

# D2 Subway East End Evaluation

September 29, 2021 Public Meeting



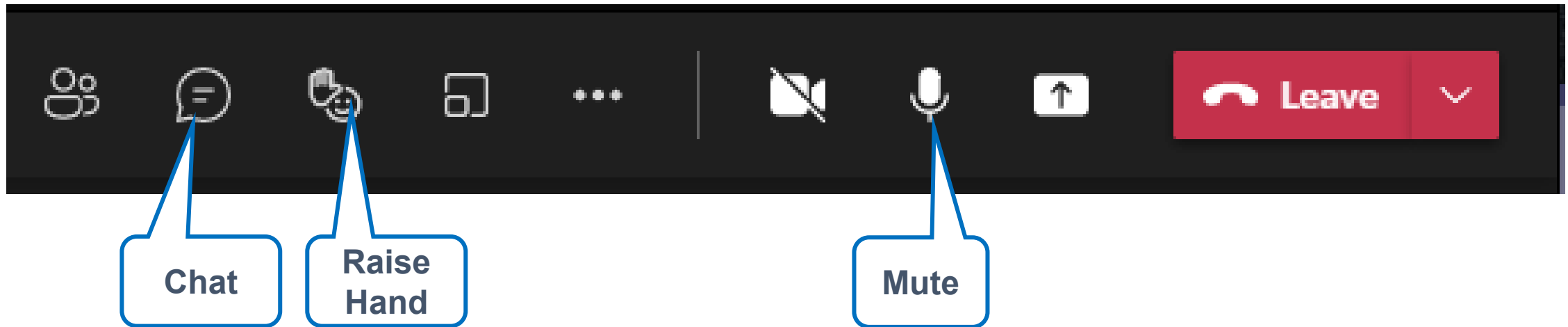
North Central Texas  
Council of Governments



# PLEASE MUTE YOUR MICROPHONE

The presentation is being recorded and will be posted to [DART.org/D2](https://DART.org/D2).

Please use the chat box to type your questions or raise your hand if you would like to ask a question or speak. There will be a Q&A period and opportunity to comment at the end of the presentation.



Comments not received during this meeting must be submitted to [DDOTPlanning@dallascityhall.com](mailto:DDOTPlanning@dallascityhall.com) or by mail to be formally considered.

# Agenda

1. Welcome and Meeting Purpose
2. Background and Process Overview
3. Results of Second Level Screening
4. Next Steps
5. Q&A / Opportunity to Comment

# Meeting Purpose

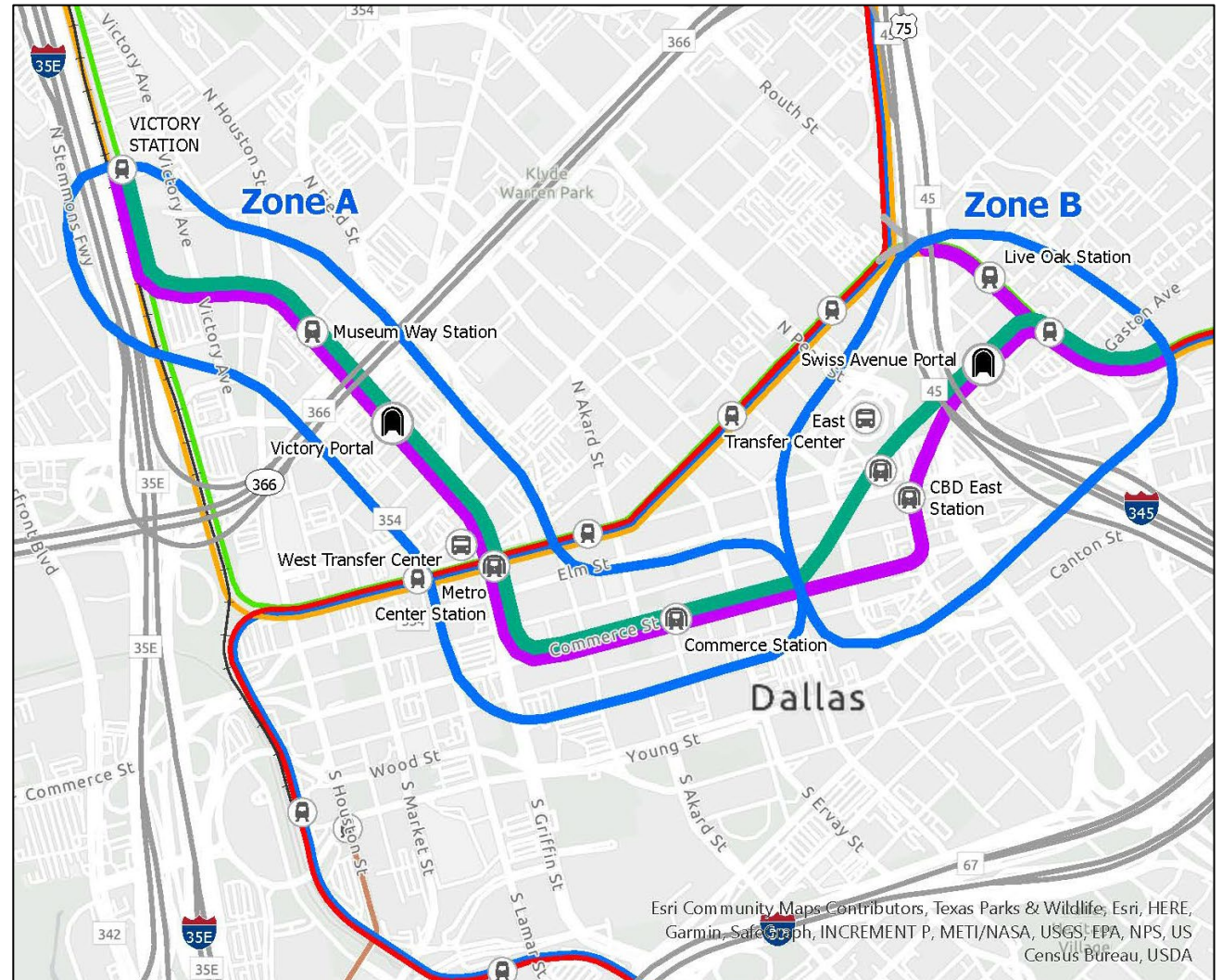
- Provide the community an update on the D2 East End Evaluation process
- Solicit input on the findings of the second level screening to support staff recommendation

# Background & Process Overview

# Background

March 24, 2021, Dallas City Council Resolution

- Advanced the D2 subway and set the Alignment in **Zone A**
- Directed city staff to work with DART, TxDOT, NCTCOG, and stakeholders to evaluate project refinements, enhancements, and/or modifications in **Zone B** to address and mitigate technical, environmental, and alignment concerns



Source: Map by Transportation GIS, February 2021

# Vision & Key Issues for Zone B Evaluation

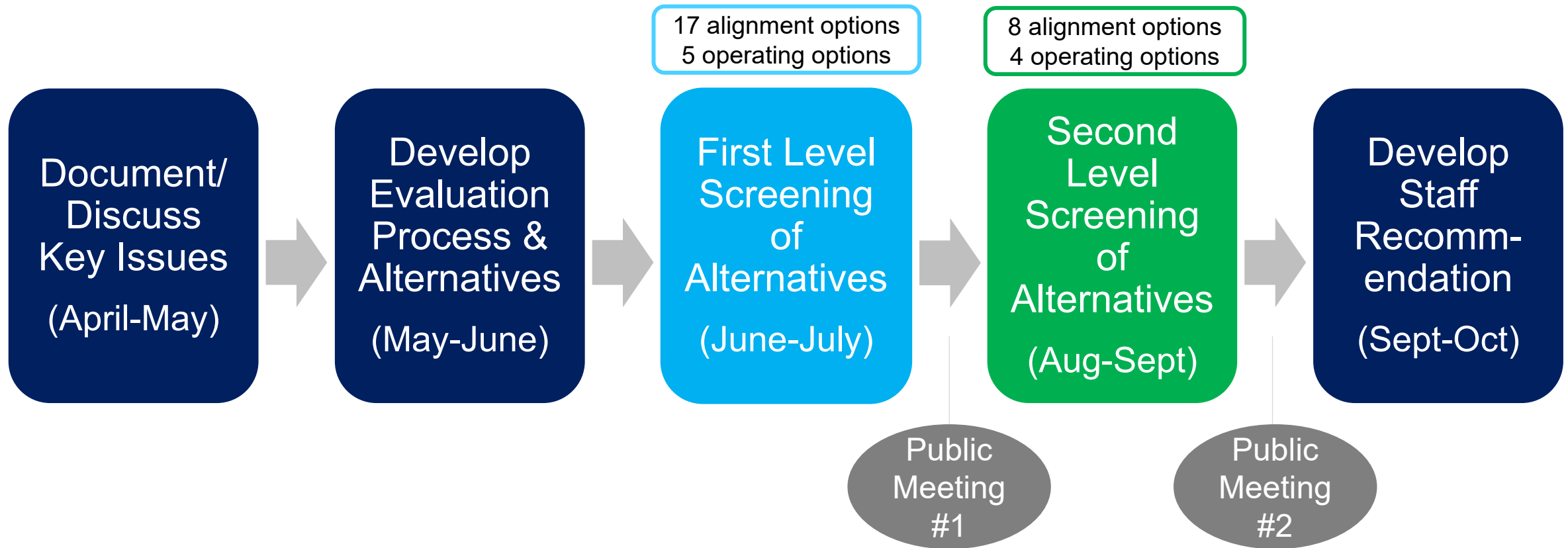
The overall vision will be based on looking at the D2 Subway, I-345, local street network, and other related infrastructure projects in a coordinated and holistic manner to:

- Minimize right-of-way needs
- Maximize economic development potential
- Reduce the potential for “throw-away” reconstruction of local streets
- Lessen business, property, and travel impacts during construction
- Enhance the city street grid and pedestrian network to reconnect neighborhoods
- Maximize the experience for transit, bicycle, pedestrian, roadway, and freight/goods movement

# Process & Schedule

## KEY DATES

- Staff recommendation by October 2021
- Brief City Council by November 2021
- Draft Interlocal Agreement(s) by and between the City, DART, NCTCOG, and TxDOT, by January 2022
- City Council resolution no later than **March 2022**





# Evaluation Process

- Alternatives were compared to the 30% design of the D2 Subway included in the April 2021 Final Environmental Impact Statement/Record of Decision (FEIS/ROD)
- Evaluation Categories and Stages:

- Evaluation Vision / Project Need and Purpose
- Design and Construction Feasibility

## First Level Screening

- Community, Economic, and Environmental Effects
- Transportation Effects
- Temporary (Construction) Effects
- Costs/Funding/Schedule
- Stakeholder Support

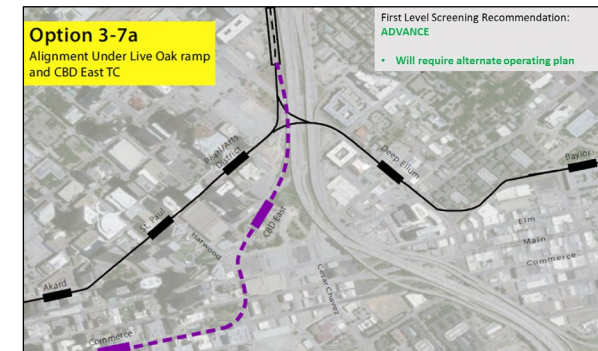
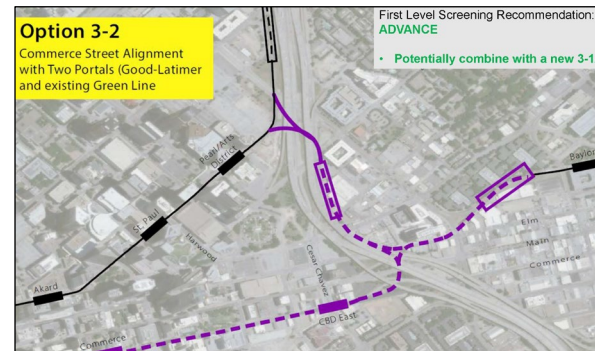
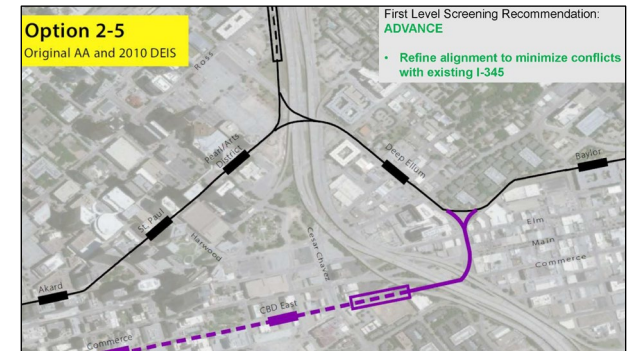
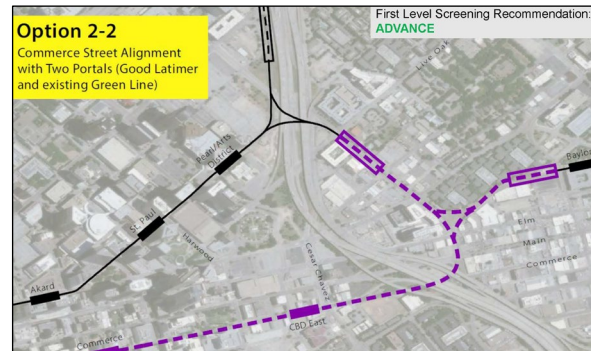
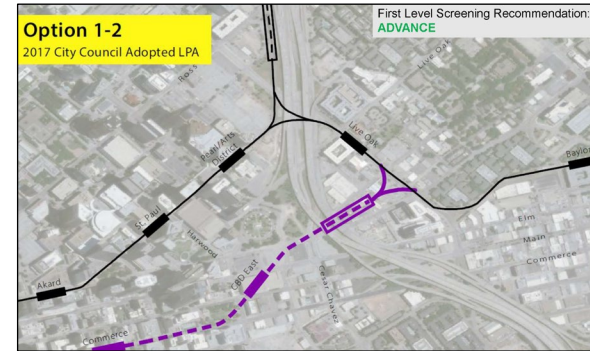
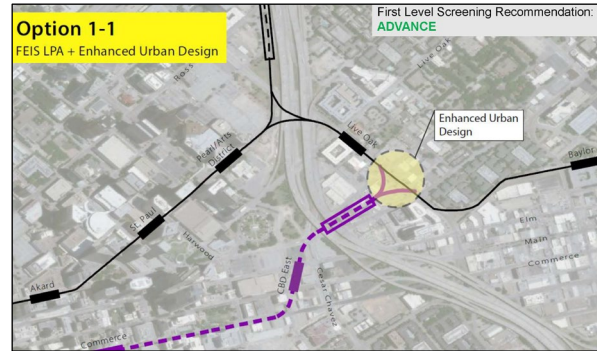
## Second Level Screening

# Results of Second Level Screening

# Options Evaluated in Second Level Screening

## Legend

	Existing Tracks	D2 Alternatives
Tracks at Street Level		
Tracks in Tunnel Underground		
Portal		
Station		



Updated since August 5<sup>th</sup> Meeting

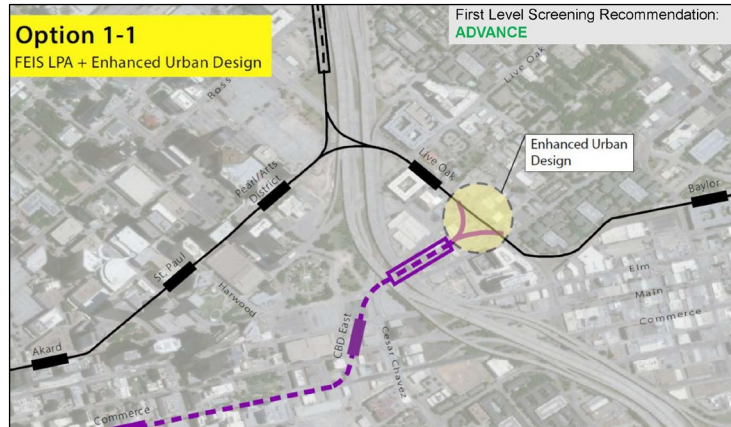
9/29/2021

# Second Level Screening Results

Alternative	Green	Yellow	Orange	East End Property Impacts	Stations	Economic & TOD Opportunities	Impacts to Riders & EJ	Street Grid/Traffic Impacts	Ped, Bike, and Micro-Transit Safety Effects	Construction Impacts	DART Service Impacts/O&M Considerations	Impacts to Future Design I-345	Project Costs	Operating Costs	FTA Grant Implications	DART Project Schedule	Stakeholder Support
Baseline - FEIS 30% Design	6	4	3	orange	green	orange	green	yellow	yellow	yellow	yellow	orange	green	green	green	green	
1-1: FEIS LPA + Enhanced Urban Design + West Side Running LRT	8	2	3	orange	green	orange	green	green	green	yellow	yellow	orange	green	green	green	green	
1-2: 2017 City Council Adopted LPA	5	5	3	orange	green	orange	green	yellow	yellow	yellow	yellow	orange	yellow	green	green	green	
2-1: Elm Street Alignment/Portal, East of I-345	3	4	6	orange	green	orange	green	orange	yellow	yellow	yellow	orange	orange	green	orange	yellow	
2-2: Commerce Street Alignment with Two Portals (Good-Latimer and existing Green Line)	4	4	5	yellow	orange	green	orange	green	green	yellow	orange	green	orange	yellow	orange	yellow	
2-5: Original AA and 2010 DEIS	5	6	2	yellow	green	yellow	yellow	orange	orange	green	green	green	green	yellow	yellow	yellow	
3-1a: 2017 City Council LPA with Wye under I-345 and Two Portals	4	3	6	orange	green	yellow	yellow	green	green	orange	orange	green	orange	yellow	orange	orange	
3-2: Commerce Street Alignment with Wye under I-345 and Two Portals	4	2	7	yellow	orange	green	orange	green	green	orange	orange	green	orange	yellow	orange	orange	
3-7a: Alignment Under Southbound I-345 Access Road	7	6	0	green	green	green	yellow	green	green	yellow	yellow	green	yellow	green	yellow	yellow	



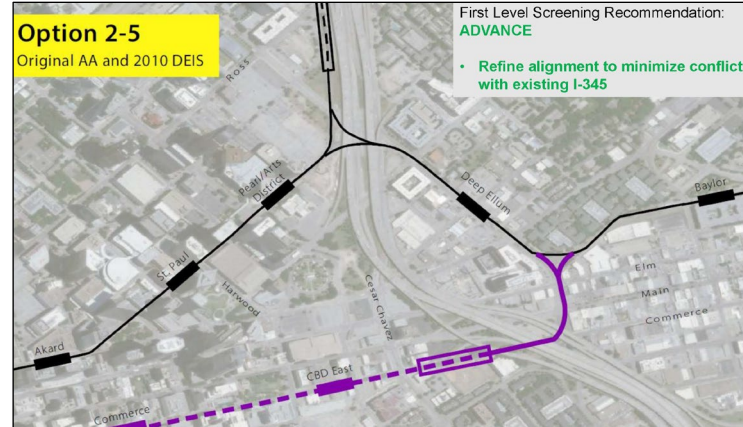
# Highest Ranking Options & Key Trade Offs



- Minor refinements to LPA
- Minimal schedule delay
- Minimal D2 cost increase

- Complicates street grid operations

- Number of private property acquisitions required
- I-345 depressed option cannot gravity drain/adds costs



- Minimal acquisition of private property
- I-345 depressed options can gravity drain
- Minimal D2 cost increase

- Inconvenient transfers/access

- Traffic conflicts
- Longer travel time



- Minimal acquisition of private property
- No crossing of I-345
- Reduced train/traffic conflicts
- Convenient transfers

- Some schedule delays
- Moderate D2 cost increase
- Requires refinements/adjustments to proposed FEIS LPA operating plan

# Next Steps

# Next Steps

- Obtain and document Stakeholder Support
- Meet with TxDOT, DART, and NCTCOG to develop staff-level recommendation
- Briefing to DART Planning and Capital Programs Committee on October 12<sup>th</sup>
- Briefing to Dallas City Council Transportation and Infrastructure Committee on October 18<sup>th</sup>
- Prepare report to summarize D2 East End Evaluation effort
- Develop draft City Council resolution

# **Q&A / Opportunity to Comment**



# Q&A / Opportunity to Comment

Please use the chat box to type your questions or raise your hand if you would like to ask a question or speak.

Comments or questions not received during this meeting must be submitted by email or mail no later than **October 6, 2021** to be formally considered.

**Email:**

[DDOTPlanning@dallascityhall.com](mailto:DDOTPlanning@dallascityhall.com)

**Mail:**

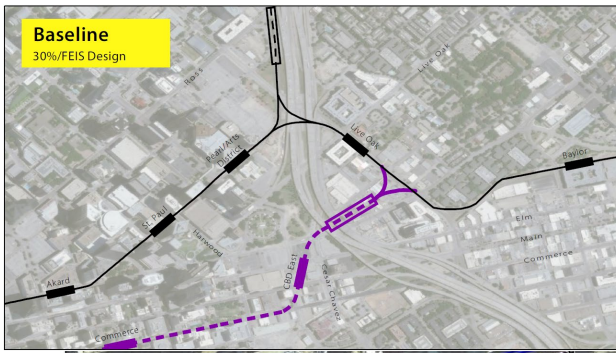
Department of Transportation, c/o D2 Subway  
1500 Marilla Street, L1BS  
Dallas, TX 75201

Recording of the presentation and the maps will be posted to [DART.org/D2](https://www.dart.org/D2) and the City of Dallas Department of Transportation website.

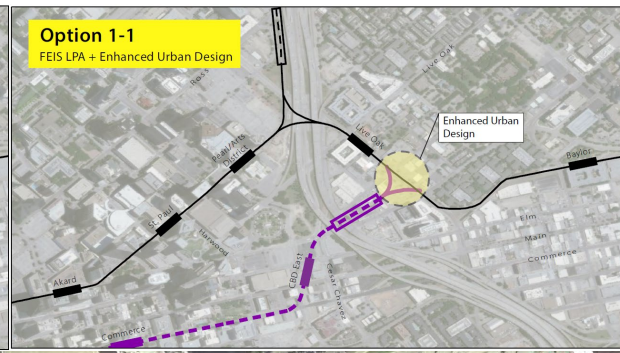
# **Appendix 1: Engineering Concepts for Highest Ranking Second Level Screening Options**



**Baseline**  
30%/FEIS Design



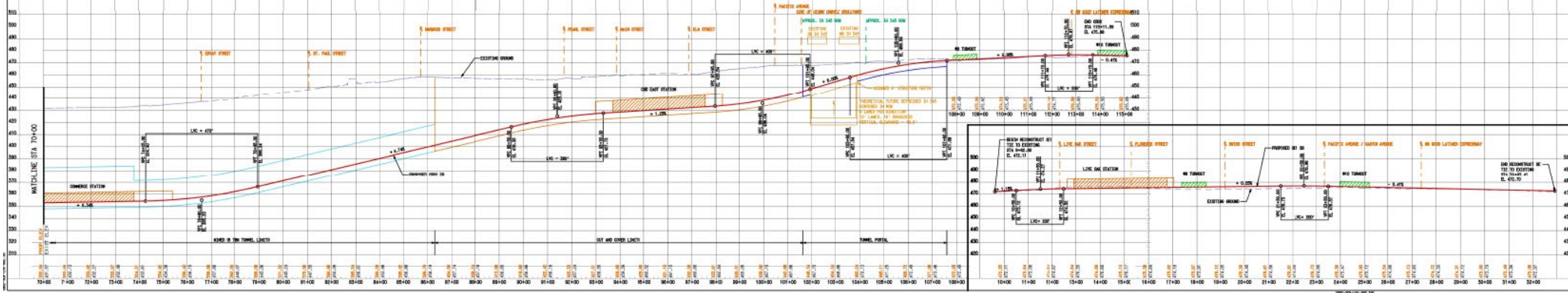
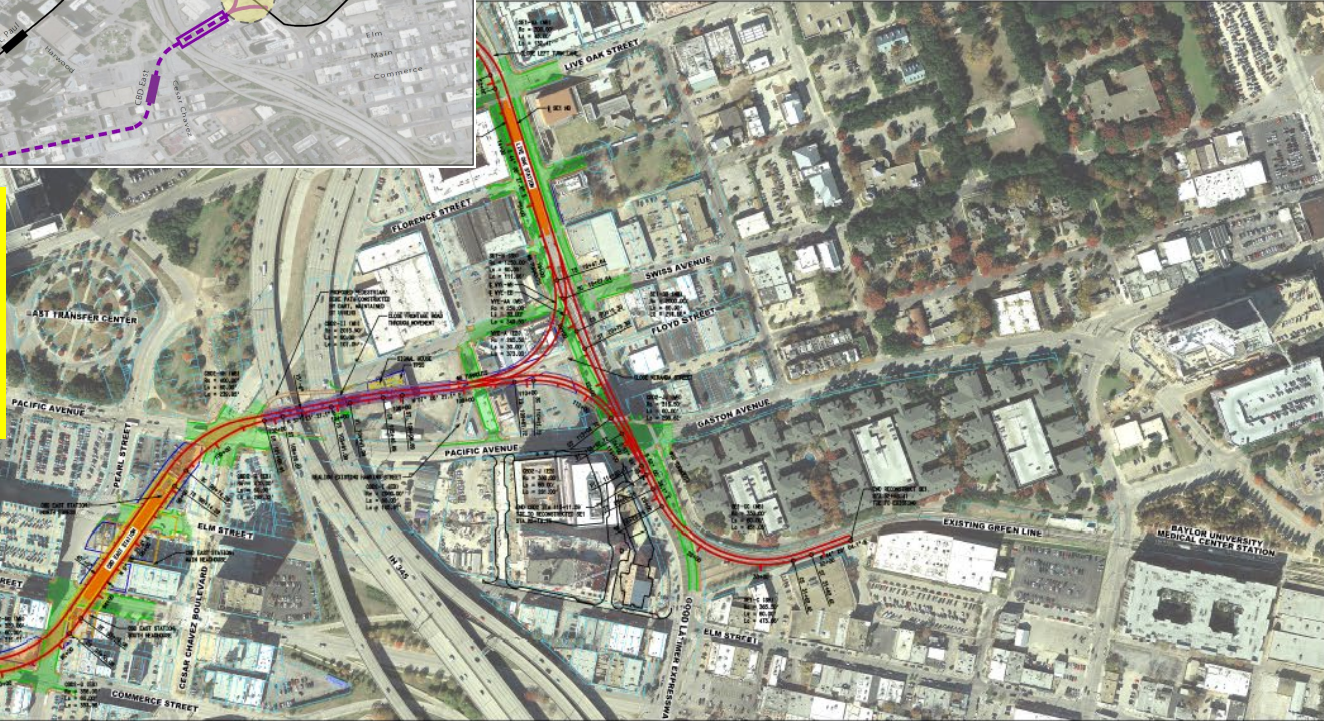
**Option 1-1**  
FEIS LPA + Enhanced Urban Design



# Baseline & Option 1-1

## Option 1-1

- Shifts existing Green Line from the median of Good Latimer to the west side of the roadway to eliminate vehicle and train conflicts at the wye
- Includes \$11 million in surface urban design improvements



SCALE: 1/8" = 100 FEET

PLAN VIEW LEGEND

- EXISTING AND PROPOSED ALIGNMENT
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE CUT AND COVER LIMITS
- APPROXIMATE TUNNEL LIMITS
- STATION PLATFORM
- PROPERTY LINES
- STREET RECONSTRUCTION LIMITS
- TRANSVERSE STREET DATA
- PROPOSED ROW LIMITS
- PROPOSED FENCE
- PROPOSED WALL

PROFILE VIEW LEGEND

- PROPOSED OR EXISTING ALIGNMENT
- EXISTING PROFILE
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE CUT AND COVER LIMITS
- APPROXIMATE TUNNEL LIMITS
- STATION PLATFORM LIMITS
- STREET TUNNEL LIMITS

NOTES:

1. PORTAL AND CUT AND COVER LIMITS ARE SUBJECT TO CHANGE.
2. UNDERGROUND TUNNEL CROSS SECTIONS ARE SUBJECT TO CHANGE.

NOT AN APPROVED DRAWING  
PRELIMINARY ENGINEERING 30% DESIGN

IN-PROGRESS  
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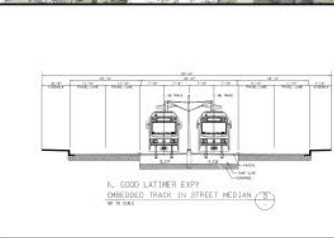
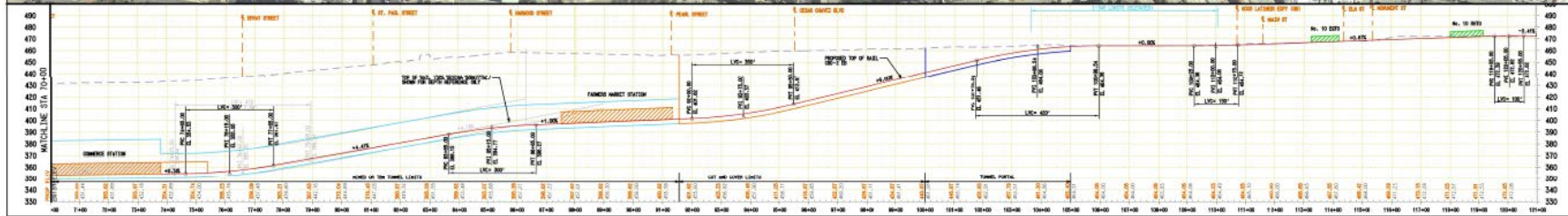
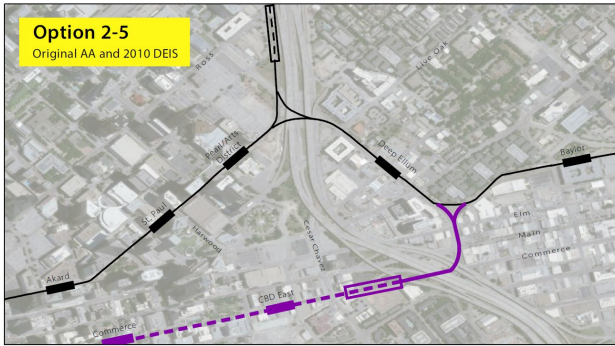
gbc  
PRELIMINARY

DAFT

LIGHT RAIL TRANSIT SYSTEM  
LINE SECTION CBD-2  
STA 70+00 TO STA 115+11.59  
COMMERCE / VICTORY / SWISS  
SHEET 2 OF 2



# Option 2-5



SCALE (IN FEET)  
1" = 50' 100' 150'

**PLAN VIEW LEGEND**

- EXISTING RIGHT LIGHT RAIL
- PROPOSED BY LIGHT RAIL ALIGNMENT
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE EXT. AND INTL. LIMITS
- APPROXIMATE TRAIL LIMITS
- PLATFORM PLATFORM
- PROPOSED LINES
- STREET INTERSECTION LIMITS
- SUPPLEMENTARY SERVICE DATA
- PROPOSED NEW LINES
- PLATFORM FORMS
- PROPOSED RAIL

**PROFILE VIEW LEGEND**

- PROPOSED BY LIGHT RAIL ALIGNMENT
- EXISTING GROUND
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE EXT. AND INTL. LIMITS
- APPROXIMATE TRAIL LIMITS
- PLATFORM PLATFORM LIMITS
- EXISTING TRAIL LIMITS

**NOTES**

- PORTAL AND EXT. AND INTL. LIMITS ARE SUBJECT TO CHANGE.
- UNDERGROUND STATION ACCESS LIMITATIONS ARE NOT INDICATED.

COMMERCE STREET  
ADJACENT TO D.F. TRACK PORTAL

NOT AN APPROVED DRAWING  
CONCEPTUAL DESIGN

**IN-PROGRESS**

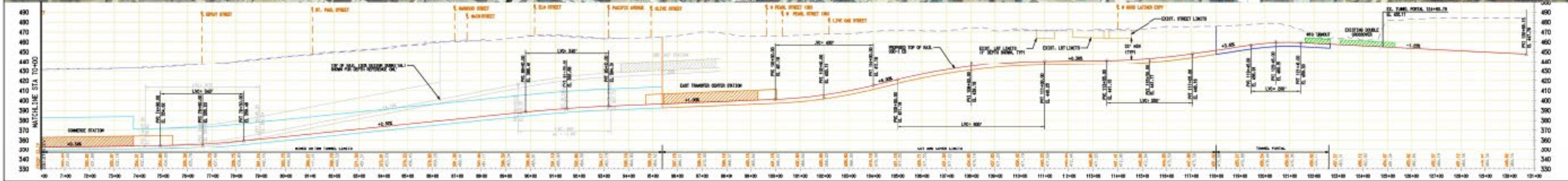
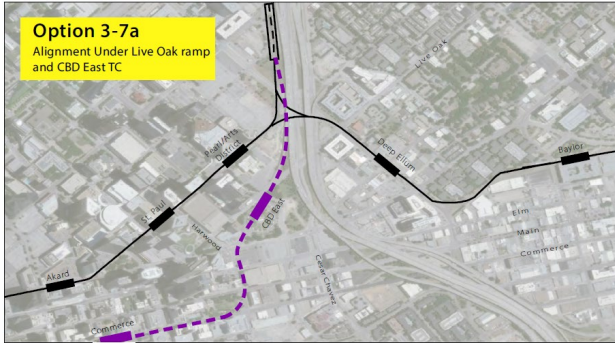
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**DART**

LIGHT RAIL TRANSIT SYSTEM  
LINE SECTION CSD-2  
STA 1+00 TO STA 120+50  
EXTENDED COMMERCE  
AT-GRADE ALTERNATIVE



# Option 3-7a



SCALE 1/8" = 1' (VERTICAL)

**PLAN VIEW LEGEND**

- EXISTING 100' LIMIT OF C&G
- PROPOSED 100' LIMIT OF C&G, A, LIMIT
- APPROXIMATE SPITAL LIMITS
- APPROXIMATE 100' ASIDE LIMITS
- APPROXIMATE FRAME LIMITS
- STATION PLATFORM
- STREET PLATFORM
- STREET RECONSTRUCTION LIMITS
- STREET RECONSTRUCTION 100' ASIDE
- PROPOSED ROW LIMITS
- PROPOSED CONC.
- PROPOSED RAIL

**PROFILE VIEW LEGEND**

- PROPOSED 100' LIMIT OF C&G, A, LIMIT
- EXISTING PROFILE
- APPROXIMATE SPITAL LIMITS
- APPROXIMATE 100' ASIDE LIMITS
- APPROXIMATE FRAME LIMITS
- STATION PLATFORM
- STREET PLATFORM

**NOTES:**

1. PROFILE AND 100' ASIDE LIMITS ARE SUBJECT TO CHANGE.
2. UNDERGROUND UTILITIES WOULD BE RELOCATED AS NECESSARY.

NOT AN APPROVED DRAWING  
CONCEPTUAL DESIGN

**IN-PROGRESS**

THIS DRAWING IS PRELIMINARY AND NOT FOR PERMITTING, BIDDING, OR CONSTRUCTION.

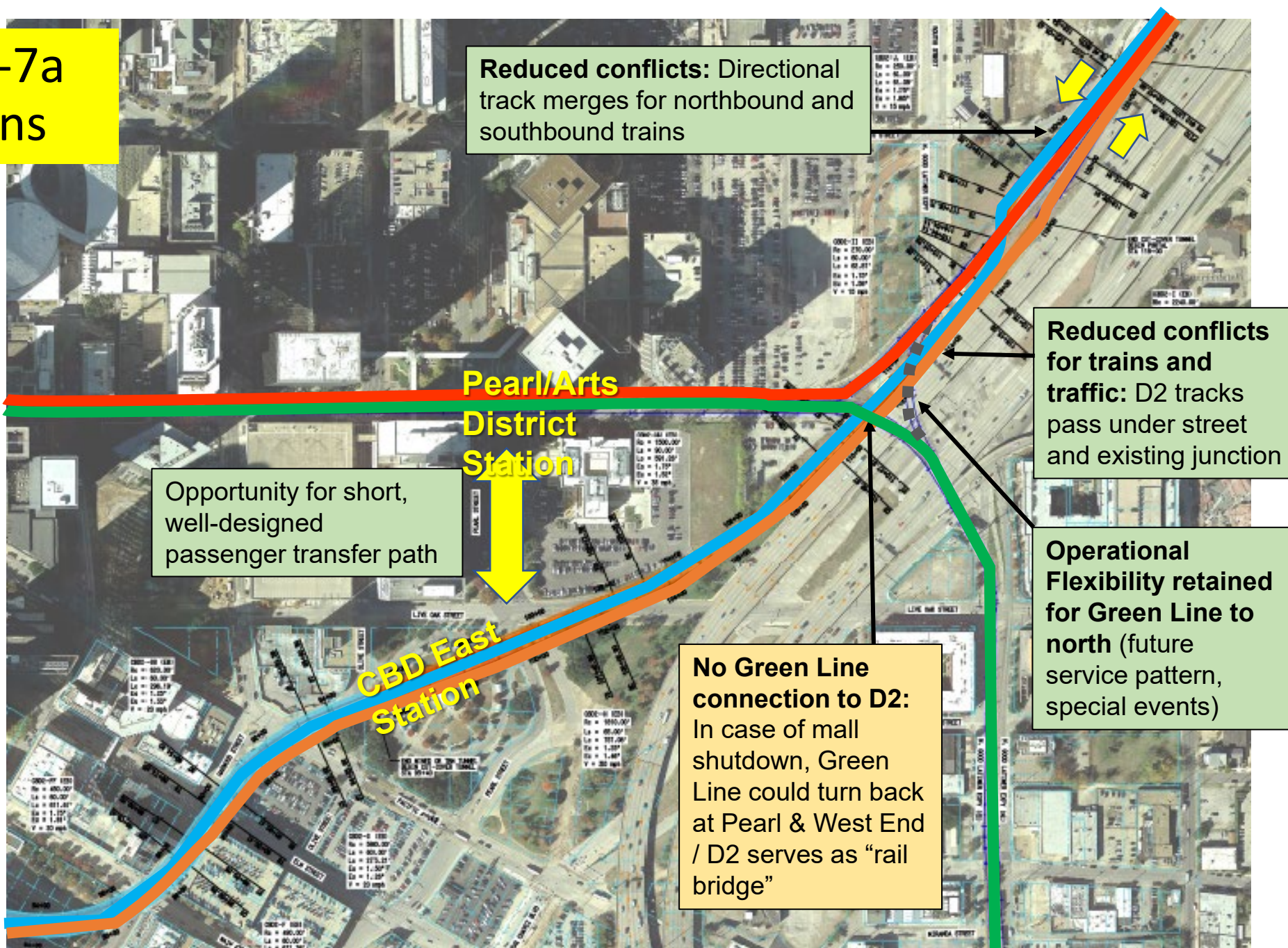
DATE: 09/29/2021

PROJECT: LIGHT RAIL TRANSIT SYSTEM  
LINE SECTION CSD-2  
EAST END EVALUATION  
OPTION 3-7a  
HARWOOD ST. TO EXIST. PORTAL

**DART**



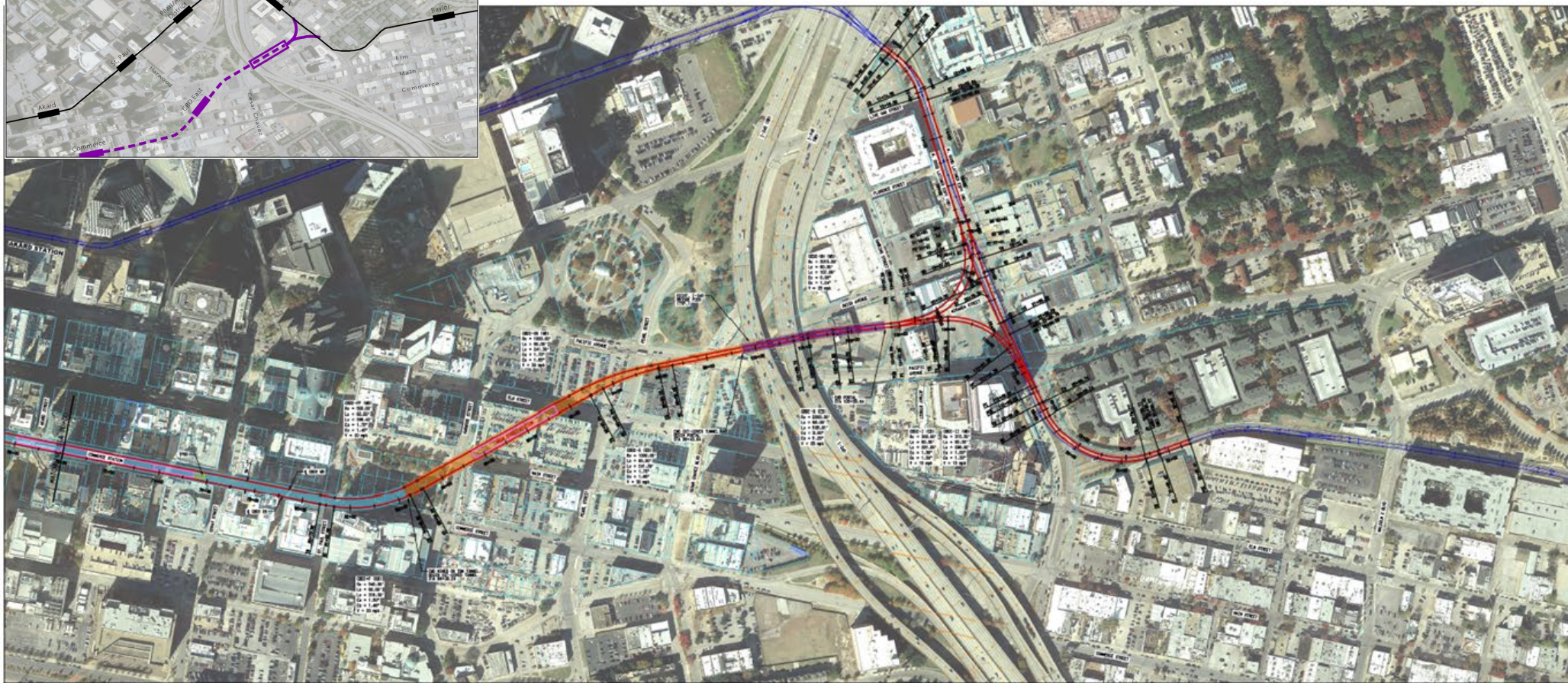
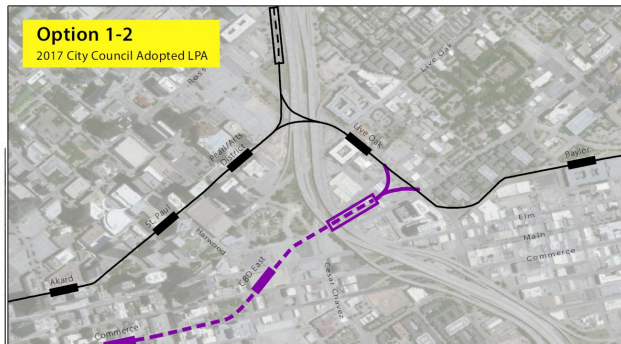
# Option 3-7a Operations



# **Appendix 2: Options Not Recommended Second Level Screening**



# Option 1-2



SCALE: 1/8" = 1' @ 11.5"

**PLAN VIEW LEGEND**

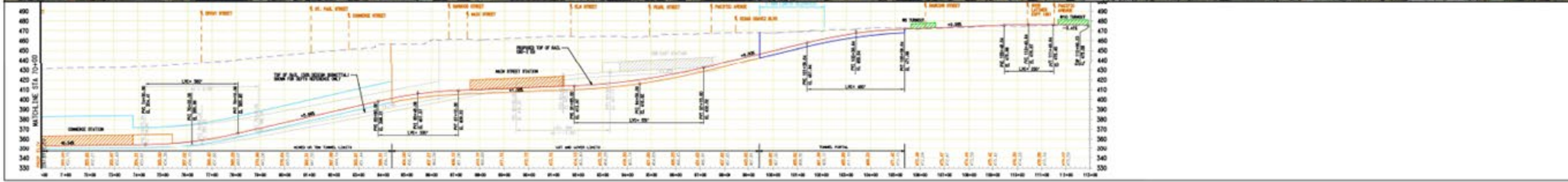
- STATION (SEE LIGHT RAIL ALIGNMENT)
- APPROXIMATE STATION LIMITS
- APPROXIMATE OF THE LIGHT RAIL
- APPROXIMATE TANGENT LIMITS
- STATION PLATFORM
- STATION
- STREET ACCOMMODATION LIMITS
- STATION PLATFORM LIMITS
- STATION TANGENT LIMITS
- STATION TANGENT LIMITS

**PROFILE VIEW LEGEND**

- APPROXIMATE OF LIGHT RAIL ALIGNMENT
- STATION
- APPROXIMATE OF THE LIGHT RAIL
- APPROXIMATE OF THE LIGHT RAIL
- STATION PLATFORM LIMITS
- STATION TANGENT LIMITS
- STATION TANGENT LIMITS

**NOTES:**

1. STATION, AND OFF AND OVER LIMITS ARE SUBJECT TO CHANGE.
2. DIMENSIONS BETWEEN APPROXIMATE LOCATIONS ARE NOT GUARANTEED.



NOT AN APPROVED DRAWING  
CONCEPTUAL DESIGN

**IN-PROGRESS**

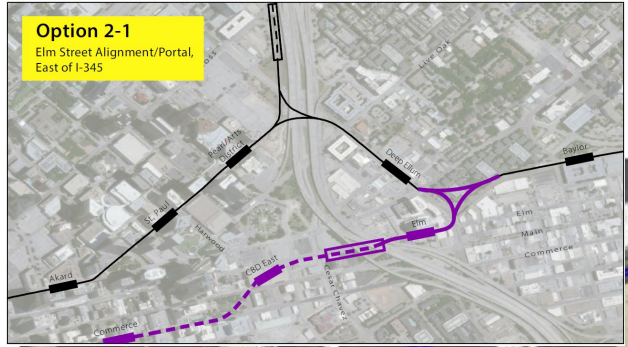
FOR REVIEW OR RECORD  
DO NOT CONSIDER FOR CONSTRUCTION

DATE: 09/29/2021

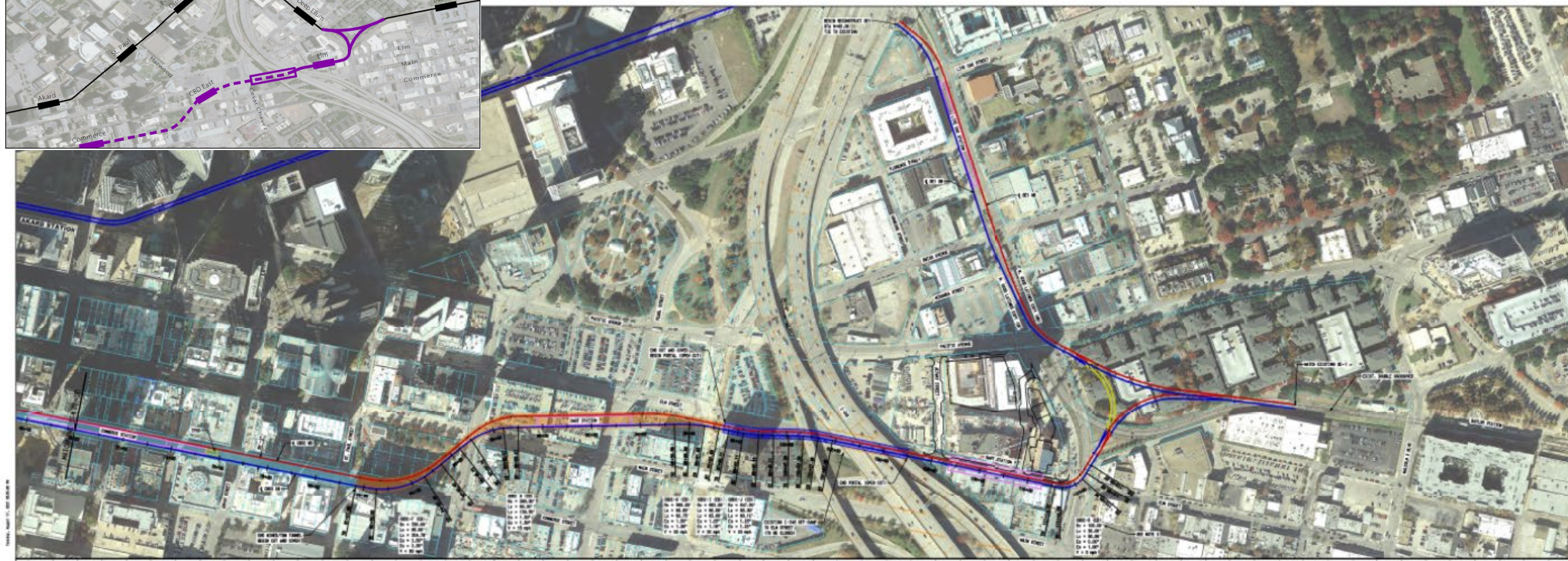
PROJECT: LIGHT RAIL TRANSIT SYSTEM  
LINE SECTION CSD-2  
EAST END EVALUATION  
OPTION 1-2  
CITY COUNCIL ADOPTED LPA

**DART**





# Option 2-1



SCALE: 1/8" = 100' FEET

PLAN VIEW LEGEND

- EXISTING AND PROPOSED RIGHT OF WAY
- EXISTING AND PROPOSED PORTAL LIMITS
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE SET AND COVER LIMITS
- APPROXIMATE TANGENT LIMITS
- RIGHT OF WAY
- RIGHT OF WAY
- STREET RECONSTRUCTION LIMITS
- PROPOSED SET AND COVER LIMITS
- PROPOSED PORTAL LIMITS
- PROPOSED TANGENT LIMITS
- PROPOSED TANGENT LIMITS

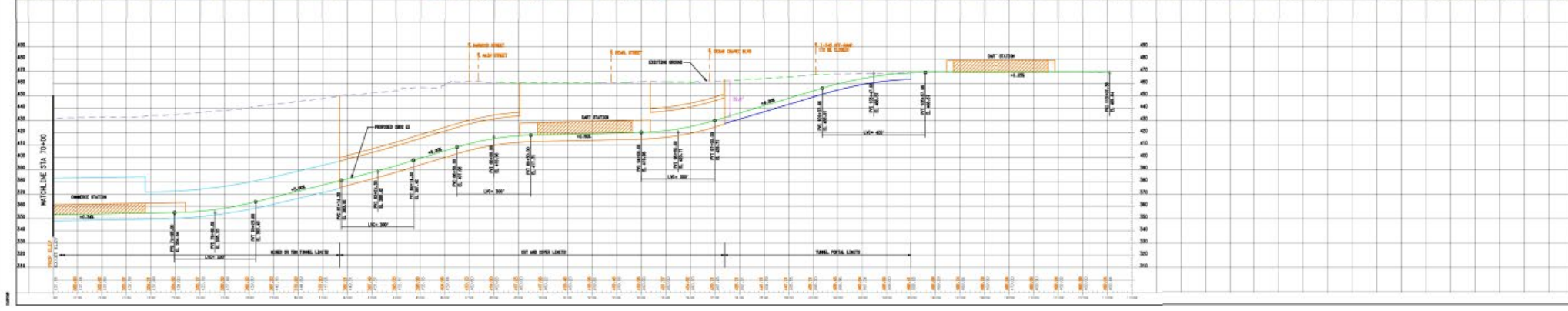
PROFILE VIEW LEGEND

- PROPOSED SET AND COVER LIMITS
- EXISTING GRADE
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE SET AND COVER LIMITS
- APPROXIMATE TANGENT LIMITS
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED TANGENT LIMITS

NOTES

- PORTAL AND SET AND COVER LIMITS ARE SUBJECT TO CHANGE.
- EXISTING AND PROPOSED GRADE LIMITS ARE SUBJECT TO CHANGE.
- EXISTING AND PROPOSED GRADE LIMITS ARE SUBJECT TO CHANGE.
- EXISTING AND PROPOSED GRADE LIMITS ARE SUBJECT TO CHANGE.
- EXISTING AND PROPOSED GRADE LIMITS ARE SUBJECT TO CHANGE.

NOT AN APPROVED DRAWING  
CONCEPTUAL DESIGN



IN-PROGRESS

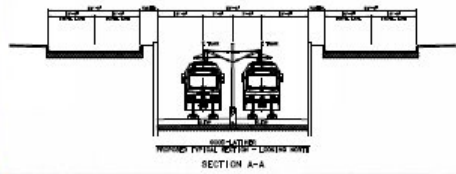
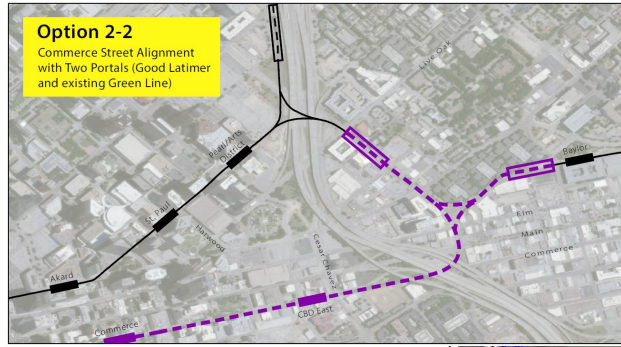
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DART

LIGHT RAIL TRANSIT SYSTEM  
LINE SECTION EBD-2  
EAST END EVALUATION  
OPTION II-1  
ELM STREET ALIGNMENT



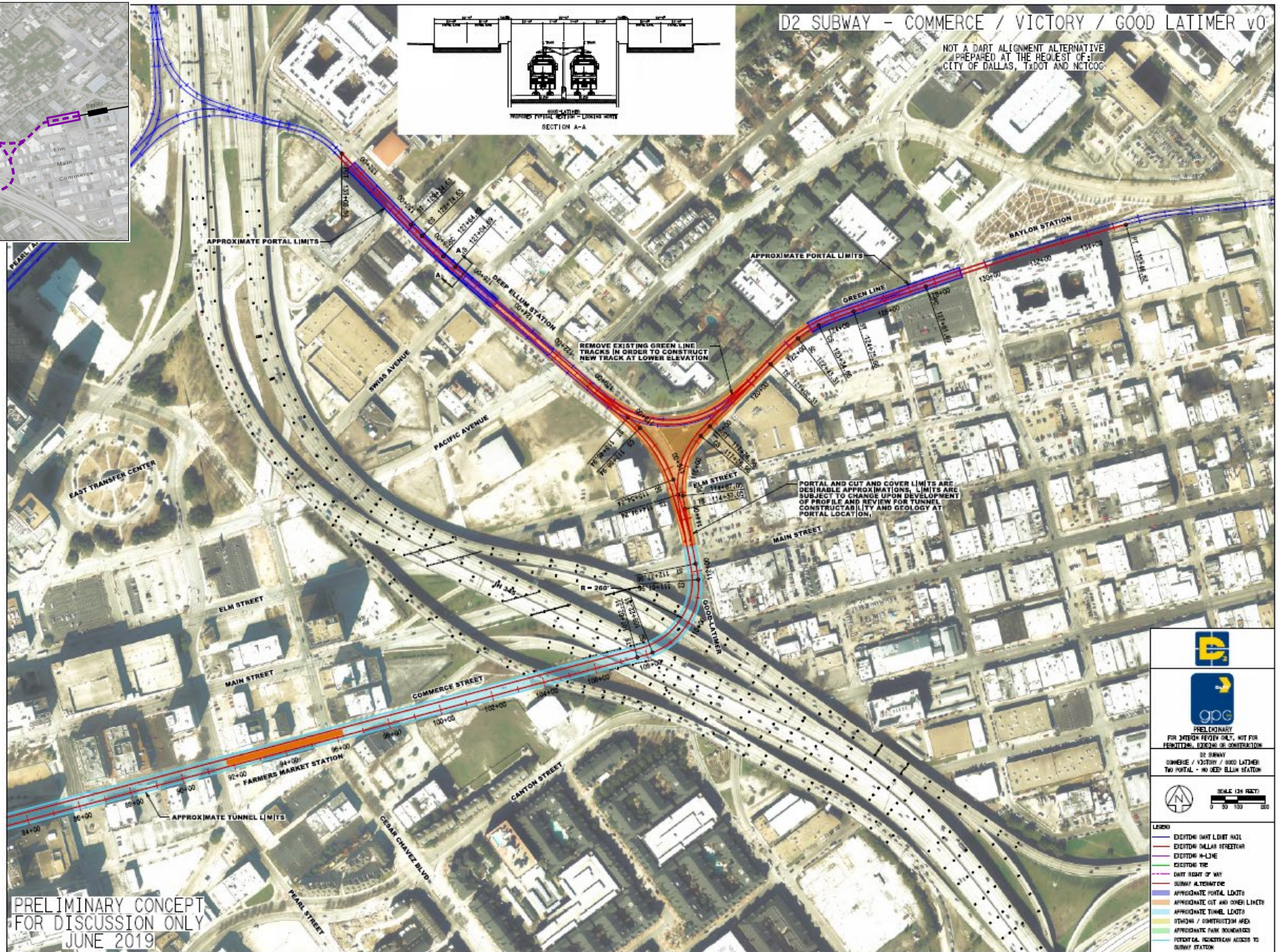
**Option 2-2**  
 Commerce Street Alignment  
 with Two Portals (Good Latimer  
 and existing Green Line)



**D2 SUBWAY - COMMERCE / VICTORY / GOOD LATIMER v0**

NOT A DART ALIGNMENT ALTERNATIVE  
 PREPARED AT THE REQUEST OF:  
 CITY OF DALLAS, TxDOT AND NCTCOG

# Option 2-2



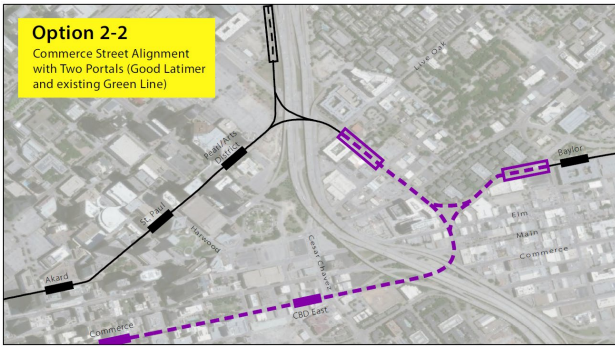
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 PERMITTING, EXERCISE OR CONSTRUCTION

D2 SUBWAY  
 COMMERCE / VICTORY / GOOD LATIMER  
 TWO PORTAL - NO DEEP ELLIM STATION

**LEGEND**

- EXISTING DART LIGHT RAIL
- EXISTING DALLAS FREETHEAT
- EXISTING M-LINE
- EXISTING M-LINE
- DART RIGHT OF WAY
- SUBWAY ALTERNATIVE
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE CUT AND COVER LIMITS
- APPROXIMATE TUNNEL LIMITS
- STATION / CONSTRUCTION AREA
- APPROXIMATE PARK BOUNDARIES
- POTENTIAL BICYCLEWAY ACCESS TO SUBWAY STATION



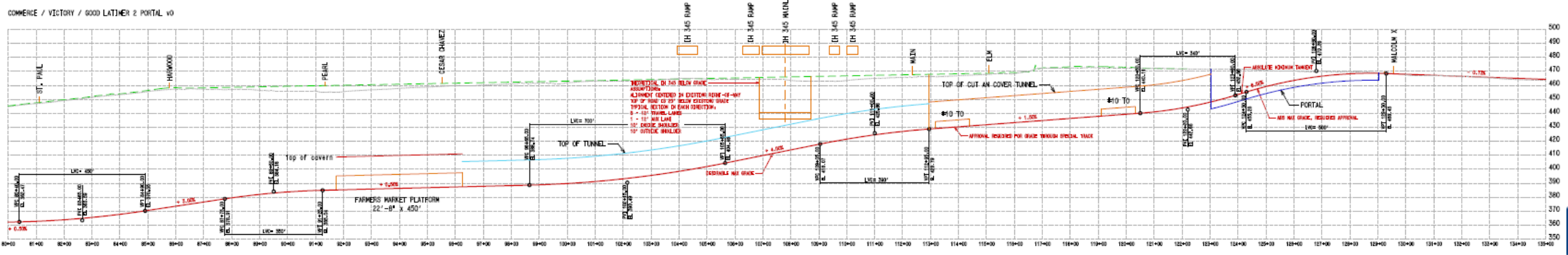
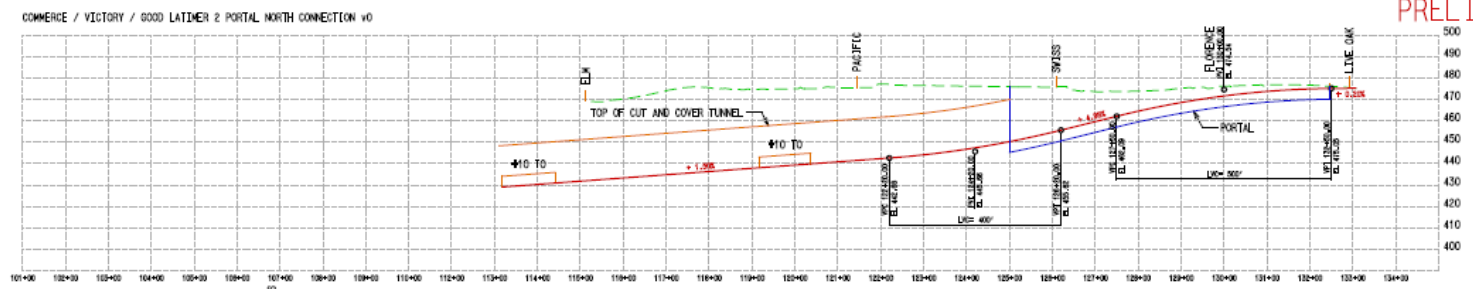


# Option 2-2

DRAFT - FOR DISCUSSION ONLY  
SUBJECT TO CHANGE

NOT A DART ALIGNMENT ALTERNATIVE  
PREPARED AT THE REQUEST OF  
CITY OF DALLAS, TxDOT AND METCOG

PRELIMINARY



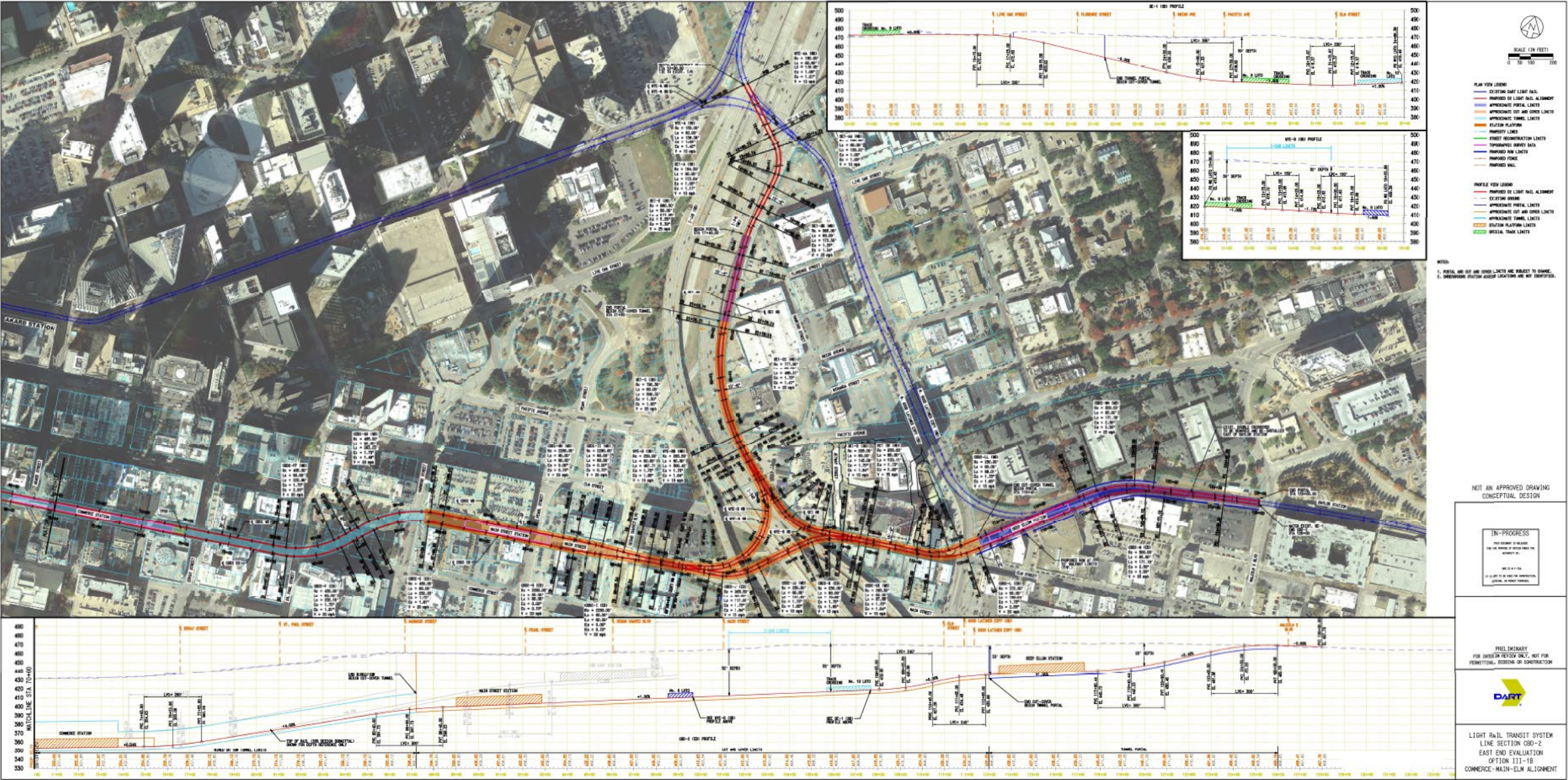
PRELIMINARY



PRELIMINARY  
FOR INTERIM REVIEW ONLY, NOT FOR  
PERMITTING, BIDDING OR CONSTRUCTION



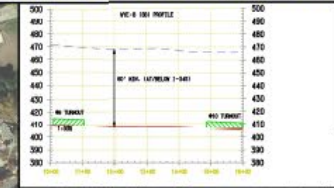
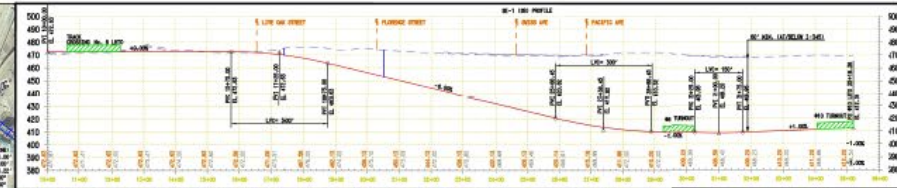
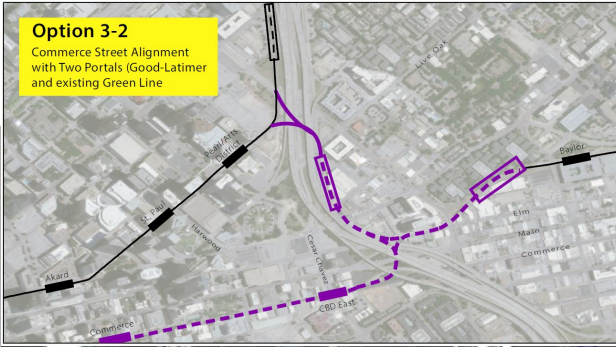
# New Option 3-1a





# Option 3-2

**Option 3-2**  
 Commerce Street Alignment  
 with Two Portals (Good-Latimer  
 and existing Green Line)



SCALE (IN FEET)  
 0 50 100 150

**PLAN VIEW LEGEND**

- CUSTOM HART LIGHT RAIL
- PROVIDED BY LIGHT RAIL ALIGNMENT
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE CUT AND COVER LIMITS
- APPROXIMATE TUNNEL LIMITS
- STATION PLATFORM
- PROPOSED LANE
- STREET RECONSTRUCTION LIMITS
- TRANSMISSION SERVICE TOWER
- PROPOSED SIGN LIMITS
- PROPOSED FENCE
- PROPOSED WALL

**PROFILE VIEW LEGEND**

- PROVIDED BY LIGHT RAIL ALIGNMENT
- CUSTOM GROUND
- APPROXIMATE PORTAL LIMITS
- APPROXIMATE CUT AND COVER LIMITS
- APPROXIMATE TUNNEL LIMITS
- SPECIAL TRUCK LIMITS

**NOTES:**

1. PORTAL, CUT AND COVER LIMITS ARE SUBJECT TO CHANGE.
2. UNDERGROUND TUNNEL CROSS SECTIONS ARE NOT SHOWN.

NOT AN APPROVED DRAWING  
 CONCEPTUAL DESIGN

**IN-PROGRESS**  
 PRELIMINARY  
 FOR DESIGNER REVIEW ONLY. NOT FOR PERMITTING, BIDDING OR CONSTRUCTION.

**DART**

LIGHT RAIL TRANSIT SYSTEM  
 LINE SECTION CSD-2  
 EAST END EVALUATION  
 OPTION III-2 - COMMERCE ST.  
 WYE BELOW 7-345, TWO PORTALS



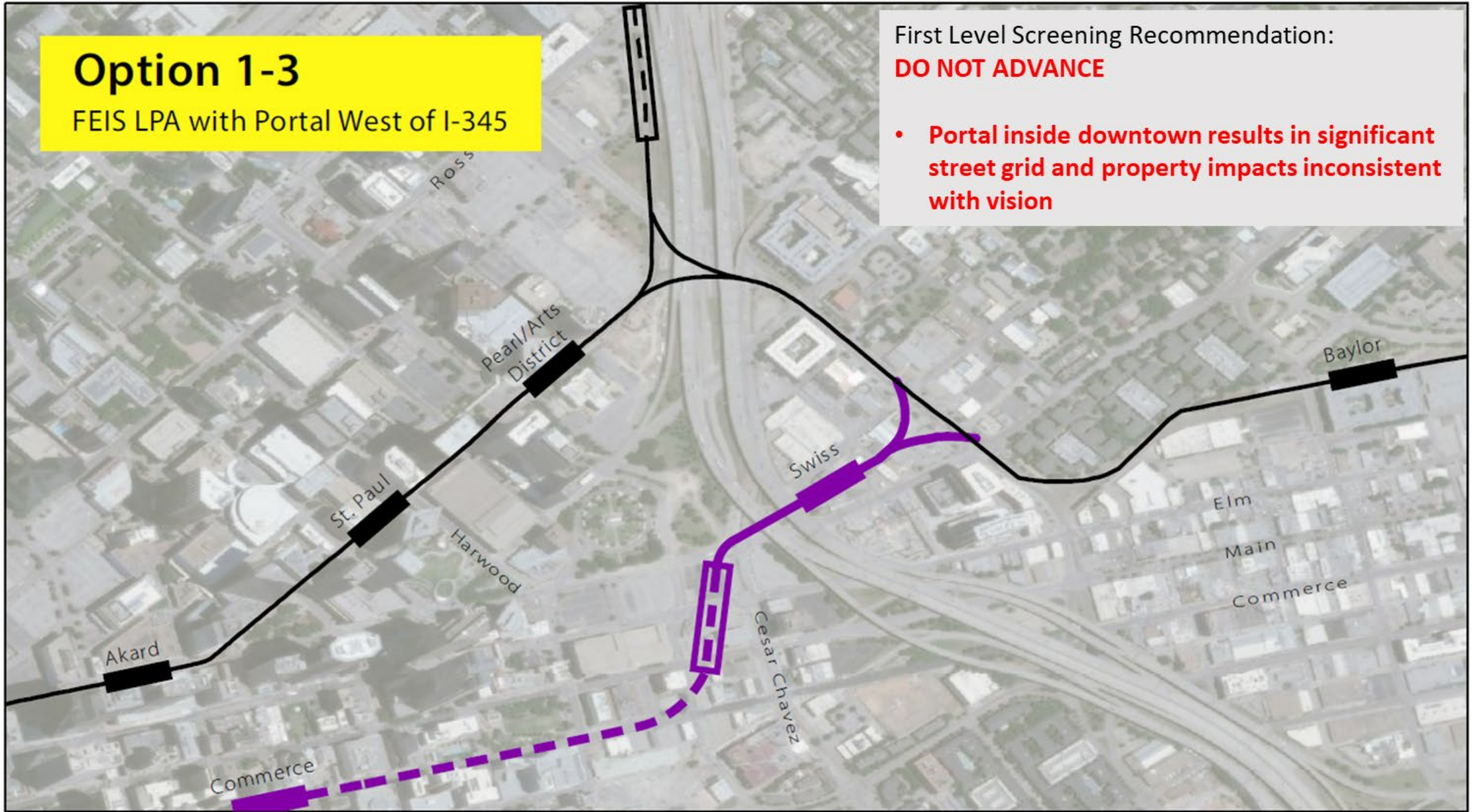
# **Appendix 3: Options Not Recommended First Level Screening**

# Option 1-3

FEIS LPA with Portal West of I-345

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Portal inside downtown results in significant street grid and property impacts inconsistent with vision**



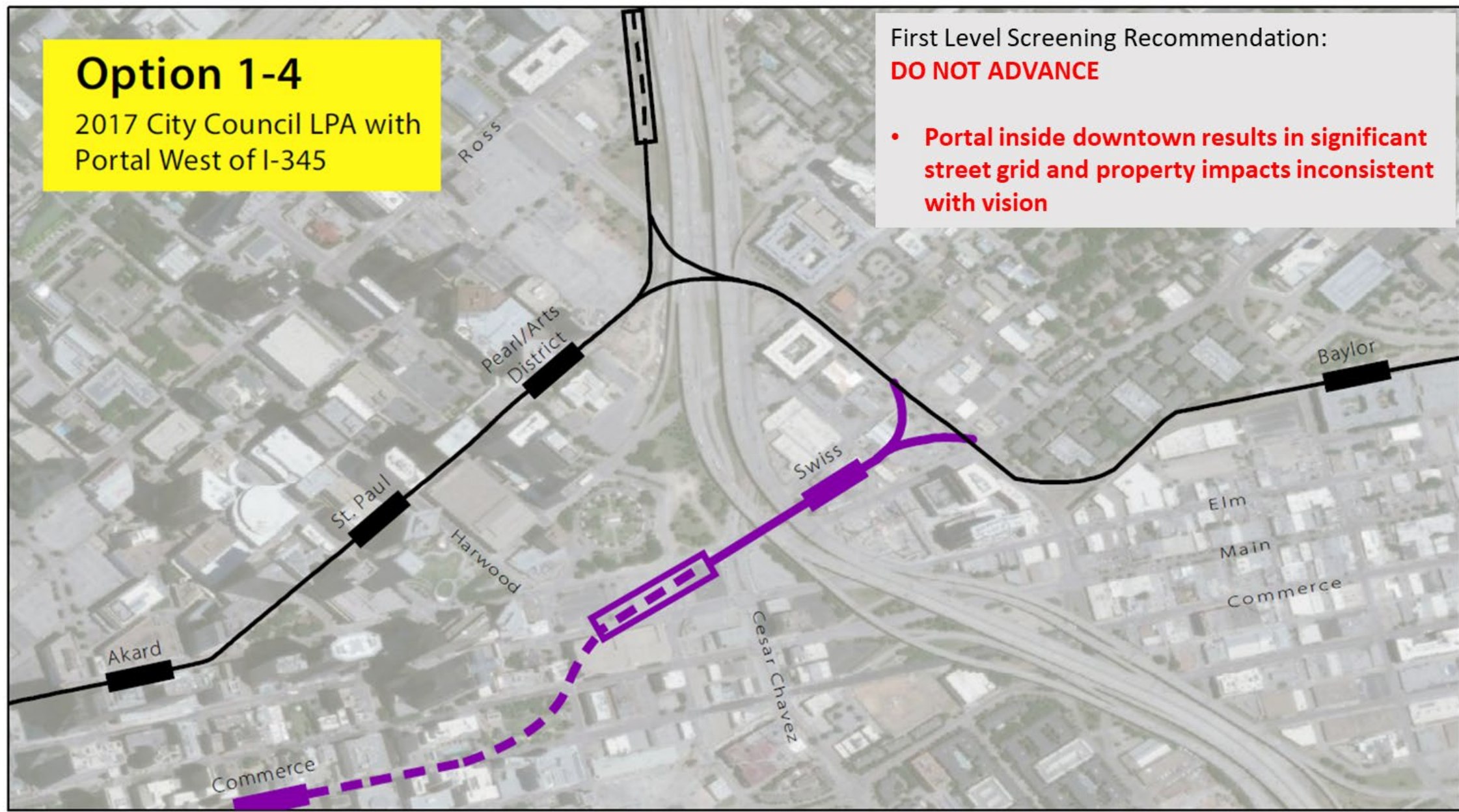


# Option 1-4

2017 City Council LPA with Portal West of I-345

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Portal inside downtown results in significant street grid and property impacts inconsistent with vision**



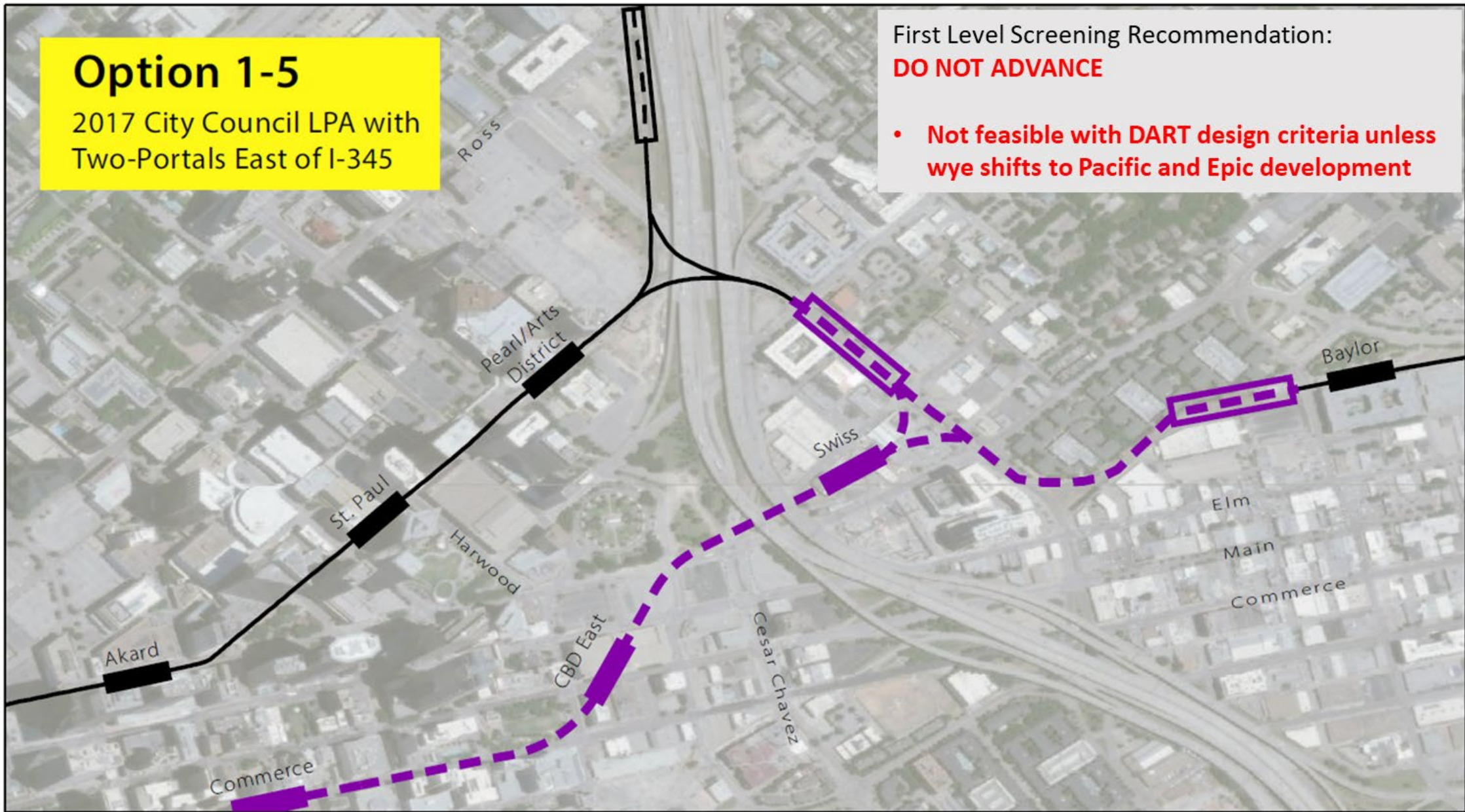


# Option 1-5

2017 City Council LPA with  
Two-Portals East of I-345

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Not feasible with DART design criteria unless wye shifts to Pacific and Epic development**



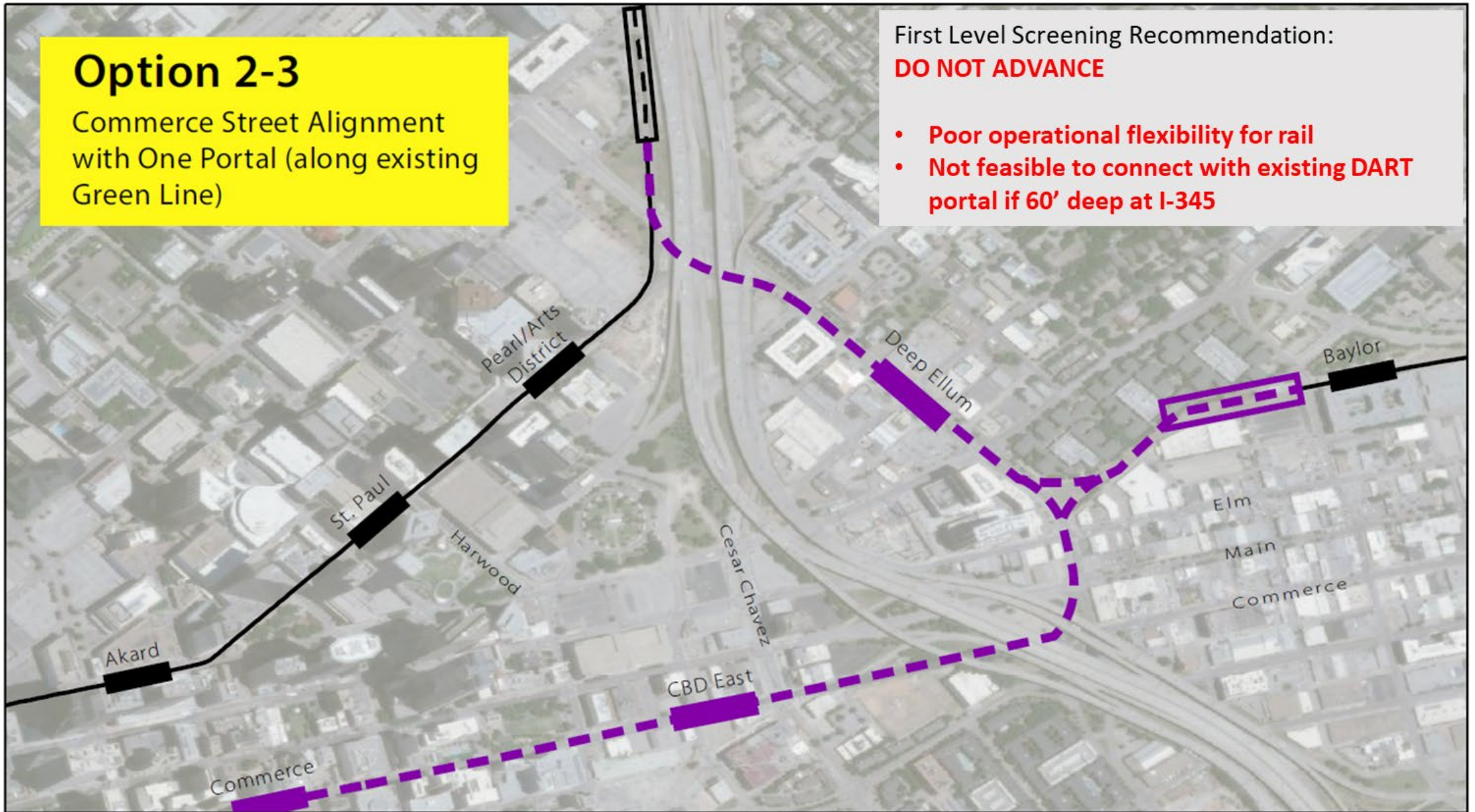


## Option 2-3

Commerce Street Alignment  
with One Portal (along existing  
Green Line)

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Poor operational flexibility for rail**
- **Not feasible to connect with existing DART portal if 60' deep at I-345**



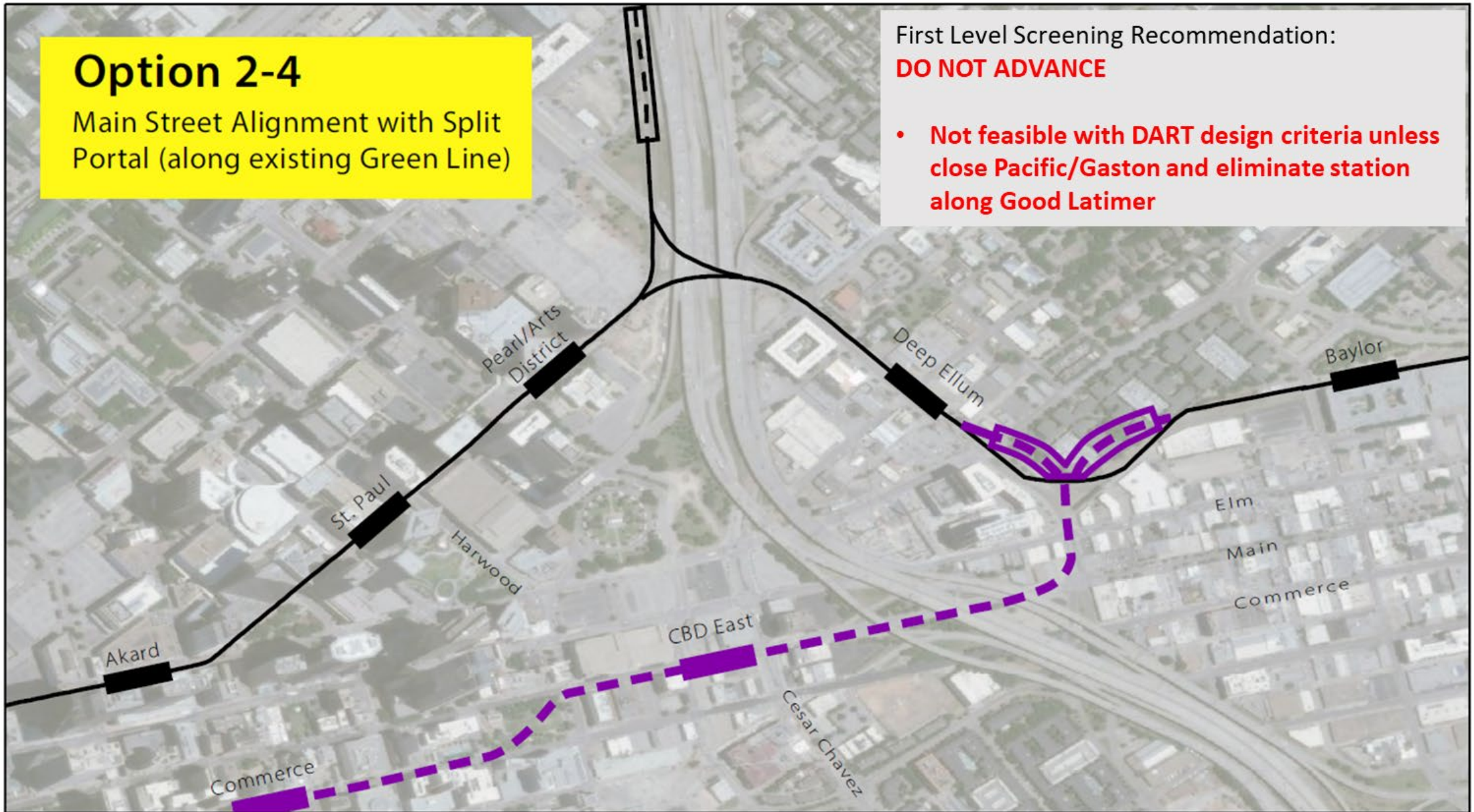


## Option 2-4

Main Street Alignment with Split Portal (along existing Green Line)

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Not feasible with DART design criteria unless close Pacific/Gaston and eliminate station along Good Latimer**



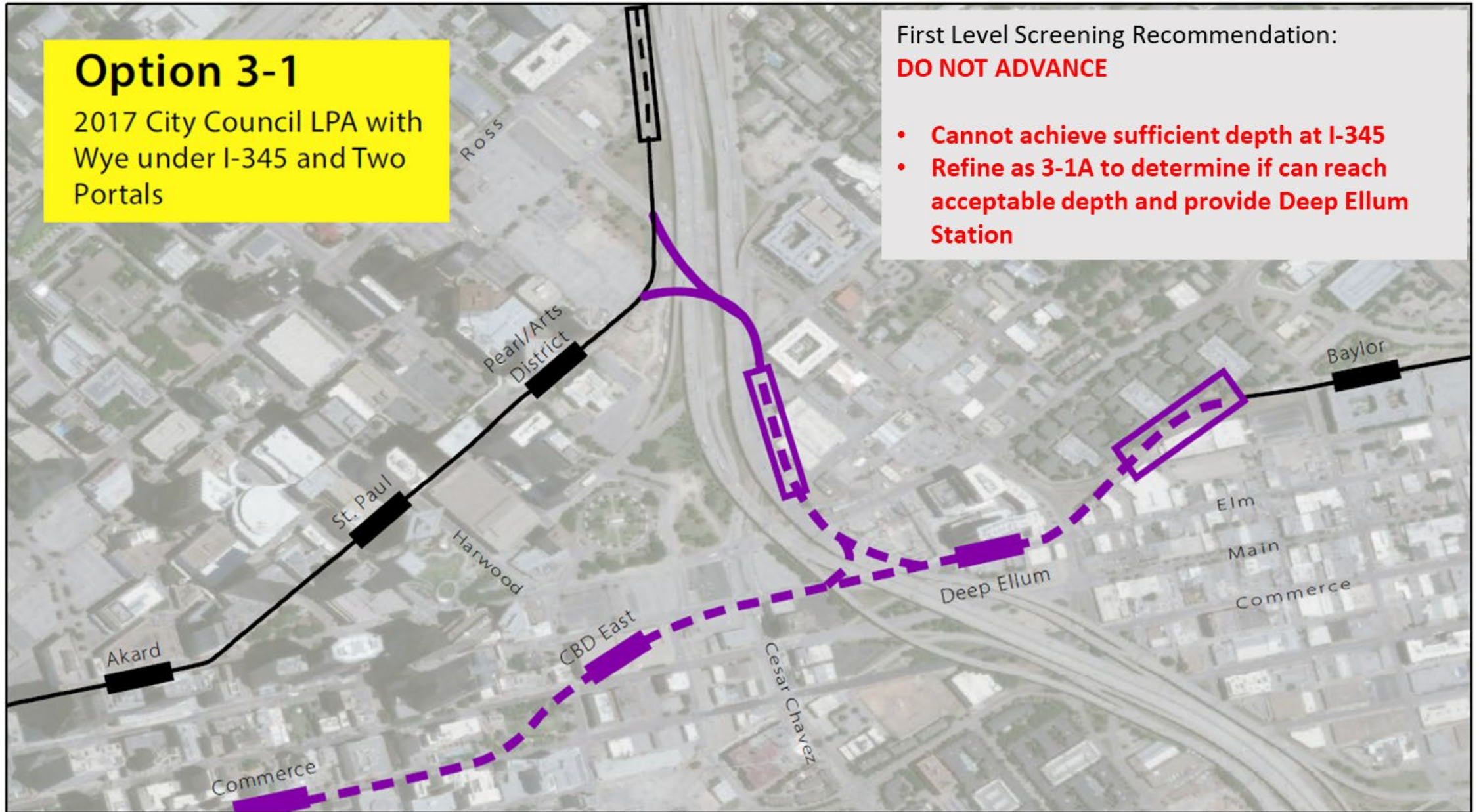


## Option 3-1

2017 City Council LPA with  
Wye under I-345 and Two  
Portals

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Cannot achieve sufficient depth at I-345**
- **Refine as 3-1A to determine if can reach acceptable depth and provide Deep Ellum Station**



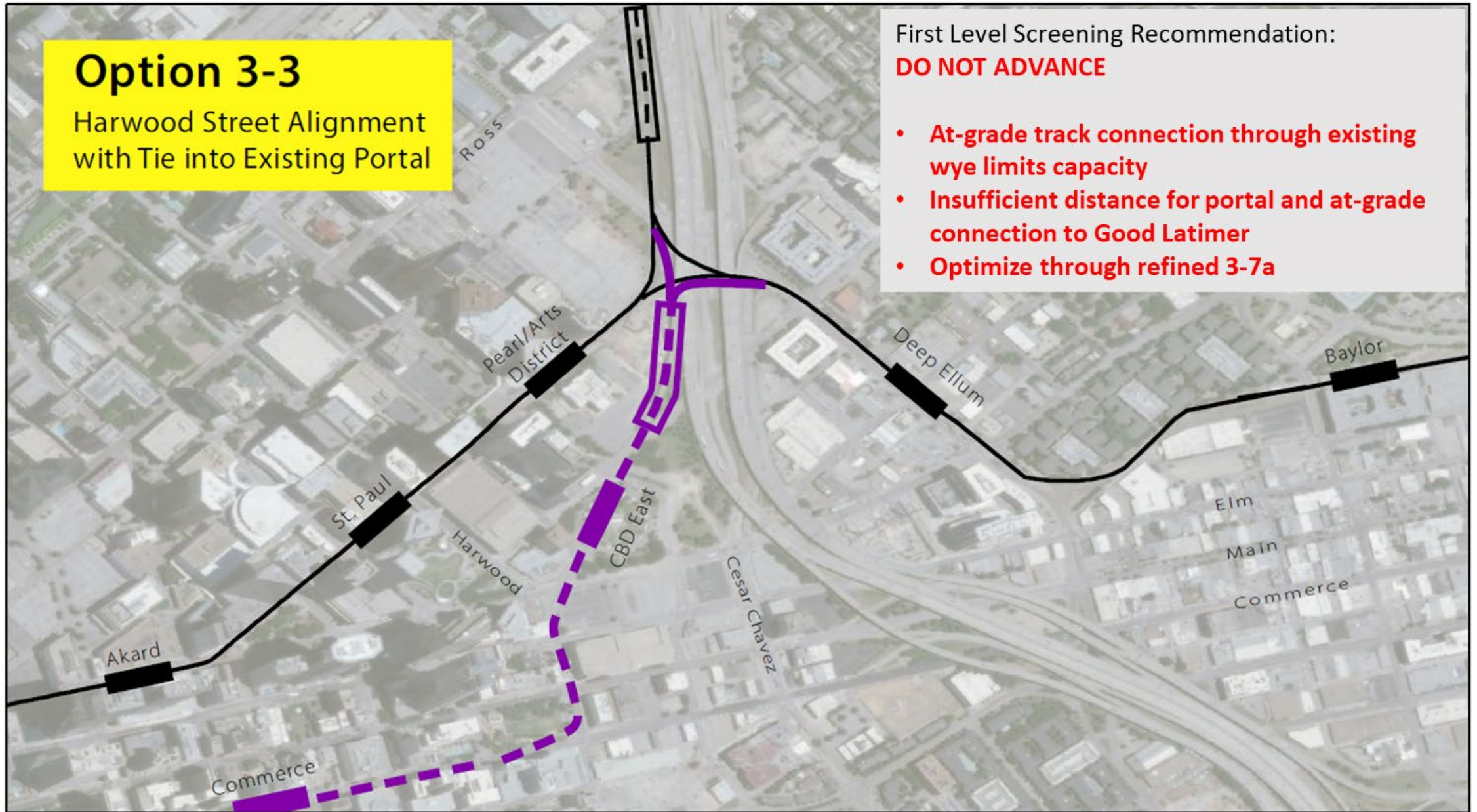


## Option 3-3

Harwood Street Alignment  
with Tie into Existing Portal

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **At-grade track connection through existing wye limits capacity**
- **Insufficient distance for portal and at-grade connection to Good Latimer**
- **Optimize through refined 3-7a**



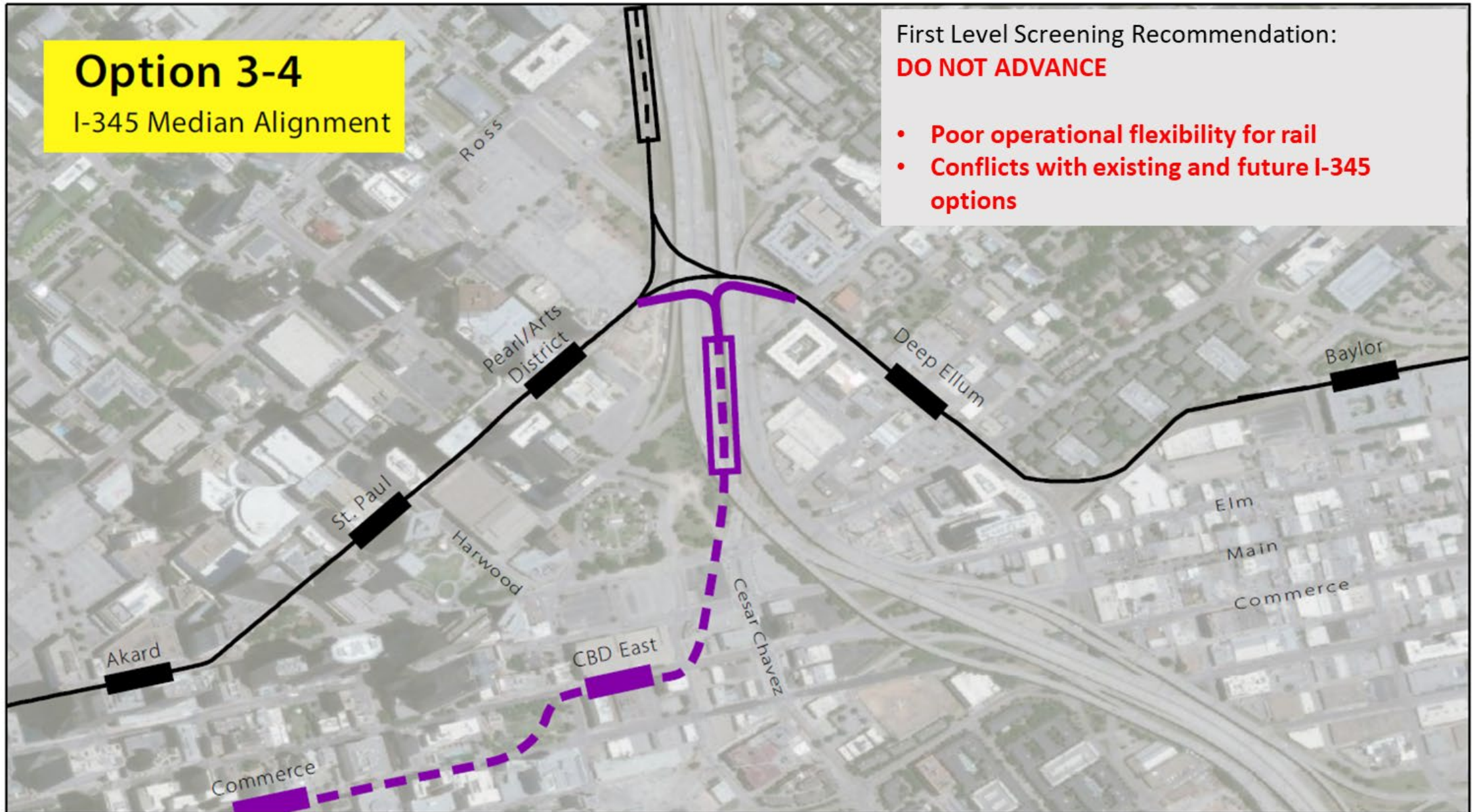


## Option 3-4

I-345 Median Alignment

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Poor operational flexibility for rail**
- **Conflicts with existing and future I-345 options**



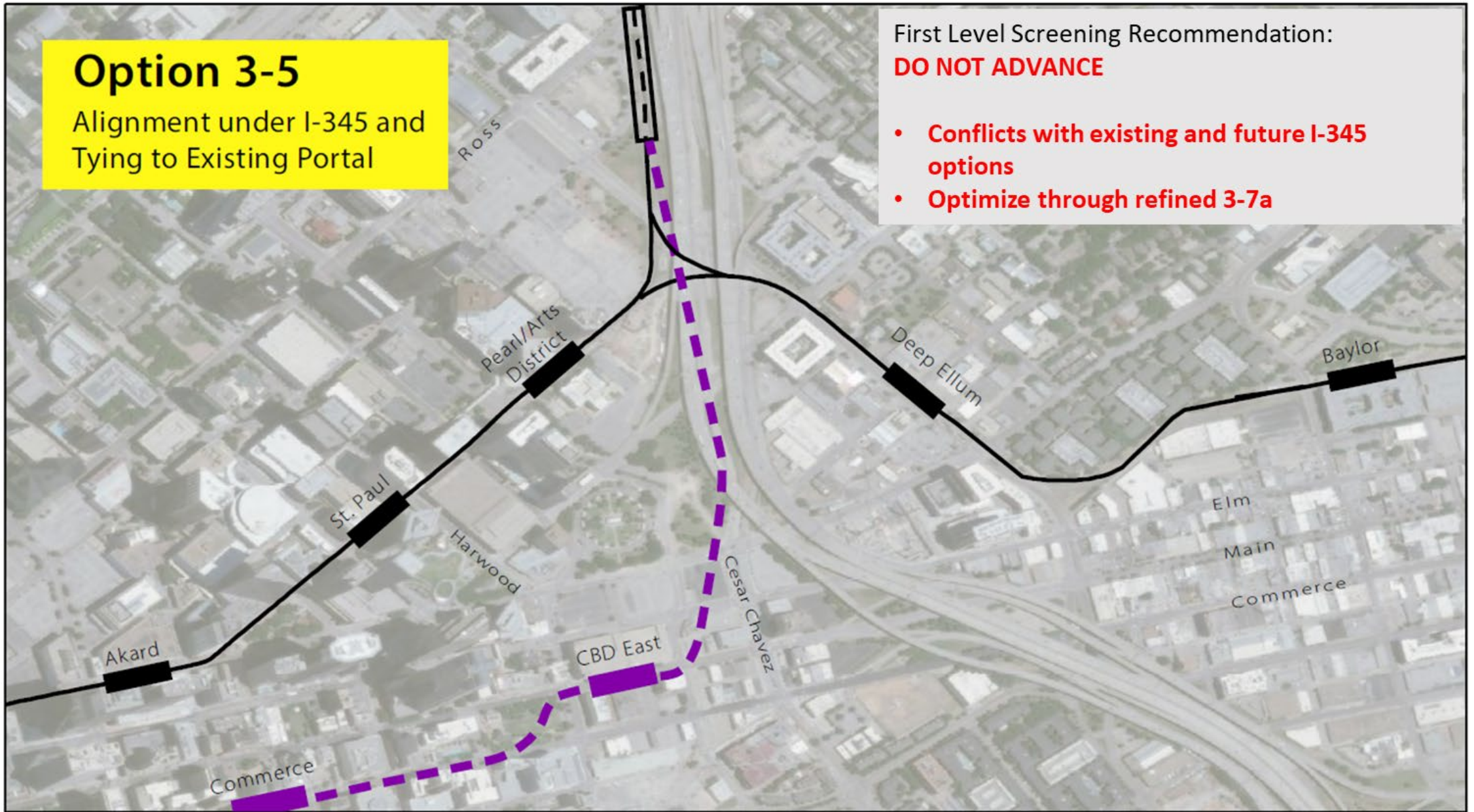


## Option 3-5

Alignment under I-345 and  
Tying to Existing Portal

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Conflicts with existing and future I-345 options**
- **Optimize through refined 3-7a**



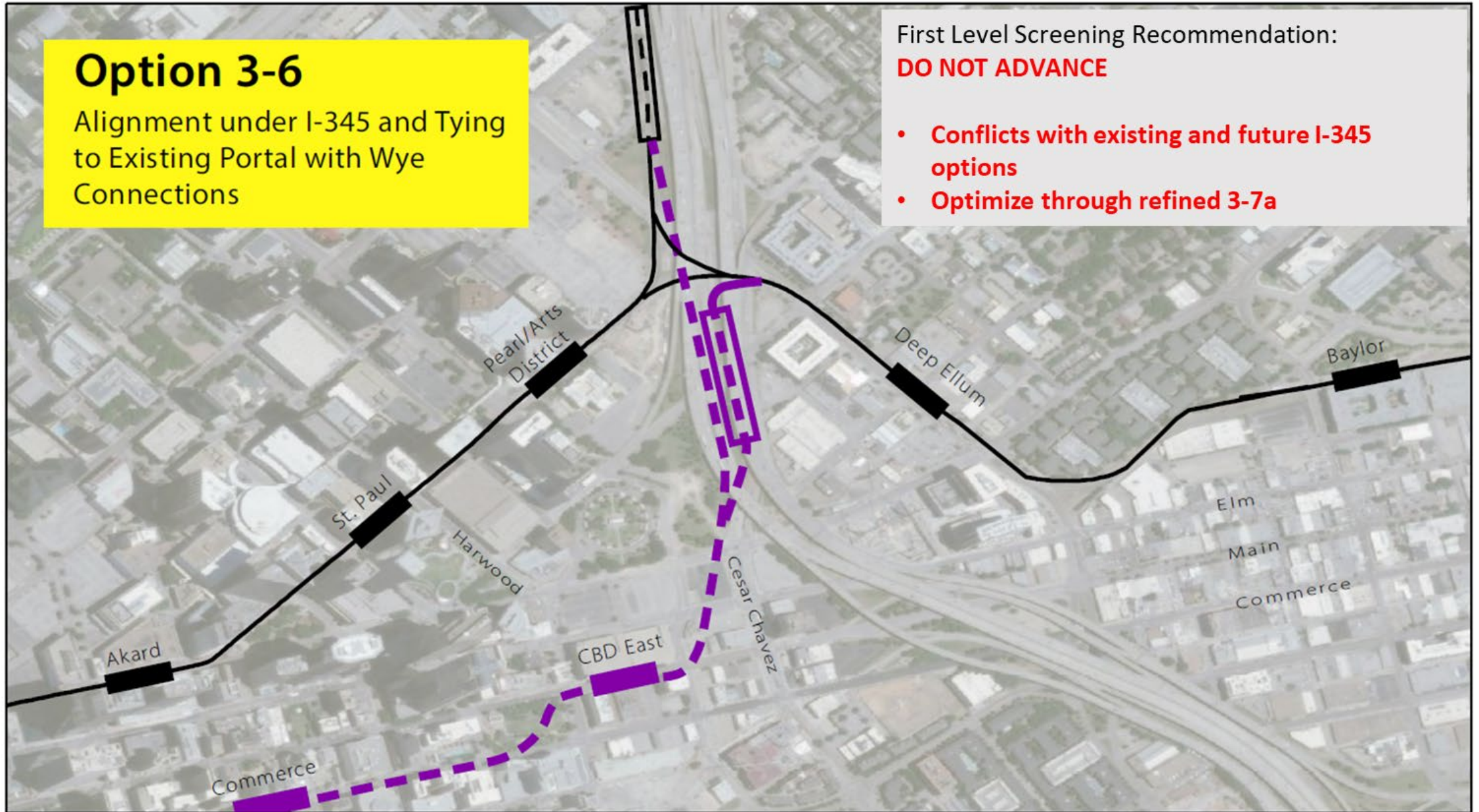


## Option 3-6

Alignment under I-345 and Tying to Existing Portal with Wye Connections

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Conflicts with existing and future I-345 options**
- **Optimize through refined 3-7a**





## Option 3-7

Alignment Under Southbound I-345 Access Road

First Level Screening Recommendation:  
**DO NOT ADVANCE**

- **Optimize as a new refined 3-7a with 3-3 alignment using Live Oak ramp ROW and station at CBD East Transfer site**

