

Clearwater Beach Marina Redevelopment Final Design Presentation

for City Council Work Session

November 13, 2023



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Moffatt & Nichol



Project Goals

- Replace aging docks
- Replace / modernize marina utilities
- Optimize marina slip mix & layout
- Maximize city-owned submerged lands, but maintain existing slip count and balance
- Provide upland storage and ticket sales opportunities
- Reduce congestion along Coronado Drive
- Activate “Marina Walk”
- Maintain commercial operations during construction
- Provide 2 boat slips for water taxi
- **Replace/raise bulkhead**



CLEARWATER
BRIGHT AND BEAUTIFUL - BAY TO BEACH



moffatt & nichol

Project Progress

➤ NTP Oct 2021

1. Master Plan

- Market Study
- Commercial Tenant Outreach

2. 30% Submittal

3. 60% Submittal

4. Permitting

- Federal channel deauthorized Jan 2023
- FDEP ERP permit authorized June 2023
- FDEP stormwater exemption authorized Sept 2023
- Flex development app approved by CDB Oct 2023
- Army Corps (on going)
- Pinellas County PCWNCA (on going)

5. Grants

- Sportfish Restoration (on going)
- Tourism Development Council (on going)

6. Final Design (On going)

What's Next?

- Bid Submittal (90%) Nov 2023
- CMAR Bid Phase
- Construction Documents (100%)
- Building permitting
- Construction

Project Risks

- Federal Channel Deauthorization
- Parking Reduction
- Dredge Disposal
- Inflation & Supply chain issues

Project Area



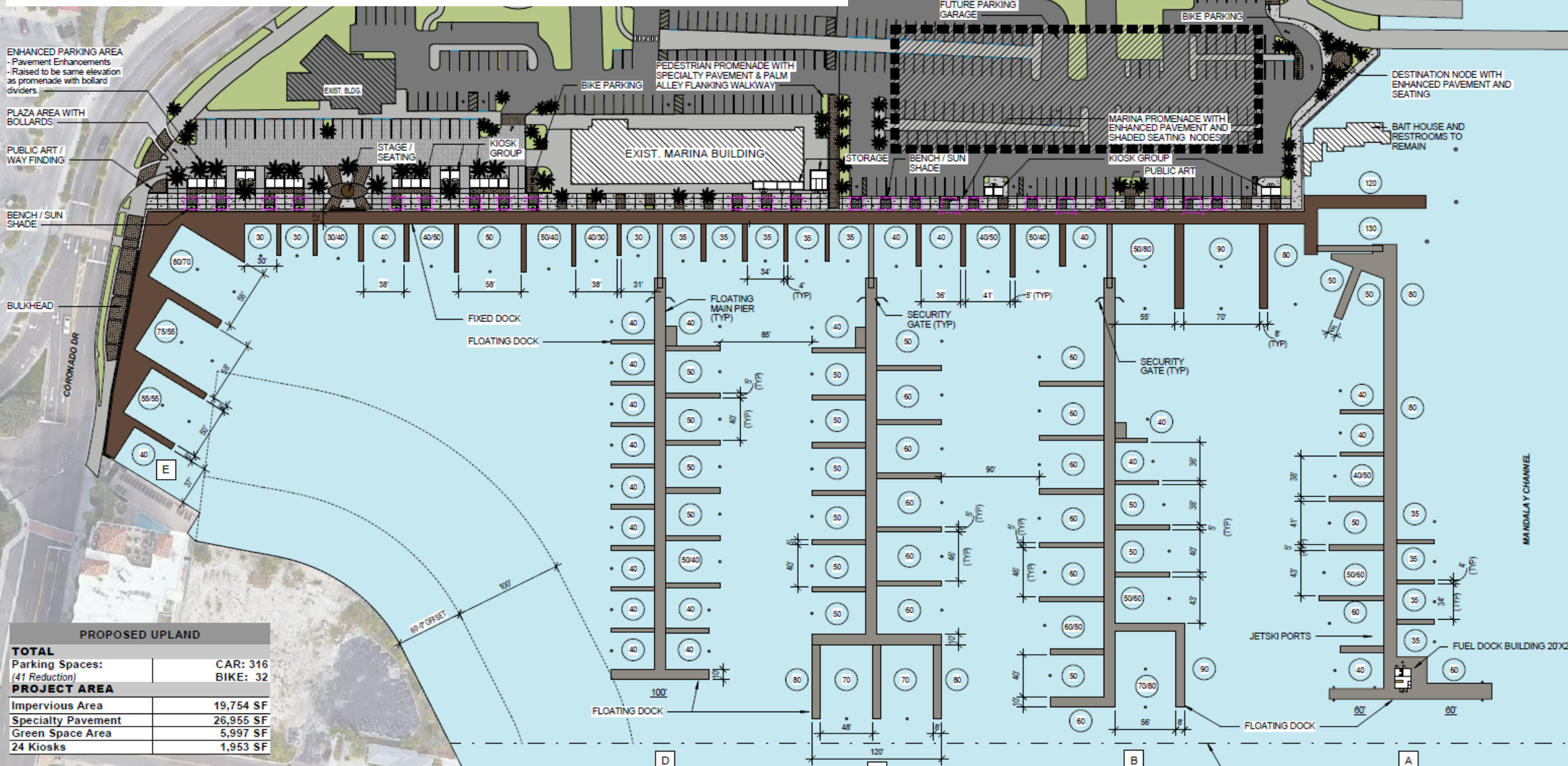
PROJECT AREA

-  Upland
-  Marina

| Slip Size | EXISTING SLIP MIX | | | | | |
|--------------|-------------------|---------------|--------------|---------------|------------|-------------|
| | COMMERCIAL* | | RECREATIONAL | | TOTAL | |
| | (#) | (%) | (#) | (%) | (#) | (%) |
| <40 | 21 | 35.6% | 29 | 27.4% | 50 | 30.3% |
| 40 | 9 | 15.3% | 0 | 0.0% | 9 | 5.5% |
| 50 | 10 | 16.9% | 58 | 54.7% | 68 | 41.2% |
| 60 | 8 | 13.6% | 7 | 6.6% | 15 | 9.1% |
| 70+ | 11 | 18.6% | 12 | 11.3% | 23 | 13.9% |
| Total | 59 | 100.0% | 106 | 100.0% | 165 | 100% |

*Commercial count includes 6 fuel slips and 1 ferry slip

Master Plan - Hybrid Alternative



ENHANCED PARKING AREA
- Pavement Enhancements
- Raised to be same elevation as promenade with bollard dividers

PLAZA AREA WITH BOLLARDS

PUBLIC ART / WAY FINDING

BENCH / SUN SHADE

BULKHEAD

CORONADO DR

EXIST. BLDG

BIKE PARKING

STAGE / SEATING

KIOSK GROUP

EXIST. MARINA BUILDING

PEDESTRIAN PROMENADE WITH SPECIALTY PAVEMENT & PALM ALLEY FLANKING WALKWAY

BIKE PARKING

STORAGE

BENCH / SUN SHADE

MARINA PROMENADE WITH ENHANCED PAVEMENT AND SHADED SEATING NODES

KIOSK GROUP

PUBLIC ART

FUTURE PARKING GARAGE

BIKE PARKING

DESTINATION NODE WITH ENHANCED PAVEMENT AND SEATING

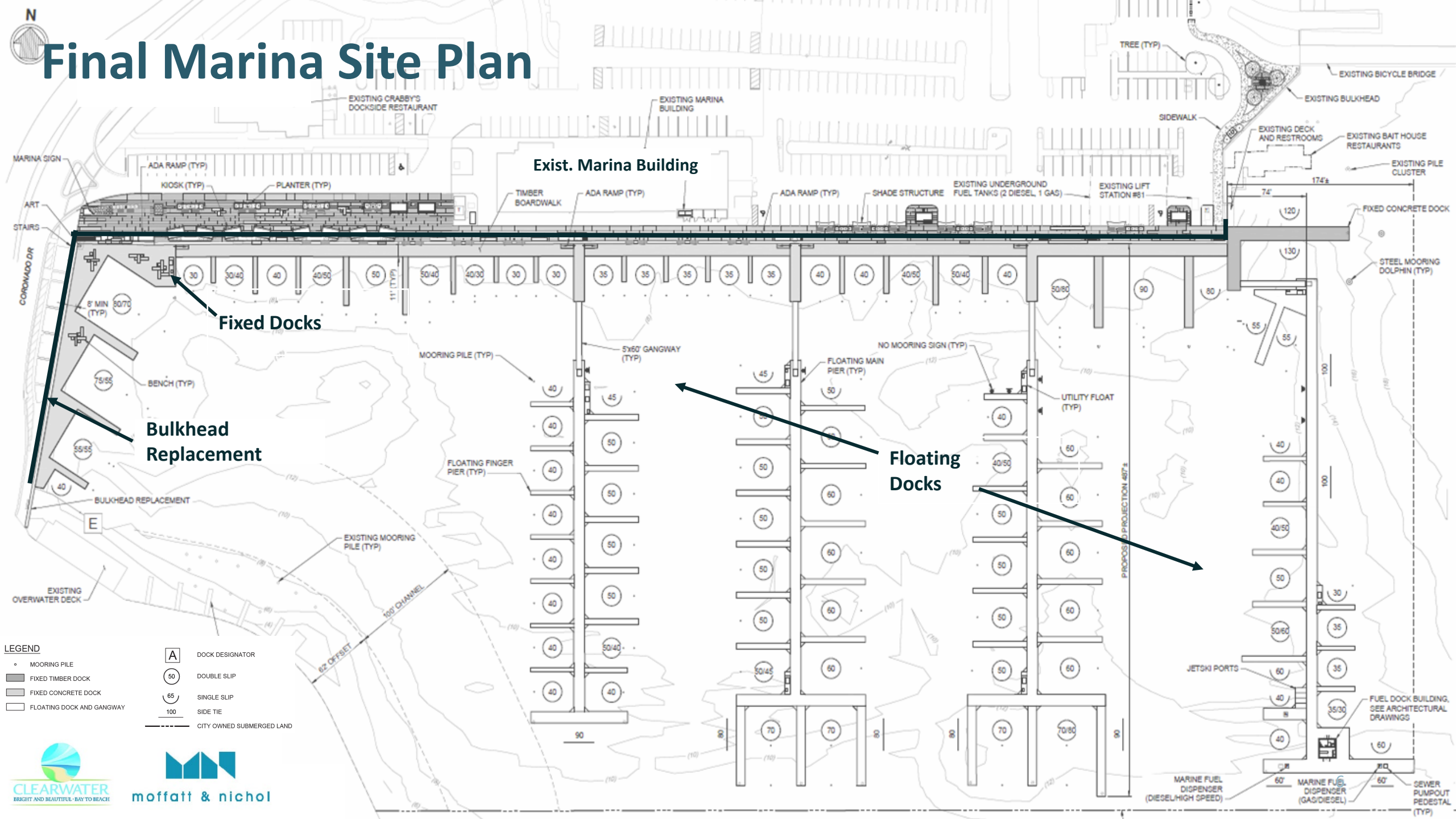
BAIT HOUSE AND RESTROOMS TO REMAIN

| PROPOSED UPLAND | |
|---------------------------|------------------|
| TOTAL | |
| Parking Spaces: | CAR: 316 |
| (41 Reduction) | BIKE: 32 |
| PROJECT AREA | |
| Impervious Area | 19,754 SF |
| Specialty Pavement | 26,955 SF |
| Green Space Area | 5,997 SF |
| 24 Kiosks | 1,953 SF |

MANDALAY CHANNEL

SUBMERGED LAND LEASE BOUNDARY

Final Marina Site Plan

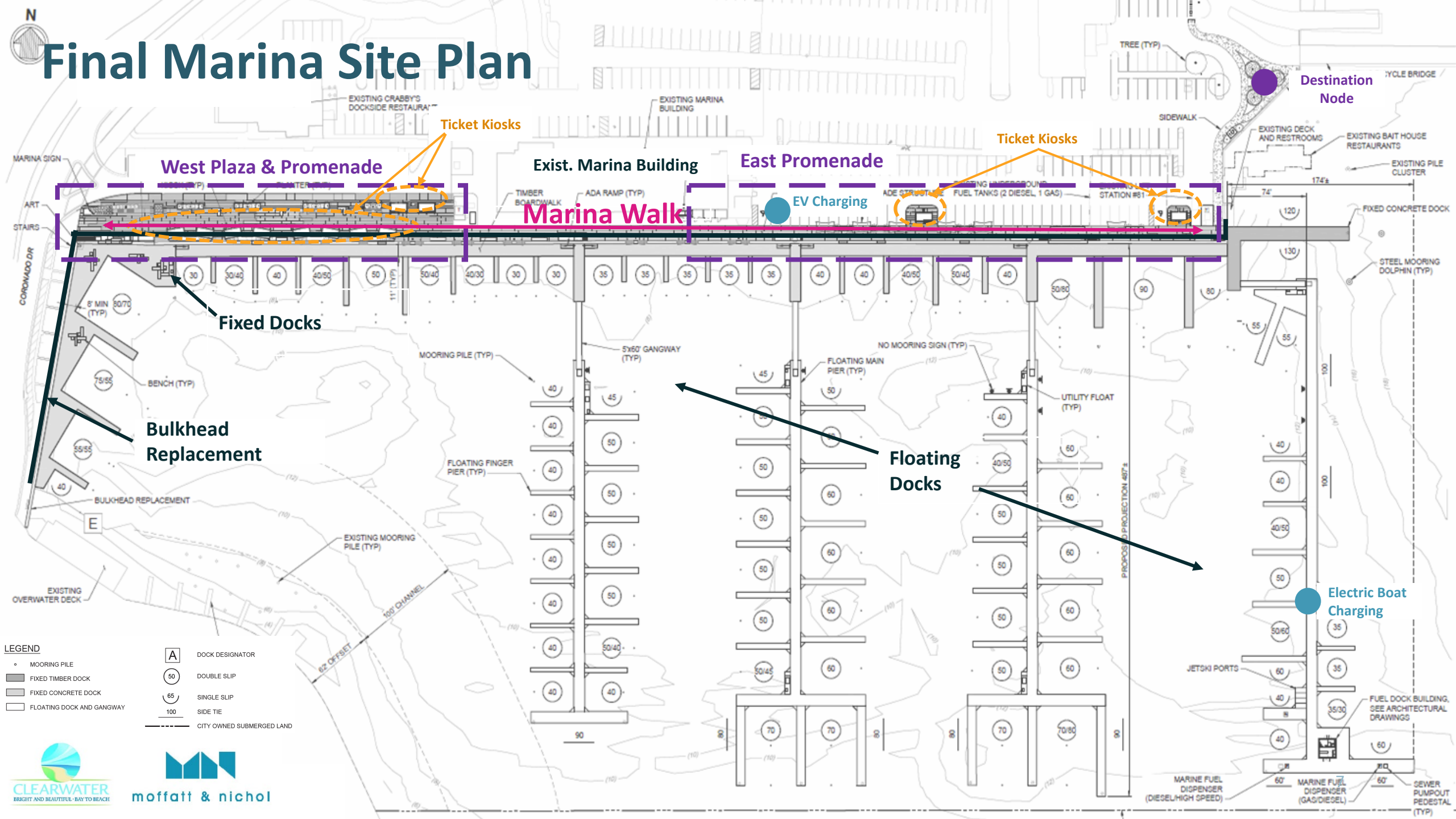


CORONADO DR

- LEGEND**
- MOORING PILE
 - FIXED TIMBER DOCK
 - FIXED CONCRETE DOCK
 - FLOATING DOCK AND GANGWAY
 - CITY OWNED SUBMERGED LAND
 - A** DOCK DESIGNATOR
 - 50 DOUBLE SLIP
 - 65 SINGLE SLIP
 - 100 SIDE TIE

SEWER PUMPOUT PEDESTAL (TYP)

Final Marina Site Plan



MARINA SIGN
ART
STAIRS
CONVADO DR

- LEGEND**
- MOORING PILE
 - FIXED TIMBER DOCK
 - FIXED CONCRETE DOCK
 - FLOATING DOCK AND GANGWAY
 - CITY OWNED SUBMERGED LAND
 - DOCK DESIGNATOR
 - DOUBLE SLIP
 - SINGLE SLIP
 - SIDE TIE



Ticket Kiosks

West Plaza & Promenade

Exist. Marina Building

East Promenade

Ticket Kiosks

Marina Walk

EV Charging

Fixed Docks

Bulkhead Replacement

Floating Docks

Electric Boat Charging

Destination Node

CYCLE BRIDGE

TREE (TYP)

SIDEWALK

EXISTING DECK AND RESTROOMS

EXISTING BAIT HOUSE RESTAURANTS

EXISTING PILE CLUSTER

TIMBER BOARDWALK

ADA RAMP (TYP)

EXISTING PUMP-OUT STATION #81

FUEL TANKS (2 DIESEL, 1 GAS)

EXISTING PUMP-OUT STATION #81

FIXED CONCRETE DOCK

STEEL MOORING DOLPHIN (TYP)

MOORING PILE (TYP)

5'x60' GANGWAY (TYP)

NO MOORING SIGN (TYP)

FLOATING MAIN PIER (TYP)

UTILITY FLOAT (TYP)

FLOATING FINGER PIER (TYP)

EXISTING MOORING PILE (TYP)

100' CHANNEL

82' OFFSET

PROPOSED PROJECTION 487'

JETSKI PORTS

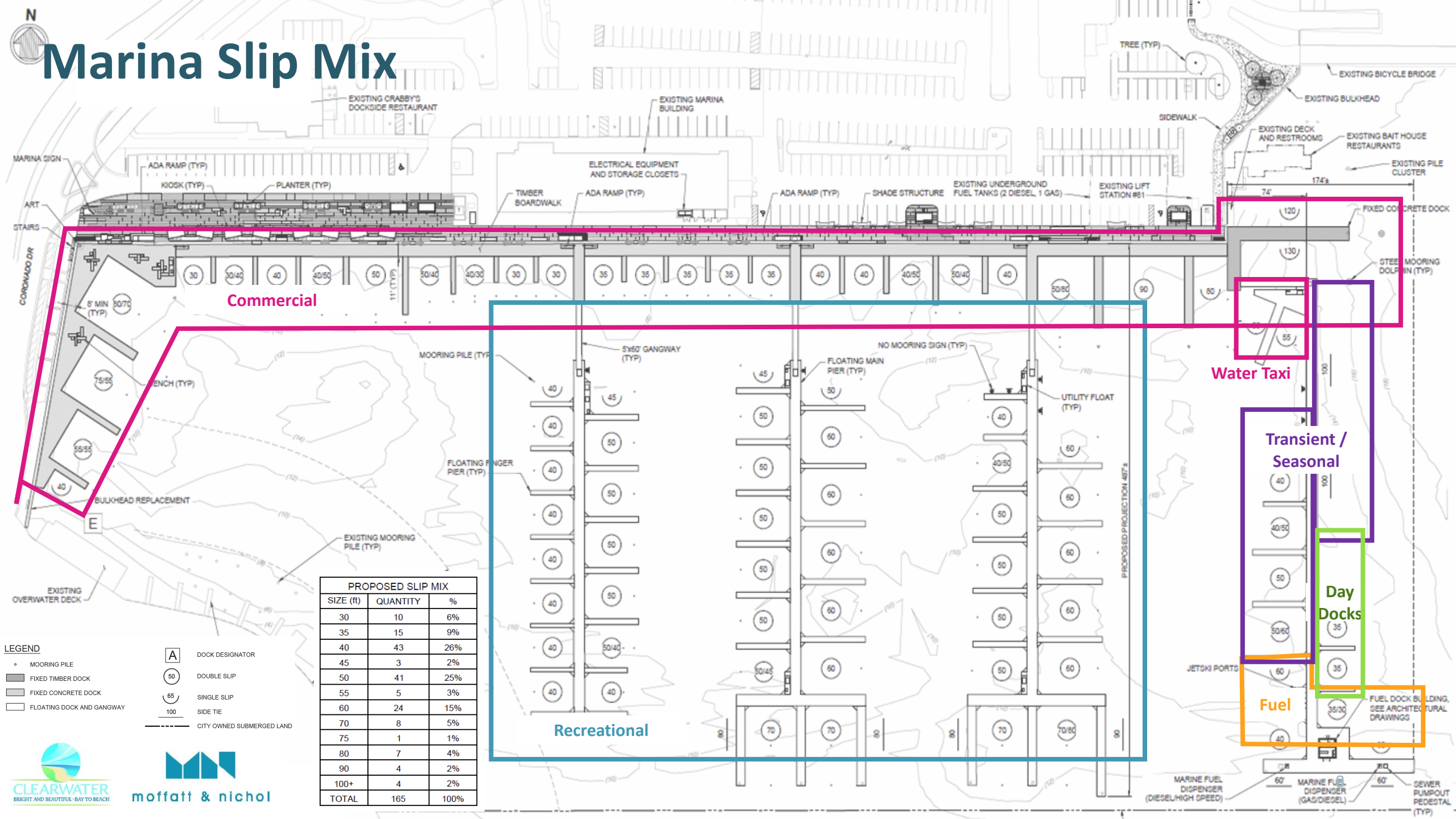
FUEL DOCK BUILDING, SEE ARCHITECTURAL DRAWINGS

MARINE FUEL DISPENSER (DIESEL/HIGH SPEED)

MARINE FUEL DISPENSER (GAS/DIESEL)

SEWER PUMP-OUT PEDESTAL (TYP)

Marina Slip Mix



Commercial

Water Taxi

Transient / Seasonal

Recreational

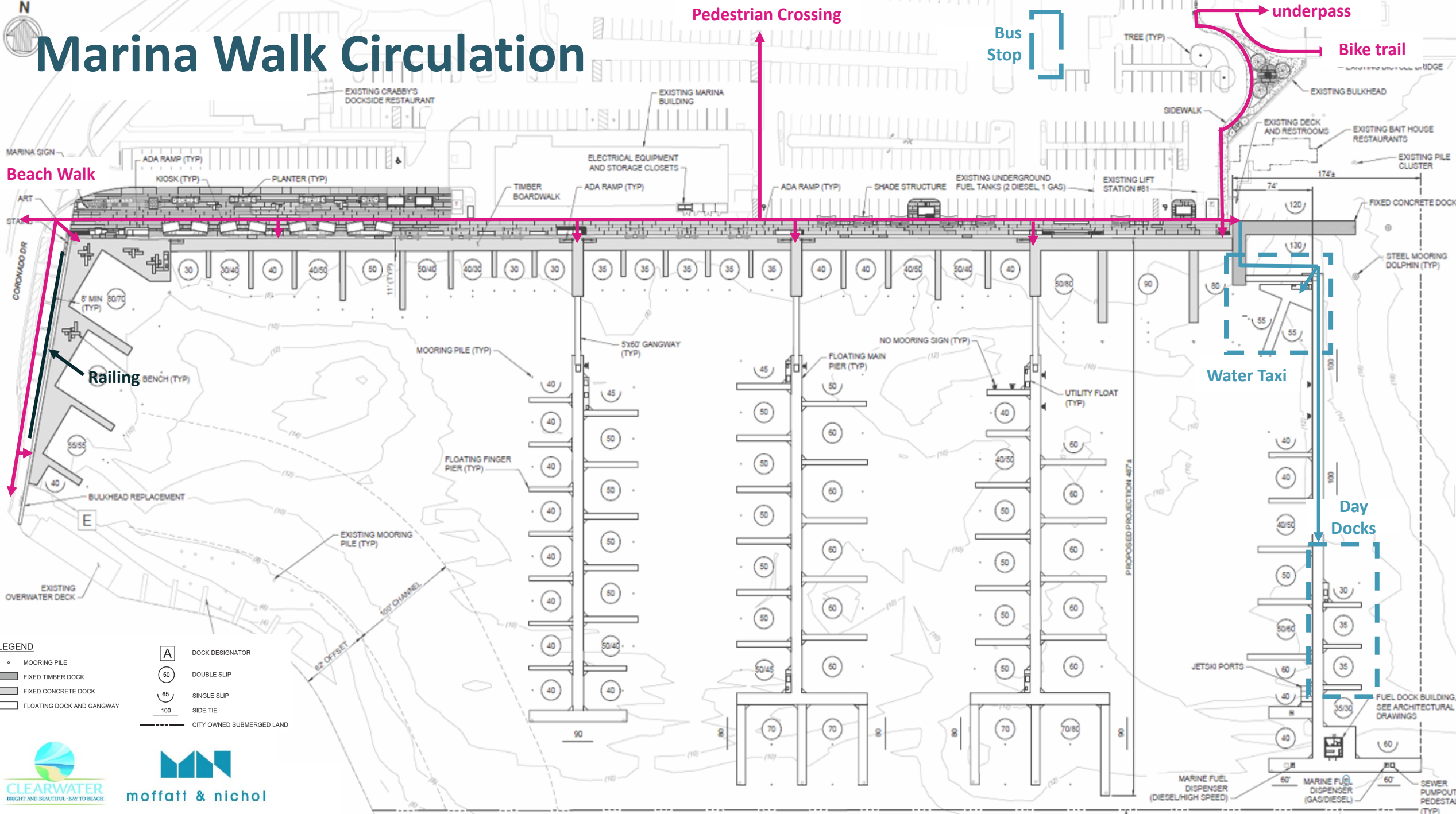
Day Docks

Fuel

| PROPOSED SLIP MIX | | |
|-------------------|------------|-------------|
| SIZE (ft) | QUANTITY | % |
| 30 | 10 | 6% |
| 35 | 15 | 9% |
| 40 | 43 | 26% |
| 45 | 3 | 2% |
| 50 | 41 | 25% |
| 55 | 5 | 3% |
| 60 | 24 | 15% |
| 70 | 8 | 5% |
| 75 | 1 | 1% |
| 80 | 7 | 4% |
| 90 | 4 | 2% |
| 100+ | 4 | 2% |
| TOTAL | 165 | 100% |

- LEGEND**
- MOORING PILE
 - FIXED TIMBER DOCK
 - FIXED CONCRETE DOCK
 - FLOATING DOCK AND GANGWAY
 - A** DOCK DESIGNATOR
 - 50 DOUBLE SLIP
 - 65 SINGLE SLIP
 - 100 SIDE TIE
 - CITY OWNED SUBMERGED LAND

Marina Walk Circulation



Beach Walk

Pedestrian Crossing

Bus Stop

underpass

Bike trail

Water Taxi

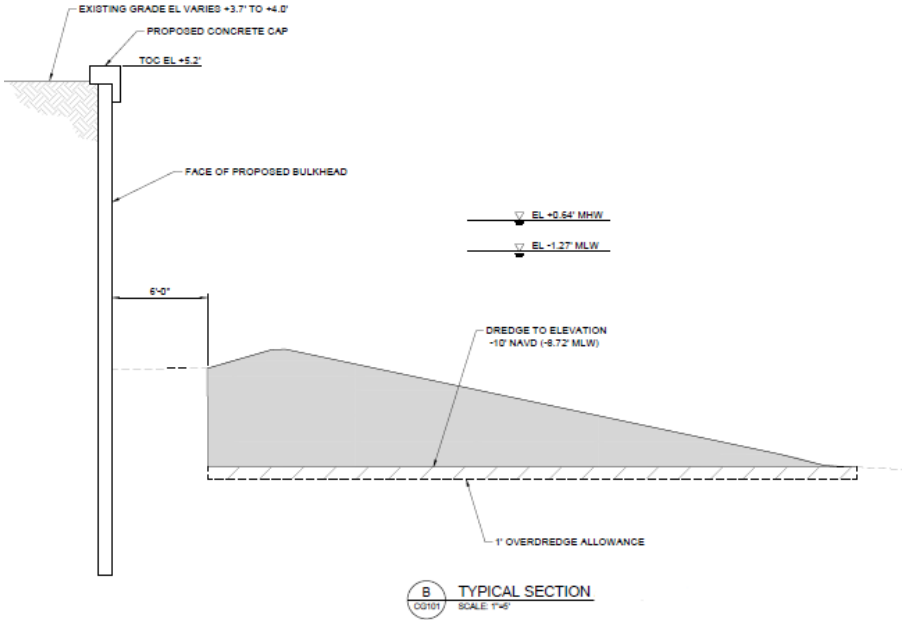
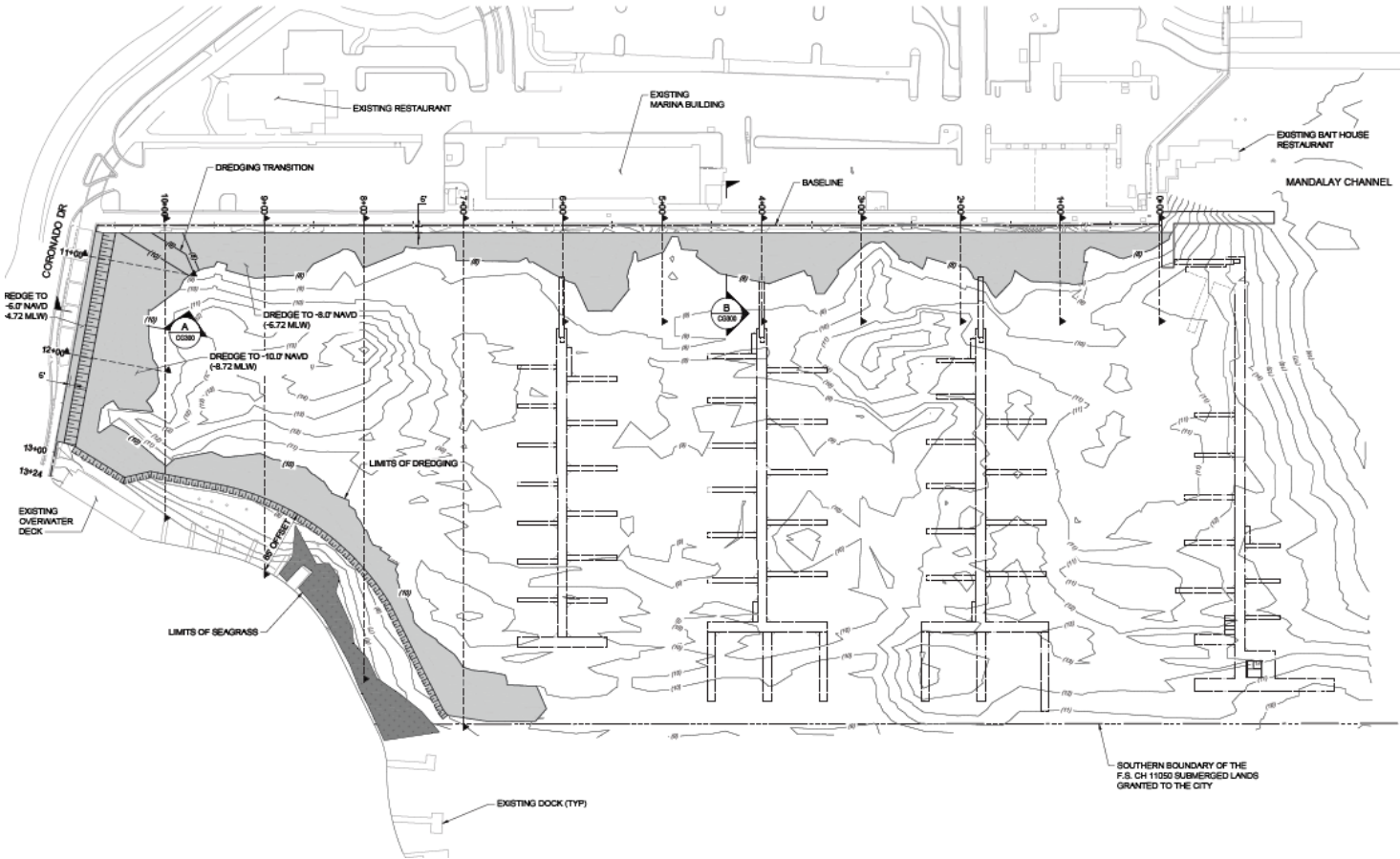
Day Docks

LEGEND

- MOORING PILE
- FIXED TIMBER DOCK
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- FLOATING DOCK AND GANGWAY
- ⊞ CITY OWNED SUBMERGED LAND
- A DOCK DESIGNATOR
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Maintenance Dredging

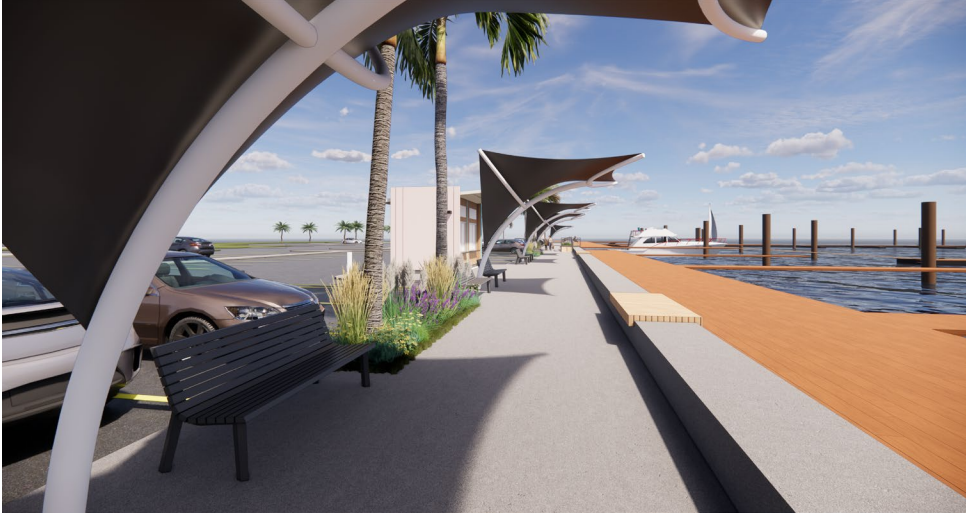


Marina Walk West Plaza



Marina Walk

Marina Walk Promenade



Commercial Boardwalk



ADA Dock Access



Destination Node



Buildings

Ticket Kiosks



Fuel Office



Master Plan vs. 60 % Design

| PROBABLE OPINION OF CONSTRUCTION COST | | DATE PREPARED | | |
|--|----------|--------------------------------------|----------------------|-------------------------|
| | | 25-Aug-22 | | |
| CLIENT AND LOCATION City of Clearwater Clearwater, FL | | ESTIMATED BY Moffatt & Nichol | | |
| PROJECT TITLE Clearwater Beach Marina Rehabilitation - Fixed Dock Alternative | | MN JOB NUMBER 211223 | | |
| | | STATUS OF DESIGN Concept Estimate | | |
| ITEM DESCRIPTION | QUANTITY | | ENGINEERING ESTIMATE | |
| | NUMBER | UNIT | UNIT COST | TOTAL |
| 1 General Conditions | | | | \$ 1,000,000.00 |
| Mobilization/demobilization, construction management, insurance, etc | 1 | LS | \$ 1,000,000.00 | \$ 1,000,000.00 |
| 2 Marina Structures | | | | \$ 10,320,000.00 |
| Demolition of Existing Docks, Overwater Buildings, Mooring Piles, and Utilities | 1 | LS | \$ 1,000,000.00 | \$ 1,000,000.00 |
| Boardwalk Timber Fixed Docks and Piling | 25,000 | SF | \$ 120.00 | \$ 3,000,000.00 |
| Concrete Floating Docks and Guide Piling | 36,000 | SF | \$ 150.00 | \$ 5,400,000.00 |
| Dock Appurtenances (Dock Boxes, Cleaning Stations, etc.) | 1 | ALLOW | \$ 200,000.00 | \$ 200,000.00 |
| Timber Mooring Piles | 90 | EA | \$ 2,000.00 | \$ 180,000.00 |
| Mooring Dolphins for Dinner Cruise Docks | 2 | EA | \$ 50,000.00 | \$ 100,000.00 |
| Overwater Fuel Building (20'x20') | 1 | ALLOW | \$ 200,000.00 | \$ 200,000.00 |
| 60' long ADA Aluminum Gangway | 4 | EA | \$ 60,000.00 | \$ 240,000.00 |
| 3 Maintenance Dredging | | | | \$ 960,000.00 |
| Maintenance Dredging (assumes local disposal site) | 6,000 | CY | \$ 160.00 | \$ 960,000.00 |
| 4 Seawall Repairs | | | | \$ 3,990,000.00 |
| Sheetpile bulkhead wall with Reinf. Conc. Cap | 1,330 | LF | \$ 3,000.00 | \$ 3,990,000.00 |
| 5 Site Improvements | | | | \$ 1,280,000.00 |
| Sidewalk and pedestrian plaza pavement | 24,000 | SF | \$ 10.00 | \$ 240,000.00 |
| Landscaping | 1 | ALLOW | \$ 100,000.00 | \$ 100,000.00 |
| Site Furniture, Shade Structures, & Lighting | 1 | ALLOW | \$ 300,000.00 | \$ 300,000.00 |
| Parking Lot Pavement Re-stripping | 1 | LS | \$ 25,000.00 | \$ 25,000.00 |
| Kiosk | 24 | EA | \$ 15,000.00 | \$ 360,000.00 |
| Building Storage Renovations | 1 | ALLOW | \$ 50,000.00 | \$ 50,000.00 |
| Public Art (~1% Construction Budget) | 1 | ALLOW | \$ 180,000.00 | \$ 180,000.00 |
| Wayfinding / Signage | 1 | ALLOW | \$ 25,000.00 | \$ 25,000.00 |
| 6 Marina Utilities | | | | \$ 5,510,000.00 |
| Dock Utilities (Water, Sewer, Electrical, Fire) | 61,000 | SF | \$ 75.00 | \$ 4,575,000.00 |
| Water Main Connection(s) including fire hydrant(s) and backflow preventer(s) | 1 | ALLOW | \$ 75,000.00 | \$ 75,000.00 |
| Sewer connection | 1 | ALLOW | \$ 50,000.00 | \$ 50,000.00 |
| Electrical Distribution Equipment | 1 | LS | \$ 250,000.00 | \$ 250,000.00 |
| Communications / Low Voltage | 1 | LS | \$ 160,000.00 | \$ 160,000.00 |
| Marina Lighting | 1 | ALLOW | \$ 150,000.00 | \$ 150,000.00 |
| Fuel System Dispensers & hose reels | 1 | LS | \$ 150,000.00 | \$ 150,000.00 |
| Sewage Pumpout Stations | 1 | LS | \$ 100,000.00 | \$ 100,000.00 |
| SUBTOTAL | | | | \$ 23,060,000 |
| Engineer's Contingency | 15% | | \$ | 3,459,000 |
| Inflation Allowance (Est @ 7% for 1 year) | 7% | | \$ | 1,614,200 |
| TOTAL | | | | \$ 28,133,200 |

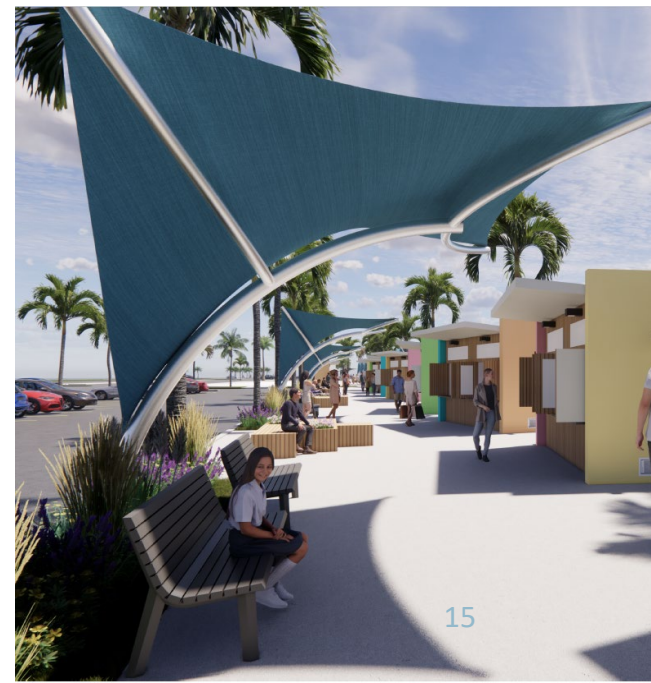
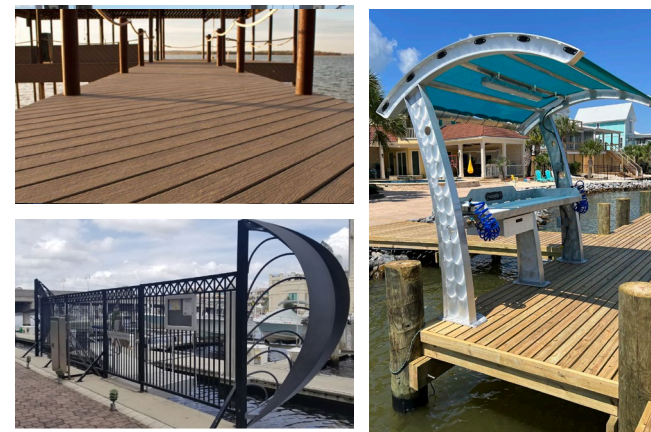
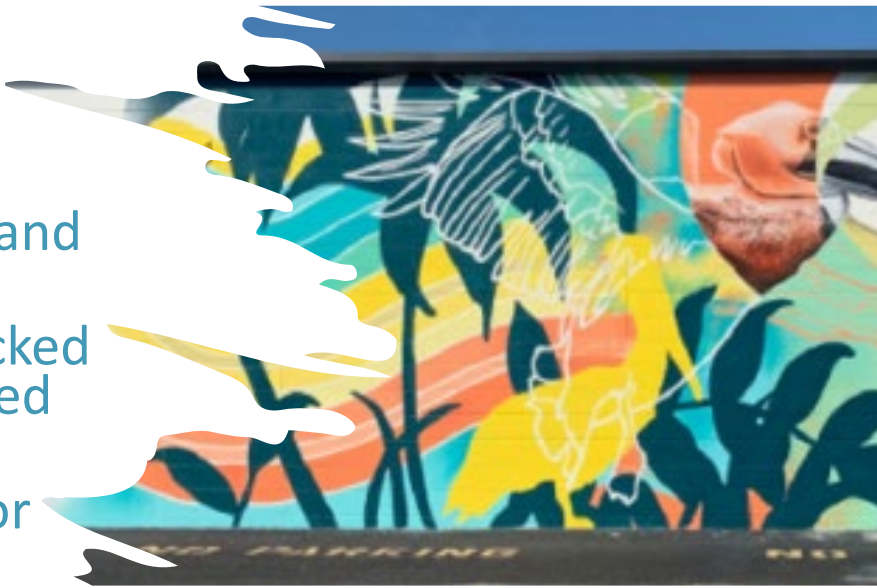


| PROBABLE OPINION OF CONSTRUCTION COST | | | DATE PREPARED | |
|---|----------|-------------|--|-------------------------|
| | | | 20-Jun-23 | |
| CLIENT AND LOCATION City of Clearwater Clearwater, FL | | | ESTIMATED BY Moffatt & Nichol | |
| PROJECT TITLE Clearwater Beach Marina Replacement | | | MN JOB NUMBER 211223 | |
| | | | STATUS OF DESIGN 80% Design Submittal | |
| ITEM DESCRIPTION | QUANTITY | | ENGINEERING ESTIMATE | |
| | NUMBER | UNIT | UNIT COST | TOTAL |
| 1 General Conditions | | | | \$ 2,517,737.50 |
| Mobilization/demobilization, construction management (6%), insurance, etc | 10% | of subtotal | | \$ 2,517,737.50 |
| 2 Marina Structures | | | | \$ 12,392,750.00 |
| Demolition of Existing Docks, Overwater Buildings, Mooring Piles, and Utilities | 1 | LS | \$ 1,500,000.00 | \$ 1,500,000.00 |
| Fixed Timber Commercial Boardwalk, Piers, and Timber Support Piling | 21,700 | SF | \$ 145.00 | \$ 3,146,500.00 |
| Concrete Floating Docks with HDPE Sleeved Steel Guide Piling | 35,000 | SF | \$ 180.00 | \$ 6,300,000.00 |
| Fixed Concrete Dinner Cruise Dock with Coated Steel Support Piling | 1,885 | SF | \$ 250.00 | \$ 471,250.00 |
| 60' long ADA Aluminum Gangway | 4 | EA | \$ 60,000.00 | \$ 240,000.00 |
| Timber Mooring/Fender Pile | 120 | EA | \$ 2,000.00 | \$ 240,000.00 |
| Mooring Dolphin for Dinner Cruise Dock | 2 | EA | \$ 60,000.00 | \$ 120,000.00 |
| Dock Appurtenances (Dock Boxes, Cleaning Stations, etc.) | 1 | ALLOW | \$ 200,000.00 | \$ 200,000.00 |
| Overwater Fuel Building (Building only) | 1 | LS | \$ 175,000.00 | \$ 175,000.00 |
| 3 Maintenance Dredging | | | | \$ 1,001,920.00 |
| Maintenance Dredging (includes 1' overdredge allowance & offsite disposal) | 6,282 | CY | \$ 160.00 | \$ 1,001,920.00 |
| 4 Bulkhead Replacement | | | | \$ 4,294,400.00 |
| Cantilever Bulkhead with NZ26 Steel Sheet Piles and Reinforced Concrete Cap | 1,342 | LF | \$ 3,200.00 | \$ 4,294,400.00 |
| 5 Site Improvements | | | | \$ 1,916,305.00 |
| Sidewalk/Plaza Colored Concrete Pavement | 19,820 | SF | \$ 12.00 | \$ 235,440.00 |
| Concrete Sidewalk at East End | 2,350 | SF | \$ 12.00 | \$ 28,200.00 |
| Trench Drain | 550 | LF | \$ 150.00 | \$ 82,500.00 |
| Nyloplast Drain Basin | 6 | EA | \$ 2,500.00 | \$ 15,000.00 |
| 12" PVC Drainage Pipe | 80 | LF | \$ 85.00 | \$ 6,800.00 |
| Storm Manhole | 1 | EA | \$ 5,500.00 | \$ 5,500.00 |
| Ribbon Palm | 18 | EA | \$ 1,500.00 | \$ 27,000.00 |
| Cabbage Palmetto | 18 | EA | \$ 450.00 | \$ 8,100.00 |
| Silver Trumpet Tree | 1 | EA | \$ 800.00 | \$ 800.00 |
| Red Tip Coco Plum | 44 | EA | \$ 50.00 | \$ 2,200.00 |
| Firebush | 28 | EA | \$ 30.00 | \$ 840.00 |
| Dwarf Pink Ice Oleander | 6 | EA | \$ 30.00 | \$ 180.00 |
| Saw Palmetto | 24 | EA | \$ 150.00 | \$ 3,600.00 |
| Horizontal Coco Plum | 26 | EA | \$ 30.00 | \$ 780.00 |
| Dune Sunflower | 22 | EA | \$ 20.00 | \$ 440.00 |
| Lipstick Chinese Hibiscus | 54 | EA | \$ 30.00 | \$ 1,620.00 |
| Yaupon Holly | 21 | EA | \$ 35.00 | \$ 735.00 |
| Pink Muhly Grass | 46 | EA | \$ 35.00 | \$ 1,610.00 |
| Fakahatchee Grass | 56 | EA | \$ 35.00 | \$ 1,960.00 |
| Landscape installation (Including mulch) | 1 | ALLOW | \$ 45,000.00 | \$ 45,000.00 |
| Site Furniture, Seat Walls, bollards | 1 | ALLOW | \$ 250,000.00 | \$ 250,000.00 |
| Parking Lot Re-stripping | 1 | LS | \$ 15,000.00 | \$ 15,000.00 |
| Shade Structures | 18 | ALLOW | \$ 26,000.00 | \$ 468,000.00 |
| Kiosk Group (2 units) | 12 | EA | \$ 45,000.00 | \$ 540,000.00 |
| Building Storage Renovations | 1 | LS | \$ 50,000.00 | \$ 50,000.00 |
| Wayfinding / Signage | 1 | ALLOW | \$ 25,000.00 | \$ 25,000.00 |
| Public Art | 1 | ALLOW | \$ 100,000.00 | \$ 100,000.00 |
| 6 Marina Utilities | | | | \$ 5,572,000.00 |
| Water Main Connection and backflow preventer for Portable Water System | 1 | LS | \$ 20,000.00 | \$ 20,000.00 |
| FDC and Connection to Fire Main for Fire Water System | 1 | LS | \$ 12,000.00 | \$ 12,000.00 |
| Sewer connection | 1 | LS | \$ 15,000.00 | \$ 15,000.00 |
| Marina Electrical System | 1 | LS | \$ 3,950,000.00 | \$ 3,950,000.00 |
| Potable Water System | 1 | LS | \$ 225,000.00 | \$ 225,000.00 |
| Fire Water System | 1 | LS | \$ 250,000.00 | \$ 250,000.00 |
| Sewage Pumpout System | 1 | LS | \$ 200,000.00 | \$ 200,000.00 |
| Fuel System Dispensers & hose reels | 1 | LS | \$ 400,000.00 | \$ 400,000.00 |
| Communications / Low Voltage | 1 | ALLOW | \$ 200,000.00 | \$ 200,000.00 |
| Lighting | 1 | ALLOW | \$ 300,000.00 | \$ 300,000.00 |
| SUBTOTAL | | | | \$ 27,695,113 |
| Engineer's Contingency | 15% | | \$ | 4,154,267 |
| Inflation Allowance (Est @ 10% for 1 year) | 10% | | \$ | 2,769,511 |
| TOTAL | | | | \$ 34,618,891 |



Final Design Summary

- Marina maintains same slip count and balanced slip mix
- Commercial boats slips remain docked along perimeter of marina with fixed docks
- Resilient floating docks provided for non-commercial end users
- Fixed docks and gangway access platforms raised 15" to 24" to accommodate rising water levels
- Bulkhead replacement raises cap by 15" to 18" to meet minimum cap height
- "Marina Walk" extends Beach Walk with shade, and seating
- Kiosks located upland near primary dock entrances
- ADA compliant facility
- EV charging stations and electric boat charging added





moffatt & nichol
Creative People, Practical Solutions.®

THANK YOU!

moffattnichol.com