

## Eller Drive & McIntosh Road Intersection Improvement Feasibility Study

Stakeholder Meeting 2

# Constraints and Flaws of Improvement Concepts

June 27, 2024

# Agenda



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Welcome and Opening

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Recap of Previous Discussion

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Constraints and Flaws of Alternatives

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Open Discussion

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Defining Fatal Flaws

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Next Steps

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# Previous Discussion



# Field Observations and Assessment



- Eller Drive security gate
- Lack of EB storage before gate
- EB thru traffic competing with NBLT traffic
- Short turn radius for SBRT trucks
- McIntosh Road gate and/or Southport terminals operat





# Existing Conditions – Microsimulation



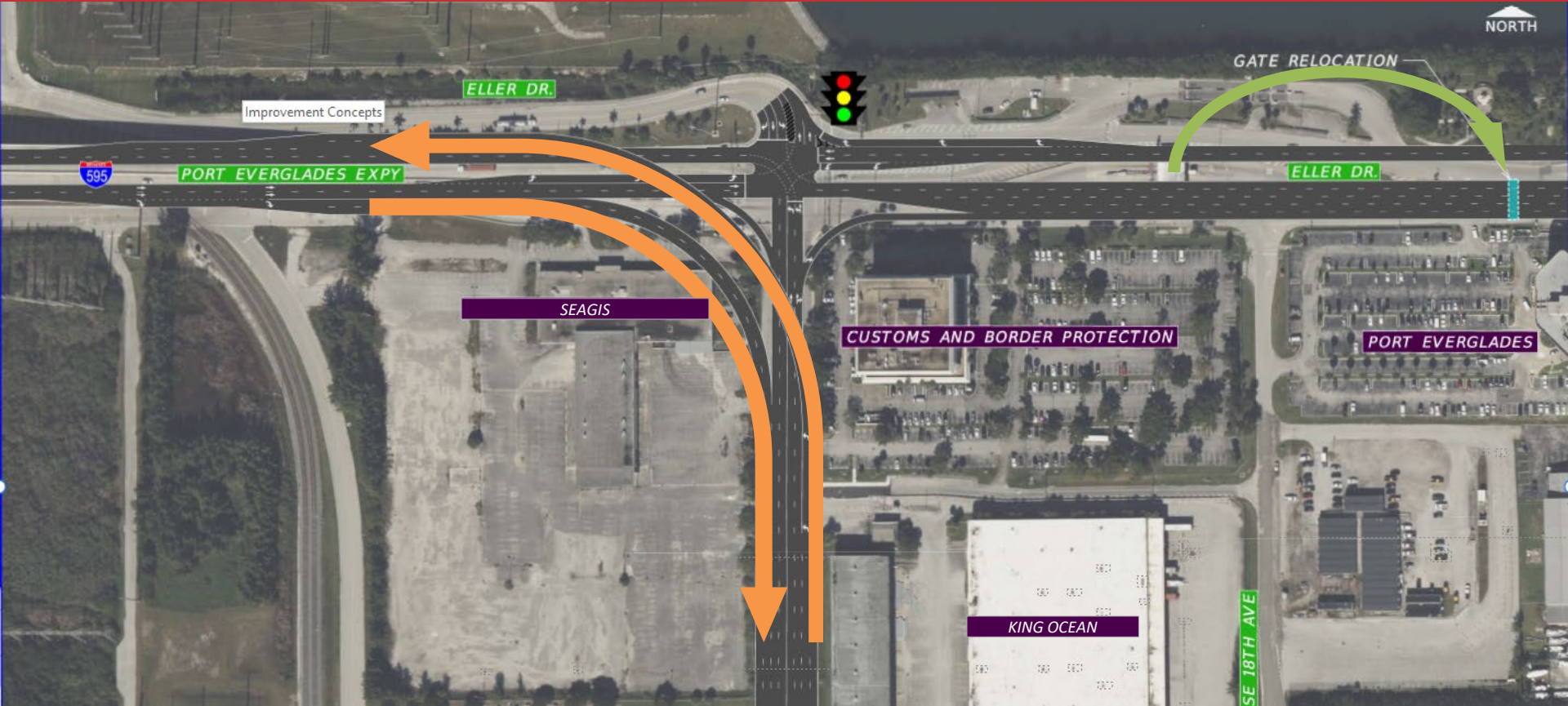
# Approach to Improvements



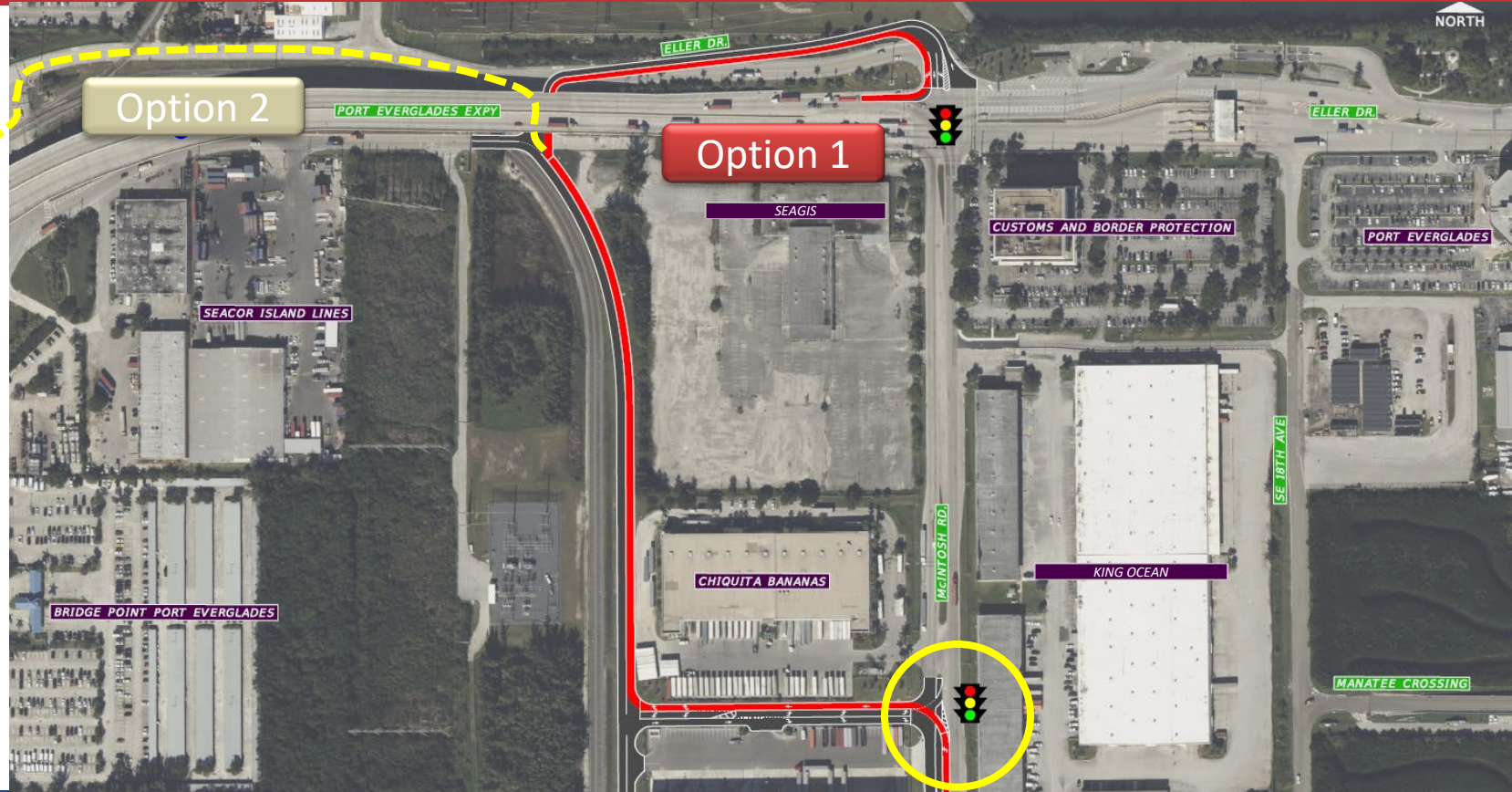
- Eller Drive gate location
- Increase EB storage before gate
- Eliminate/reduce EB thru traffic competition with NBLT traffic
- Increase SBRT turn radius
- McIntosh Road gate and/or Southport terminals operations



# 1. I-595 to McIntosh Rd Flyover + Eller Dr Gate Relocation

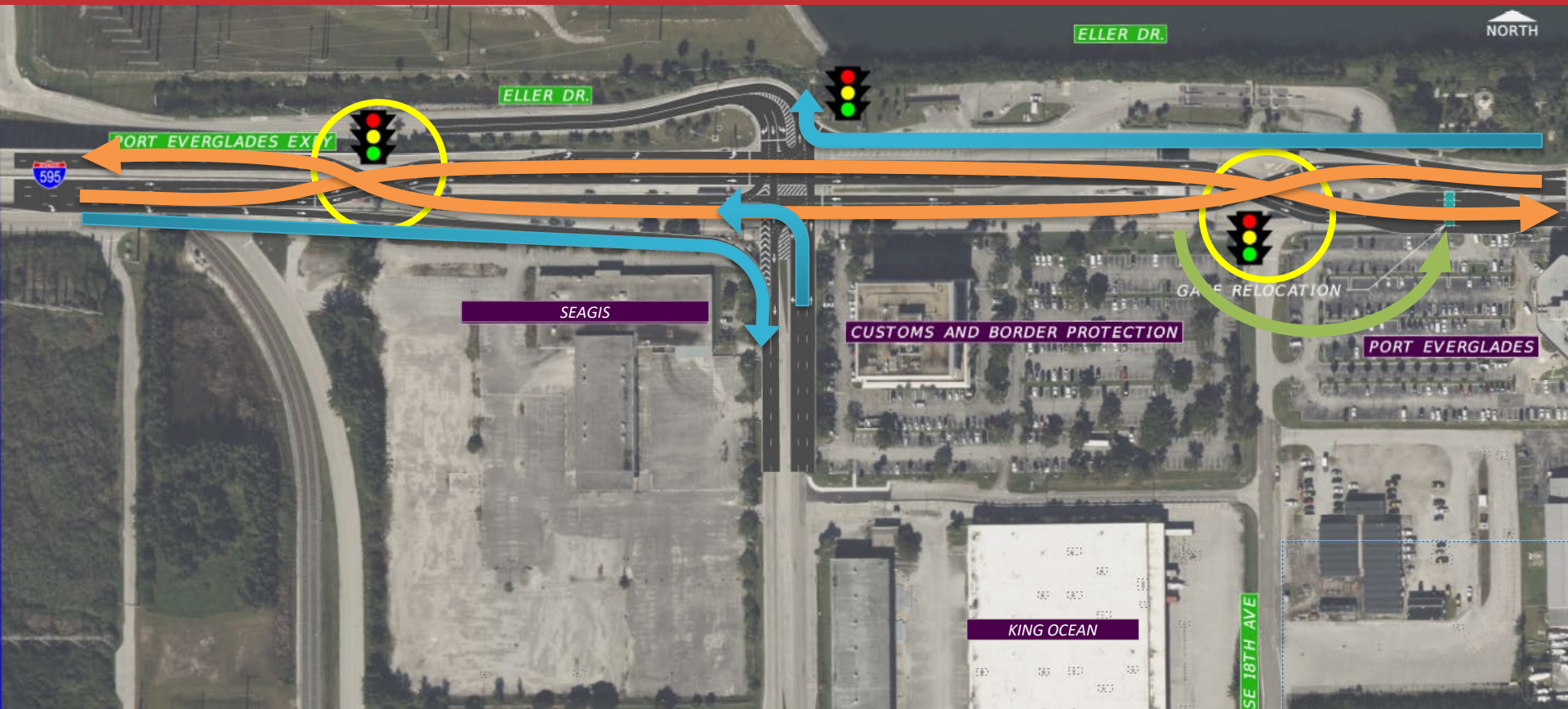


# 2. NB Truck Re-Routing





# 3. Diverged East/West + Eller Dr Gate Relocation

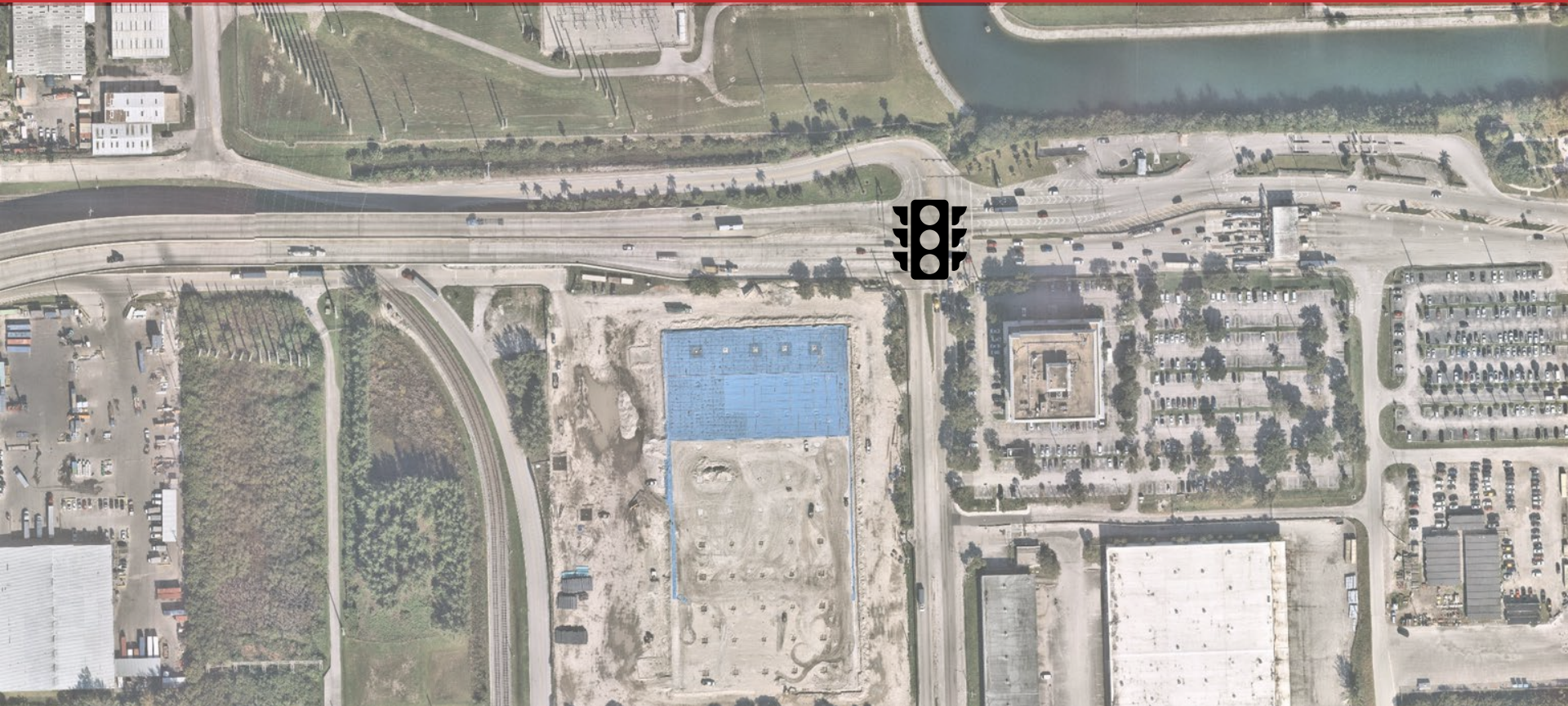


# 4. Eller Dr Gate Elimination





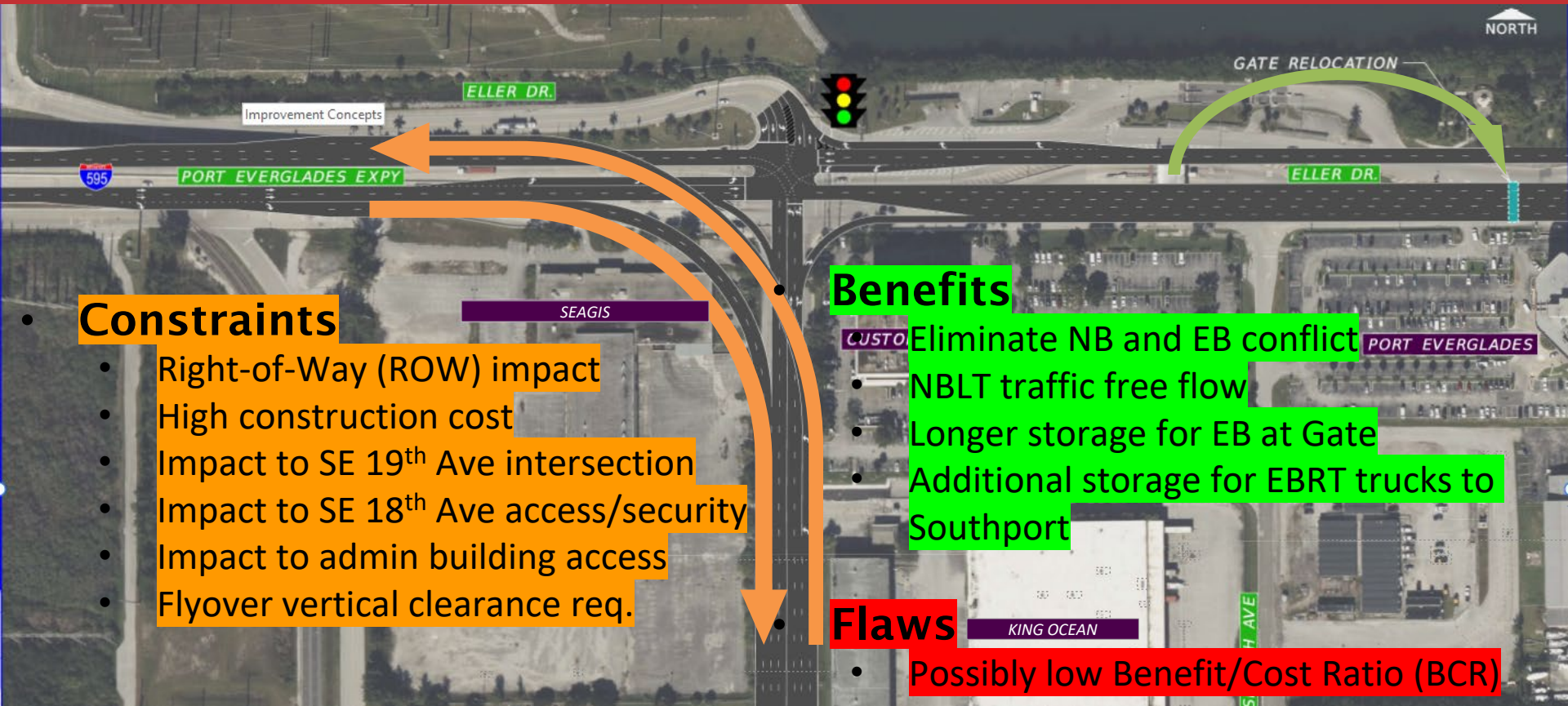
# 5. No Build



# Constraints and Flaws



# 1. I-595 to McIntosh Rd Flyover + Eller Dr Gate Relocation



## Constraints

- Right-of-Way (ROW) impact
- High construction cost
- Impact to SE 19<sup>th</sup> Ave intersection
- Impact to SE 18<sup>th</sup> Ave access/security
- Impact to admin building access
- Flyover vertical clearance req.

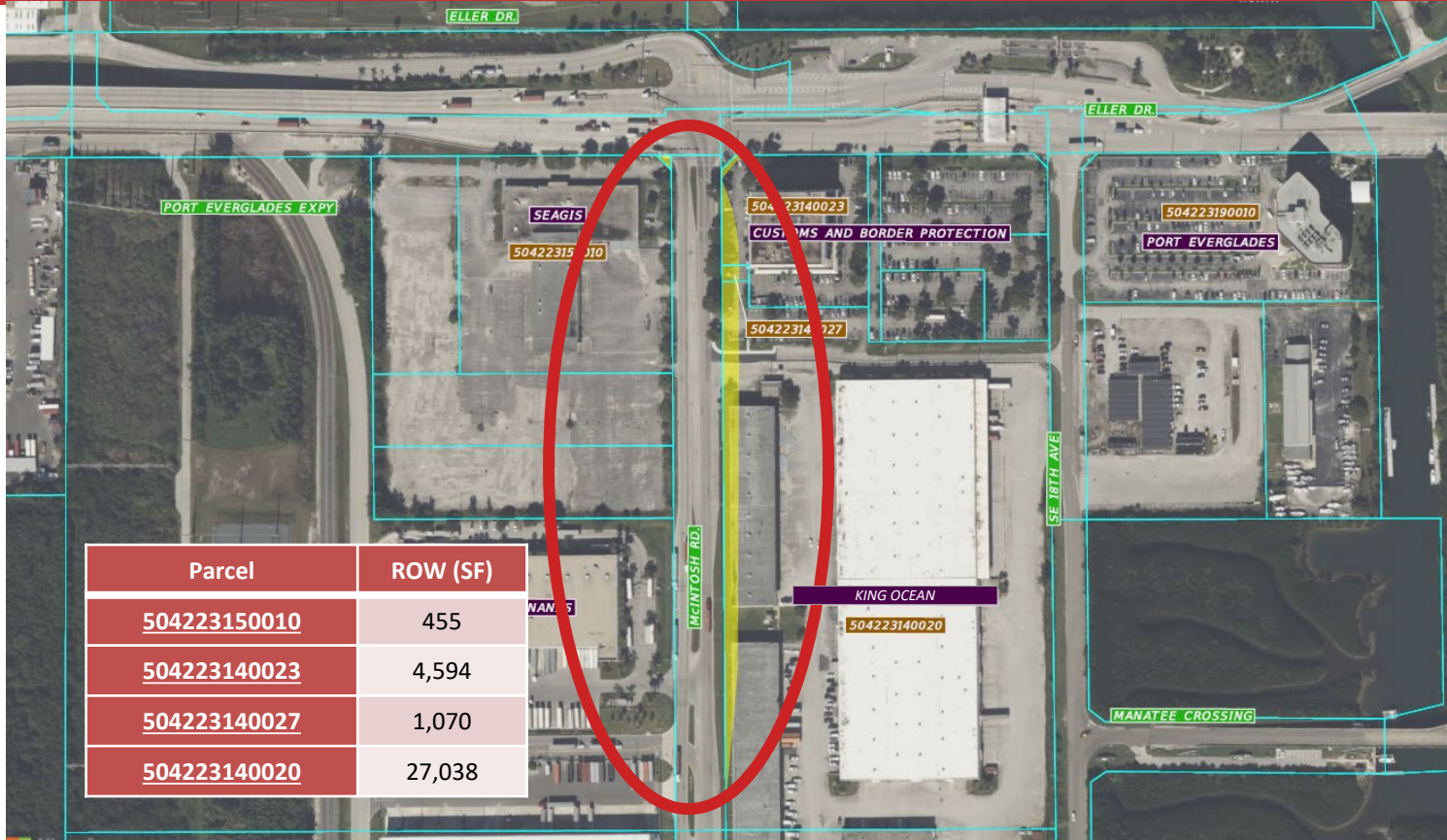
## Benefits

- Eliminate NB and EB conflict
- NBLT traffic free flow
- Longer storage for EB at Gate
- Additional storage for EBRT trucks to Southport

## Flaws

- Possibly low Benefit/Cost Ratio (BCR)

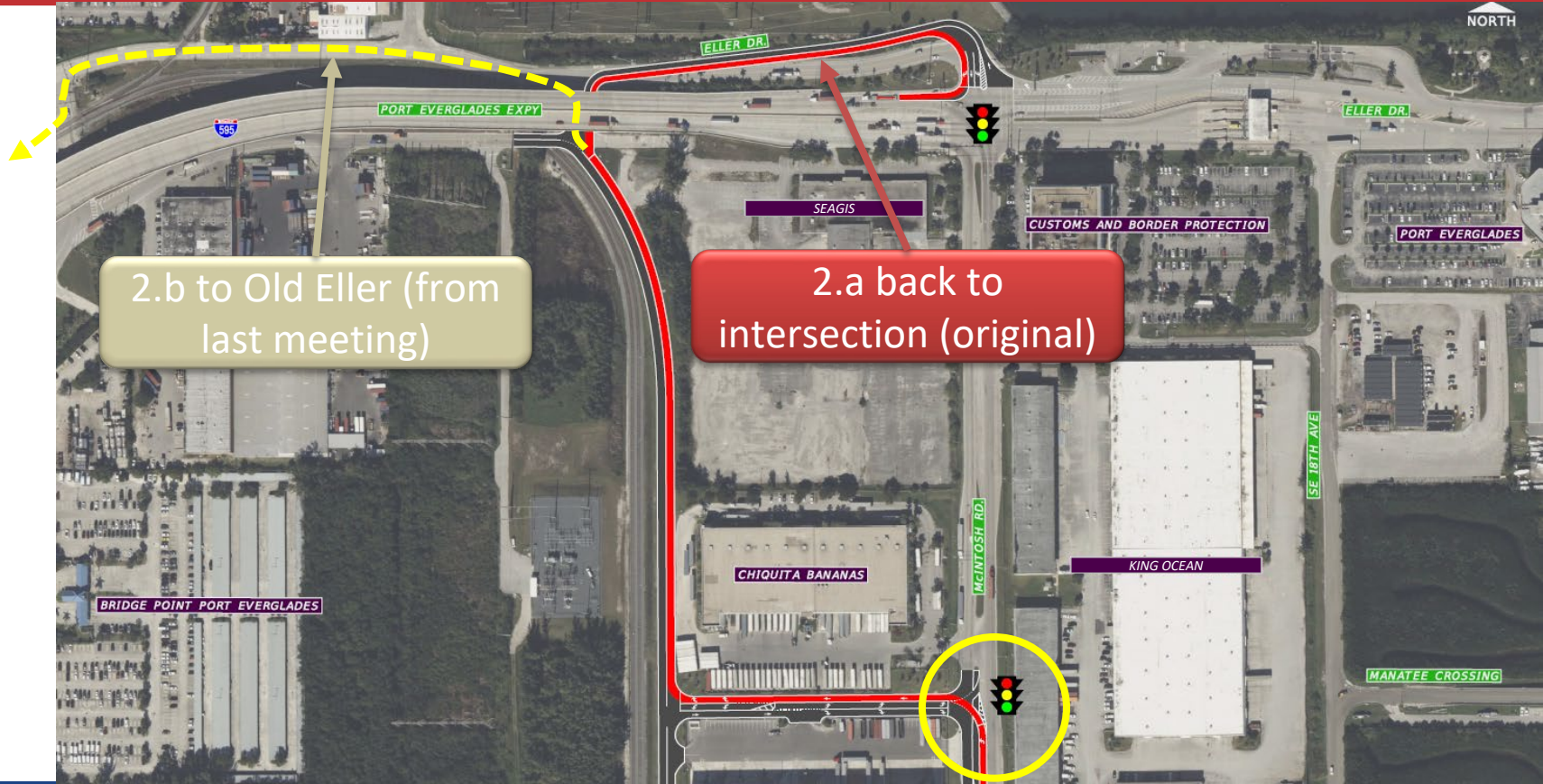
# Flyover ROW Impact (draft)



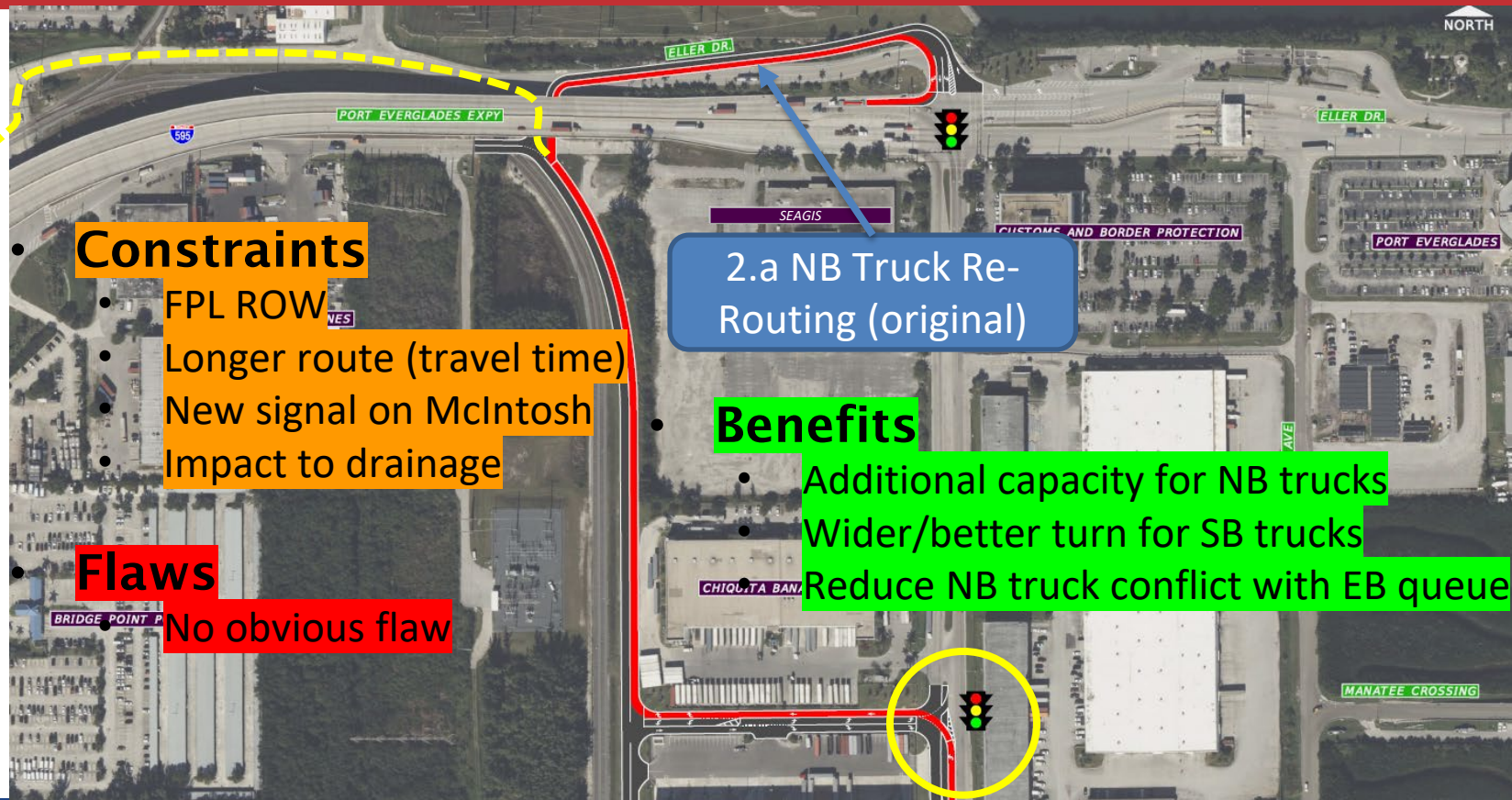
Parcel	ROW (SF)
<u>504223150010</u>	455
<u>504223140023</u>	4,594
<u>504223140027</u>	1,070
<u>504223140020</u>	27,038



# 2. NB Truck Re-Routing



# 2.a NB Truck Re-Routing (back to intersection)



## Constraints

- FPL ROW
- Longer route (travel time)
- New signal on McIntosh
- Impact to drainage

## Flaws

No obvious flaw

2.a NB Truck Re-Routing (original)

## Benefits

- Additional capacity for NB trucks
- Wider/better turn for SB trucks
- Reduce NB truck conflict with EB queue

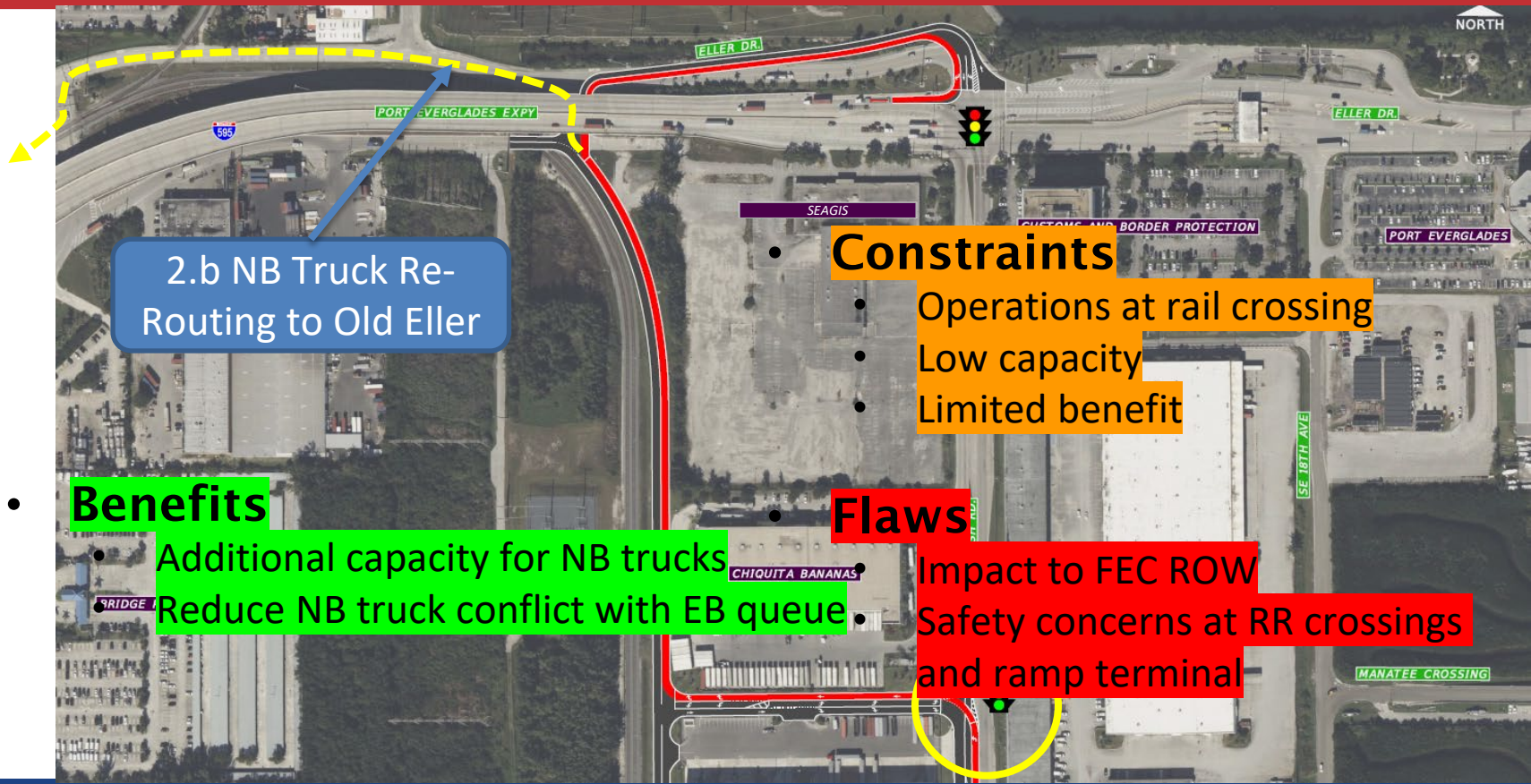


# 2.a NB Truck Re-Routing ROW Impact (draft)



Parcel	Area (SF)
<u>504223050320</u>	9,866
<u>504223050100</u>	215

# 2.b NB Truck Re-Routing (to Old Eller)



2.b NB Truck Re-Routing to Old Eller

- **Benefits**
  - Additional capacity for NB trucks
  - Reduce NB truck conflict with EB queue

- **Constraints**
  - Operations at rail crossing
  - Low capacity
  - Limited benefit

- **Flaws**
  - Impact to FEC ROW
  - Safety concerns at RR crossings and ramp terminal



# Field Review – NB Truck Rerouting to Older Eller FEC Crossing at Old Eller

A



# Field Review – NB Truck Rerouting to Older Eller Old Eller at NE 7<sup>th</sup> Ave

B



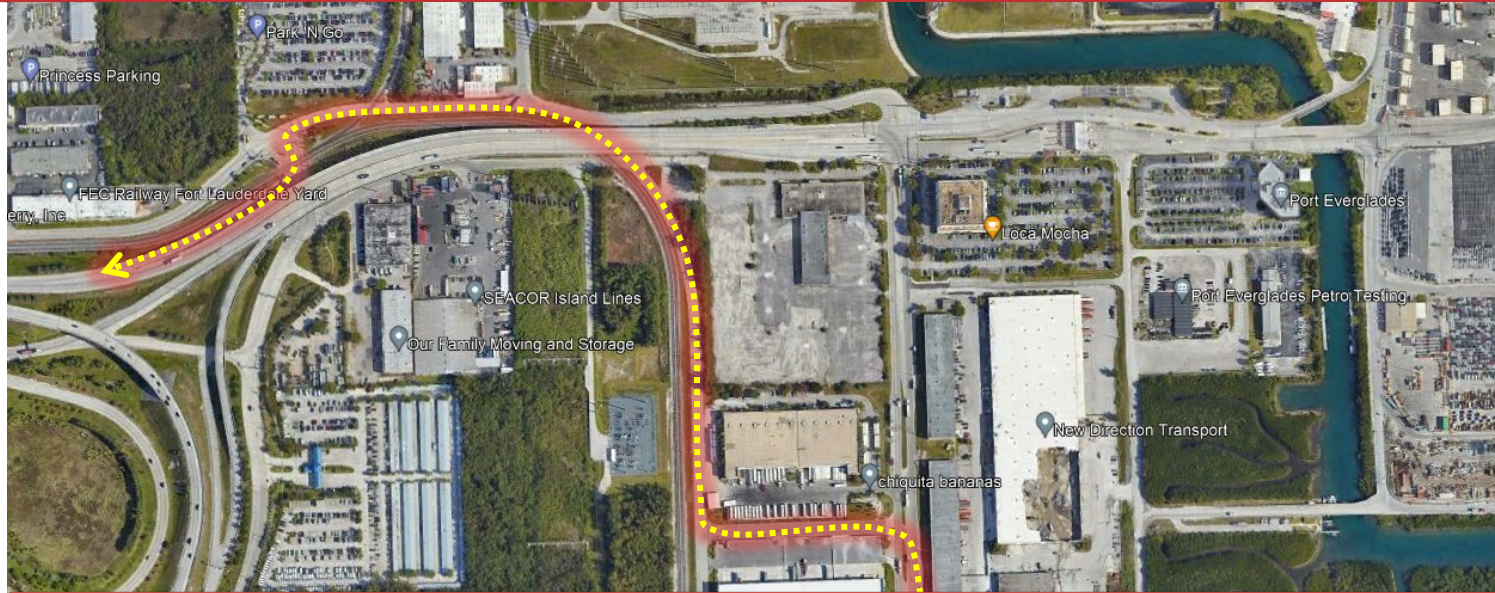


Field Review – NB Truck Rerouting to Older Eller  
Old Eller at NE 7<sup>th</sup> Ave  
Wednesday, 4/10/24, 1pm

B



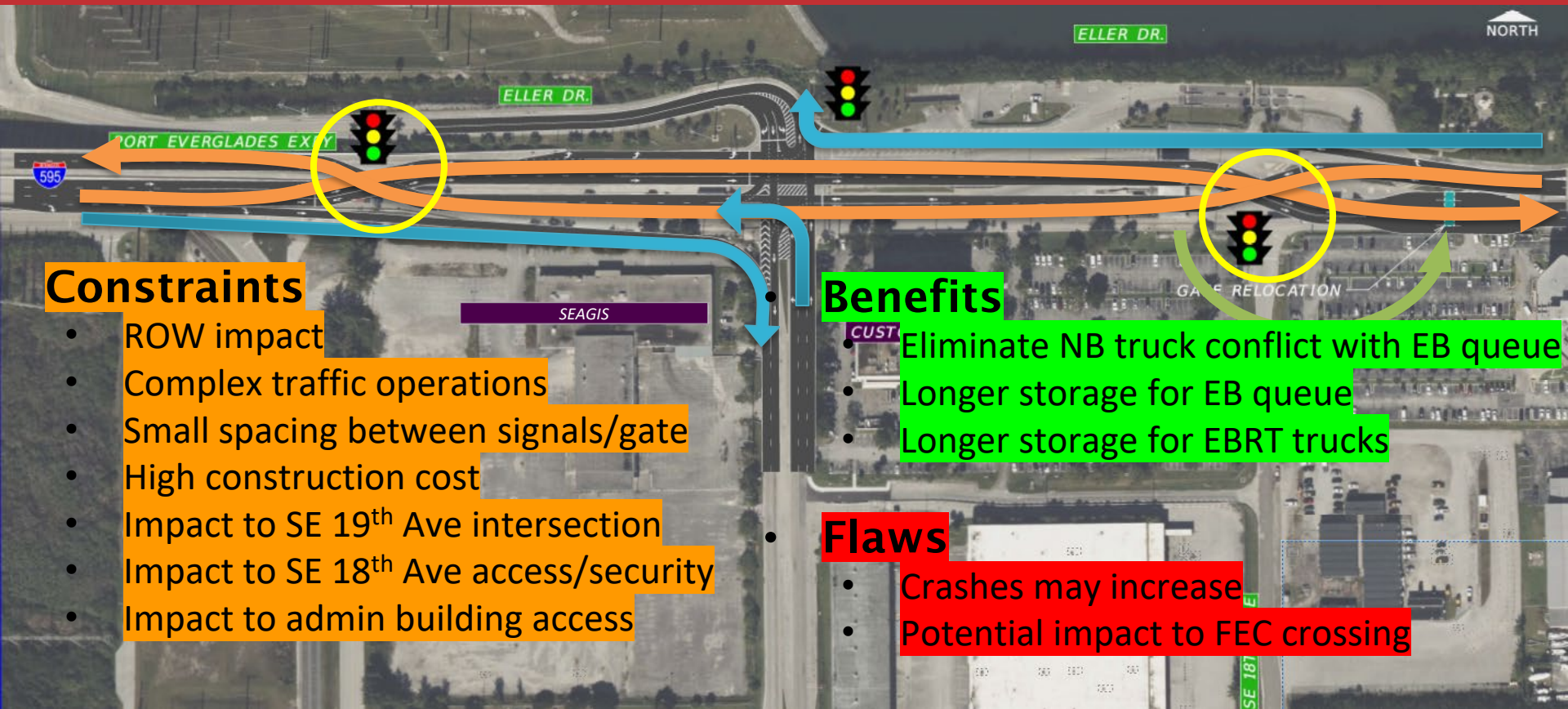
## 2.b NB Truck Re-Routing (to Old Eller)



Removed from further evaluation



# 3. Diverged East/West + Eller Dr Gate Relocation



## Constraints

- ROW impact
- Complex traffic operations
- Small spacing between signals/gate
- High construction cost
- Impact to SE 19<sup>th</sup> Ave intersection
- Impact to SE 18<sup>th</sup> Ave access/security
- Impact to admin building access

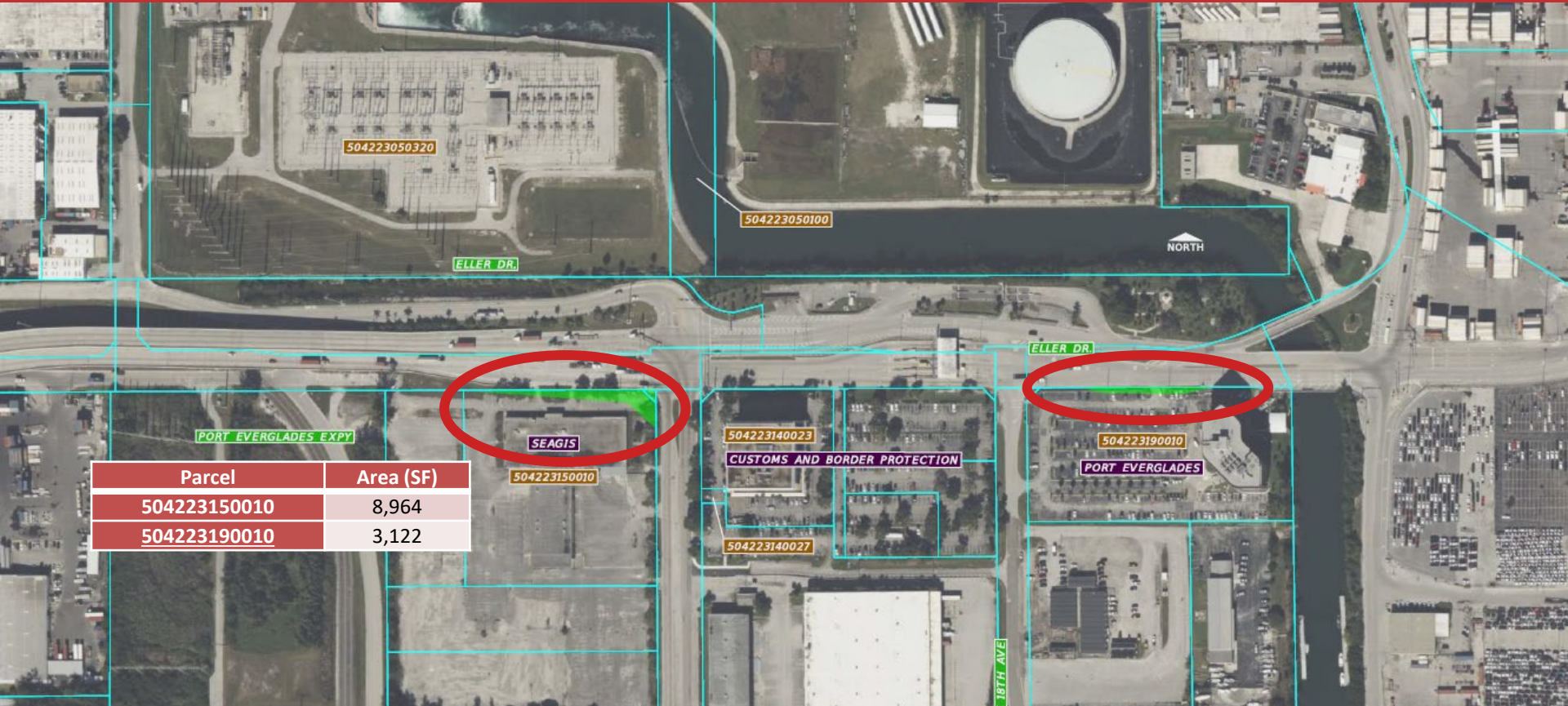
## Benefits

- Eliminate NB truck conflict with EB queue
- Longer storage for EB queue
- Longer storage for EBRT trucks

## Flaws

- Crashes may increase
- Potential impact to FEC crossing

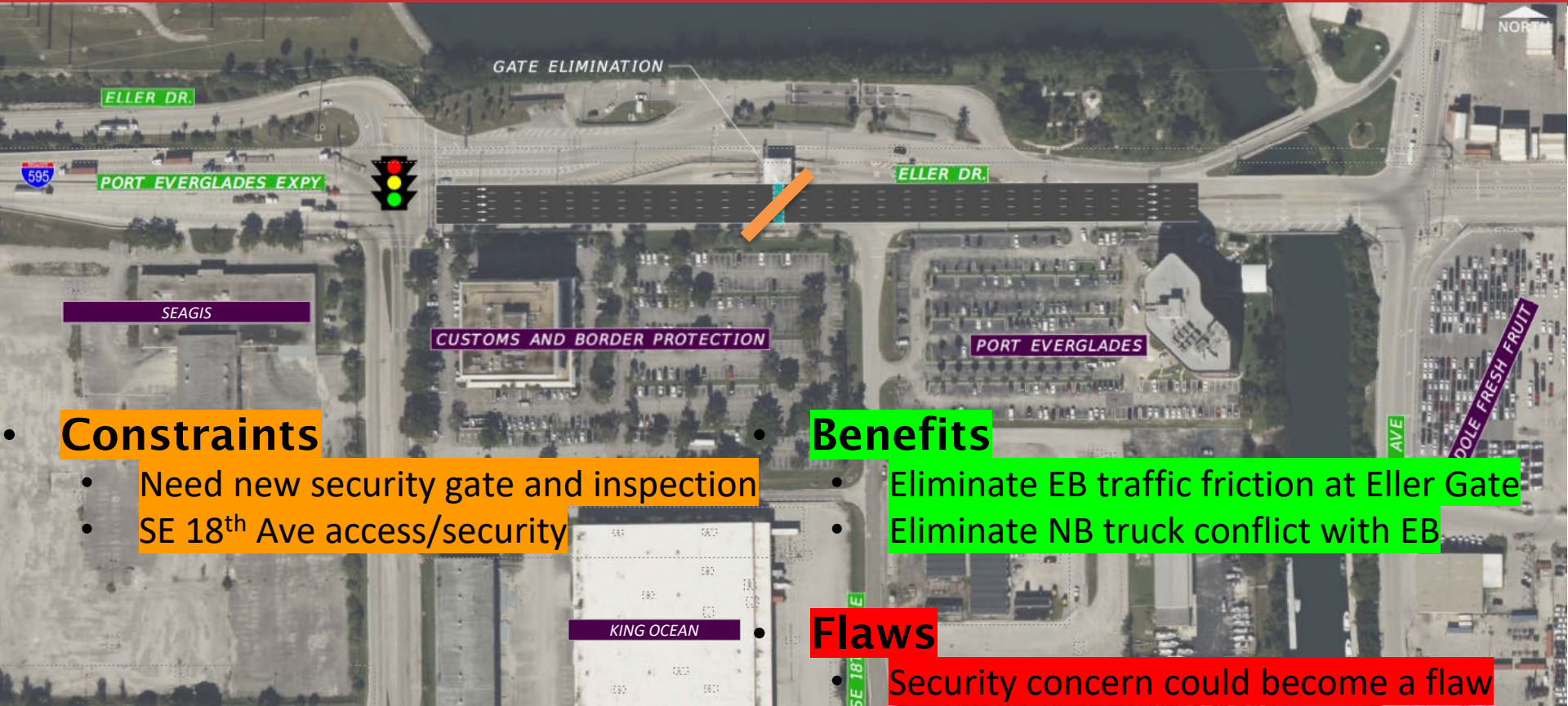
# Diverged East/West ROW Impact (draft)



Parcel	Area (SF)
504223150010	8,964
504223190010	3,122



# 4. Eller Dr Gate Elimination



## Constraints

- Need new security gate and inspection
- SE 18<sup>th</sup> Ave access/security

## Benefits

- Eliminate EB traffic friction at Eller Gate
- Eliminate NB truck conflict with EB

## Flaws

- Security concern could become a flaw

# 5. No Build



- **Existing problems could deteriorate**
  - Delay and friction at Eller Dr Gate
  - NB trucks blocked by EB queue
  - Short turn radius for SBRT trucks
  - More crashes



# Constraints and Flaws

- **Constraints**

- Right-of-Way (ROW)
- Engineering
- Cost
- Maintaining access
- Port security

- **Flaws**

- Significant impact to stakeholder ROW
- Impact to FEC facilities/ROW
- Challenges to traffic operations
- Likelihood of new crashes
- Low BCR

## Stakeholder Support

# Open Discussion



# Defining Fatal Flaws

# What do we consider as **Fatal Flaws**?

- **Significant Impact to/by FEC Crossings and ROW**
- **Longer delay/queue**
- **More crashes**
- **BCR<1 (benefit < cost)**

**Stakeholder support is required!**



# Next Steps

# Next Steps

- **Complete Conceptual Designs**
- **Complete Cost Estimates**
- **Complete Alternative Evaluation**

**Next Meeting: Fall 2024 – Alt. Analysis and Recommendation**





# Deliverables

Task	Deliverables	Status	Schedule
6 (1-5)	Ex Cond Report draft	Completed	Jan-24
6 (1-5)	Ex Cond Report final	Completed	Jan-24
7	Concept alternatives draft	Completed	Feb-24
7	Concept alternatives Final	Ongoing	Jun-24
8	Construction cost estimate	Ongoing	Jun-24
8	ROW cost estimate	Ongoing	Aug-24
9	Draft benefit cost analysis	Ongoing	Aug-24
10	Alternative analysis (AA)	Ongoing	Sep-24
11	Recommendations	To-Do	Oct-24
12	Project kick-off meeting with PEV and FDOT	Completed	Aug-23
12	Prep meeting with PEV and FDOT - stakeholder kick-off	Completed	Feb-24
12	Prep meeting with PEV and FDOT - flaws and constraints	Completed	Jun-24
12	Prep meeting with PEV and FDOT - AA and recommendation	To-Do	Oct-24
13	Stakeholder meeting - kickoff and concepts	Completed	Feb-24
13	Stakeholder meeting - flaws and constraints	Ongoing	Jun-24
13	Stakeholder meeting - AA and recommendation	To-Do	Oct-24
14	Draft project report	To-Do	Oct-24
14	Final project report	To-Do	Nov-24



# Project Contact

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Project website: <https://www.porteverglades.net/development/feasibility-study/>