

# BRAZOS ISLAND HARBOR, CHANNEL IMPROVEMENT PROJECT

A Public Private Partnership between the  
U.S. Army Corps of Engineers, Port of  
Brownsville, and Río Grande LNG

WEDA Conference, 6-8 November 2023  
Galveston, TX

Presenters:

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U.S. ARMY



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NEXT DECADE

- Project Timeline
- Project Benefits
- Project Innovative Implementation Strategy
- Project Status



**2014 – Corps approved Feasibility Report**

**2016 – Congress authorized project**

- Seven design and construction contracts planned
- 3 years implementation (2018 – 2020)
- 2014 cost estimate: \$211M
- Cost-shared 70% Federal, 30% Non-Federal

**2019 – A-E Company HDR, under contract with Port of Brownsville / Brownsville Navigation District, completed entire project design**

- Corps approved project as a Public Private Partnership Pilot Project for implementation
- NextDecade (Río Grande LNG; RGLNG) signs agreement with Brownsville Navigation District to finance and execute Phase 1 (Sta. - 17+000 to Sta. 41+000)

2020 – Corps grants Department of the Army license to Port of Brownsville and RGLNG to construct the project

– Galveston District and Port of Brownsville signed Memorandum of Agreement (MOA) for Work Provided or Performed prior to executed a Project Partnership Agreement (PPA)

**2022 – Corps allocated \$68M of the Bi-Partisan Infrastructure Law (BIL) to initiate construction**

– Corps and Port of Brownsville signed Project Partnership Agreement

**2023 – Construction started on Segment B (Phase 2) Placement Areas (PAs) Improvements**

– Construction started on Segment A (Phase 1) PAs Improvements and Channel Deepening (CD)

**2024 – Construction to start on Segment B (Phase 2) CD**

2026 – Project scheduled completion. 2023 Corps cost estimate: \$314M (Federal, Non-Federal, Private Investments)

- Deeper channel will allow larger and heavier cargo vessels to shape the economic development of the Río Grande Valley
  - ✓ Increases import and export capabilities
  - ✓ Access to clean energy (wind and solar)
  - ✓ Makes the industries in the region more sustainable
  - ✓ Serves as catalyst for new industries
  - ✓ Fosters creation of new jobs
- Benefits an economically disadvantaged community where more than 25% of the population has remained in poverty for decades
  - ✓ > 10,000 direct and indirect new jobs at the peak of construction
  - ✓ > 800 full-time permanent jobs in a community
  - ✓ > more new jobs in the region
- Leverages private investments in civil works projects

# PUBLIC PRIVATE PARTNERSHIP (P3)<sup>5</sup>

## A TRANSFORMATIONAL PROGRAM

- Consistent with President’s plan to build a modern & sustainable infrastructure
- Transform civil work projects delivery by:
  - ✓ Expanding project partnership to include the private sector
  - ✓ Delivering civil work projects and associated infrastructure faster to benefit local, state, and national economic development
  - ✓ Providing economic savings to federal and local public partners



### Fargo-Moorhead Flood Risk Management Project

**Investment Size:** \$2.84B

**Non-Federal Sponsor(s):** Metro Flood Diversion Authority; City of Fargo, North Dakota; and City of Moorhead, Minnesota

Data date: April 2020



### Los Angeles River Ecosystem Restoration Project

*Ecosystem restoration project on the Los Angeles River, which includes water quality and recreation features. The proposal identified three separate elements spanning 11 miles from the northern edge of Griffith Park to Downtown LA.*

**Investment Size:** \$1.4B

**Non-Federal Sponsor(s):** City of Los Angeles

Data date: April 2020



### Brazos Island Harbor Channel Improvement Project

*Project would deepen the Port of Brownsville ship channel from 42 feet to 52 feet in addition to dredging berthing areas, constructing dredged material placement area capacity, raising levees, and providing aids to navigation.*

**Investment Size:** \$288M

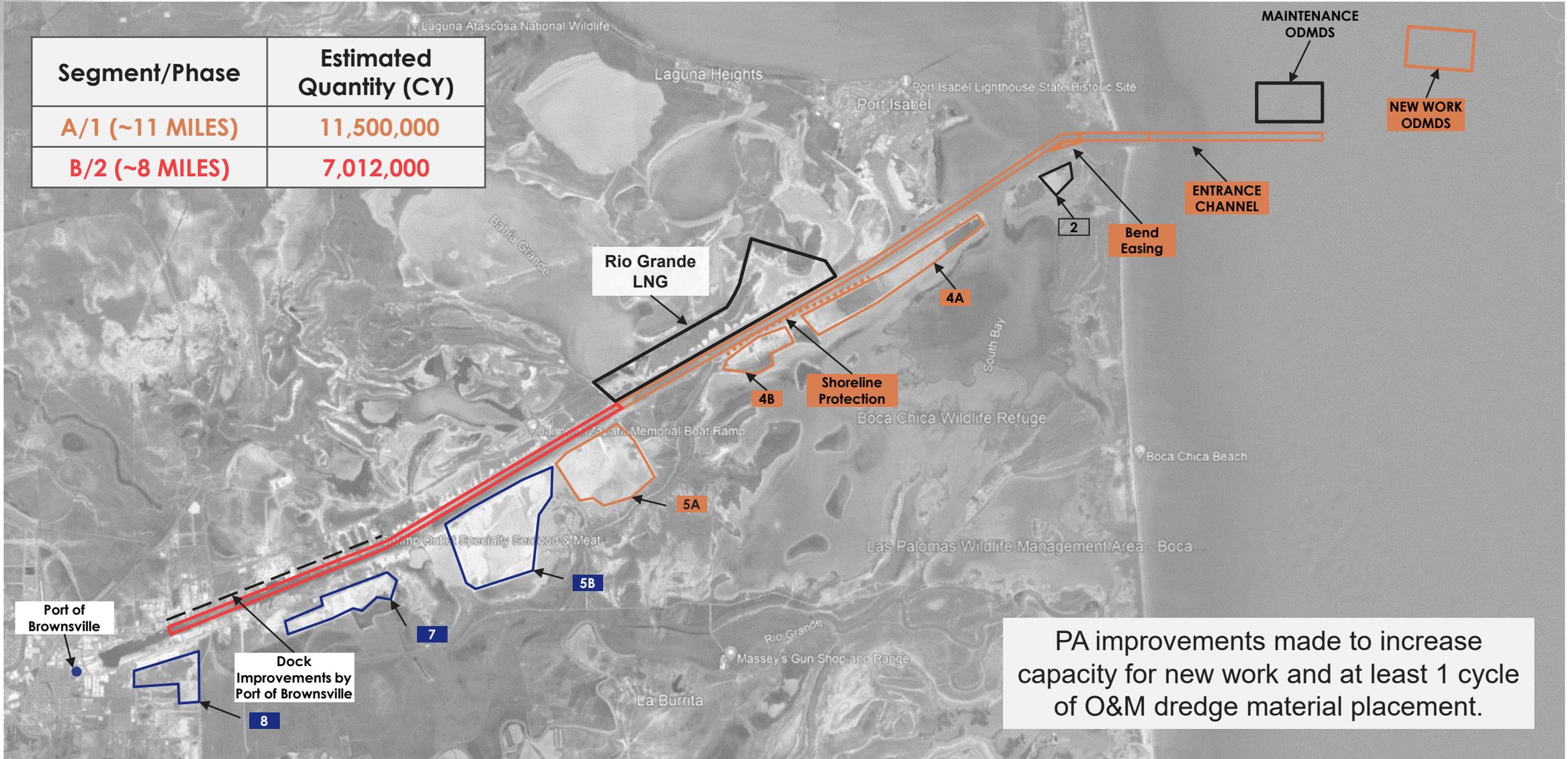
**Non-Federal Sponsor(s):** Port of Brownsville

Data date: April 2020



# BIH-CIP P3 IMPLEMENTATION

Segment/Phase	Estimated Quantity (CY)
A/1 (~11 MILES)	11,500,000
B/2 (~8 MILES)	7,012,000



PA improvements made to increase capacity for new work and at least 1 cycle of O&M dredge material placement.

## ECONOMIC IMPACT - RIO GRANDE LNG

(NEXTDECADE)

Project is fully permitted for 5 trains  
with capacity to export up to 27 mtpa

### CAPITAL INVESTMENT

# \$11.4 BILLION

Expected EPC cost for 3 trains,  
2 storage tanks, and 2 marine  
berths.

# 5,000+

Jobs (Construction phase)

# 300+

Permanent Jobs

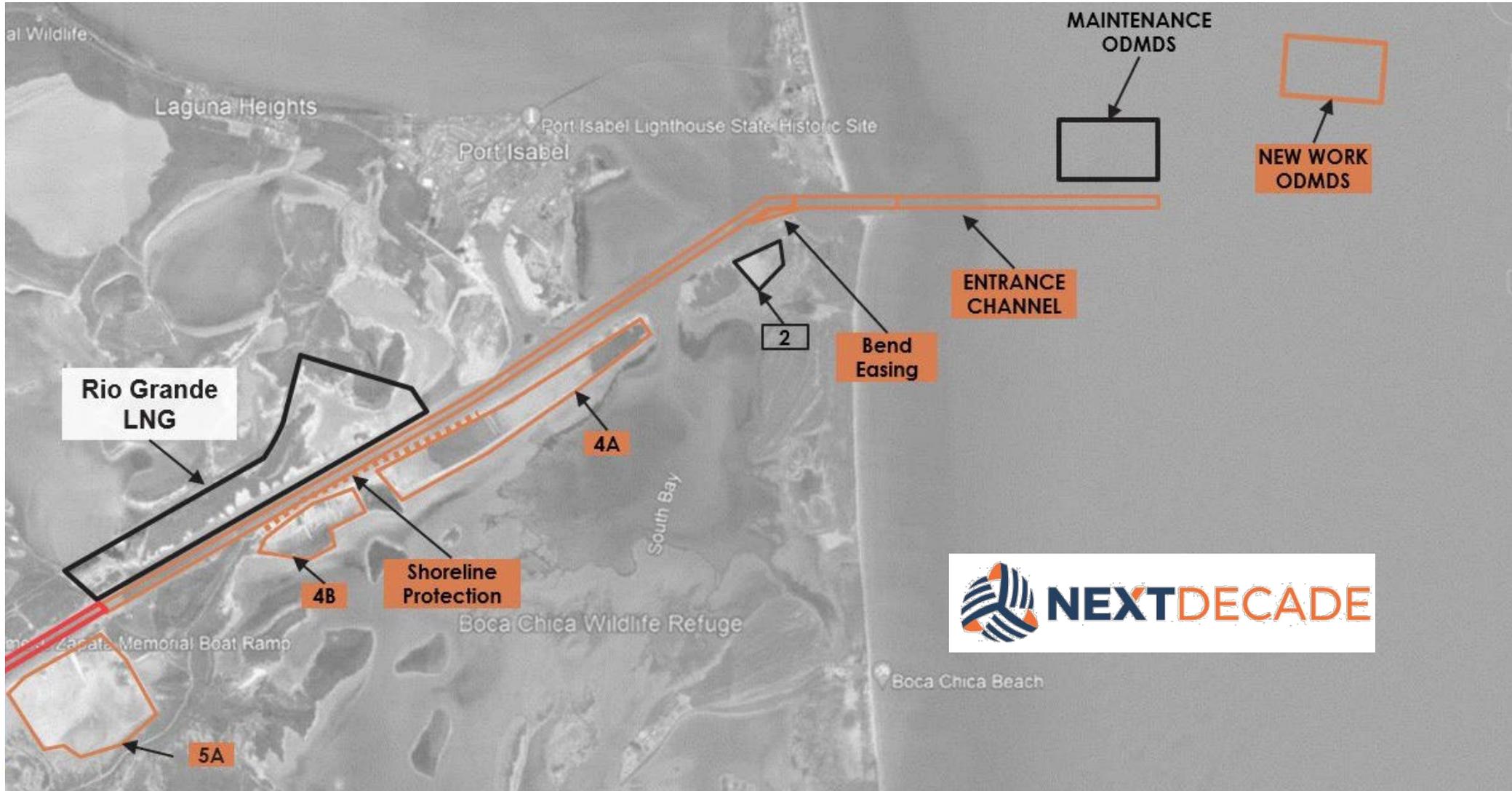
# \$5M

Per year in Tax Receipts  
(Operation of the 5 trains)



# SEGMENT-A

## PLACEMENT AREAS (PA) & CHANNEL DEEPENING (CD)





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NEXTDECADE

# SEGMENT-A

## PLACEMENT AREAS (PA) & CHANNEL DEEPENING (CD)

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1. Notice to Proceed was issued to Great Lakes Dredge & Dock (GLDD) on 07/12/2023.
2. Project Kick-off meeting held 08/09/2023 at the Port of Brownsville.
3. GLDD and subcontractor Affolter mobilized to site 09/12/2023.
4. Site access and laydown was established within the placement areas (PA's).
5. Affolter equipment started to mobilize 09/18/2023.
6. Meetings completed with Customs and Border Protection (CBP), Fish and Wildlife (FWS), TxDOT, SpaceX to inform on the use of Hwy 4 and access to the PA's. Safety Bulletin to be sent to SpaceX, CBP, FWS, TxDOT and Port of Brownsville.
7. Completed the establishment of control points 09/19 through 09/21.
8. Condition survey performed by GLDD and verification by HDR and T Baker Smith.
9. Affolter completing access road improvements, construction of heavy haul road, clearing and grubbing, laydown and site office locations in PA's, stockpile dike material and performing soil testing.
10. Placement area improvements are on the critical path to the start of dredging.



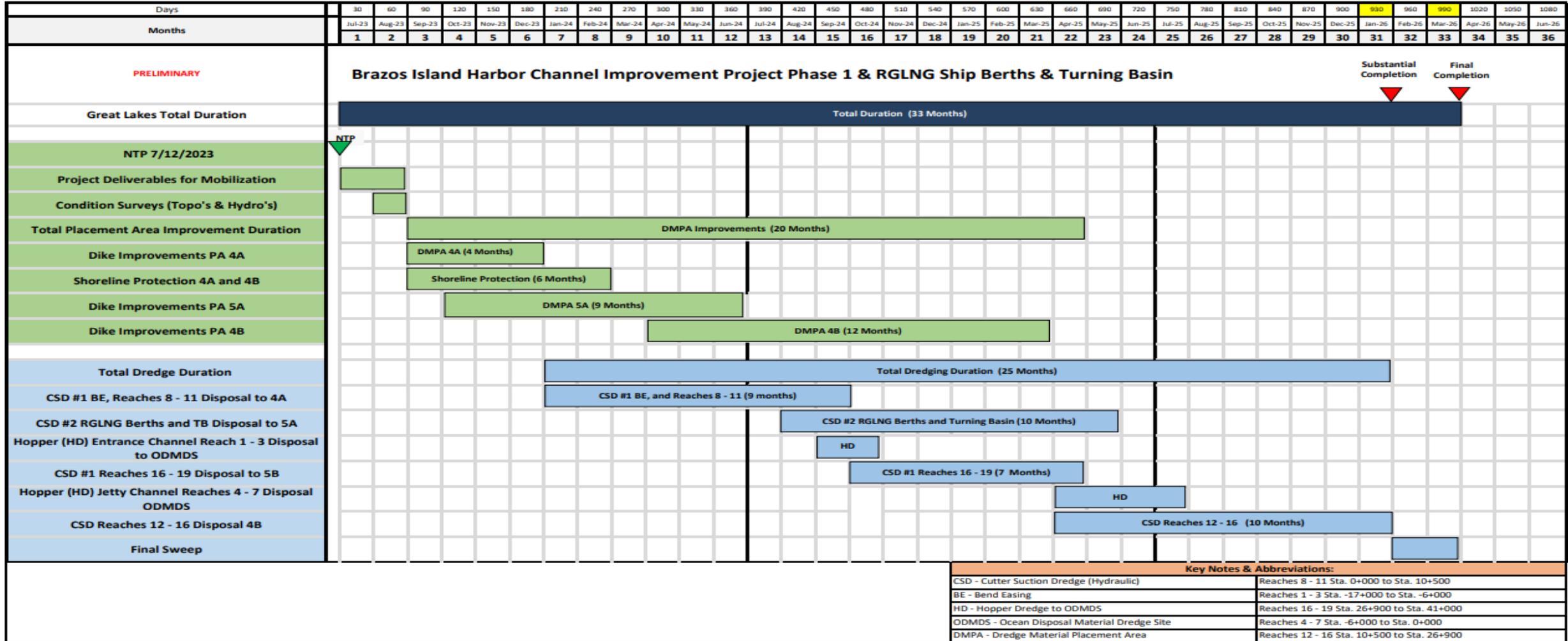
US Army Corps of Engineers



# SEGMENT-A (PHASE-1)

## PLACEMENT AREAS (PA) & CHANNEL DEEPENING (CD)

### Level-1 Schedule





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**NEXTDECADE**

# SEGMENT-A (PHASE-1)

## PLACEMENT AREAS (PA) & CHANNEL DEEPENING (CD)

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PA-4B Looking West



## ECONOMIC IMPACT



**51,000**

Jobs Created by Port's  
Maritime Activity



**\$2.6B**

Annually Into the  
Rio Grande Valley



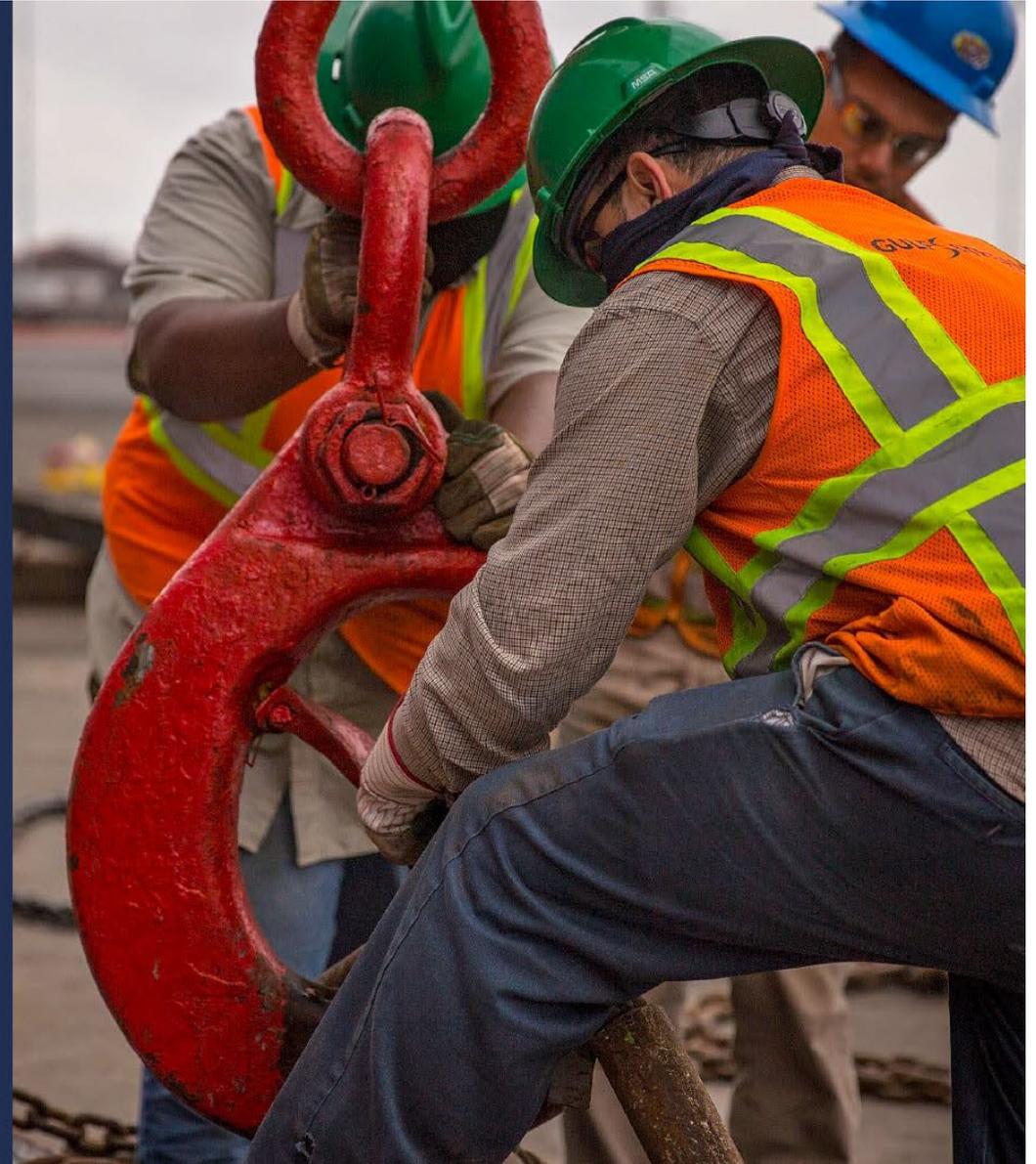
**\$3B**

Total Economic Activity



**9,000+**

Direct, Indirect,  
and Induced Jobs



# SEGMENT B PLACEMENT AREAS





DMPA 5B from the Northeast corner.



DMPA 5B Eastern Levee from the North to the South.

# U.S. ARMY CORPS OF ENGINEERS

## GALVESTON DISTRICT

### Mission



Deliver vital engineering solutions to secure our Nation, energize our economy, and reduce disaster risk, in collaboration with our partners.

### Civil Works Mission Areas



Navigation / Operations



Beneficial Use of Dredged Material



Flood Risk Management



Ecosystem Restoration



Emergency Management



Regulatory



Support for Others

### Projects Investment by Federal and Partners (FY 2023)

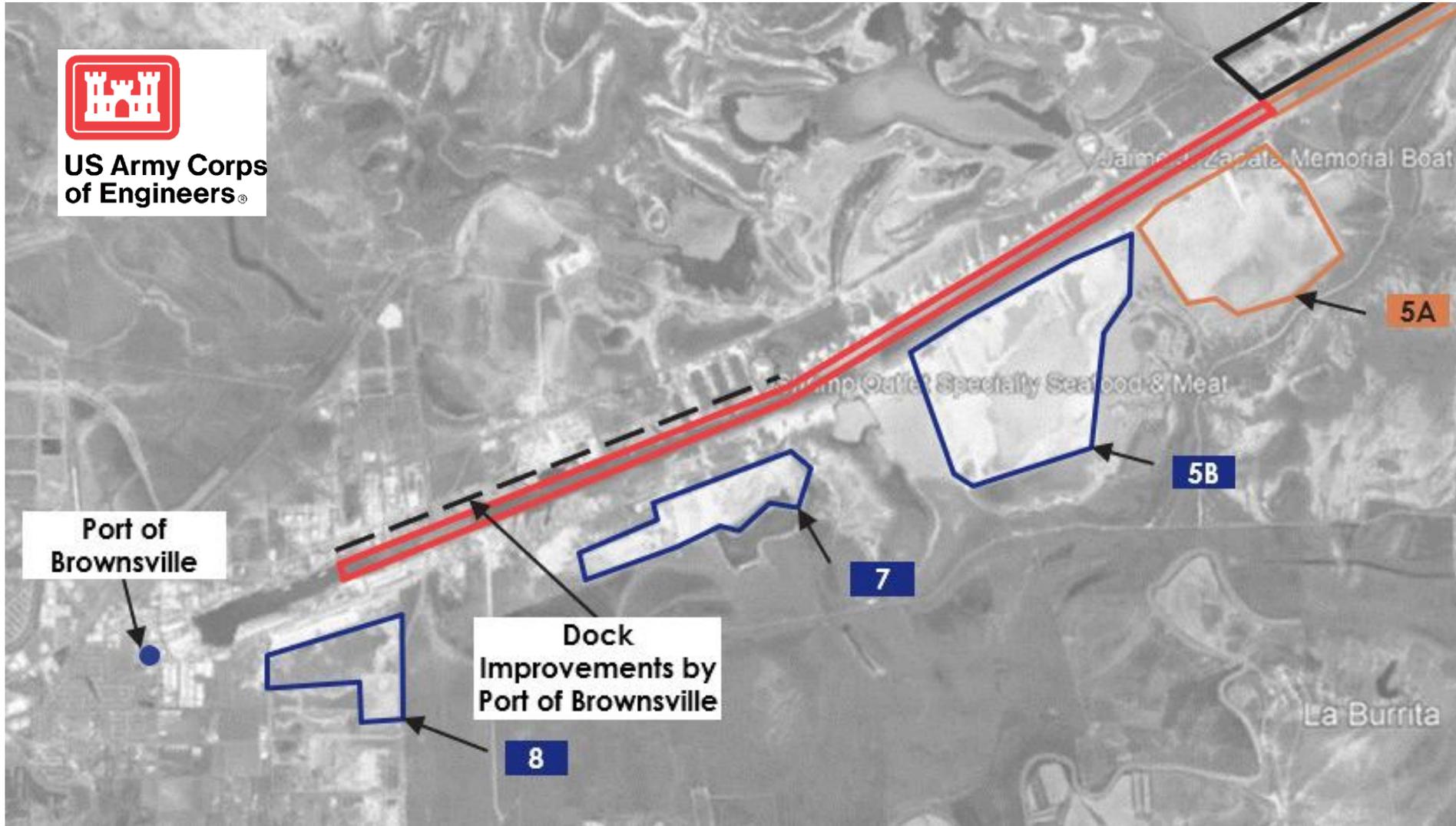
\$ 685M Area of Responsibility  
\$ 35M Río Grande Valley Area

### Projects in the Río Grande Valley Area and Estimated Investment (FY 2024)

1 Navigation O&M (BIH)  
1 Navigation New Work (BIH)  
1 Feasibility Study (LRGV Watershed Study)  
1 Ecosystem Restoration  
1 CAP  
1 PAS  
-----  
> \$60M planned



# SEGMENT B CHANNEL DEEPENING



- Design work completed
- Contract
  - ✓ Dredge Type: Pipeline
  - ✓ Placement: Upland, confined (PA 5B)
  - ✓ Quantity: 7,012,000 CY
  - ✓ Depth: 52 ft + 2 ft
  - ✓ Slope: 2.5H:1V from 41+000 to 63+906  
2H:1V from 63+906 to 84+200
  - ✓ Period of Performance: 20 months
  - ✓ Work Restrictions: None
- Invitation For Bids Contract Solicitation Schedule
  - ✓ 03 Jan 2024 – Advertisement
  - ✓ 02 Feb 2024 – Bids Opening
  - ✓ 29 Mar 2024 – Award
- Local Jobs Impact: > 750 direct and secondary

**INDEX OF DRAWINGS**

SHEET #	DRAWING NO.	TITLE
1	001	CONTRACT BIDDING
2	002	GENERAL NOTES
3	003	PROPOSED CHANNEL CROSS SECTION
4	004	PROPOSED CHANNEL CROSS SECTION
5	005	PROPOSED CHANNEL CROSS SECTION
6	006	PROPOSED CHANNEL CROSS SECTION
7	007	PROPOSED CHANNEL CROSS SECTION
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**BRAZOS ISLAND HARBOR**  
**CHANNEL IMPROVEMENT PROJECT PHASE 2**  
**STATION 41+000 TO STATION 84+200**

SOLICITATION NO.: \_\_\_\_\_

ISSUE DATE: \_\_\_\_\_

100% PRELIMINARY  
BCORS REVIEW  
(REV1)

SHEET ID:  
**G-001**

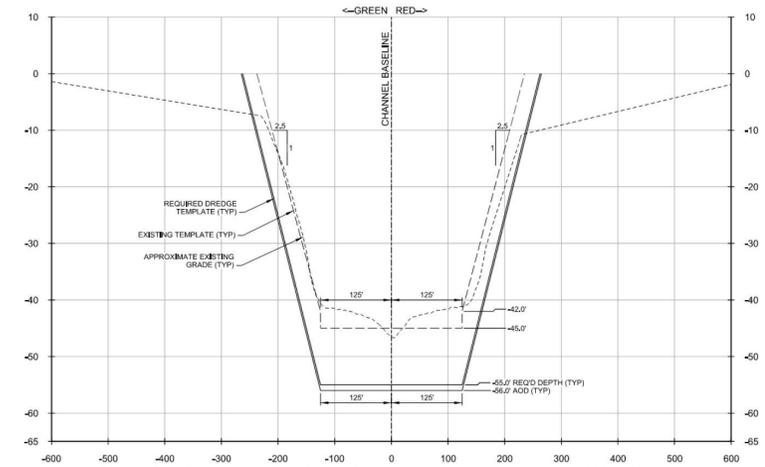
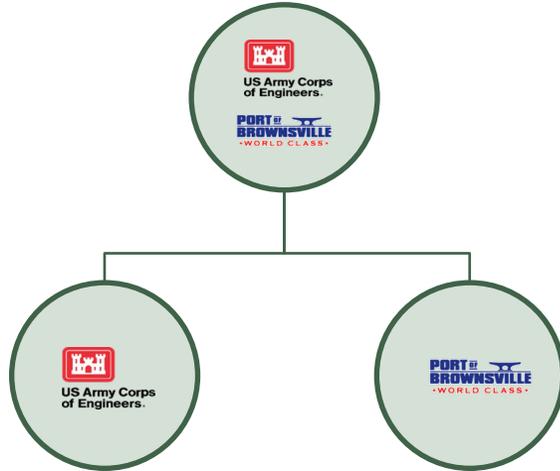


Figure 3-4: Representative Cross Section - Existing Template and New Work Template for Main Channel (Station 49+000)

## Initial Strategy

- CNT 1**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain
- CNT 2**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain
- CNT 3**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain
- CNT 4**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain
- CNT 5**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain
- CNT 6**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain
- CNT 7**
  - Design
  - Issue Solicitation
  - Construct
  - Maintain



CNT-1	-17+000 to 00+000
CNT-2	PA4B & PA5A
CNT-3	PA7, PA8, 70+000 to 89+500
CNT-4	25+000 to 50+000
CNT-5	PA5, 00+000 to 07+000
CNT-6	07+000 to 25+000
CNT-7	PA5B, 50+000 to 70+000

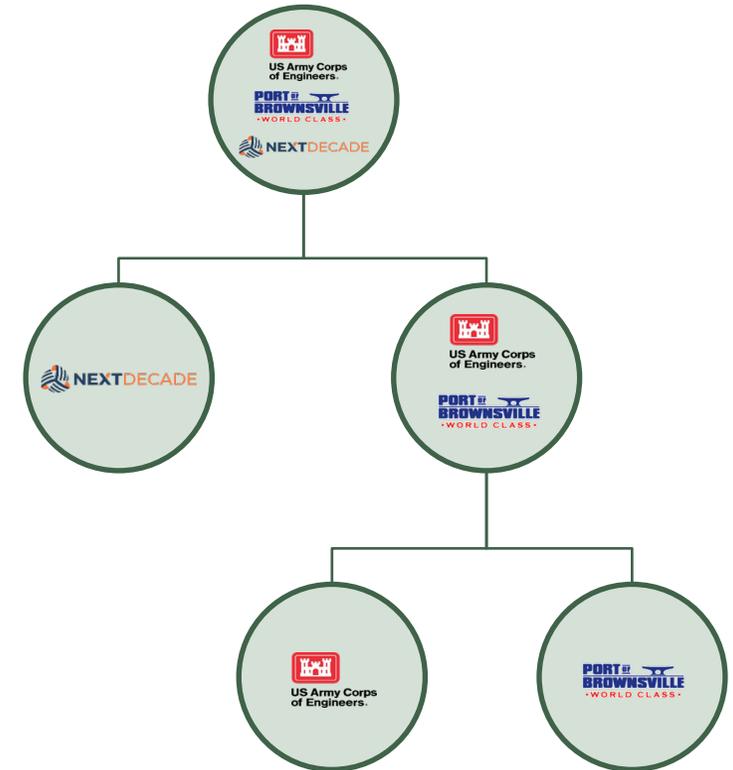
~ 3 years (2018 – 2020), MULTIPLE contracts per year

## Current Strategy

- CNT 1**
  - Design
  - Issue Solicitation
  - Construct
- CNT 2**
  - Design
  - Issue Solicitation
  - Construct
- CNT 3**
  - Design
  - Issue Solicitation
  - Construct

Maintain once all completed

~ 3 years each  
**INTEGRATED**  
(~3 years)



**HIGH RISK** for untimely Appropriation of Funds; Most likely 2 years each SEQUENTIAL in a fund's constraint environment (≥ 14 years)



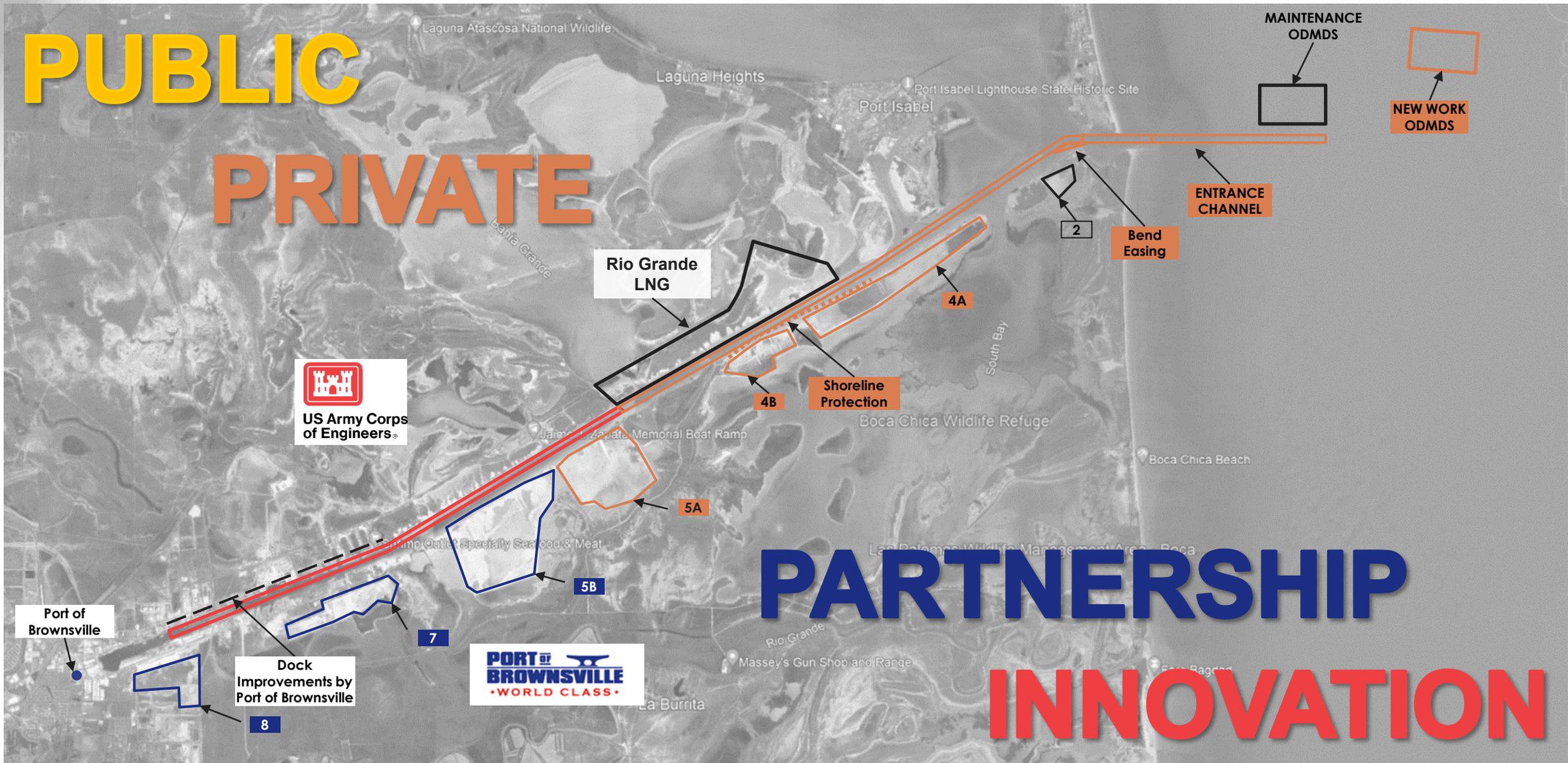
NEXTDECADE

THANK YOU!

P3 = WIN + WIN + WIN

PUBLIC

PRIVATE



PARTNERSHIP

INNOVATION