



# **TESORO AVON MOTEMS COMPLIANCE PROJECT**

July 16, 2015

Tom Lu - Martinez Refinery Manager

Matt Buell – Martinez Environmental Manager

# TESORO MARTINEZ – AT A GLANCE

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- 650 employees -- using a “multiplier” effect this means 5,200 jobs that rely on our business
- 700 - 1500 contract employees (depending on projects)
- \$97 million in annual payroll; \$16 million in Property Tax paid in 2014
- One of five Bay Area refineries supplying 15-20% of local fuel supplies
- Also one of the four refineries that have continuously operated here since ca. 1915
- Marine transportation accounts for 20% of refinery petroleum product movement

# PROJECT OVERVIEW

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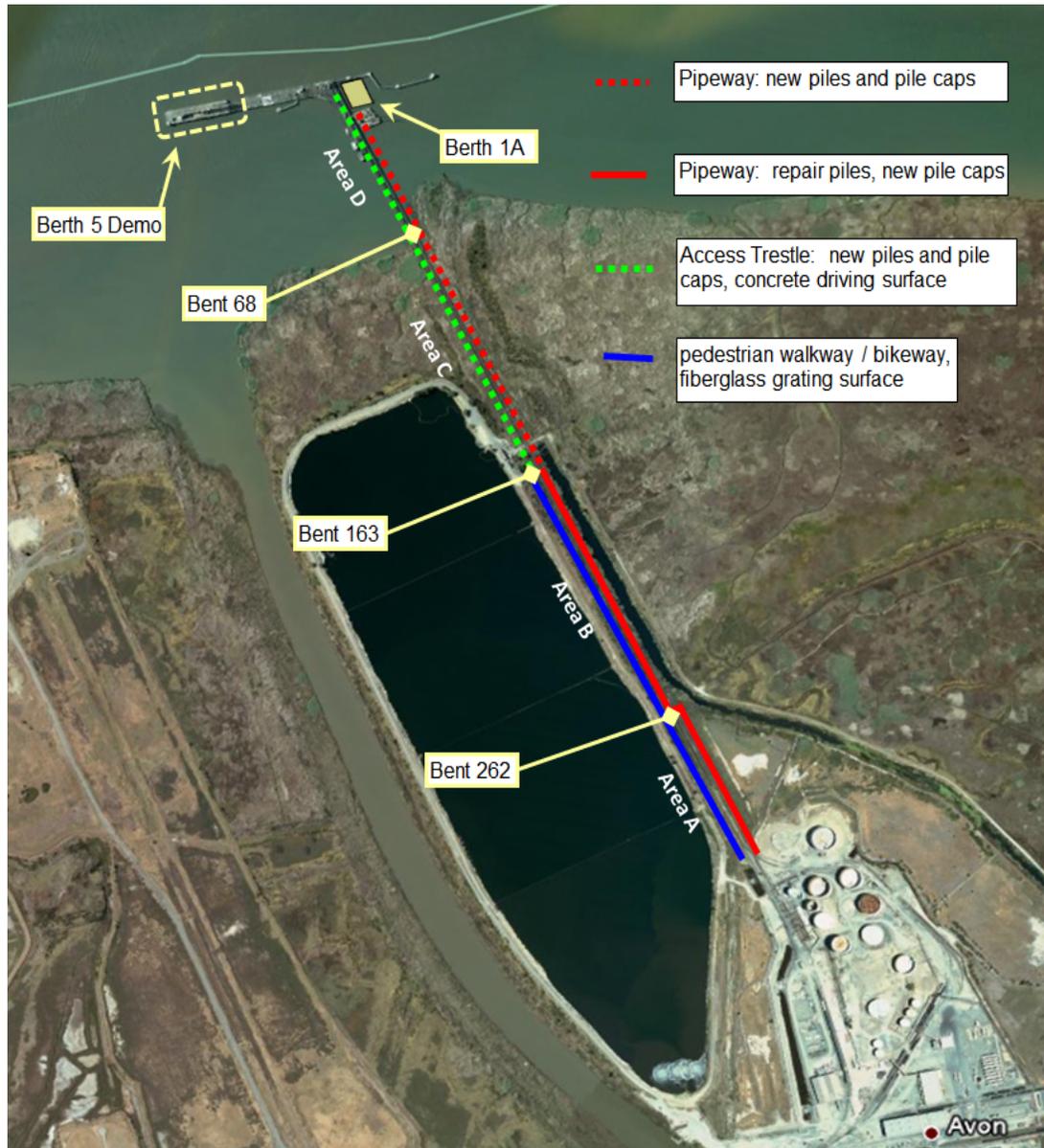
- MOTEMS - Standards were developed to ensure that California Marine Oil Terminals meet the highest levels of safe operation and protection of the environment
- This project will consist only of upgrading the existing Avon Marine Terminal to current MOTEMS Standards - with no additional capacity for product transfers
- The Avon Marine Terminal does not bring in crude oil - a lease condition does not allow crude unloading without State approval
- State Lands Commission requires project completion by June 2017

# MARTINEZ REFINERY MARINE TERMINALS

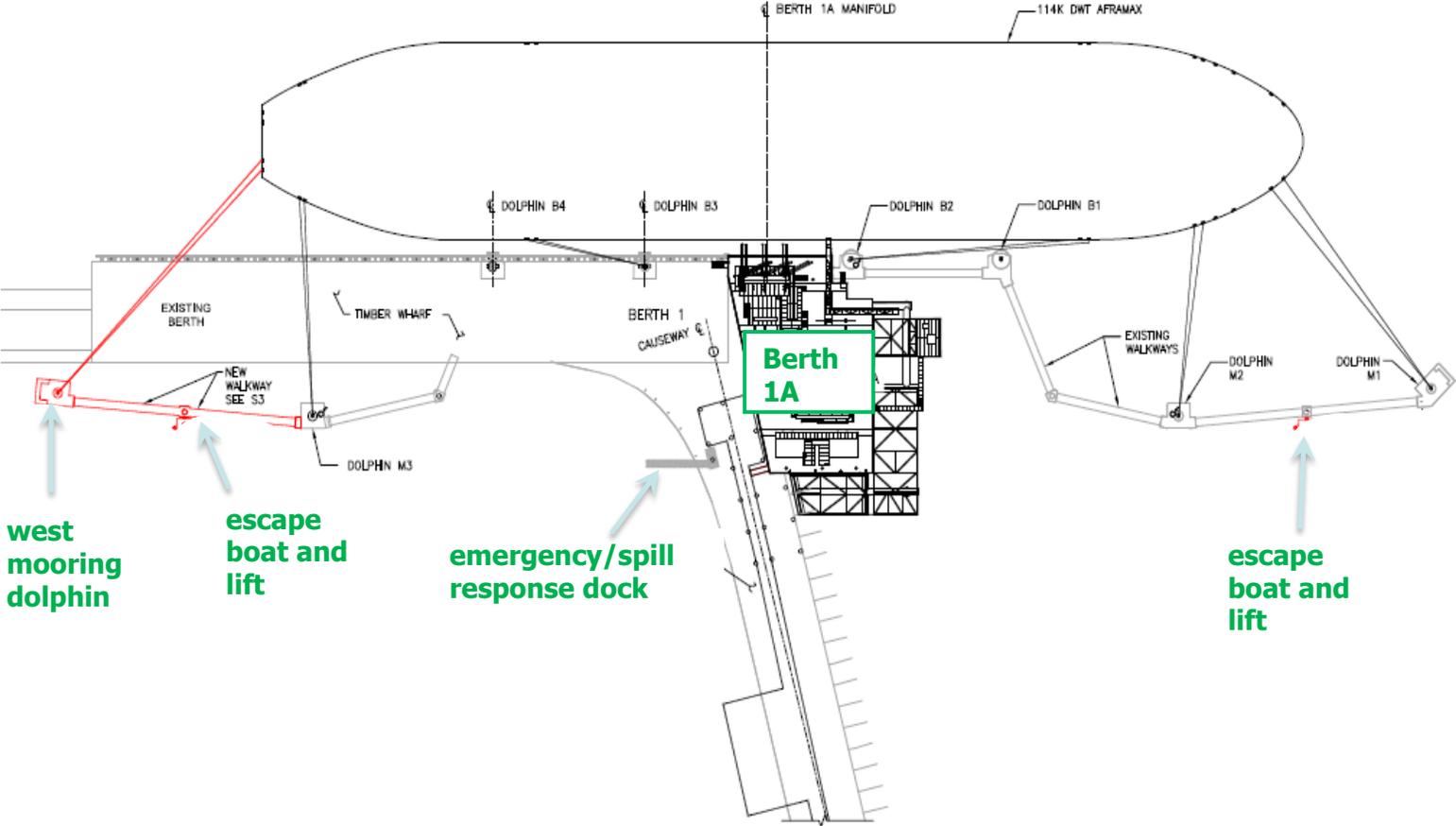
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# PROJECT AREA

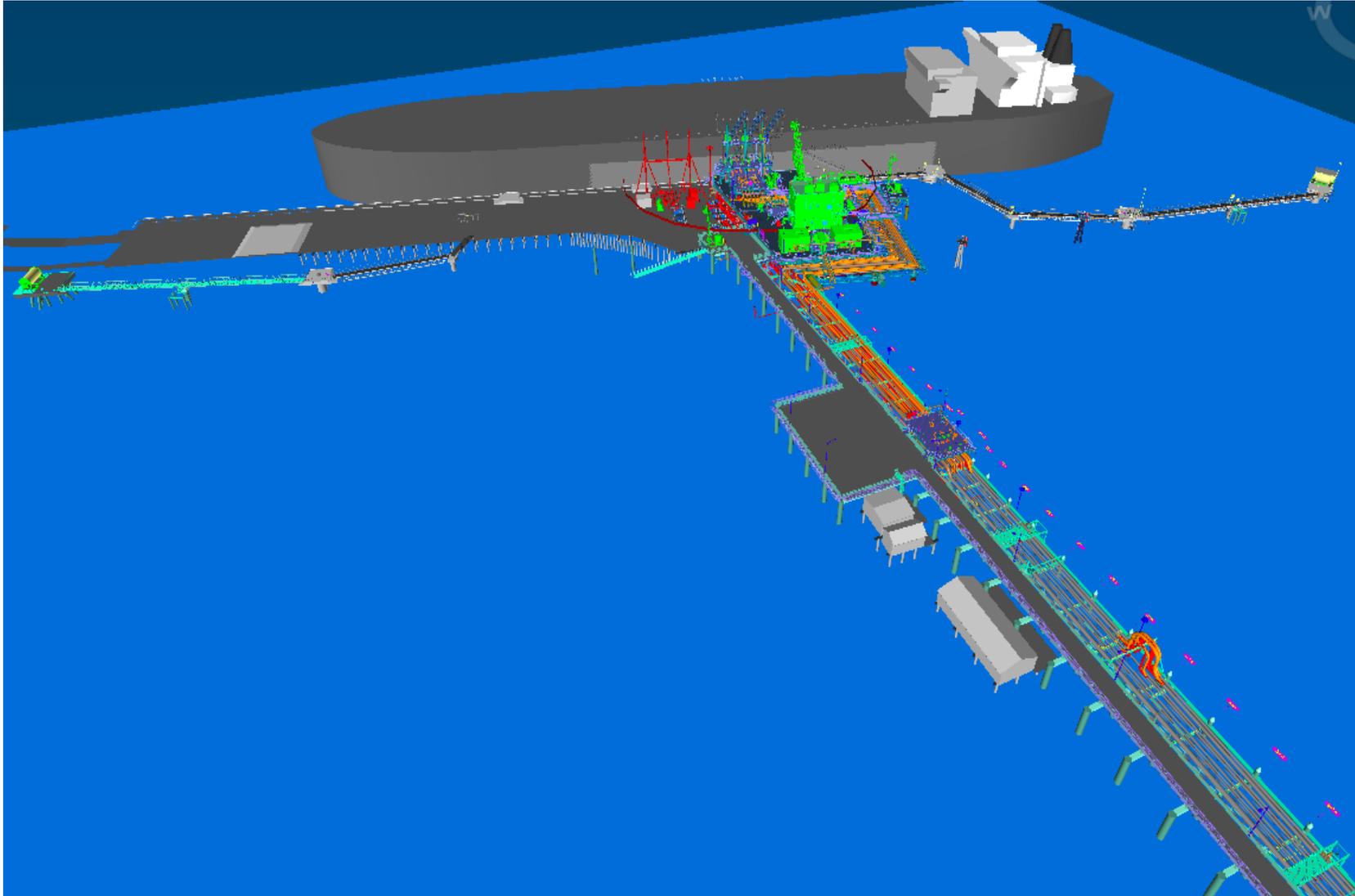


# NEW TERMINAL PROJECT ELEMENTS

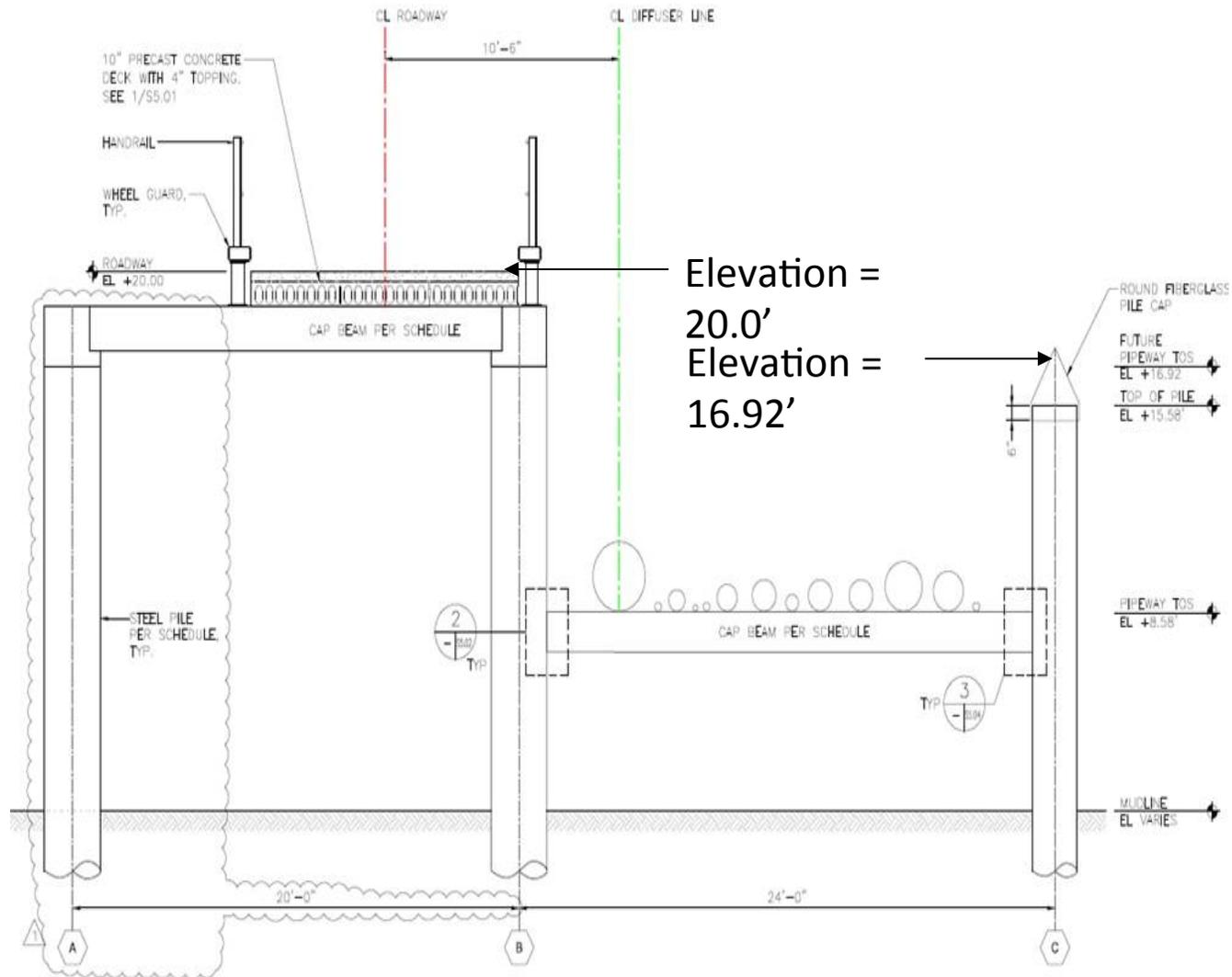


# BERTH 1A LAYOUT SHOWING BERTHED SHIP

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# TYPICAL NEW TRESTLE "BENT"



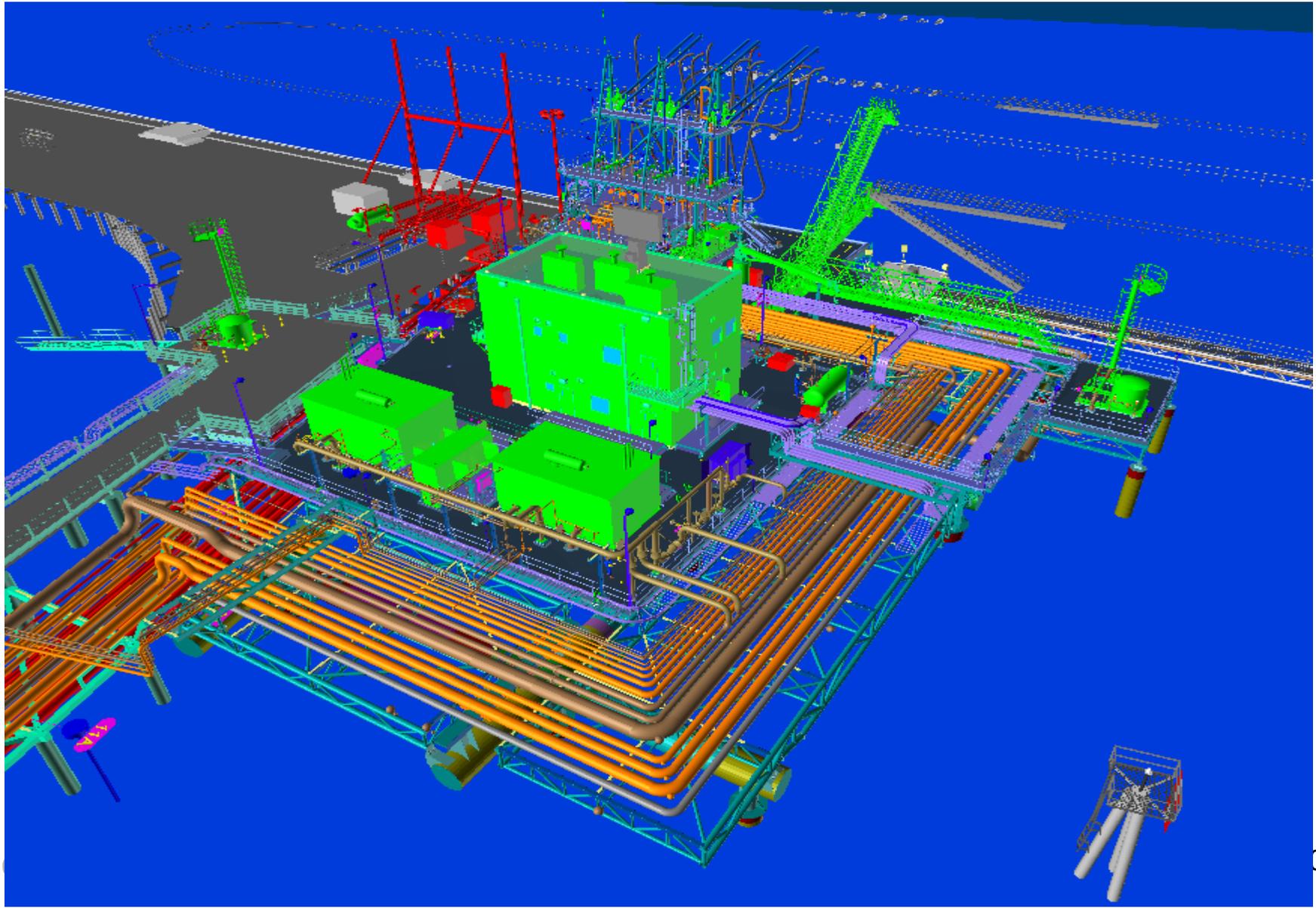
C2 TYPICAL SECTION  
 3/8" = 1'-0"

NEW TRESTLE - AREA C  
 AREA C - SHOWN: BENT 75A

# STATE OF ART PROJECT DESIGN

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- Designed by Marine Terminal Engineering Experts
  - Anvil – Electrical & Piping
  - Ben C. Gerwick / COWI – Structural
  - Langan Treadwell Rollo – Geotechnical
- Utilized three dimensional Computer Aided Design (CAD)
- Extensive Design Quality Assurance (QA) by multiple engineering specialists
- Design included MOTEMS required oversight and approval by State Lands Commission Marine Facilities Division engineers
- Design, drawings and calculations also evaluated by the BCDC Engineering Criteria Review Board



# PROJECT CONSTRUCTION SCHEDULE

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- In-Water Work Window: August 2015 – November 2015
  - Install 401 new steel pilings
- Berth 1A: December 2015 – August 2016
  - Install pile caps, deck modules, above deck equipment, structures, instrumentation and electrical
  - Complete “above water” construction of mooring dolphin, oil spill response dock and escape boat lifts
- Approach Trestle: December 2015 – November 2016
  - Install new pile caps and other structural steel
  - Install new roadway and bikeway
  - Demo existing piles / structure
- Cutover to Berth 1A: November 2016 – December 2016
  - Shutdown wharf operations and perform all piping tie-ins
  - Perform all final system walkdowns and mechanical/instrument checks
  - Perform final training
  - Commission Berth 1A

# SAFETY ASPECTS

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- Rigorous seismic design criteria required by MOTEMS (that exceed normal local earthquake building codes)
- Rapid pipeline shut-off valves to significantly decrease response time for operators
- Enhanced emergency response capabilities
  - Additional fire fighting and spill response equipment
  - New response and escape boat docks
- New state-of-the-art Operations Control Building
- Systems for remote rapid emergency ship releases, tension monitoring of mooring lines and collision avoidance are also required by lease conditions

# JURISDICTIONAL AGENCY AUTHORIZATIONS

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- State Lands Commission CEQA EIR Certification / 30 year lease renewal
- Project Permitting
  - US Army Corps of Engineers (USACE) Nationwide Permit
  - Biological Opinions from Service Agencies
    - US Fish and Wildlife Service
    - National Marine Fisheries Service
  - Regional Water Quality Control Board (RWQCB) Water Quality Certification
  - BCDC Major Permit application scheduled for consideration hearing on July 16

*All agency authorizations restrict in-water construction to a Work Window of August 1 through November 30 for fish protection.*

# ADDITIONAL ENVIRONMENTAL BENEFITS

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- Removal of approximately 900 creosote treated piles
- Funding for McNabney Marsh Restoration (East Bay Regional Park adjacent to I-680 near Benicia - Martinez Bridge)
- Enhancement of California Clapper Rail habitat
- Provides more than 10 acres of enhanced Salt Marsh Harvest Mouse habitat in perpetuity
- Required stormwater treatment mitigation for new terminal approach road
- Required Osprey nest relocation

# COMPLIANCE WITH BCDC PLANS & POLICIES

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- Increases Bay open water surface area by 11,939 square feet
- New Berth 1A, terminal approach road and pipeway supports designed to accommodate future sea level rise per Bay Plan
- Installation of five seismic accelerometers on the new Berth 1A and approach road as requested by the ECRB
- The application before you for consideration today has other “special conditions” – all of which Tesoro has committed to address

# QUESTIONS?

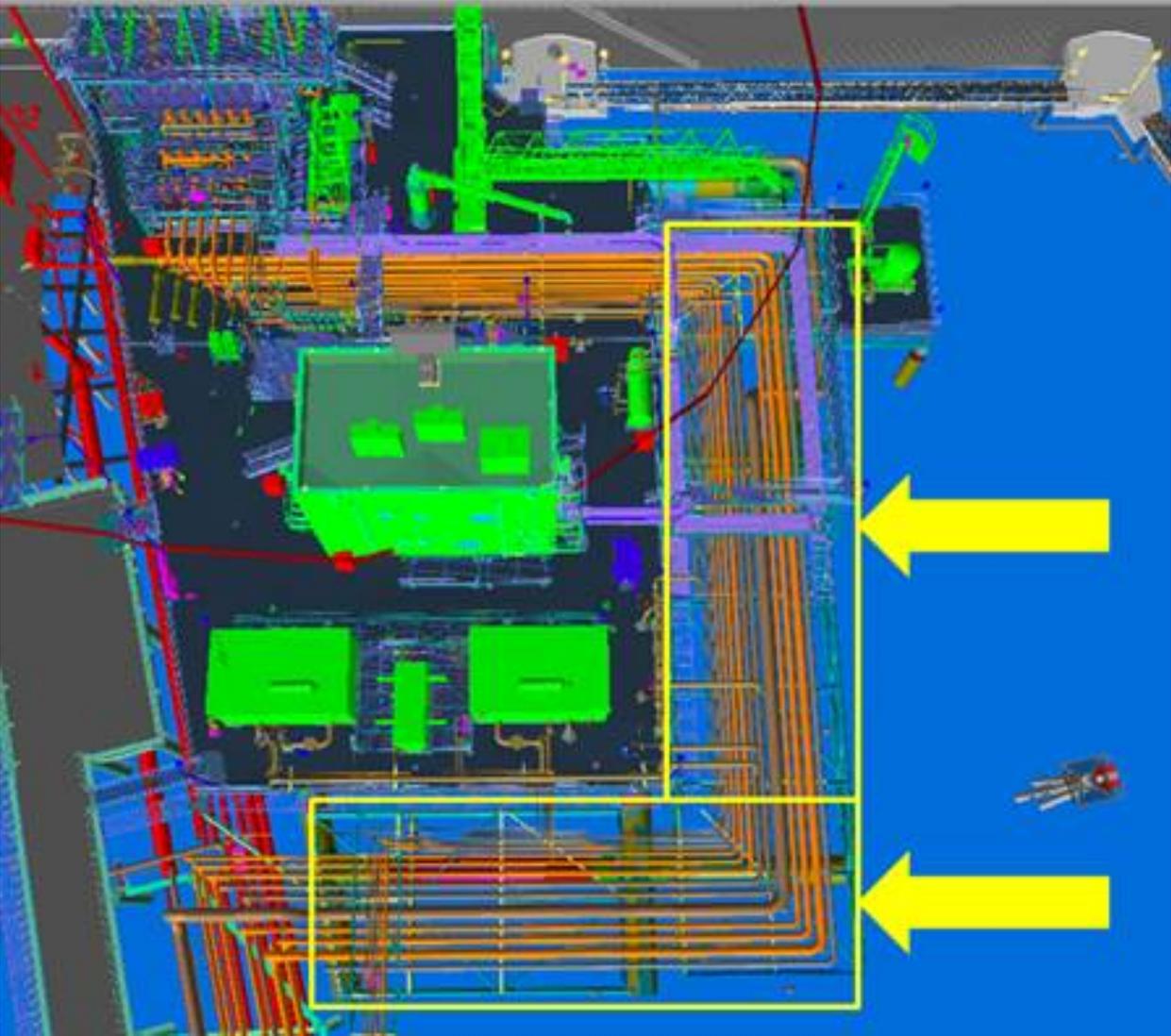
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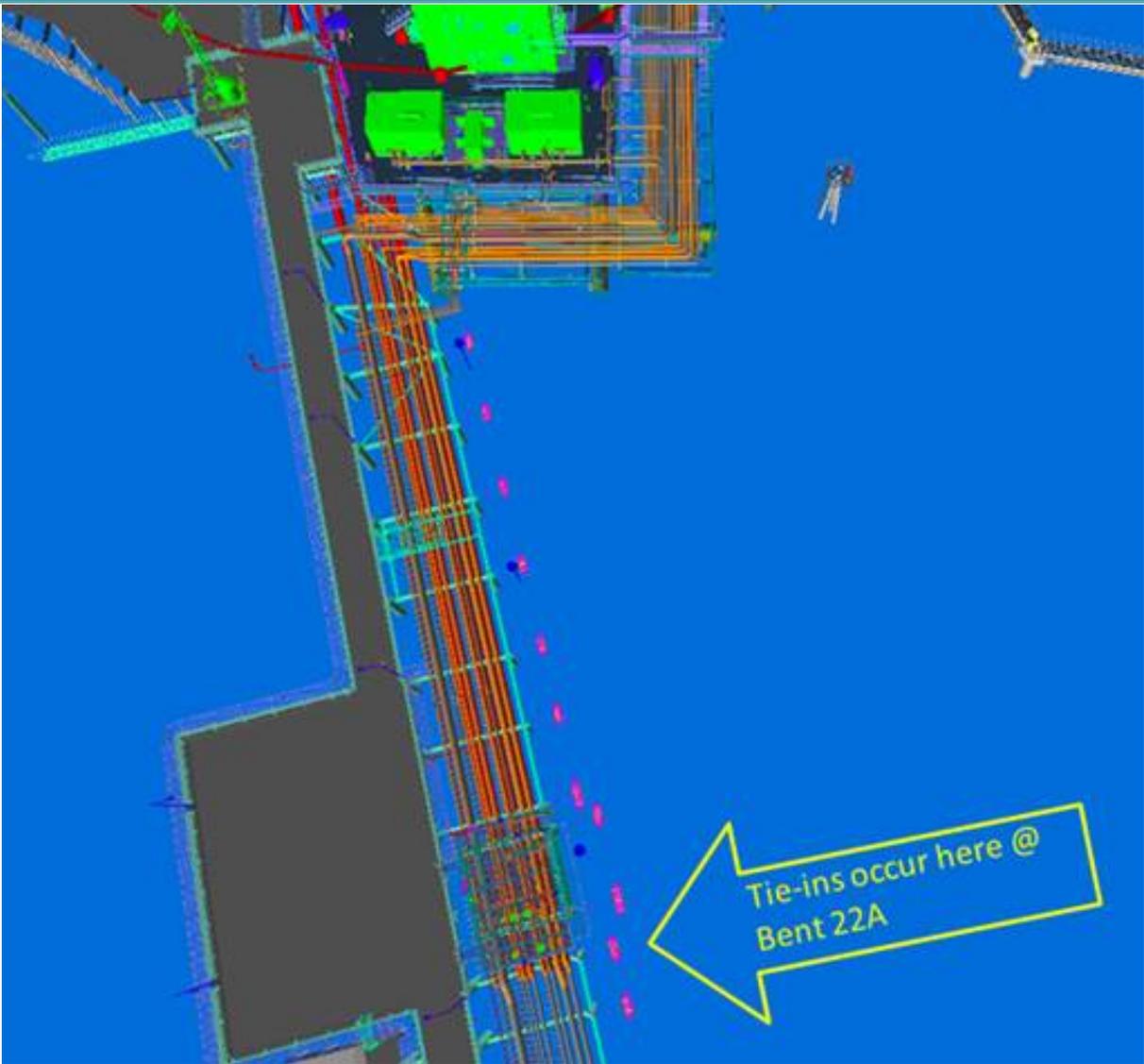
End of Presentation

# NEW BERTH 1A PIPING LAYOUT

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# NEW BERTH 1A PIPING CONNECTION TIE IN



# EXISTING AVON TERMINAL



# BCDC JURISDICTION

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# SHARED VALUE

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Improving the quality of life in areas where we work and live:

- \$500,000+ donated to charities in 2014 alone with focus on
  - STEM Education (science, technology, engineering & math)
  - Public Safety
  - Environmental Conservation & Sustainability
- 2,000+ volunteer hours worked each year
- 15 baseball diamonds & soccer fields used by the community for \$1/year.
- Community Advisory Panel (CAP) existing of 14 members of the community meeting monthly to discuss issues and concerns.

# COMMUNITY ENGAGEMENT

We support more than 50 charities and community organizations, including :

