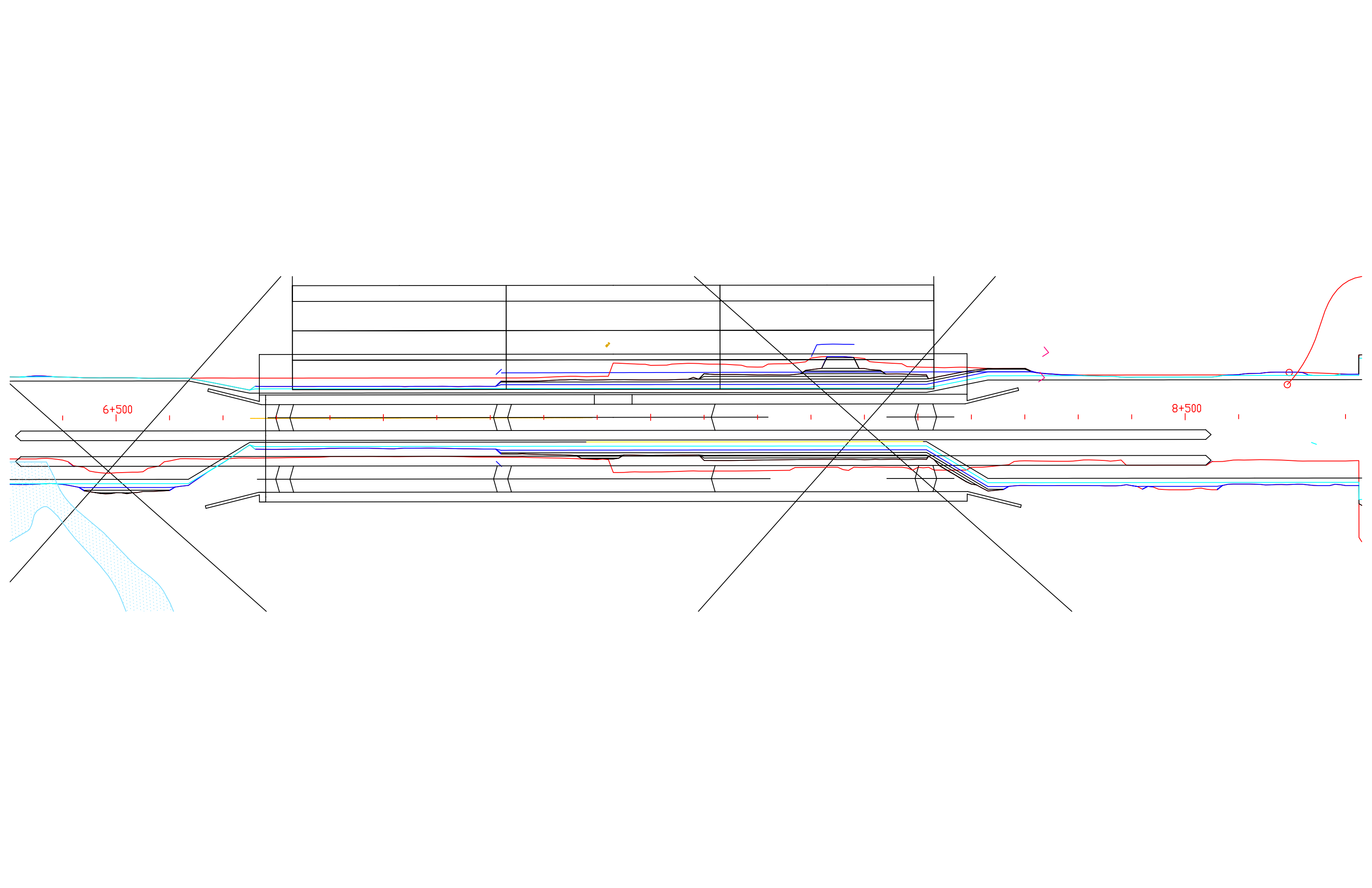
Division de Proyectos de Capacidad del Canal
Autoridad del Canal de Panama
Edificio 601
CROZAL
República de Panama

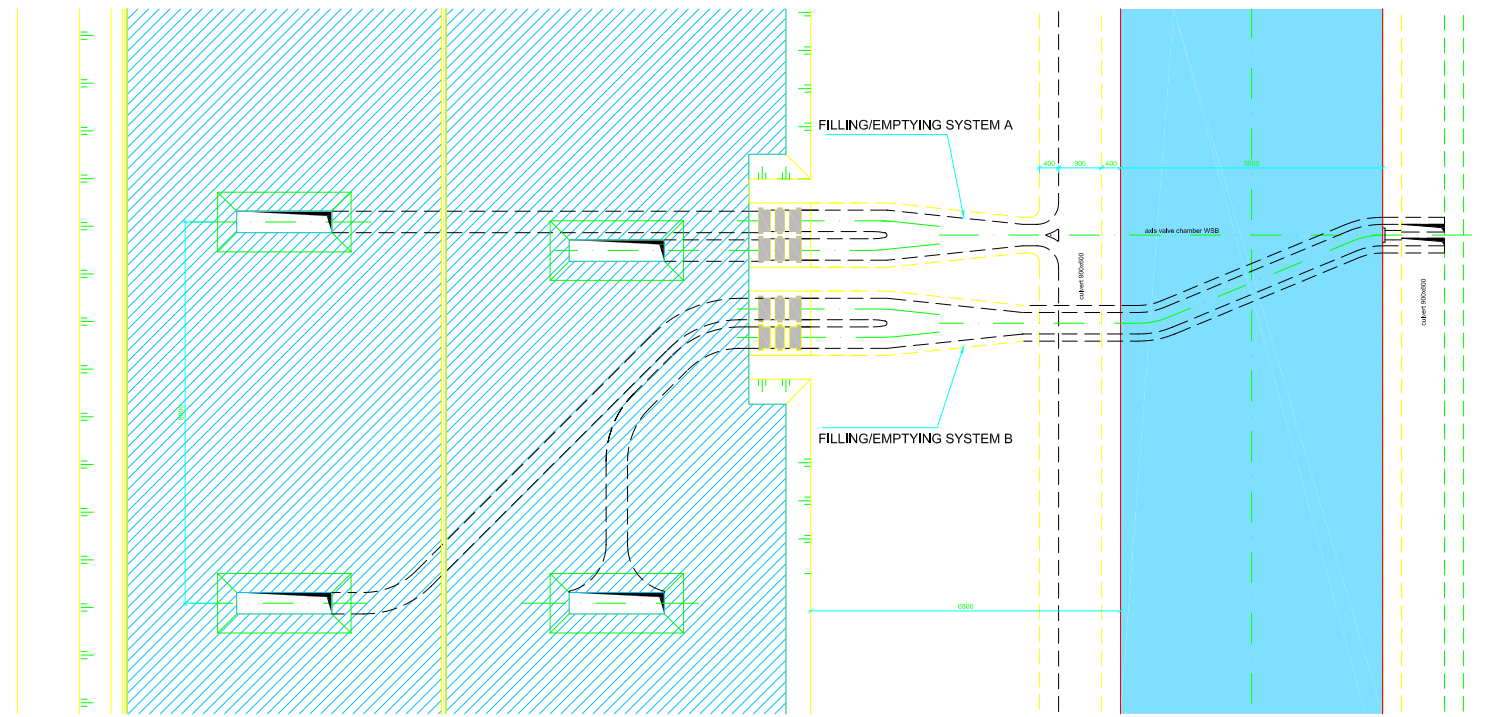
Diseño Conceptual de las Esclusas Post Panamax
Alternative Conceptual Design of
Pacific & Atlantic Post-Panamax Locks - 3x2 WSB

PACIFIC LOCKS COMPLEX (3x2 WSB)
Cross-sections Lock Walls

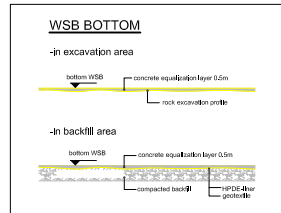
REV.	DATE	DESCRIPTION	DESIGN	CHECKED	APPROVED
B	15/07/20	FINAL REPORT	SET	ME	JOR
A	15/06/20	DRIFT FINAL REPORT - UPDATE	PM	ME	JOR
-	01/12/04	FIRST EDITION	PM	ME	JOR

Contract: SAA-150551 Scale: 1/200 Drawing n°: D4- B - 306 Rev.: B Folio: 1 / 1

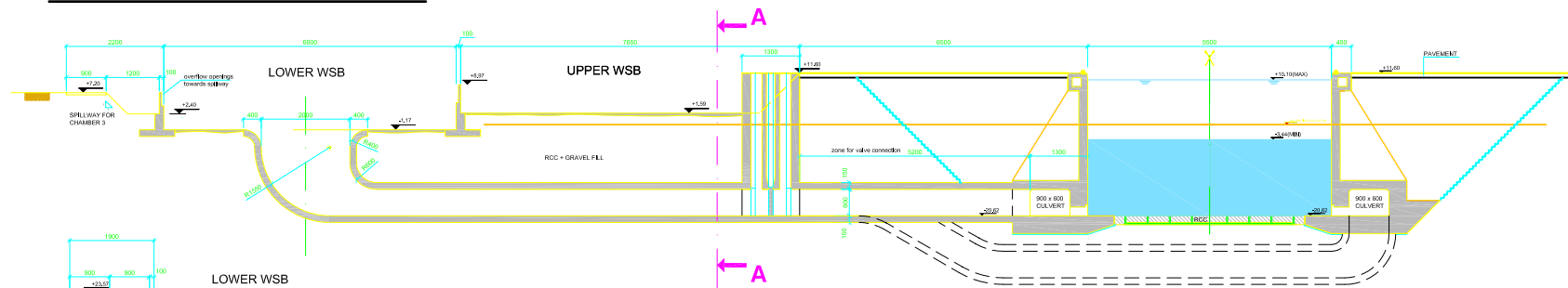




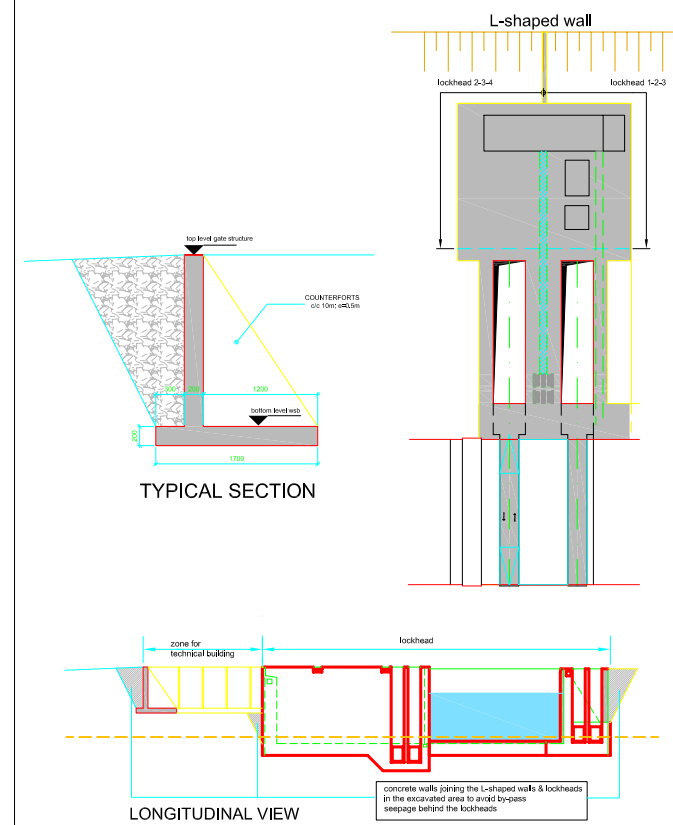
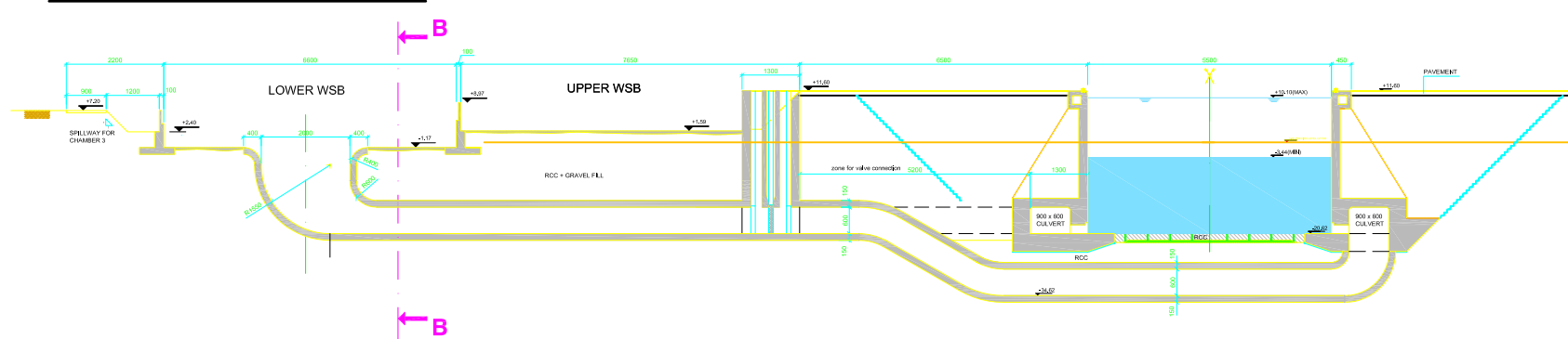
PLAN VIEW FILLING / EMPTYING SYSTEM



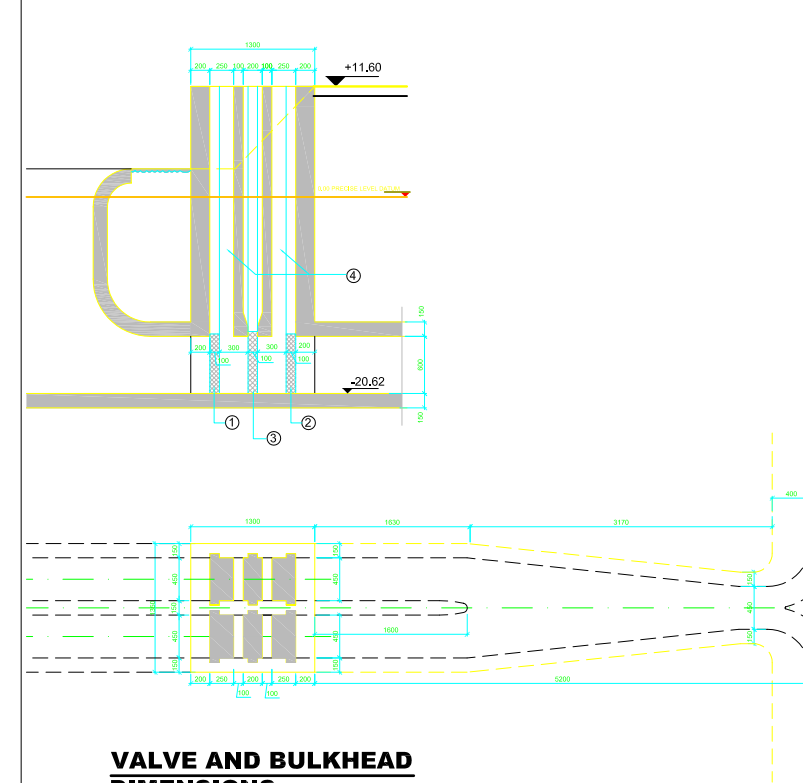
FILLING / EMPTYING SYSTEM A



FILLING / EMPTYING SYSTEM B



L-SHAPED WALLS BEHIND LOCK HEADS 1, 2, 3 and 4 (1/00)



VALVE AND BULKHEAD DIMENSIONS (1/250)

1 and 2: MAINTENANCE BULKHEADS
 3: WSB-VALVE
 4: MAINTENANCE SHAFTS TO REACH THE SPACE BETWEEN BULKHEADS AND VALVE

In normal operation, a WSB can be locked from the lock chamber by closing the 4 valves (there are 4 conduits connecting a WSB to the lock chamber).

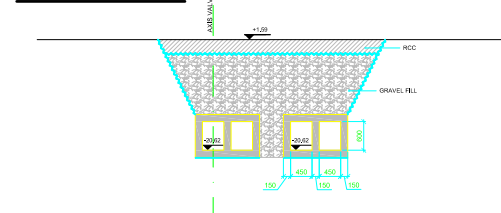
By keeping the 4 conduit valves in closed position, it is possible to empty one (or several) WSB by pumping. This can be done without interruption of the ship traffic through the locks. However, the hydraulic cylinders of the conduit valves are not designed to move the valves under such a head of water.

In case of trouble on one of the conduit valves, the bulkheads 1 and 2 must be lowered. Two WSB conduits have to be closed. Operation of the corresponding WSB can still go on by using the 2 remaining conduits.

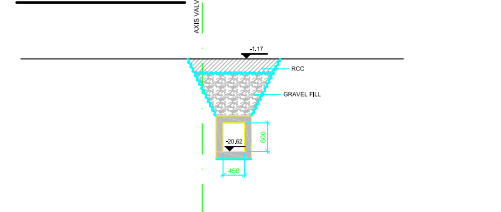
During maintenance, access on both sides of the valves is possible by using bulkheads 1 and 2 after emptying of the space between them.

Conduit valves and bulkheads are equipped with rubber / PTFE seals of the upstream and downstream type.

SECTION A-A



SECTION B-B



NOTE :
 THE FILLING AND EMPTYING SYSTEM IS SHOWN WITH LEVELS FOR CHAMBER 3

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 ALL DIMENSIONS ARE IN CENTIMETERS

Diseño Conceptual de las Esclusas Post Panamax
 Alternative Conceptual Design of Pacific & Atlantic Post-Panamax Locks - 3x2 WSB

PACIFIC LOCKS COMPLEX (3x2 WSB)
 WATER SAVING BASINS - FILLING AND EMPTYING SYSTEM
 SIDE BY SIDE CONDUITS DISPOSITION

Contract	Scale	Drawing n°:	Rev:	Folio
SA-15005	1/500	D4- C - 303	B	1 / 1