



# INDIA BASIN WATERFRONT PARK



# EQUITABLE DEVELOPMENT PLAN

- Support the development of the India Basin Waterfront Parks designed in partnership with the Bayview-Hunters Point community
- Stimulate local hiring through job training for construction activities, park-related concession opportunities, and recreation leadership positions.
- Create opportunities to address issues of social and environmental justice, equity, and inclusion within the Bayview Hunter’s Point communities.
- Construct more usable open space to address the population growth in a high-need and emerging neighborhood and improve recreational amenities to existing residents.



On-site engagement



Sample board



## WATERFRONT PROPERTIES



### Maintained by SF Recreation and Parks

- 900 Innes/Boatyard Park
- India Basin Shoreline Park
- India Basin Open Space
- Big Green

### Maintained by others

- Heron's Head Park (Port of San Francisco)
- Hunters Point Shoreline (PG&E)
- Marketplace (BUILD Inc.)



**Phase 1: Remediation (March 2021 –August 2022)**

The remediation project removed contaminated soil and sediment left behind from industrial boat building and vessel repair activities and restored and capped the site with clean fill. Contaminated marine debris, abandoned structures, and deteriorated concrete was also removed to enable future park development.

**Phase 2: 900 Innes Park (September 2022 – October 2024)**

Project is in construction. The concrete piles and slabs for Pier 1 and Pier 2 are completed and work is ongoing for the Food Pavilion, Shop Building, and Maintenance Building. Restoration work on the Shipwright’s cottage is underway.

**Phase 3: IBSP (June 2025 – August 2027)**

The final phase of the project is currently under permit review. The design team has completed 90% construction documents as this design was developed in parallel with Phase 1 of 900 Innes.

- PHASE 1 REMEDIATION LOW
- PHASE 2 900 INNES PARK
- PHASE 3 INDIA BASIN SHORELINE PARK
- PROPERTY LINE



## PROJECT BACKGROUND AND HISTORY

- **2014**
  - Acquisition of the 900 Innes site
- **2015**
  - IB Waterfront Plan (Sponsored by BUILD Inc and led by Bionic)
  - RPD Project Initiation
- **2016**
  - Concept Design Competition
  - GGN prepares Concept Development
- **2017**
  - GGN Revised Concept
  - Draft EIR & Release
- **2018**
  - Remedial Planning & EIR Certification
  - \$5M Grant Received
- **2019**
  - Received Pritzker Funding, GGN Schematic Design & Investigations, EDP Kick Off
- **2020**
  - GGN began Detailed Design
  - Remediation Bidding & Award
- **2021**
  - GGN Construction Documents Complete
  - 900 Innes Permitting: DBI and Regulatory/Resource
  - 900 Innes Remediation Construction began
- **2022**
  - Park Bidding & Award, Remediation completed
  - 900 Innes Park Construction began
- **2023**
  - 900 Innes Construction
  - IBSP Permitting: DBI and Regulatory/Resource
- **2024**
  - 900 Innes Park opens to public
  - IBSP Bidding & Award
- **2025**
  - IBSP Construction to begin

# 900 INNES PRE-REMEDATION



# 900 INNES UNDER REMEDIATION



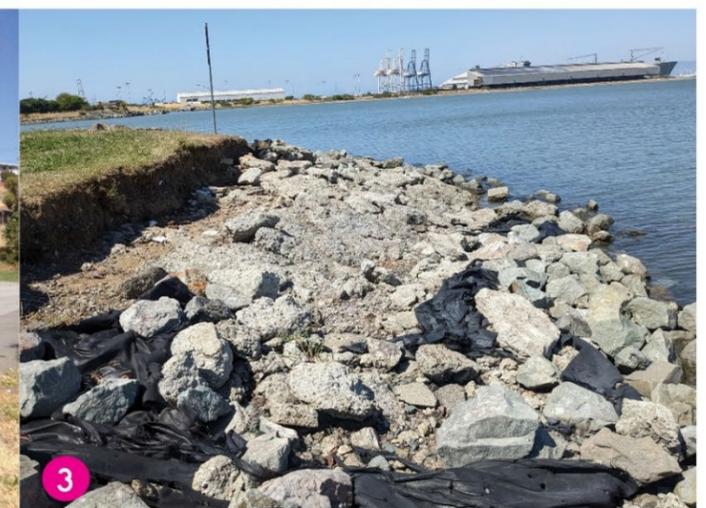
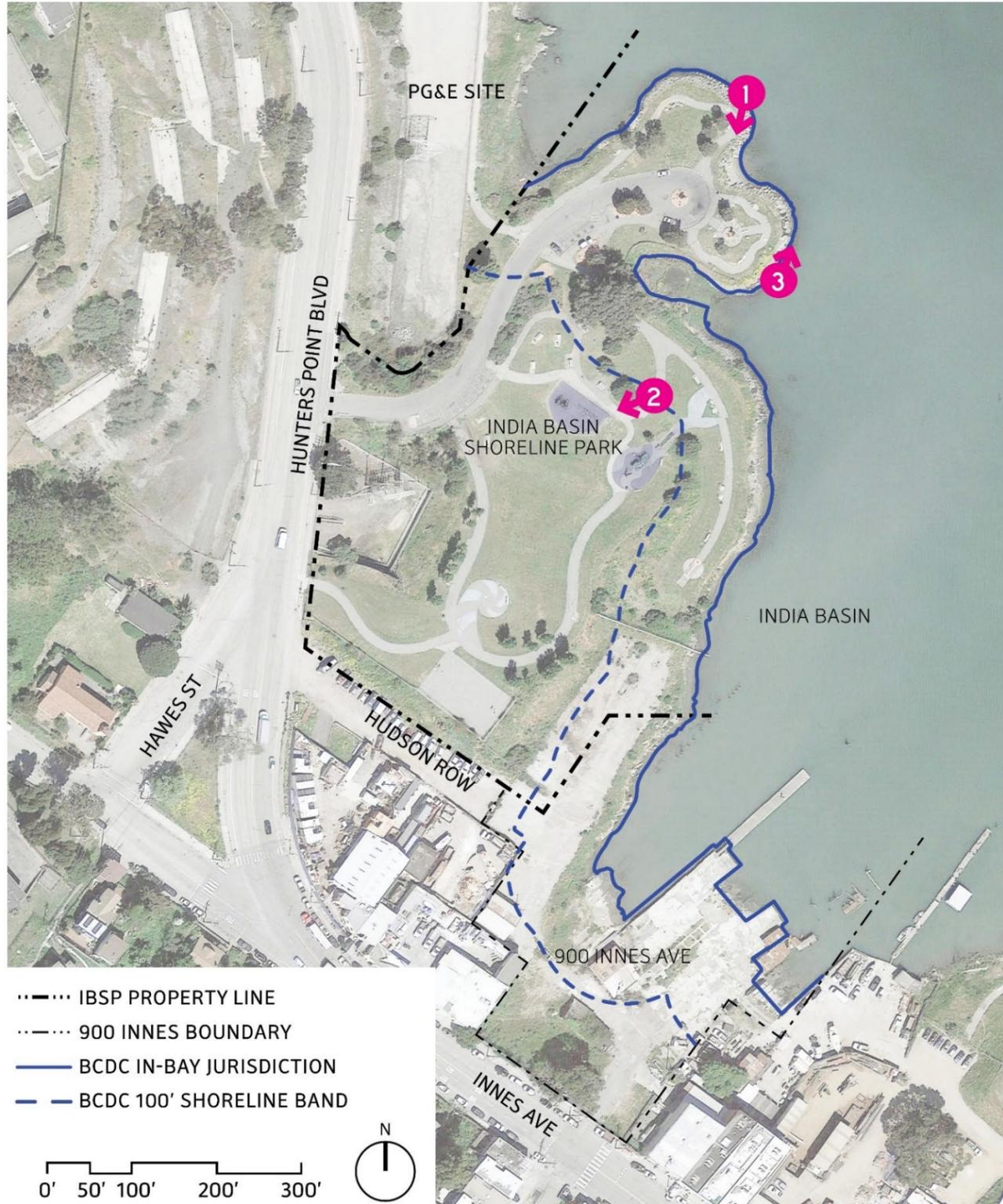
# 900 INNES POST - REMEDIATION



# 900 INNES PARK COMPLETED



# INDIA BASIN SHORELINE PARK – EXISTING SITE



# PROJECT GOALS

**Uphold Community Priorities**

**Connect and Provide Access**

**Create and Enhance Natural Habitat**

**Adapt to Sea Level Rise**



# PROPOSED LAYOUT OF THE PARK



Boathouse

Restroom

Maintenance Building

Shop Building

Food Pavilion

Shipwright's Cottage

# COMMUNITY DRIVEN DESIGN FEATURES



1 Welcome Decks (porch swings)



2 Marineway Lawn (places to gather)

3 Cookout Terrace (places to grill)

4 Basketball Courts

5 Playground

6 Boathouse (water access)



7 Floating Dock (water access)

8 Gravel Shore (ecology classes)

9 Nature Pathways/Habitat Viewing

10 Bay Trail (biking for kids)

11 Interpretive Plan (in development)





# ASSESSMENT OF BROWNFIELD CLEANUP ALTERNATIVES (ABCA)

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1. Existing Conditions
2. Site History and Goals
3. Sea Level Rise Resilience
4. Site Investigation Activities
5. Assessment of Brownfield Cleanup Alternatives - ABCA
  - a) Applicable Regulations and Cleanup Standards
  - b) Remediation Alternatives
  - c) Comparison Criteria
  - d) Evaluation of Alternatives
  - e) Recommendation
  - f) Justification
  - g) Green and Sustainable Remediation Measures

# INDIA BASIN SHORELINE PARK - 401 HUNTERS POINT BLVD

## LEGEND

- SITE BOUNDARY
- EXISTING MHW LINE (5.9 FT)

## ABBREVIATIONS

MHW = MEAN HIGH WATER

## NOTES

1. FEATURES SHOWN ARE APPROXIMATE AND BASED ON INDIA BASIN SHORELINE PARK PERMIT SET DESIGN DRAWINGS DATED JULY 17, 2023 BY GGN, INC.



# SITE HISTORY AND PROJECT GOALS

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## – Site History

- Before 1938: Tidal mudflat
- 1875 – 1936: Hunters Point Ship Graveyard
- 1960s: Filled with material from Candlestick Park & I-280 construction
- 1990s: Construction of India Basin Shoreline Park

## – Project Goals

- Enhance the park with increased protection for the environment and public health
- Ensure careful soil management during construction

# SEA LEVEL RISE (SLR) RESILIENCE

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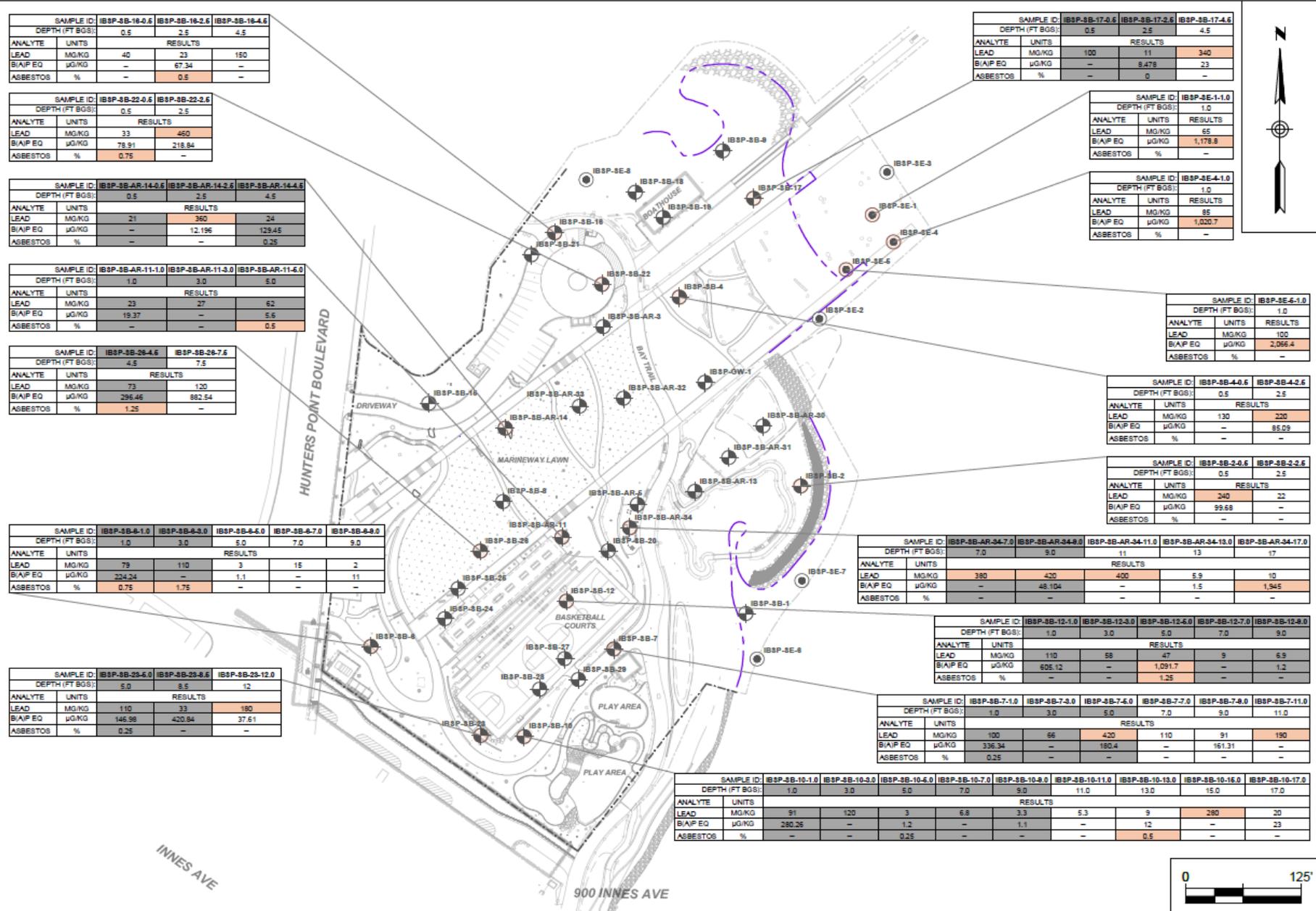
- Evaluated Site conditions under anticipated SLR scenarios from 2050, 2070, or 2100
  - Building elevations set above 2100 king tide
  - Main park features set above 2070 king tide
- The shoreline is a natural edge adaptive to SLR
  - Upland areas allow wetlands to migrate in response to SLR
  - Provide storm surge protection minimizing impacts to park features

# SITE INVESTIGATION ACTIVITIES

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- Site Characterization Report—May 2017 (Northgate)
  - Addressed Data Gaps
  - 91 soil samples, 2 groundwater samples, 13 sediment samples, and 8 surface water
  - Analyzed for various contaminants
  - Identified sporadic low levels of metals (lead), naturally occurring asbestos, polycyclic aromatic hydrocarbons (PAHs)
  - Concluded that
    - 1) Site conditions suitable for continued recreational use
    - 2) Redevelopment activities should be performed under a Site Management Plan

# SOIL AND SEDIMENT RESULTS



SAMPLE ID:	IBSP-SB-16-0.6	IBSP-SB-16-2.6	IBSP-SB-16-4.6	
DEPTH (FT BGS):	0.5	2.5	4.5	
ANALYTE	UNITS	RESULTS		
LEAD	MG/KG	40	23	150
BIA/P EQ	µG/KG	-	67.34	-
ASBESTOS	%	-	0.5	-

SAMPLE ID:	IBSP-SB-22-0.6	IBSP-SB-22-2.6	
DEPTH (FT BGS):	0.5	2.5	
ANALYTE	UNITS	RESULTS	
LEAD	MG/KG	33	460
BIA/P EQ	µG/KG	78.91	218.84
ASBESTOS	%	0.75	-

SAMPLE ID:	IBSP-SB-AR-14-0.6	IBSP-SB-AR-14-2.6	IBSP-SB-AR-14-4.6	
DEPTH (FT BGS):	0.5	3.5	4.5	
ANALYTE	UNITS	RESULTS		
LEAD	MG/KG	21	360	24
BIA/P EQ	µG/KG	-	12,196	129.45
ASBESTOS	%	-	-	0.25

SAMPLE ID:	IBSP-SB-AR-11-1.0	IBSP-SB-AR-11-3.0	IBSP-SB-AR-11-6.0	
DEPTH (FT BGS):	1.0	3.0	6.0	
ANALYTE	UNITS	RESULTS		
LEAD	MG/KG	23	27	62
BIA/P EQ	µG/KG	19.37	-	5.6
ASBESTOS	%	-	-	0.5

SAMPLE ID:	IBSP-SB-26-4.6	IBSP-SB-26-7.6	
DEPTH (FT BGS):	4.5	7.5	
ANALYTE	UNITS	RESULTS	
LEAD	MG/KG	73	120
BIA/P EQ	µG/KG	296.46	882.54
ASBESTOS	%	1.25	-

SAMPLE ID:	IBSP-SB-6-1.0	IBSP-SB-6-3.0	IBSP-SB-6-6.0	IBSP-SB-6-7.0	IBSP-SB-6-9.0	
DEPTH (FT BGS):	1.0	3.0	6.0	7.0	9.0	
ANALYTE	UNITS	RESULTS				
LEAD	MG/KG	79	110	3	15	2
BIA/P EQ	µG/KG	224.24	-	1.1	-	11
ASBESTOS	%	0.75	1.75	-	-	-

SAMPLE ID:	IBSP-SB-29-6.0	IBSP-SB-29-8.6	IBSP-SB-29-12.0	
DEPTH (FT BGS):	6.0	8.6	12	
ANALYTE	UNITS	RESULTS		
LEAD	MG/KG	110	33	180
BIA/P EQ	µG/KG	146.98	420.84	37.61
ASBESTOS	%	0.25	-	-

SAMPLE ID:	IBSP-SB-17-0.6	IBSP-SB-17-2.6	IBSP-SB-17-4.6	
DEPTH (FT BGS):	0.5	2.5	4.5	
ANALYTE	UNITS	RESULTS		
LEAD	MG/KG	100	11	340
BIA/P EQ	µG/KG	-	8,478	23
ASBESTOS	%	-	0	-

SAMPLE ID:	IBSP-SE-1-1.0	
DEPTH (FT BGS):	1.0	
ANALYTE	UNITS	RESULTS
LEAD	MG/KG	65
BIA/P EQ	µG/KG	1,179.8
ASBESTOS	%	-

SAMPLE ID:	IBSP-SE-4-1.0	
DEPTH (FT BGS):	1.0	
ANALYTE	UNITS	RESULTS
LEAD	MG/KG	85
BIA/P EQ	µG/KG	1,020.7
ASBESTOS	%	-

SAMPLE ID:	IBSP-SE-6-1.0	
DEPTH (FT BGS):	1.0	
ANALYTE	UNITS	RESULTS
LEAD	MG/KG	100
BIA/P EQ	µG/KG	2,066.4
ASBESTOS	%	-

SAMPLE ID:	IBSP-SB-4-0.6	IBSP-SB-4-2.6	
DEPTH (FT BGS):	0.5	2.5	
ANALYTE	UNITS	RESULTS	
LEAD	MG/KG	130	220
BIA/P EQ	µG/KG	-	85.09
ASBESTOS	%	-	-

SAMPLE ID:	IBSP-SB-2-0.6	IBSP-SB-2-2.6	
DEPTH (FT BGS):	0.5	2.5	
ANALYTE	UNITS	RESULTS	
LEAD	MG/KG	340	22
BIA/P EQ	µG/KG	99.68	-
ASBESTOS	%	-	-

SAMPLE ID:	IBSP-SB-AR-34-7.0	IBSP-SB-AR-34-9.0	IBSP-SB-AR-34-11.0	IBSP-SB-AR-34-13.0	IBSP-SB-AR-34-17.0	
DEPTH (FT BGS):	7.0	9.0	11	13	17	
ANALYTE	UNITS	RESULTS				
LEAD	MG/KG	380	430	400	5.9	10
BIA/P EQ	µG/KG	-	48,104	-	1.5	1,945
ASBESTOS	%	-	-	-	-	-

SAMPLE ID:	IBSP-SB-12-1.0	IBSP-SB-12-3.0	IBSP-SB-12-6.0	IBSP-SB-12-7.0	IBSP-SB-12-9.0	
DEPTH (FT BGS):	1.0	3.0	6.0	7.0	9.0	
ANALYTE	UNITS	RESULTS				
LEAD	MG/KG	110	58	47	9	6.9
BIA/P EQ	µG/KG	605.12	-	1,091.7	-	1.2
ASBESTOS	%	-	-	1.25	-	-

SAMPLE ID:	IBSP-SB-7-1.0	IBSP-SB-7-3.0	IBSP-SB-7-6.0	IBSP-SB-7-7.0	IBSP-SB-7-8.0	IBSP-SB-7-11.0	
DEPTH (FT BGS):	1.0	3.0	6.0	7.0	8.0	11.0	
ANALYTE	UNITS	RESULTS					
LEAD	MG/KG	100	66	420	110	91	190
BIA/P EQ	µG/KG	336.34	-	180.4	-	161.31	-
ASBESTOS	%	0.25	-	-	-	-	-

SAMPLE ID:	IBSP-SB-10-1.0	IBSP-SB-10-3.0	IBSP-SB-10-6.0	IBSP-SB-10-7.0	IBSP-SB-10-8.0	IBSP-SB-10-11.0	IBSP-SB-10-13.0	IBSP-SB-10-16.0	IBSP-SB-10-17.0	
DEPTH (FT BGS):	1.0	3.0	6.0	7.0	8.0	11.0	13.0	16.0	17.0	
ANALYTE	UNITS	RESULTS								
LEAD	MG/KG	91	120	3	6.8	3.3	5.3	9	280	20
BIA/P EQ	µG/KG	280.26	-	1.2	-	1.1	-	12	-	23
ASBESTOS	%	-	-	0.25	-	-	-	0.5	-	-



# ASSESSMENT OF BROWNFIELD CLEANUP ALTERNATIVES - ABCA

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- Applicable Regulations and Cleanup Standards
  - SF Department of Public Health per Maher Ordinance
  - Environmental Screening Levels from SF Water Board (Commercial and Construction)
  
- Remediation Alternatives
  - **Alternative #1. No Action**
  
  - **Alternative #2. 1-ft Excavation, Disposal, and Durable Cover**
    - Excavation and disposal of soil to set Site grades
    - Installation of a physical barrier:
      - Hardscape (concrete, asphalt) or
      - Minimum 1-ft-thick softscape cap
    - Implementation of long-term operation and maintenance
  
  - **Alternative #3. 2-ft Excavation, Disposal, and Durable Cover**
    - Same as Alternative #2, except minimum 2-ft-thick softscape cap

# ABCA

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## – Comparison Criteria

- Effectiveness = reduce toxicity, mobility, or volume
- Implementability = feasibility of constructing/operating/maintaining
- Cost = comparison of cost estimates for the alternatives

## – Evaluation of Alternatives

- Alternative #1 is not effective
- Alternatives #2 and #3 are both effective and implementable, while alternative #2 has a lower estimated cost (\$10M vs \$12M)

## – Recommendation

- Alternative #2 (1-Ft Excavation, Offsite Disposal, and Durable Cover)

# INDIA BASIN SHORELINE PARK RECOMMENDED ALTERNATIVE

## LEGEND

-  SITE BOUNDARY
-  PROPOSED MHW LINE (5.9 FT)
-  RESTORATION AREAS (12" CLEAN IMPORT TOPSOIL)
-  BIORETENTION AREAS (12" CLEAN IMPORT TOPSOIL)
-  NATIVE GARDENS (12" CLEAN IMPORT TOPSOIL)
-  STREET TREE SOILS (NATIVE SOIL LEFT BETWEEN TREE/SHRUB ROOTBALLS)
-  SODDED TURF SOIL (12" CLEAN IMPORT TOPSOIL OVER DEMARCATION LAYER)
-  NEARSHORE GRAVEL COVER - NORTH SHORELINE PROTECTION
-  NEARSHORE GRAVEL COVER - CENTRAL MARINE WAY LAWN SHORELINE TRANSITION
-  NEARSHORE GRAVEL COVER - SOUTH SHORELINE PROTECTION



## NOTES

1. THIS FIGURE SHOWS A SIMPLIFIED, APPROXIMATE DURABLE COVER PLAN BASED ON PERMIT SET SITE PLAN AND PAVING SCHEDULE (SHEET L110.2) AND THE SOILS PLAN (SHEET L160.2) REVISED APRIL 26, 2024. SEE LANDSCAPE DRAWINGS FOR FURTHER DETAIL.

# ABCA

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- Justification for Alternative 2 – DPH approved
  - Removing shallow soil and marking the limits of removal will enhance public health protection and guide safety measures for construction & maintenance
  - Most of the site is restored habitat with limited visitor access due to steep slopes, dense vegetation, and protective barriers
  - In park visitor areas, either hardscape (walkways, basketball courts) or grass over 1-ft of clean soil cover with demarcation layer will be present
  - Periodic inspection to check integrity of the durable cover
  - Maintenance activities by RPD staff or trained contractors

# ABCA

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## – Green and Sustainable Remediation Measures

- Resilient to anticipated SLR
- Development set to LEED Gold Standards
- Excavation during the dry-weather months
- Stormwater management prioritizing infiltration-based BMPs
- Wetland restoration to enhance natural resources and biodiversity

# DISCUSSION