



2018 Port Everglades Master/Vision Plan Update

Combined Charrette

May 1, 2019



Many of the concepts included are preliminary in nature. Additional analyses and input will continue through the Master/Vision Plan process.

Issues and Opportunities – Overall

- Ability to add berths/acres very limited
 - Prioritization of berth/land use against different criteria required
 - More volume on same footprint required
 - Liquid bulk: steady as she goes; LNG a near-/mid-term priority
 - Cruise: more berths and percent utilization of berths will need to increase
 - Containers: moves per crane/berth and TEUs per acre need to increase; dwell times need to decrease; landside transportation issues must be dealt with ASAP
 - Bulk/breakbulk: tons/acre need to increase but overall acreage goes down slightly
 - Ro-Ro: high growth market; requires more land
- Regional demand vs. PEV demand
 - Three ports (PEV, PortMiami, Port of Palm Beach) serve the core South Florida market
 - Market conditions will drive future berth and land demand in the region
 - Value proposition, capacity, efficiency and relationships will drive port selection
 - PEV cannot be everything to everyone; tradeoffs are unavoidable
 - Infrastructure, efficient operations and flexibility are key to PEV's future success

Issues and Opportunities – Day 1 Feedback

- **Liquid Bulk**

- LNG is important but complicated to accommodate; optimal location remains TBD
 - B&A needs to confirm maximum distance to berth for LNG pipeline in order to refine potential site options
 - Slip 1/3 berth utilization must be consulted/confirmed before LNG is considered for Berths 7-13
 - PEV should consider using the north side of the STNE for LNG bunkering
 - Hybrid options that allow a barge to “bunker” LNG vessels more directly should be considered
- Slip 1/3 expansion project needs to consider replacement of existing pipeline infrastructure for petroleum

- **Cruise**

- Potential concerns with prevailing winds at proposed Berth 19/20 finger pier
 - Simulation needs to occur before this project is formally recommended
- APM could be a game-changer for PEV
 - Secure and efficient remote baggage handling will be an important factor
 - In lieu of on-port parking, PEV should consider off-port parking options that minimize on-port traffic and maximize utilization of proposed APM
- Traffic study needs to consider impact of security checkpoints on flow and congestion because there is congestion at both Eisenhower and Eller Drive gates

Issues and Opportunities – Day 1 Feedback

- **Cargo**

- Midport (Berth 29) should include stern ramp in addition to quarter ramp options in order to accommodate complete range of Ro-Ro vessel operations
 - “Figure 7” design to be evaluated by B&A; turning notch stern ramp to be evaluated
 - High and heavy ro-ro cargo requires concrete yard area as opposed to traditional asphalt
- LNG is important to cargo industry as well as cruise industry but same complications in terms of operations and site selection
- Port Access Road and Northport break-bulk yard should account for yard handling equipment heights if possible
- Extension of Griffin Road into Southport as an additional/secondary access/egress route is important, needed and should be prioritized
 - The value/impact of the security checkpoint on McIntosh Road should be evaluated as part of the traffic study since it is redundant with ISPS gates at each terminal and may contribute to truck traffic
 - Truck queuing capacity is still important and must be factored into McIntosh Road realignment project
- Dynegy is a strong potential location for cold/frozen storage or other logistics uses and should be activated in the near term if possible

Issues and Opportunities – Day 1 Feedback

- Cargo (continued)

- Shaw property is a strong potential location for port industrial uses including distribution and/or chassis/empty storage, assuming Griffin Road extension moves forward
- Both technology and operational changes are required to meet future containerized cargo demand on available acres/berths
 - Appointment systems are needed sooner rather than later to help manage gate congestion issues
 - Container yard densification is a near, mid- and long-term requirement to meet future demand meaning all PEV terminals will likely need to move to RTG operations as soon as feasible
- More cranes (at least 2 per Southport berth) in addition to the 13 currently envisioned should be considered in order to support projected container activity
 - Berth capacity is more limited than acreage, even after the STNE
 - Berth/crane productivity must increase across the board in step with crane density

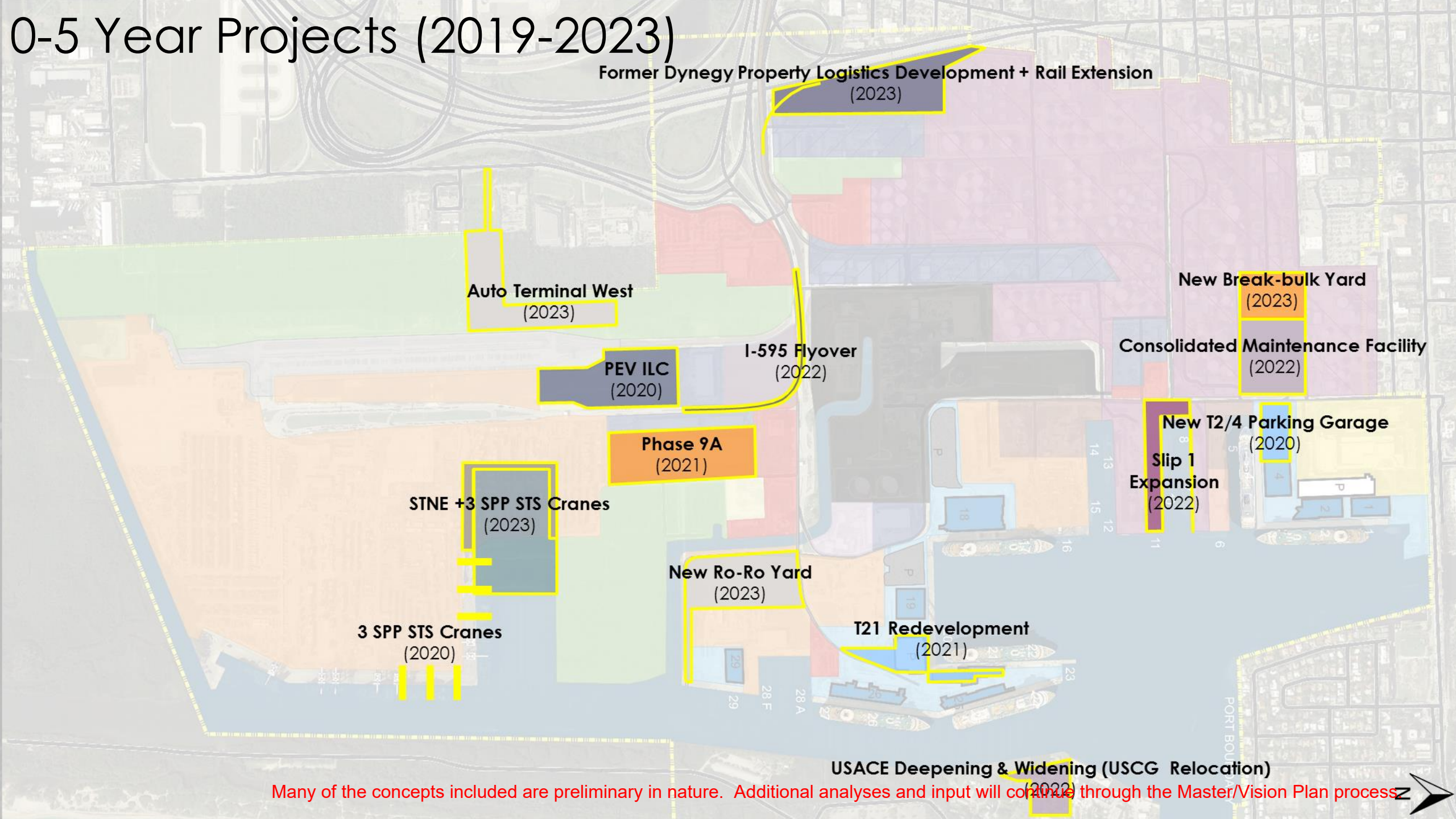
Port Projects by Area by Year

	0-5 Year Projects		5-10 Year Projects		10-20 Year Projects	
Northport	T2/T4 Parking Garage	2020	Port Access Road	2025		
	Slip 1 Expansion	2022	Slip 3 Expansion	2026		
	Maintenance Facility Consolidation	2022	LNG Bunkering + Storage Facility	2028		
	Break-bulk Yard	2023				
Midport	T21 Redevelopment	2021	Tracor Basin Fill	2024	Berth 19 Finger Pier	2029
	Ro-Ro Yard Relocation/Expansion	2023	T29	2027	T19/20	2030
			Ro-Ro Yard Expansion	2027	Berths 14/15 Realignment	2037
			T26	2028	Ro-Ro Yard Expansion	2033
Southport	PEV ILC	2020	Phase 9C-1	2025	Phase 9C-2	2029
	3 SPP STS Cranes	2020	Phase 9A-2	2026		
	Phase 9A-1	2021	Griffin Road Extension	2026		
	STNE + 3 SPP STS Cranes	2023	McIntosh Road Realignment	2027		
Portwide/Other			Berth 33 Alignment	2028		
			Container Terminal reconfiguration	2028		
	USACE Deepening & Widening (USCG Relocation)	2022	Shaw Property Development	2024	APM	2035
	Shaw Property Acquisition	2022	USACE Deepening & Widening	2025		
	I-595 Flyover	2022	Commercial Consolidation	2025		
	Former Dynegy Logistics Development	2023				
	Auto Terminal West	2023				

STATUS QUO

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0-5 Year Projects (2019-2023)



Former Dynegy Property Logistics Development + Rail Extension
(2023)

Auto Terminal West
(2023)

PEV ILC
(2020)

I-595 Flyover
(2022)

Phase 9A
(2021)

STNE +3 SPP STS Cranes
(2023)

3 SPP STS Cranes
(2020)

New Ro-Ro Yard
(2023)

T21 Redevelopment
(2021)

USACE Deepening & Widening (USCG Relocation)
(2022)

New Break-bulk Yard
(2023)

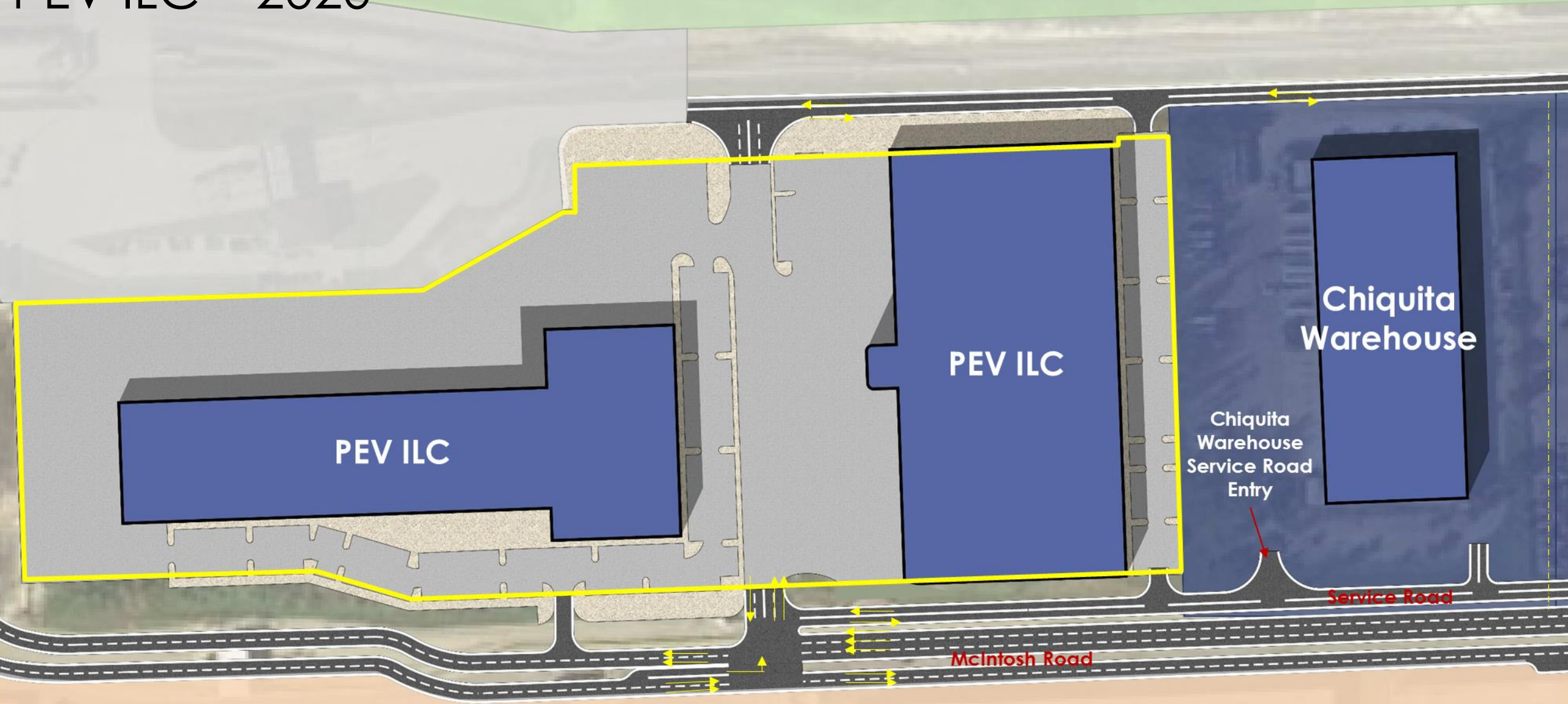
Consolidated Maintenance Facility
(2022)

New T2/4 Parking Garage
(2020)

Slip 1
Expansion
(2022)

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PEV ILC – 2020



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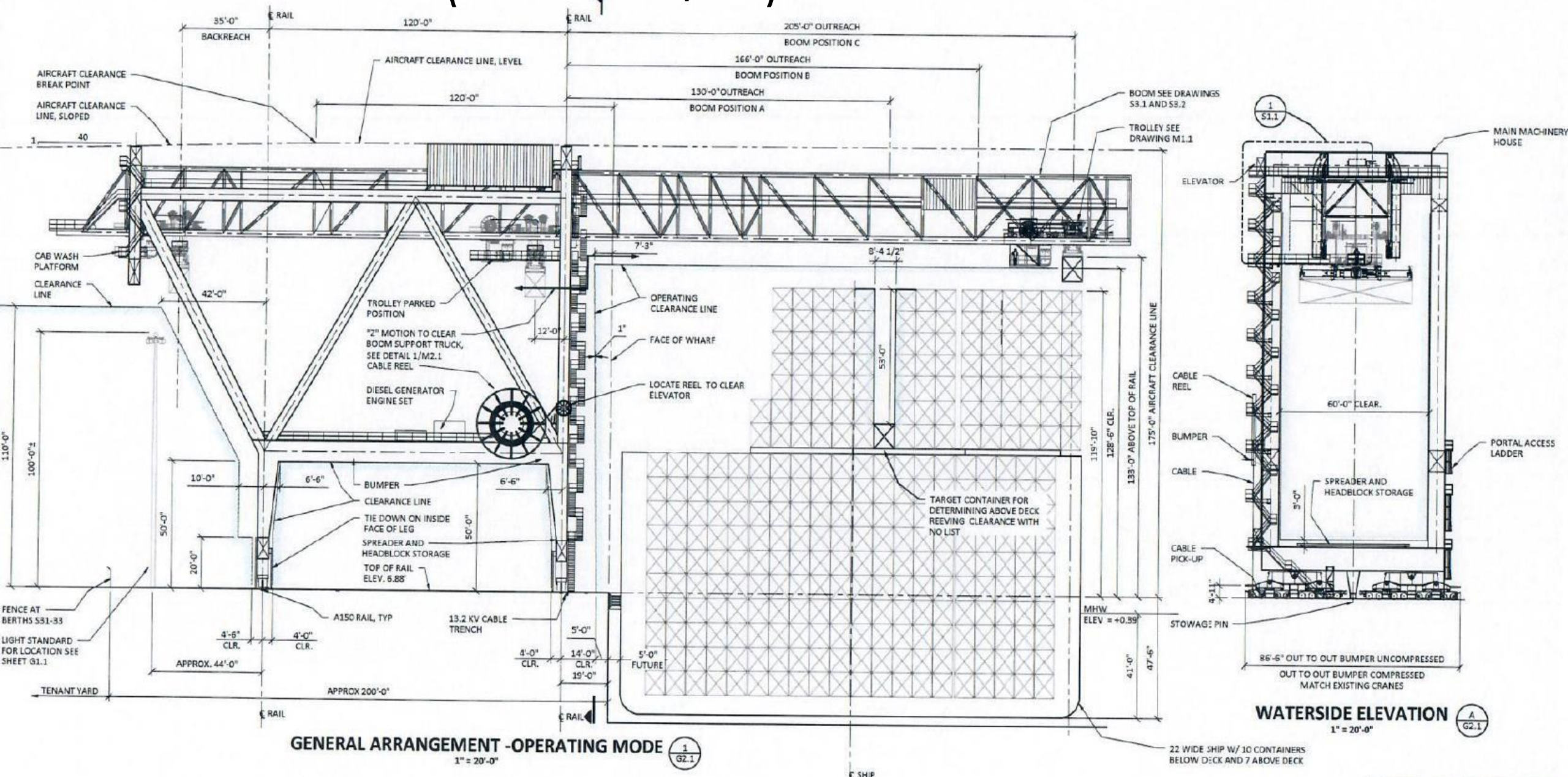
T2/T4 Parking Garage – 2020



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3 SPP STS Cranes (Berths 31/32) – 2020

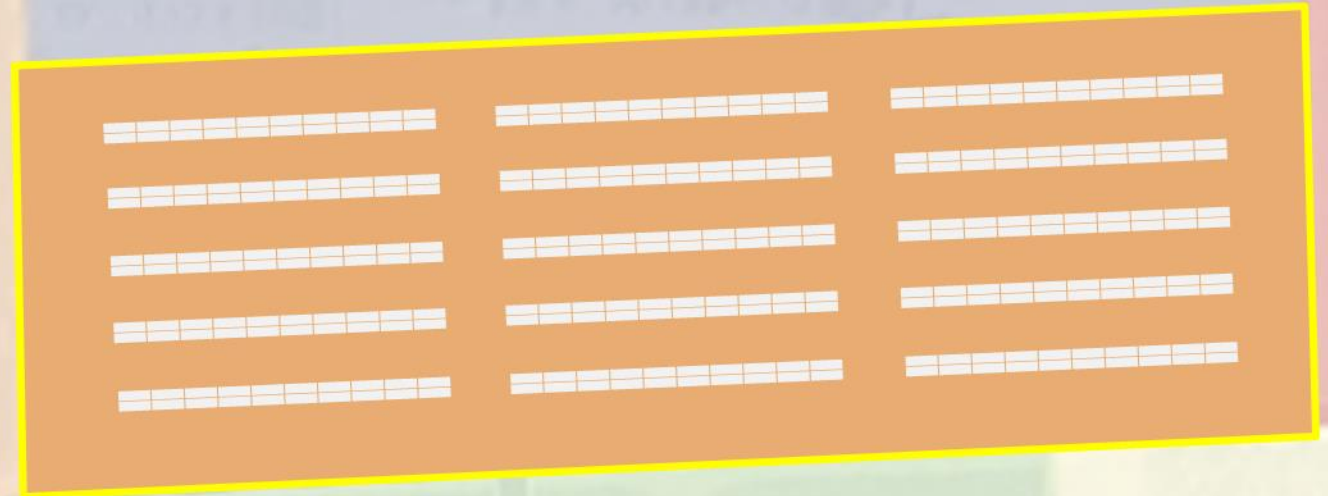


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Phase 9A-1 – 2021

New Container Yard

20 acres



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T21 Redevelopment – 2021

T19

T21 Redevelopment

T21

T25

T26

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T21

T25

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T21

T25

Additional analyses and input will continue through the Master/Vision Plan process.

T21

T25

Additional analyses and input will continue through the Master/Vision Plan process.

T21 Redevelopment – 2021

T19

T21 Redevelopment

T21

T25

T26

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T21 Redevelopment – 2021

T19

T21 Redevelopment

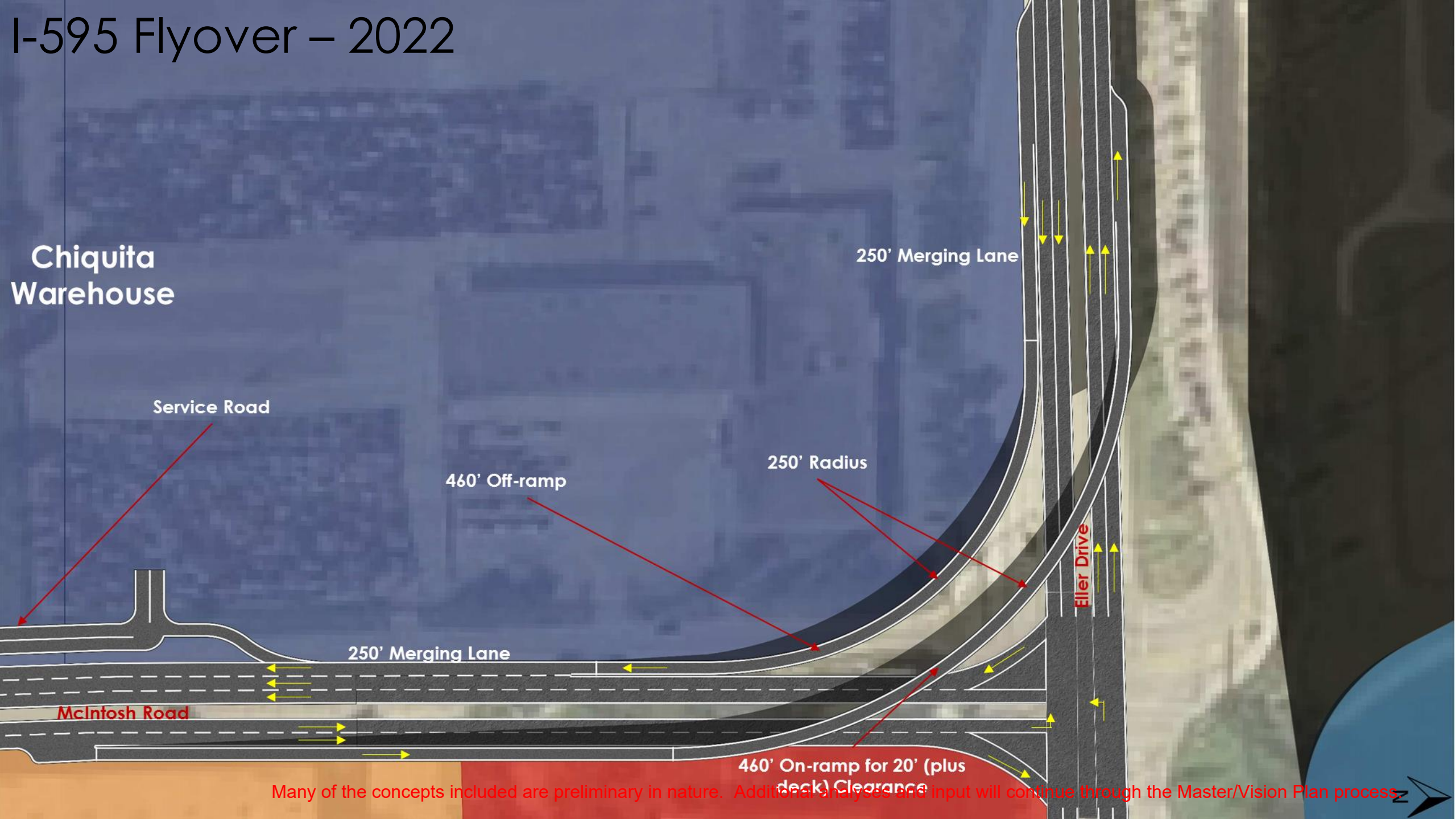
T21

T25

T26

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I-595 Flyover – 2022



Chiquita
Warehouse

Service Road

460' Off-ramp

250' Merging Lane

250' Radius

250' Merging Lane

McIntosh Road

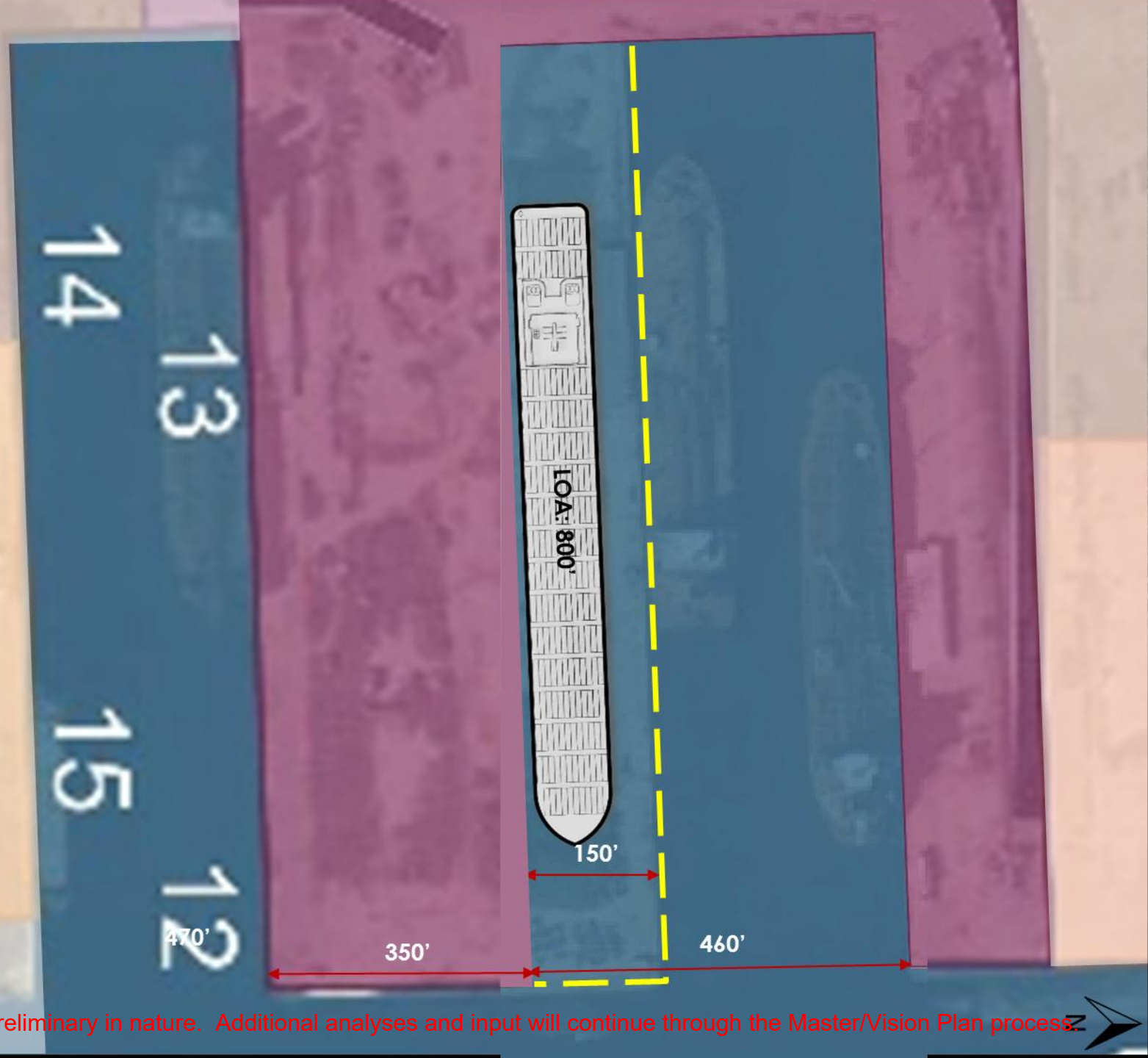
Eller Drive

460' On-ramp for 20' (plus
deck) Clearance

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Slip 1 Expansion – 2022



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Consolidated Maintenance Facility – 2022

New Break-Bulk Yard – 2023

New Break-bulk Yard

7 acres

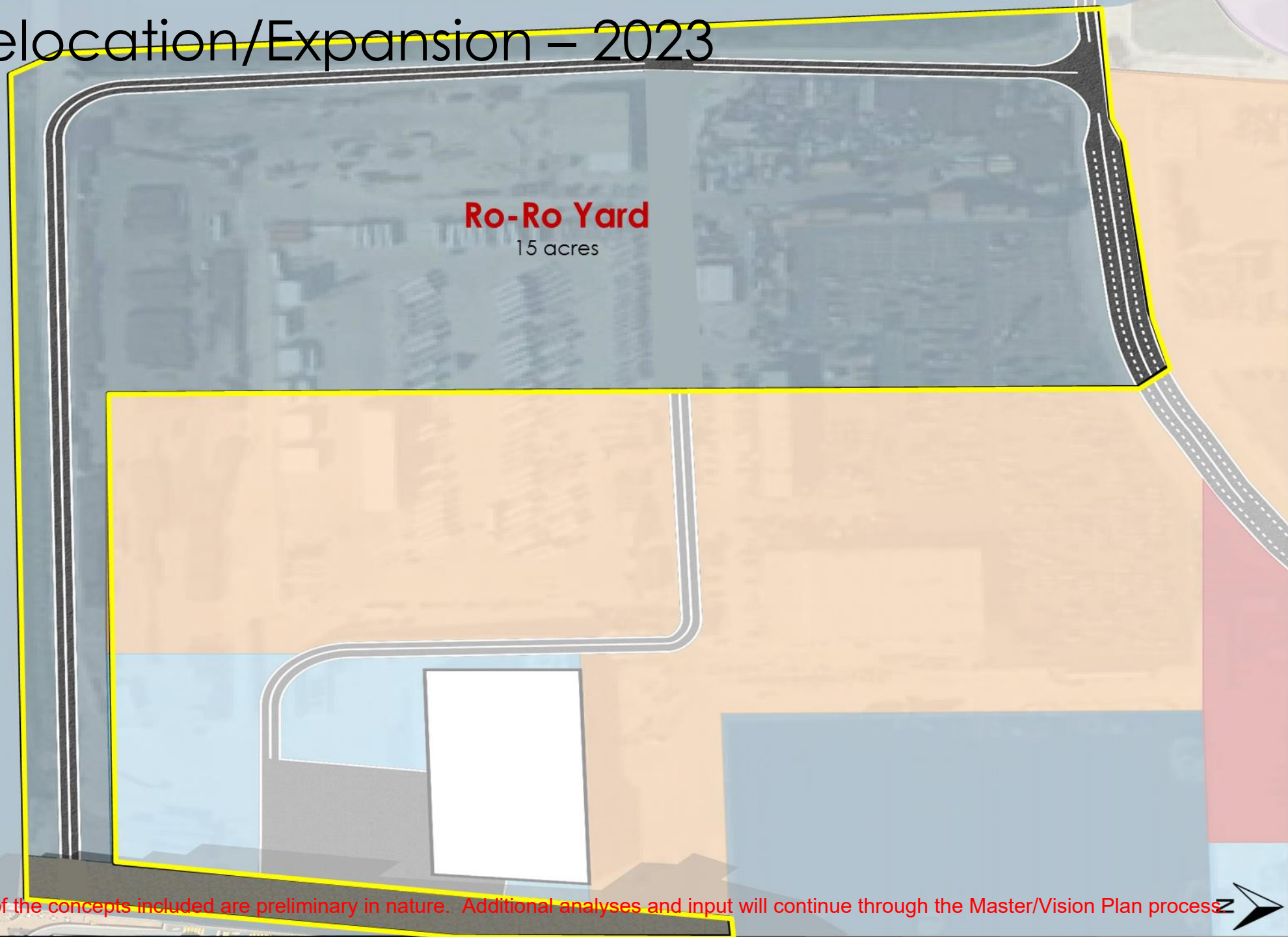
**Consolidated
Maintenance Facility**

11 acres

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Ro-Ro Yard Relocation/Expansion – 2023



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SE 38th St

800'

700'

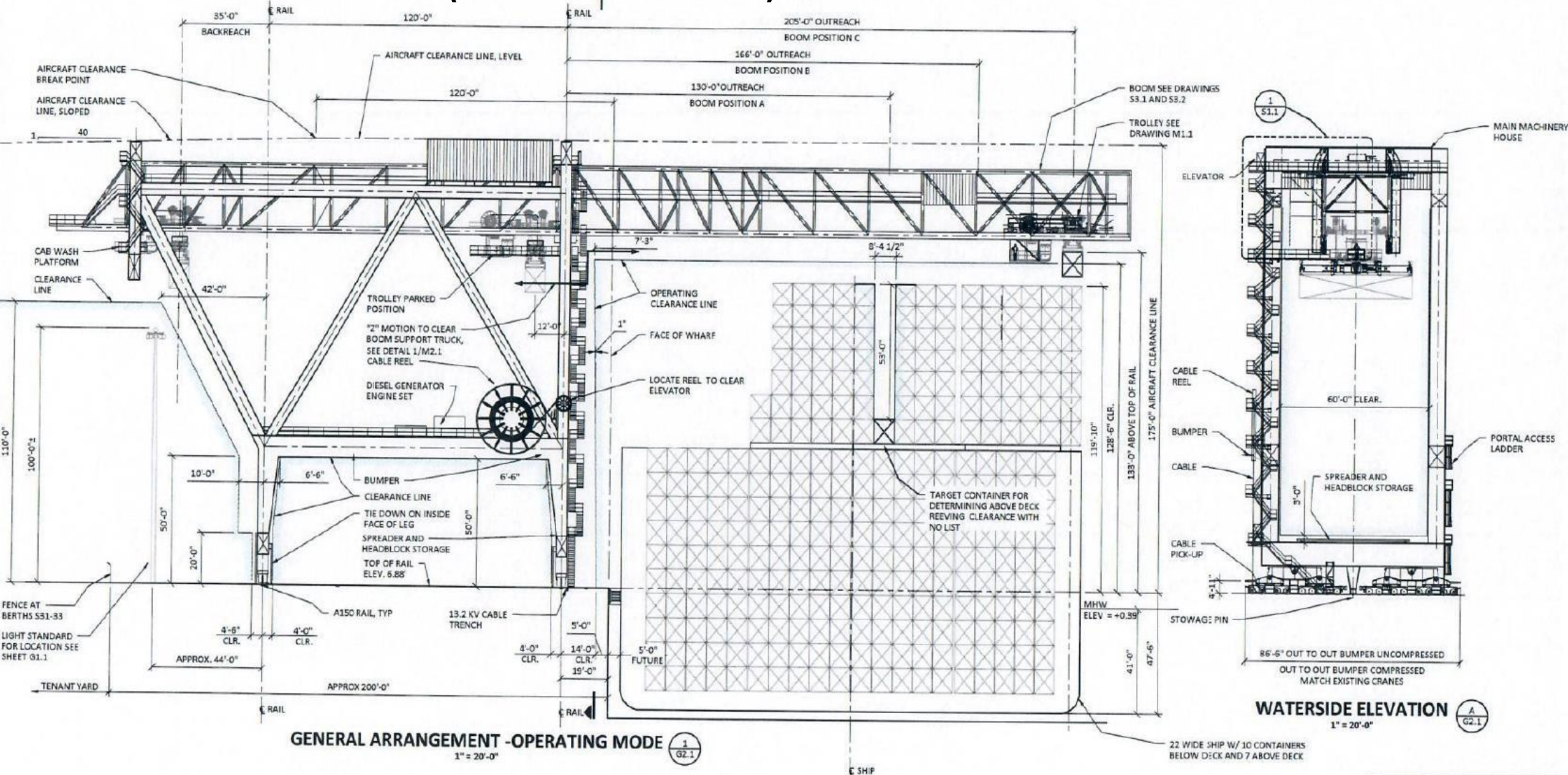
Southport Turning Notch

33 acres (including new aprons)

1,500'

900'

3 SPP STS Cranes (Berths 31/32) – 2023



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PORTAL CRANES
LOW PROFILE CRANES

Former Dynegy Logistics Development – 2023

An aerial photograph of a landscape with a large, irregularly shaped area highlighted in a solid purple color. This area is bordered by a yellow dashed line. To the left of the purple area is a road with a black and white striped curb. Above the purple area is a road with a yellow dashed line. The background shows a mix of green fields, trees, and some buildings.

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Auto Terminal West – 2023

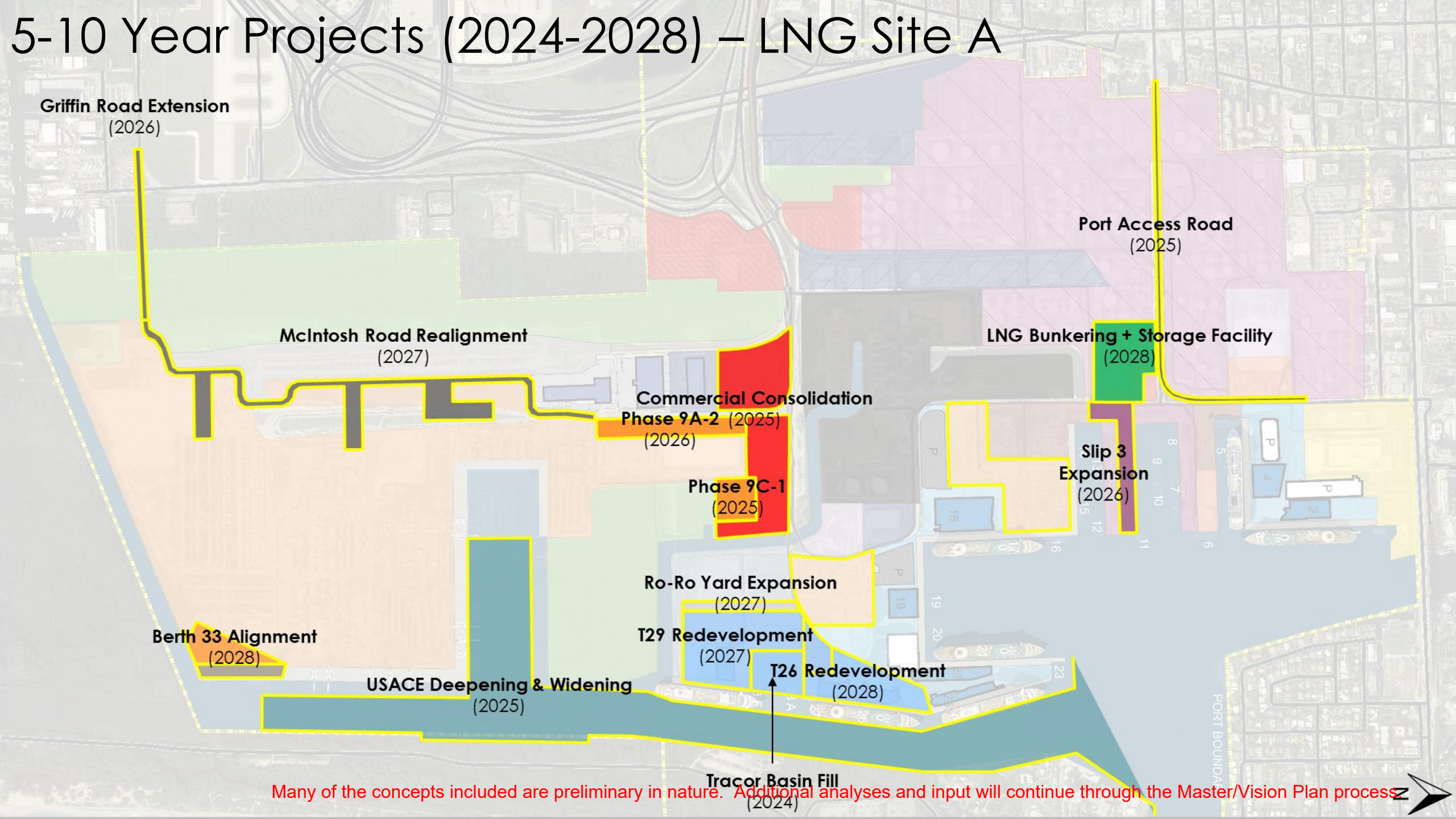
Auto Terminal West – Parcel 2

7 acres

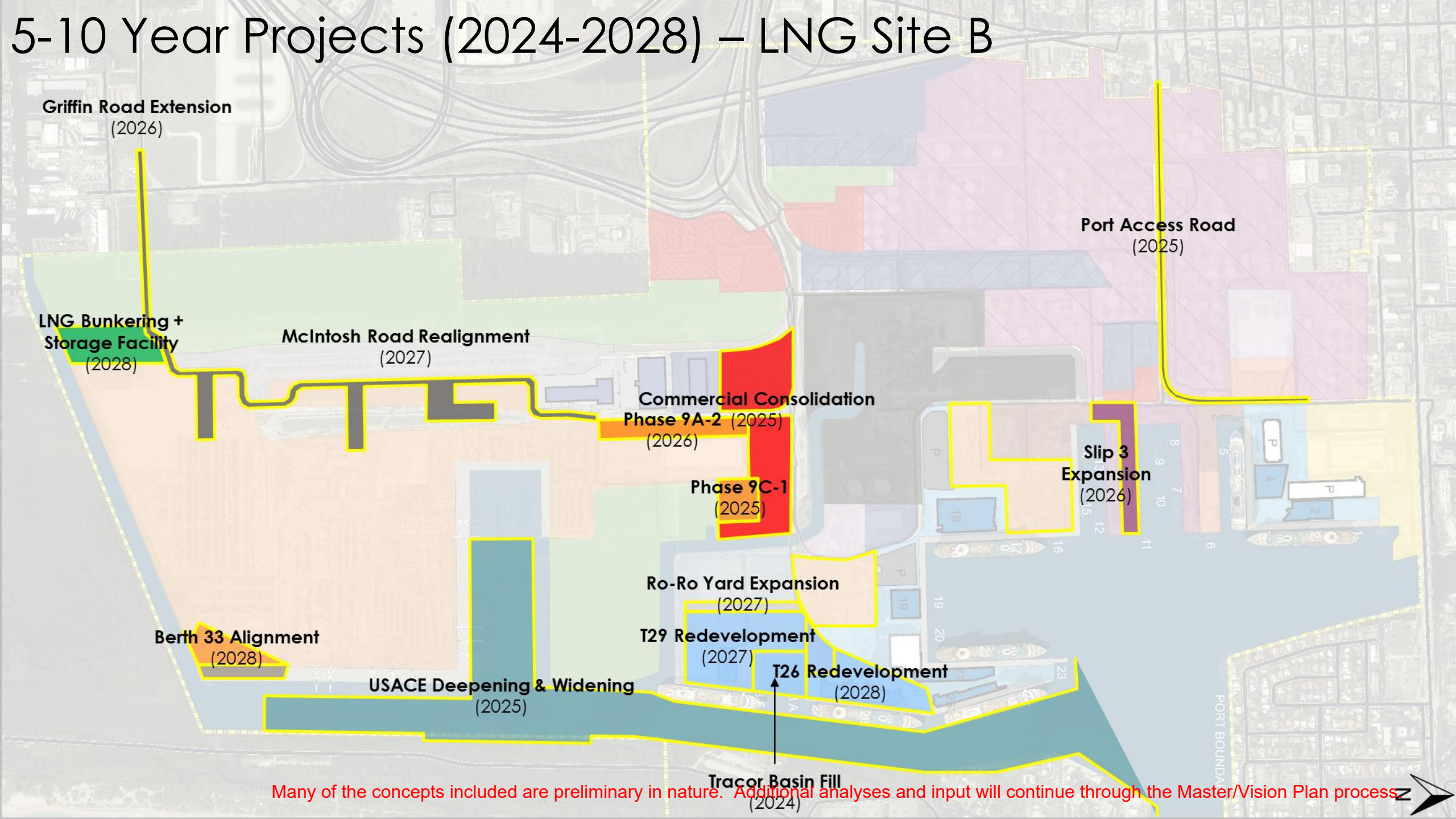
Auto Terminal West – Parcel 1

13 acres

5-10 Year Projects (2024-2028) – LNG Site A

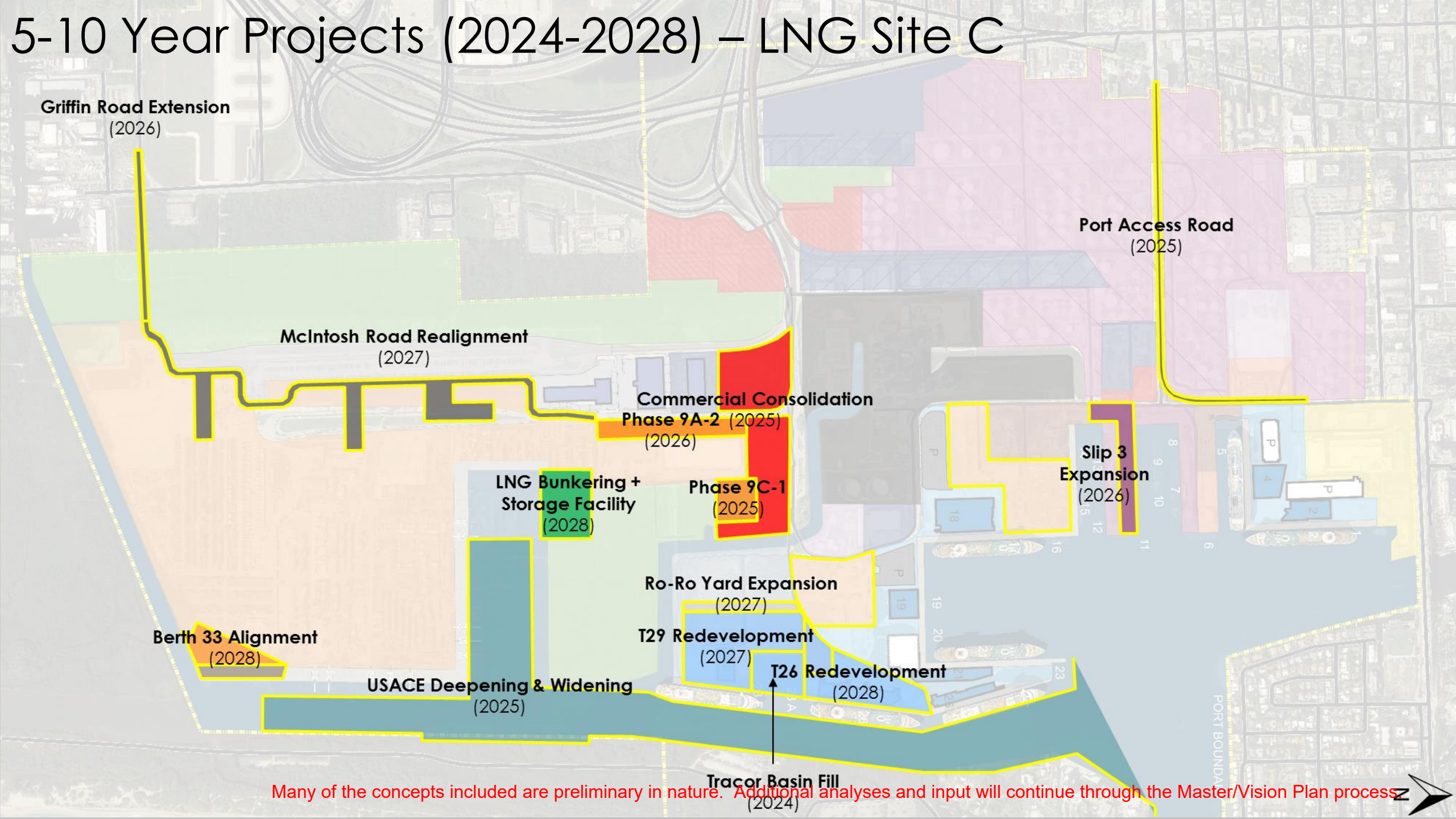


5-10 Year Projects (2024-2028) – LNG Site B



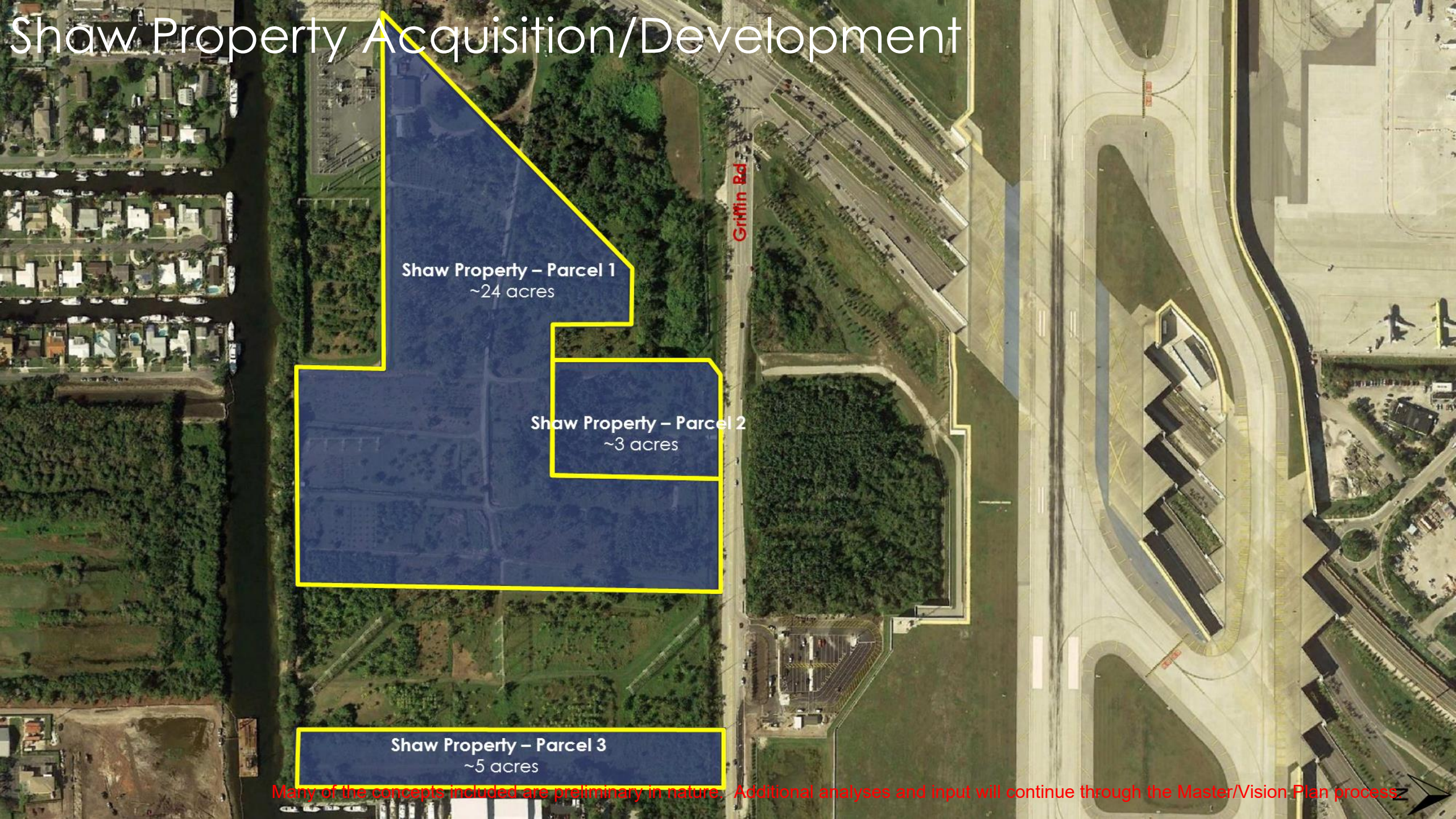
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5-10 Year Projects (2024-2028) – LNG Site C



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Shaw Property Acquisition/Development



Shaw Property – Parcel 1
~24 acres

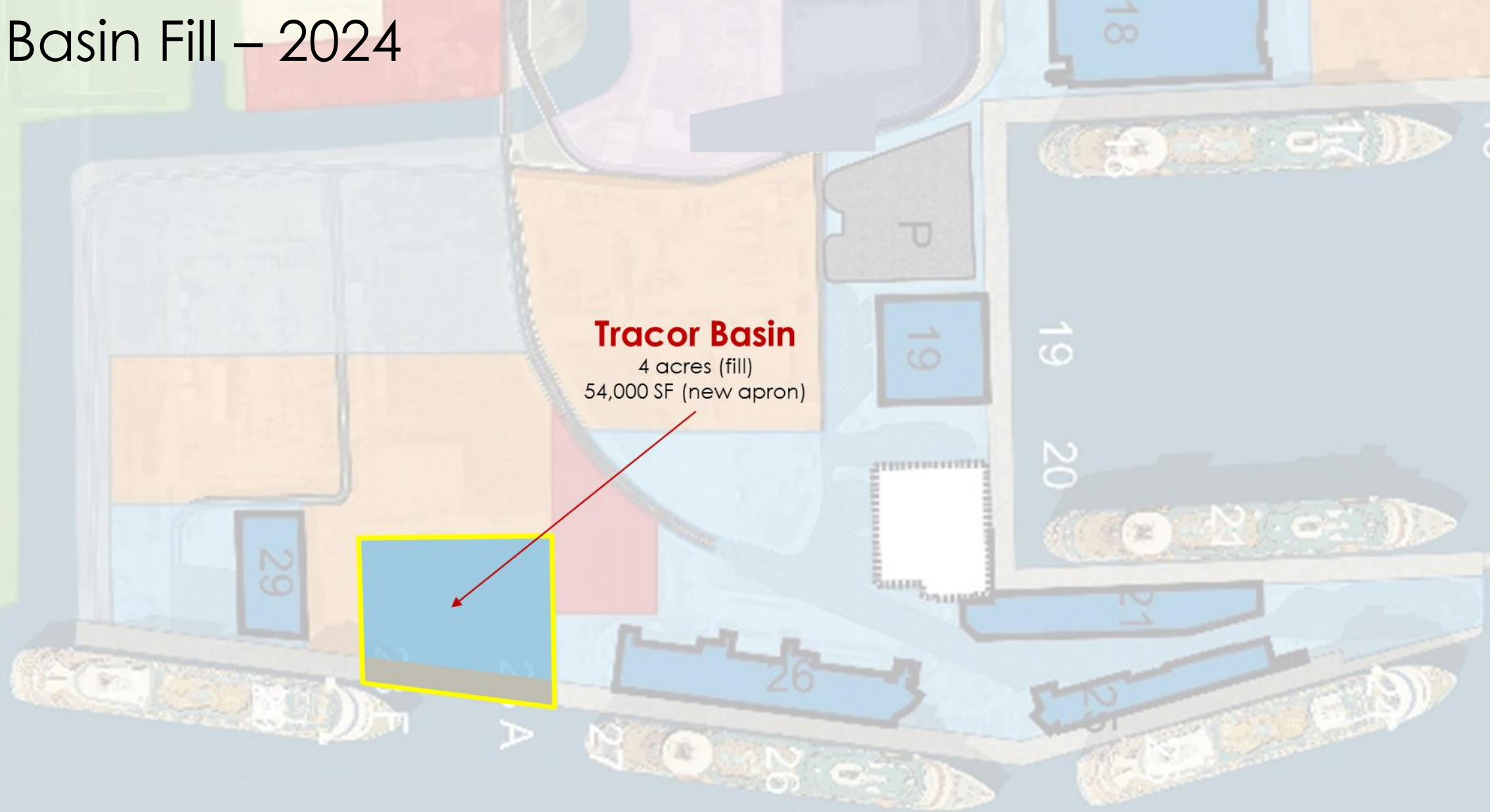
Shaw Property – Parcel 2
~3 acres

Shaw Property – Parcel 3
~5 acres

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Tracor Basin Fill – 2024



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Port Access Road – 2025

New County Road

Connects US1 northbound to SE 17th Street via partial grade separation over existing road (SR84/Spangler Blvd & Eisenhower Blvd)

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Commercial Consolidation



**PEV Administration +
Maritime/Government Offices**
12 acres (site)

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Phase 9C-1 – 2025



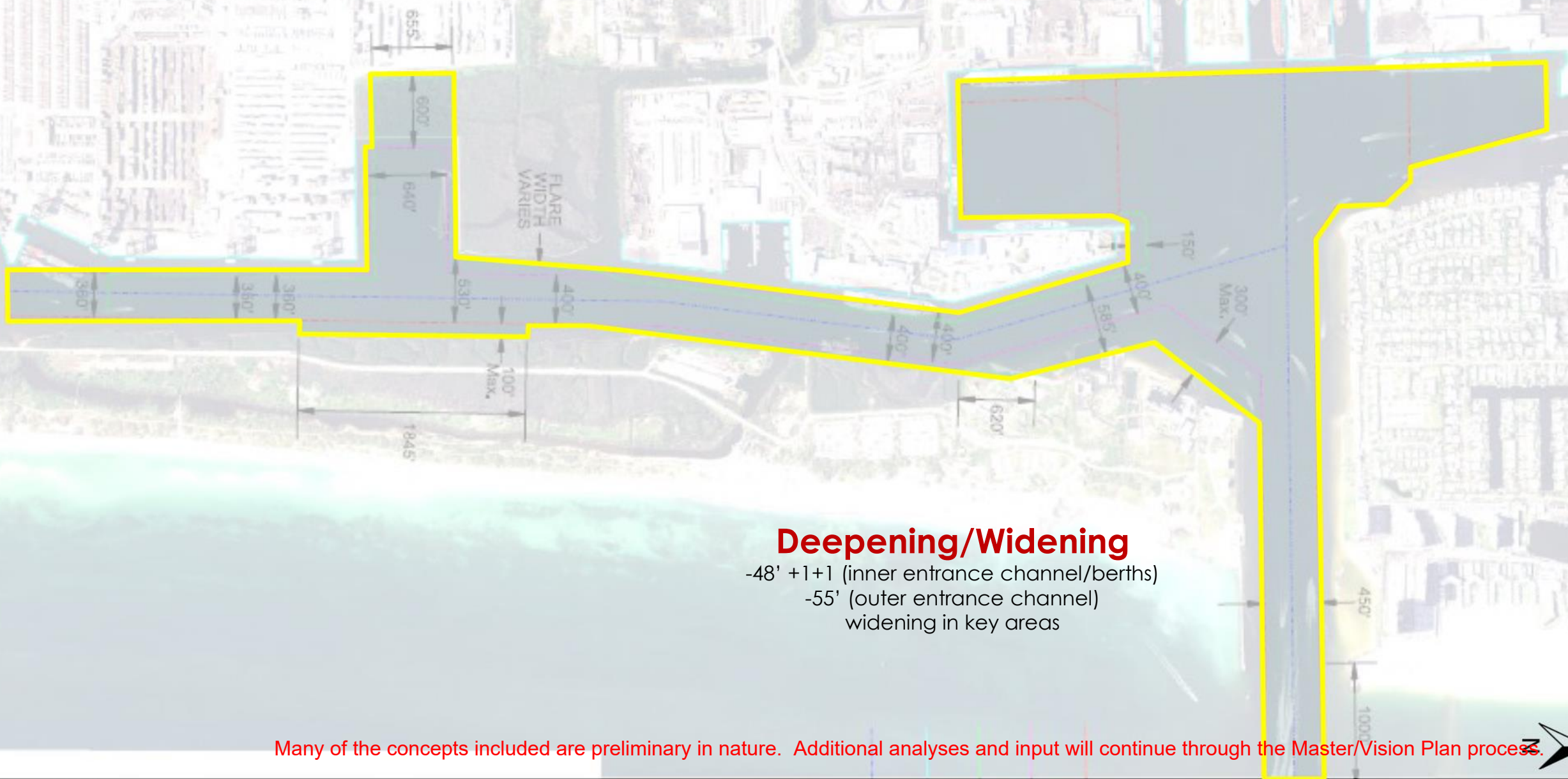
New Container Yard

4 acres

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USACE Deepening/Widening – 2025



Deepening/Widening

- 48' +1+1 (inner entrance channel/berths)
- 55' (outer entrance channel)
- widening in key areas

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Phase 9A-2 – 2026

New Container Yard

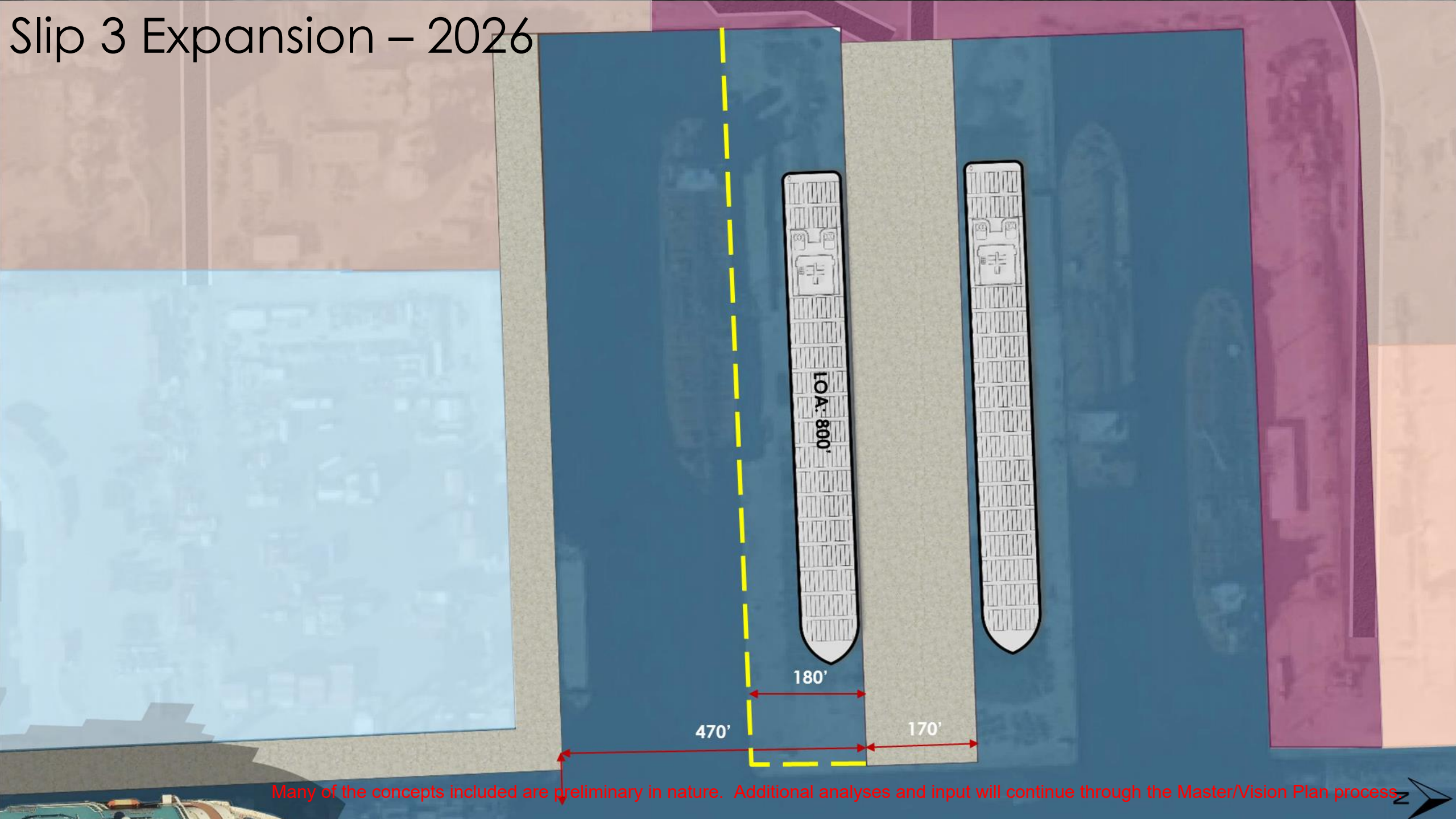
6 acres



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Slip 3 Expansion – 2026



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Griffin Road Extension/McIntosh Road Realignment (2026/2027)

Griffin Rd Extension

Wetland/Vacant/FPL Transmission Lines

Private (Commercial)

FEC ICTF
(43 acres)

McIntosh Rd

Container Terminal
Entrance/Gate

Container Terminal
Entrance/Gate

PEV ILC

PEV ILC

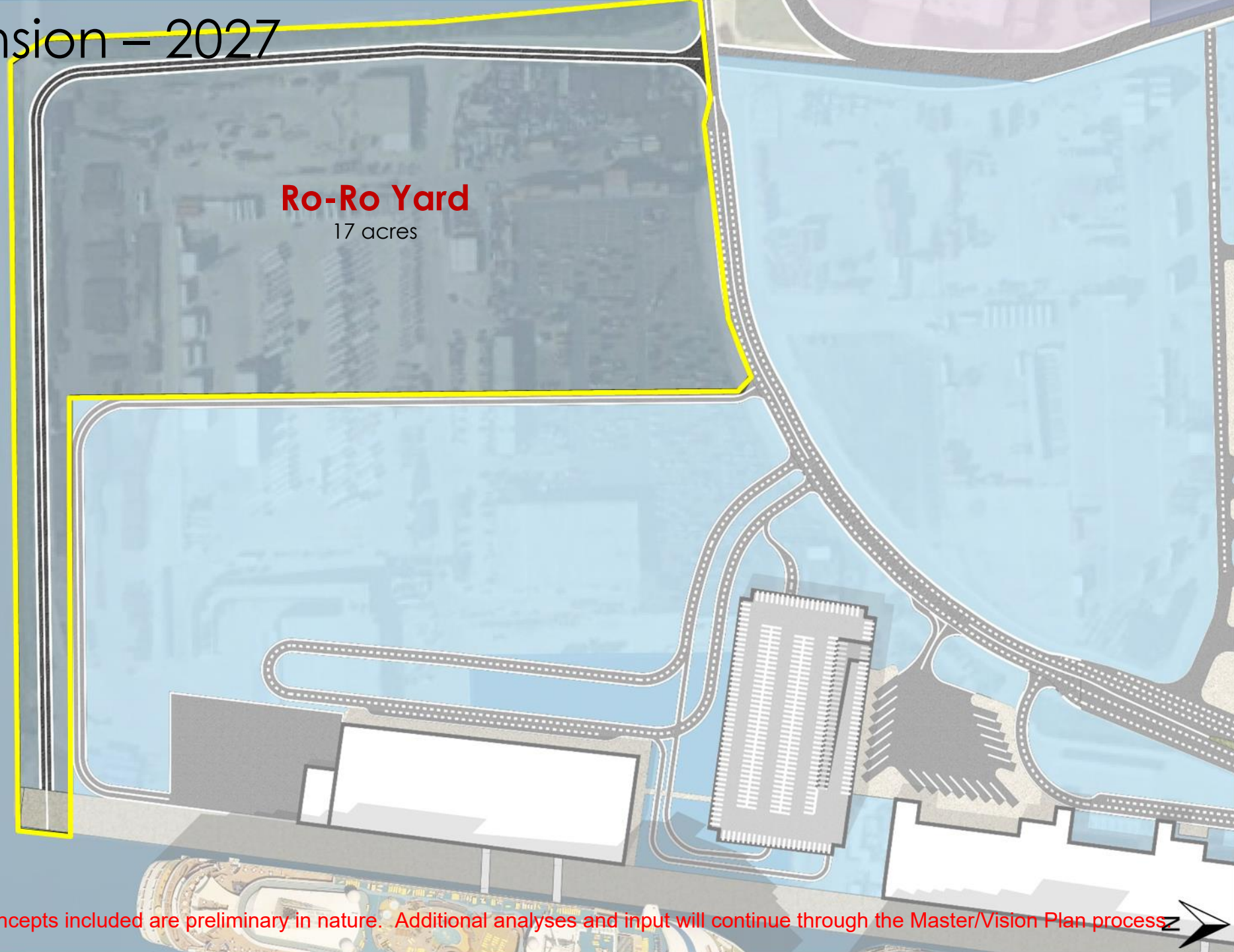
Chiquila
Warehouse

New
Commercial
Area

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Ro-Ro Yard Expansion – 2027



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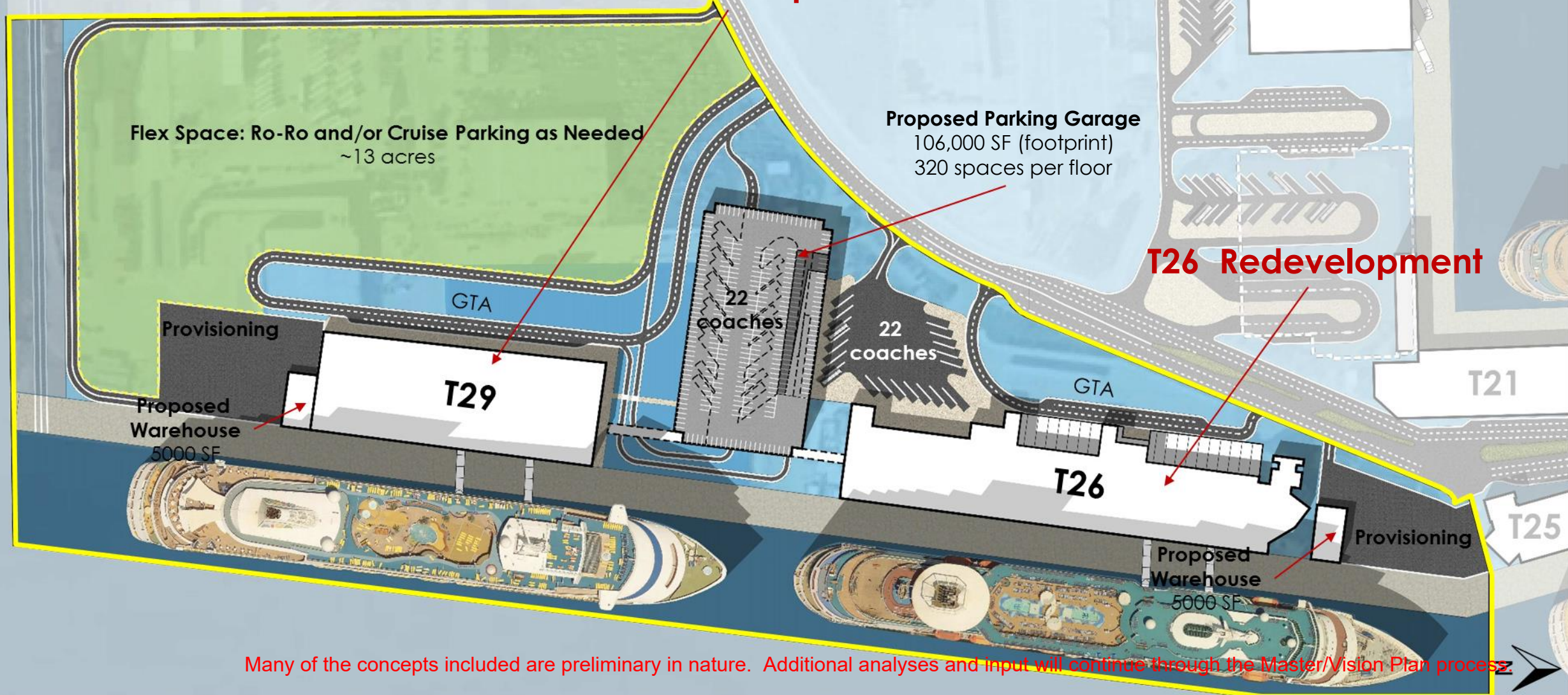


T29 Redevelopment – 2027

T26 Redevelopment – 2028

Alternative A

T29 Redevelopment



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LNG Bunkering + Storage Facility (Site A) – 2028

LNG Bunkering + Storage Facility
10 acres

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LNG Bunkering + Storage Facility (Site B) – 2028



Many of the concepts included are preliminary in nature. Additional analyses and input will continue through the Master/Vision Plan process



LNG Bunkering + Storage Facility (Site C) – 2028



The map shows a coastal area with a large blue body of water on the left. A grey rectangular area represents a land parcel. Within this parcel, a green rectangle is outlined in yellow, indicating the site for the LNG Bunkering + Storage Facility. To the left of the grey area, there are two white valve symbols on a horizontal line. To the right of the green area, there is a light green area representing another land parcel. The background is a light orange color.

LNG Bunkering + Storage Facility

9 acres

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Berth 33 Alignment – 2028

Berth Alignment

3 acres (fill)
80,500 SF (new apron)

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2028 Land Use – LNG Site A

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2028 Land Use – LNG Site B

Griffin Rd Extension

McIntosh Rd

Spangler Blvd/SR 84

Eisenhower Blvd

SE 17th St

Port Boundary

CVB - County

Wetland/Vacant/FPL Transmission Lines

LNG (10 acres)

Auto Terminal West (20 acres)

FEC ICTF (43 acres)

Containers (276 acres)

Conservation Area

Private (Commercial)

Private (Miscellaneous)

Private (Petroleum)

Stormwater Storage (8 acres)

Wetland (2 acres)

Logistics (19 acres)

Private (Commercial)

Private (Miscellaneous)

Proposed PEV Port Access Road

Break-bulk (7 acres)

Maintenance (11 acres)

Logistics (8 acres)

Commercial (11 acres)

Vacant (2 acres)

FPL - Private

Dry Bulk (13 acres)

Vacant (22 acres)

Liquid Bulk (15 acres)

Cruise (19 acres, incl. parking)

Dry/Break-bulk (6 acres)

Cruise (77 acres, incl. parking)

Vacant (11 acres)

Fire Station (5 acres)

Commercial (14 acres)

Logistics (7 acres)

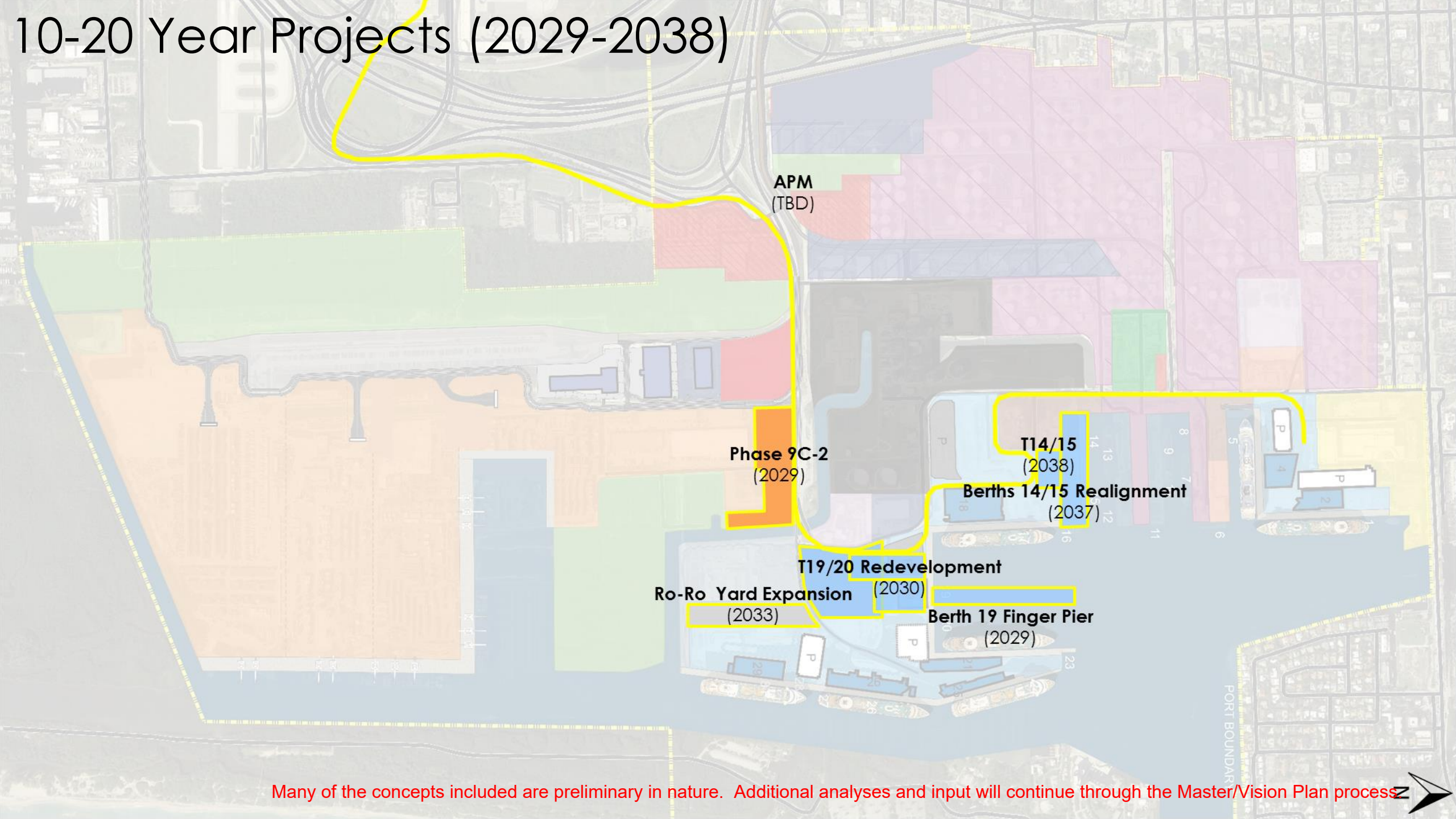
PEV ILC (16 acres)

Ro-Ro (17 acres)

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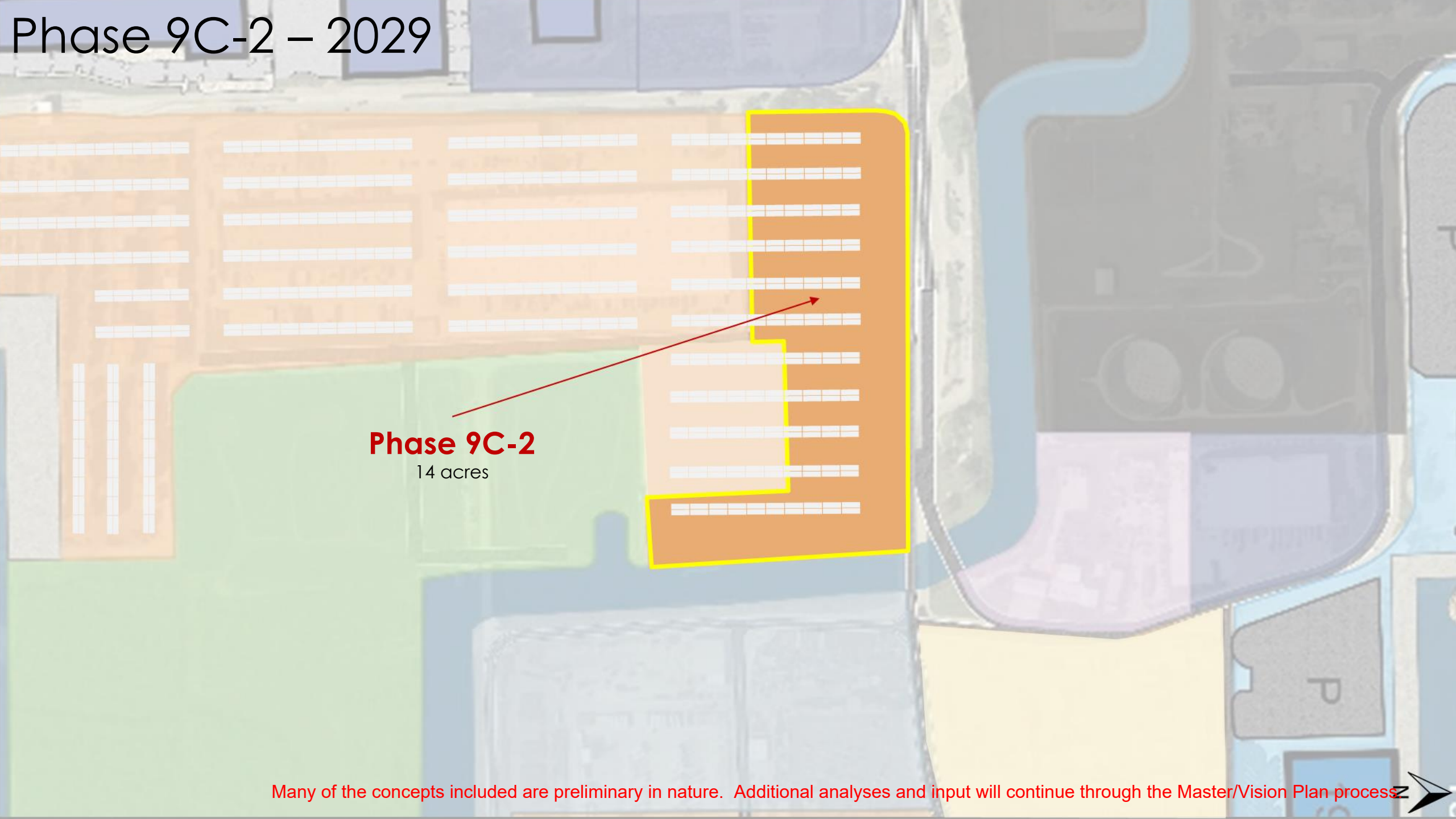
10-20 Year Projects (2029-2038)



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Phase 9C-2 – 2029



Phase 9C-2

14 acres

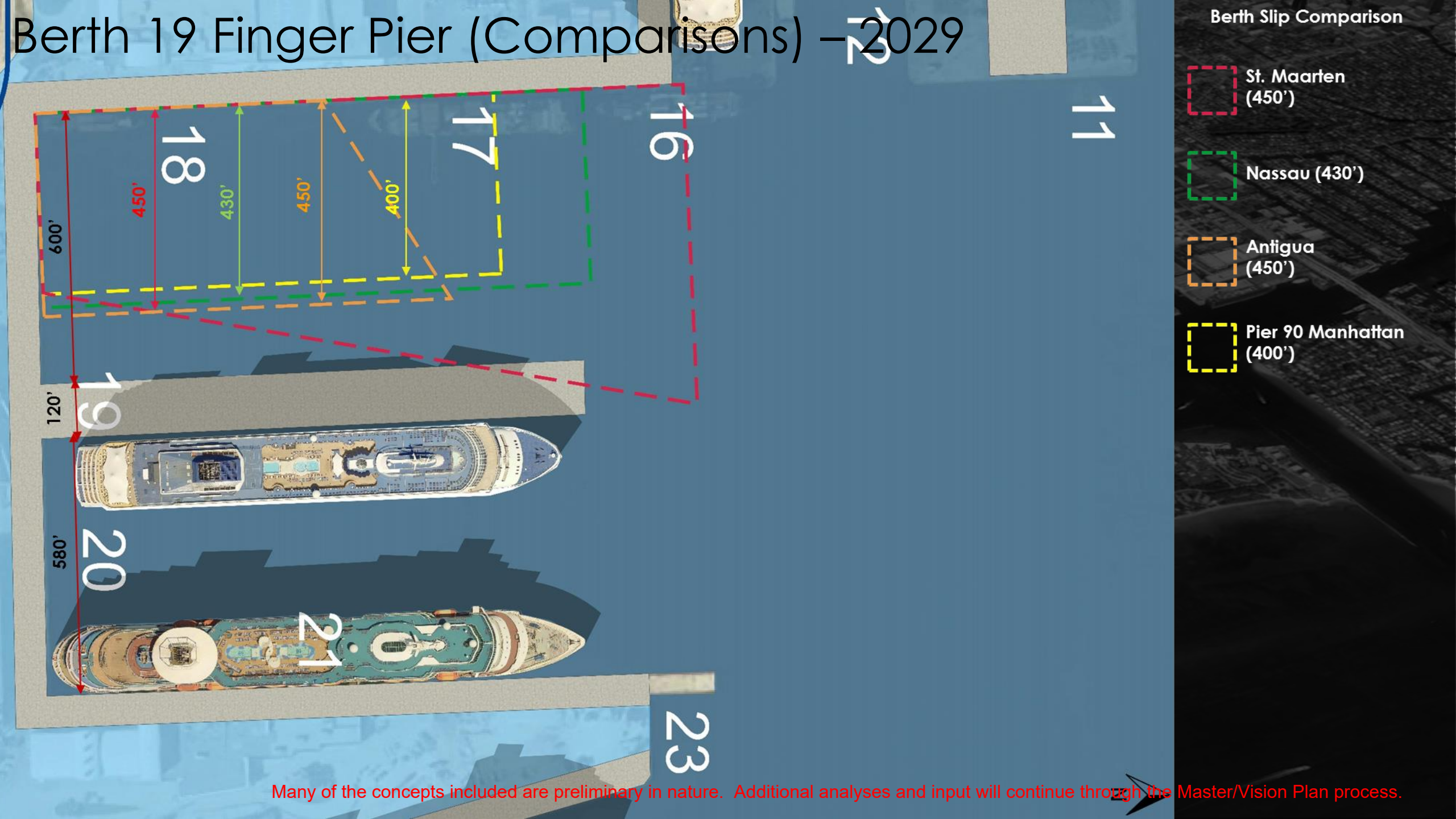
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Berth 19 Finger Pier – 2029



Berth 19 Finger Pier (Comparisons) – 2029



T19/20 Redevelopment – 2030

Future APM Station
Provisioning

Proposed Warehouse
5000 SF

14 coaches

42 coaches

Optional Surface Parking
454,000 SF
1,375 spaces

Proposed Parking Garage
242,700 SF (footprint)
735 spaces per floor
(3 floors = 2,206 spaces)

T19/20
Expanded to
200,000 SF (footprint)

GTA

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T19/20 Redevelopment – 2030

Optional Surface Parking
454,000 SF
1,375 spaces

Proposed Parking Garage
242,700 SF (footprint)
735 spaces per floor
(3 floors = 2,206 spaces)

coaches
14
coaches

coaches
42
coaches

Proposed Warehouse
5000 SF

Future APM Station
Provisioning

T19/20
Expanded to
200,000 SF (footprint)

GTA

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T19/20 Redevelopment – 2030

Optional Surface Parking
454,000 SF
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Proposed Parking Garage
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735 spaces per floor
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42 coaches

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Expanded to
200,000 SF (footprint)

Proposed Warehouse
5000 SF

Future APM Station

Provisioning

GTA

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T19/20 Redevelopment – 2030

Optional Surface Parking
454,000 SF
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Proposed Parking Garage
242,700 SF (footprint)
735 spaces per floor
(3 floors = 2,206 spaces)

14 coaches

42 coaches

T19/20
Expanded to
200,000 SF (footprint)

Proposed Warehouse
5000 SF

Future APM Station

Provisioning

GTA

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T19/20 Redevelopment – 2030

Future APM Station Provisioning

Proposed Warehouse 5000 SF

14 coaches

42 coaches

Optional Surface Parking 454,000 SF 1,375 spaces

Proposed Parking Garage 242,700 SF (footprint) 735 spaces per floor (3 floors = 2,206 spaces)

T19/20 Expanded to 200,000 SF (footprint)

GTA

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T19/20 Redevelopment – 2030

Future APM Station
Provisioning

Proposed Warehouse
5000 SF

14 coaches

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Optional Surface Parking
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Expanded to
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GTA

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T19/20 Redevelopment – 2030

Future APM Station
Provisioning

Proposed Warehouse
5000 SF

14 coaches

42 coaches

Optional Surface Parking
454,000 SF
1,375 spaces

Proposed Parking Garage
242,700 SF (footprint)
735 spaces per floor
(3 floors = 2,206 spaces)

T19/20
Expanded to
200,000 SF (footprint)

GTA

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T19/20 Redevelopment – 2030

Future APM Station
Provisioning

Proposed Warehouse
5000 SF

14 coaches

42 coaches

Optional Surface Parking
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1,375 spaces

Proposed Parking Garage
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735 spaces per floor
(3 floors = 2,206 spaces)

T19/20
Expanded to
200,000 SF (footprint)

GTA

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T19/20 Redevelopment – 2030

Future APM Station
Provisioning

Proposed Warehouse
5000 SF

14 coaches

42 coaches

Optional Surface Parking
454,000 SF
1,375 spaces

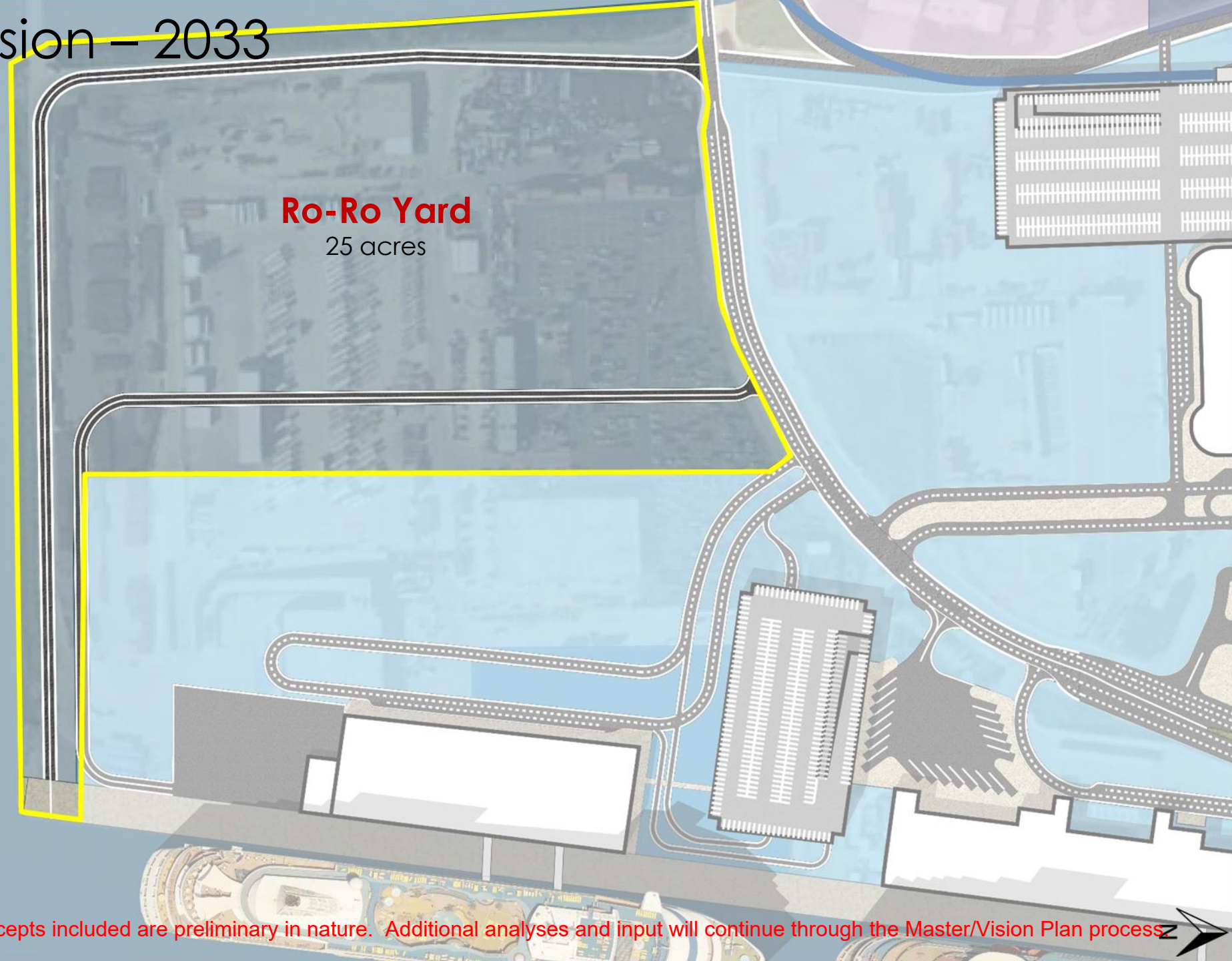
Proposed Parking Garage
242,700 SF (footprint)
735 spaces per floor
(3 floors = 2,206 spaces)

T19/20
Expanded to
200,000 SF (footprint)

GTA

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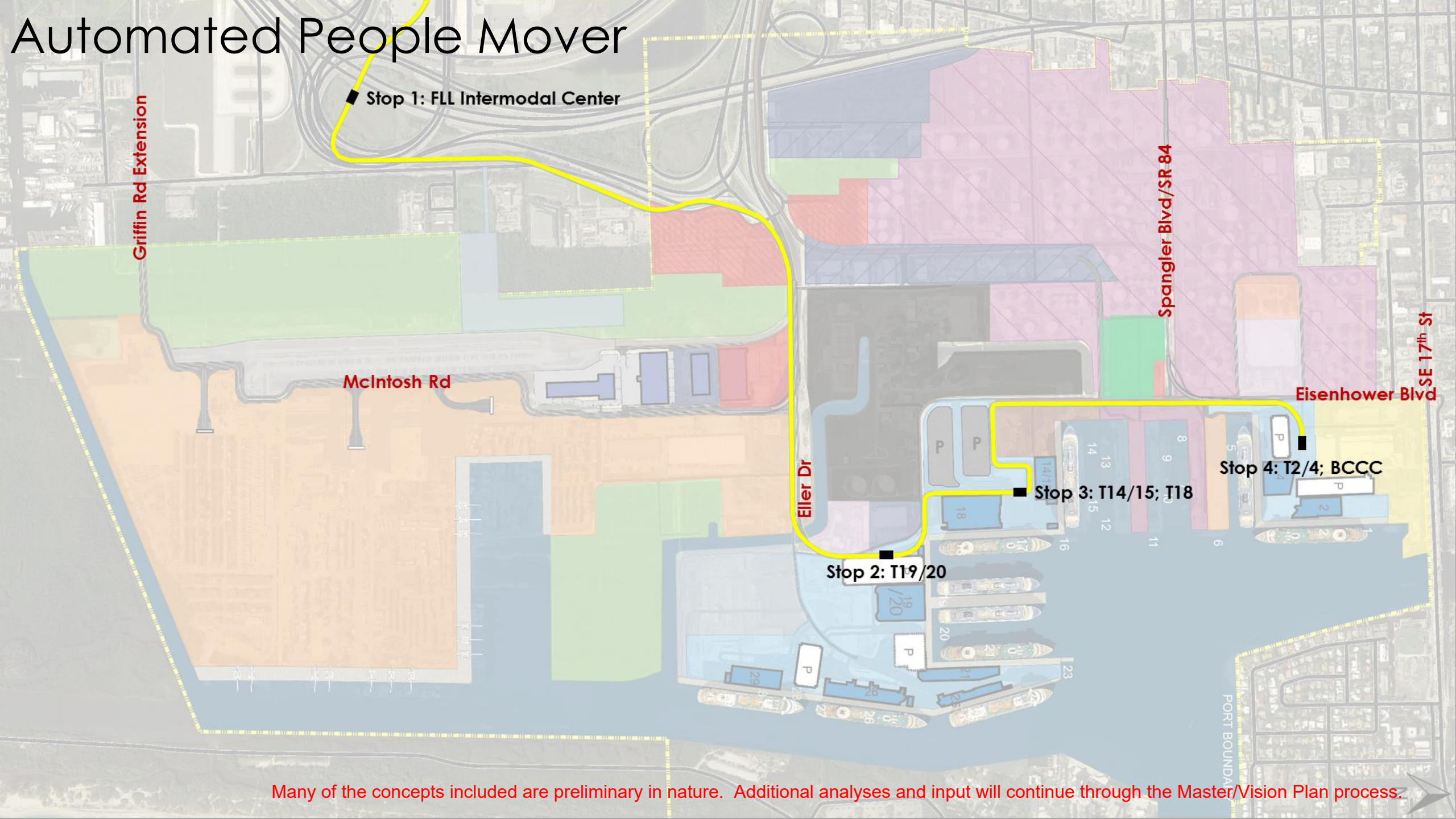
Ro-Ro Yard Expansion – 2033



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Automated People Mover



Stop 1: FLL Intermodal Center

Griffin Rd Extension

McIntosh Rd

Eller Dr

Spangler Blvd/SR 84

Eisenhower Blvd

SE 17th St

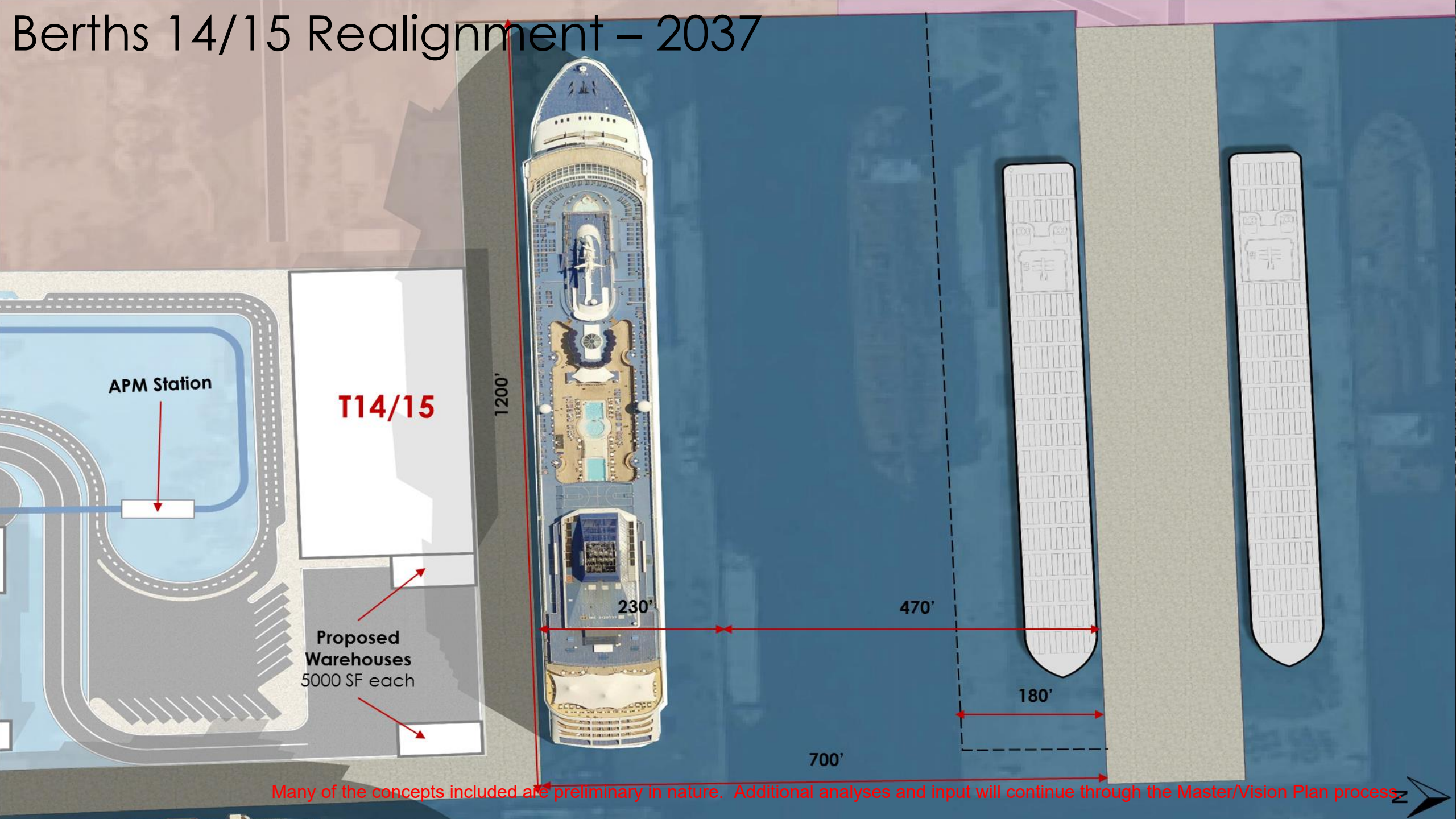
Stop 4: T2/4; BCCC

Stop 3: T14/15; T18

Stop 2: T19/20

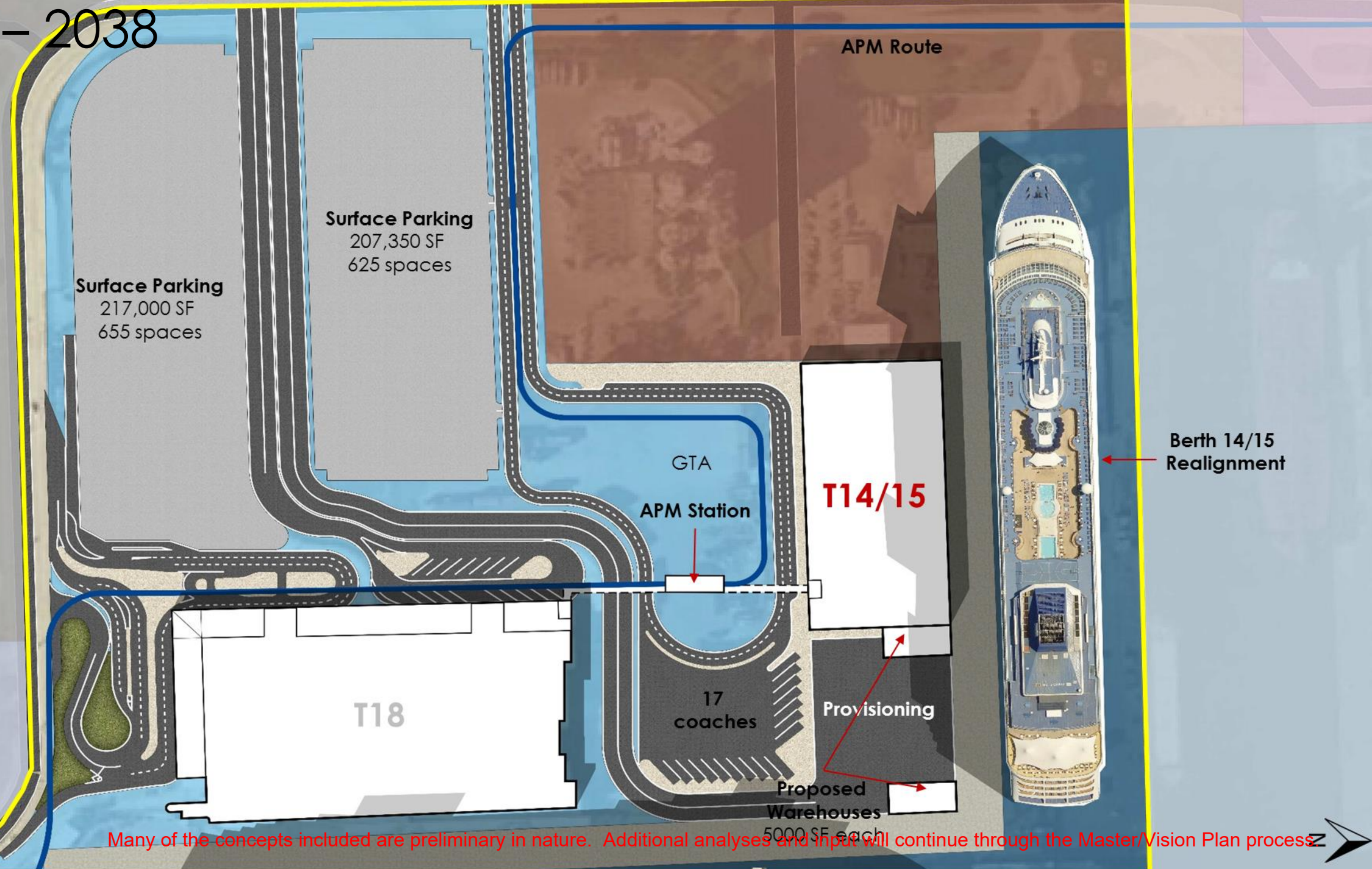
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Berths 14/15 Realignment – 2037



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T14/15 – 2038



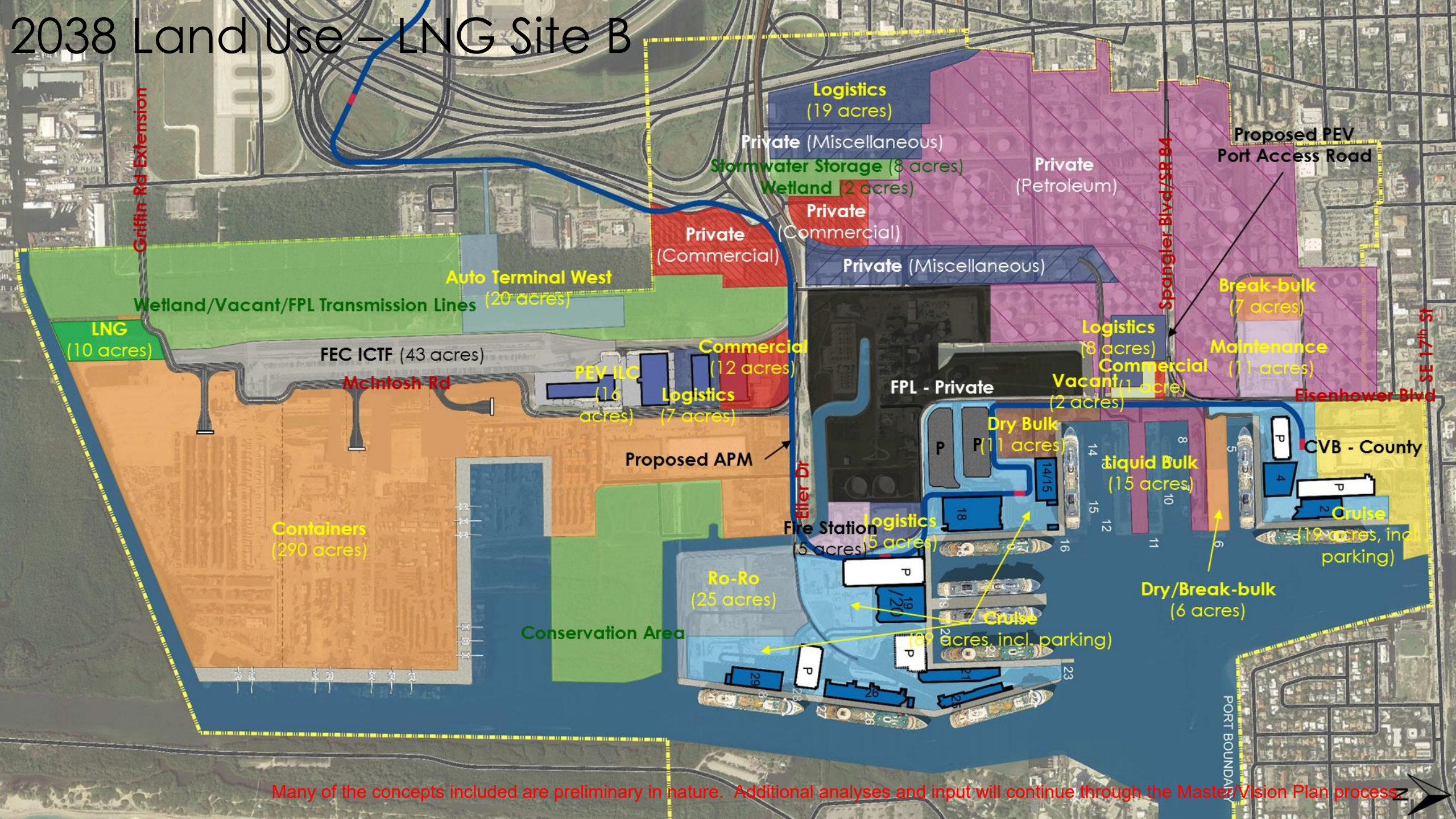
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2038 Land Use – LNG Site A



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2038 Land Use – LNG Site B



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Immediate Next steps

- Phase 1
 - Phase 1 (Elements 1 and 2) final report delivered in October, 2018
- Phase 2
 - Future development concepts and projects
 - Berth and land demand for each line of business
 - Operational and infrastructure enhancements
 - Commercial and logistics opportunities
 - Traffic and parking
 - Financial evaluation
 - Final recommended plan
 - Strategies for implementation



2018 Port Everglades Master/Vision Plan Update

Combined Charrette

May 1, 2019



Many of the concepts included are preliminary in nature. Additional analyses and input will continue through the Master/Vision Plan process.