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# Manhattan Beach Pier Railing Replacement Project

Community Information Meeting

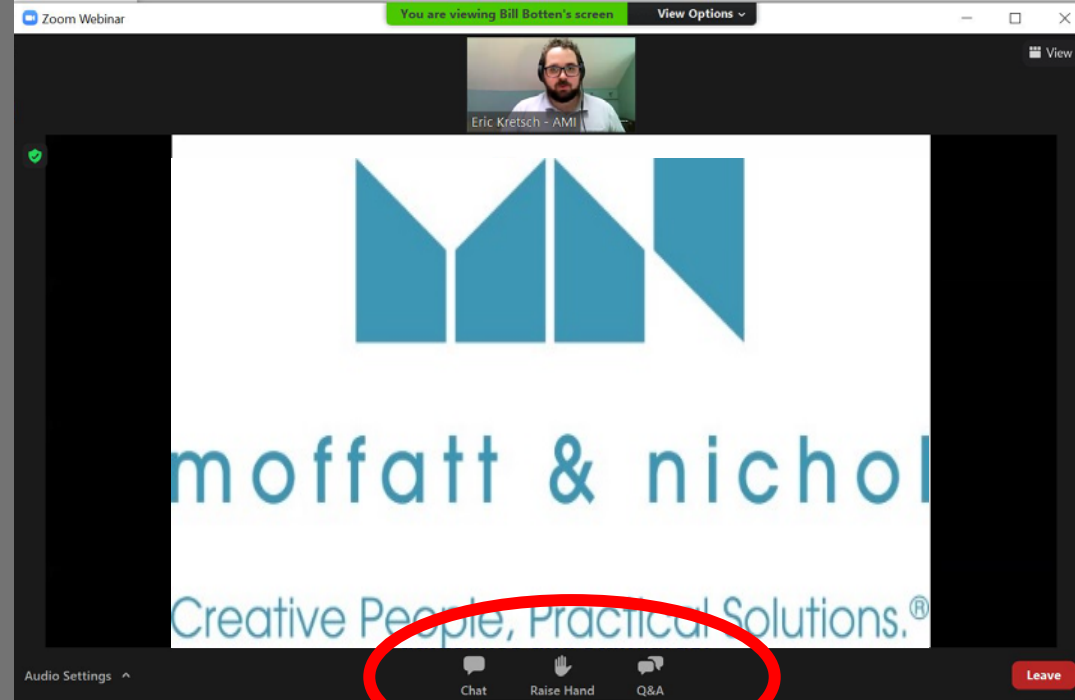
Thursday October 29, 2020

# Presentation Housekeeping



Gilbert Gamboa, Project Manager

City of Manhattan Beach  
Public Works Department



- All participants will be on MUTE during the entire presentation.
- Please TYPE any questions into the CHAT feature at bottom of meeting window at anytime during the presentation.
- The moderator will read your questions to the presenters at the end of the presentation.



# Project Background



Gilbert Gamboa, Project Manager

City of Manhattan Beach  
Public Works Department

- 1) Stakeholder Outreach
  - Interview Key Stakeholders (CA Parks, LA County, City of MB)
  - Review key operational criteria, enhancements, and safety concerns
- 2) Conceptual Alternatives
  - Develop three (3) alternative layouts
    - 1) Enhanced Replacement
    - 2) Replace In-Kind
    - 3) Modernized Replacement
- 3) Initial Regulatory Agency Coordination
  - Pre-Permit Application Consultation
- 4) Community Outreach
  - Attend Community Information Meeting



Since 1941,  
Moffatt & Nichol  
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in waterfront, infrastructure, and  
coastal engineering projects with  
a specialized expertise in ports,  
harbors, coastal environments,  
and waterfront destinations.



**JOHN G. MOFFATT - FRANK E. NICHOL  
AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)  
HARBOR AND COASTAL ENGINEERING AWARD**

Manhattan Beach, US



Project Area  
Outlined in Yellow

# Project Location

- Manhattan Beach Pier Railing and Entrance Gate
- Lower Parking Lot and Restroom Railings
- Bike Path Railing at Base of Pier



# Project Objective

“Revitalize a core landmark in a vibrant seaside community through providing a modernized railing system with enhancements in safety, minimizing maintenance, and thoughtfully designed to enhance the collective experience while preserving existing iconic character of the pier”. – City Design Team





# Existing Railing

- 1917-1920 **Manhattan Beach Pier was first constructed**
- 1956 -1960 **Two-rail steel pipe system was replaced with four-rail steel pipe system**
- 1986 -1992 **The current four-rail system is installed to replace corroded system**
  - Roughly 28-34 years since last railing replacement



Manhattan Beach pier, circa 1937.  
(Source: Los Angeles Public Library; Security Pacific National Bank Collection)



Manhattan Beach pier, circa 2020.  
(Source: M&N)



## Project Need

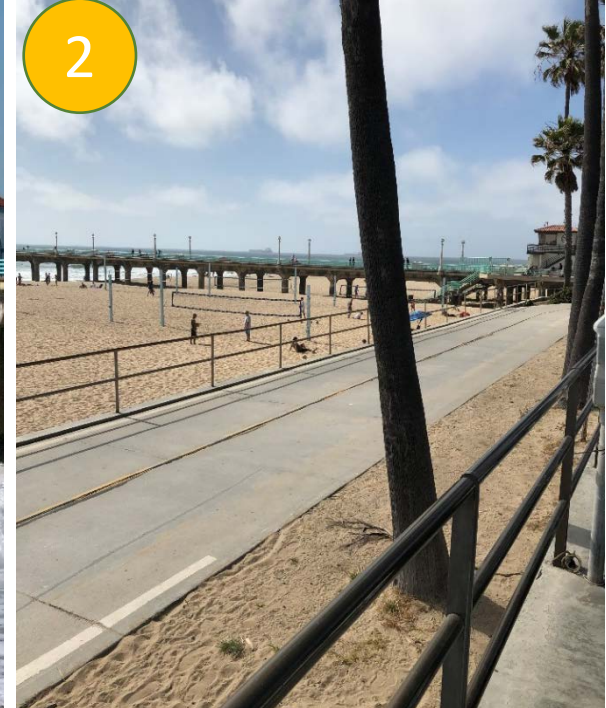
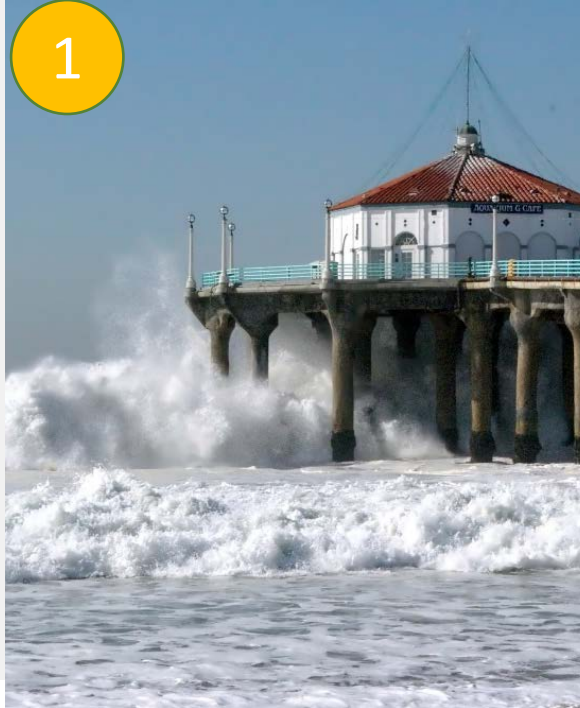
- 1 Advanced deterioration in several locations along the existing railing
- 2 The existing railing is not removable, which makes maintenance more difficult.
- 3 Existing railing is not compliant with current building and ADA codes
- 4 Existing railing around pier, lower parking lots, restrooms, and bike path do not match styles, colors, and code compliance







# Railing Replacement Considerations



1 Existing Site Constraints and Maintenance Considerations

2 Existing Railing Consistency.

3 Historic and regulatory considerations

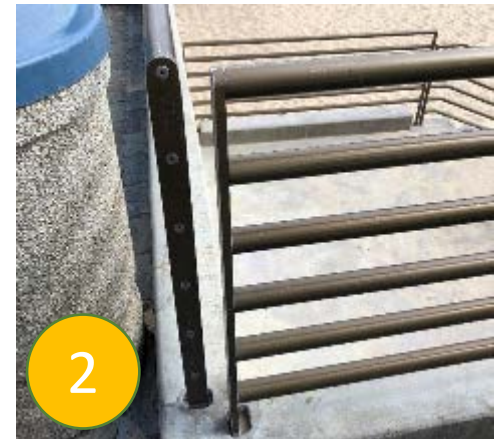
## 3 Regulatory Permit Process





# Existing Site Constraints and Maintenance Considerations

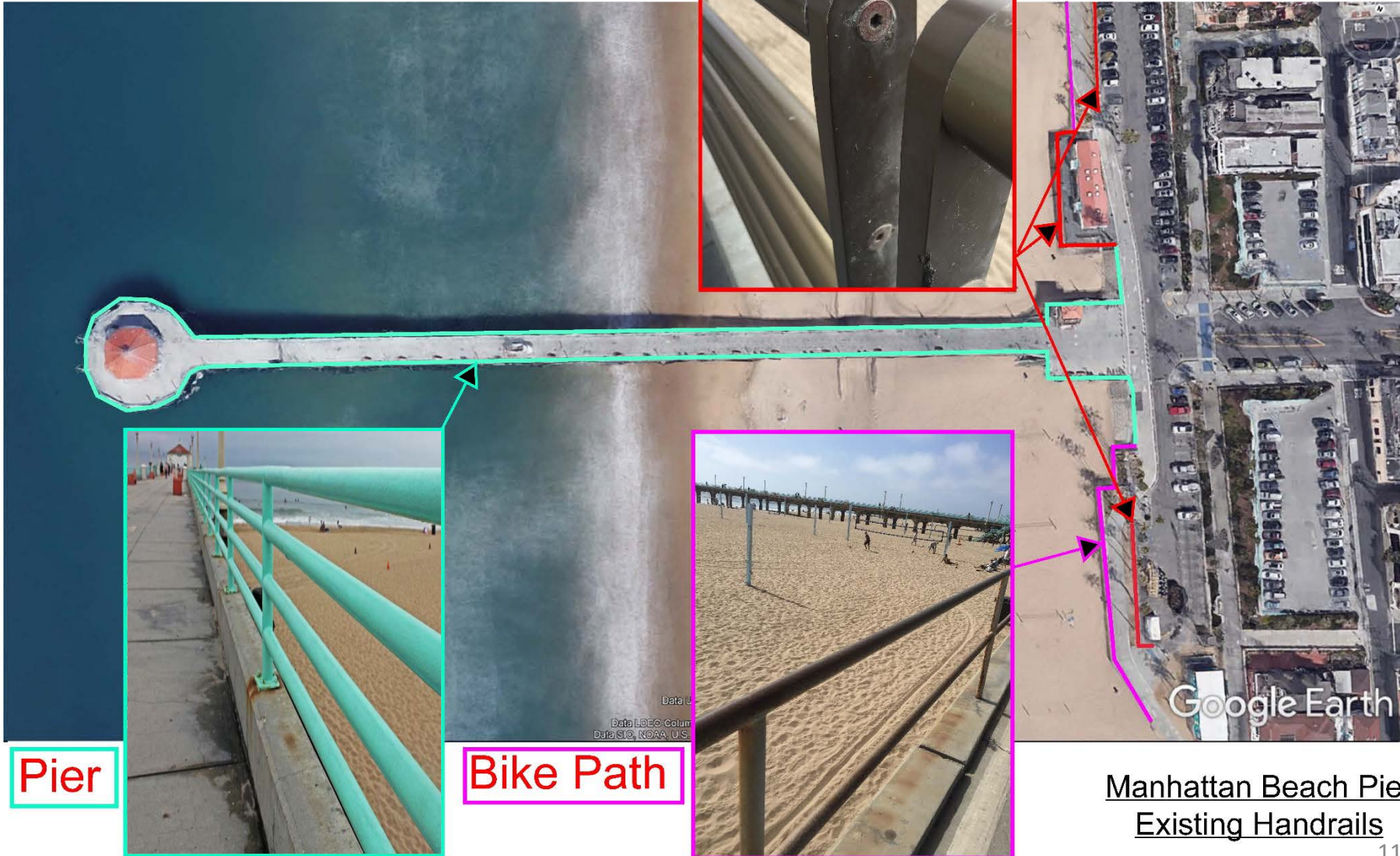
- 1 Solve awkward transition between various mounting conditions: Existing curb, steps, and sidewalk
- 2 Provide segmented railings where appropriate for ability to replace in segments
- 3 Use modern materials that are more resilient and easier to maintain.
- 4 Accommodate existing equipment / signage





- Create a more consistent railing look and feel throughout waterfront to match style of the adjacent systems.

# Existing Railing Consistency



Pier

Bike Path

Restrooms and Parking Lot

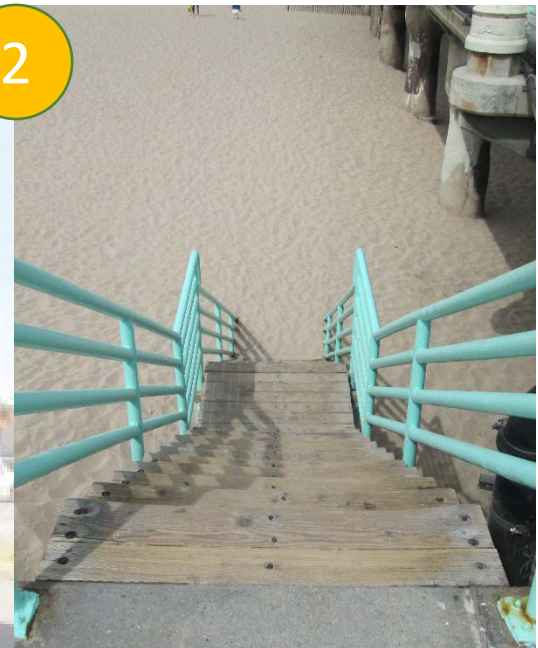
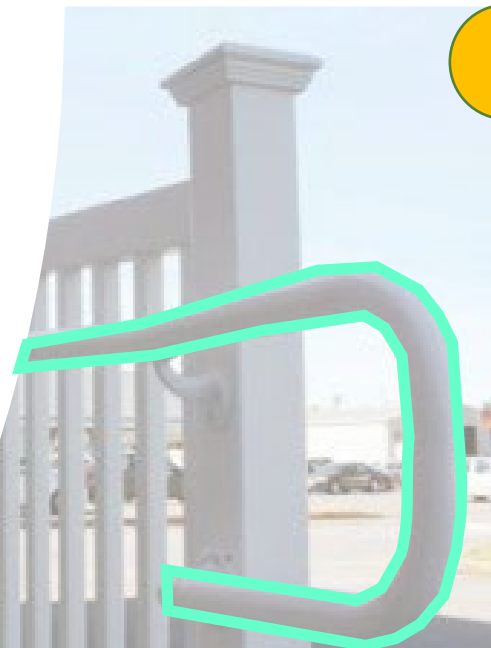
Google Earth

Manhattan Beach Pier  
Existing Handrails



# Historic and Regulatory Considerations

- 1 CA State Parks Historical Review Board
  - The Manhattan Beach Pier was designated as a State Historic landmark in 1995
  - Maintain character of existing railings to the extent possible including: style (horizontal railing); color (sea foam green), visual (minimize view obstructions)
- 2 City of MB and LA County Building code and ADA compliance
- 3 State and Federal Regulatory Agencies
  - Maintain view corridors
  - Public access





# Alternate 1

## Enhanced Replacement

- Match style of existing railing with minor modifications to meet current building codes and accommodate maintenance considerations.
- **Pros**
  - Similar in style to the existing railing
  - Only need to add one additional horizontal rail and potentially secondary post as compared to the existing
  - Can have removable segments to aid in maintenance
  - Use of aluminum tubing to reduce corrosion potential
  - Least Expensive to Construct
- **Cons**
  - Required additional base plates and anchor bolts, needed for structural integrity
- **Preferred Alternative**





# Alternate 2

Replace In-Kind

- Match style of existing railing with minimal modifications to meet current building codes.
- **Pros**
  - Closest in style to the existing railing
  - Minimum number of rails
- **Cons**
  - Continuous vs segmented. Difficult to have removable segments
  - Larger bulky tubes not as appealing, require large baseplates, and more costly
  - More expensive to construct
  - Will require the most maintenance





# Alternate 3

## Modernized Replacement

- Provide more modern railing system with smaller horizontal rails and completely removable top cap. Match color of existing railing.
- **Pros**
  - Wide top rail is ergonomic and completely removable. Also tends to stay cooler during the day
  - Can have removable segments to aid in maintenance
- **Cons**
  - Does not as closely maintain existing pier character
  - Required additional base plates and anchor bolts
  - Most expensive to construct

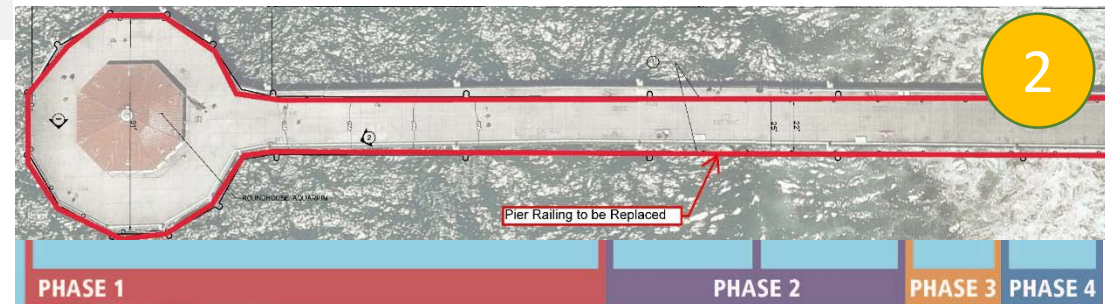




# Construction Considerations

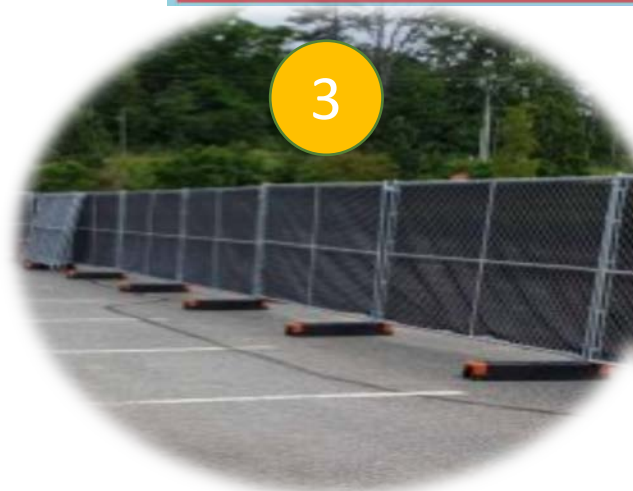


1 Public access and traffic control



2 Construction Phasing

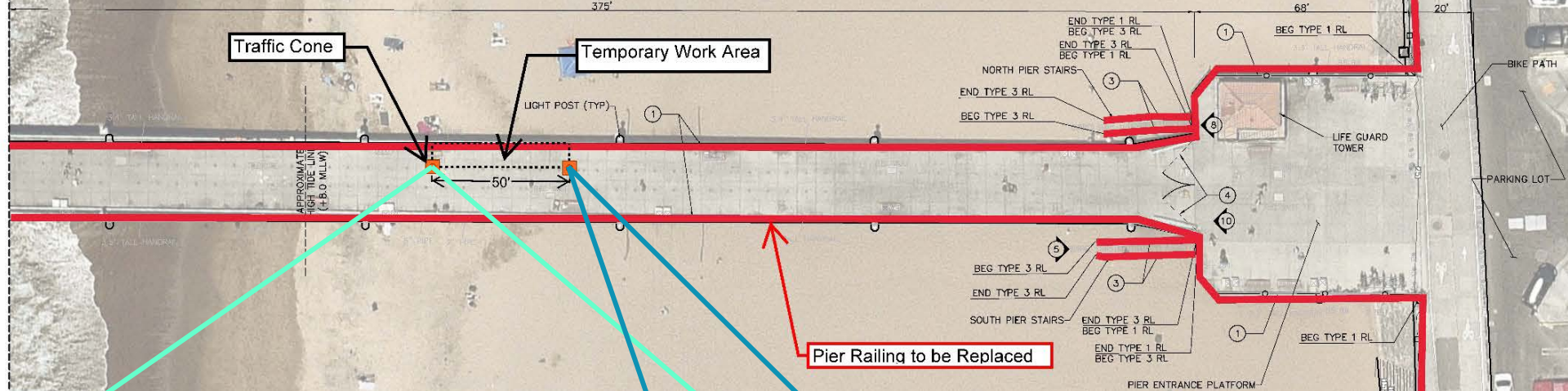
3 Staging



4 Coordination with Special events





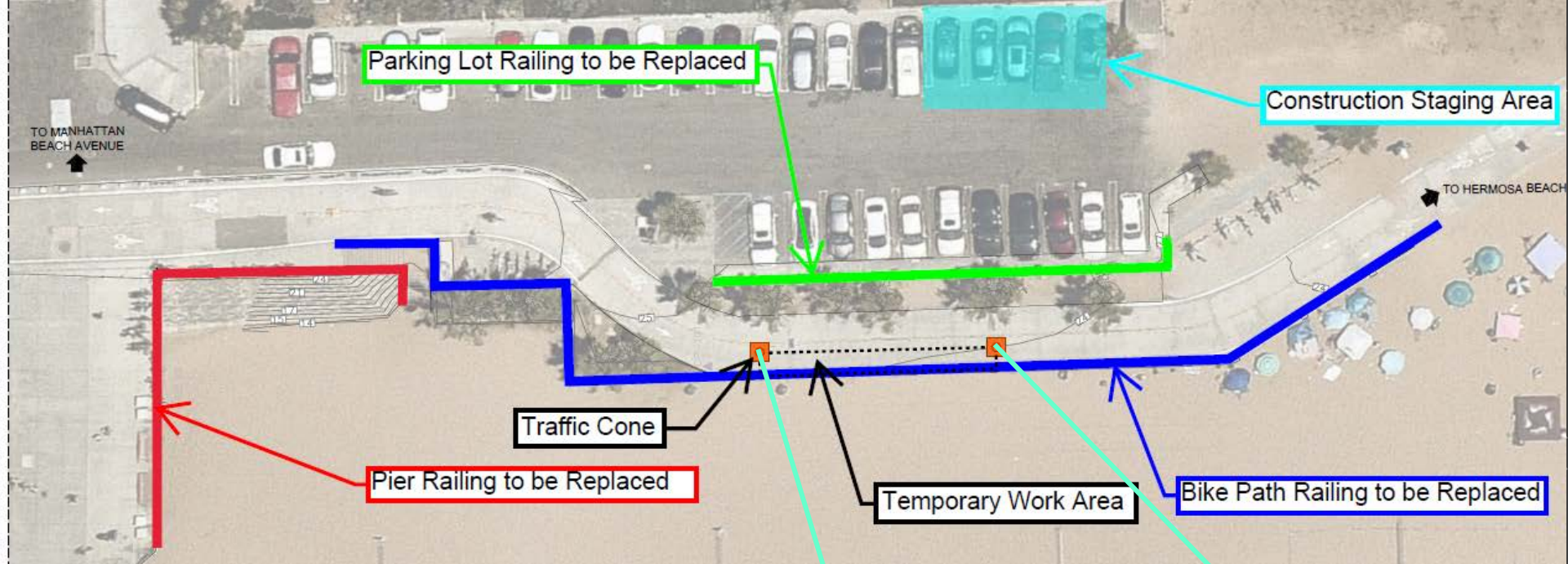


50-ft Area

Maintain Access

# Pier Access During Construction?

- Small areas (+/- 50-ft in length) along pier coned off temporarily for installation



Parking Lot Railing to be Replaced

Construction Staging Area

TO MANHATTAN BEACH AVENUE

TO HERMOSA BEACH

Traffic Cone

Pier Railing to be Replaced

Temporary Work Area

Bike Path Railing to be Replaced

# Bike Path and Parking Lot Access During Construction?

- Small staging area in Lower Parking Lot
- Small areas (+/- 50-ft in length) along pier and bike path coned off temporarily for installation



Maintain Access

# Next Steps



Continued Public Outreach



Submit Regulatory Permit Applications



City Council Approval



Develop Final Design



Begin Construction

# Thank You!

For more information, please contact:



Gilbert Gamboa, Project Manager  
City of Manhattan Beach  
Public Works Department  
Phone: (310) 802 – 5356

**Please visit Project Webpage:**

Webpage: [www.citymb.info/PierRailingProject](http://www.citymb.info/PierRailingProject)

Email: [PierRailing@citymb.info](mailto:PierRailing@citymb.info)

