



Date of Meeting: November 7, 2017
Item No.: 4C

Terminal 46

Dock Rehabilitation Project

CONSTRUCTION FUNDING

CIP # C800603
Project # 104827



APPROX. 2640'
PILECAP & DECK PANEL
REHABILITATION

TERMINAL 46

NWSA Area Approx. 87.8 Acres

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Terminal 46 Dock Rehabilitation

Project Authorization

Request construction funding in the amount of \$28,436,000.

Increase total project authorization from \$1,854,000 to a new total of \$30,290,000

\$19,000,000.00 of this request to be reimbursed from the Federal TIGER Grant awarded in July 2015



Terminal 46 Dock Rehabilitation

Project Summary:

- Conducted pile caps and deck panels condition survey in 2011.
- Capital improvements obligation in the tenant 13th lease amendment signed in December 2012.
- Awarded TIGER grant in July 2015.
- Completed 100% design.
- Completed all permitting process.
- Construction scheduled to begin March 2018

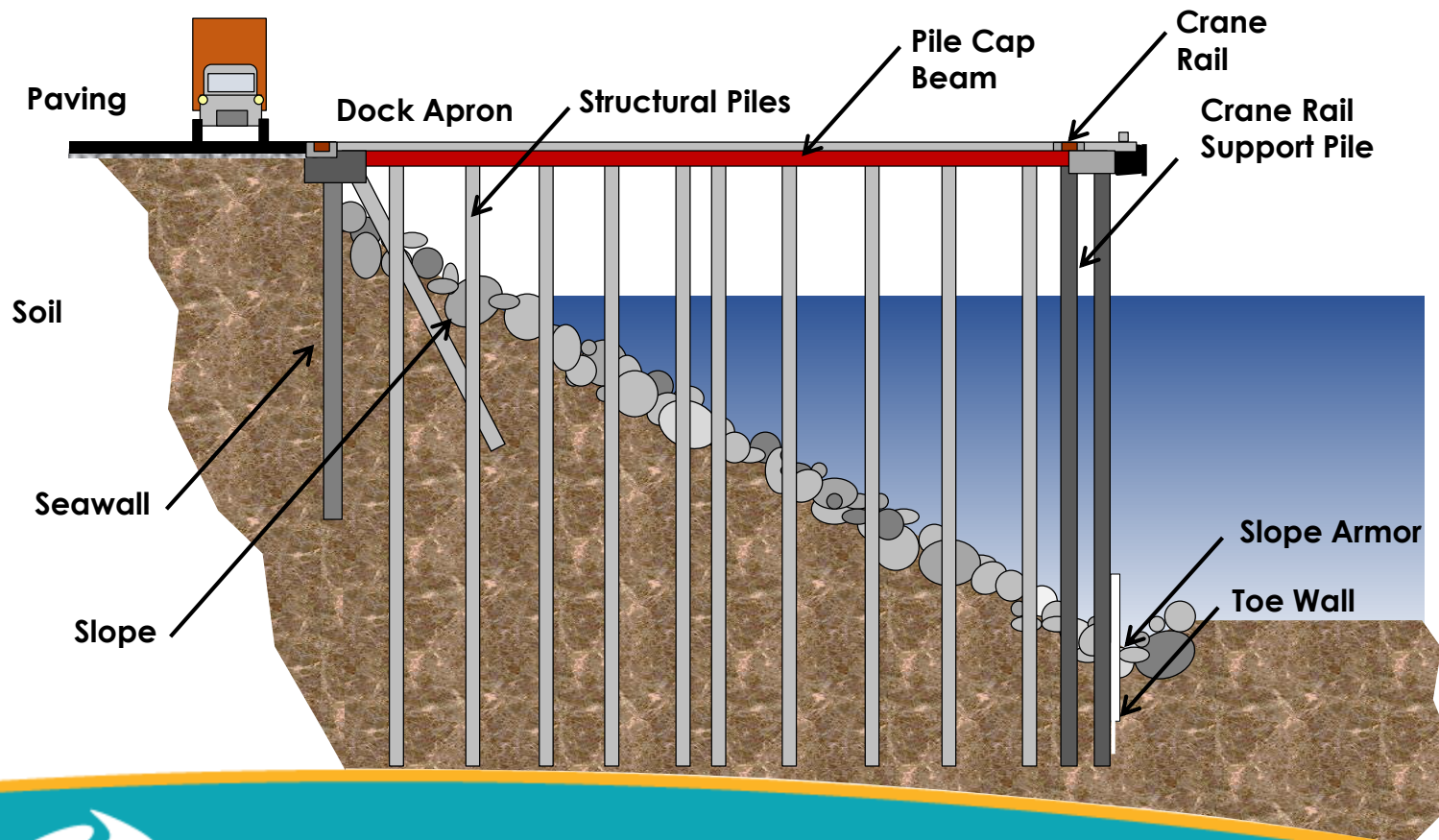


Terminal 46 Dock Rehabilitation



Terminal 46 Dock Rehabilitation

Typical Container Dock Section Component



Terminal 46 Dock Rehabilitation

Pile Cap Aging

Apron
Deck

Pile cap

Uncracked pile cap
Minor cracking begins
Water enters,
corrosive concrete
starts forming

Pile

Cracks grow, concrete is
corrosive, reinforcing
corrodes, and concrete
spalls.



Terminal 46 Dock Rehabilitation

Sample Damages



Sample Pile Cap Damages

Sample Deck Panel Damages



Terminal 46 Dock Rehabilitation

Sample Damages



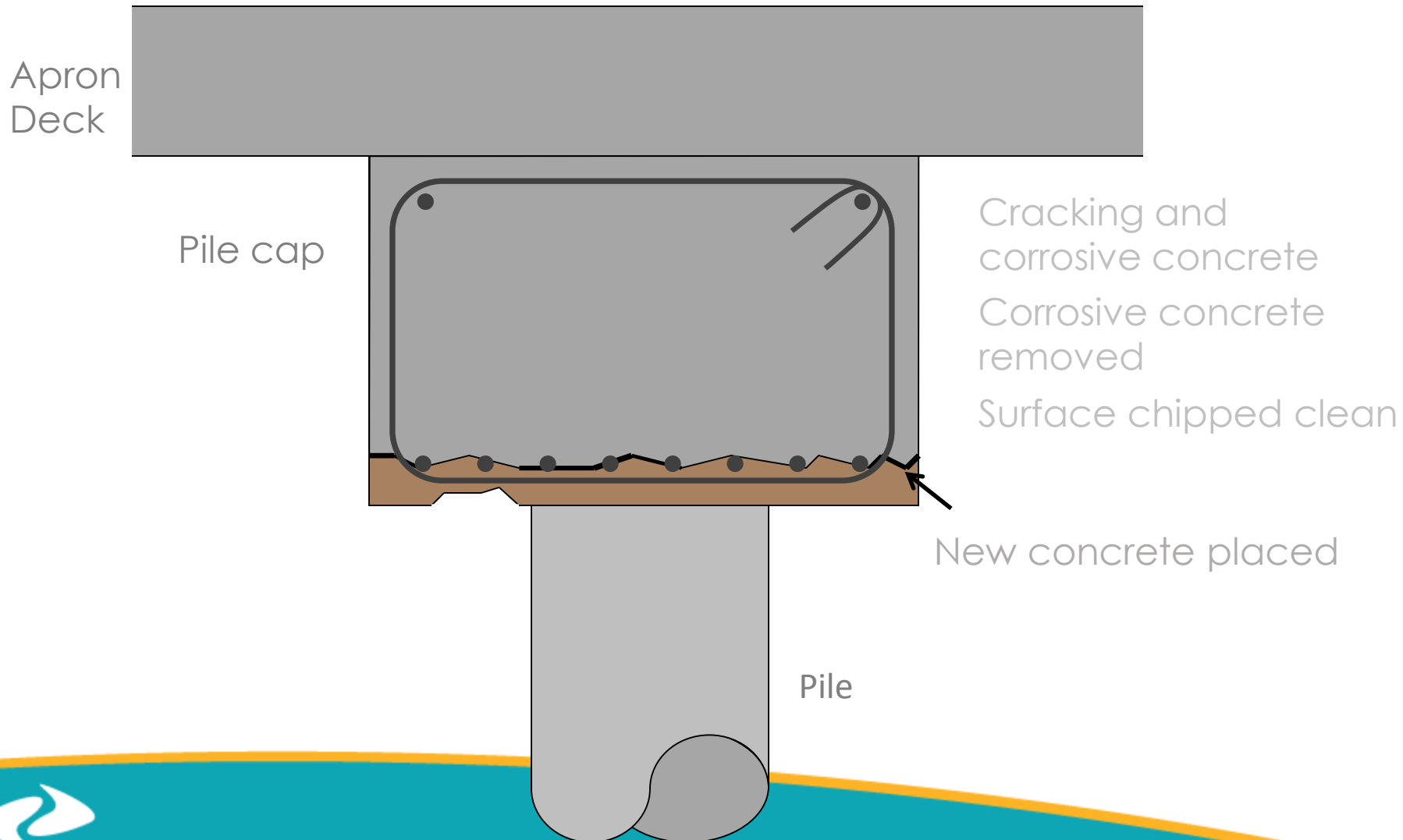
Sample Pile Cap Damages

Sample Deck Panel Damages



Terminal 46 Dock Rehabilitation

Typical Pile Cap Repair



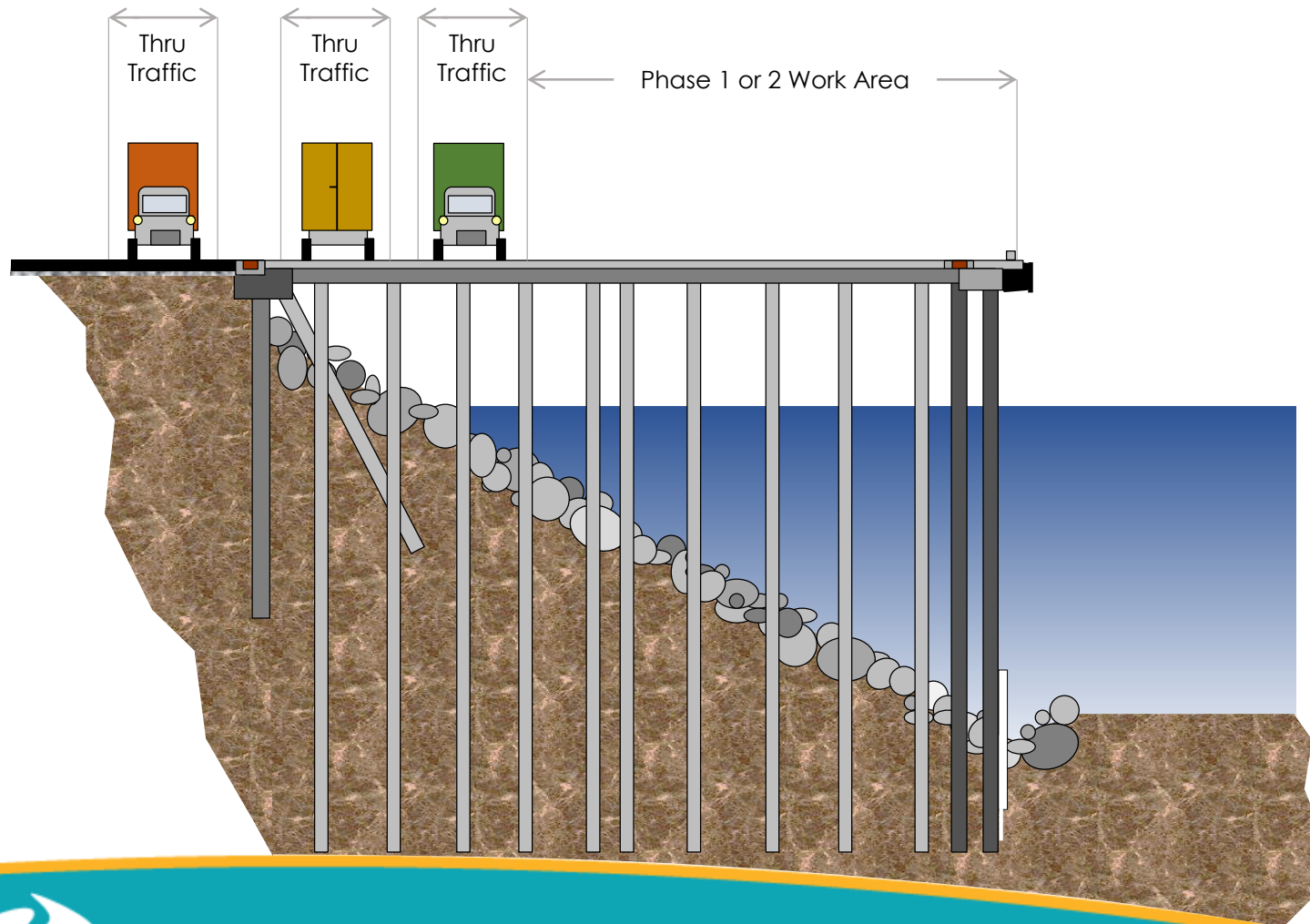
Terminal 46 Dock Rehabilitation

Construction Phasing

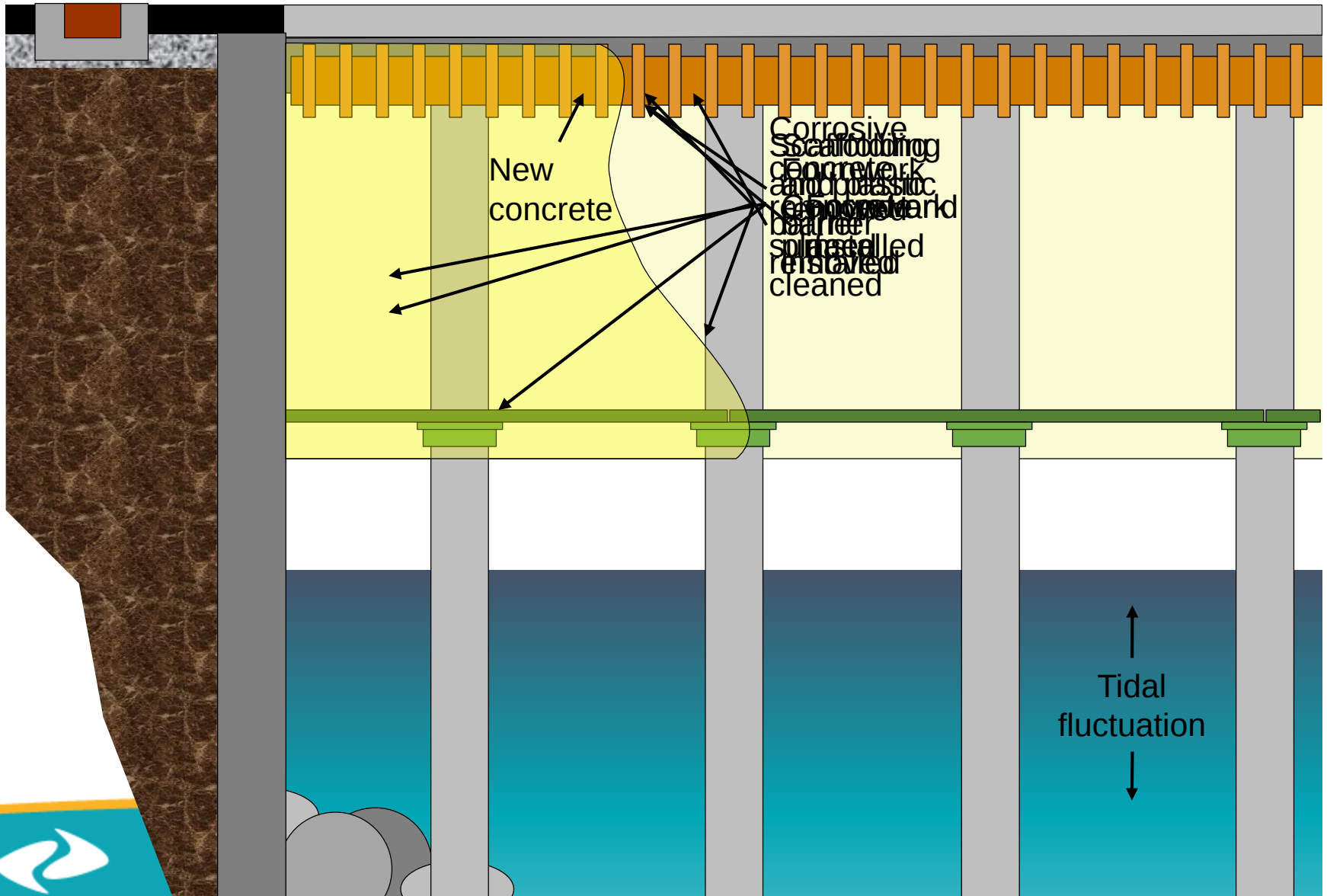


Terminal 46 Dock Rehabilitation

Construction Phasing



Repair Logistics



Terminal 46 Dock Rehabilitation

Terminal 18 Pilot Project 2012



Scaffolding Setup

Remove Damaged Area



Terminal 46 Dock Rehabilitation

Terminal 18 Pilot Project 2012



Remove Damaged Area

Collected Debris for Disposal



Terminal 46 Dock Rehabilitation

Terminal 18 Pilot Project 2012



Painted Rebar

Forms Setup for Grout



Terminal 46 Dock Rehabilitation

Terminal 18 Pilot Project 2012



Pumping Grout

Work Completed



Terminal 46 Dock Rehabilitation

Request project authorization in the amount of \$28,436,000, for a total authorized amount of \$30,290,000, for work associated with the Terminal 46 Dock Rehabilitation, Master Identification Number C800603-104827.



Terminal 46 Dock Rehabilitation

Questions?

