

# Regional Zero Emission Infrastructure for Heavy-Duty Trucks Serving the Port of San Diego *National City, City Council*

September 20, 2022



# Maritime Clean Air Strategy

## Truck Objective 2A

*Within the fourth quarter of calendar year 2022, present a concept plan to the Board for its consideration that identifies four potential public-facing medium-duty/heavy-duty charging locations within the San Diego Region to support deployment of zero emissions trucks, which may include locations in close proximity to or on TAMT and/or NCMT.*

**Also, in Alignment with CERP Action E1 – Advance the deployment of heavy-duty on-road electric trucks**



# Stakeholder & Community Engagement:

## *MCAS Community Objective 1*

*Rely on established processes for stakeholders and the public to provide input in the selection, deployment, and on-going monitoring of emission reduction projects.*

- 9/12 – Coordination with Caltrans & SDG&E
- 9/15 – Maritime Stakeholder Forum
- 9/20 – National City, City Council
- 9/21 – Barrio Logan Community Planning Group
- 9/27 – AB 617 Steering Committee



# End in Mind

## Proposed Staff Recommendation for November 2022 BPC Meeting

### Part 1: Port Tidelands Sites

- Issue Request for Proposal (RFP) to develop ZE Truck Infrastructure at **one** of the following sites:
  - Tidelands Site 3 - NW 19<sup>th</sup> /Tidelands
    - *Approximately 8.2 acres*
  - Tidelands Site 4 - SW 19<sup>th</sup>/Tidelands
    - *Approximately 5 acres*
      - *Northern Parcel approx. 2.8 acres or*
      - *Southern Parcel approx. 2.0 acres*

### Part 2: Regional Sites

- Collaborate with Caltrans to develop Regional Sites located at:
  - I-15/I-76 (Pala) Interchange (North County)
  - Otay Mesa (Border)

# Request for Information (RFI)

## *Zero Emission Infrastructure for Heavy-Duty Trucks Serving Port of San Diego and the San Diego Region*

Solicitation Open from May 23 to July 25, 2022  
and asked for:

- Qualifications, Experience and References
- Description of Organization, Personnel and Staffing
- Business Model and Financial Projections
- Proposed Development Concept –  
Overview of Operational Model
- Site Design Concepts



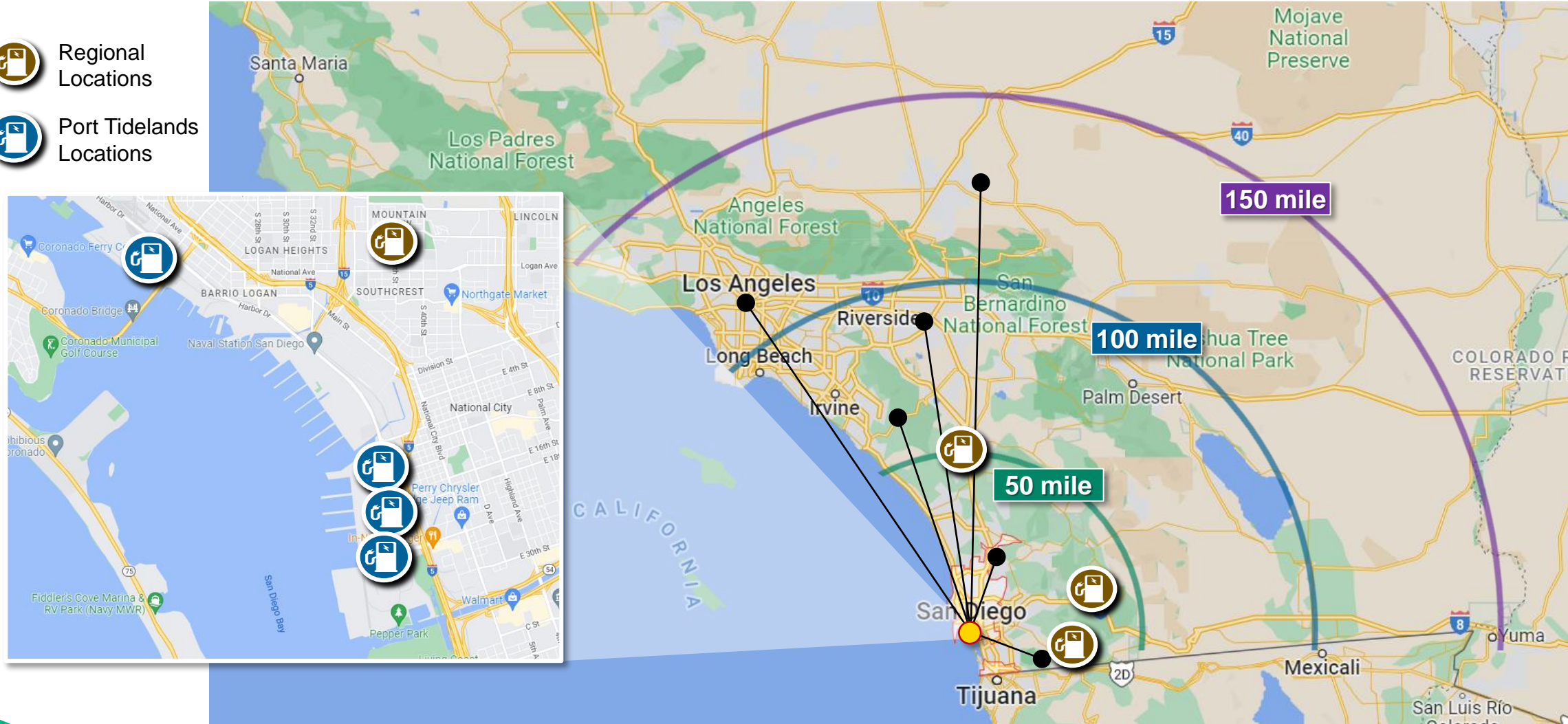
# Routes and Potential Infrastructure Locations



Regional Locations



Port Tideland Locations



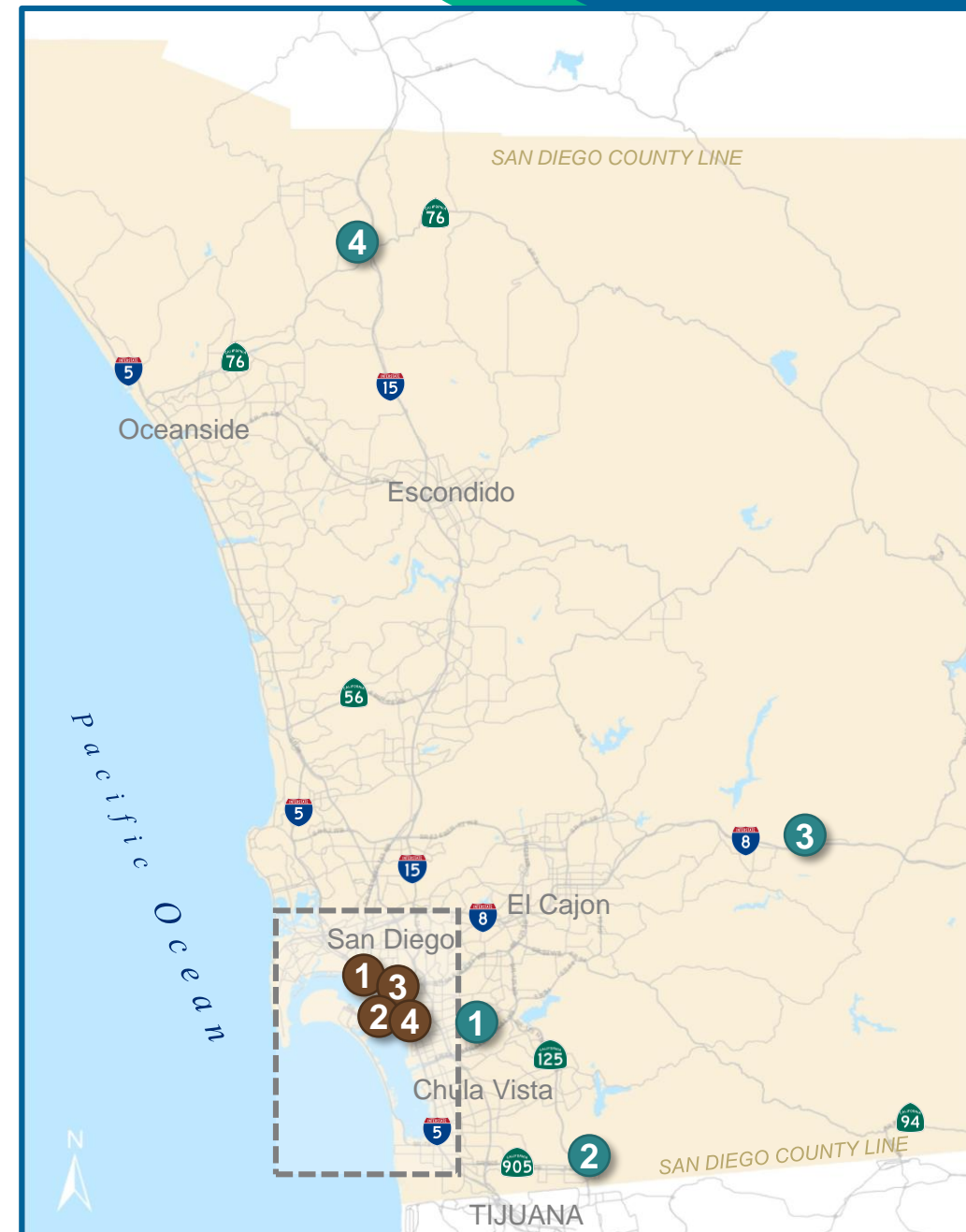
# Map of RFI Proposed ZE Truck Infrastructure Sites

## Tidelands:

1. Dirt Lot @ TAMT (San Diego)
2. Pepper Oil (National City)
3. 19<sup>th</sup> Street/ Tidelands Ave. NORTH (National City)
4. 19<sup>th</sup> Street/ Tidelands Ave. SOUTH (National City)

## Regional:

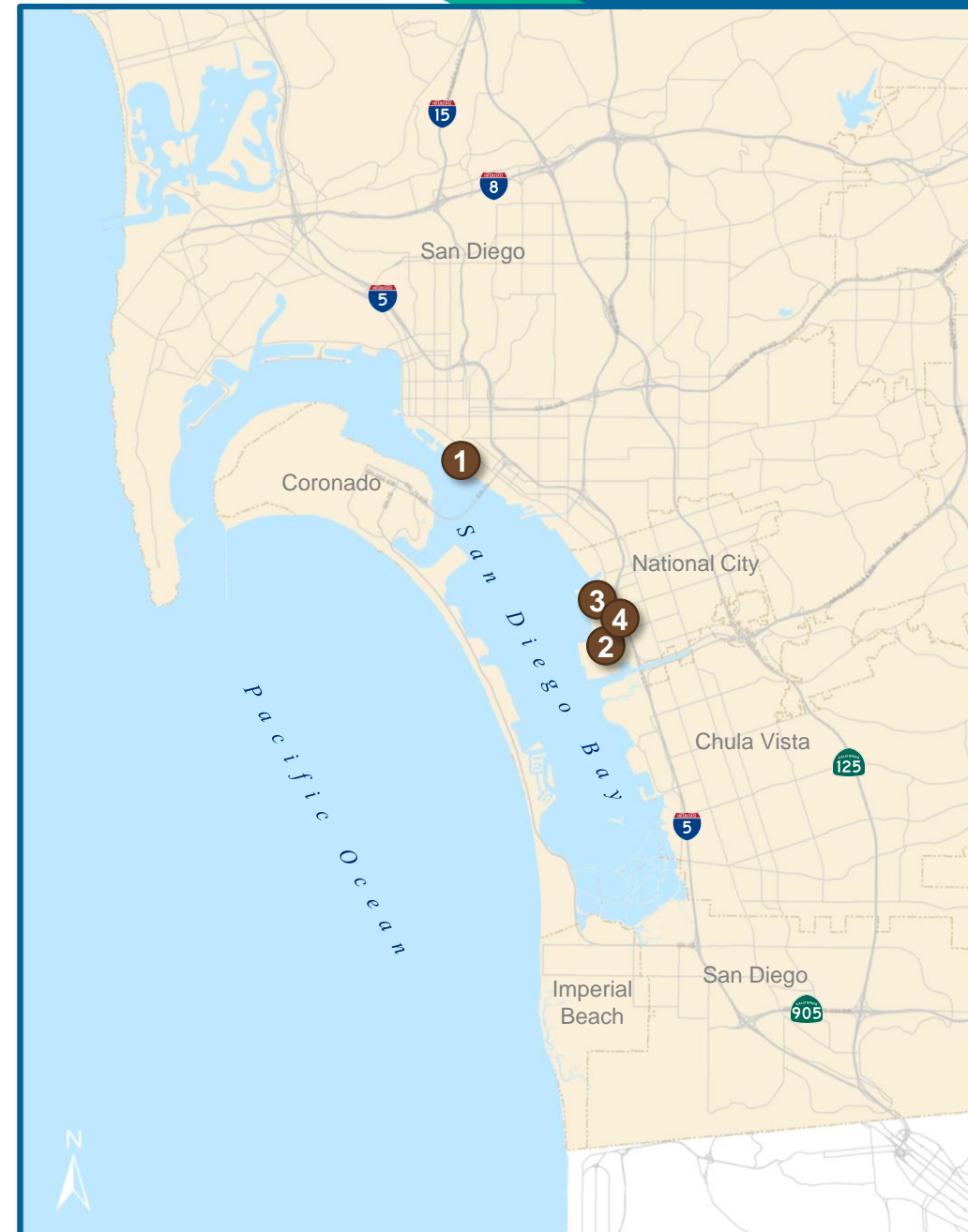
1. District Tidelands Adjacent
2. Otay Mesa
  - a. Caltrans Border Crossing
  - b. Pasha
3. I-8 Corridor
4. I-15 Corridor
  - a. Caltrans Rest Area (I-15/I-76 Interchange @ Pala Mesa)



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# Summary of RFI Responses

- Received 18\* Responses
- Varying technologies and business models proposed
- Varying interest in proposed Tidelands Sites and Regional Locations

**EVSE**  
*electric vehicle supply equipment*  
8 respondents

**H2**  
*hydrogen infrastructure*  
1 respondents

**EVSE & H2**  
7 respondents

\*Two respondents were vendors that did not respond to the Scoped RFI.

# Proposed Business Model Concepts

- A range of business models were proposed, including:
  - 3-35 Year Lease Term, some with revenue share
  - Varying degrees of subsidy requests from the Port, for example:
    - Free rent;
    - Infrastructure funding, site readiness, partnership development, environmental review, and grant assistance; and
    - Guarantees to offset low demand as a financial back-stop.
- Grant funding reliant
- Varying Service Types:
  - Charging as a Service (CaaS), Hydrogen as a Service (HaaS), and Trucking as a Service (TaaS), and Subscription-based EVSE and H2

**CaaS**

(charging as a service)

**HaaS**

(hydrogen as a service)

**TaaS**

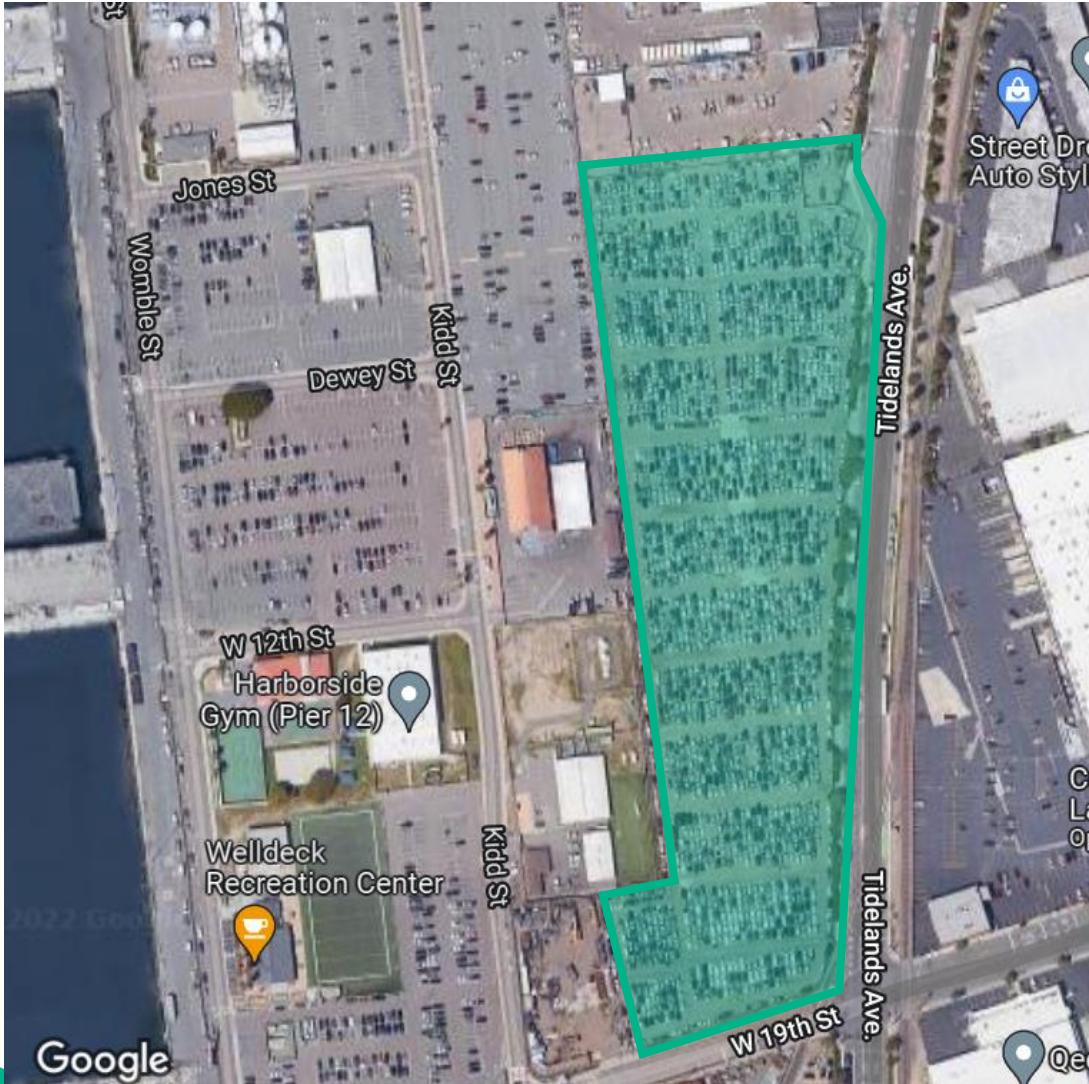
(trucking as a service)

# Site Development Interest

Proposed Tidelands Sites and Regional Locations	Approximate Acreage (if applicable)	Number of Interested Respondents
Tidelands Site 3 – NW 19 <sup>th</sup> / Tidelands	8.2	12
Tidelands Site 4 – SW 19 <sup>th</sup> / Tidelands	5	11
Regional 2B – Otay Mesa (Pasha)	5	11
Regional 2A – Otay Mesa (CalTrans)	N/A	10
Regional 4 – CalTrans I-15/I-76	N/A	10
Tidelands Site 1 – TAMT Dirt Lot	1	7
Tidelands Site 2 – Pepper Oil	2.75	7
Regional 3 – I-8 Corridor*	-	6
Regional 1 – Adjacent to Tidelands*	-	6

\* Respondents expressed interest in All Sites, with no specific site information provided.

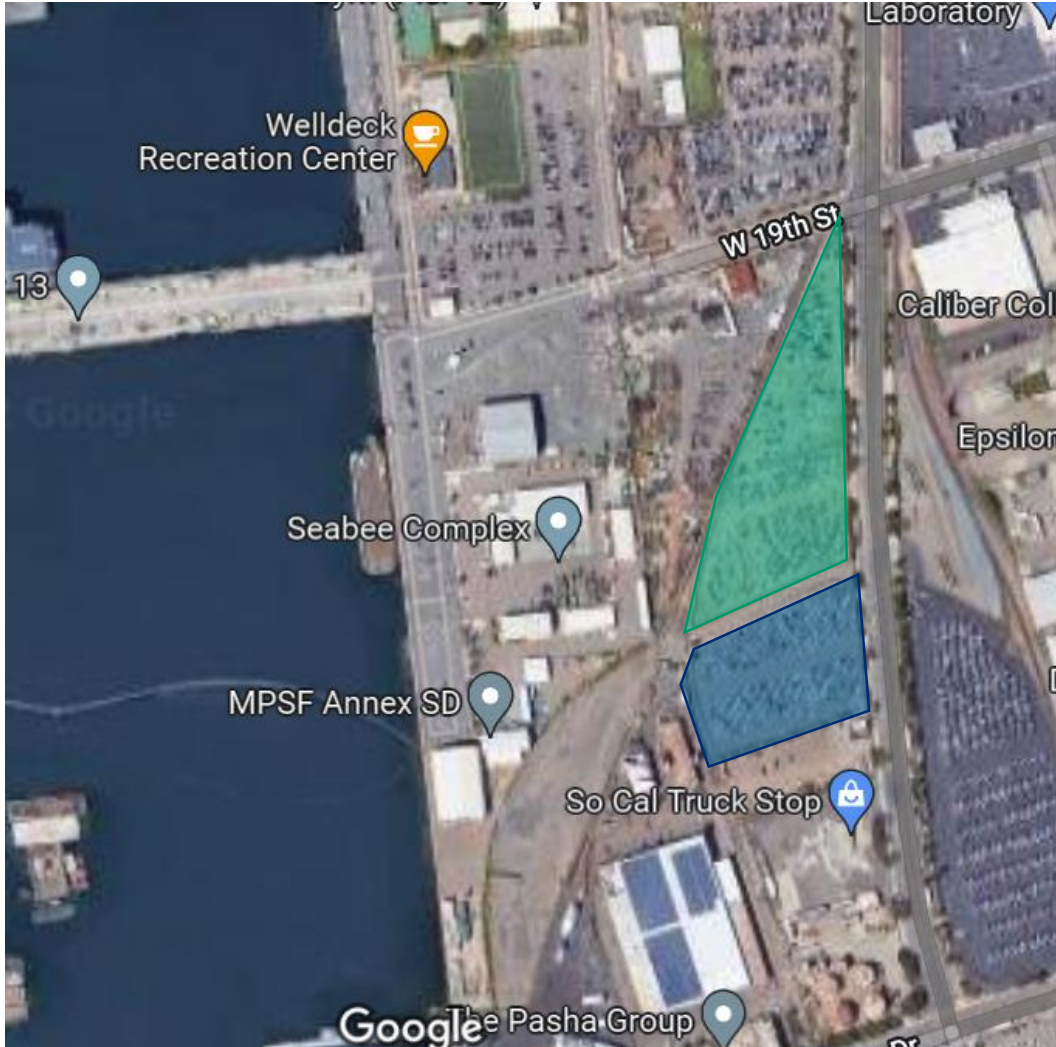
# Tidelands Site 3: 19<sup>th</sup> Street/ Tidelands Avenue NORTH (National City)



## Stats:

- Owned by Port, located on Tidelands, presently under short-term lease
- Approximately 8.2 acres
- Paved

# Tidelands Site 4: 19<sup>th</sup> Street/ Tidelands Avenue SOUTH (National City)



## Stats:

- Owned by Port, located on Tidelands, presently under short-term lease
- Approximately 5 acres
  - *Northern Parcel approx. 2.8 acres*
  - *Southern Parcel approx. 2.0 acres*
- Northern Parcel gravel; Southern Parcel paved

# Preferred Concepts to Include in *Proposed Request for Proposal (RFP)*

- Turn-key Infrastructure
- Prioritize Port trucking needs
- Development of infrastructure under a lease term
- Revenue-share models
- Preference for most financially feasible pro
- Demonstrated infrastructure development experience
- Integrate Distributed Energy Resources
  - *Microgrids*
  - *Battery Energy Storage*
  - *Solar*
  - *Energy Management*

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