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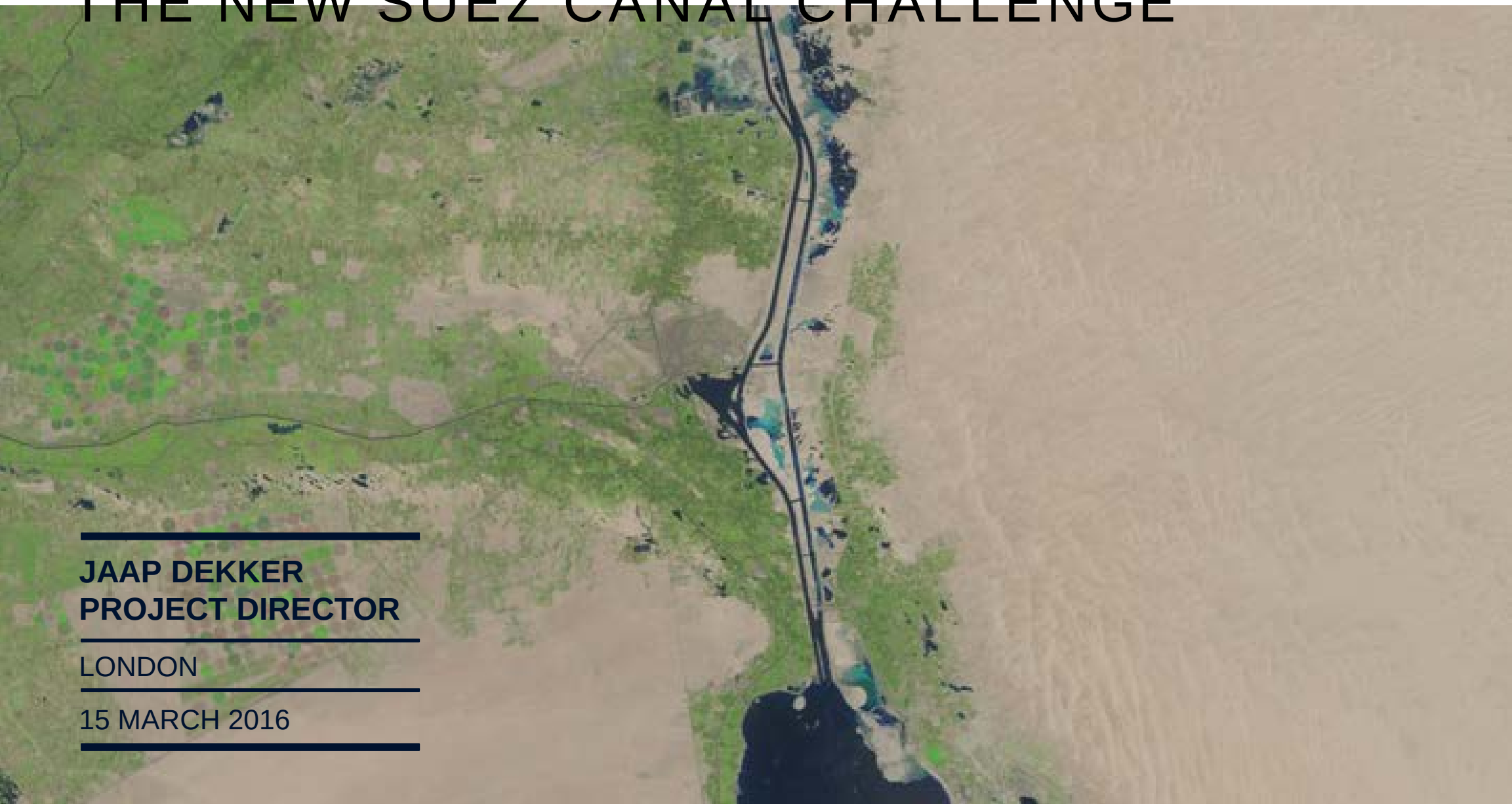
THE NEW SUEZ CANAL CHALLENGE



JAAP DEKKER
PROJECT DIRECTOR

LONDON

15 MARCH 2016

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SUEZ CANAL

NEW SUEZ CANAL

- Two way traffic over 71 km
- Scope Challenge Consortium = parallel to original canal over 35 km (KP58.2 – KP 92.6)
- Cutting transit time from 20hrs to 11hrs
- Increase capacity from 49 ships/day tot 97 ships/day
- Increase in Revenues

Figure 1 – Overview of Suez Canal location

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SUEZ CANAL HISTORY

2000 – 600 BC

- Several dynasty's have "dredged" canals connecting the Nile with the Red Sea

1798 NAPOLEON

- Interest in finding the remains of an ancient waterway passage
- 1804 erroneous "survey measurements" indicated a height difference of 10m between Mediterranean & Red Sea

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SUEZ CANAL HISTORY

1854

- Ferdinand de Lesseps enlisting the interest of the Egyptian viceroy Said Pasha in the project.

1858

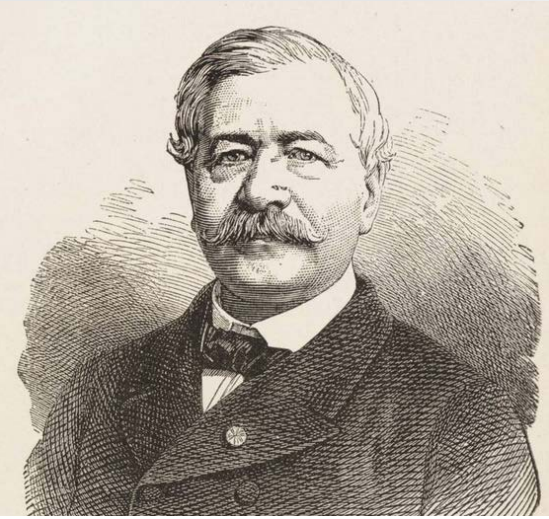
- La Compagnie Universelle du Canal Maritime de Suez. Private Egyptian concern, its stock owned chiefly by French and Egyptian interests.

1859

- Start of the works

1869

- 17 November 1869 Opening of the Suez Canal



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SUEZ CANAL HISTORY

THE SUEZ CANAL – AUGUST 2014

17,000 VESSEL TRANSITS PER YEAR

5 BILLION USD TRANSIT FEES PER YEAR

5% OF EGYPT'S GDP

CANAL ONE WAY TRAFFIC

THE SUEZ CANAL – THE FUTURE

30,000 VESSEL TRANSITS PER YEAR

12 BILLION USD TRANSIT FEES PER YEAR

25% OF EGYPT'S GDP (INC SCZONE)

THE GOAL IS TWO WAY TRAFFIC

TO BE ACCOMPLISHED IN 1 YEAR

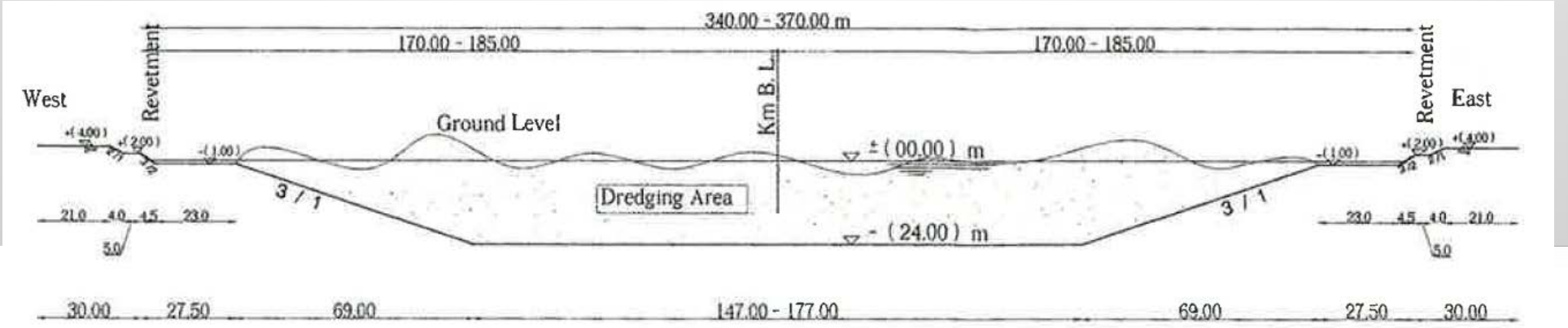
TENDER PROCESS

TENDER ANNOUNCEMENT - 5TH AUGUST 2014

- Depth: 24 m
- Width: 147 -177 m (toe line)
- Length: 35 km
- Volume: 170 million m^3

- President Abdel Fattah al-Sisi

"The Project has to be finished within one year"



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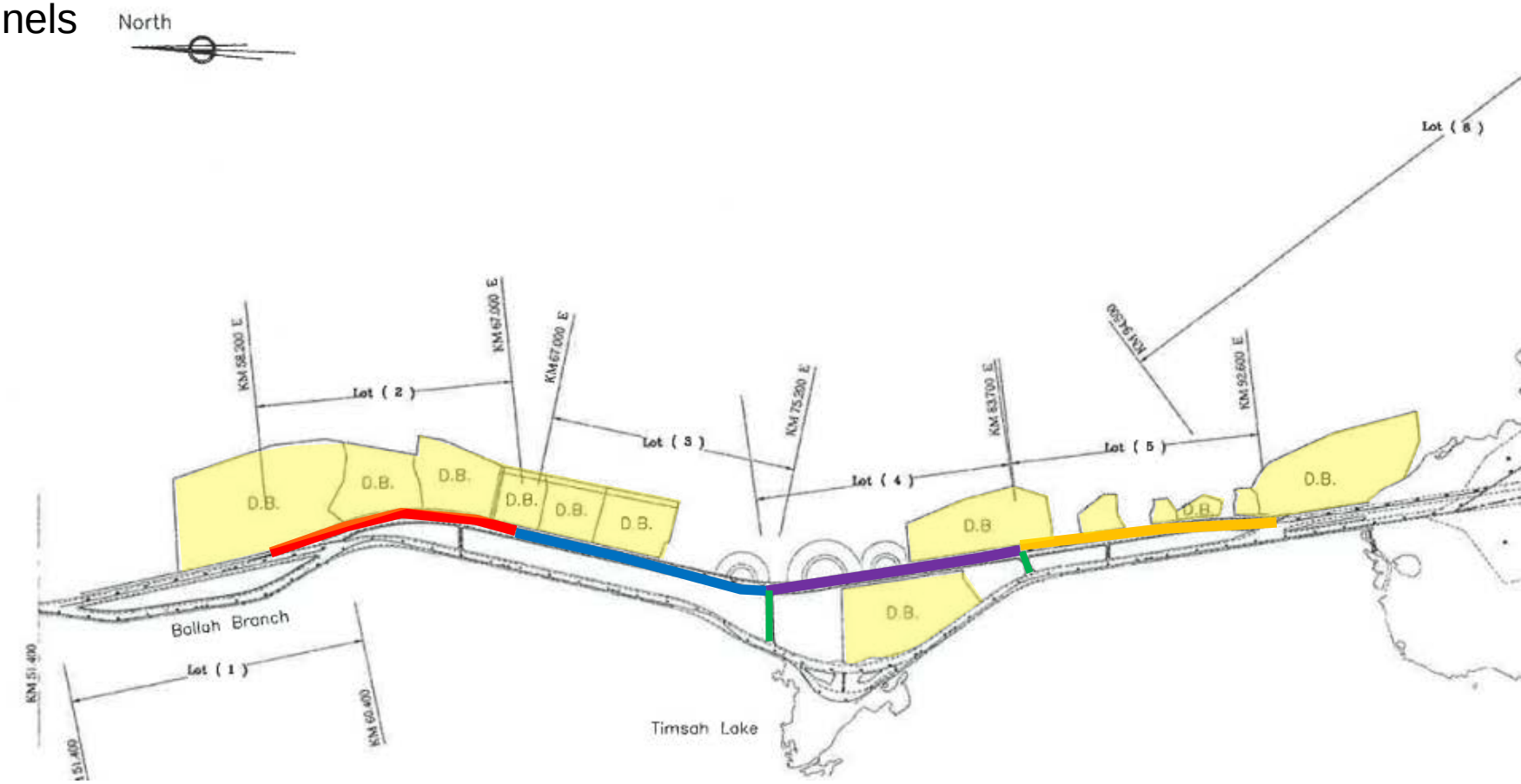
TENDER PROCESS

SCOPE OF WORKS CHALLENGE CONSORTIUM

- 35 km Channel (Lot 2,3,4 &5)
- 2 Service Channels



CHALLENGE CONSORTIUM

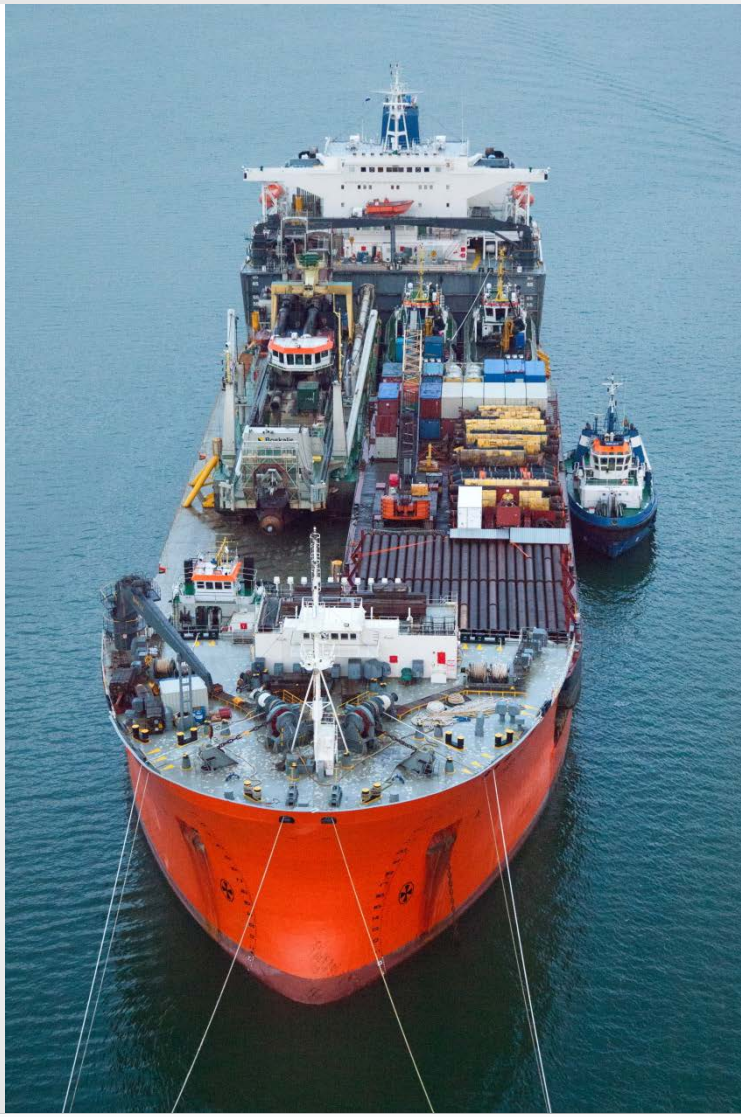
شركة الجرافات البحرية الوطنية
NATIONAL MARINE DREDGING COMPANY
Boskalis Van Oord
DJN Jan De Nul GROUP

THE CHALLENGE:

- Project governed by time pressure but with a fixed end date of August 1st 2015
- No preparation period
- Record number of equipment required
- Record daily productions
- Technically not complicated – main challenges in logistics, organization and planning

1 YEAR INCLUDING TENDER

13 AUGUST 2014	**RECEIVED TENDER**
17 SEPTEMBER	**TENDER SUBMISSION**
20 SEPT – 15 OCT	**NEGOTIATIONS**
15 OCTOBER 2014	**CONTRACT AWARD**
17 OCTOBER	**7 DREDGERS DEPARTED**
5 NOVEMBER 2014	**1ST DREDGER COMMENCED**



STARTING THE PROJECT

$1,500,000 PROJECT

220 MILLION M3 OF DREDGING

10 MONTHS TO GO

21 CUTTER SUCTION DREDGERS

5 TRAILING SUCTION HOPPER DREDGERS

2000 PEOPLE ON SITE

1.4MIO M3 PER DAY (PEAK PRODUCTIONS)

1,500M3 FUEL PER DAY

TRUSTEE
SMITBARGE
DOCKWISE

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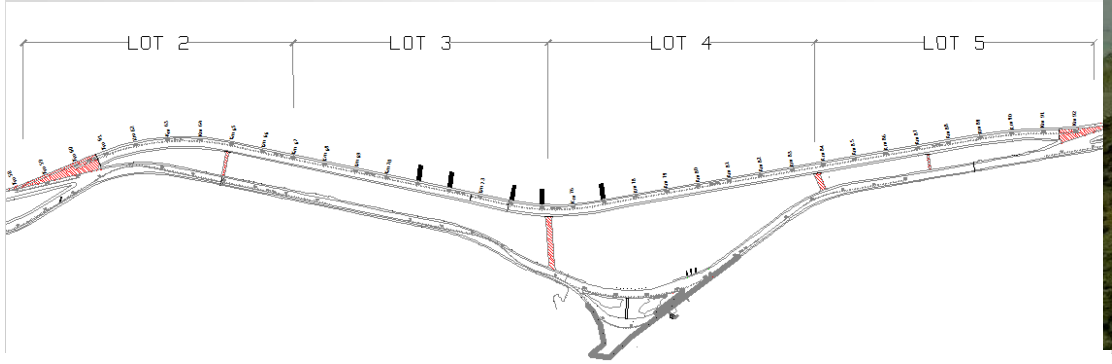
PHASE 01

MAKING SPACE

CREATING ACCESS

- Access via the north & south entrance
- Access via 2 Service Canals
- Access via 2 Cross Canals (not part of the design)
- Floatation dredging only



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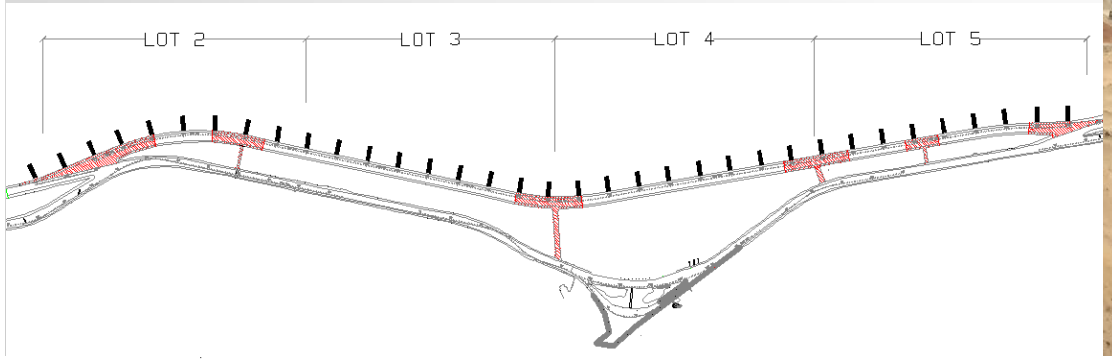
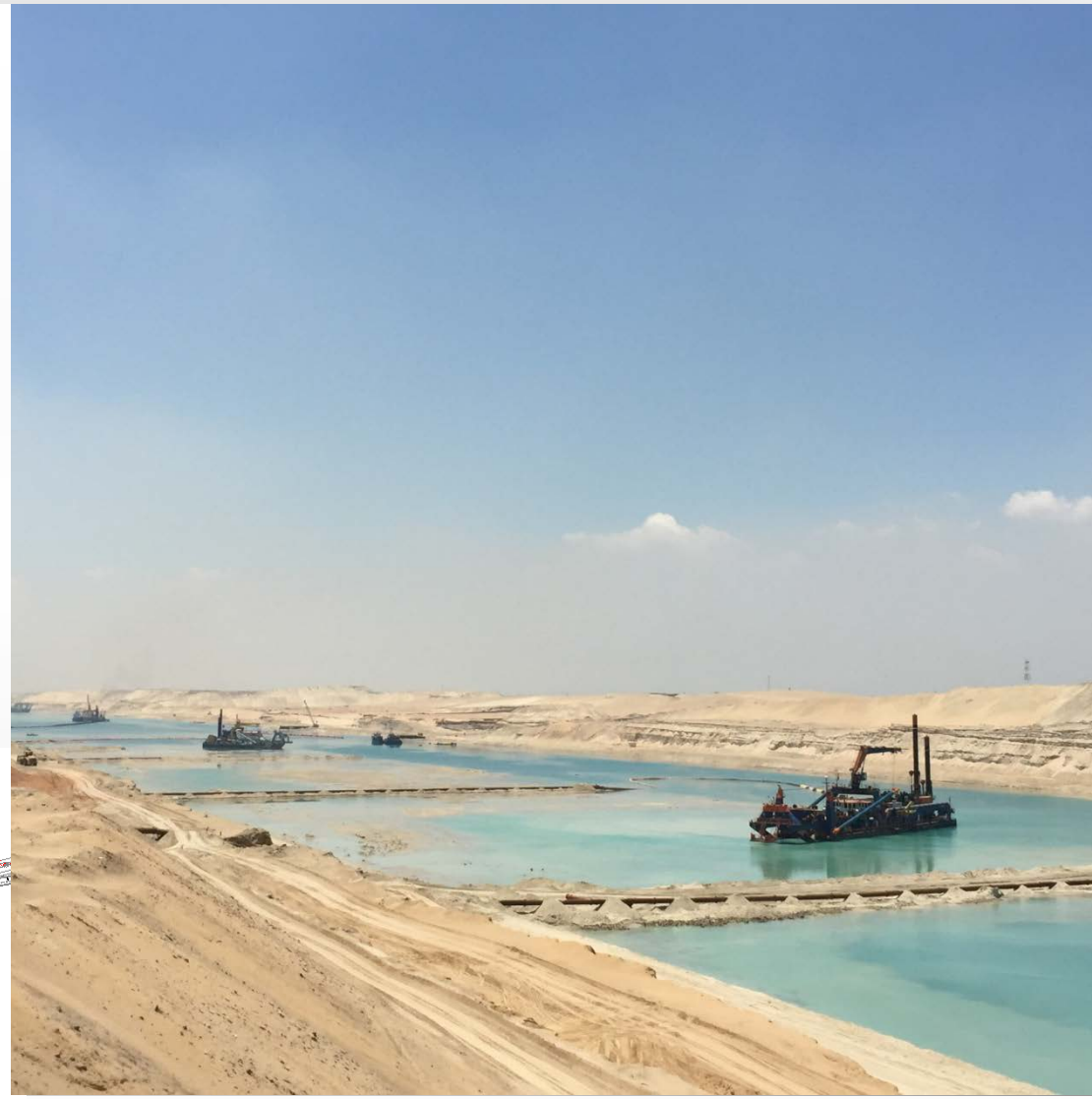
AND MORE SPACE

PHASE 02: CREATING SPACE

- More CSD equipment arriving
- Creating width and depth
- Plan ahead the shore connections
- TSHD’s added to the fleet

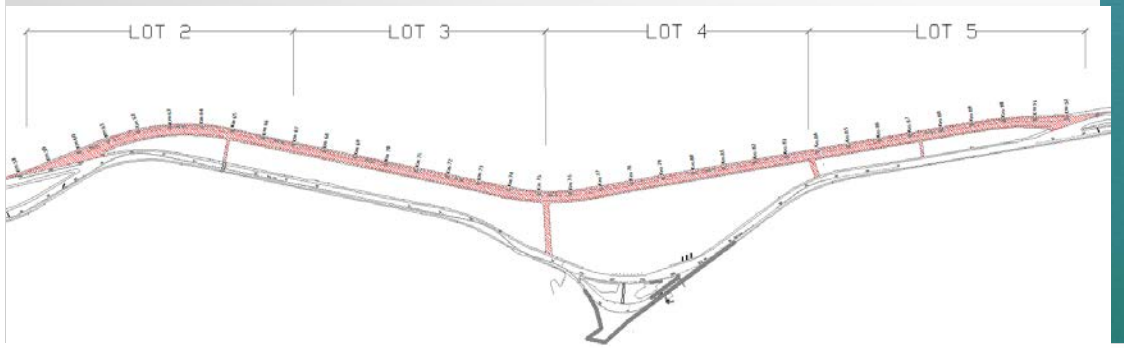


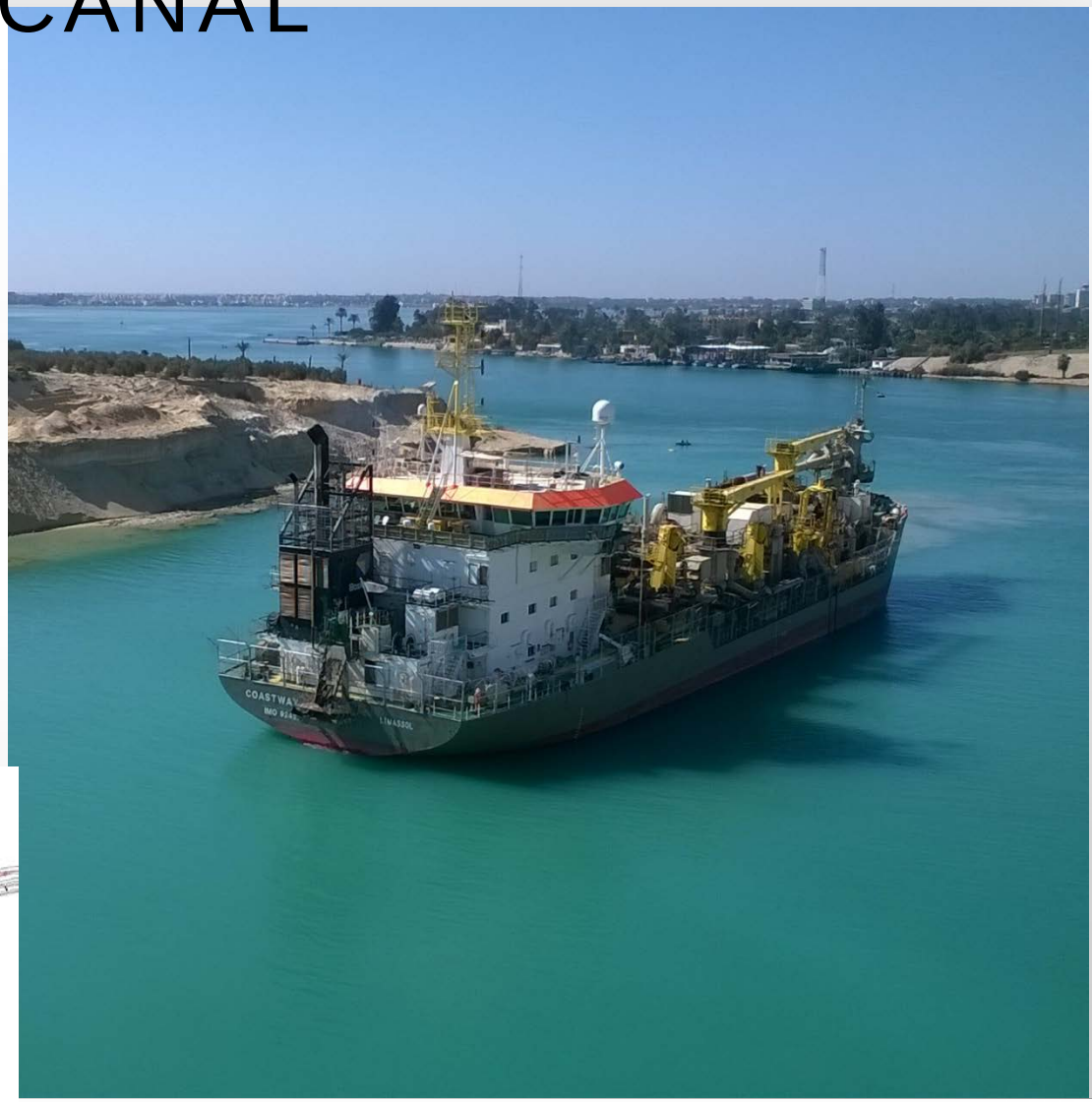


DELIVERING THE NEW CANAL

PHASE 03: CREATING A CANAL

- Use equipment to the maximum
- Prepare areas for final surveys
- Clean up high spots and reducing the capacity
- Handover and acceptance by the Client





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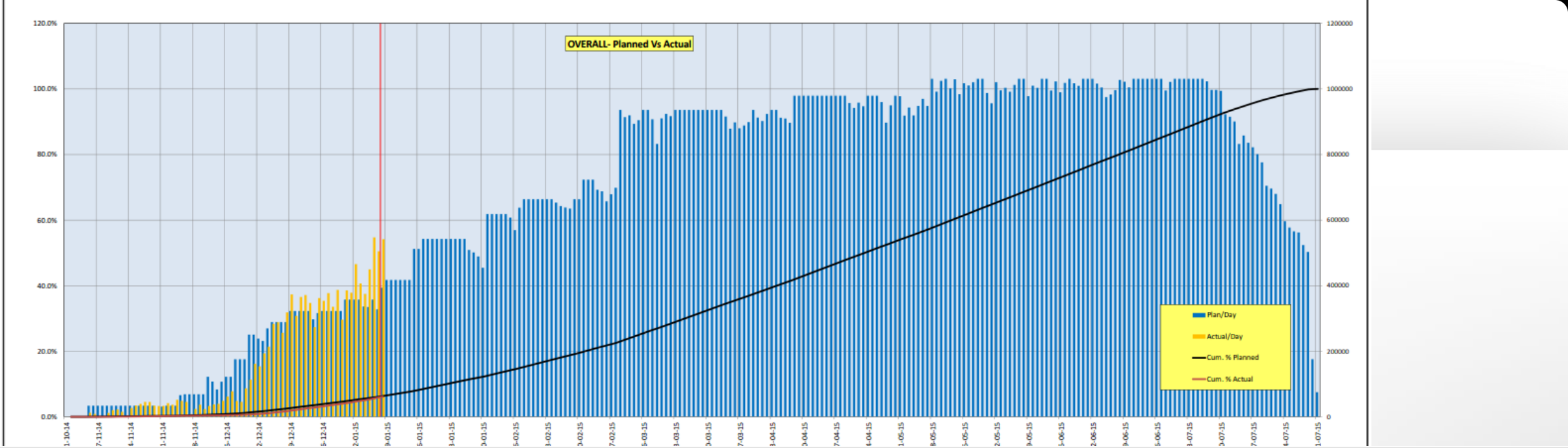
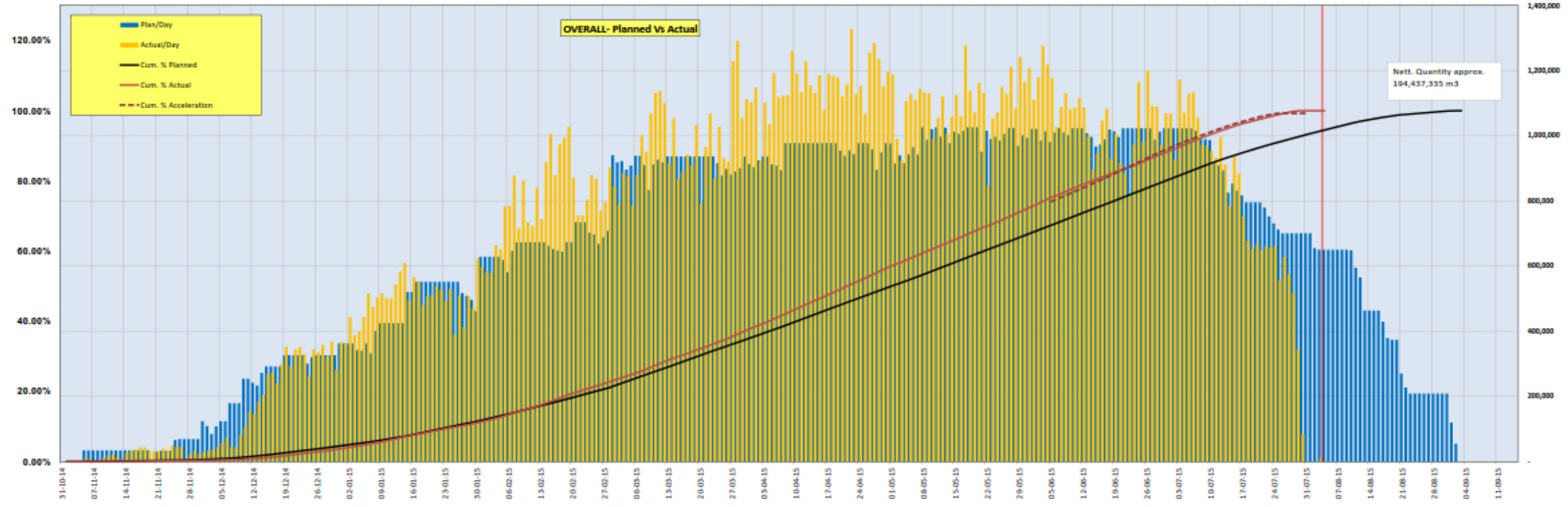

OVERALL- Planned Vs Actual
Plan/Day
Actual/Day
Cum. % Planned
Cum. % Actual

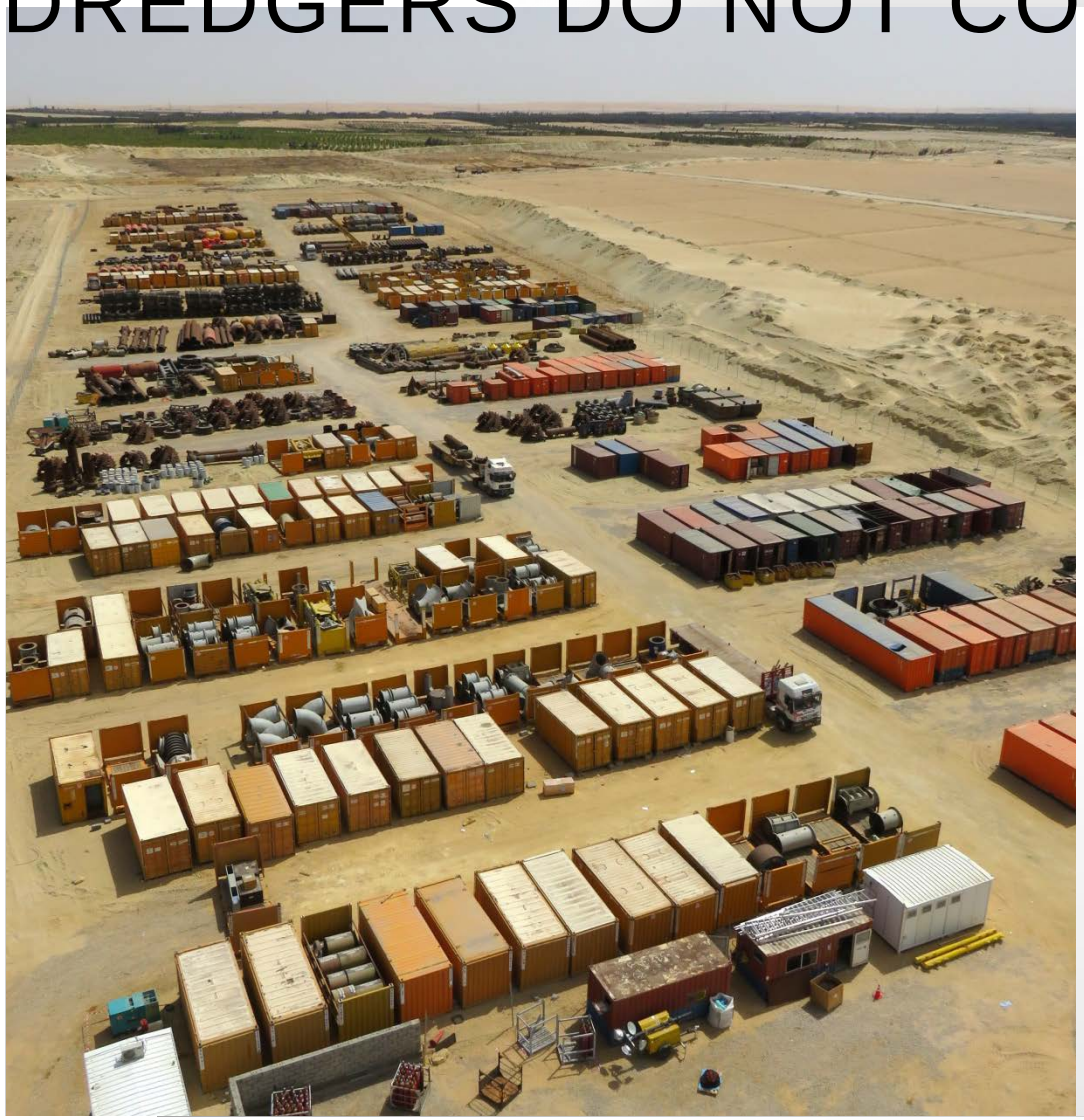

OVERALL- Planned Vs Actual
Plan/Day
Actual/Day
Cum. % Planned
Cum. % Actual
Cum. % Acceleration
Nett. Quantity approx.
194,437,335 m3

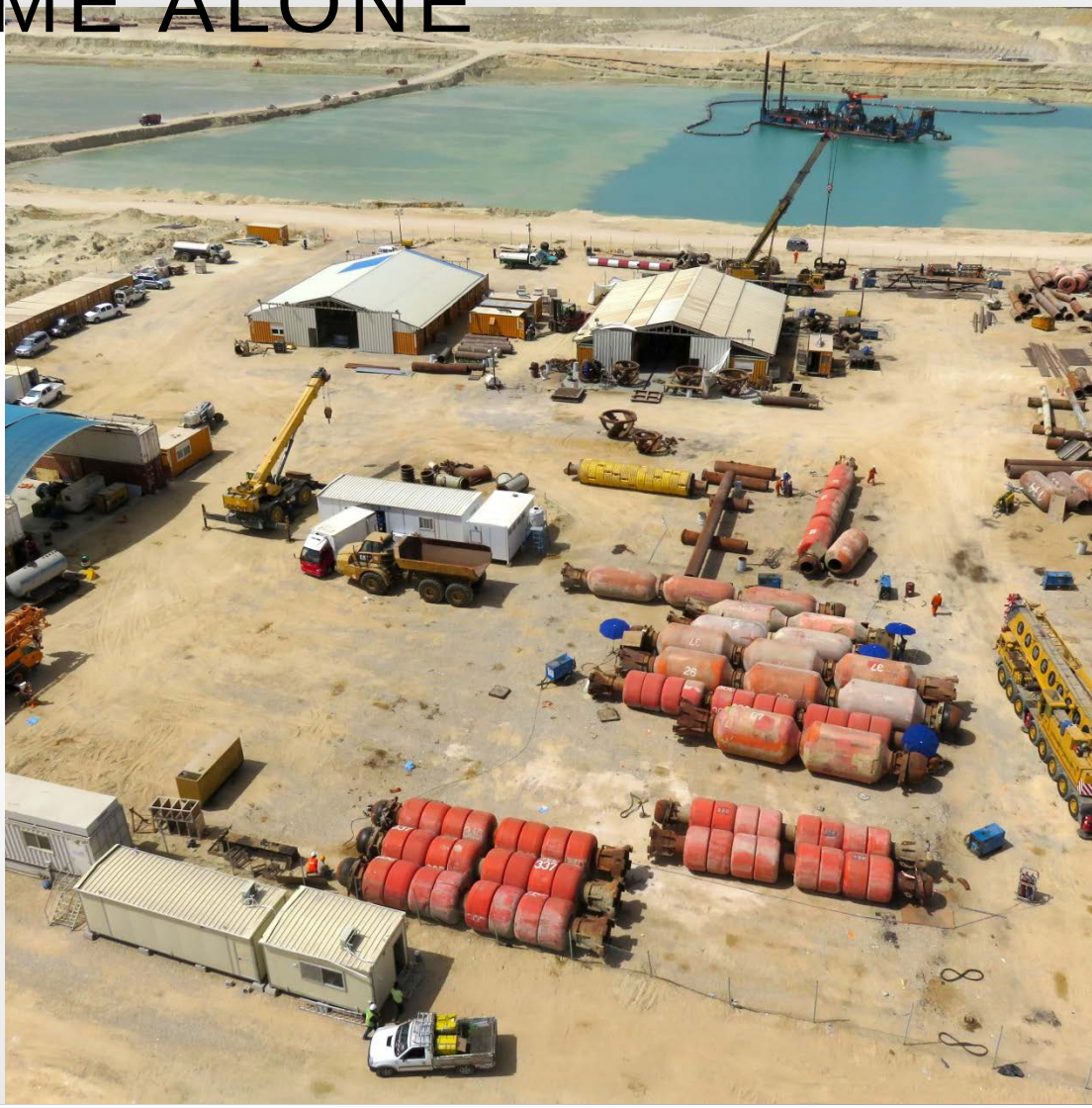
AND THE ENVIRONMENT CONTINUES

THINK IN SOLUTIONS

- Site is a military zone
- Both canals dissect the area
- Road connections between Sinai and Ismailia area
- Irrigation channel crossing the New Canal route
- Accommodation for all
- Late IT (Wi-max) availability
- Working in Consortium with 4 different Partners
- 45 Nationalities
- Use dredgers to their maximum capability

DREDGERS DO NOT COME ALONE

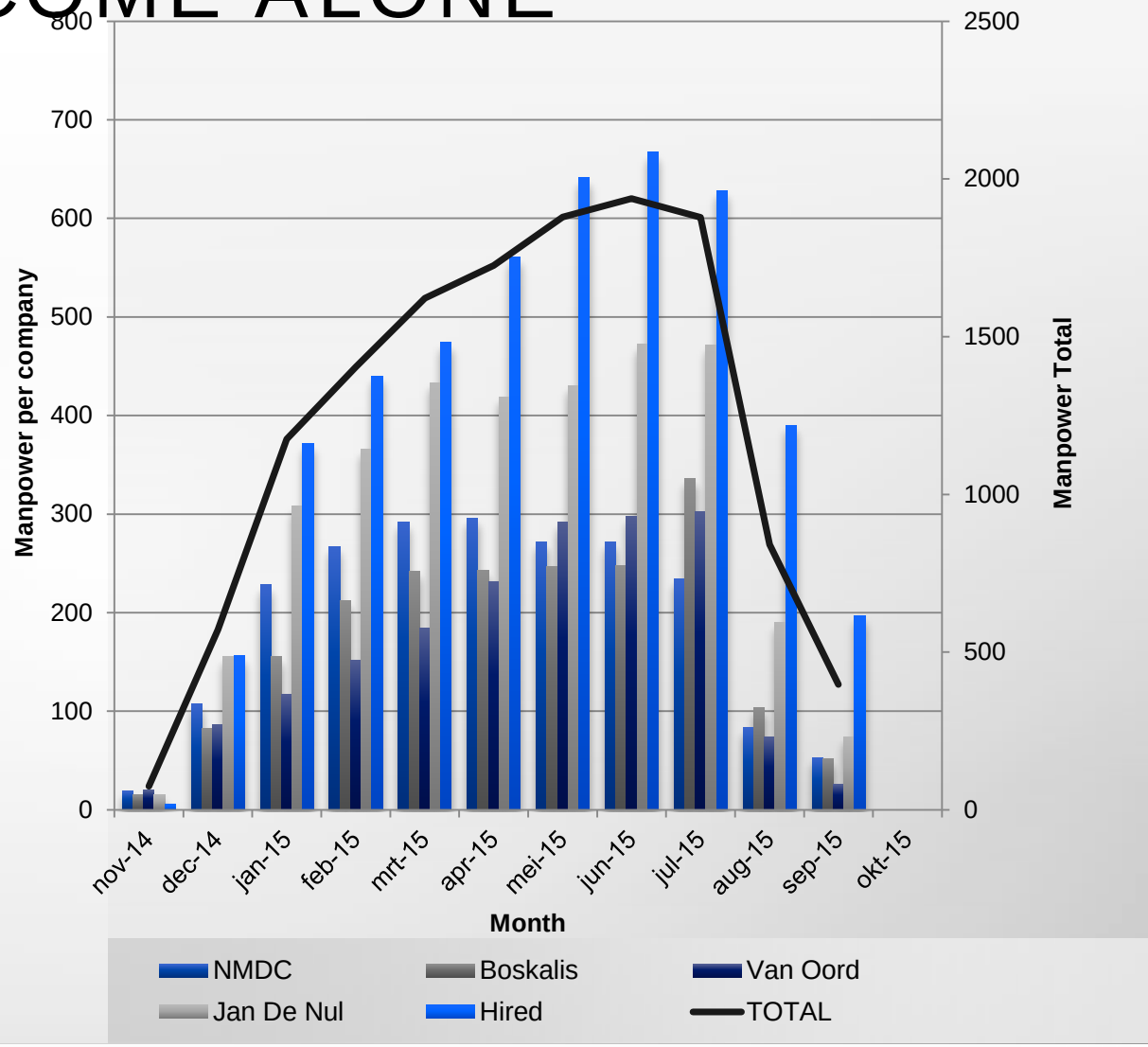




DREDGERS DO NOT COME ALONE

HUMAN RESOURCES:

- Almost 2000 people on site
- Up to 200 drivers
- 4 Accommodation barges
- 1 Cruise vessel
- 40 Auxiliary vessels



HS MARINE
DN52
DRUGGE
BAARSBV.COM
V.VALDI
BELIZE

OCEAN MAJESTY

MOB DREDGING AND DEMOB AT ONCE

MOBILISATION COMPLETED IN JUNE

DEMOB COMMENCED IN MAY

CANAL DELIVERED 1 AUGUST 2015

DEMOB COMPLETED 31 OCTOBER 2015

SUEZ CANAL
PROJECT PROGRESS PICTURES:

SUEZ CANAL
PROJECT PROGRESS PICTURES:

1 AUGUST 2015 – FINAL COMPLETION