

COMPANY PROFILE 2025



The sea — our responsibility

SEALINES

www.seatec-sarl.com

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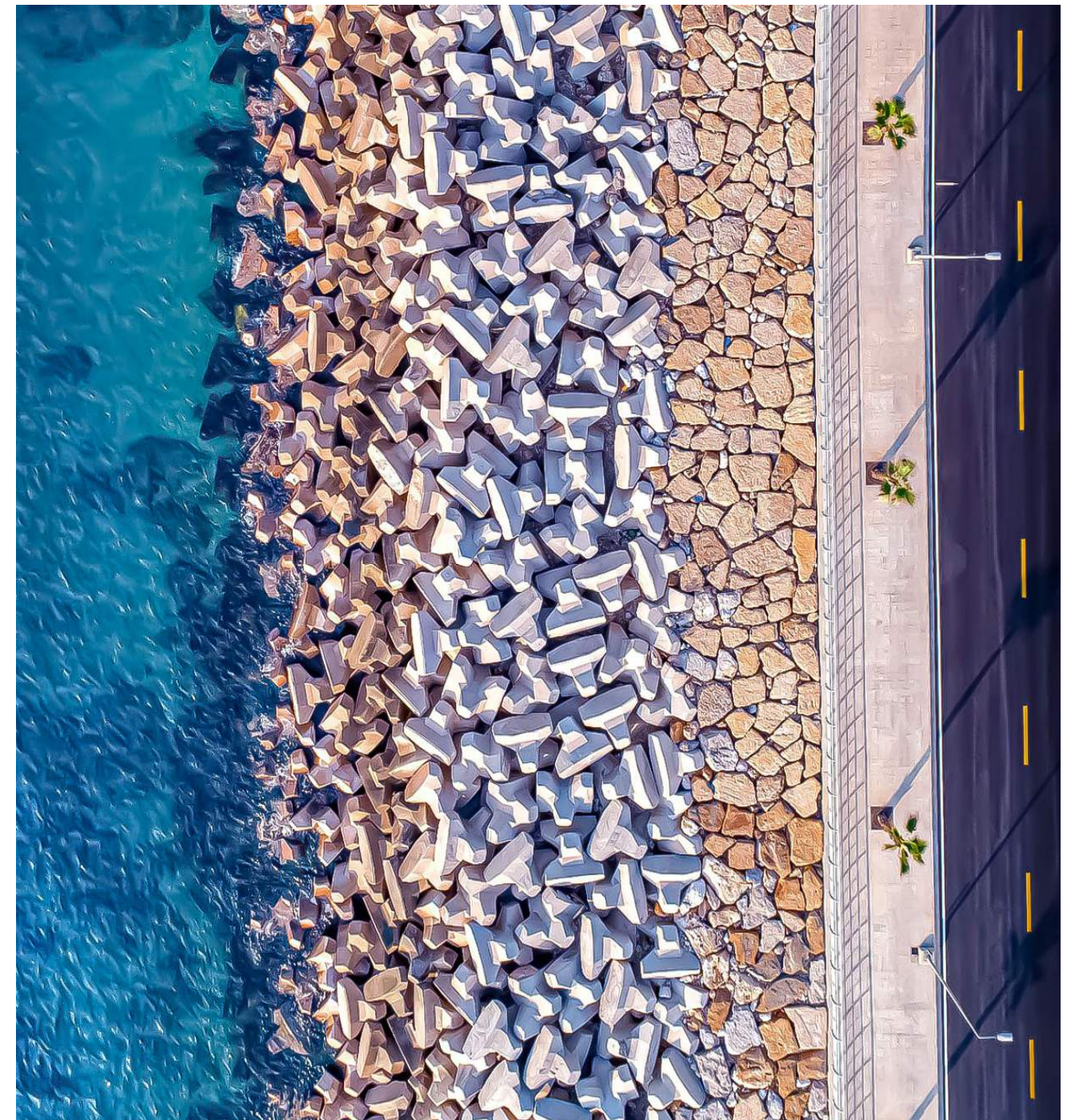
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SEATEC

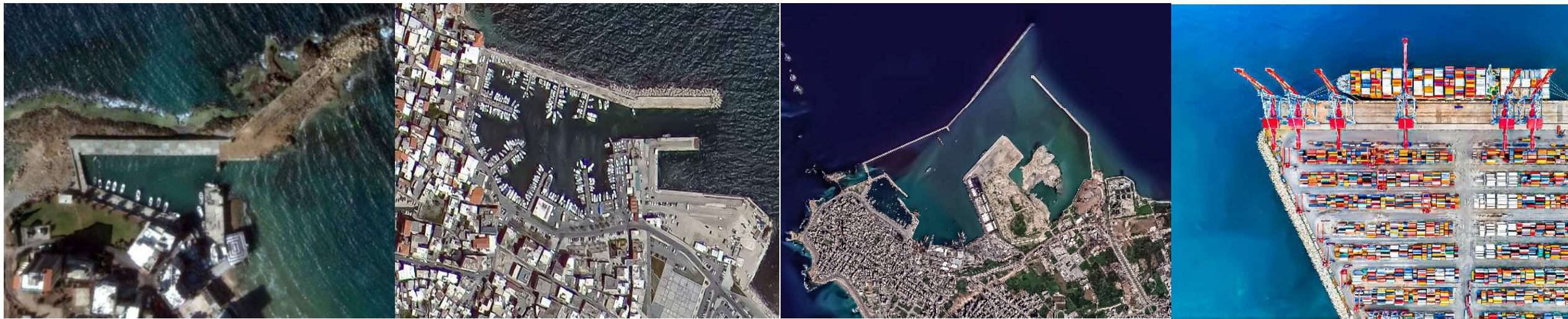
provides its clients with design and supervision services in coastal and port engineering, covering surveying, site investigation, master planning, numerical modeling, tender and detailed design, feasibility and EIA studies, permitting, construction planning, management and supervision.

Serving public as well as private sectors since 2000, SEATEC sarl is dedicated to give its clients the best engineering assistance.

SEATEC sarl operates in the EU territory through its subsidiary in Cyprus, S. SEATEC (Cyprus) Ltd.



COMPANY HISTORY



PROJECTS LOCATION



Countries ●	
Middle East	AFRICA
Lebanon	Egypt
Jordan	Libya
Syria	Tunis
GULF	Algeria
UAE	Djibouti
KSA	Ivory Coast
Qatar	Cameroon
Oman	Nigeria
ASIA	EUROPE
India	Cyprus

GET IN TOUCH WITH US

5

HEAD OFFICE

SEATEC sarl

Beaini Center, 1st floor, Down Town,
31 Ernest Renan St.,
PC 4504 Byblos, LEBANON

Ph : +961 9 55 00 22
Fax : +961 9 55 00 44
Mob : +961 3 29 10 30
Web : www.seatec-sarl.com
E-mail : seatec@seatec-sarl.com

SUBSIDIARY OFFICE

S. SEATEC (CYPRUS) Ltd

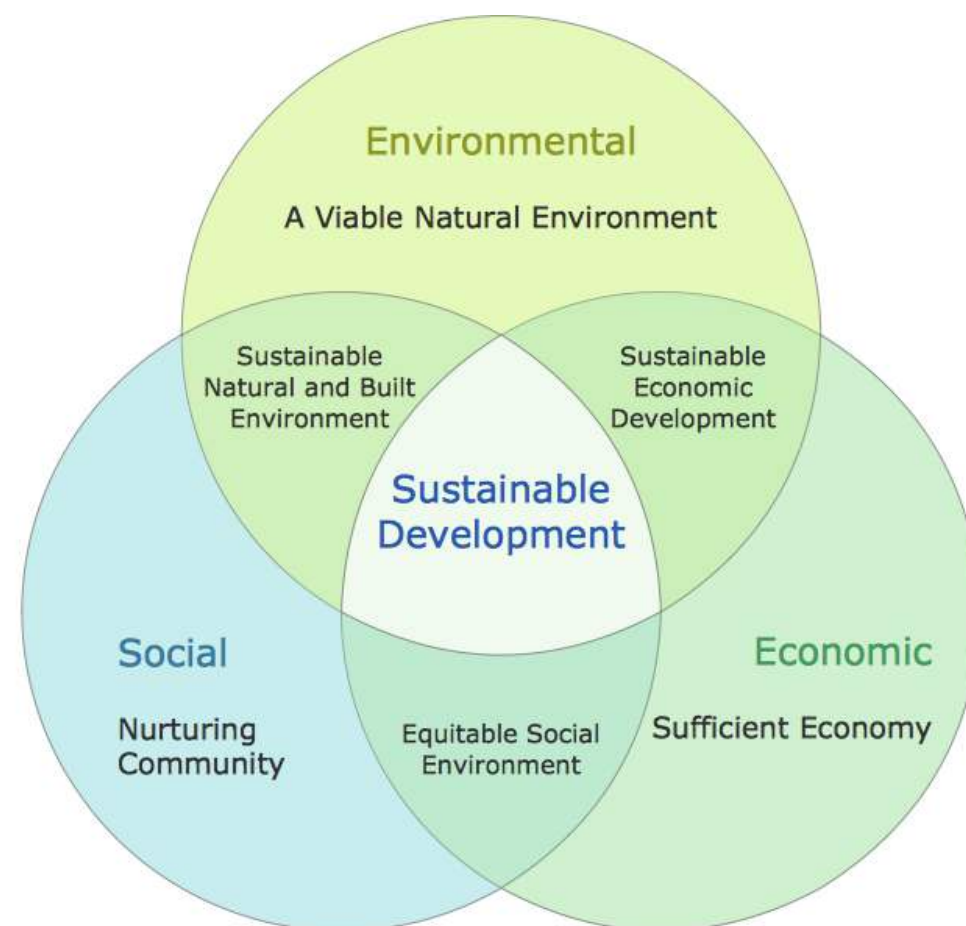
Michail Olympiou, 26 Dali,
2540 Nicosia, CYPRUS



VISION 01

SUSTAINABLE ENGINEERING SOLUTIONS

"Leading the way in creating sustainable and resilient engineering solutions that harmonize with nature and withstand the test of time"



VISION 02

ECO-FRIENDLY AND GREEN PRACTICES

"Pioneering eco-friendly and green solutions that preserve coastlines and promote a sustainable future for generations to come"



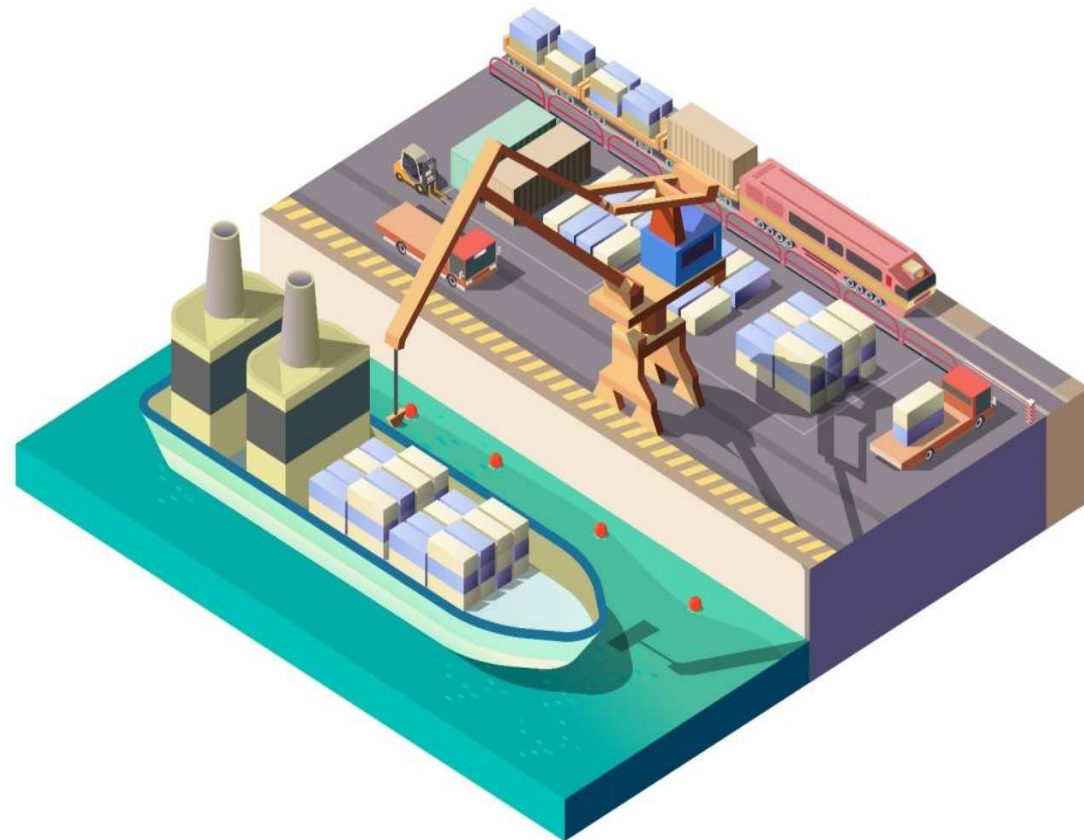
COMPANY VISION

7

VISION 03

SMART PORTS

"Transforming ports into smart, efficient, and interconnected hubs that drive global trade and economic growth".



VISION 04

INNOVATIVE COASTAL DEVELOPMENTS

"Fostering innovative coastal developments that boost local economies and enhance the quality of life for coastal communities".



INTRO

SERVICES

SEATEC sarl (www.seatec-sarl.com) is a multi-disciplinary engineering company, operating since 2000, mainly specialized in the design and supervision of coastal and ports projects, covering :

- Ports: commercial, cruise, marinas, fishing, industrial, naval bases...
- Specialized Terminals: Containers, general cargo, bulk, Agri bulk, oil and gas...
- Urban Waterfronts developments
- Coastal protections
- Dredging and reclamation works
- Beaches (protection and artificial nourishment)
- Offshore pipelines (outfalls, intake pipes...)
- Mooring structures, ship lifts
- Marine infra (Breakwaters, quay walls, platforms, slipways...)



CAPACITY OF THE COMPANY

9

SERVICES

SEATEC offers a range of services through an experienced team in coastal and port engineering field :

- Site selection and evaluation
- Topographic and bathymetric survey
- Underwater inspection
- Rehabilitation of existing infrastructure
- Development of new infrastructure and facilities
- Master planning (future development) and phasing
- 3D presentations (views and videos)
- Feasibility studies
- Design optimization
- Design review /value engineering
- Preliminary and detailed design
- Execution drawings
- Numerical modelling
- Environmental Impact Assessment (EIA) studies
- Permitting and consents from relevant public authorities
- Tender documents
- Assistance to clients in selection of contractors



SERVICES

- Supervision services, management and supervision of construction sites in accordance with health and safety guidelines, through an experienced team of site engineers, supervisors, surveyors and divers
- Supervising contractors, subcontractors and work activities
- Compliance of executed works with the relevant building regulations, quality standards
- Construction permit and with the specified technical documentation and guidelines
- Issuing of information and instructions on behalf of the client
- Validate of contractor's payments
- Hazards and risks assessment and Prevention of construction errors
- Carrying out regular inspections and raising safety concerns at the appropriate level
- Keeping construction on schedule, construction errors
- Completing records for site reports
- Resolving problems and implementing improvements
- Works handing over certificate



OUR TEAM

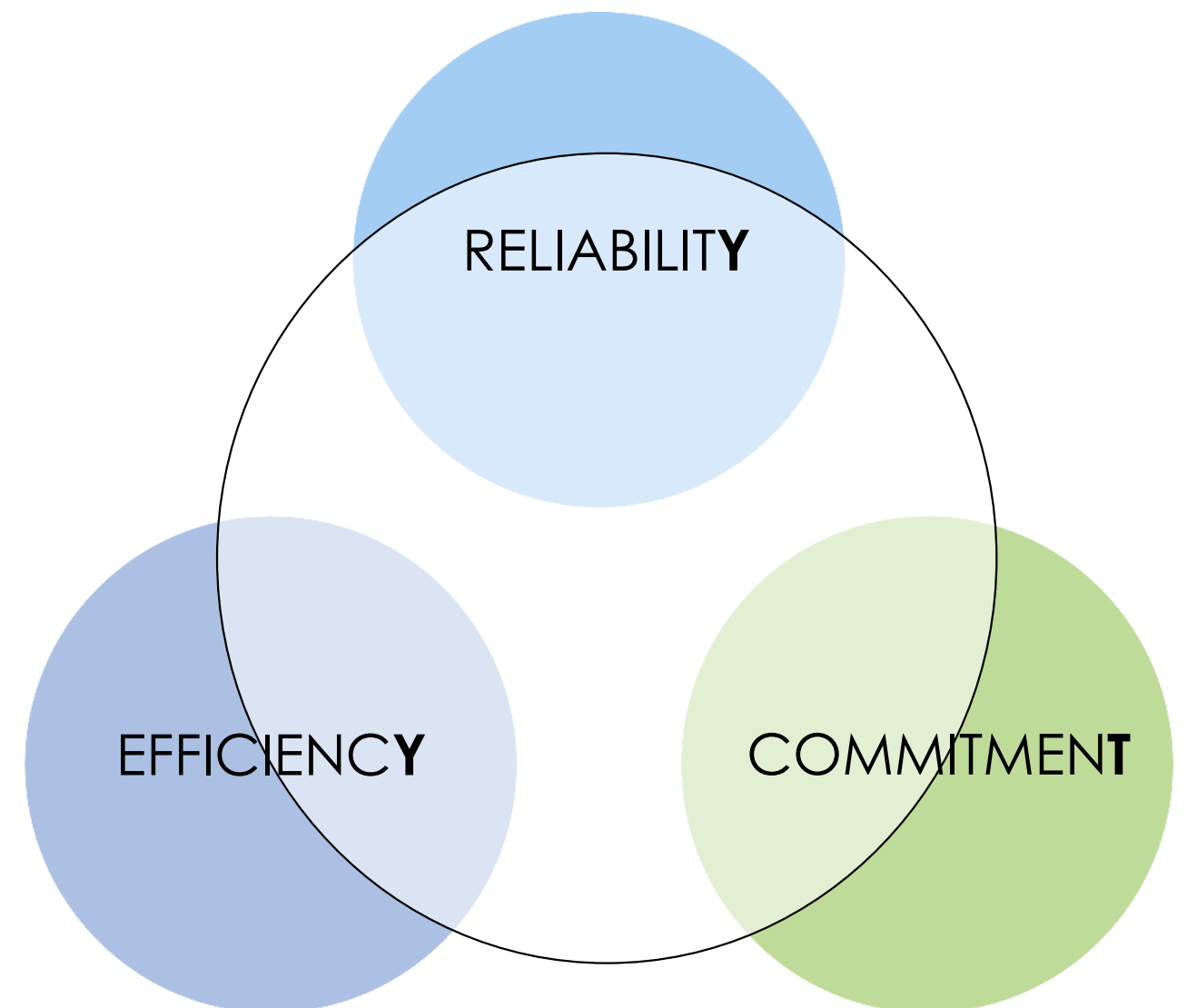
SEATEC have an experienced Team for in house design, covering all coastal and ports engineering aspects, geotechnical analysis, numerical modeling, works supervision..., keeping an excellent cooperation with leading European maritime and hydraulic laboratories for 2D/3D physical modeling.

A strong team spirit with the Client will be essential, working as part of a single entity rather than as competent individuals.

The team of experts is mostly composed of people involved in our recent projects, carefully selected for their:

- Experience in the field of expertise
- Efficiency
- Experience in working with each other
- Ability to advise both public and private Clients

Moreover, SEATEC can mobilize on short notice its technical resources when and where such expertise is needed.



OUR NUMBERS



SINCE
2000



COUNTRIES
+16



CLIENTS
+50



PROJECTS
+450

SEALINES



Slowways are not shown in this section

TERMINAL 829

14

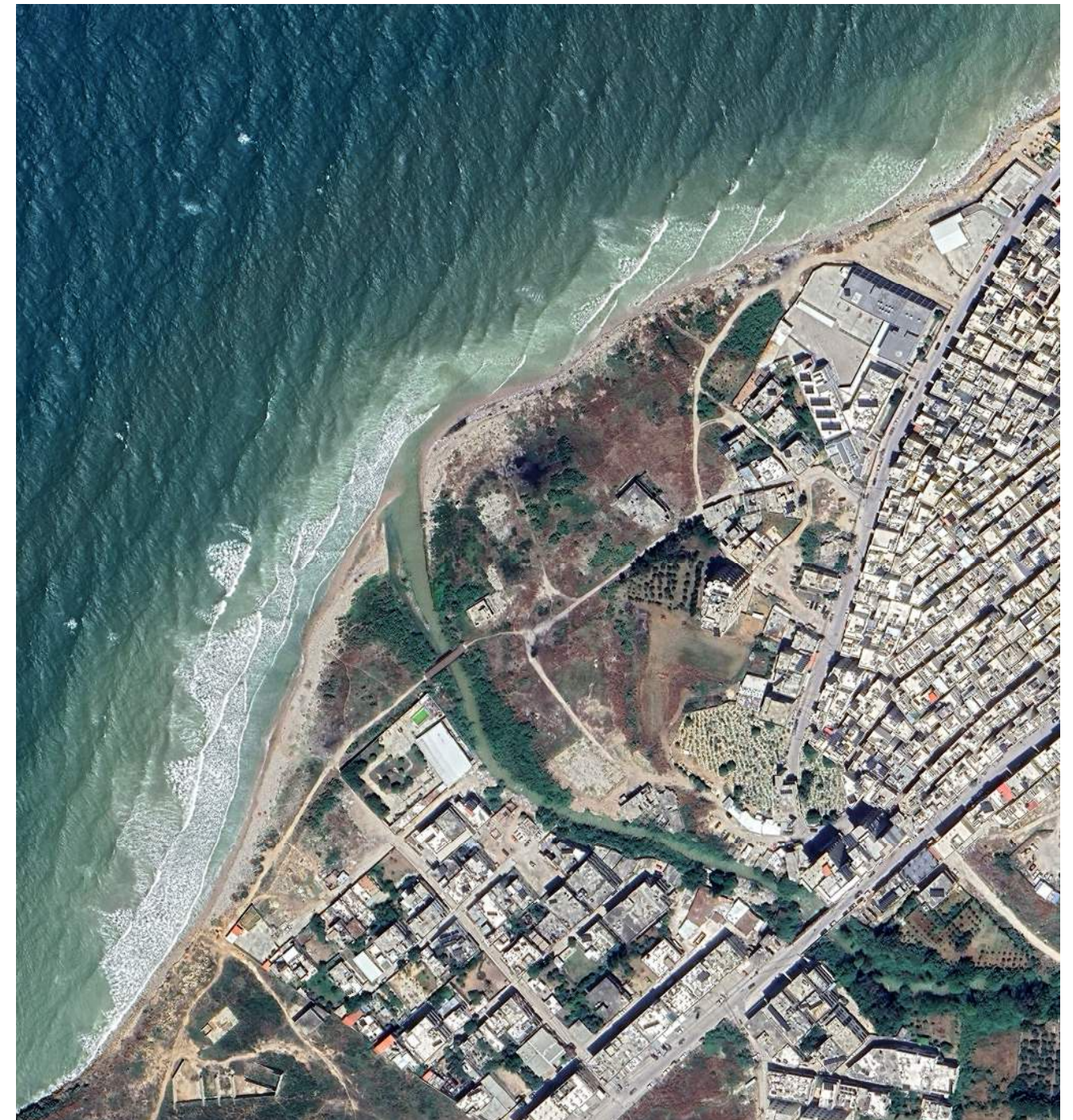
Client Owners Plot 829
Location LEBANON – Zouk Bhannine
34°30'40" N
35°57'14" E
Consultant SEATEC sarl

Terminal 829

Year 2025
Design / Surveying / Permitting

- Master Plan
- Offshore pipelines (L=750m) for fuel/oil products
- Tanks for fuel/oil/gas storage
- Buildings / workshop / lab buildings in the private plot
- Offshore berth (CBM) for tankers
- Reclaimed land with rocky protection (L=220m)
- Underground passage
- Bathymetric survey (510,000m²)
- Decree for the Public maritime domain occupancy (Pipelines, tanker berth, platform...)
- Drawings / BoQ / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Coastal Protections / Revetments / Surveying / Permitting



IPT TERMINAL DECREE

15

Client IPT (Issa Petroleum trade)

Location LEBANON – Amchit
34°08'27" N
35°37'44" E

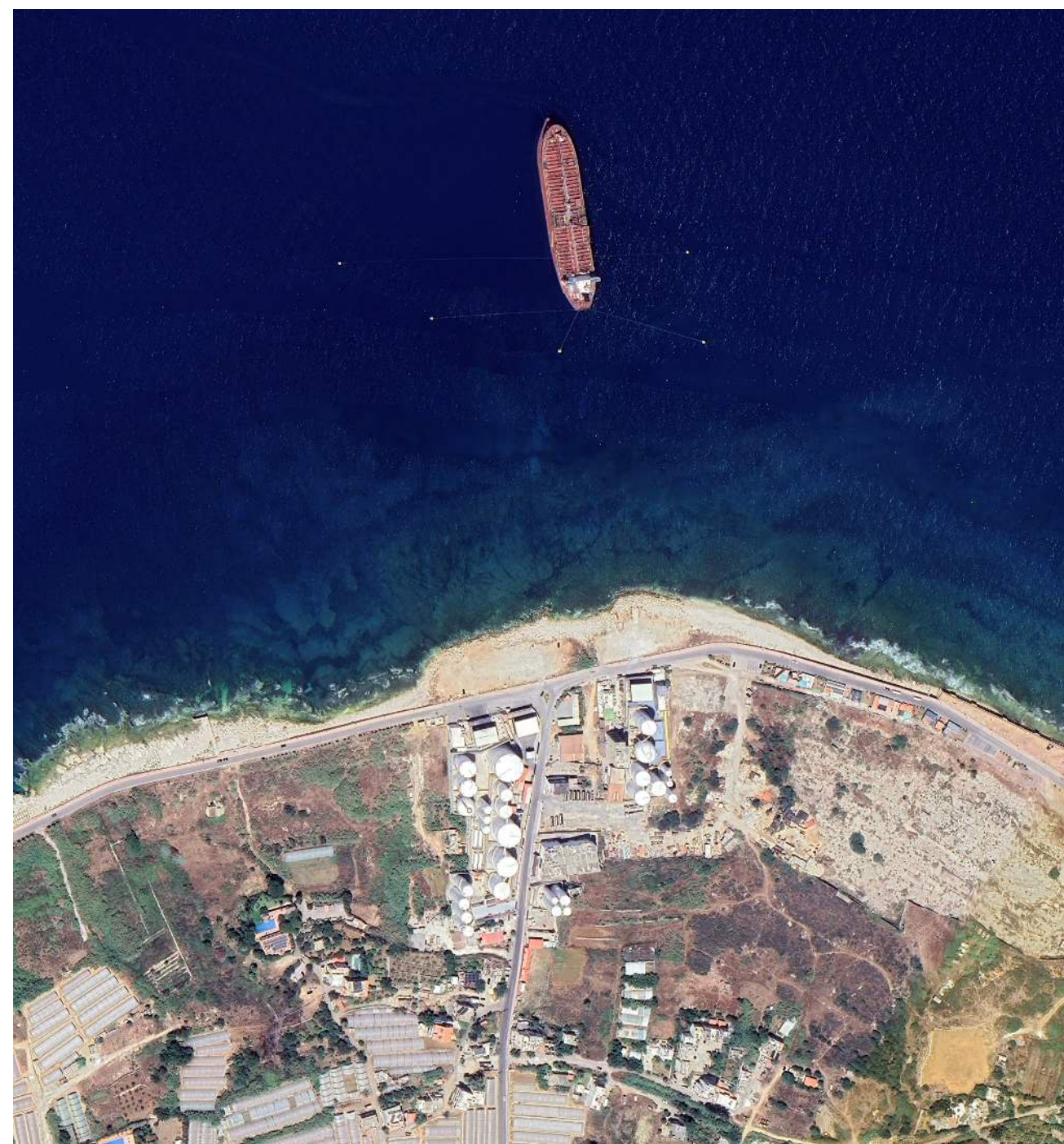
Consultant SEATEC sarl

IPT Terminal Decree

Year 2024
Surveying / Permitting

- Decree for the Public maritime domain occupancy (Sealines, tanker berth, platform...)
- Topographic survey
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



LEBANON ENERGY TERMINAL DECREE

16

Client LEBANON ENERGY srl

Location LEBANON – Amchit
34°08'27" N
35°37'44" E

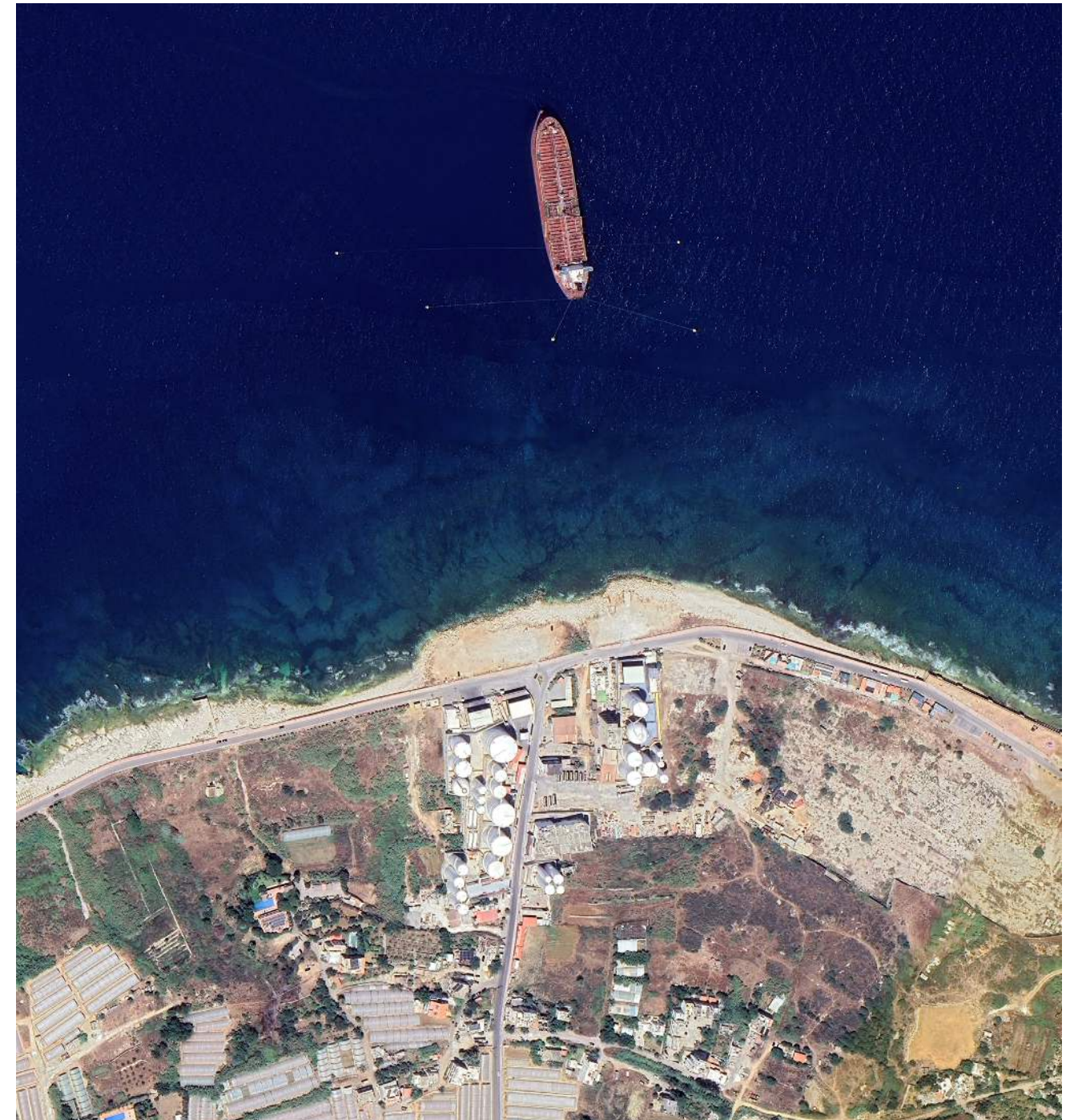
Consultant SEATEC srl

LEBANON ENERGY Terminal Decree

Year 2024
Surveying / Permitting

- Decree for the Public maritime domain occupancy (Sealines, tanker berth, platform...)
- Topographic survey
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures /
CBM / Surveying / Permitting



LAF BEIRUT NAVAL BASE FLUSHING SYSTEM

17

Client LEBANESE REPUBLIC
Ministry of Defense
Lebanese Army Forces (LAF)

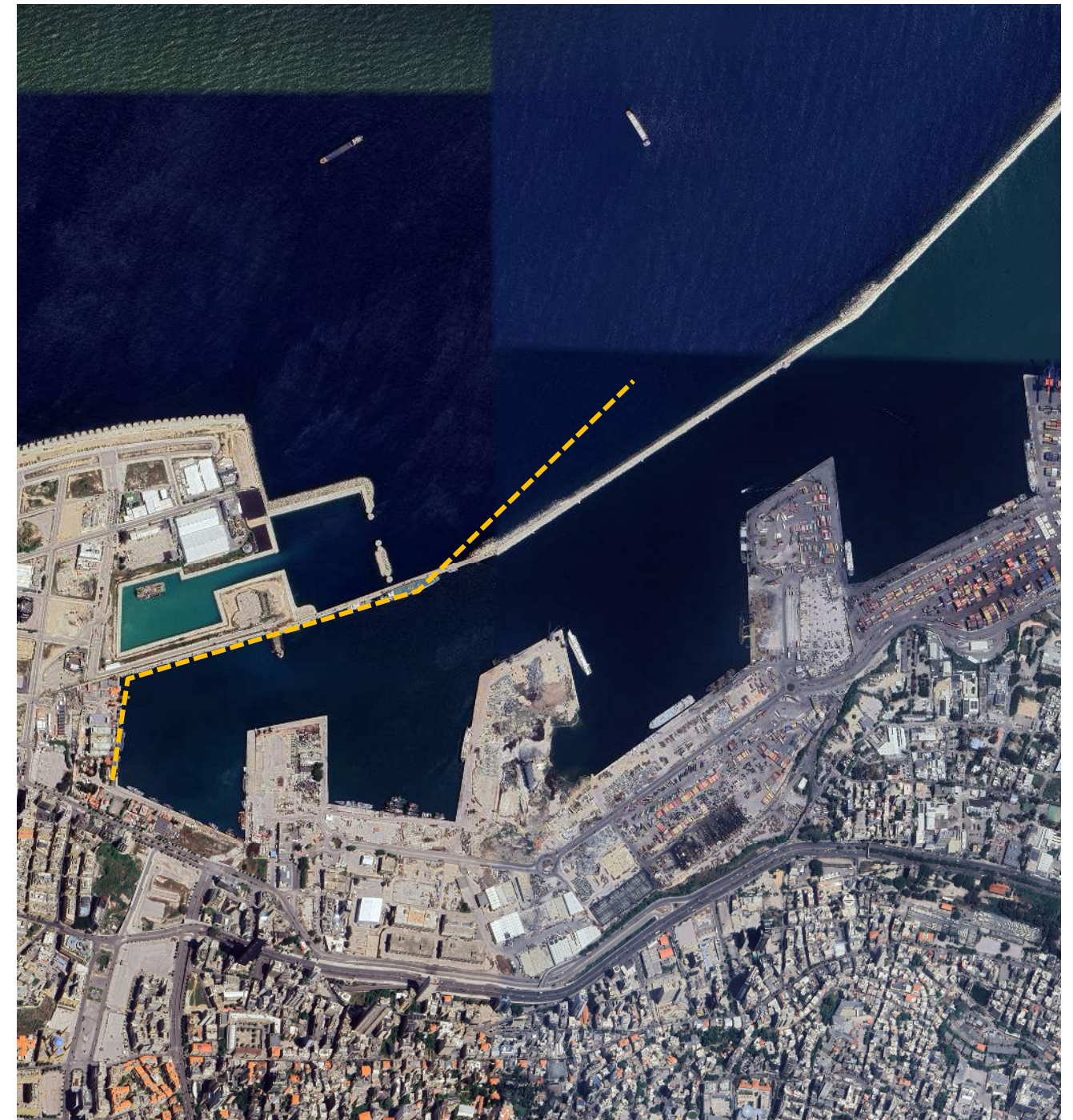
Location LEBANON – Beirut
33°54'06" N
35°30'33" E

Consultant SEATEC sarl

LAF Beirut Naval Base Flushing System

Year 2024
Conceptual Design

- Flushing system of basin N1
- Buried channel (L=200m)
- Collection chamber
- Marine outfall (L=1,420m)
- Drawings / BoQ



Ports / Naval Bases / **Sealines** / **Marine Outfalls**

IPT TERMINAL CBM

Client LEBANESE REPUBLIC
Ministry of Public Works and Transport
Directorate General of Land and Maritime Transport

IPT (Issa Petroleum trade)

Location LEBANON – Amchit
34°08'27" N
35°37'44" E

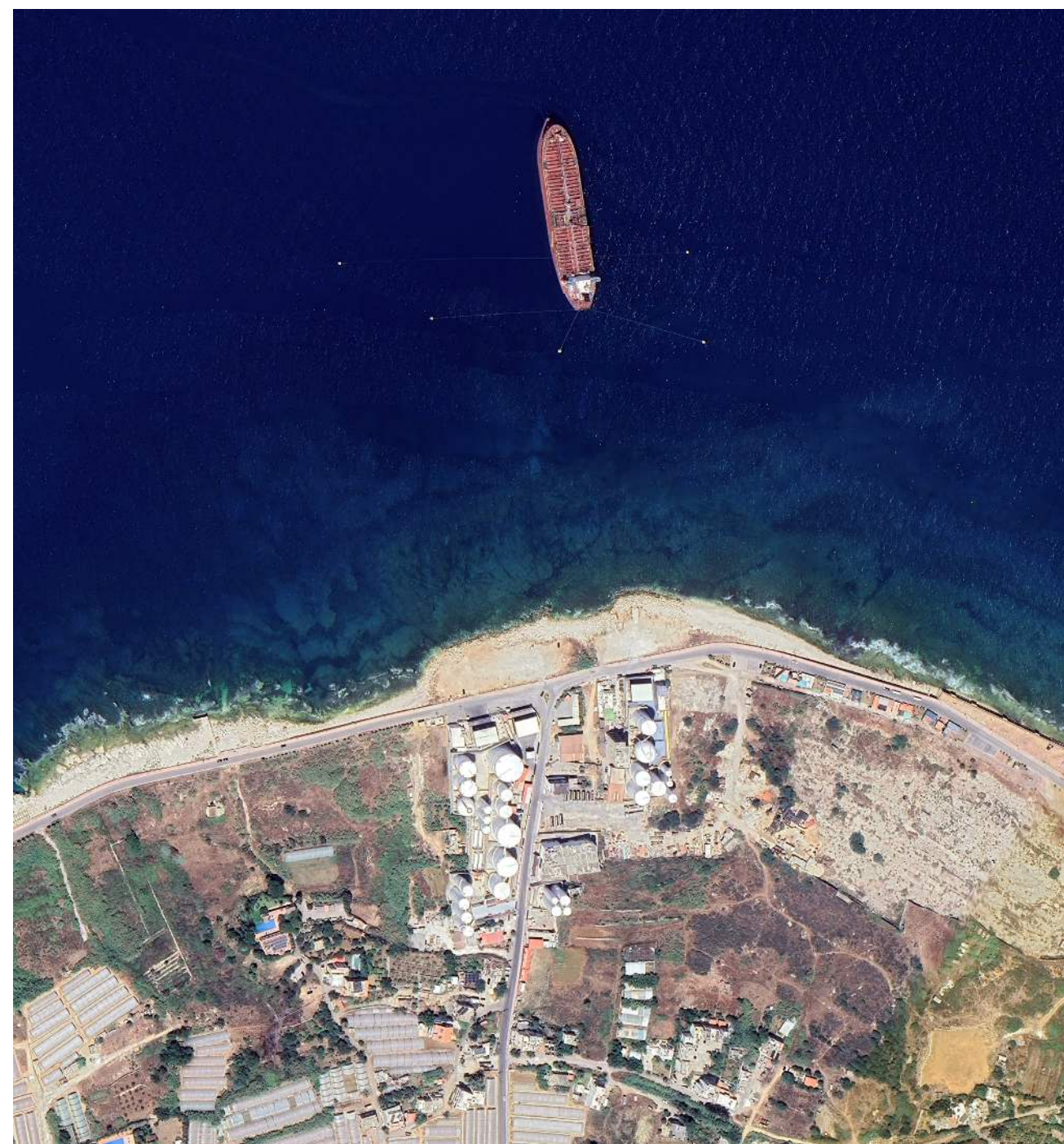
Consultant SEATEC sarl

IPT Terminal CBM

Year 2022
Design

- Assessment of IPT Terminal CBM safety and feasibility for tankers maneuvering and mooring operations, regarding existing depth
- Drawings / Reporting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM



LIQUIGAS TERMINAL CBM

Client LIQUIGAS srl
Location LEBANON – Zouk
33°58'03" N
35°36'01" E
Consultant SEATEC srl

LIQUIGAS Terminal CBM

Year 2022
Design

- Assessment of Liquigas Terminal CBM safety and feasibility for tankers maneuvering and mooring operations, regarding existing depth
- Dredging works
- Drawings / Reporting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Dredging



MEDCO TERMINAL - 2

20

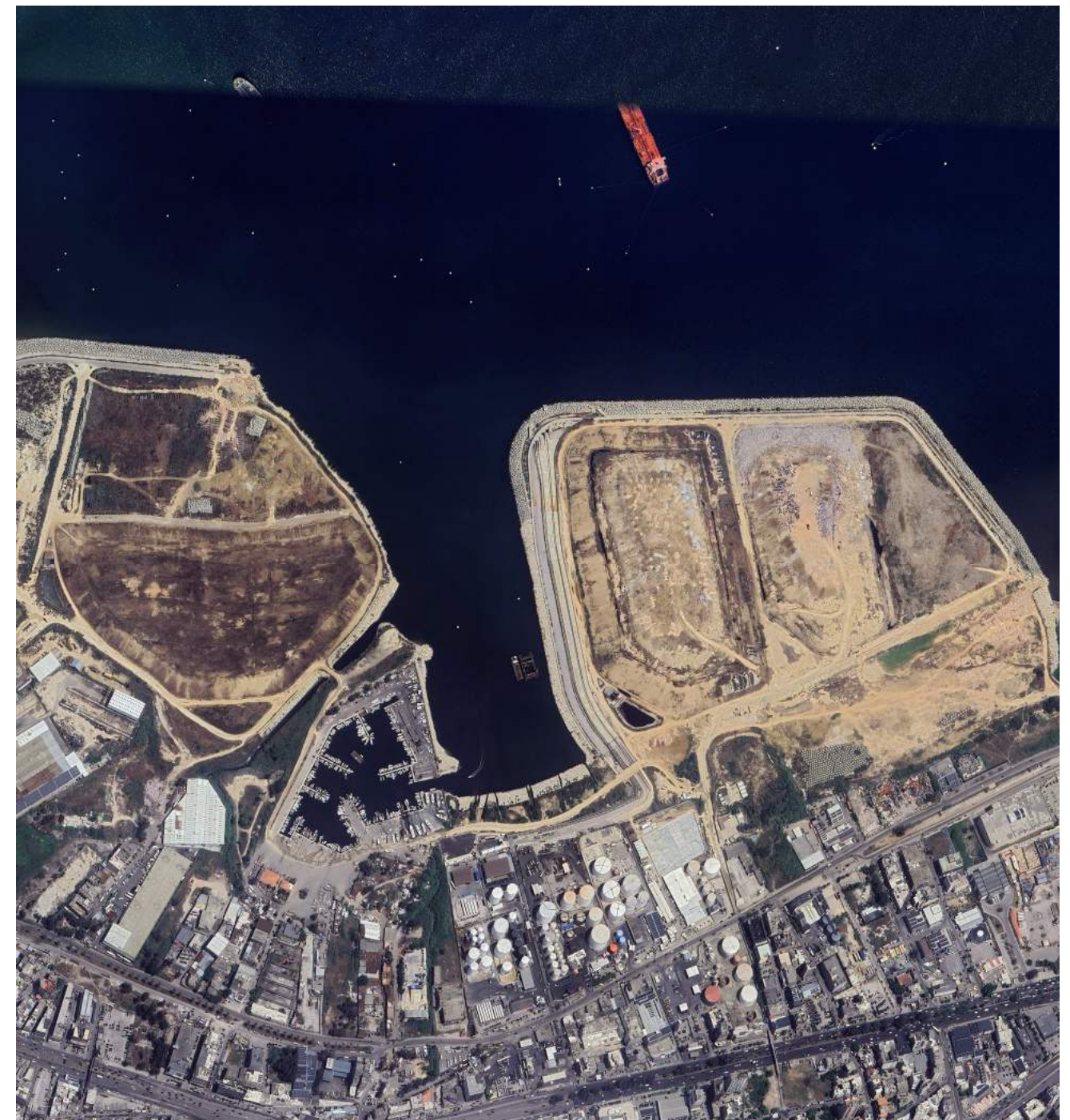
Client MEDCO sal
Location LEBANON – Bauchriyeh
33°53'47" N
35°33'12" E
Consultant SEATEC sarl

MEDCO Terminal - 2

Year 2020
Permitting

- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Decree modification for onshore, offshore pipelines and tankers berth relocation in the public maritime domain
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Permitting



WARDIEH TERMINAL - 2

21

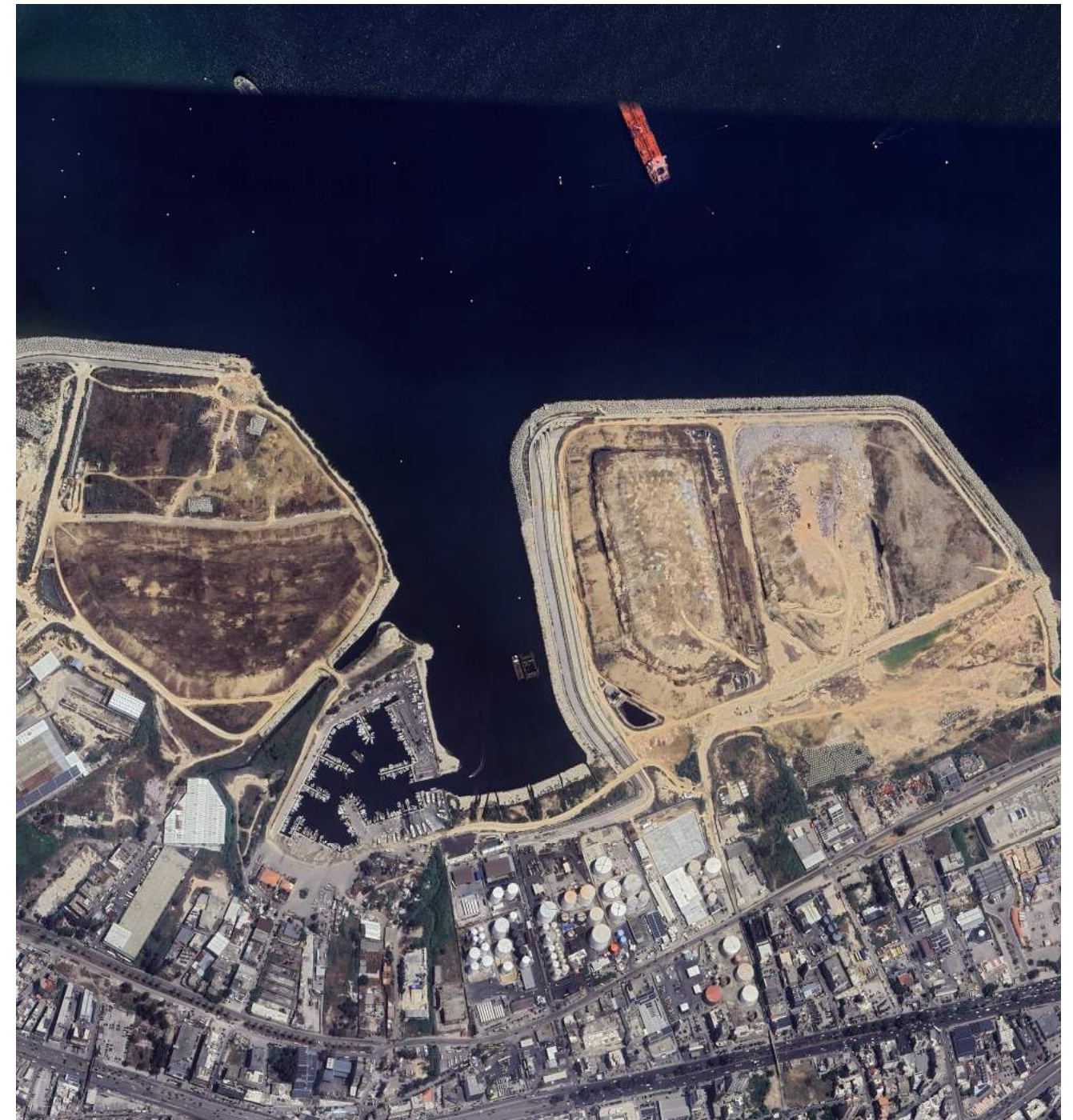
Client Wardieh Holding sal
Location LEBANON – Bauchriyeh
33°53'57" N
35°33'18" E
Consultant SEATEC sarl

WARDIEH Terminal - 2

Year 2019
Permitting

- Decree modification of the Public maritime domain occupancy as per the new location of sealine and berthing CBM
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Permitting



TOTAL LIBAN TERMINAL - 3

22

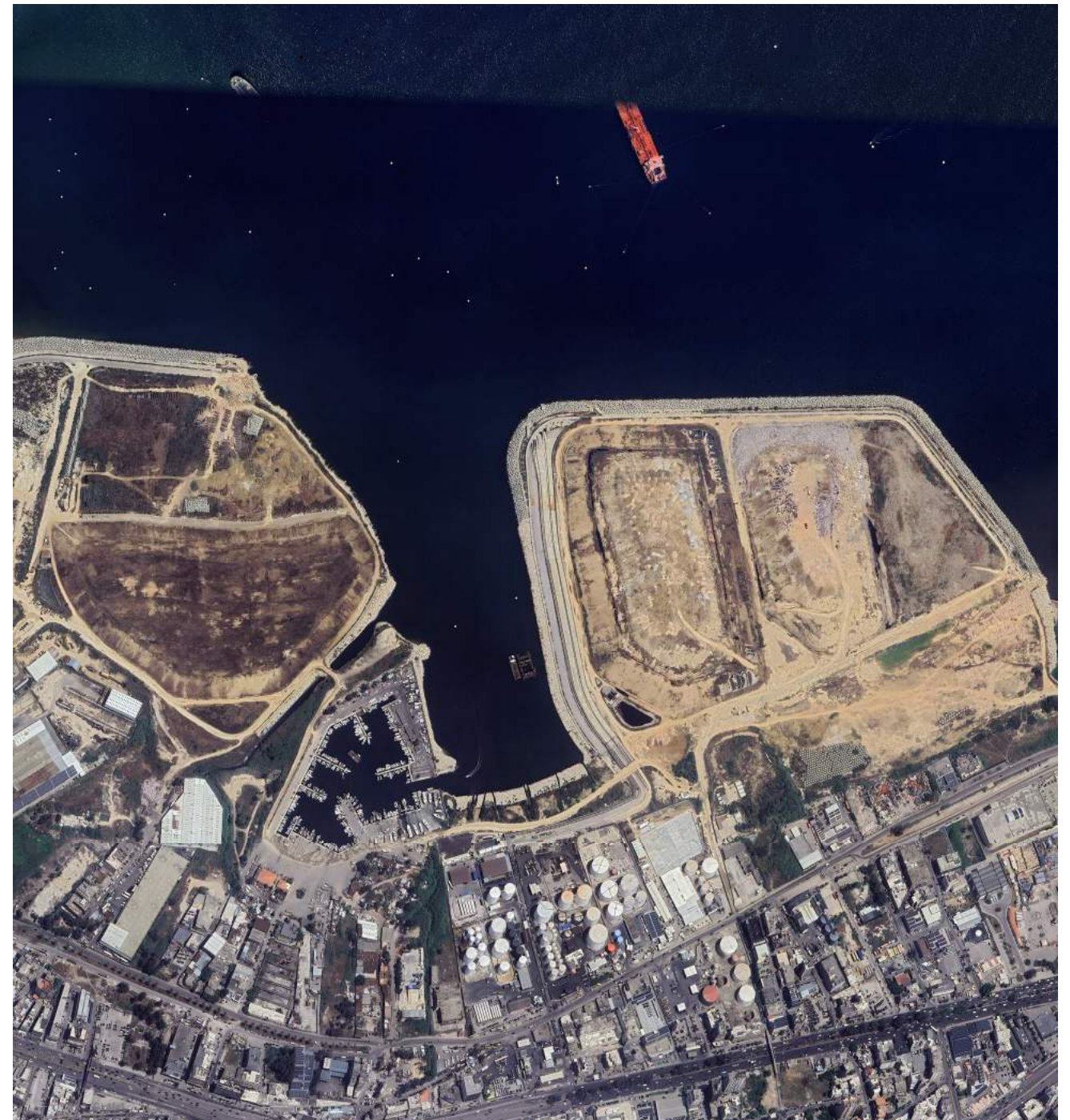
Client TOTAL LIBAN sal
Location LEBANON – Zouk
33°58'03" N
35°36'01" E
Consultant SEATEC sarl

TOTAL LIBAN Terminal - 3

Year 2019
Permitting

- Decree modification of the Public maritime domain occupancy as per the new location of sealine and berthing CBM
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Permitting



UNITERMINALS - 2

23

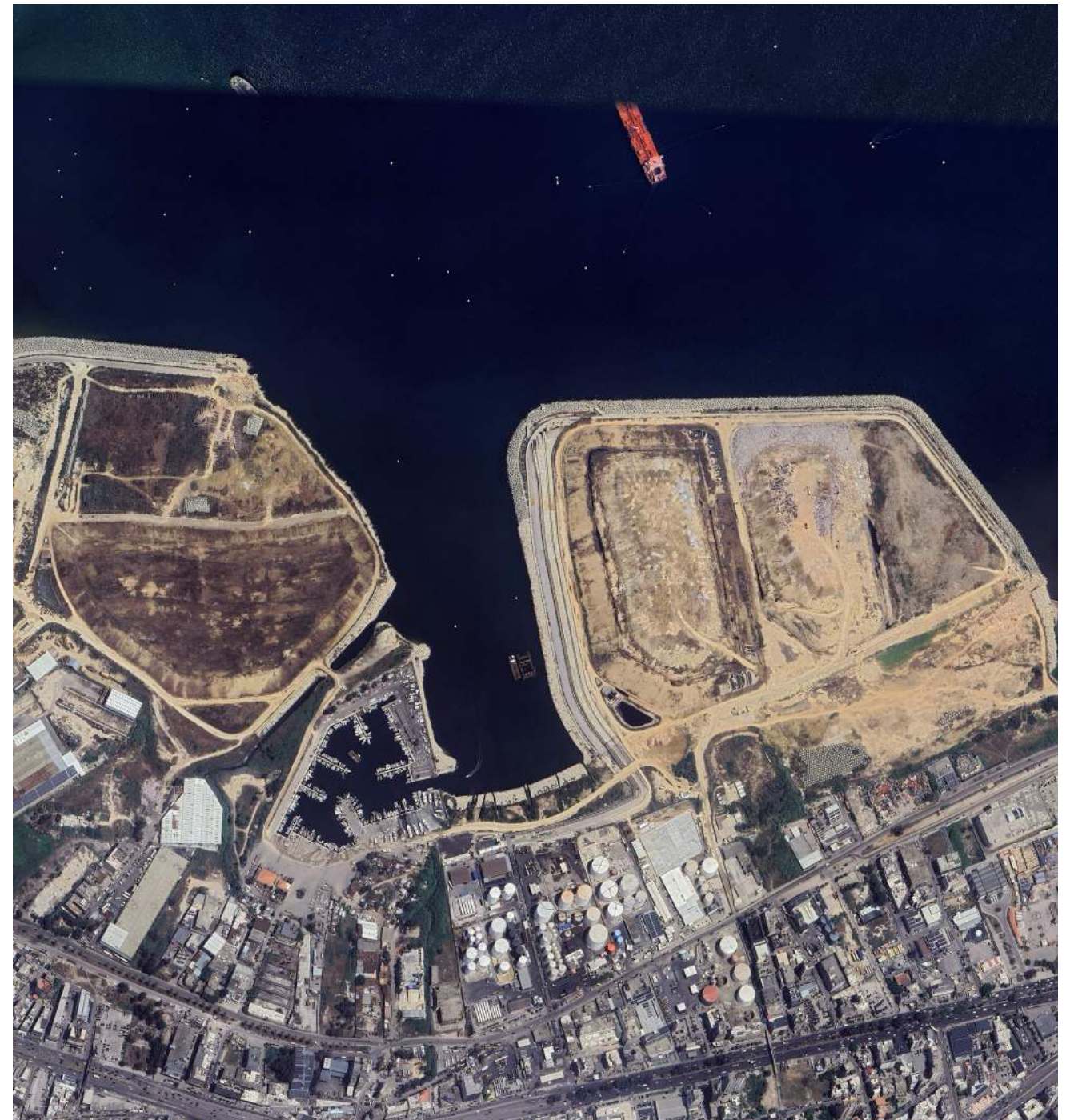
Client UNITERMINALS sal
Location LEBANON – Bauchriyeh
33°53'56" N
35°33'13" E
Consultant SEATEC sarl

UNITERMINALS - 2

Year 2019
Permitting

- Decree modification of the Public maritime domain occupancy as per the new location of sealine and berthing CBM
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Permitting



COGICO TERMINAL - 2

24

Client COGICO sal
Location LEBANON – Jieh
33°39'00" N
35°24'35" E
Consultant SEATEC sarl

COGICO Terminal - 2

Year 2019
Surveying / Permitting

- Topographic survey for the area occupied in the public maritime domain
- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)



Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures /
CBM / Surveying / Permitting

EMERGENCY MARINE OUTFALL AT DAR MREISSE

25

Client LEBANESE REPUBLIC
Ministry of Interior and Municipalities
Municipality of Beirut

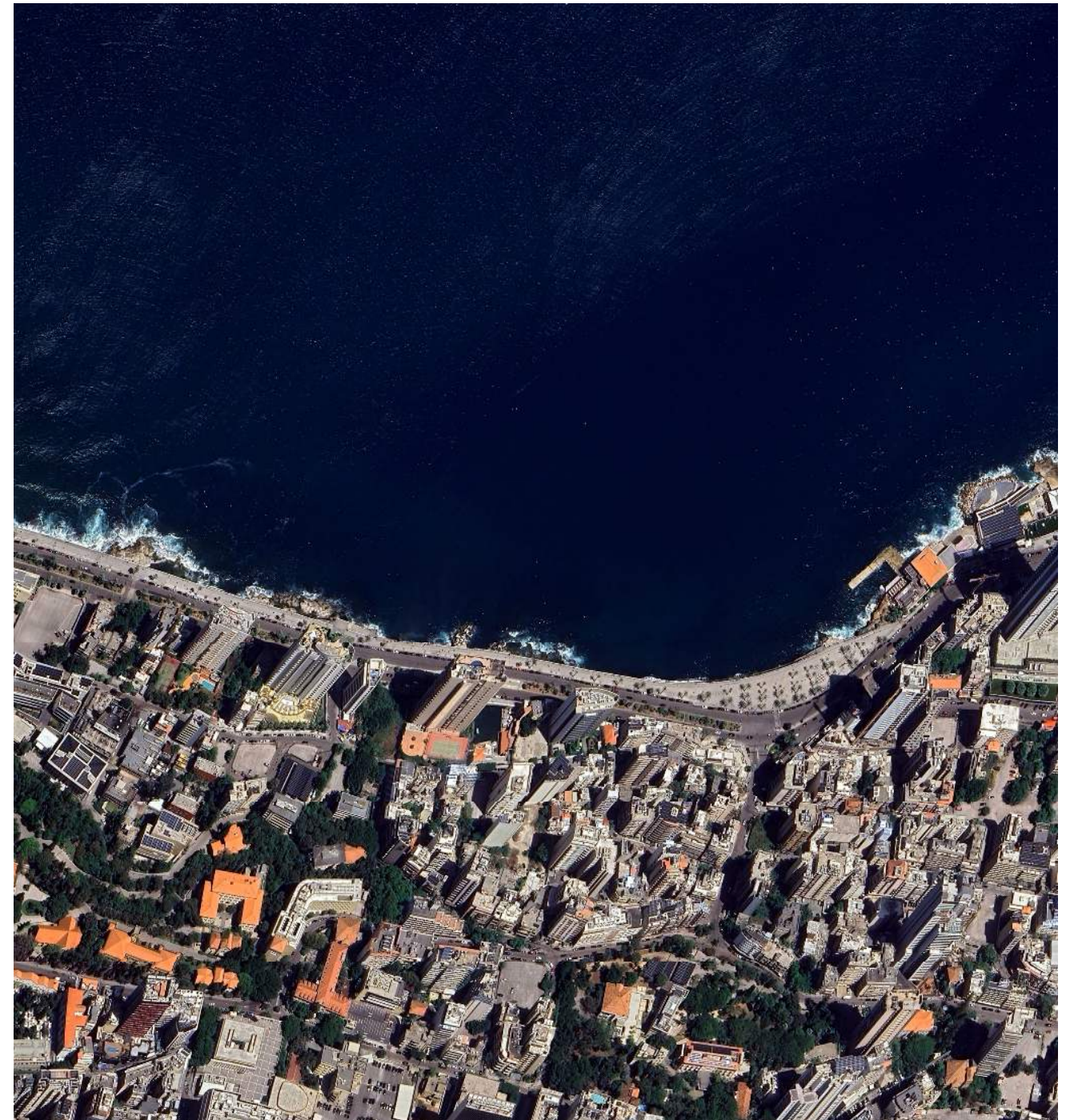
Location LEBANON – Dar Mreisse
33°54'06"N
35°29'10"E

Consultant SEATEC sarl

Emergency marine outfall at Dar Mreisse

Year 2019 - 2020
Design / Surveying

- Marine outfall (GRE 600mm, L=155m) @Max-17.00m
- Diffuser (GRE 1100mm, L=104m) @Max-33.00m
- Onshore RC connexion chamber / pumping station
- Marine protection of the outfall (dredging, underwater concrete, sloped rocky protection, precast concrete collars...)
- Hydraulic design / Piping details
- Effluent diffusion modeling
- Topographic survey along the shore
- Bathymetric survey (124,000m²)
- Tender Documents / Drawings / BoQ



Sealines / Marine Outfalls / Coastal Protections / Seawalls

DORA MUTW JETTY (1/2)

26

Client LEBANESE REPUBLIC
Ministry of Public Works and Transport
Directorate General of Land and Maritime Transport

Location LEBANON - Dora
33°54'21"N
35°33'10"E

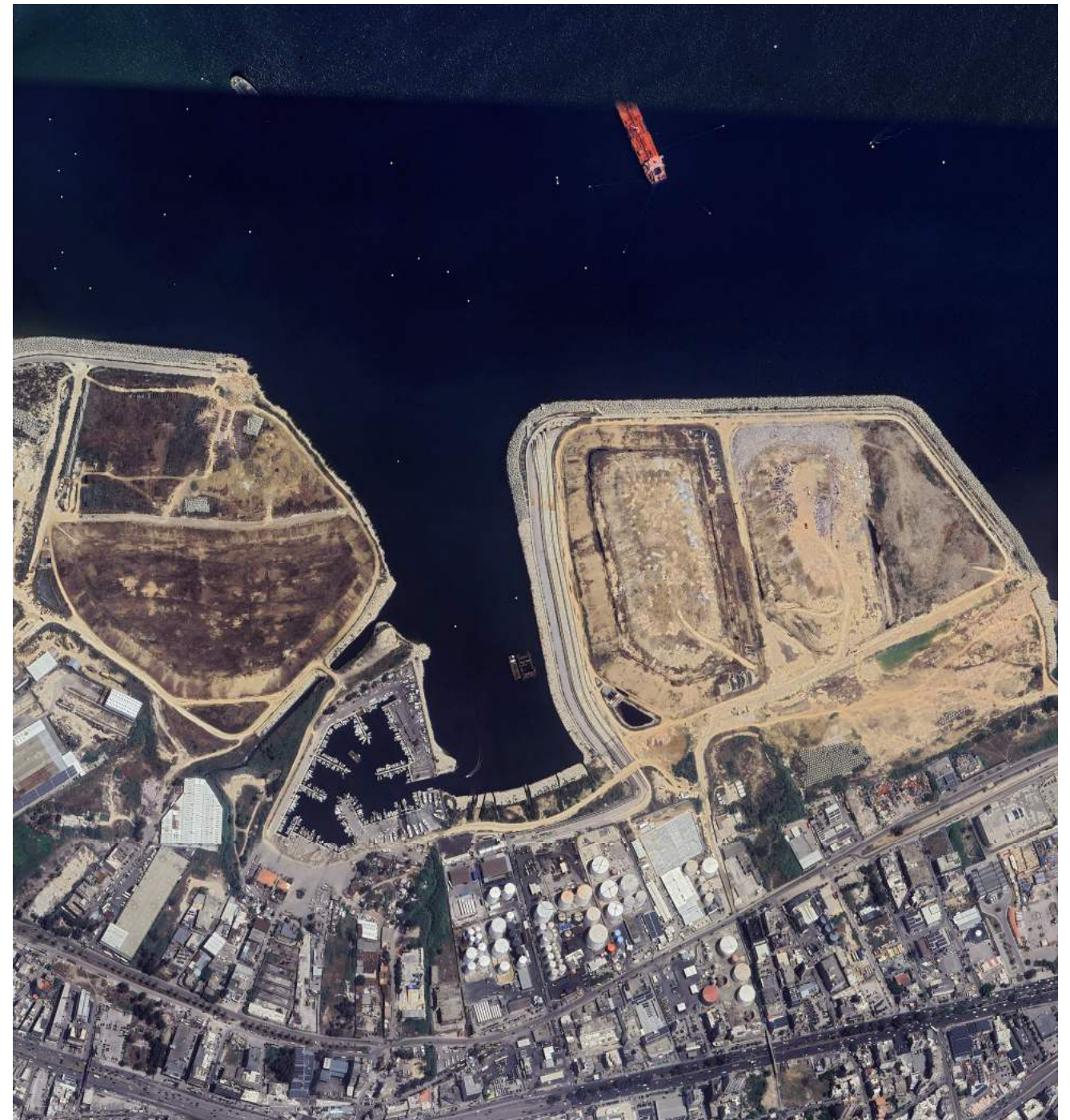
Consultant SEATEC sarl

Dora MUTW Jetty

Year 2018
Conceptual Design / Surveying

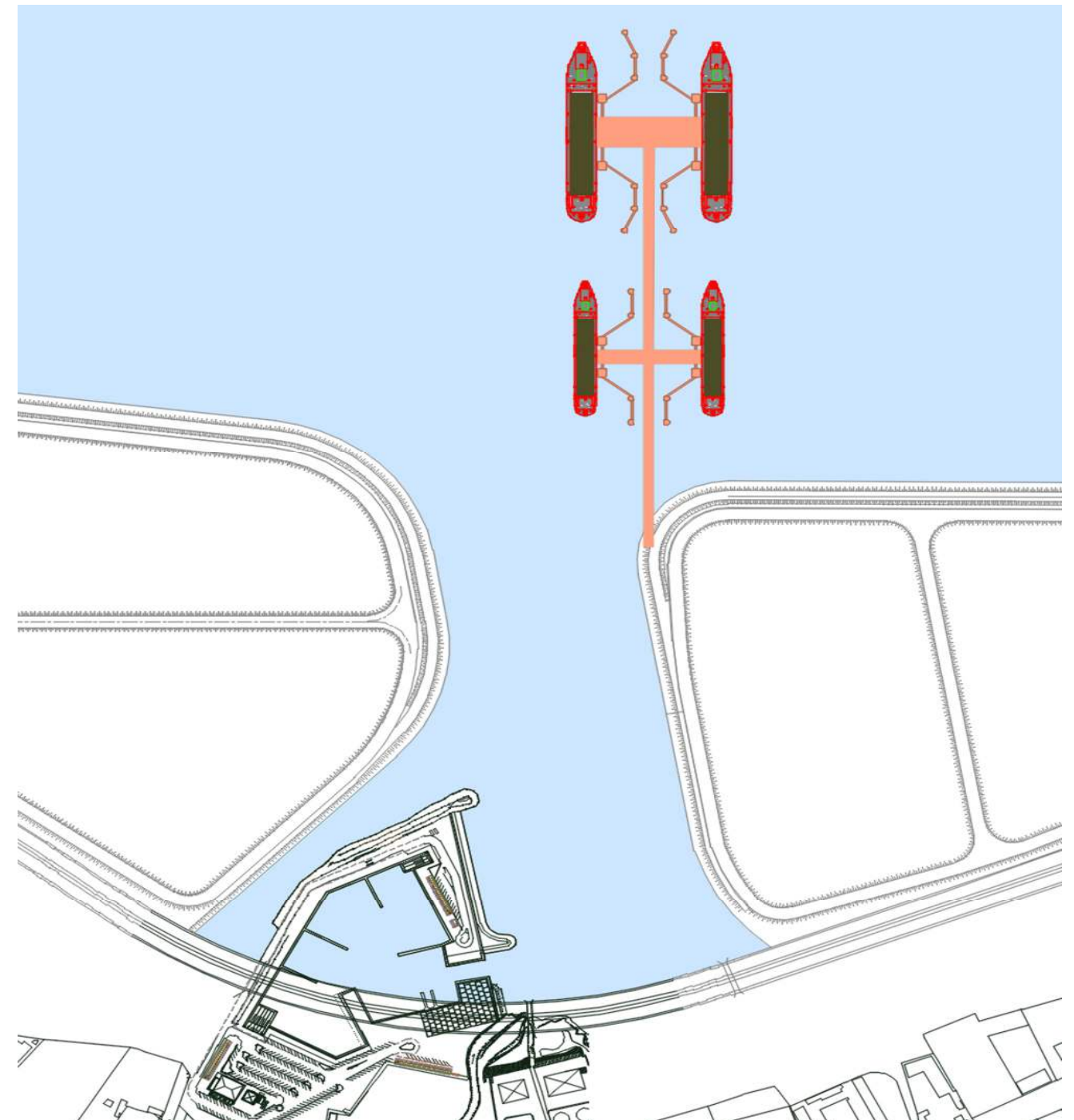
- Jetty for tankers berthing (Metallic structure on piles, L=627m)
- Berths (L=140m @-12.00m MSL, Nbr 2) / Breasting and Mooring dolphins
- Berths (L=226m @-18.00m MSL, Nbr 2) / Breasting and Mooring dolphins
- Offshore platform N1 on piles (4,470m²)
- Offshore platform N2 on piles (1,855m²)
- Onshore pipes (L=525m)

Ports / Oil & Gas Terminals / Mooring Structures / Dolphins / **Sealines** / **Offshore Pipelines** / Surveying



Dora MUTW Jetty

- Reclaimed platform (23,500m²)
- Berthing capacity (4 tankers)
- Topographic survey (shoreline)
- Bathymetric survey (2,692,000m²)
- Drawings



Ports / Oil & Gas Terminals / Mooring Structures / Dolphins / **Sealines** / **Offshore Pipelines** / Surveying

UNIVERSAL GAS TERMINAL - 2

28

Client UNIVERSAL GAS srl

Location LEBANON – Amchit
34°08'30" N
35°37'44" E

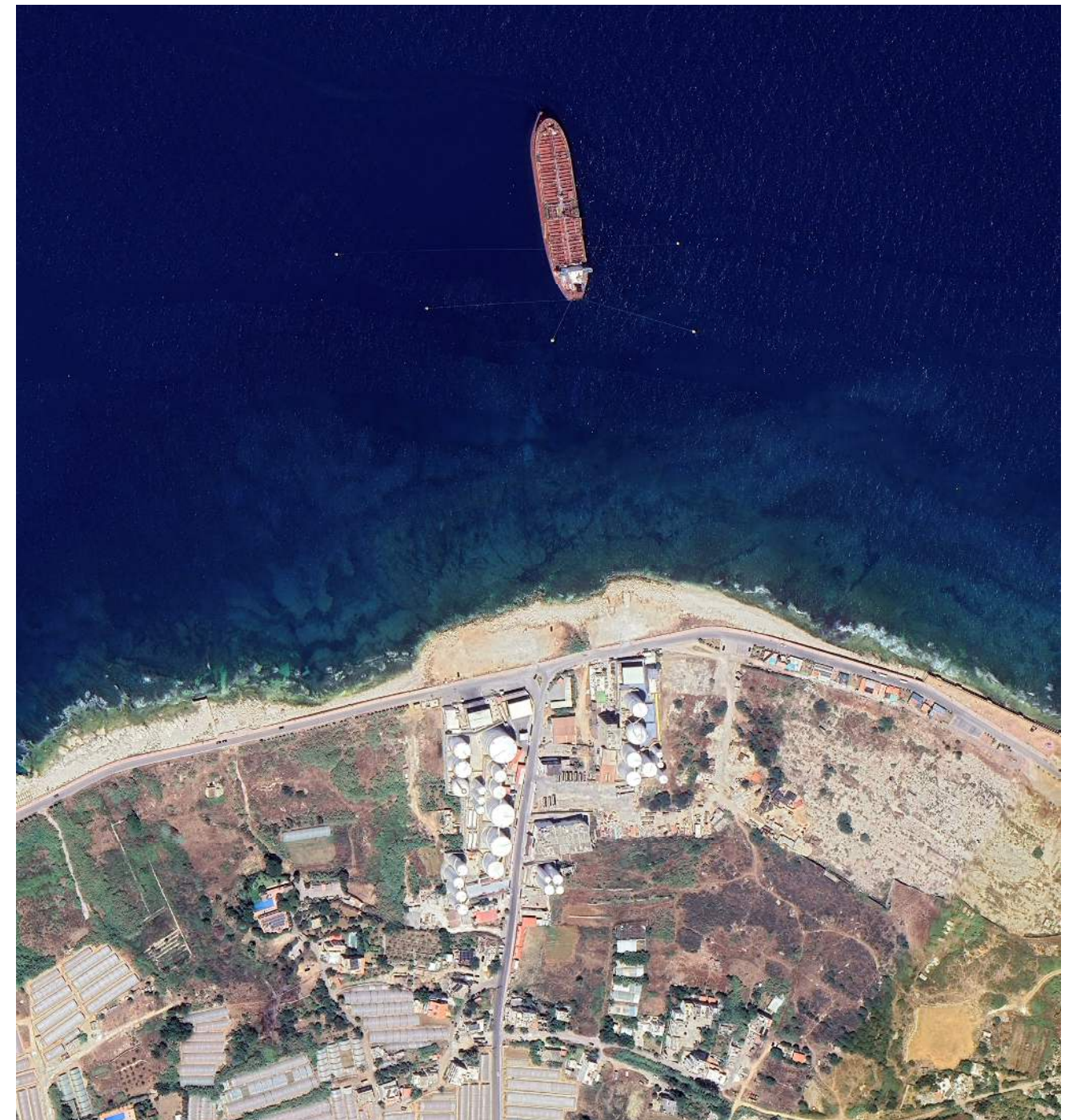
Consultant SEATEC srl

Universal Gas Terminal - 2

Year 2018
Surveying / Permitting

- Topographic survey for the area occupied in the public maritime domain, including onshore and offshore pipelines and CBM (10,200m²)
- Bathymetric survey (97,800m²)
- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017
- Decree of Public Maritime Domain Occupancy for offshore pipelines and tankers berth
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



SAIDA RECLAIMED AREA

29

Client LEBANESE REPUBLIC
Ministry of Public Works and Transport
Directorate General of Land and Maritime Transport

Location LEBANON – Saida
33°32'45" N
35°21'44" E

Consultant SEATEC sarl

Master Plan / Zoning for the Reclaimed area in the vicinity of Saida Commercial Port (505,452 m2)

Year 2017
Design / Surveying

- Container and General Cargo (53,000m2)
- Grain silo (23,000m2)
- Special economic zone 1 (12,000m2)
- Special economic zone 2 (7,000m2)
- Open storage yard for cars (18,500m2)
- Oil and gas with sealine and offshore berth (59,500m2)
- Public spaces (28,754m2)
- Landfill area (70,000m2)
- Waste water treatment plant (8,500m2)
- Commercial area (50,750m2) Plots (195,500m2)
- Drawings / Decree / Master Plan

Ports / Container Terminals / General Cargo Terminals / Grain Terminals / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Waterfronts / Mooring Structures / CBM



MPC TERMINAL

30

Client MPC (Meskawi Petroleum Company) sal

Location LEBANON – Bauchrieh
33°54'46" N
35°34'45" E

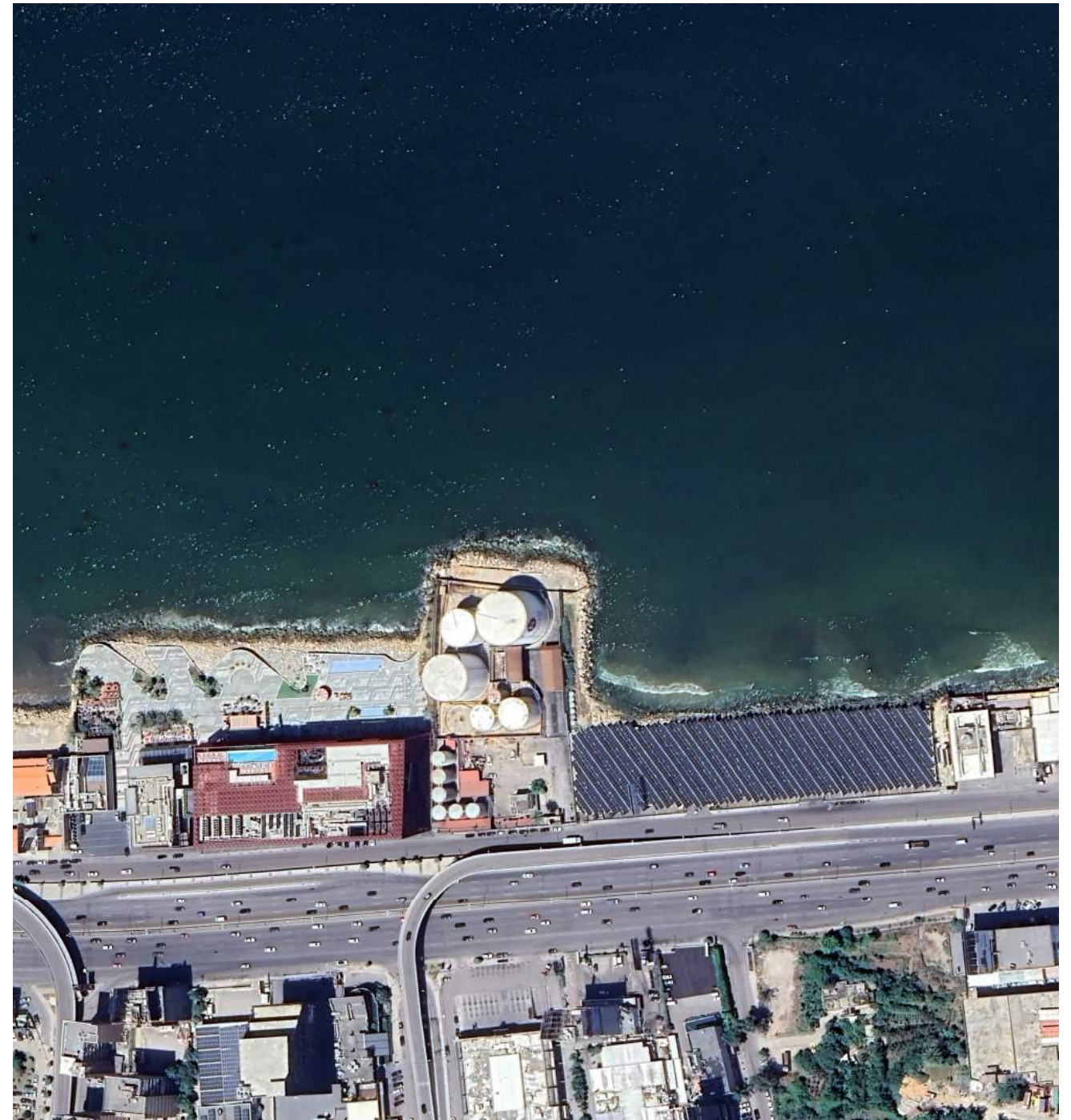
Consultant SEATEC sarl

MPC Terminal

Year 2018
Surveying / Permitting

- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Permit for reclaimed land occupancy
- Topographic survey
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore pipelines** / Mooring Structures / CBM / Surveying / Permitting



Client LEBANON ENERGY srl

Location LEBANON – Amchit
34°08'27" N
35°37'44" E

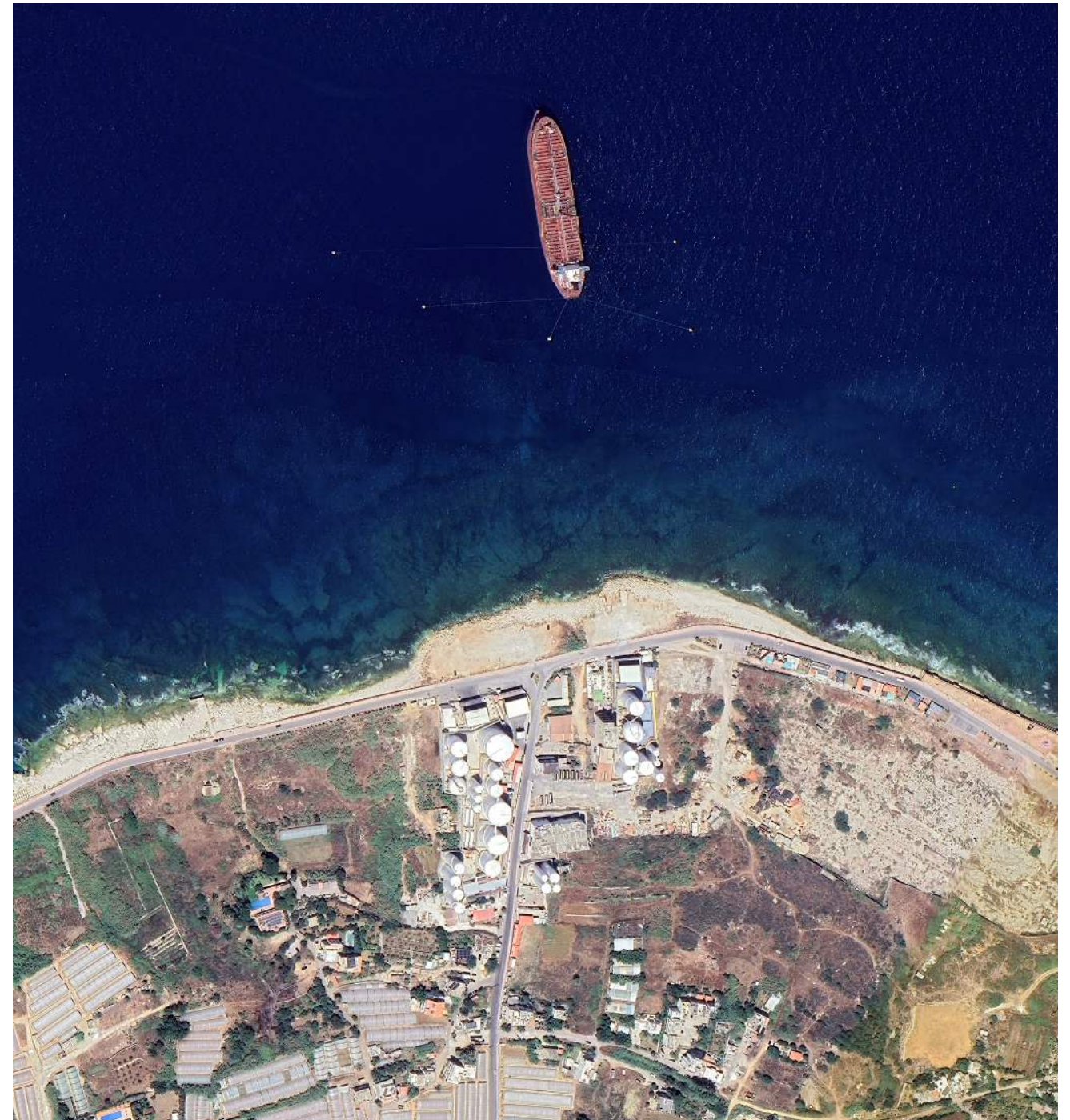
Consultant SEATEC srl

LEBANON ENERGY Terminal - 2

Year 2017 – 2018
Design / Surveying / Permitting

- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Permit (Decree) for offshore pipelines, tankers berth CBM and reclaimed land occupancy
- Topographic survey (5,800m²)
- Bathymetric survey (30,300m²)
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



IPT TERMINAL - 2

32

Client IPT (Issa Petroleum trade)

Location LEBANON – Amchit
34°08'27" N
35°37'44" E

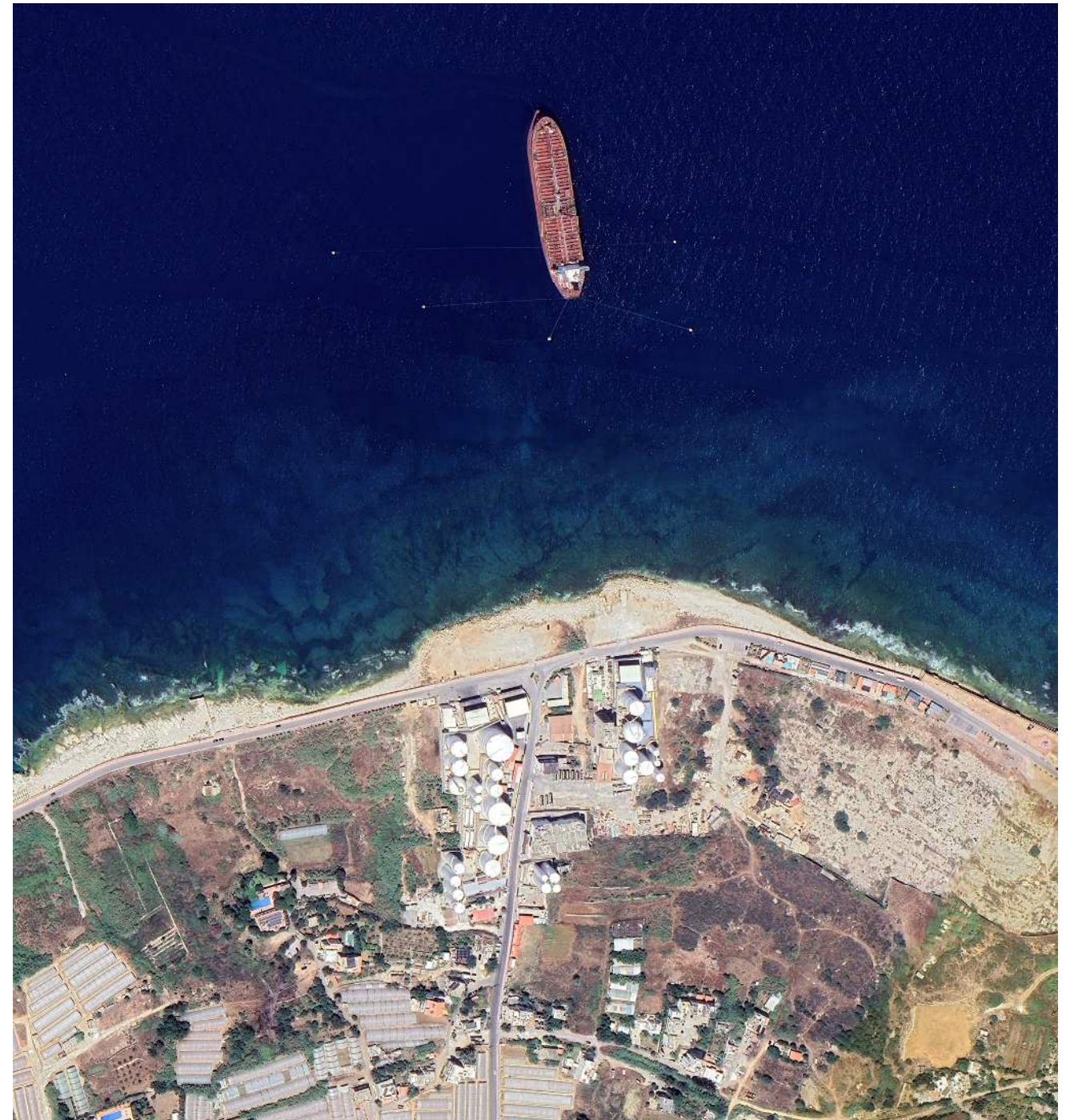
Consultant SEATEC sarl

IPT Terminal - 2

Year 2017 – 2018
Design / Surveying / Permitting

- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Permit (Decree) for offshore pipelines, tankers berth CBM and reclaimed land occupancy
- Coastal protection (seawalls)
- Topographic survey (3,250m²)
- Bathymetric survey (109,000m²)
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Coastal Protections / Seawalls / Surveying / Permitting



TOTAL LIBAN TERMINAL - 2

33

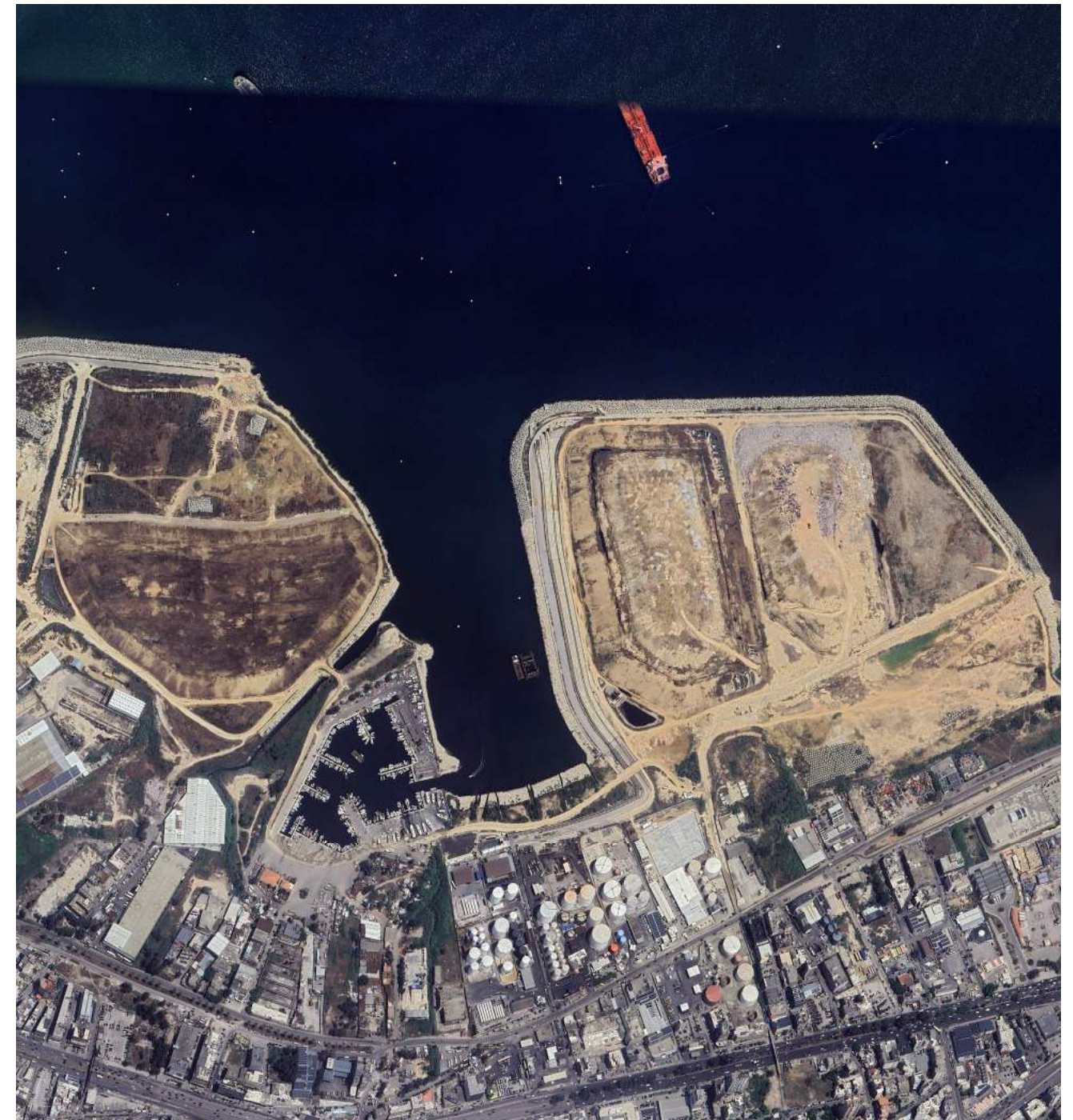
Client TOTAL LIBAN sal
Location LEBANON – Zouk
33°58'03" N
35°36'01" E
Consultant SEATEC sarl

TOTAL LIBAN Terminal - 2

Year 2017
Surveying / Permitting

- Topographic survey
- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



WARDIEH TERMINAL - 1

34

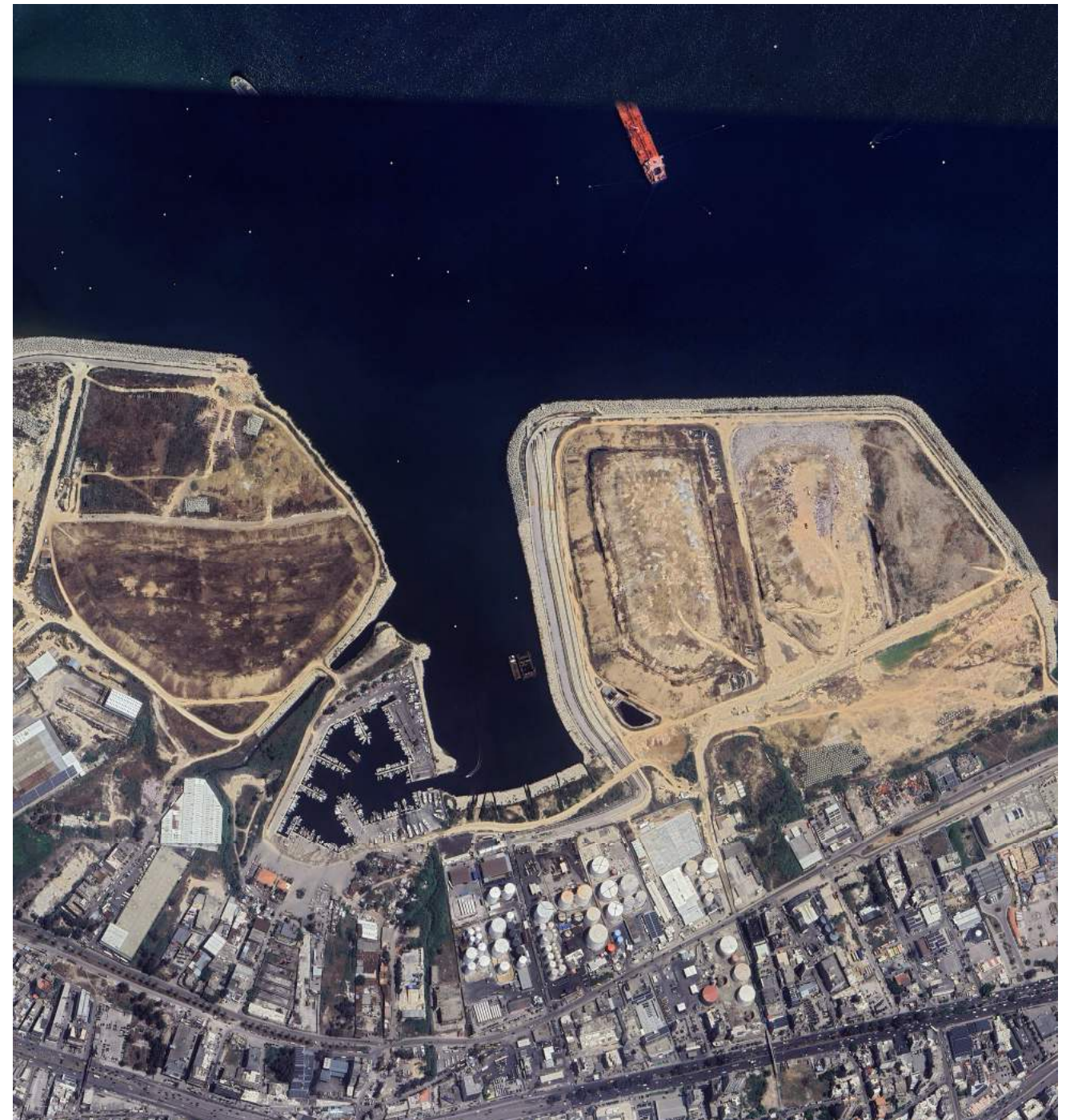
Client Wardieh Holding sal
Location LEBANON – Bauchriyeh
33°53'57" N
35°33'18" E
Consultant SEATEC sarl

Year 2017
Design / Surveying / Permitting

WARDIEH Terminal

- Design of an offshore pipeline (L=180m) and an onshore one (L=740m) for oil products
- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Permit (Decree) modification for offshore pipelines, tankers berth CBM and reclaimed land occupancy
- Topographic survey
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



UNITERMINALS - 1

35

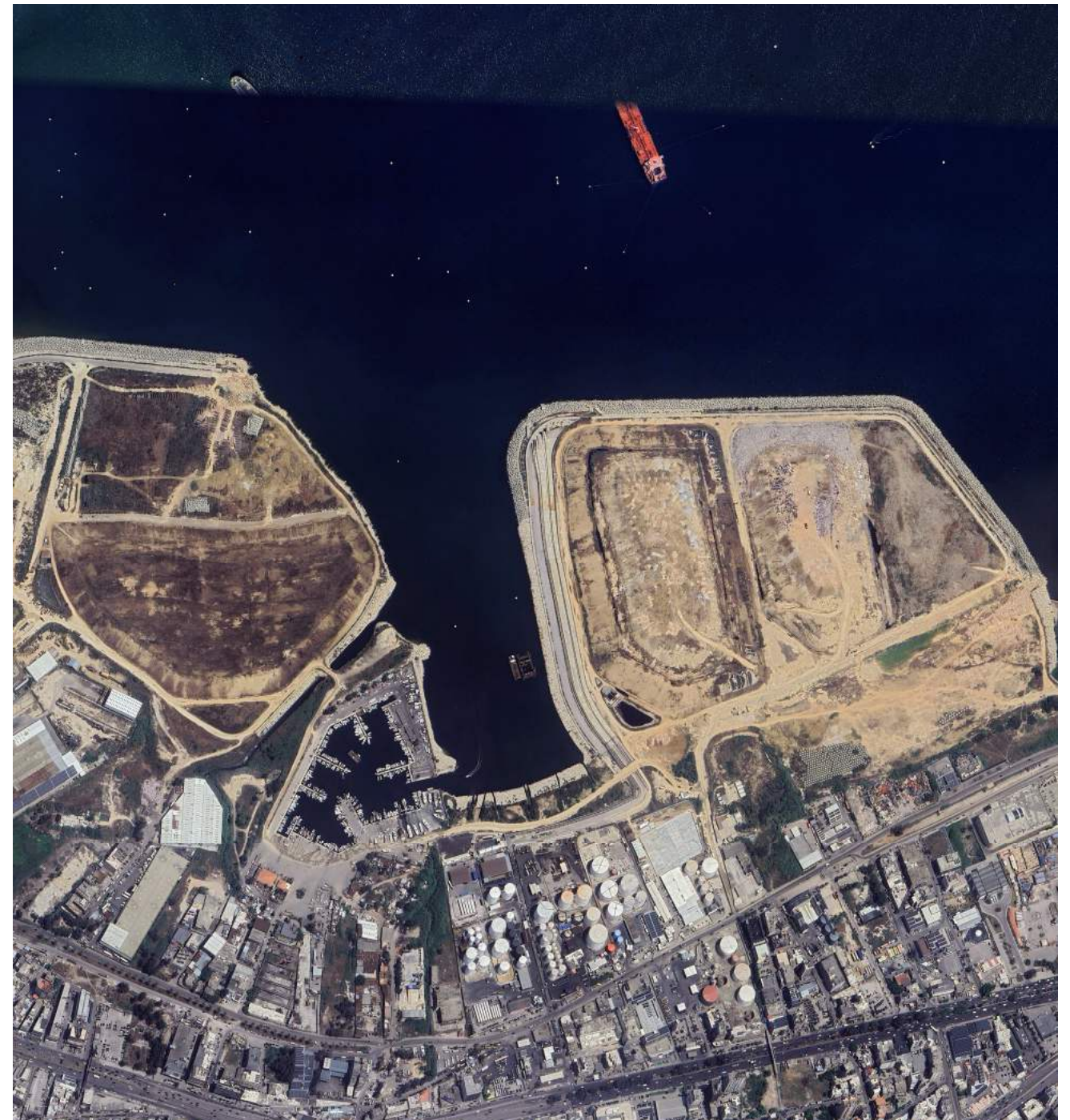
Client UNITERMINALS sal
Location LEBANON – Bauchriyeh
33°53'56" N
35°33'13" E
Consultant SEATEC sarl

Year 2017
Design / Surveying / Permitting

UNITERMINALS - 1

- Design of an offshore pipeline (L=360m) and an onshore one (L=840m) for oil products
- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)
- Permit (Decree) modification for offshore pipelines, tankers berth CBM and reclaimed land occupancy
- Topographic survey
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



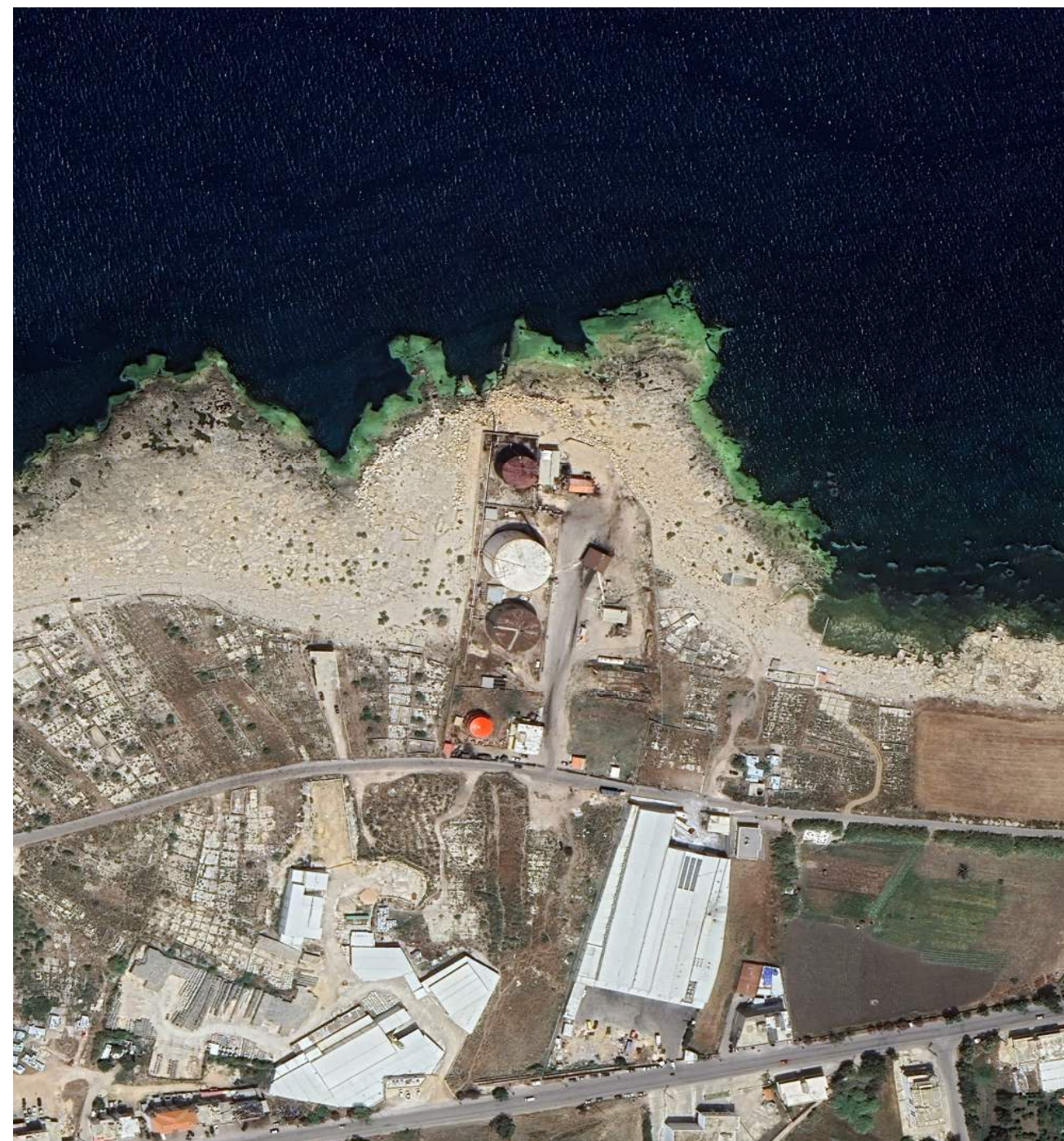
Client GEFCO
Location LEBANON – Anfeh
34°20'46" N
35°43'39" E
Consultant SEATEC sarl

Year 2017 – 2019
Surveying / Permitting

GEFCO Terminal

- Topographic survey for the area occupied in the public maritime domain
- Settlement of Public Maritime Domain Occupancy: Drawings and settlement file submitted to the MPWT / DGLMT according to Law N64 dated 25/10/2017 (Permitting)

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



BEIRUT STORM WATER PLAN

37

Client Municipality of Beirut

Location LEBANON – Beirut

Consultant SEATEC sarl

Year 2020
Conceptual Design

Beirut storm water plan

- Estimate of storm water flow for the whole Beirut city (11 zones and related marine outfalls)
- Drawings



Sealines / Marine Outfalls

RAMLET EL BAYDA MARINE OUTFALL

38

Client Municipality of Beirut

Location LEBANON – Beirut
33°52'12"N
35°28'52"E

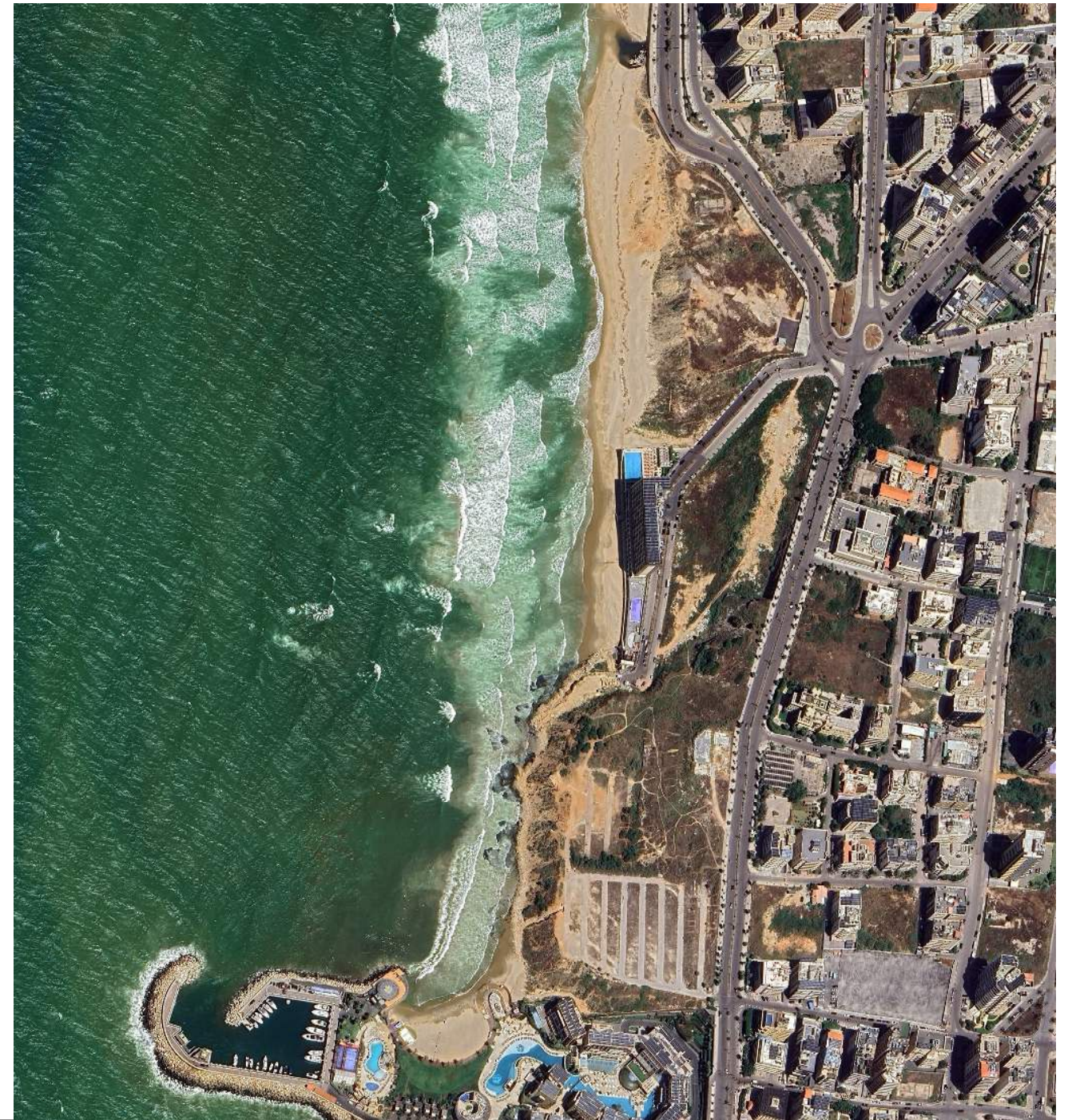
Consultant SEATEC sarl

Year 2019 – 2020
Design / Surveying / Permitting

Ramlet el Bayda marine outfall

- Marine outfall (GRP 1100mm, L=832m) @Max -18.00m
- Diffuser (GRP 1100mm, L=192m) @Max -28.00m
- Onshore new sewer system (GRP 800mm)
- Onshore RC stormwater culvert with manholes and connexion / pig chamber
- Marine protection of the outfall (dredging, underwater concrete, sloped rocky protection, precast concrete collars...)
- Hydraulic design / Piping details
- Effluent diffusion modeling
- Topographic survey along the shore
- Bathymetric survey (320,000m²)
- Tender Documents / Drawings / BoQ
- Permitting / Decree drawing

Sealines / Marine Outfalls / Surveying / Permitting



COGICO TERMINAL - 1

39

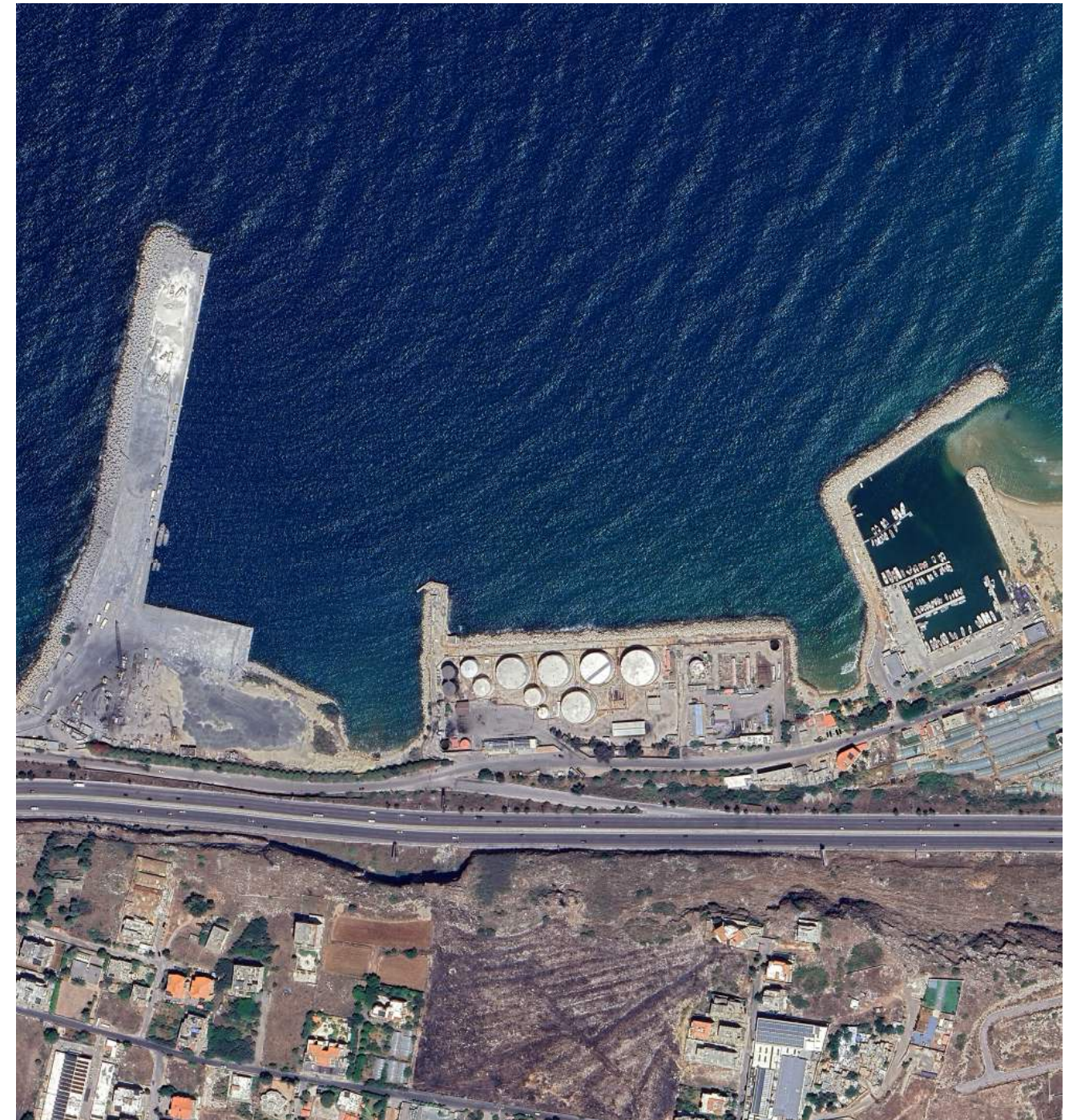
Client COGICO sal
Location LEBANON – Jieh
33°39'00" N
35°24'35" E
Consultant SEATEC sarl

Year 2017 – 2018
Design / Surveying / Permitting

COGICO Terminal - 1

- Design of a new tanker berth @-14.00m
- Breakwater with Accropodes blocks protection
- Quaywall @-14.00m (Precast concrete blocks / gravity QW)
- Dredging for access channel and maneuvering area
- Topographic survey for existing structures
- Bathymetric survey (540,000m²)
- Drawings / BoQ

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures /
CBM / Coastal Protections / Revetments / Surveying / Permitting



LIQUIGAS TERMINAL

40

Client LIQUIGAS srl
Location LEBANON – Zouk
33°58'03" N
35°36'01" E
Consultant SEATEC srl

Year 2016
Design / Surveying / Permitting

LIQUIGAS Terminal

- Sloped protection (Rubble mound type, L=442m @max - 5.00m, precast concrete 6.3m³ Accropodes blocks Type I)
- Reclaimed area layout (14,464m²)
- Offshore pipelines (L=535m) with CBM berth for oil products import
- Decree modification for offshore pipelines, tankers berth CBM and reclaimed land occupancy
- Topographic survey (14,000m²)
- Bathymetric survey (216,000m²)
- Drawings / BoQ / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Coastal Protections / Revetements / Mooring Structures / CBM / Surveying / Permitting



TYRE MARINE OUTFALL

41

Client Danash Co.
Location LEBANON – Tyre
33°18'0"N
35°13'14"E
Consultant SEATEC sarl
Year 2014 – 2015
Design

Tyre marine outfall

- Hydraulic, Stability and protection design for the marine outfall of Tyr waste water treatment plant
- Marine outfall (D=110cm; L=1,355m) and diffuser (D=110cm; L=145m)
- Hydraulic design
- Diffusion modeling
- Collars and rocky protection
- Drawings / BoQ



Sealines / Marine Outfalls / Surveying / Permitting

TOTAL LIBAN TERMINAL - 1

42

Client TOTAL LIBAN sal

Location LEBANON – Zouk
33°58'03" N
35°36'01" E

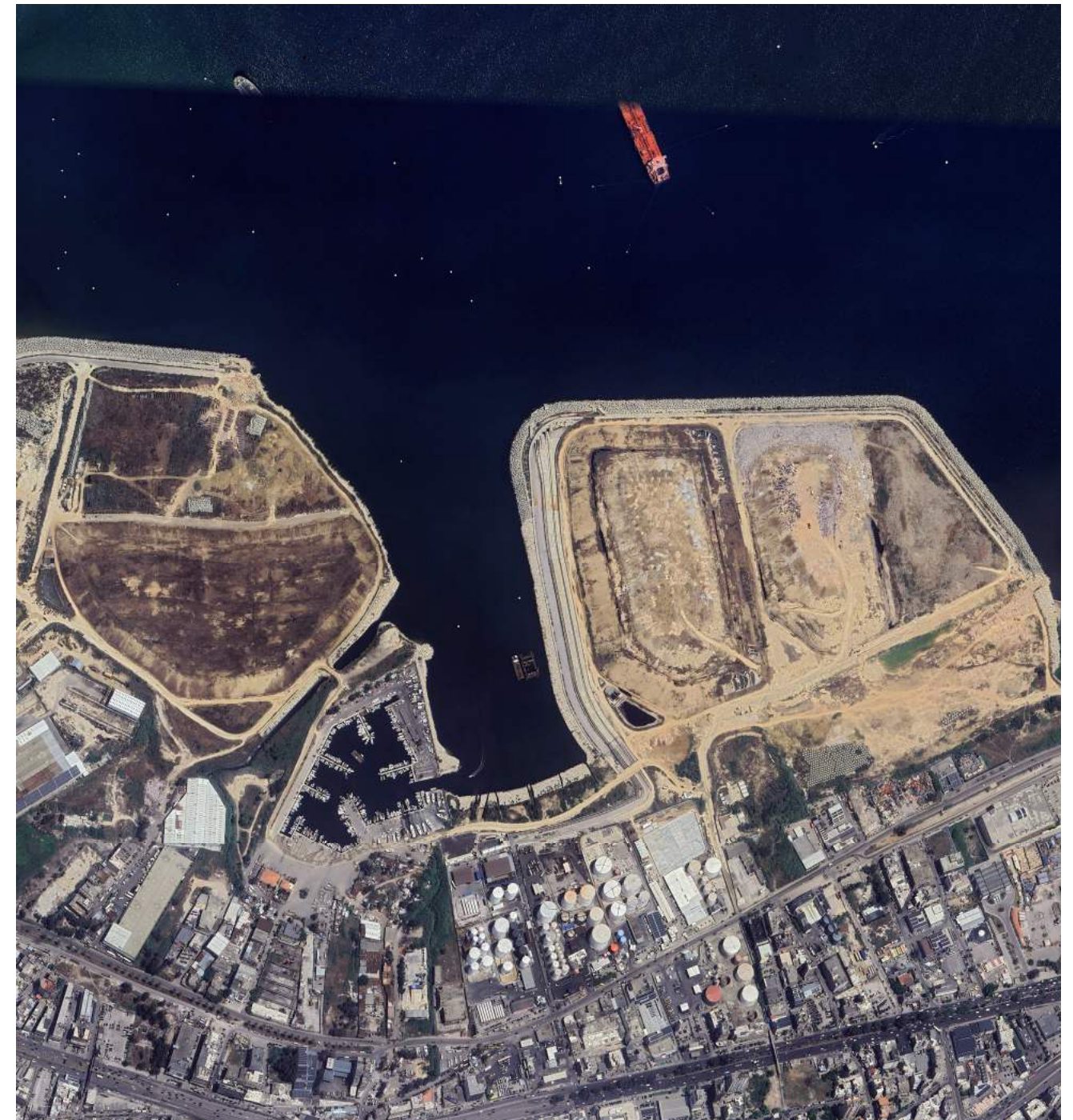
Consultant SEATEC sarl

Year 2014
Design / Surveying / Permitting

TOTAL LIBAN Terminal - 1

- Design of an offshore pipeline (L=1,076m) for oil products
- Decree modification for offshore pipelines, tankers berth CBM and reclaimed land occupancy
- Topographic survey (7,400m²)
- Bathymetric survey (176,000m²)
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



UNIVERSAL GAS TERMINAL - 1

43

Client UNIVERSAL GAS srl

Location LEBANON – Amchit
34°08'30" N
35°37'44" E

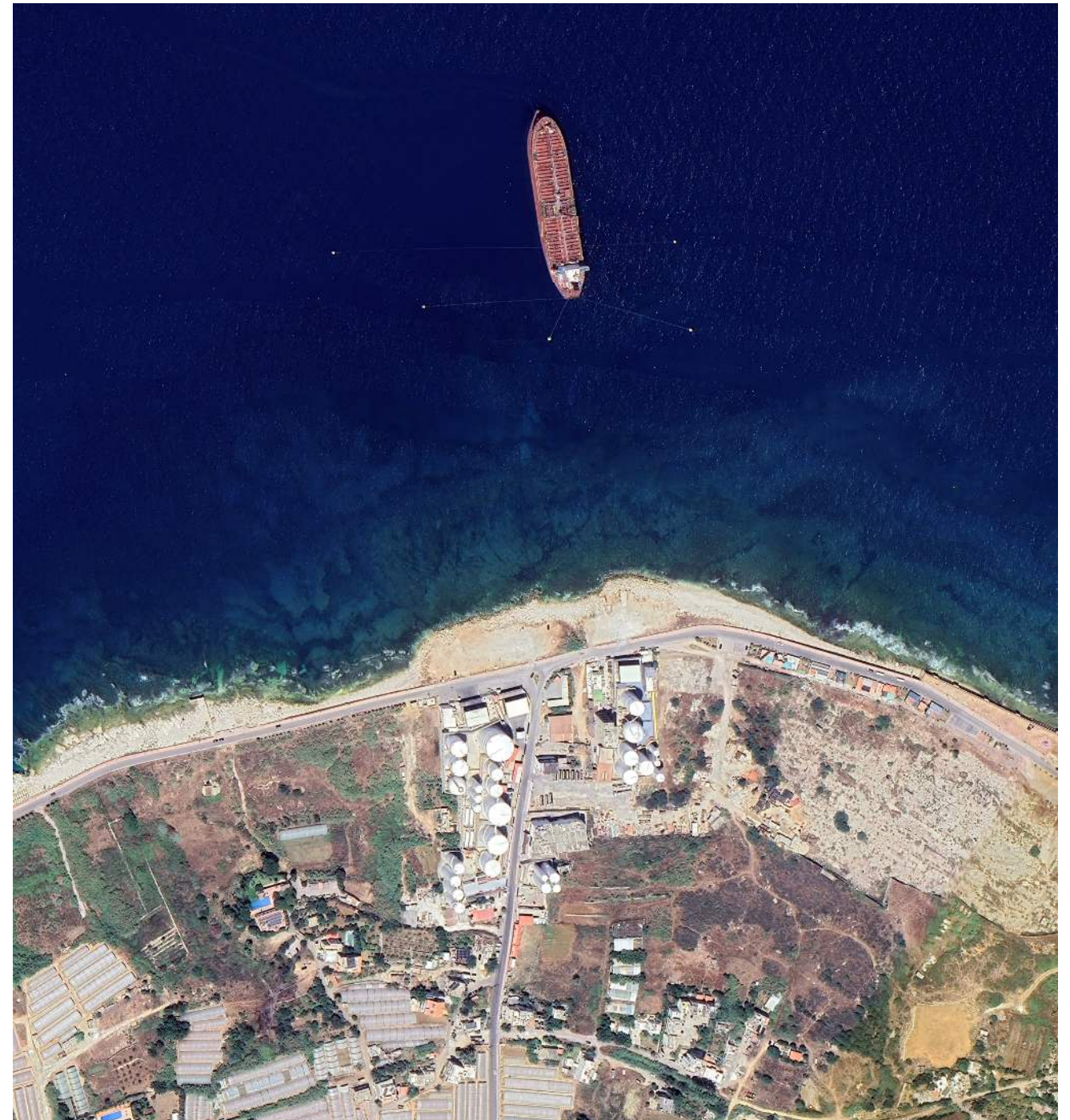
Consultant SEATEC srl

Year 2013
Surveying

Universal Gas Terminal - 1

- Topographic survey of existing onshore / offshore pipelines and 4 mooring buoys (CBM)
- Drawings

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying



Client Buildum Ventures sal

Location LEBANON – Tripoli
34°27'36" N
35°49'7" E

LEBANON - Zahrani
33°30'23"N
35°20'34"E

Consultant SEATEC sarl

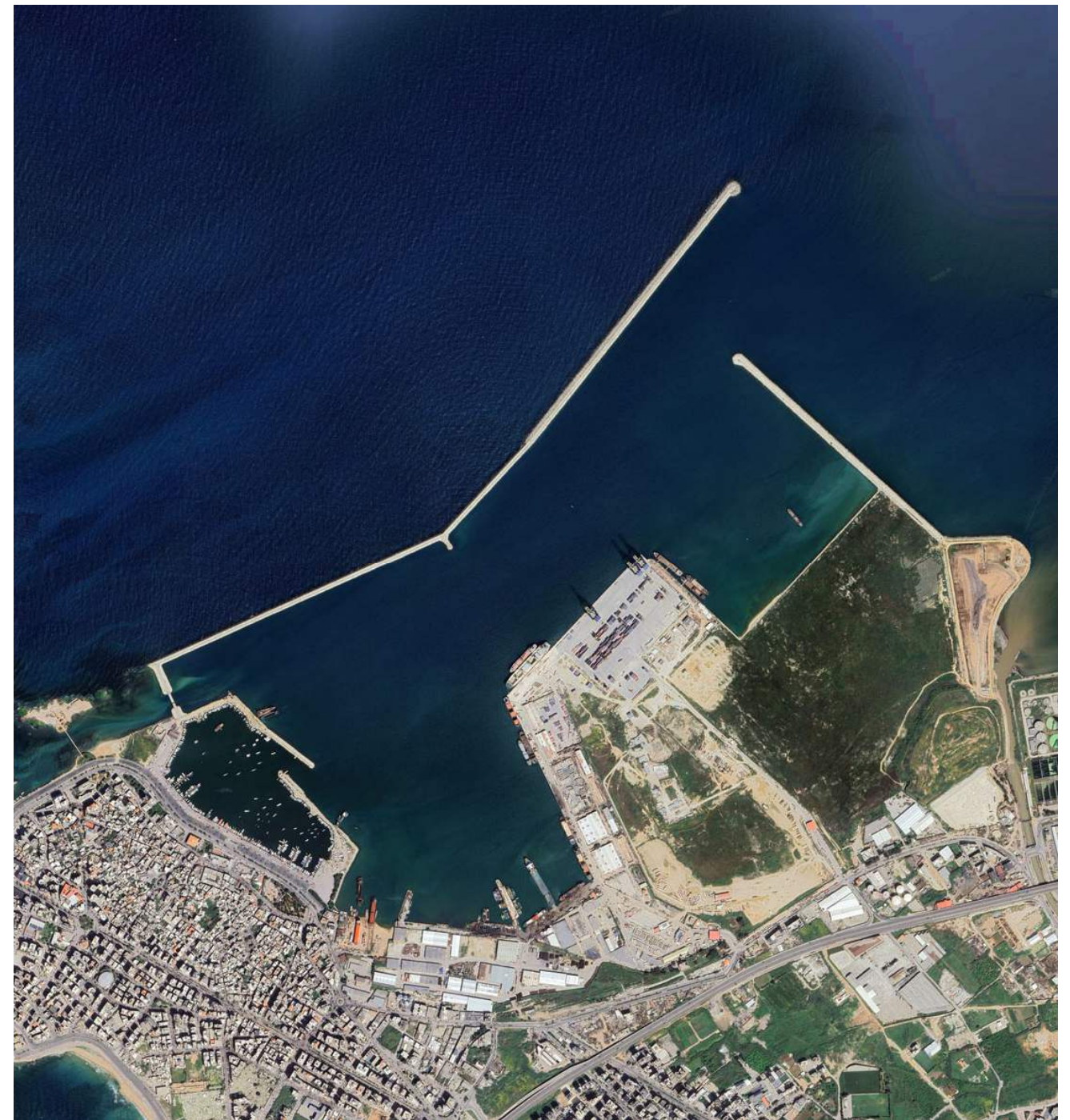
LNG Terminals for Power Stations

Year 2013 - 2014
Conceptual Design

- Sites assessment for LNG and FSRU berths for both sites, Tripoli and Zahrani Power Stations

Tripoli Site

- Rehabilitation and armoring of the existing main breakwater at Tripoli Port (L=500m), with 9m³ concrete Accropodes blocks Type I or main detached breakwater (L=1,268m) with QR core, rocky filter layer and 20m³ concrete Accropodes blocks Type I



Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines**

LNG Terminals for Power Stations

- Quaywall (L=400m @-15.00m) for the FSRU mooring
- Platform (21,500m²)
- LNG tanker moored (sided) along the two FSRU
- Dredging Works for a maneuvering area @-16.00m

Zahrani Site

- Main breakwater (L=1,998m) with QR core, rocky filter layer and 20m³ concrete Accropodes blocks Type I
- Quaywall (L=400m @-15.00m) for the FSRU mooring
- Platform (21,500m²)
- LNG tanker moored (sided) along the two FSRU
- Dredging Works for a maneuvering area @-16.00m



Ports / Oil & Gas Terminals / Sealines / **Offshore Pipelines**

IAPCO TERMINAL

46

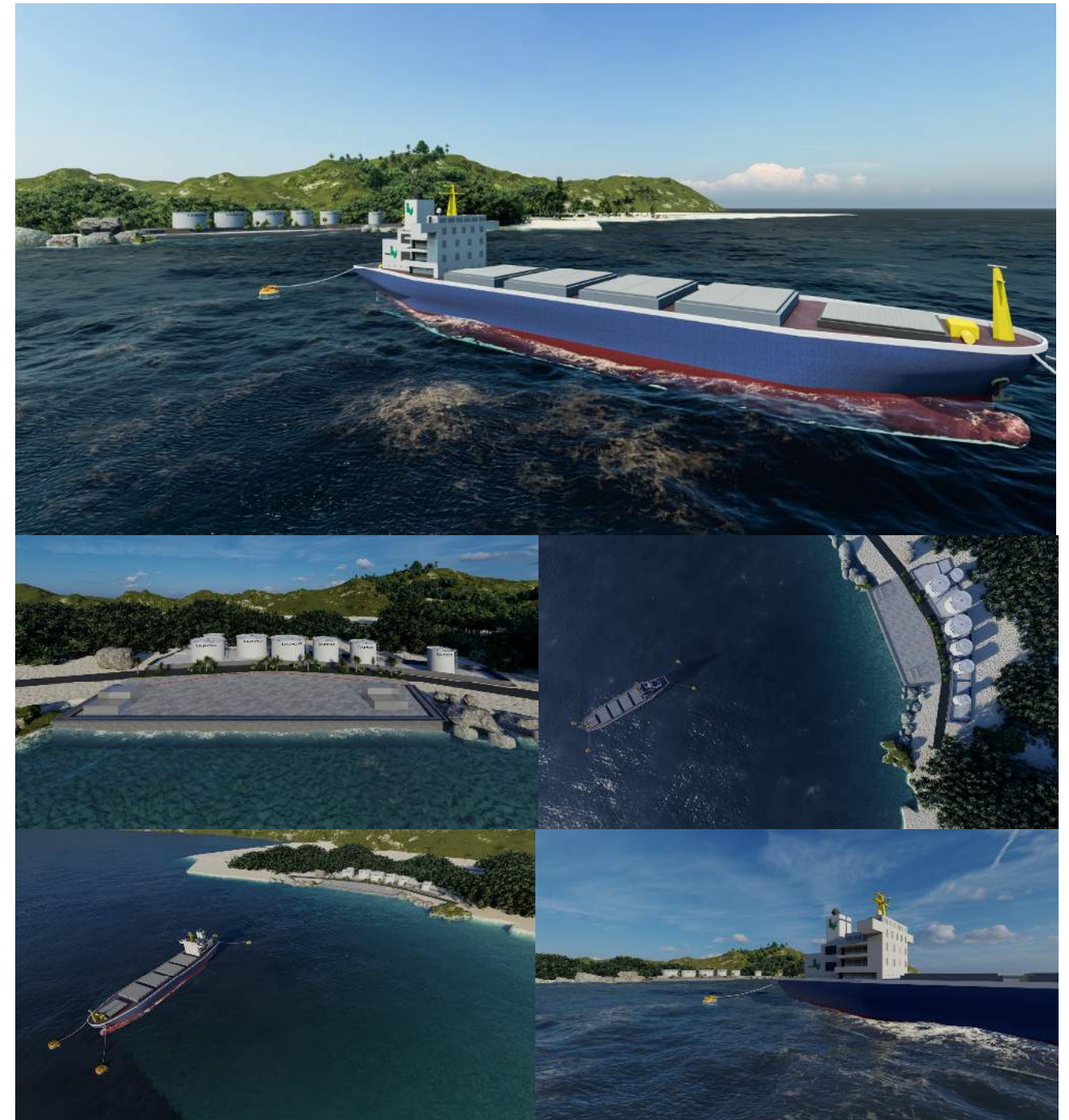
Client IAPCO sal
Location LEBANON – Selaata
34°17'10" N
35°39'53" E
Consultant SEATEC sarl

IAPCO Terminal

Year 2013 – 2017 – 2019
Design / Surveying / Permitting

- Design of an offshore pipeline (L=311m) for fuel/oil products
- Land reclamation with RC seawall protection
- Conceptual design of tanks and related buildings / facilities in the private plot
- Topographic survey (64,000m²)
- Bathymetric survey (154,000m²)
- Specifications / Drawings / BoQ / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Coastal Protections / Seawalls / Mooring Structures / CBM / Surveying / Permitting



WATERFRONT CITY MARINE OUTFALL

47

Client Waterfront City sarl

Location LEBANON – Dbayeh
33°55'10"N
35°34'52"E

Consultant SEATEC sarl

Year 2012 – 2013 – 2014
Design / Surveying / Permitting

Waterfront city marine outfall

- HDPE marine outfall (D=50cm; L=920m) and diffuser (D=50cm; L=36m) @max -17.00m MSL
- Hydraulic design / Diffusion modeling
- Collars and rocky protection
- Waste water treatment plant
- Land reclamation (3,000m²) with rocky protection / RC sea wall for the WWTP
- Topographic survey
- Bathymetric survey (116,000m²)
- Specifications / Drawings / BoQ / Permitting



Coastal Protections / Revetments / **Sealines** / **Marine Outfalls** / Surveying / Permitting

UNIGAS TERMINAL

48

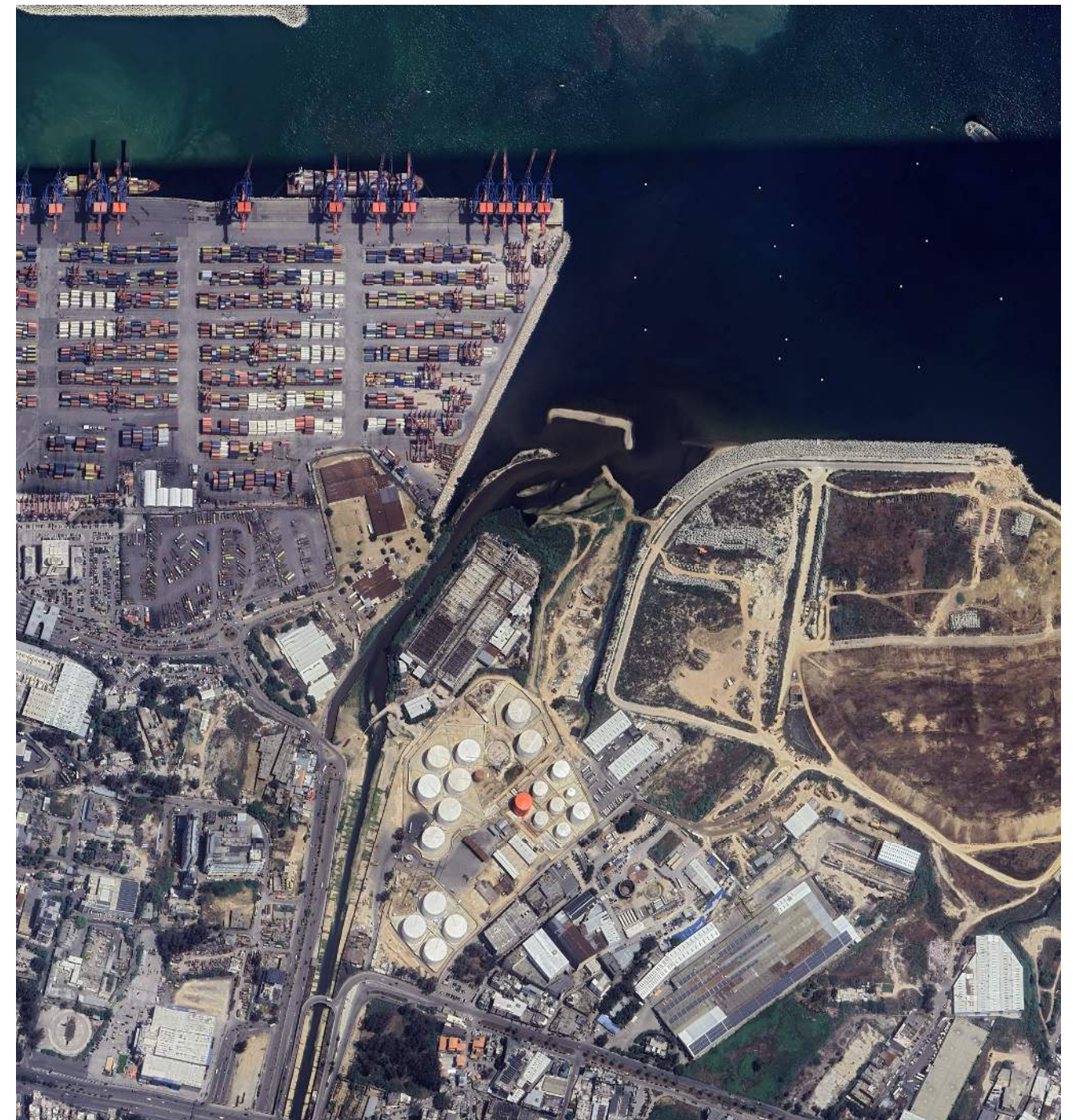
Client Coral Oil Co. limited sal
Location LEBANON – Borj Hammoud
33°54'02" N
35°32'28" E
Consultant SEATEC sarl

UNIGAS Terminal

Year 2010 – 2011 – 2012
Design / Surveying / Permitting

- Design of an offshore pipeline (L=450m) for oil products and two storage areas
- Decree modification for onshore/offshore pipelines, tankers berth and storage areas occupancy in the Public Maritime Domain
- Topographic survey (16,000m²)
- Bathymetric survey (10,500m²)
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



SHAMIGAS TERMINAL

49

Client MARCONTRACTING

Location SYRIA – Baniyas
35°13'03" N
35°56'52" E

Consultant SEATEC sarl

Shamigas Terminal

Year 2010
Design

- Stability calculation for offshore pipelines
- Pipeline N1 (D=10"; L=1667m)
- Pipeline N2 (D=6"; L=1667m)
- Design Report



Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines**

CORAL OIL TERMINAL

50

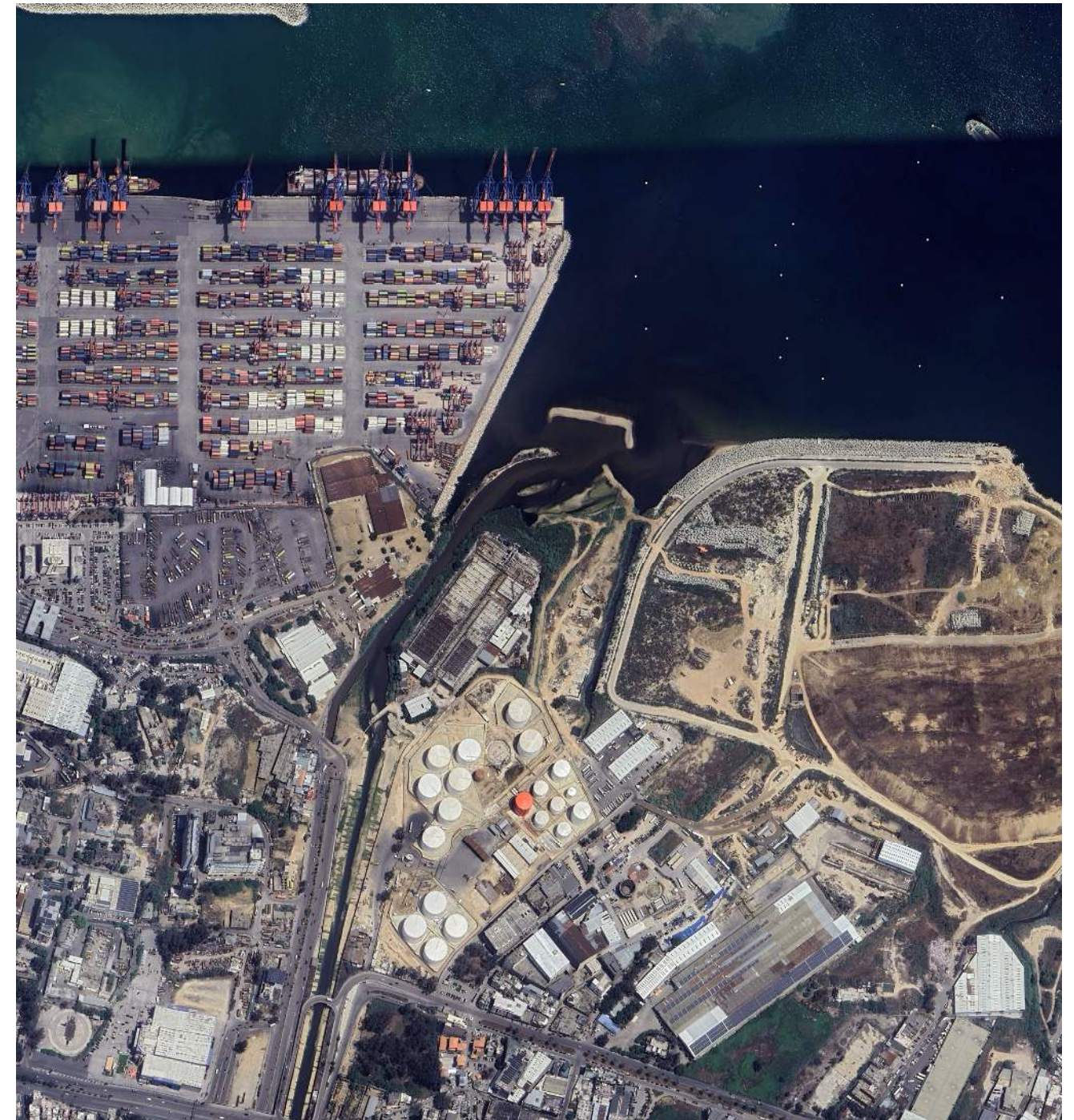
Client Coral Oil Co. limited sal
Location LEBANON – Borj Hammoud
33°54'02" N
35°32'28" E
Consultant SEATEC sarl

Coral Oil Terminal Survey

Year 2010 – 2011 – 2012
Design / Surveying / Permitting

- Design of an offshore pipeline (L=450m) for oil products and two storage areas
- Decree modification for onshore/offshore pipelines, tankers berth and storage areas occupancy in the Public Maritime Domain
- Topographic survey (16,000m²)
- Bathymetric survey (10,500m²)
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Surveying / Permitting



FALCON TERMINAL

51

Client 799 Bassatine Tripoli

Location LEBANON – Tripoli
34°27'6" N
35°50'16" E

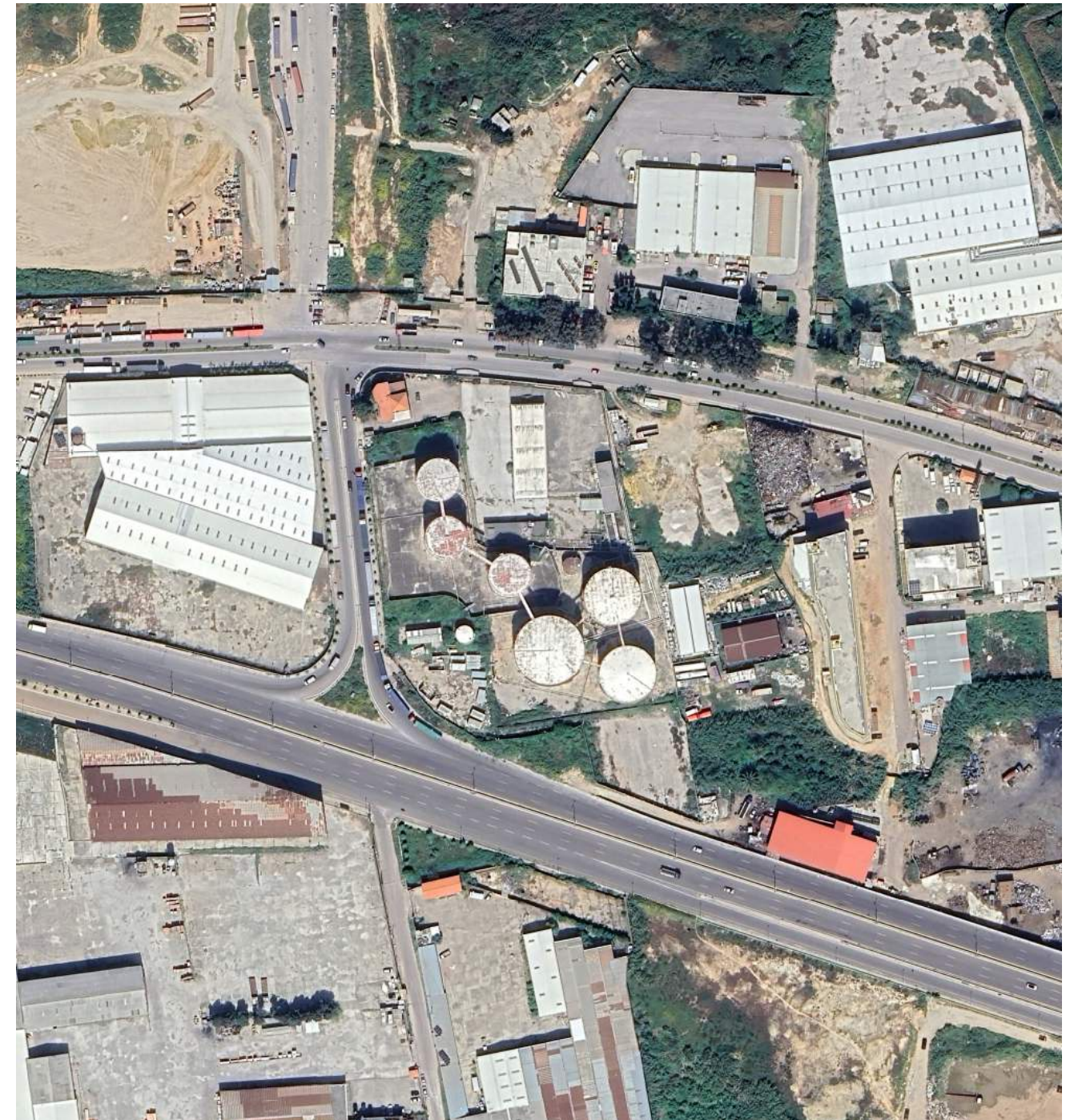
Consultant SEATEC sarl

Falcon Terminal

Year 2009
Conceptual Design / Permitting

- Conceptual design of offshore pipeline (L=2,100m) for oil products up to -14.00m MSL
- Decree modification of the public maritime domain occupancy for onshore / offshore pipeline and tankers berth
- Drawings / Permitting

Ports / Oil & Gas Terminals / **Sealines** / **Offshore Pipelines** / Mooring Structures / CBM / Permitting



MEDCO TERMINAL - 1

52

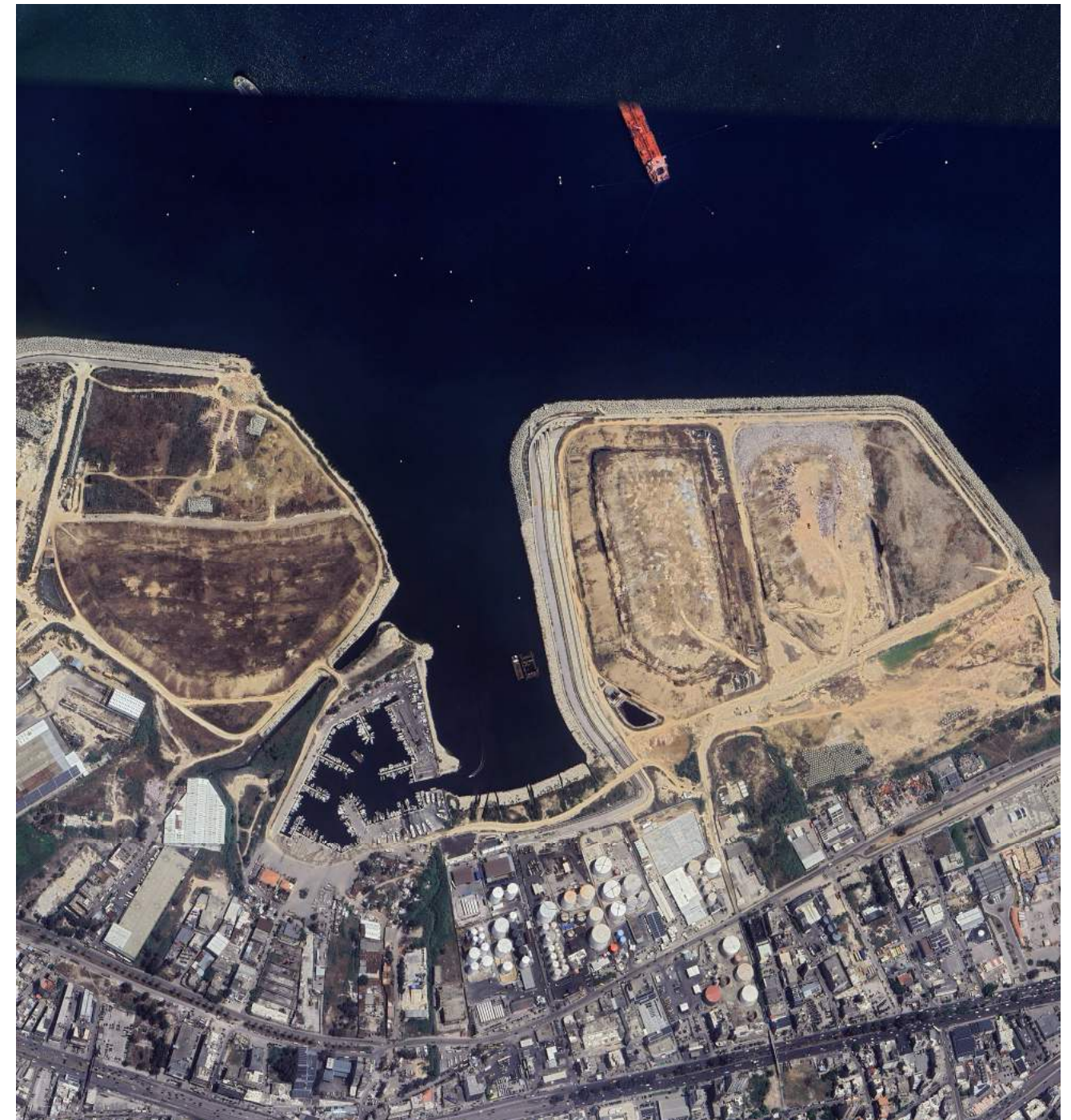
Client MEDCO sal
Location LEBANON – Bauchriyeh
33°53'47" N
35°33'12" E
Consultant SEATEC sarl

MEDCO Terminal - 1

Year 2008 – 2009 – 2012 – 2013 – 2019
Design / Surveying / Permitting

- Design of an offshore pipeline (L=1,270m) for oil products
- Decree modification for offshore pipelines and tankers berth occupancy in the public maritime domain
- Topographic survey of existing offshore pipelines and CBM
- Bathymetric survey (40,000m2)
- Drawings / Permitting

Ports / Oil & Gas Terminals / Sealines / Offshore Pipelines / Mooring Structures /
CBM / Surveying / Permitting



BATROUN MARINE OUTFALL

53

Client WS Engineering

Location LEBANON – Batroun
34°17'19"N
35°40'4"E

Consultant SEATEC sarl

Batroun marine outfall

Year 2006 – 2007
Design

- Stability and protection for the marine outfall of Batroun waste water treatment plant
- HDPE Sea outfall (D=30cm; L=335m) and diffuser (D=30cm; L=30m)
- Collars and rocky protection
- Specifications / Drawings / BoQ



Sealines / Marine Outfalls

BATROUN MARINE OUTFALL

54

Client WS Engineering
Location LEBANON – Batroun
34°17'19"N
35°40'4"E
Consultant SEATEC sarl

Batroun marine outfall

Year 2006 – 2007
Design

- Stability and protection for the marine outfall of Batroun waste water treatment plant
- HDPE Sea outfall (D=30cm; L=335m) and diffuser (D=30cm; L=30m)
- Collars and rocky protection
- Specifications / Drawings / BoQ



Sealines / Marine Outfalls

TRIPOLI MARINE OUTFALL

55

Client Private Lebanese Consultant (2004)
Port of Tripoli Authority - PoTA (2008-2009)

Location LEBANON – Tripoli
34°27'28"N
35°50'33"E

Consultant SEATEC sarl

Tripoli marine outfall

Year 2004
Design review

- Coastal rocky protection for Tripoli water treatment plant reclaimed area
- Drawings / BoQ

Year 2008 – 2009

- Technical and administrative assistance for OPET (Tripoli Commercial Port Authority), including method statement review, coordination... related to the installation of Tripoli marine outfall by the Contractor BUTEC and the necessity to use internal basins and reclaimed areas within Tripoli Commercial Port.



Coastal Protections / Revetments / Sealines / Marine Outfalls

CHEKKA MARINE OUTFALL

56

Client WS Engineering

Location LEBANON – Chekka
34°20'26"N
35°43'49"E

Consultant SEATEC sarl

Chekka marine outfall

Year 2004
Design

- Stability and protection for the marine outfall of Chekka waste water treatment plant
- Marine outfall (D=30cm; L=647m) and diffuser (D=30cm; L=28m)
- Collars and rocky protection
- Specifications / Drawings / BoQ



Sealines / Marine Outfalls