SOUTHWEST

Green Line LRT Extension

Joint Business and Community Advisory Committee Meeting

July 25, 2013

METROPOLITAN COUNCIL | Metro Transit | FTA | Transit Improvement | Hennepin

EDEN PRAIRIE | MINNETONKA | EDINA | HOPKINS | ST. LOUIS PARK | MINNEAPOLIS

Today's Topics

- Welcome and Introductions
- Supplemental Draft Environmental Impact Statement (SDEIS) Update
- Project Scope and Cost Estimate Presentation
- Summary of BAC/CAC Comments
- Adjourn

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Green Line LRT Extension

Supplemental Draft Environmental Impact Statement Update

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Project Scope and Cost Estimates

Project Scope and Cost Estimate

- Project scope refinement during Project Development
  - Reflects input and coordination:
    - DEIS comments – received 900+ public comments
    - City/Agency input – held 100+ Issue Resolution Team meetings
    - Project advisory input - BAC, CAC, SWCMC
    - Public input received from 13 public open houses (1000+ public comments) and 155+ community/stakeholder meetings
    - TSAAP coordination
  - Follows guiding principles for major scoping decisions
  - Establishes scope for Municipal Consent Plans
  - Provides context for continued discussions with stakeholders as project moves forward

SWLRT Project Development Technical Issues

Revision 04: 28 May 2013

Technical Issues:

1. Eden Prairie Alignment
2. Nine Mile Creek Crossing
3. Golden Triangle Station
4. Shady Oak Road & TH 212 Crossing
5. City West Station & TH 62 Crossing
6. Opus Station
7. Opus Hill/Minnetonka-Hopkins Bridge
8. Shady Oak Station

9. PEC West/PEC East Interface Point

10. Downtown Hopkins Station
11. Excelsior Blvd. Crossing
12. Blake Station
13. Louisiana Station
14. Wooddale Station
15. TH 100
16. Beltline Station
17. West Lake Station
18. Kenilworth Corridor
19. Bassett Creek Valley Corridor
20. Royalston Station/Interchange Project Coordination
21. Freight Rail Co-location/Relocation Alternatives

PEC West

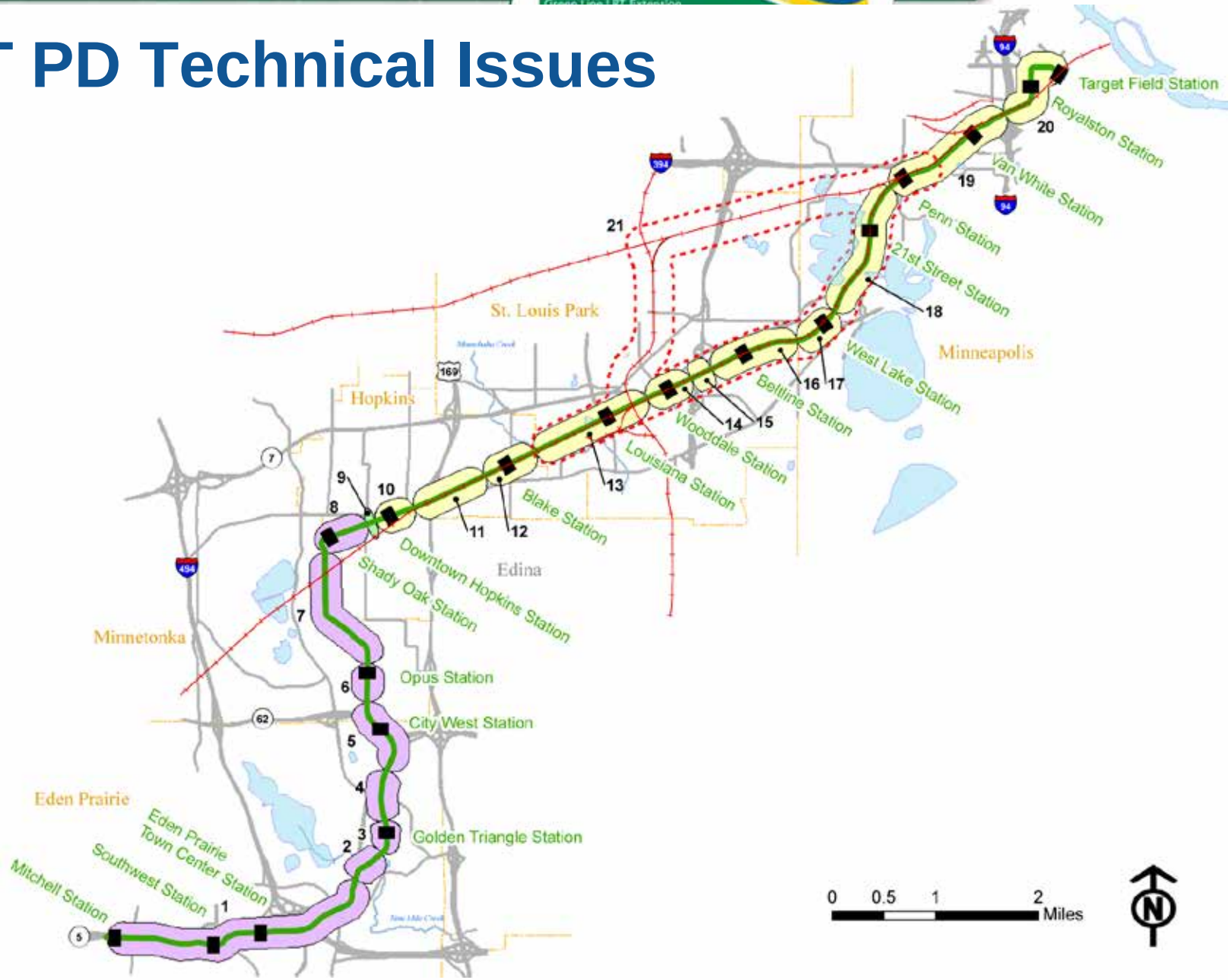
PEC East

Joint PEC West/PEC East

System-wide Technical Issues (not shown):

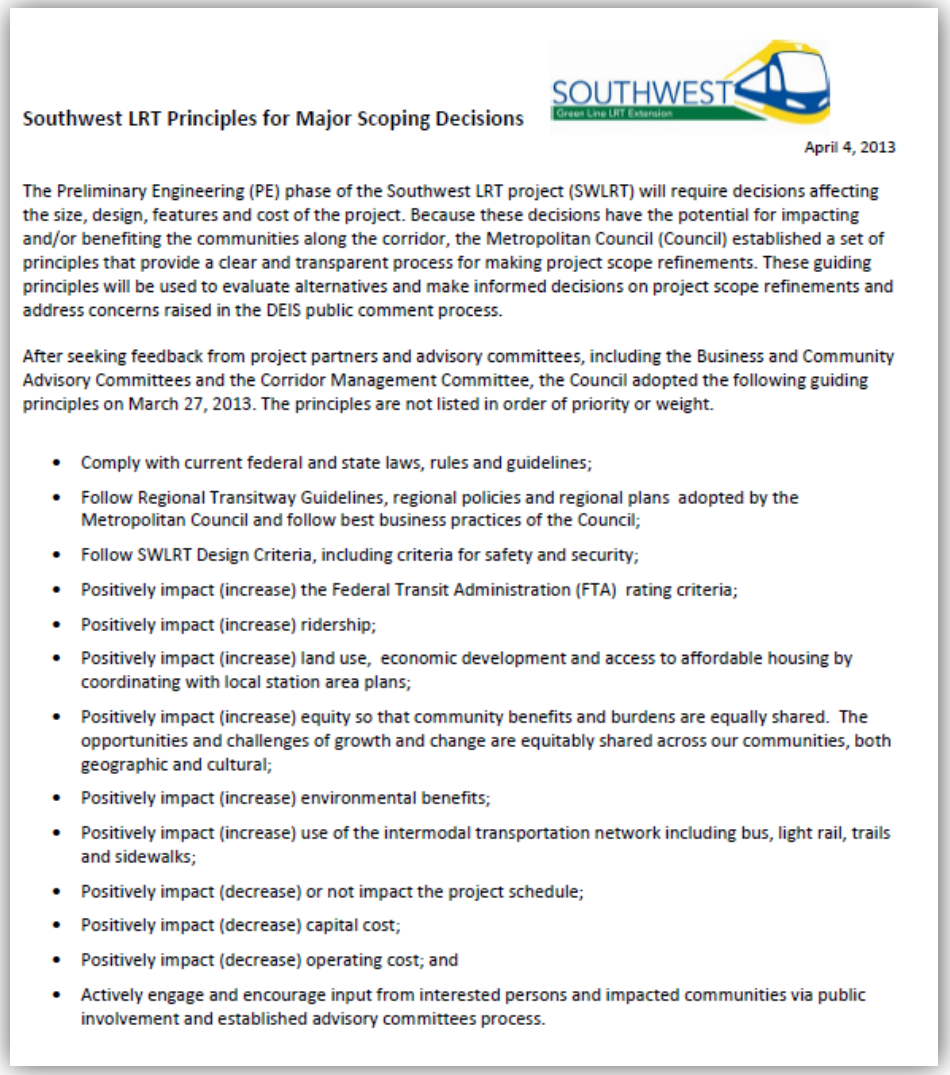
22. Traction Power Substation and Signal Bungalow Locations
23. Operation & Maintenance Facility (OMF) Location
24. Park & Ride, Kiss & Ride and Bus Layover Locations
25. Trails and LRT Interface Coordination

SWLRT PD Technical Issues



Principles for SWLRT Major Scoping Decisions (see handout)

- Purpose
  - Establish a set of decision-making principles that are clear and transparent
  - Address concerns raised in the DEIS public comment process
  - Evaluate project elements in a consistent manner



Southwest LRT Principles for Major Scoping Decisions

April 4, 2013

The Preliminary Engineering (PE) phase of the Southwest LRT project (SWLRT) will require decisions affecting the size, design, features and cost of the project. Because these decisions have the potential for impacting and/or benefiting the communities along the corridor, the Metropolitan Council (Council) established a set of principles that provide a clear and transparent process for making project scope refinements. These guiding principles will be used to evaluate alternatives and make informed decisions on project scope refinements and address concerns raised in the DEIS public comment process.

After seeking feedback from project partners and advisory committees, including the Business and Community Advisory Committees and the Corridor Management Committee, the Council adopted the following guiding principles on March 27, 2013. The principles are not listed in order of priority or weight.

- Comply with current federal and state laws, rules and guidelines;
- Follow Regional Transitway Guidelines, regional policies and regional plans adopted by the Metropolitan Council and follow best business practices of the Council;
- Follow SWLRT Design Criteria, including criteria for safety and security;
- Positively impact (increase) the Federal Transit Administration (FTA) rating criteria;
- Positively impact (increase) ridership;
- Positively impact (increase) land use, economic development and access to affordable housing by coordinating with local station area plans;
- Positively impact (increase) equity so that community benefits and burdens are equally shared. The opportunities and challenges of growth and change are equitably shared across our communities, both geographic and cultural;
- Positively impact (increase) environmental benefits;
- Positively impact (increase) use of the intermodal transportation network including bus, light rail, trails and sidewalks;
- Positively impact (decrease) or not impact the project schedule;
- Positively impact (decrease) capital cost;
- Positively impact (decrease) operating cost; and
- Actively engage and encourage input from interested persons and impacted communities via public involvement and established advisory committees process.

Project Scope and Cost Rollout

- Design adjustments and cost estimates
  - Technical Issues (TI) #2 – 20, 22, 24 and 25
  - Big three TI's
    - TI #23 Operations and Maintenance Facility (OMF)
    - TI #1 Eden Prairie Alignment
    - TI #21 Freight Rail Co-location/Relocation

Overall Cost Estimate Methodology

- Cost Estimates
  - Total Project costs include capital improvements, ROW acquisition, contingency and design related costs
  - Based on 2013 Costs
  - Costs are cited in Year of Expenditure ($YOE)

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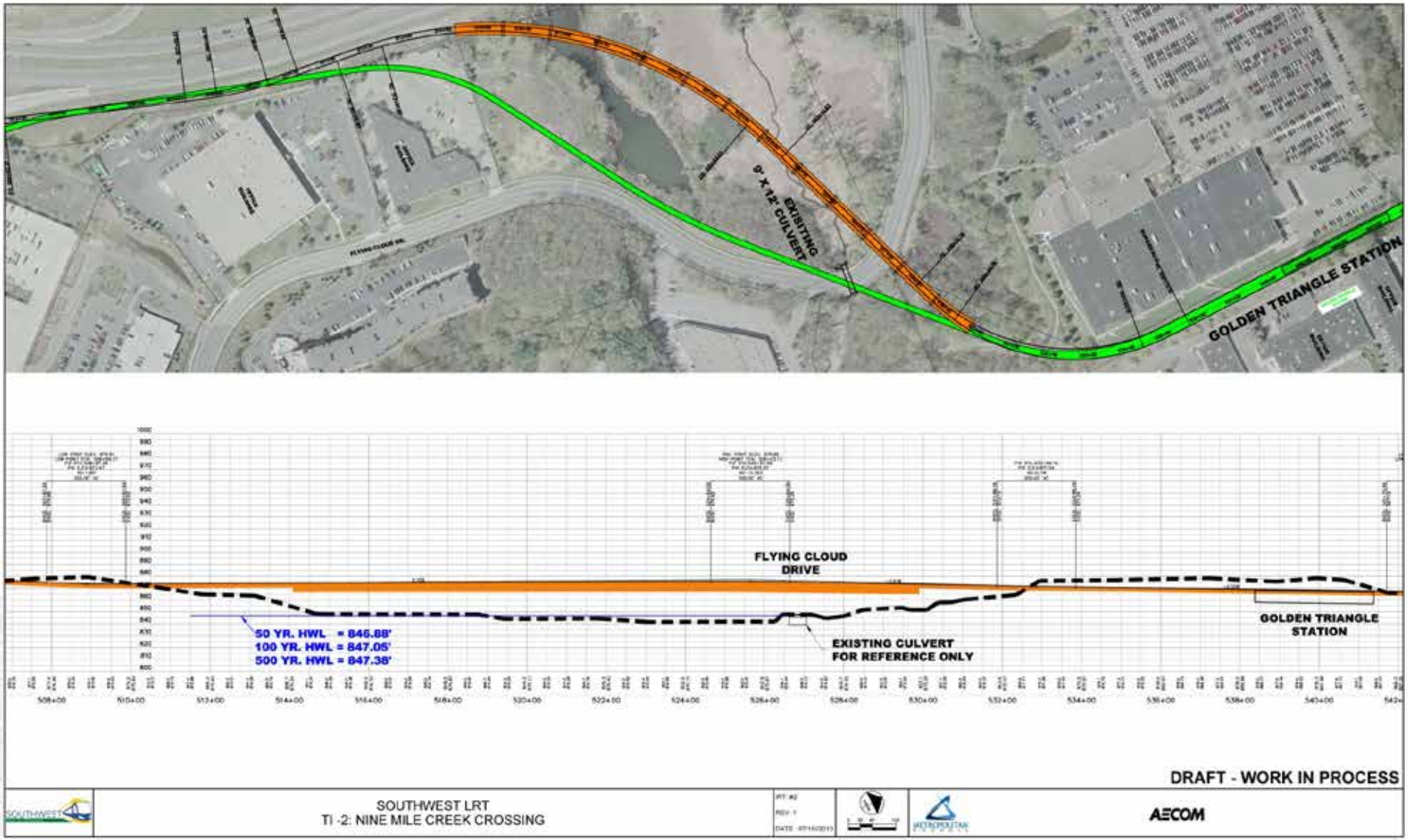
Green Line LRT Extension

Technical Issues
#2 – 20, 22, 24 and 25

TI #2: 9-Mile Creek Crossing

- Design adjustment:
  - Bridge structure over Flying Cloud Drive
- Benefits:
  - Minimizes property acquisition
  - Avoids modifications to Flying Cloud Drive and impacts to charter school
- Revised design cost estimate: $33 M (LPA Δ +$17 M)
- Primary cost driver:
  - Bridge structure over Flying Cloud Drive

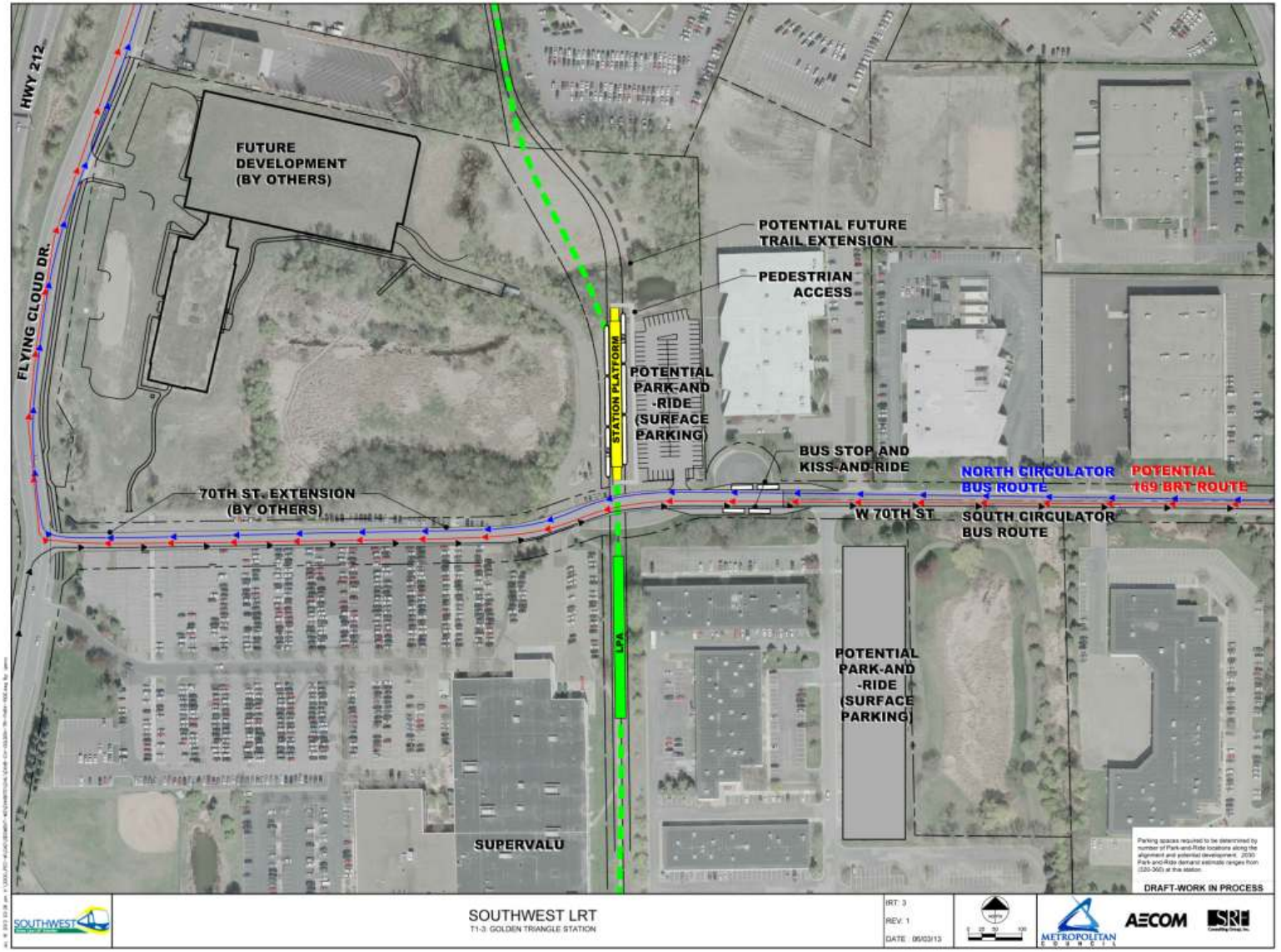
TI #2: 9-Mile Creek Crossing



TI #3: Golden Triangle Station

- Design adjustments:
  - Station platform
  - P&R – 275 surface spaces
- Benefits:
  - Station location accommodates future development
- Revised design cost estimate: $15 M (LPA Δ +$3 M)
- Primary cost drivers:
  - Land bridge for track/station over soft soils
  - ROW acquisition

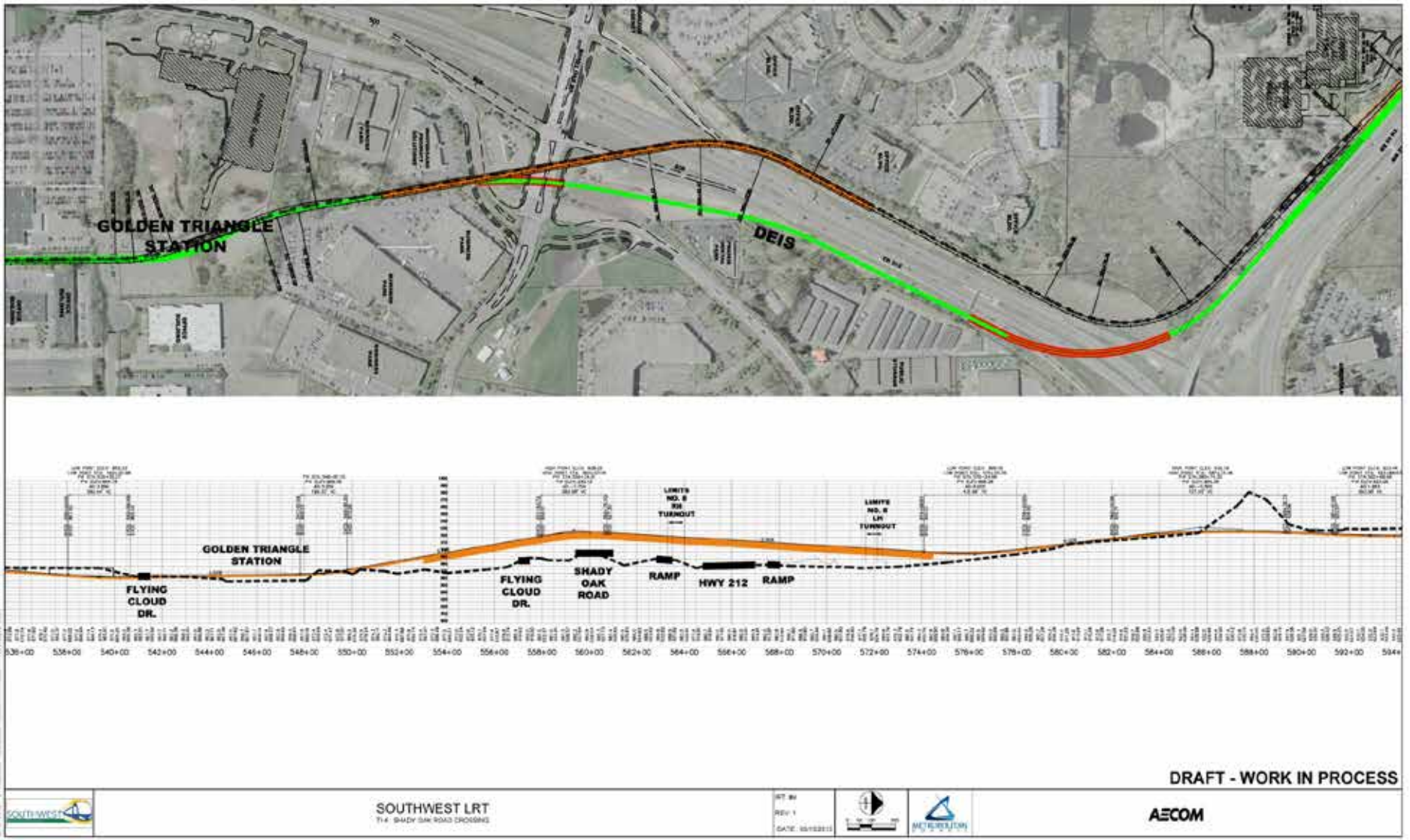
TI #3: Golden Triangle Station



TI #4: Shady Oak Road & TH 212 Crossings

- Design adjustment:
  - Change in type and location of LRT crossing of Shady Oak Road and TH 212
- Benefits:
  - Coordinates with City-led Shady Oak Road improvements
  - Combines Shady Oak Road and TH 212 crossings into single bridge

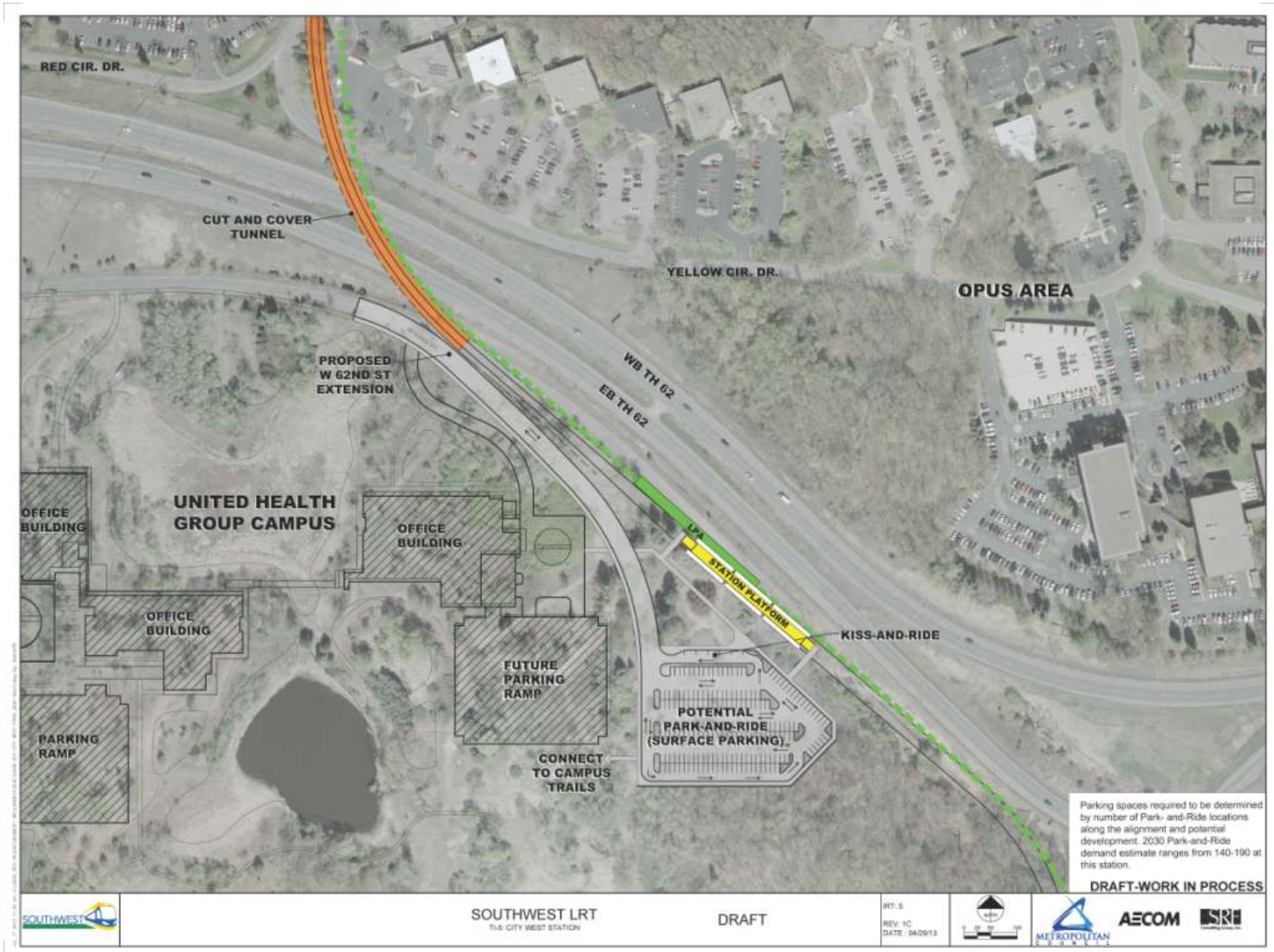
TI #4: Shady Oak Road & TH 212 Crossings



TI #5: City West Station & TH 62 Crossing

- Design adjustments:
  - Station and alignment location
  - TH 62 crossing to cut and cover tunnel
  - P&R: 190 surface spaces
- Benefits:
  - At-grade station provides improved access and capital cost savings over LPA
  - Tunnel preserves future opportunities for development infill within Opus
  - Tunnel provides capital cost savings over LPA bridge

TI #5: City West Station & TH 62 Crossing



TI #4: Shady Oak Road & TH 212 Crossings
TI #5: City West Station & TH 62 Crossing

- Revised design cost estimate: $94 M (LPA Δ -$2 M)
- Primary cost savers:
  - Tunnel under TH 62
  - ROW acquisition
  - Platform at-grade

TI #6: Opus Station

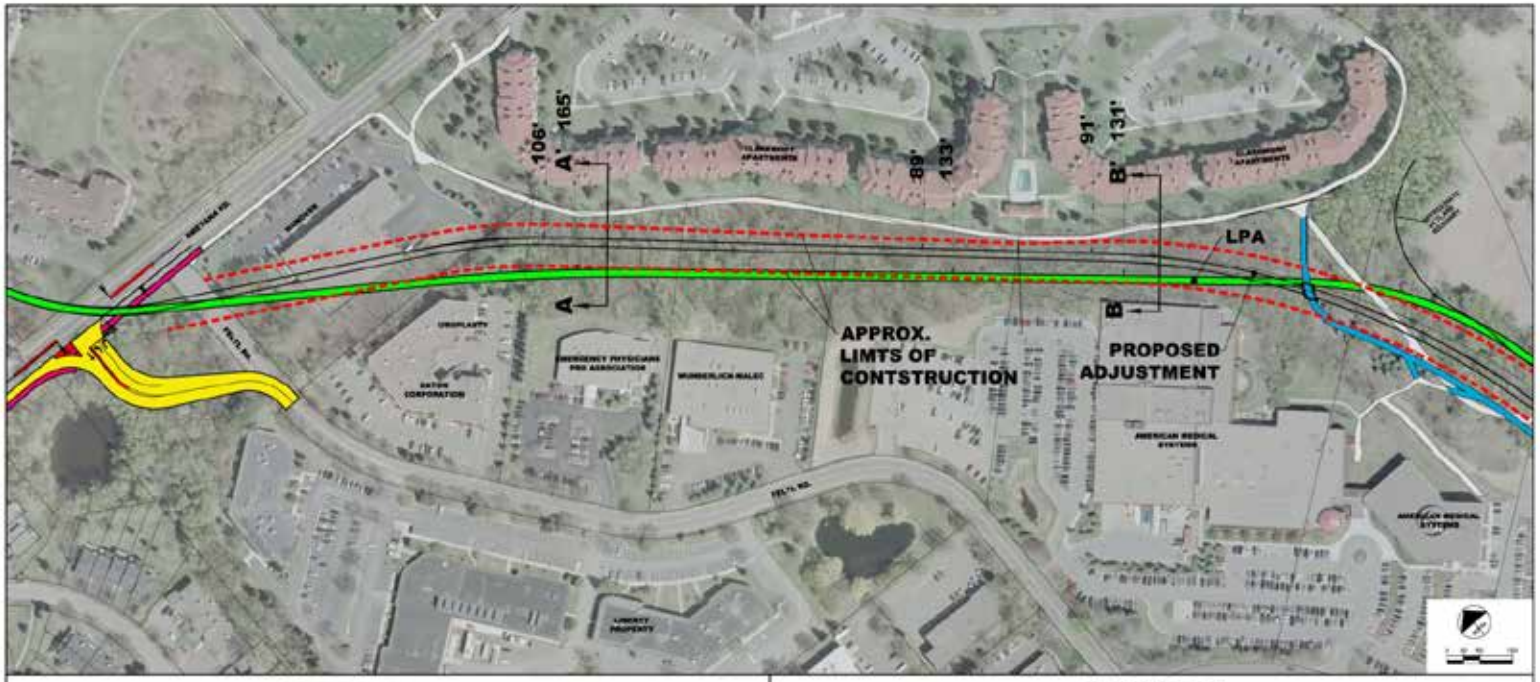
- Design adjustments:
  - Station location
  - Trail connections
  - P&R: 90 surface spaces
- Benefits:
  - Station location accommodates future development
- Revised design cost estimate: $13 M (LPA Δ +$0 M)

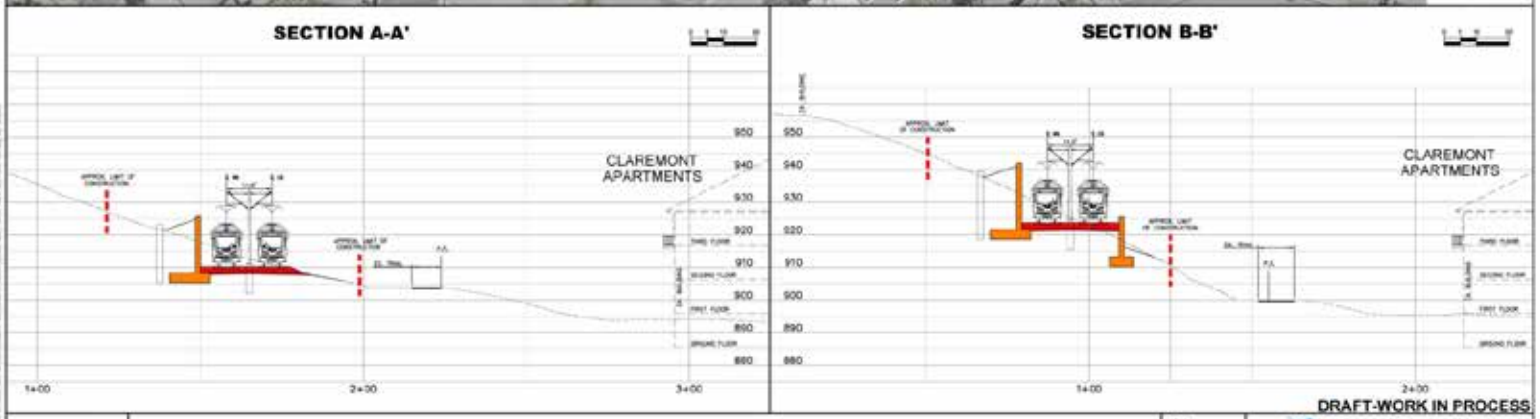
TI #6: Opus Station

TI #7: Opus Hill

- Design adjustments:
  - Track alignment
  - Roadway connection at Feltl Road and Smetana Road
- Benefits:
  - Avoids wetland
  - Improves crossing at Smetana Road

TI #7: Opus Hill

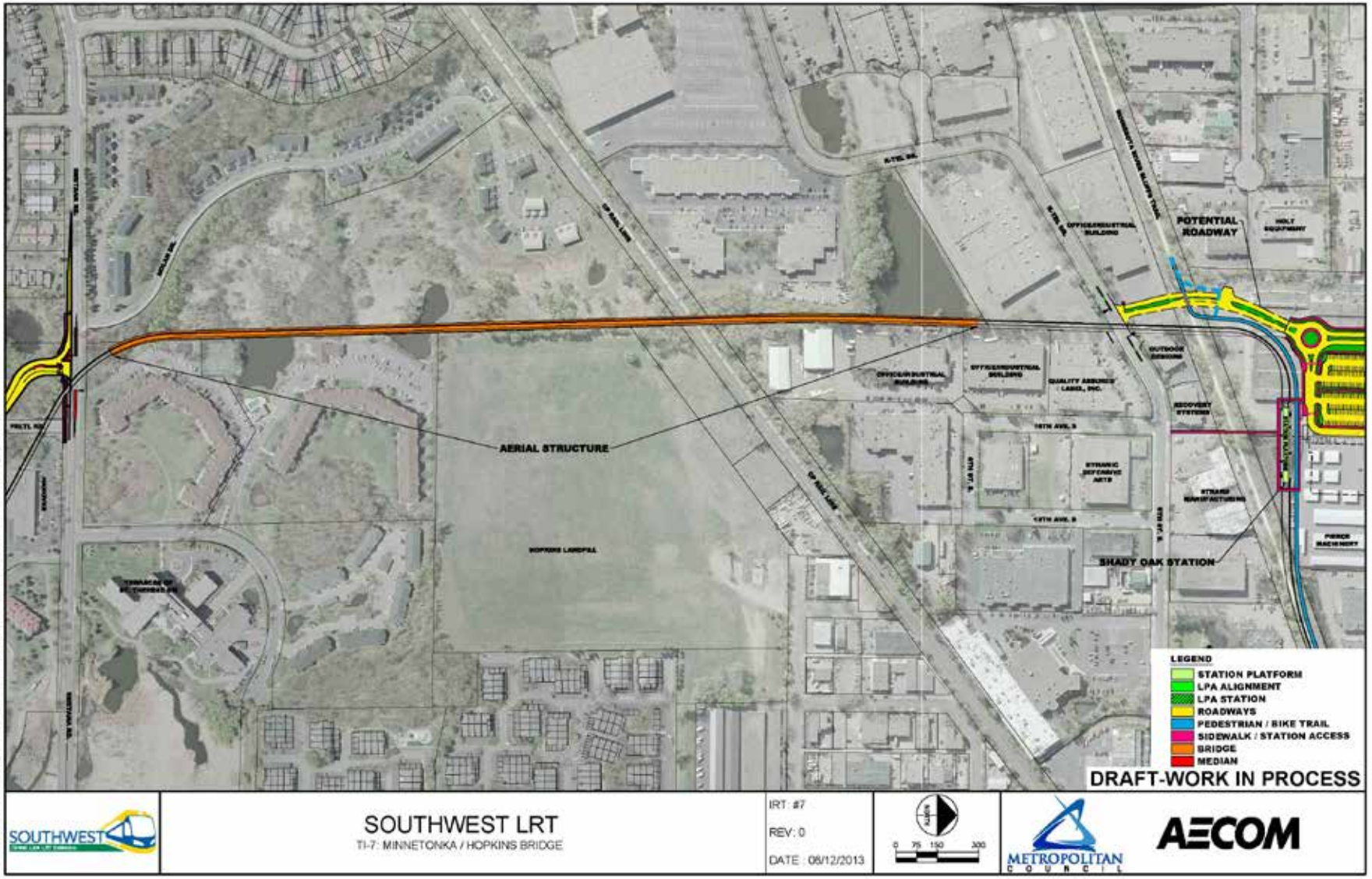




TI #7: Minnetonka/Hopkins Bridge

- Design adjustment:
  - Define bridge type
- Benefits:
  - Efficient and simple construction

TI #7: Minnetonka/Hopkins Bridge



TI #7: Minnetonka/Hopkins Bridge

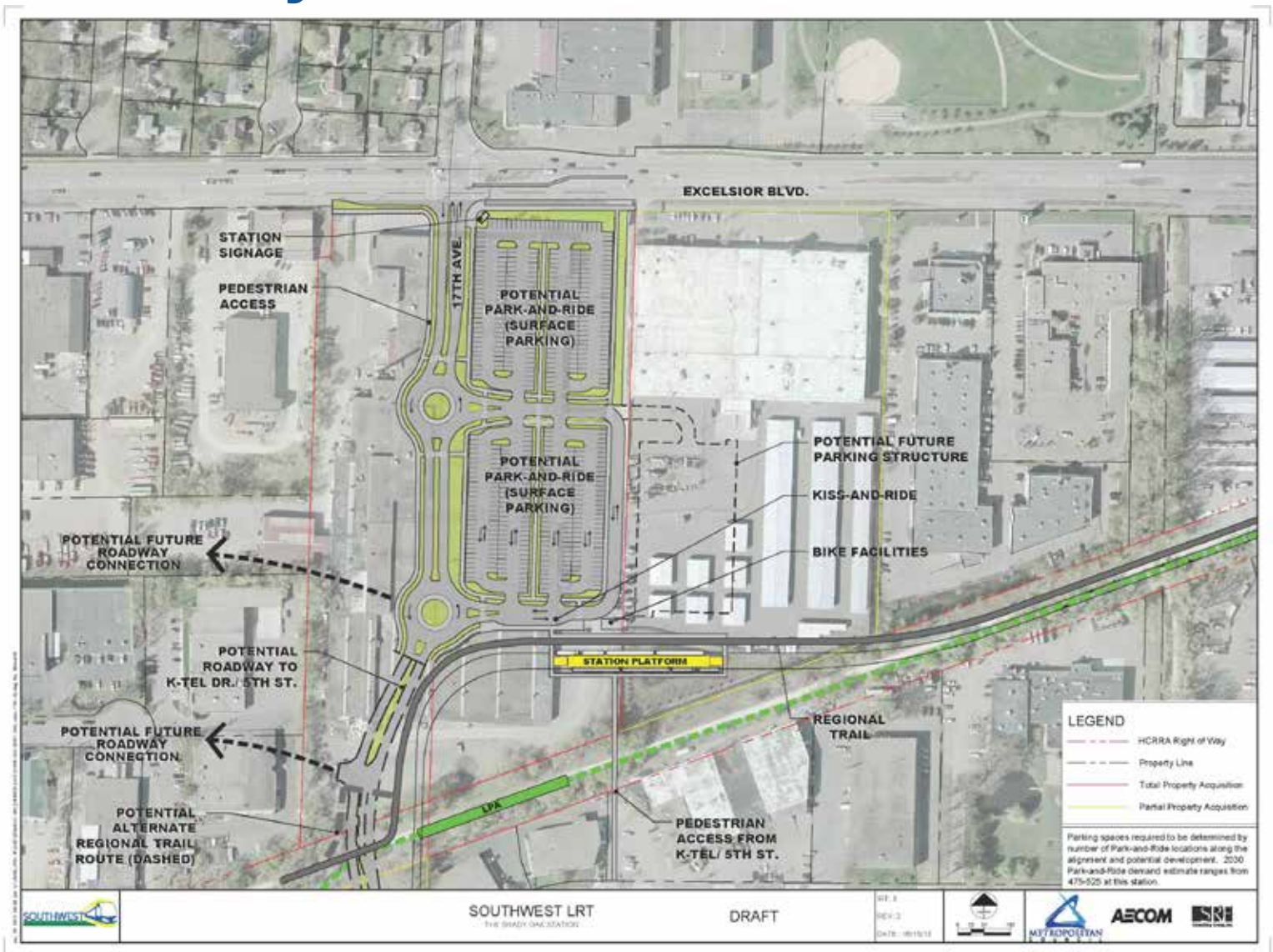
TI #7: Opus Hill & Minnetonka/Hopkins Bridge

- Revised design cost estimate: $74 M (LPA Δ -$13 M)
- Primary cost saver:
  - Bridge structure over CP's Bass Lake Spur tracks and wetlands

TI #8: Shady Oak Station

- Design adjustments:
  - Adjust alignment and station
  - Extends 17th Avenue South
  - P&R: 500 surface spaces
- Benefits:
  - Station location accommodates future development
- Design adjustment cost estimate: $49 M (LPA Δ -$6 M)
- Primary cost saver:
  - ROW acquisition

TI #8: Shady Oak Station



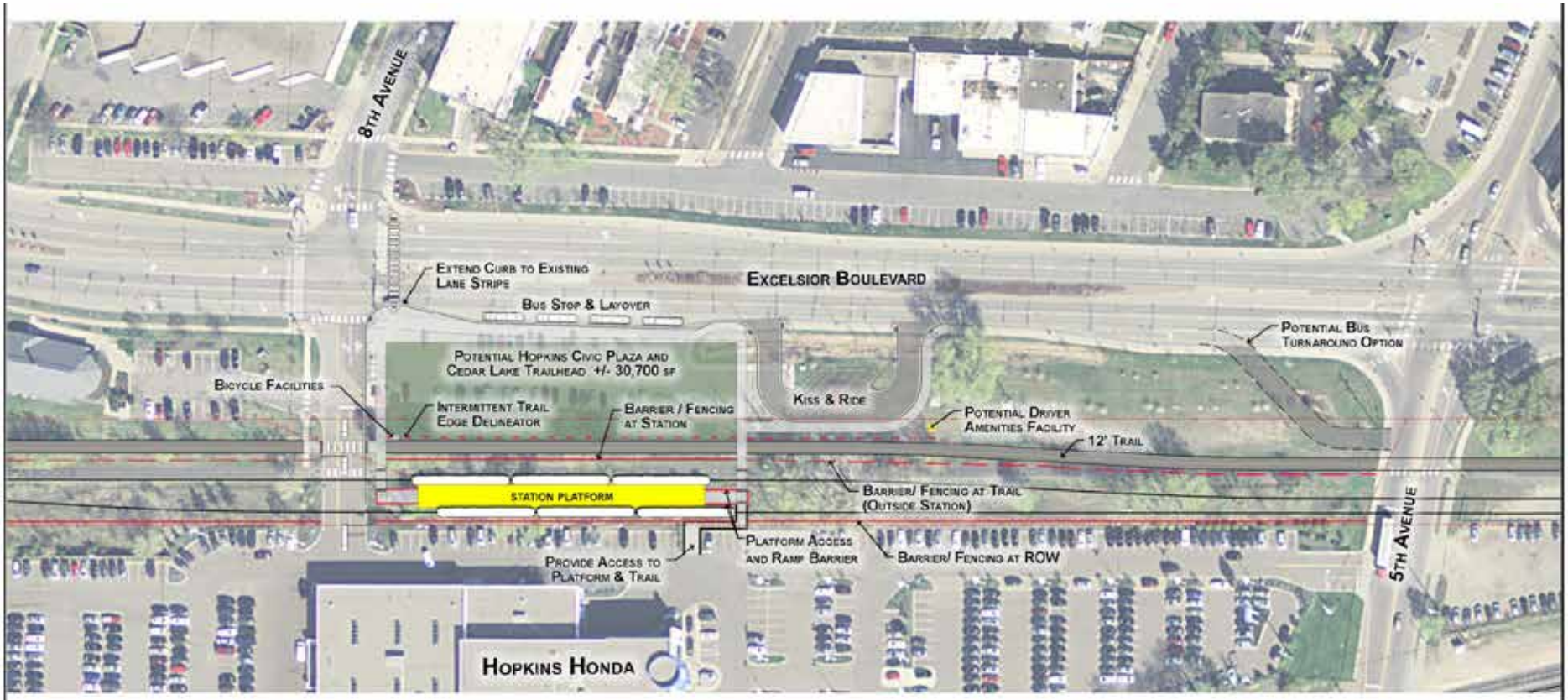
TI #9: PEC-West & PEC-East Interface

- Design adjustments:
  - No adjustments; engineering coordination point

TI #10: Downtown Hopkins Station

- Design adjustments:
  - Bus facilities
  - Preserves space for civic plaza
- Benefits:
  - Provides convenient connection to downtown Hopkins

TI #10: Downtown Hopkins Station



DRAFT-WORK IN PROCESS

SOUTHWEST

SOUTHWEST LIGHT RAIL
HOPKINS - DOWNTOWN HOPKINS STATION

IRT #10
Rev 1
04/24/2013

METROPOLITAN

Kimley-Horn and Associates, Inc.

TI #11: Excelsior Boulevard Crossing

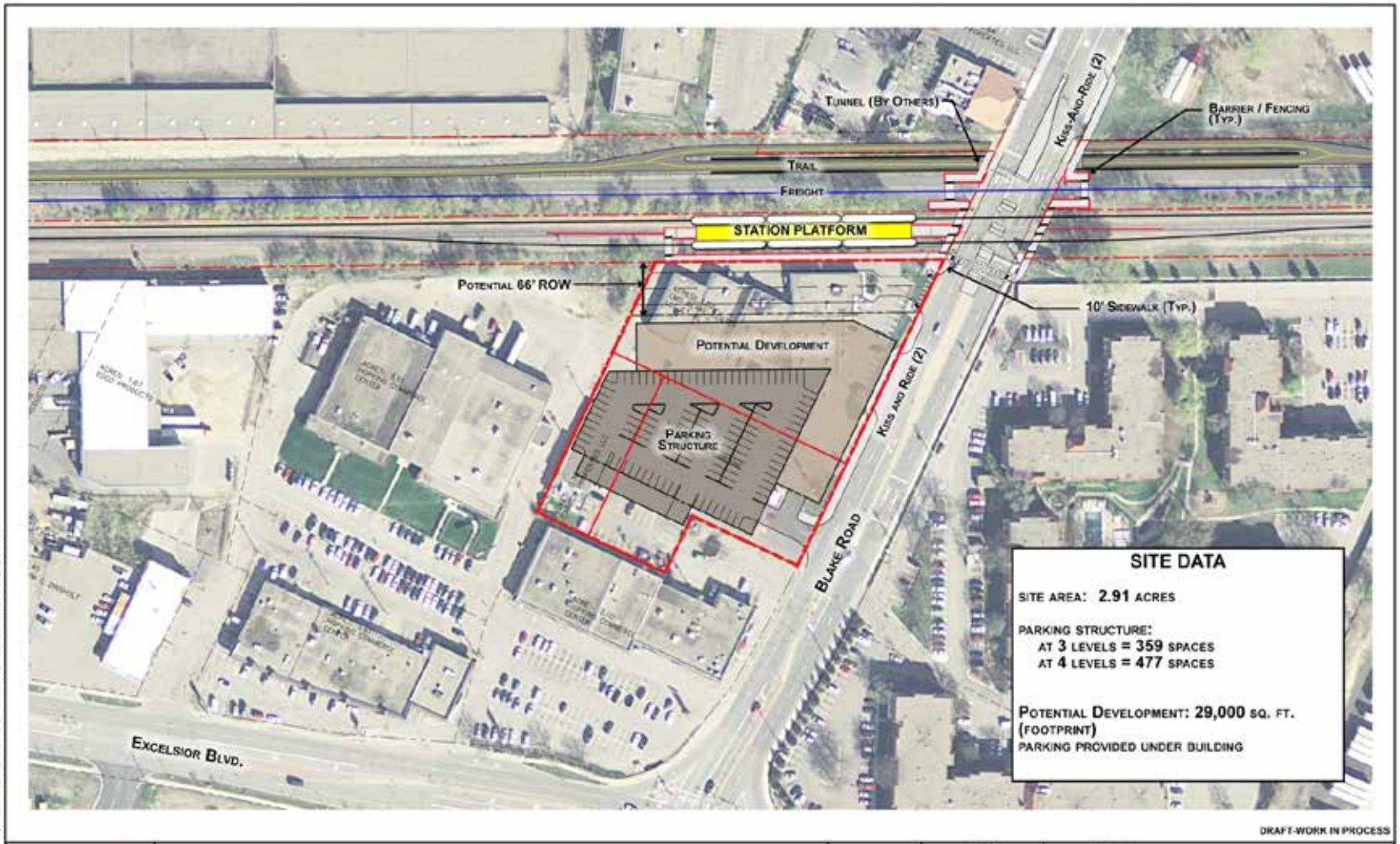
- Design adjustment:
  - Location of freight rail tracks and LRT tracks
- Benefits:
  - Allows stations east of Excelsior Boulevard to be located on south side of corridor

TI #11: Excelsior Boulevard Crossing

TI #12: Blake Station

- Design adjustments:
  - Location of freight rail tracks and LRT tracks
  - P&R: 445 structured spaces
- Benefits:
  - Station and P&R location accommodate future/joint development

TI #12: Blake Station



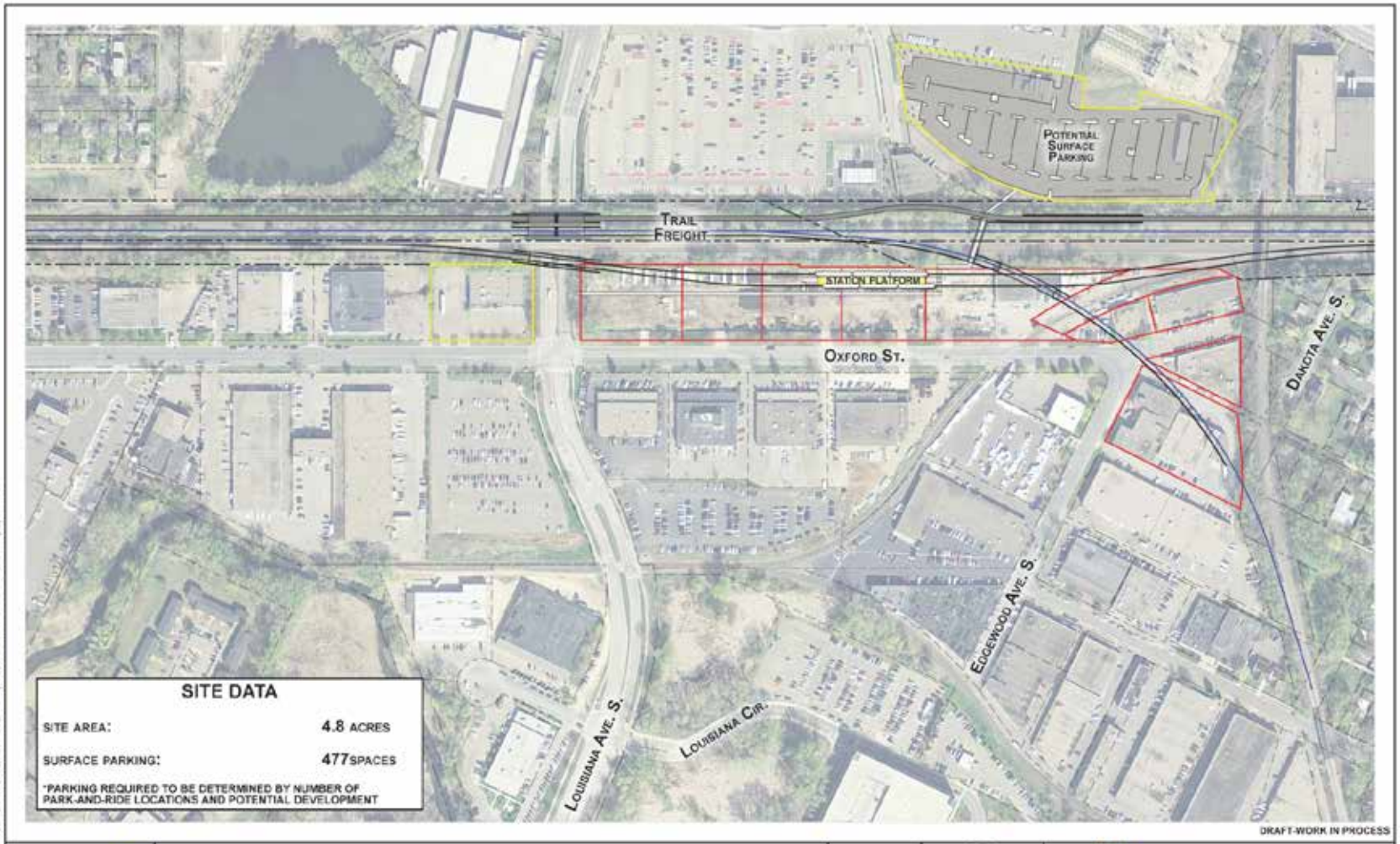
TI #10: Downtown Hopkins Station
TI #11: Excelsior Boulevard Crossing
TI #12: Blake Station

- Revised design cost estimate: $85 M (LPA Δ +$22 M)
- Primary cost drivers:
  - Structured parking and ROW acquisition for Blake Station P&R
  - Longer bridge structure over Excelsior Boulevard to swap freight rail and LRT

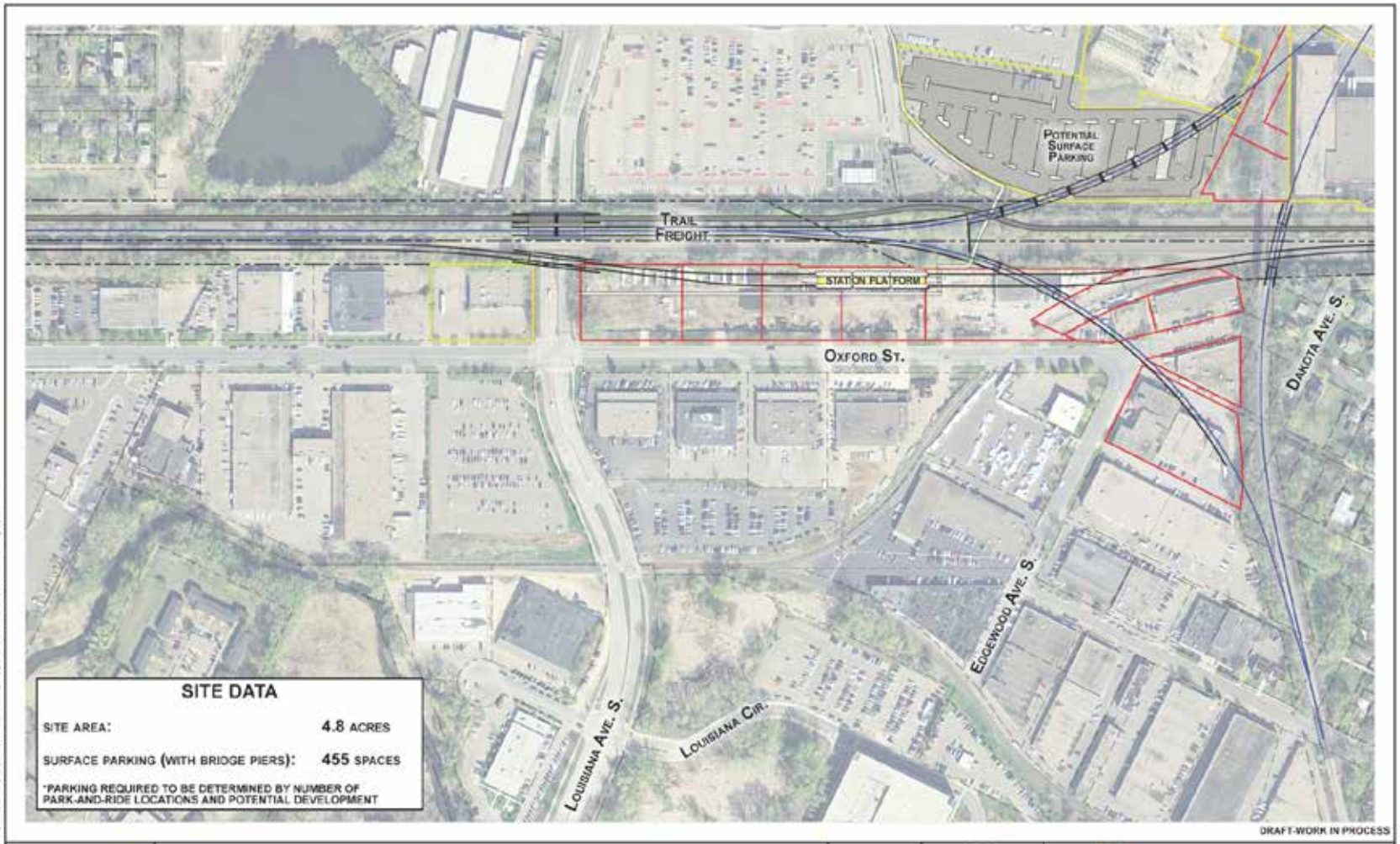
TI #13: Louisiana Station

- Design adjustments:
  - Location of freight rail tracks and LRT tracks
  - Grade of station location
  - P&R: 225 surface spaces
- Benefits:
  - Station located closer to hospital and housing
  - Provides better access to station

TI #13: Louisiana Station



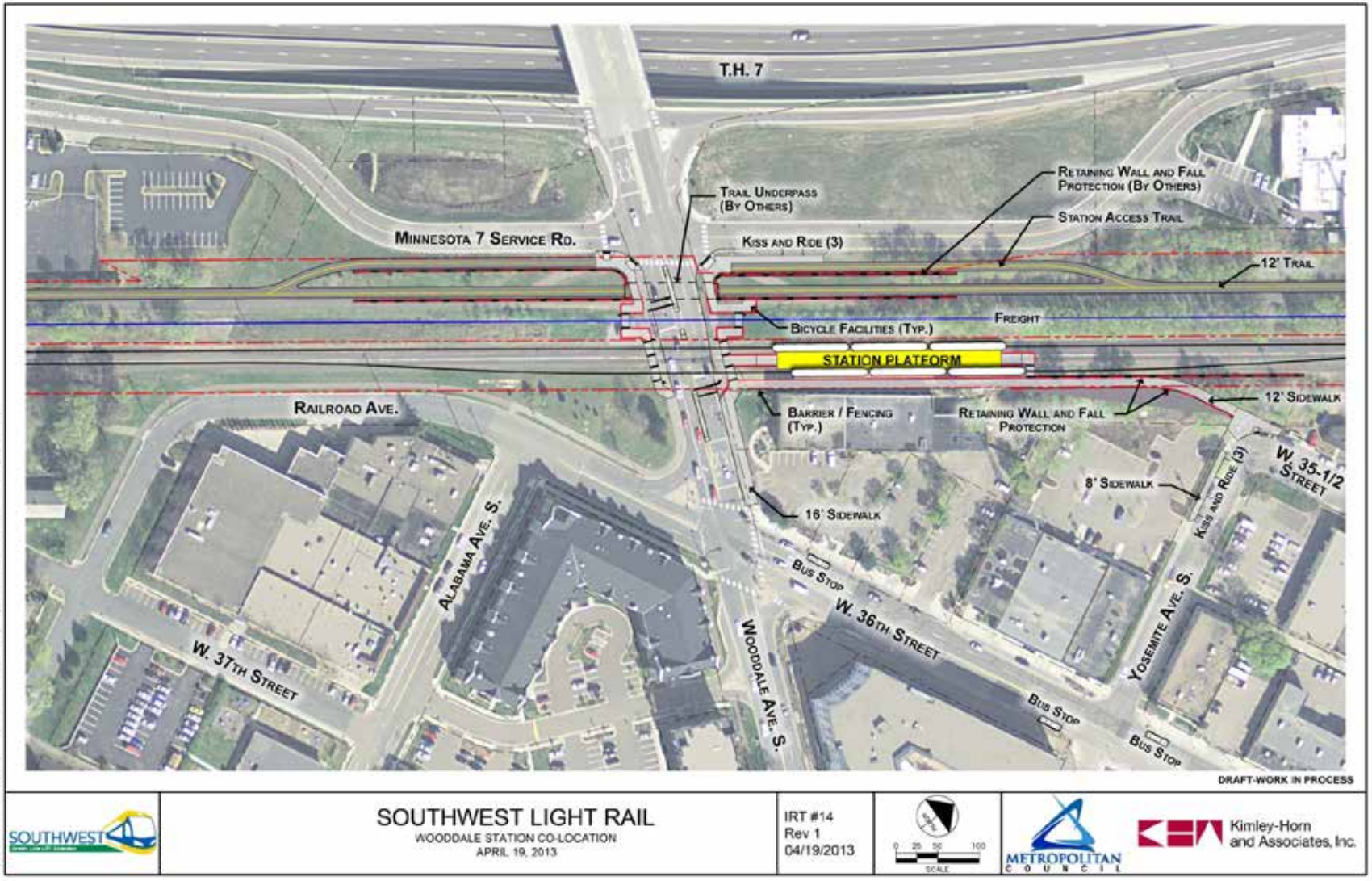
TI #13: Louisiana Station



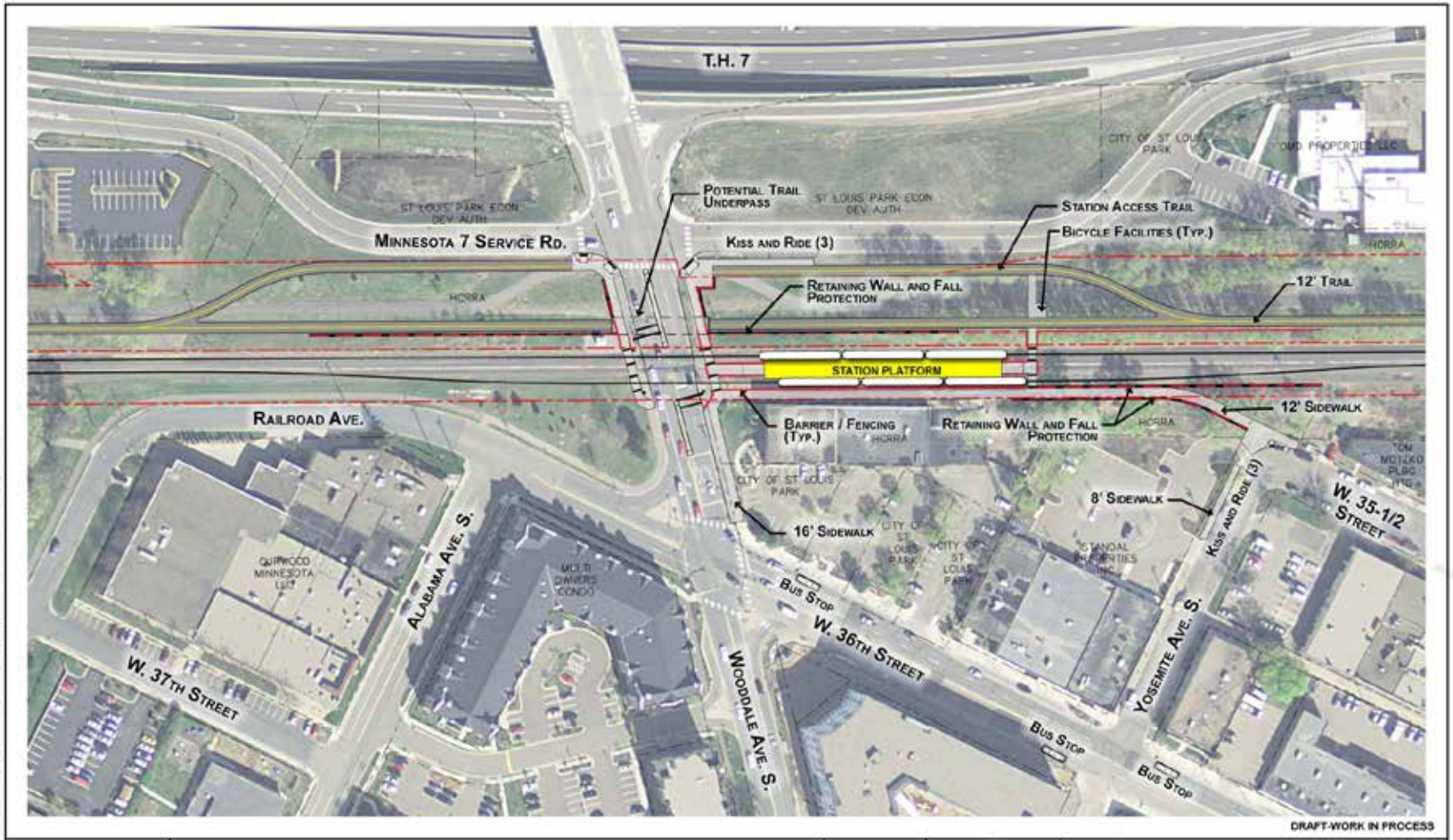
TI #14: Wooddale Station

- Design adjustments:
  - Location of freight rail tracks and LRT tracks
  - Change in trail alignment (trail underpass not included in cost estimate)
- Benefits:
  - Accommodates future development

TI #14: Wooddale Station



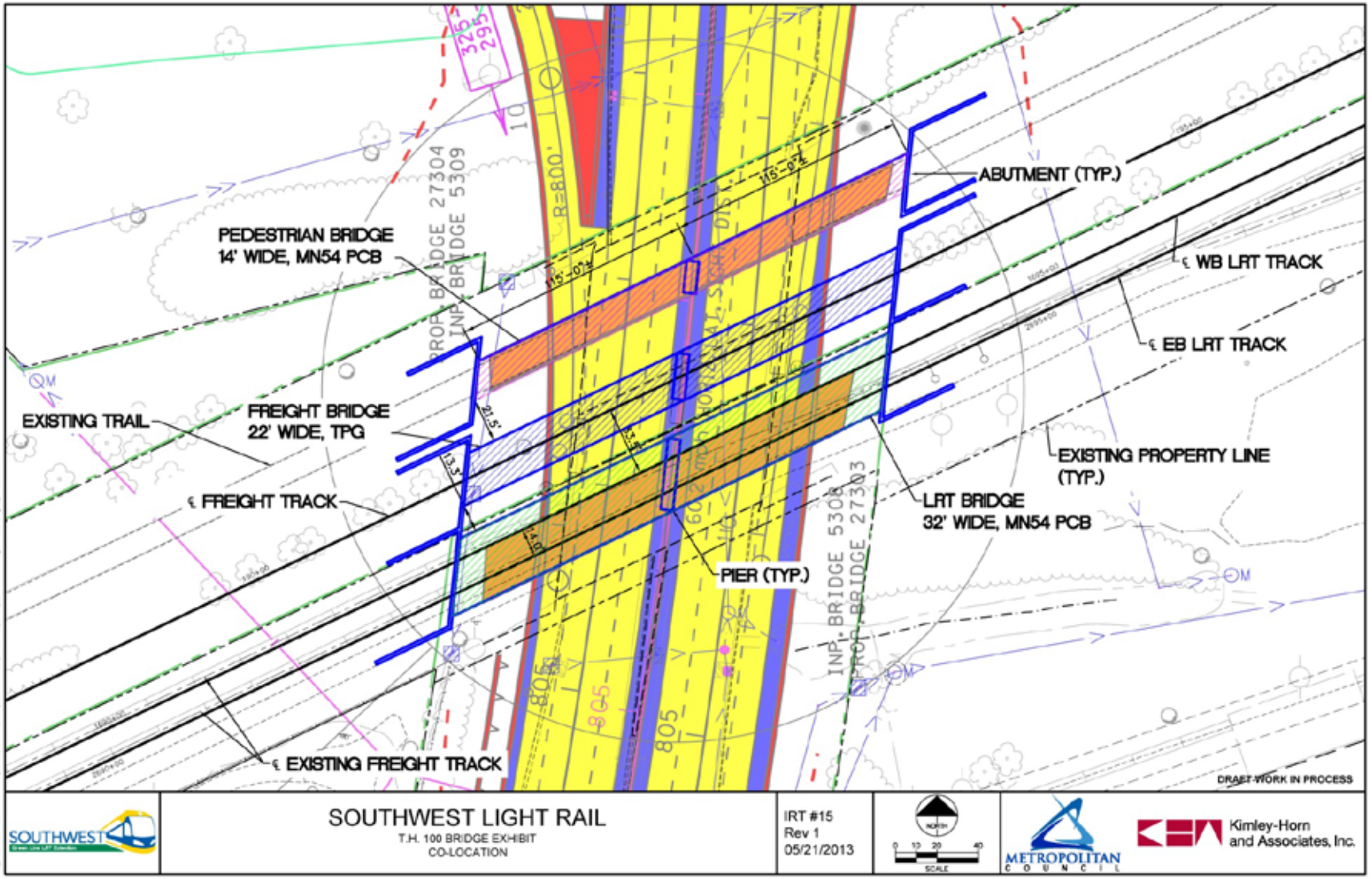
TI #14: Wooddale Station



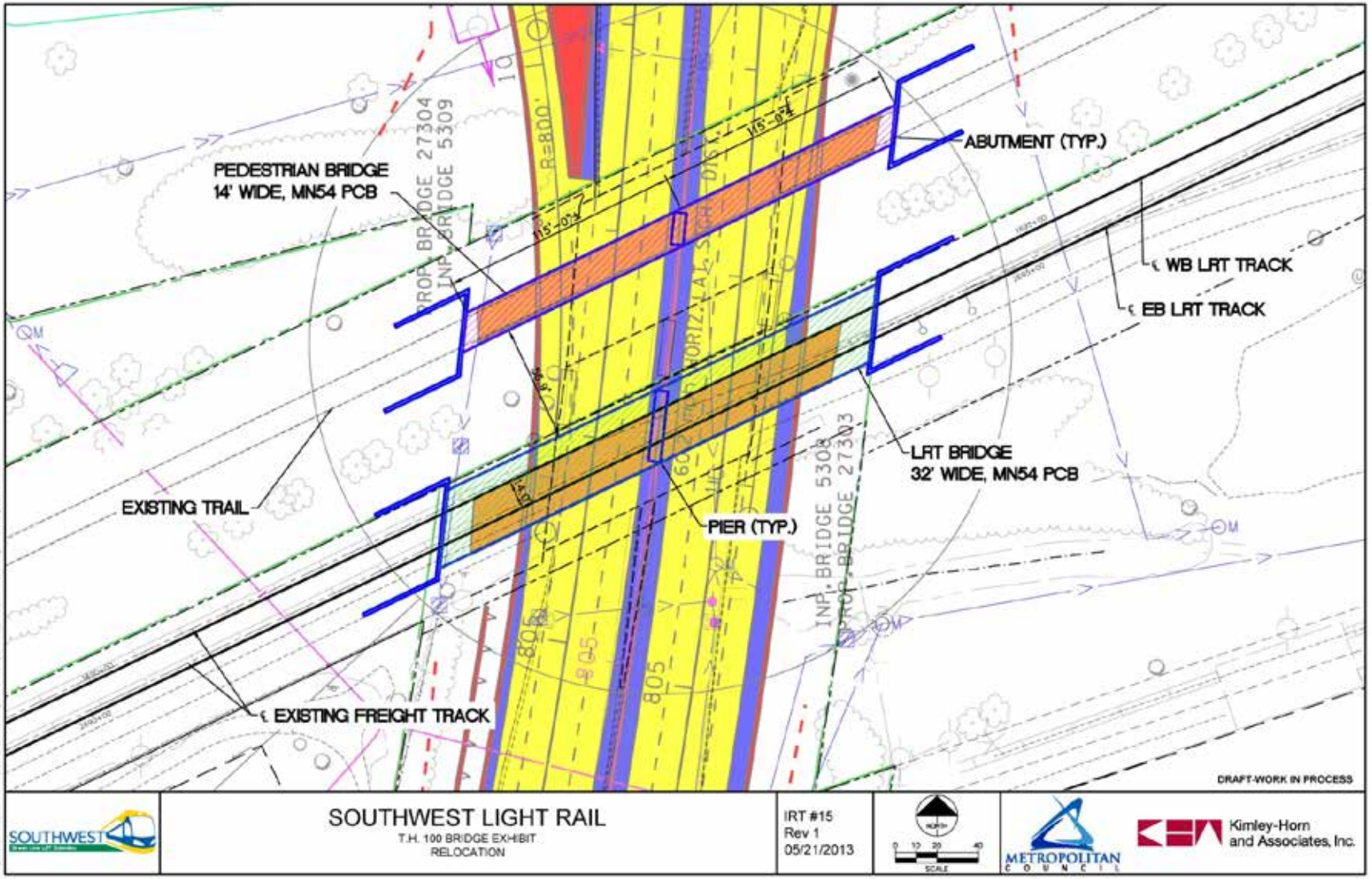
TI #15: TH 100 Crossing

- Design adjustment:
  - Location of freight rail tracks and LRT tracks
- Benefits:
  - Allows stations to be located on south side of corridor
  - Minimizes overall project costs for both MnDOT TH 100 and SWLRT projects

TI #15: TH 100 Crossing



TI #15: TH 100 Crossing



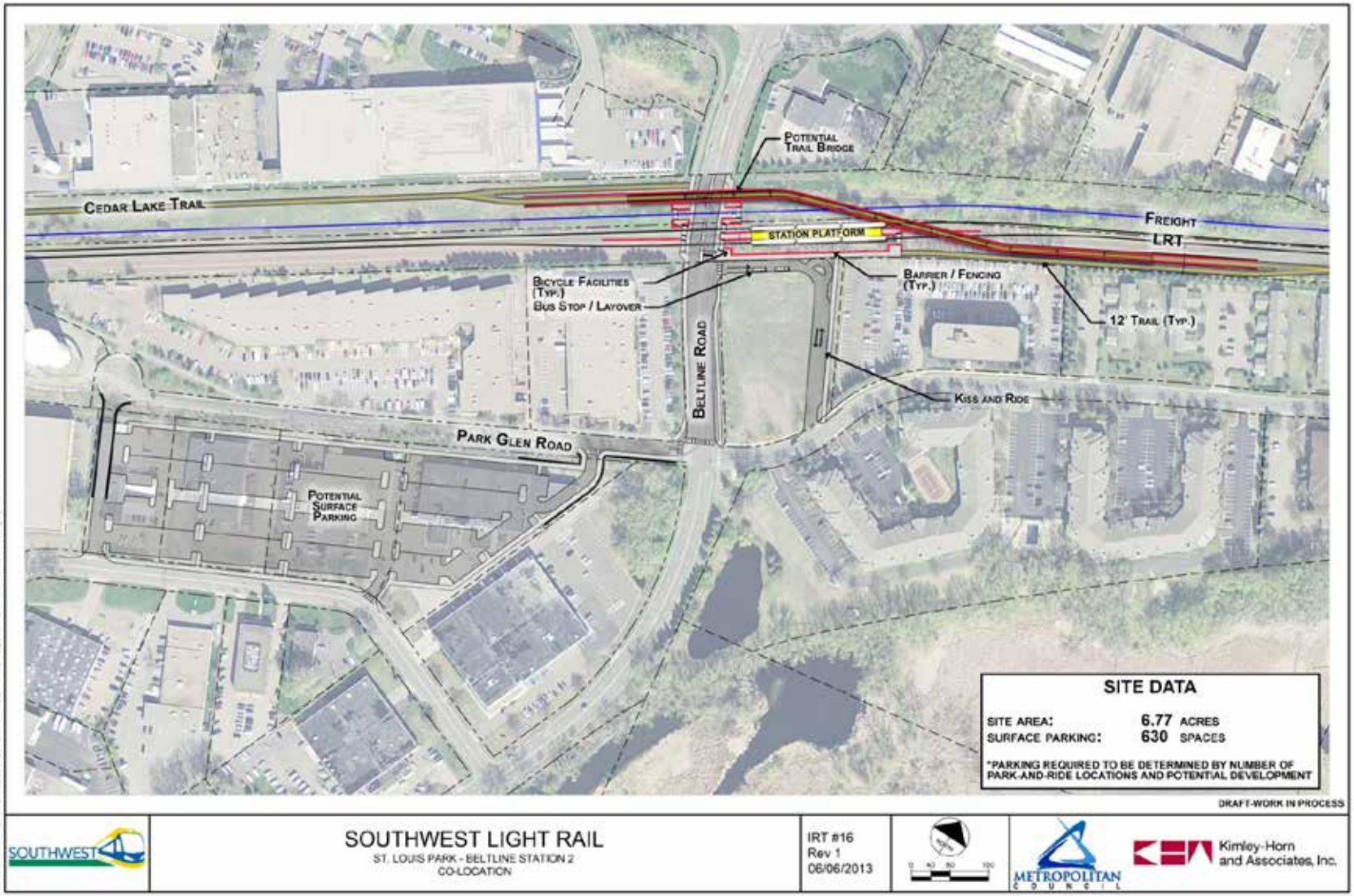
TI 13: Louisiana Station
TI 14: Wooddale Station
TI 15: TH 100 Crossing

- Revised design cost estimate: $63 M (LPA Δ +$18 M)
- Primary cost drivers:
  - ROW acquisition for P&R, station and tracks at Louisiana Station
  - Louisiana Station P&R facility
  - Track alignment at Louisiana Station

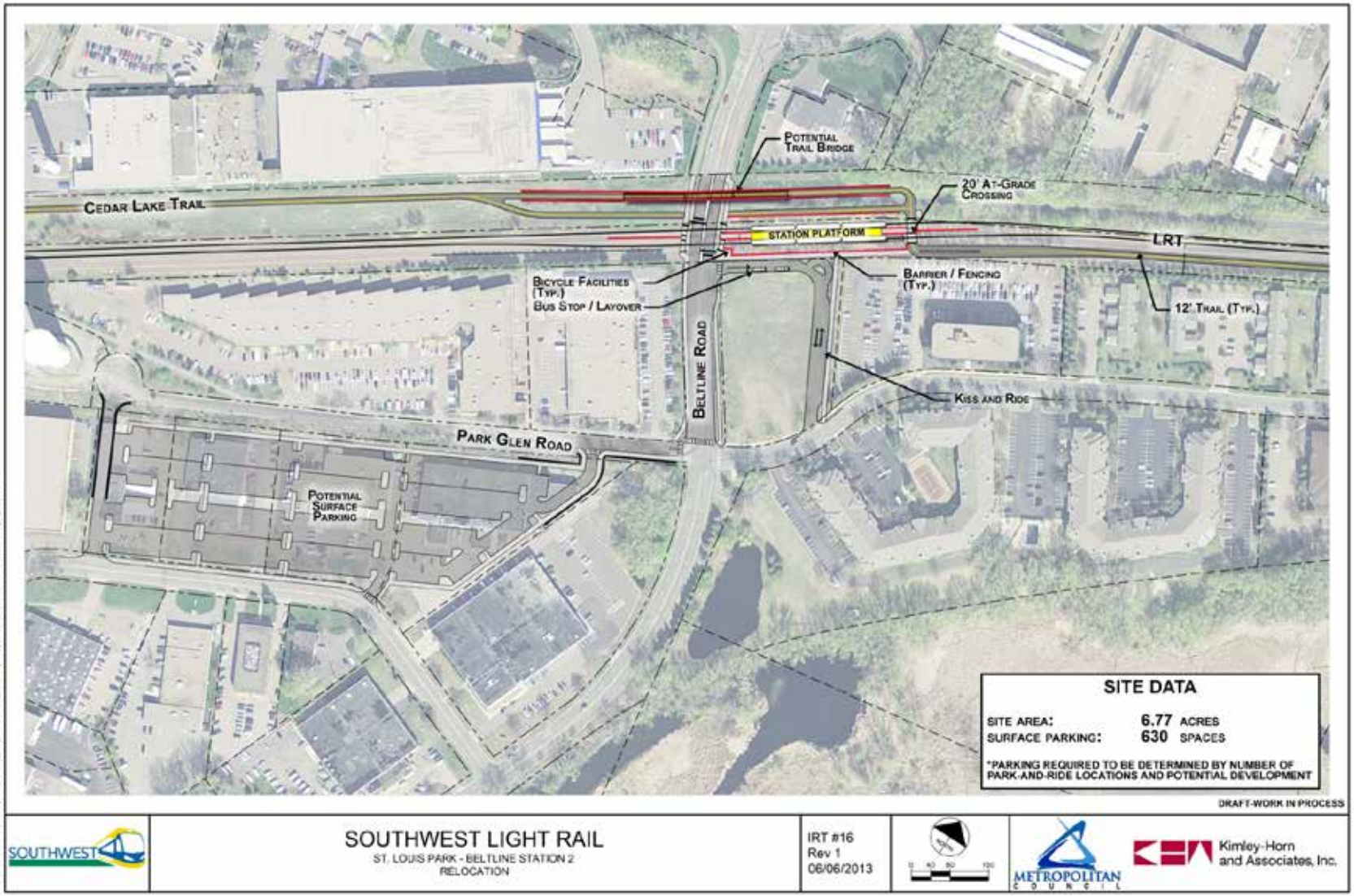
TI #16: Beltline Station

- Design adjustments:
  - Location of freight rail tracks and LRT tracks
  - P&R: 545 surface spaces
  - Change in trail alignment (trail bridge over Beltline Road not included in cost estimate)
- Benefits:
  - Accommodates future development
  - P&R location avoids prime corner redevelopment potential
- Revised design cost estimate: $29 M (LPA Δ +$15 M)
- Primary cost drivers:
  - ROW acquisition for P&R
  - P&R facility

TI #16: Beltline Station



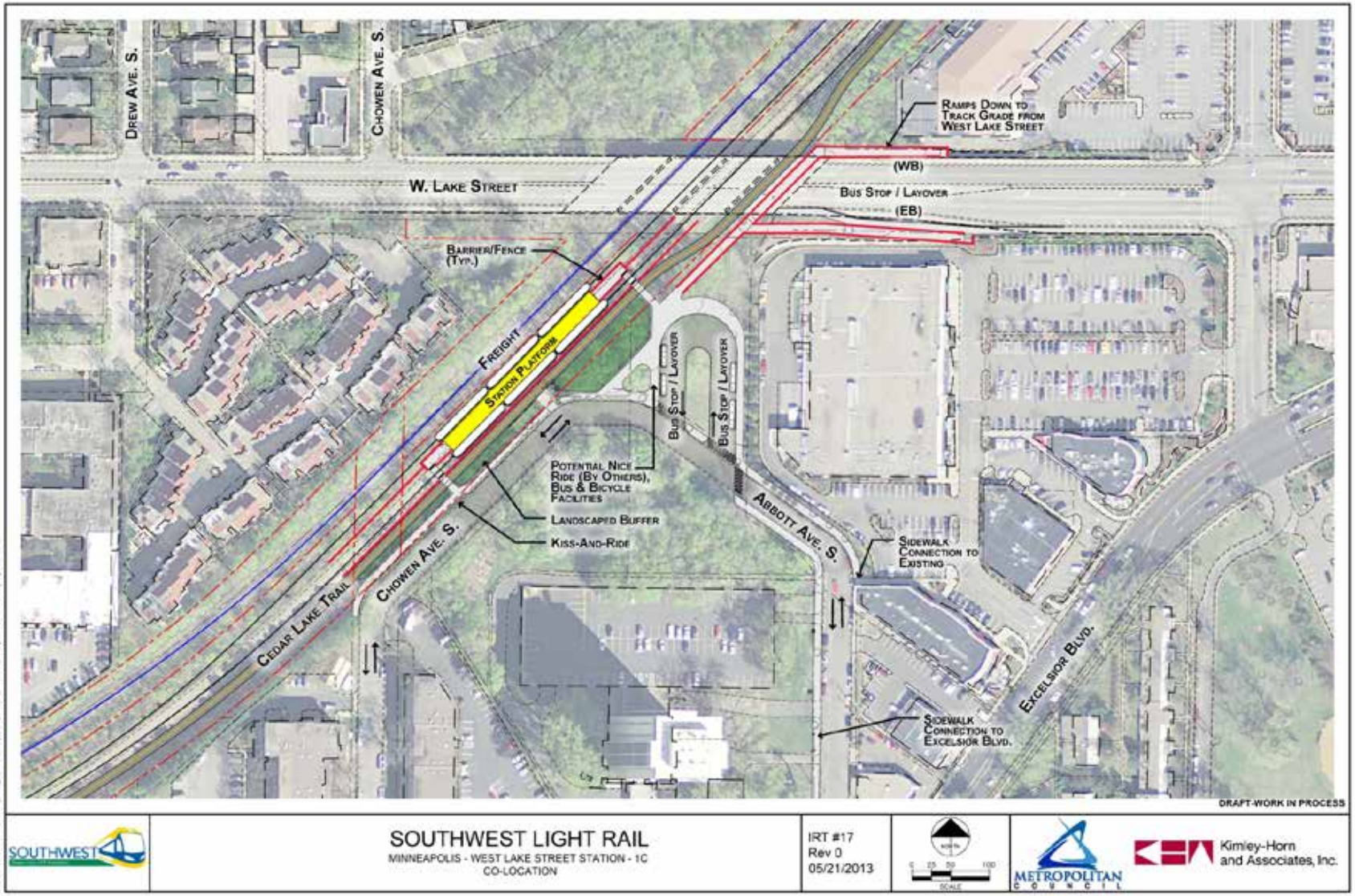
TI #16: Beltline Station



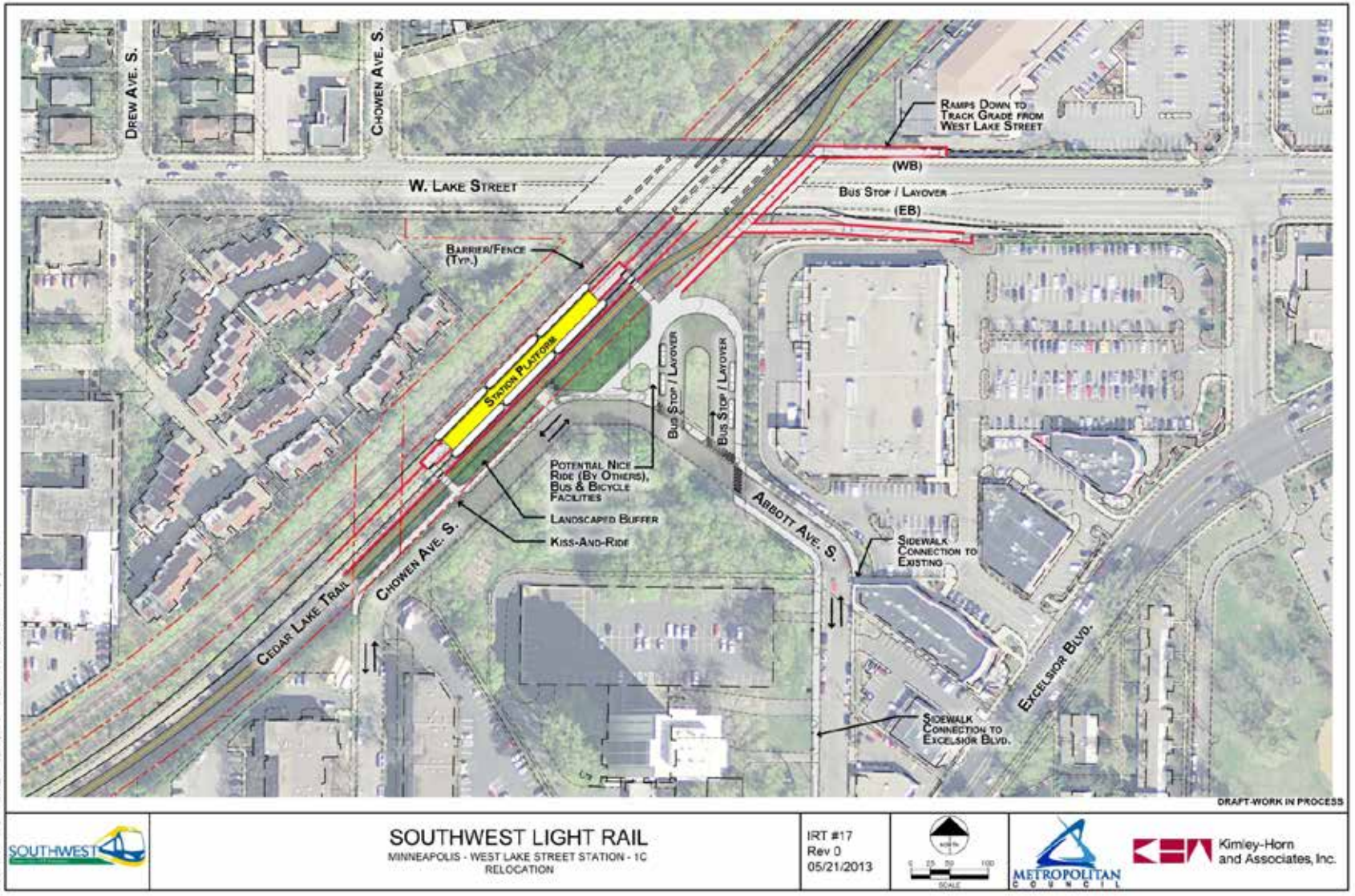
TI #17: West Lake Station

- Design adjustments:
  - Bus connections/facilities
- Benefits:
  - Accommodates future Midtown Corridor
  - Flexible design to accommodate future development

TI #17: West Lake Station



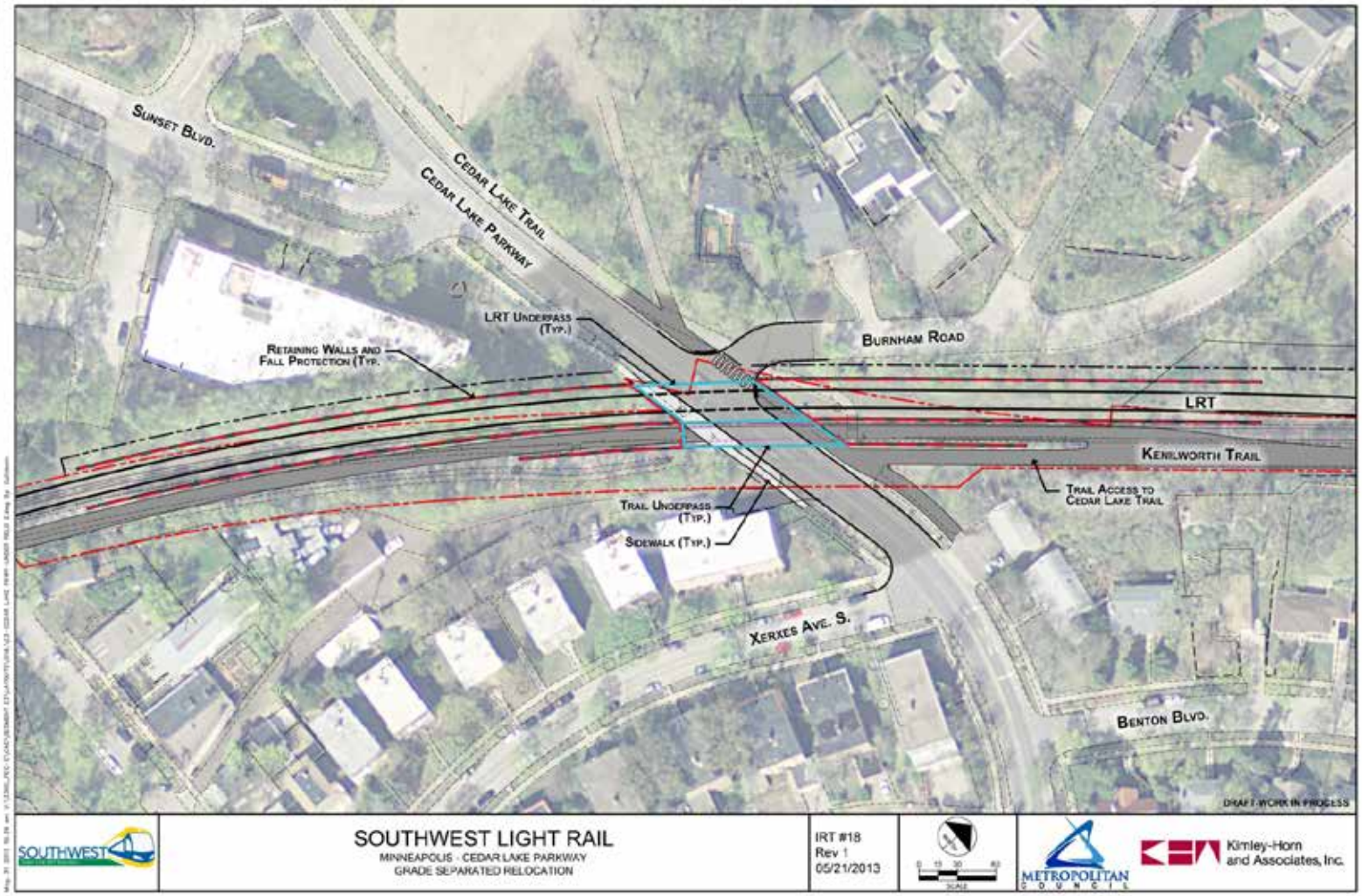
TI #17: West Lake Station



TI #18: Kenilworth Corridor: Cedar Lake Parkway Crossing

- Design adjustment:
  - Cedar Lake Parkway LRT and trail crossing to underpass
- Benefits:
  - Addresses Minneapolis Park and Recreation Board concerns for Grand Rounds crossing

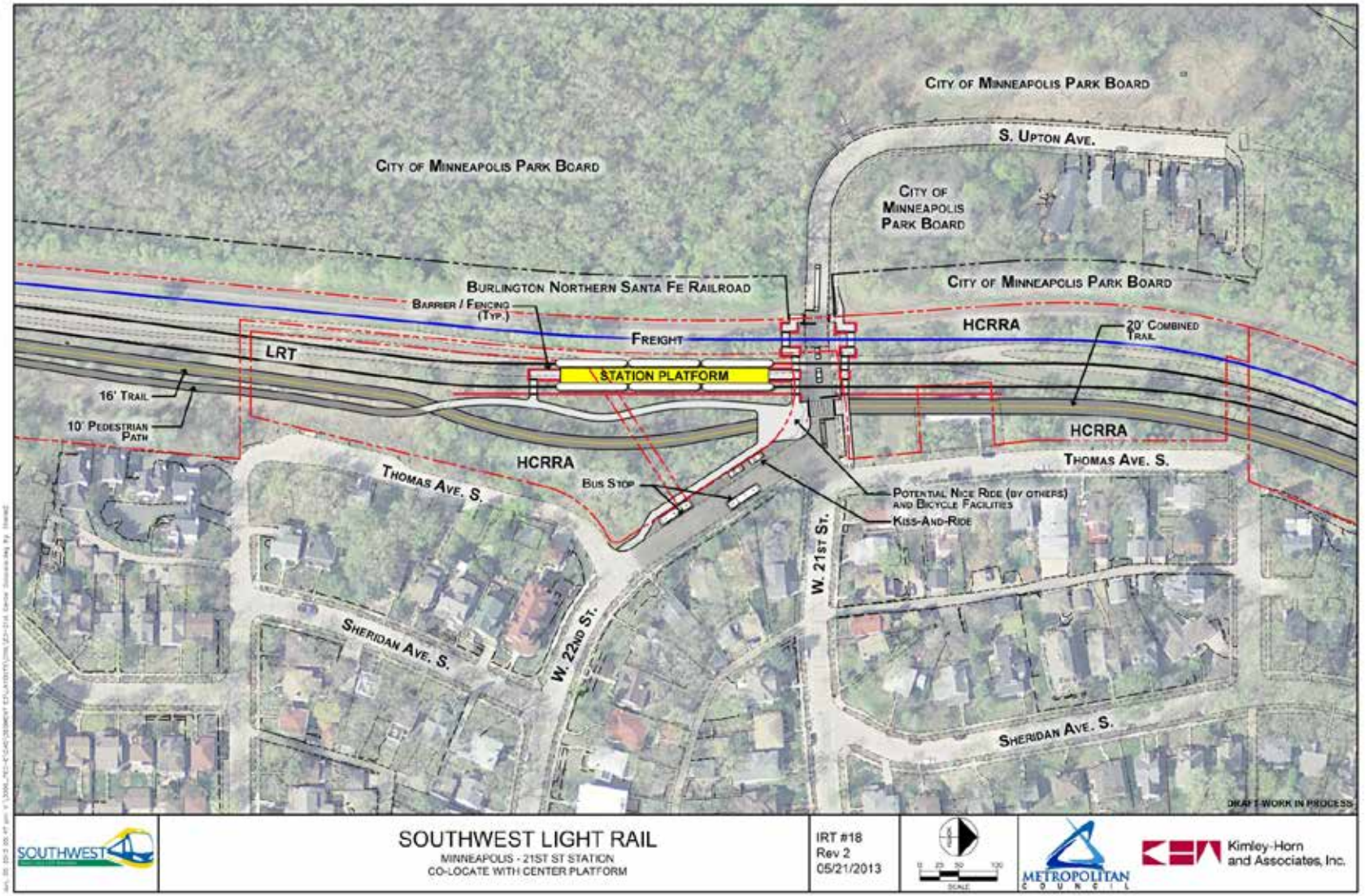
TI #18: Kenilworth Corridor: Cedar Lake Parkway Crossing



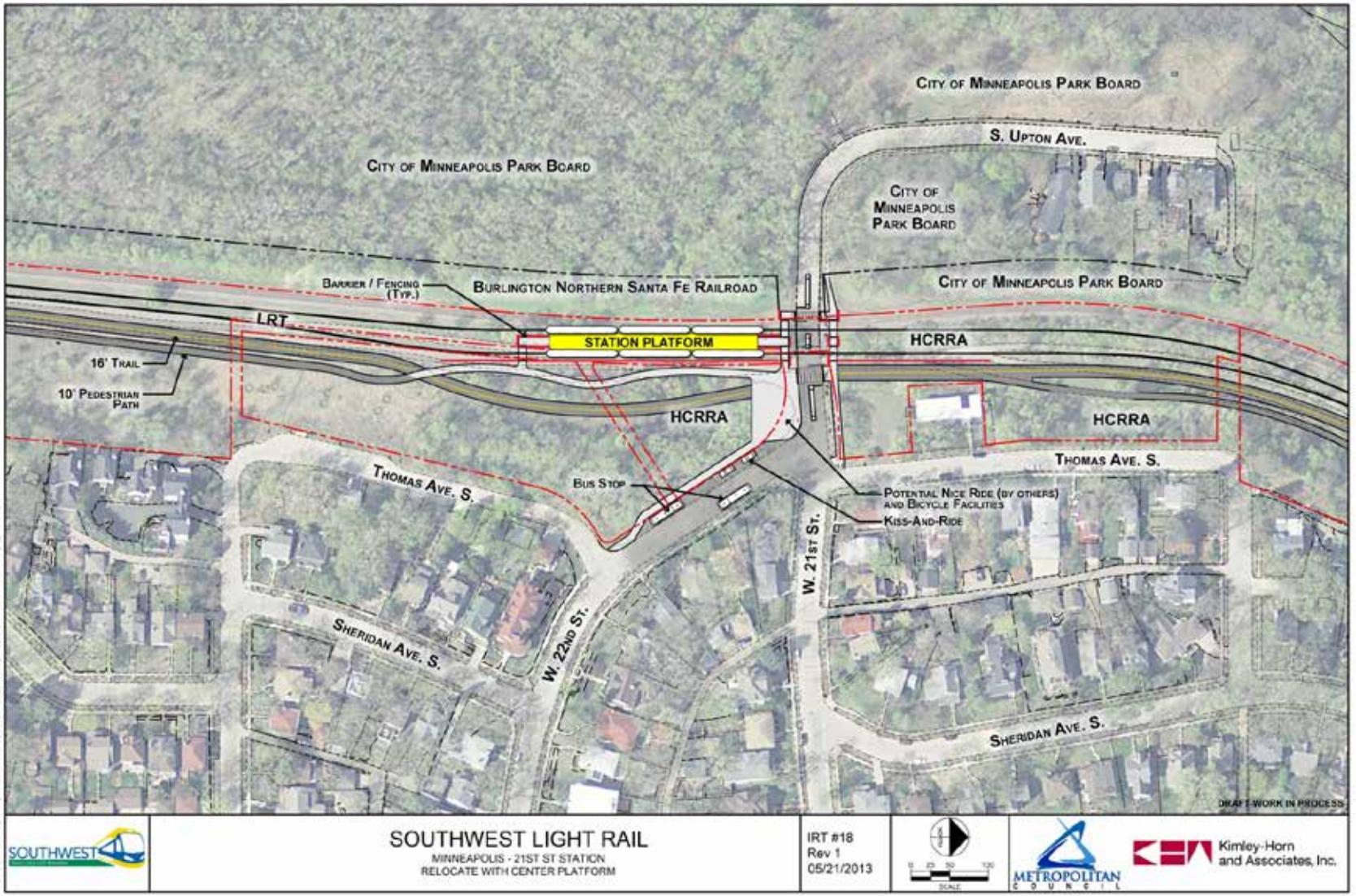
TI #18: Kenilworth Corridor: 21st St. Station

- Design adjustment:
  - Eliminated P&R
  - Station would not be included under tunnel scenarios
- Benefits:
  - Provides direct access to bus connection

TI #18: Kenilworth Corridor: 21st St. Station



TI #18: Kenilworth Corridor: 21st St. Station



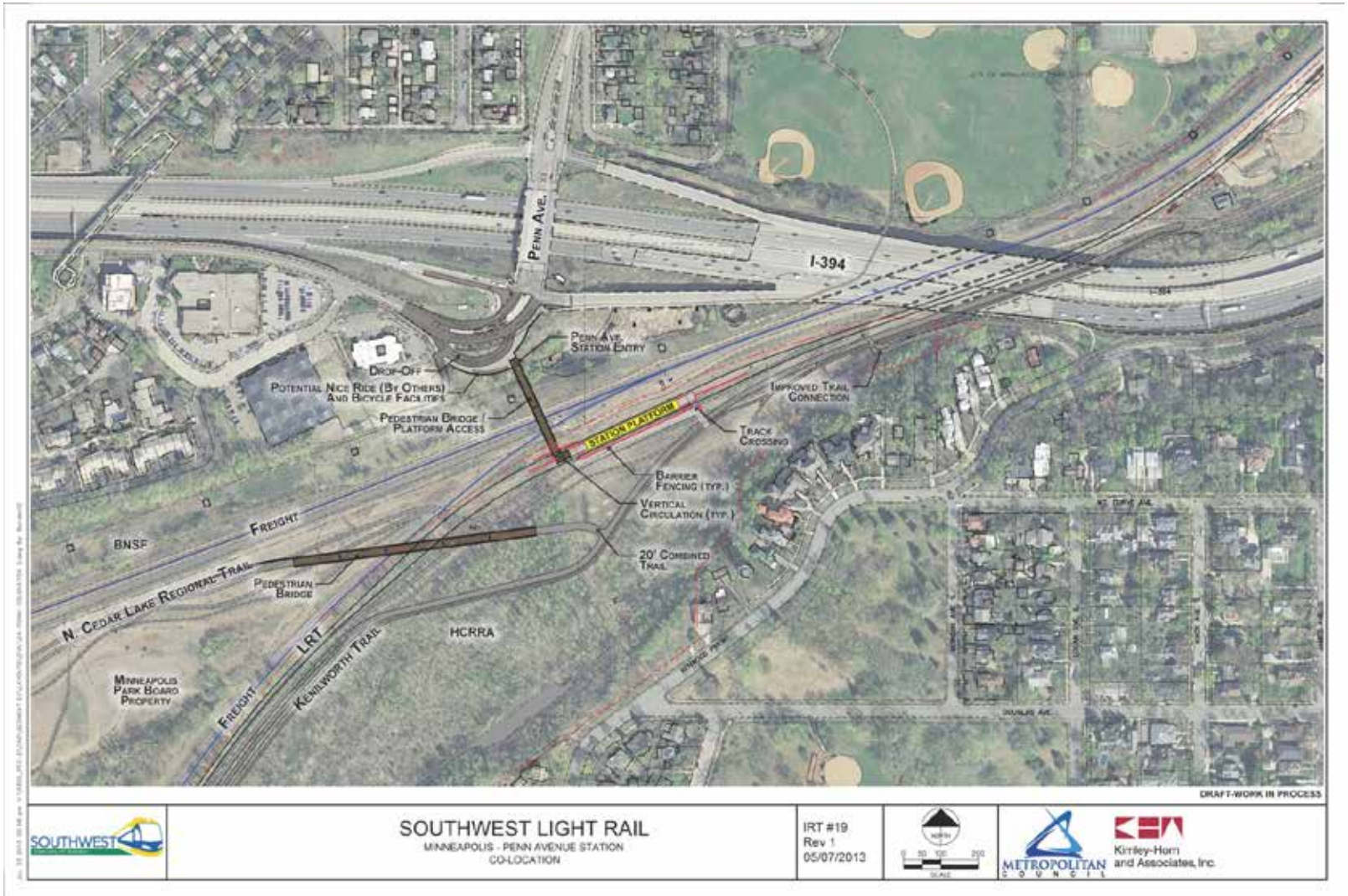
TI #17 : West Lake Station
TI #18: Kenilworth Corridor – Cedar Lake Parkway & 21st St. Station

- Revised design cost estimate: $48 M (LPA Δ -$4 M)
- Primary cost saver:
  - Underpass vs. bridge at Cedar Lake Parkway

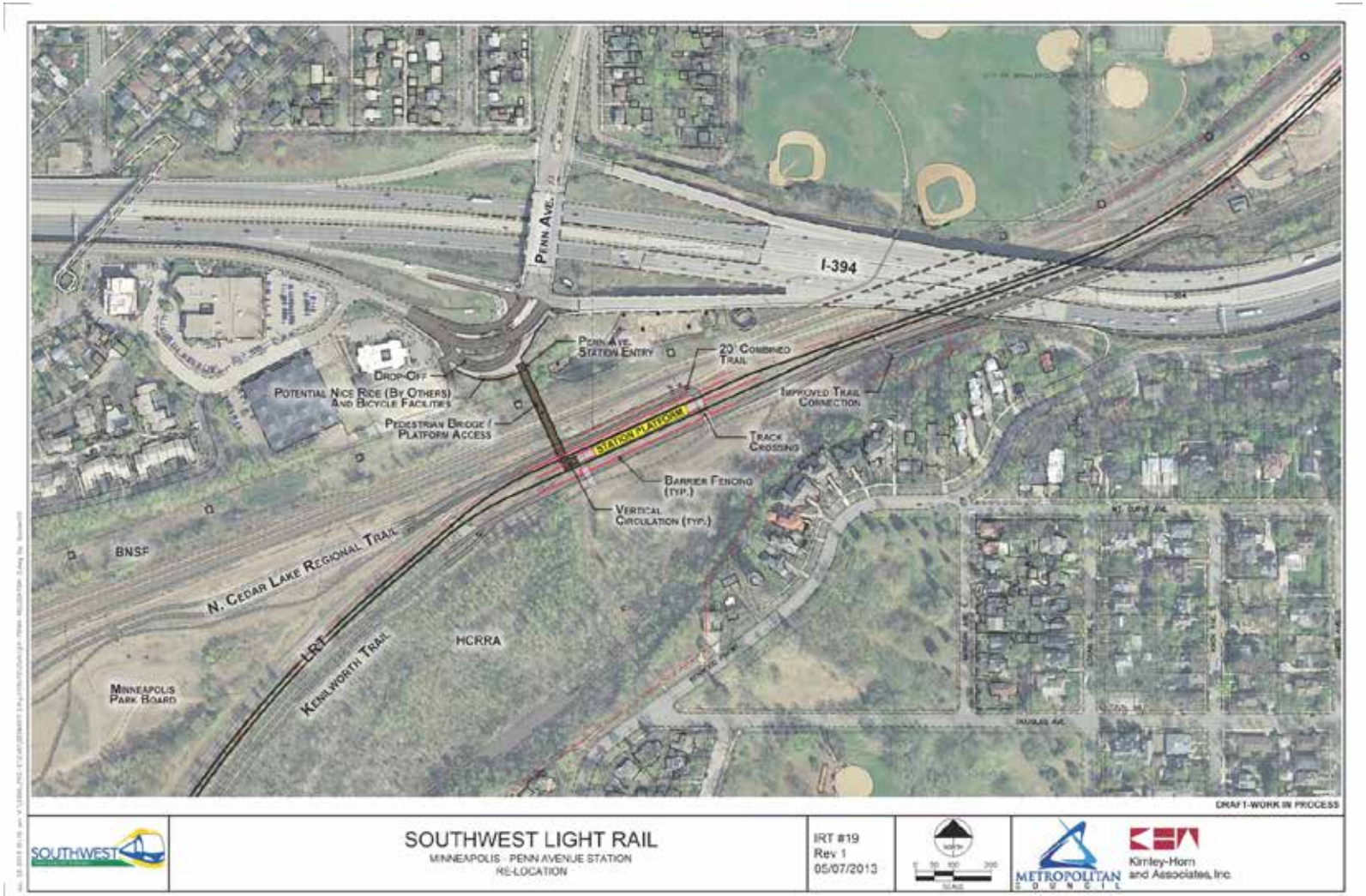
TI #19: Bassett Creek Valley Corridor - Penn Station

- Design Adjustments:
  - Station location
  - Trail alignment and connections
- Benefits:
  - Provides improved pedestrian connection to Penn Avenue/I-394

TI #19: Bassett Creek Valley Corridor – Penn Station



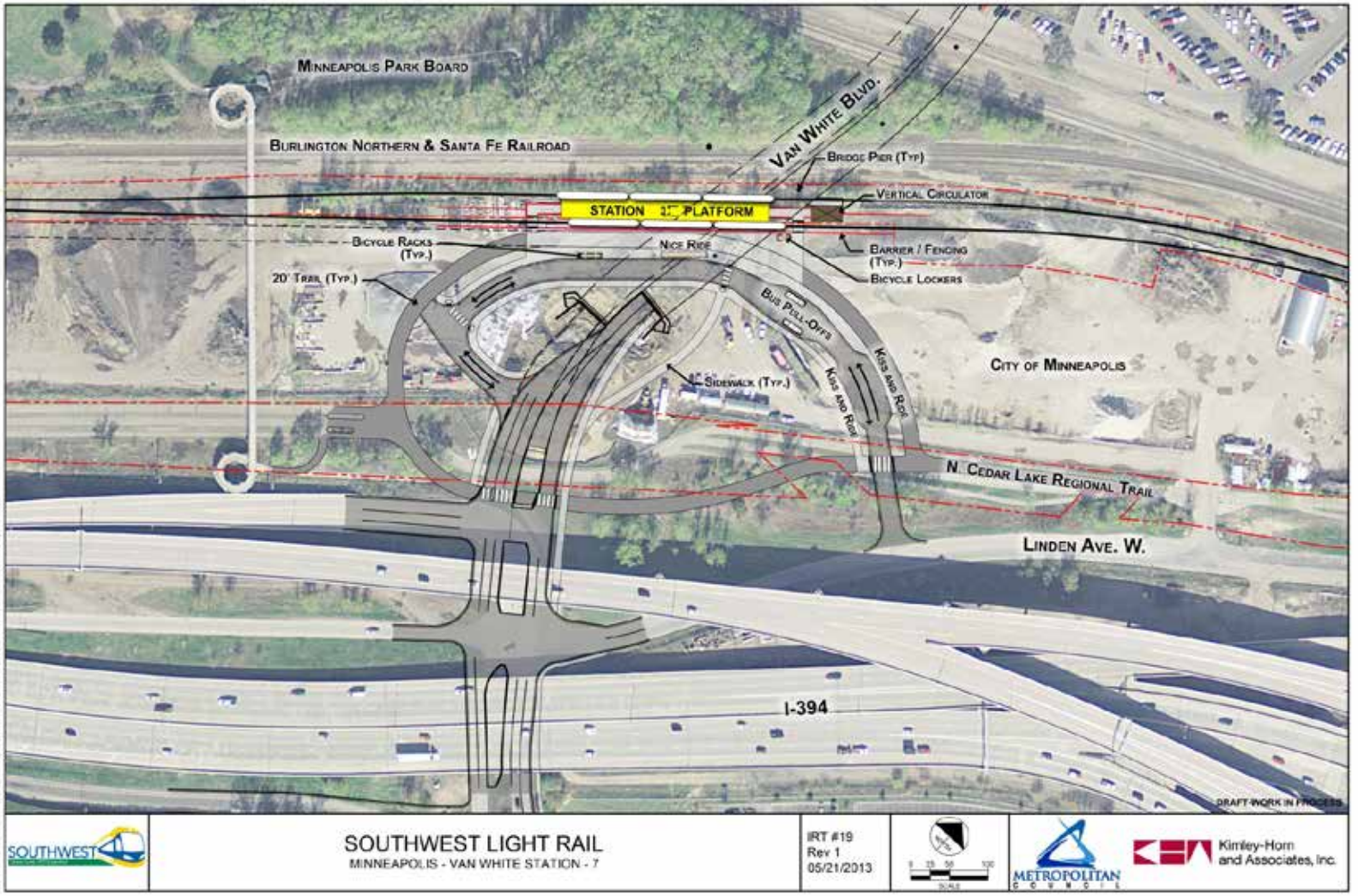
TI #19: Bassett Creek Valley Corridor - Penn Station



TI #19: Bassett Creek Valley Corridor – Van White Station

- Design adjustments:
  - Station location
  - Trail alignment and connections
  - Pedestrian vertical circulation
- Benefits:
  - Design accommodates potential future development

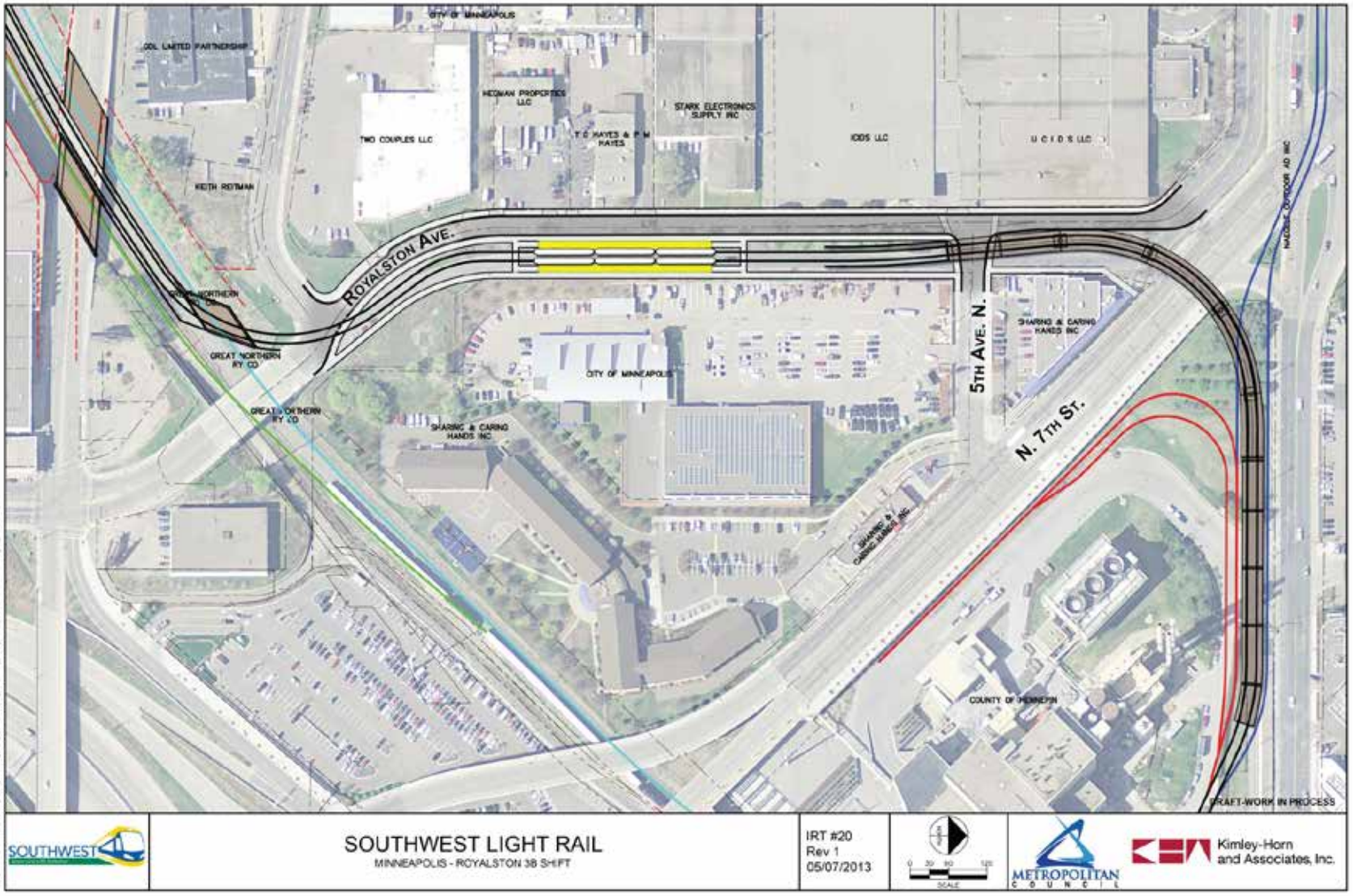
TI #19: Bassett Creek Valley Corridor – Van White Station



TI #20: Royalston Station

- Design adjustments:
  - LRT alignment and station location
  - Bridge structure over North 7th Street
- Benefits:
  - Accommodates truck delivery access to local businesses
  - Accommodates future development
  - Coordinates with HCRRA's Interchange Project
  - Accommodates future Bottineau Project

TI #20: Royalston Station



TI #19: Bassett Creek Valley Corridor – Penn Station & Van White Station
TI #20: Royalston Station

- Revised design cost estimate: $96 M (LPA Δ +$1 M)
- Primary cost drivers:
  - Vertical circulation at Van White Station
  - Vertical circulation at Penn Station
  - Bridge structure over North 7th Street

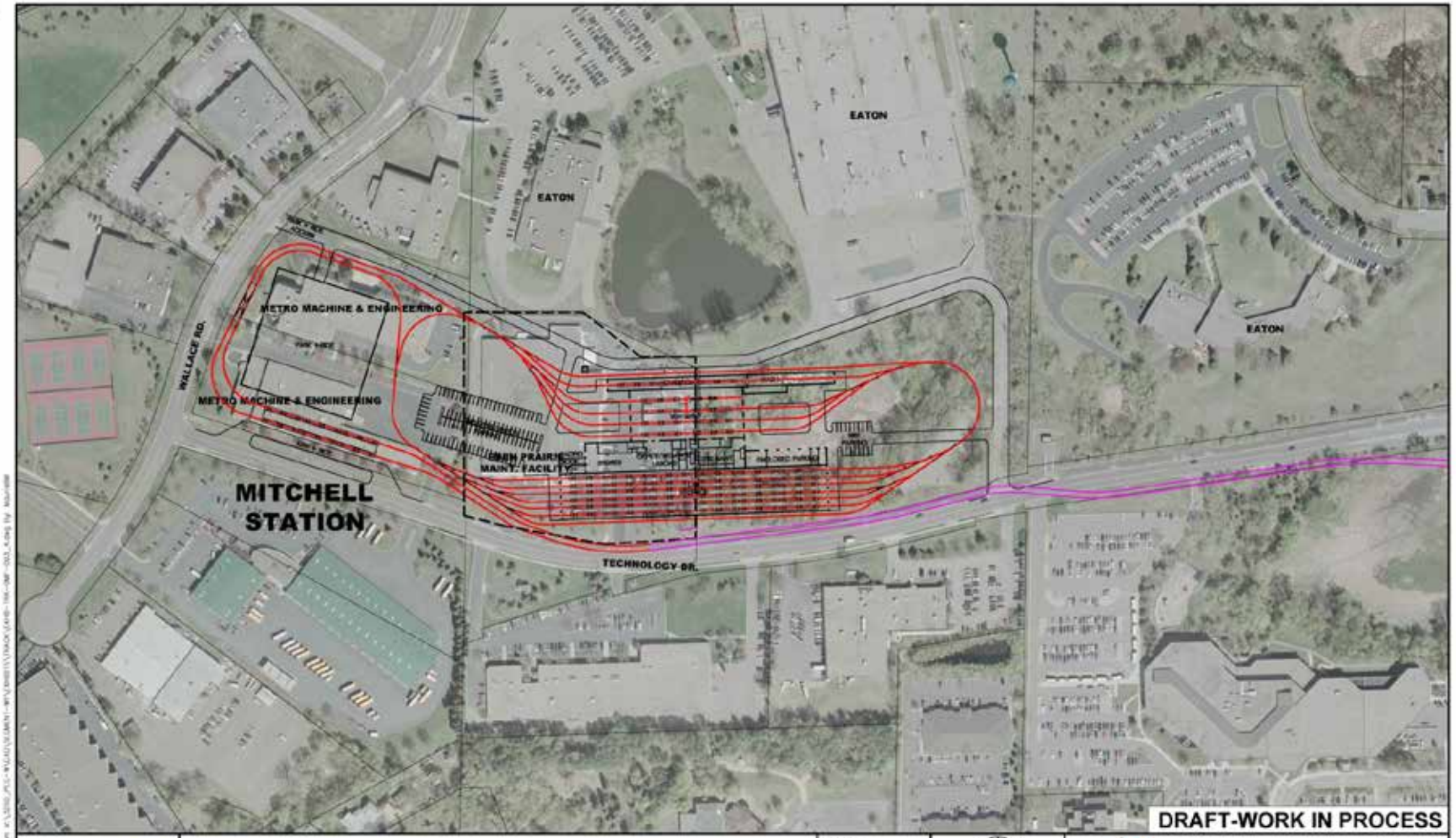
SOUTHWEST
Green Line LRT Extension

Technical Issue #23
Operations and Maintenance Facility

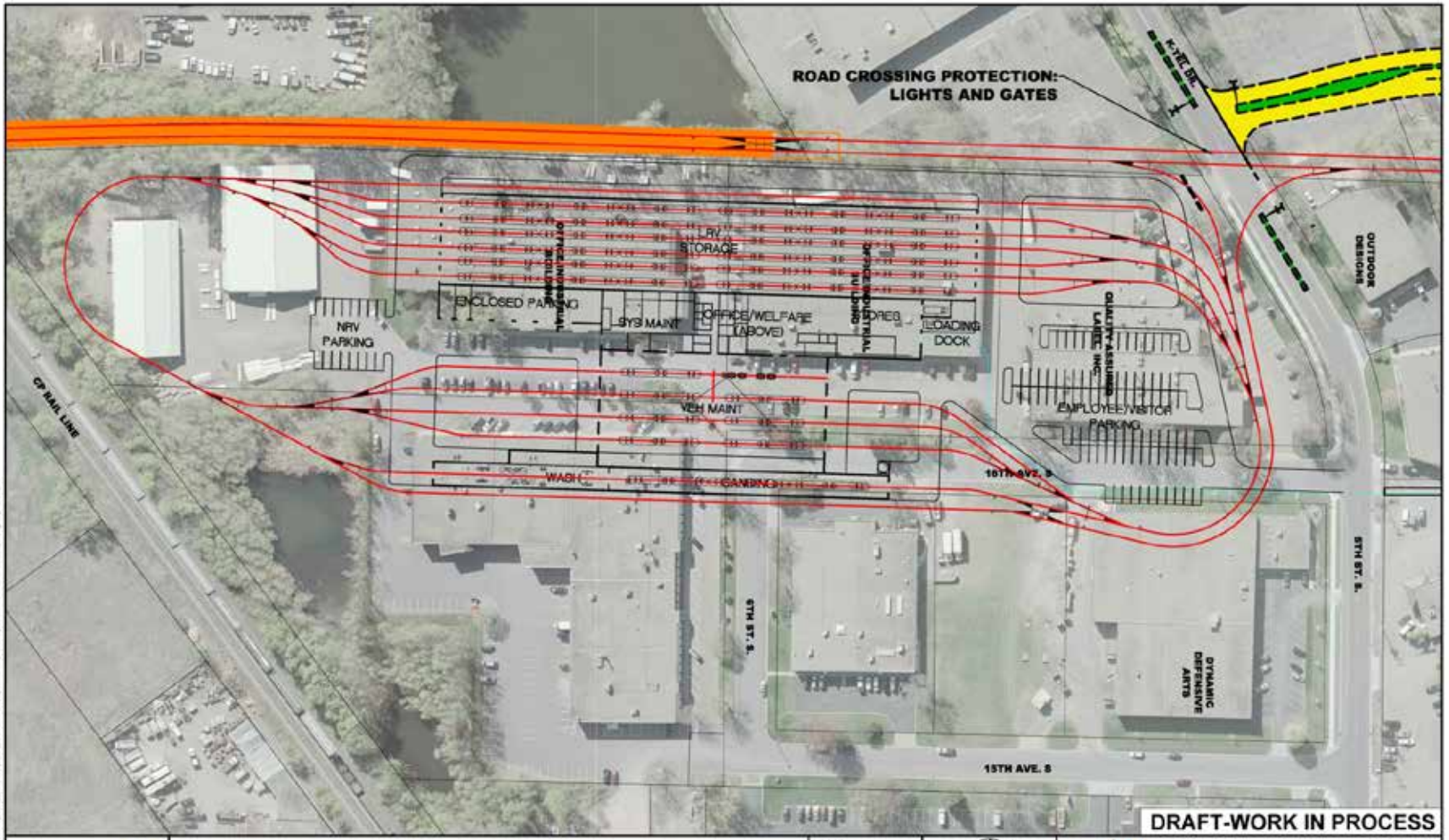
TI #23 OMF Site Location: Two Candidate Site Finalists

Site Number	Name (City)
3/4	City Garage (Eden Prairie)
9A	K-Tel East (Hopkins)

TI #23 OMF Site Location: Site Number 3/4



TI #23 OMF Site Location: Site Number 9A



TI #23 OMF Site Location

Site No.	Name (City)	OMF Site Cost Estimate (M)	LPA Δ M
3/4	City Garage (Eden Prairie)	$95 - $100	$30 - $35
9A	K-Tel East (Hopkins)	$100 - $105	$35 - $40

TI #23 OMF Site Location

Site No.	Name (City)	Cost Drivers
3/4	City Garage (Eden Prairie)	• Site demolition/clearing • Yard tracks on structure
9A	K-Tel East (Hopkins)	• Site demolition/clearing • Site grading/earthwork

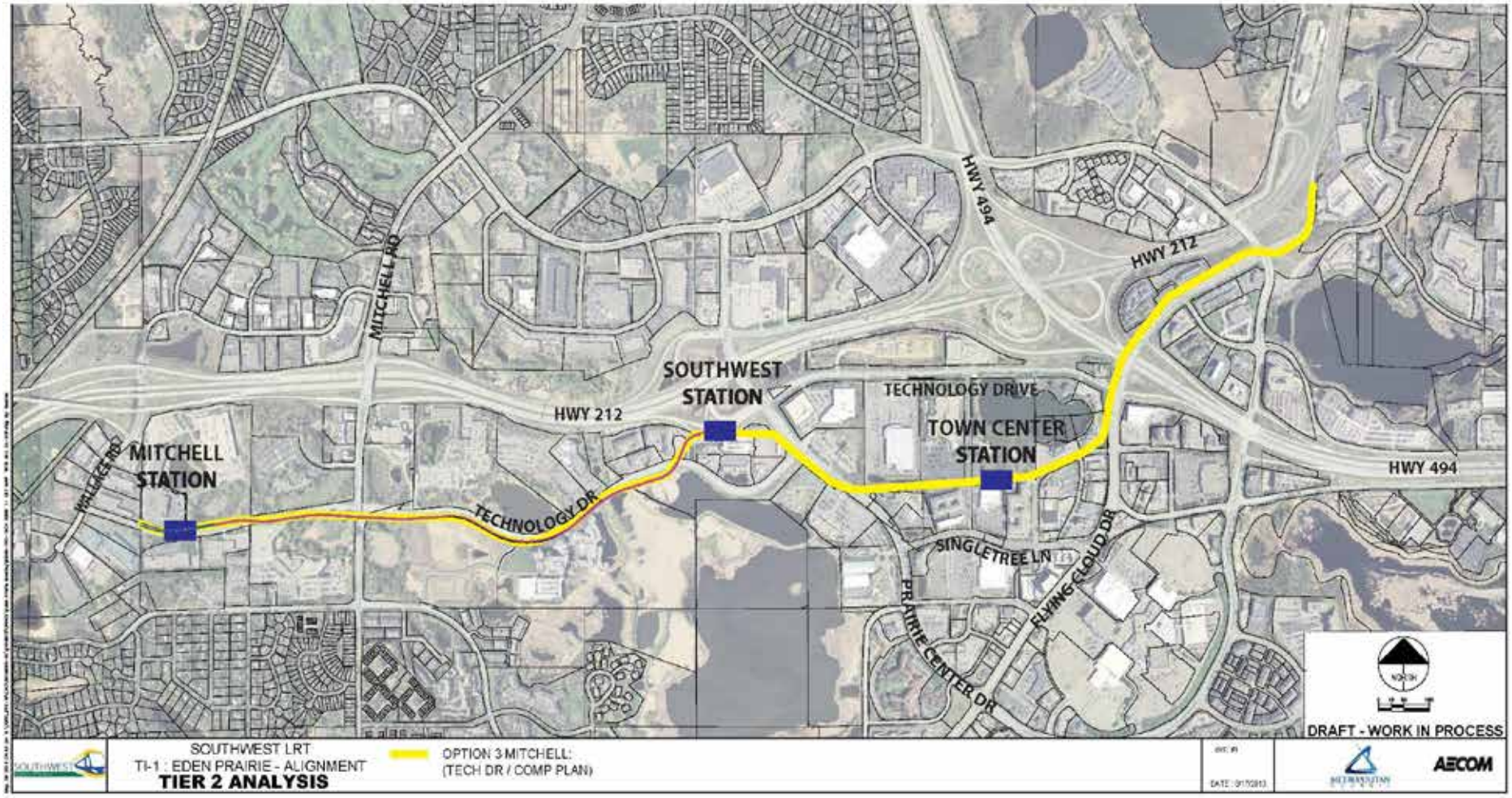
SOUTHWEST
Green Line LRT Extension

Technical Issue #1
Eden Prairie Alignment Adjustment

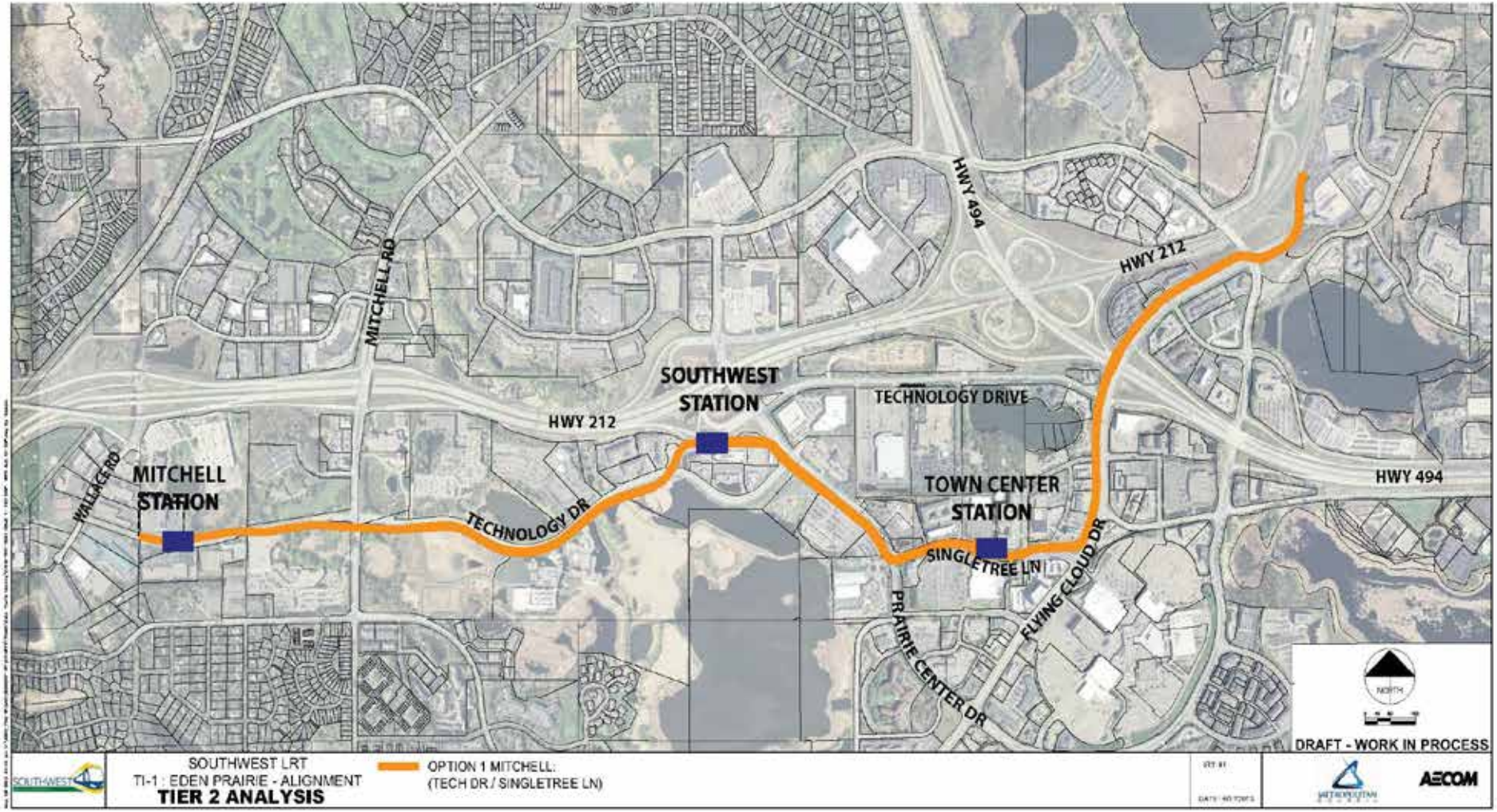
TI #1 Eden Prairie Alignment: Three Alignment Adjustment Finalists

Description
Mitchell Station & Comp Plan Station via Technology Drive
Mitchell Station & Singletree Station via Technology Drive
Mitchell Station & Singletree Station via TH 212 frontage

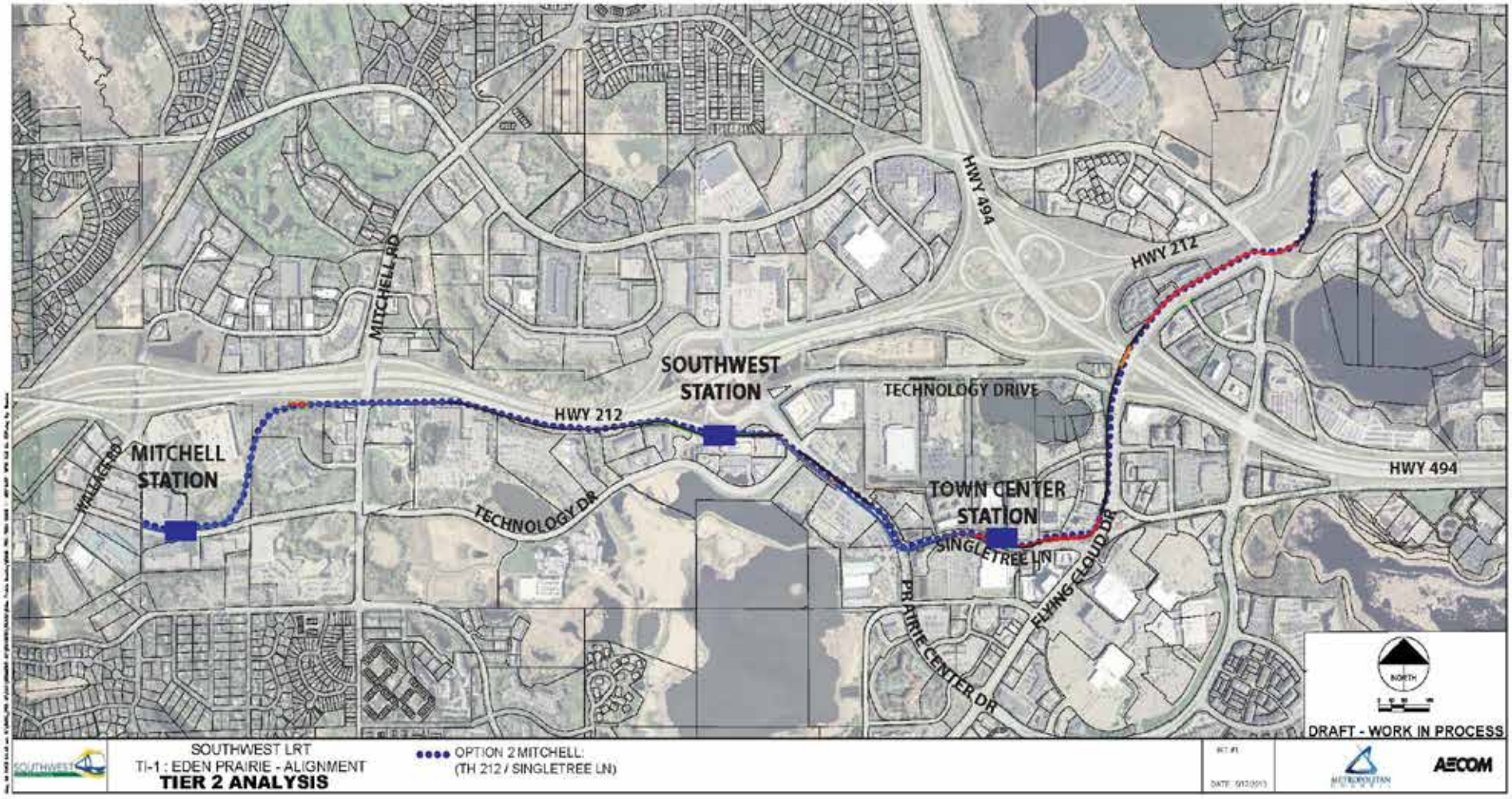
TI #1 Eden Prairie Alignment: Mitchell Station & Comp Plan Station via Technology Drive



TI #1 Eden Prairie Alignment: Mitchell Station & Singletree Station via Technology Drive



TI #1 Eden Prairie Alignment: Mitchell Station & Singletree Station via TH 212 frontage



TI #1 Eden Prairie Alignment

Description	Eden Prairie Alignment Cost Estimate (M)	LPA Δ M
Mitchell Station & Comp Plan Station via Technology Drive	$195 - $205	$30 - $35
Mitchell Station & Singletree Station via Technology Drive	$195 - $205	$30 - $35
Mitchell Station & Singletree Station via TH 212 frontage	$195 - $205	$30 - $35

TI #1 Eden Prairie Alignment

Description	Primary Cost Drivers
Mitchell Station & Comp Plan Station via Technology Dr	• Bridge structure over Prairie Center Dr. • Increased length of corridor by 1/3 mile • ROW acquisition
Mitchell Station & Singletree Station via Technology Drive	• Increased length of corridor by 1/3 mile • ROW acquisition
Mitchell Station & Singletree Station via TH 212 frontage	• Increased length of corridor by 1/2 mile • ROW acquisition

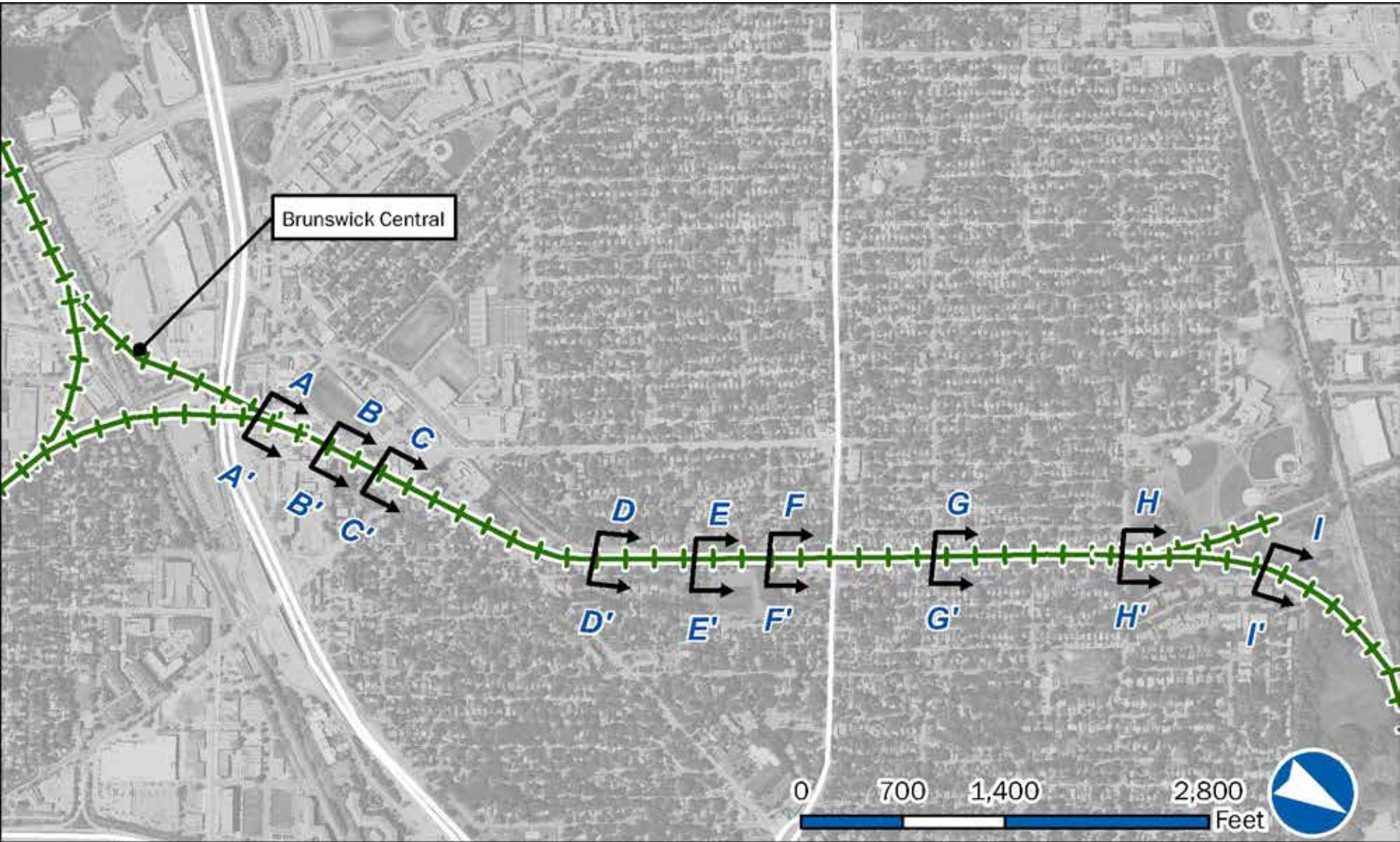
SOUTHWEST
Green Line LRT Extension

Technical Issue #21
Freight Rail

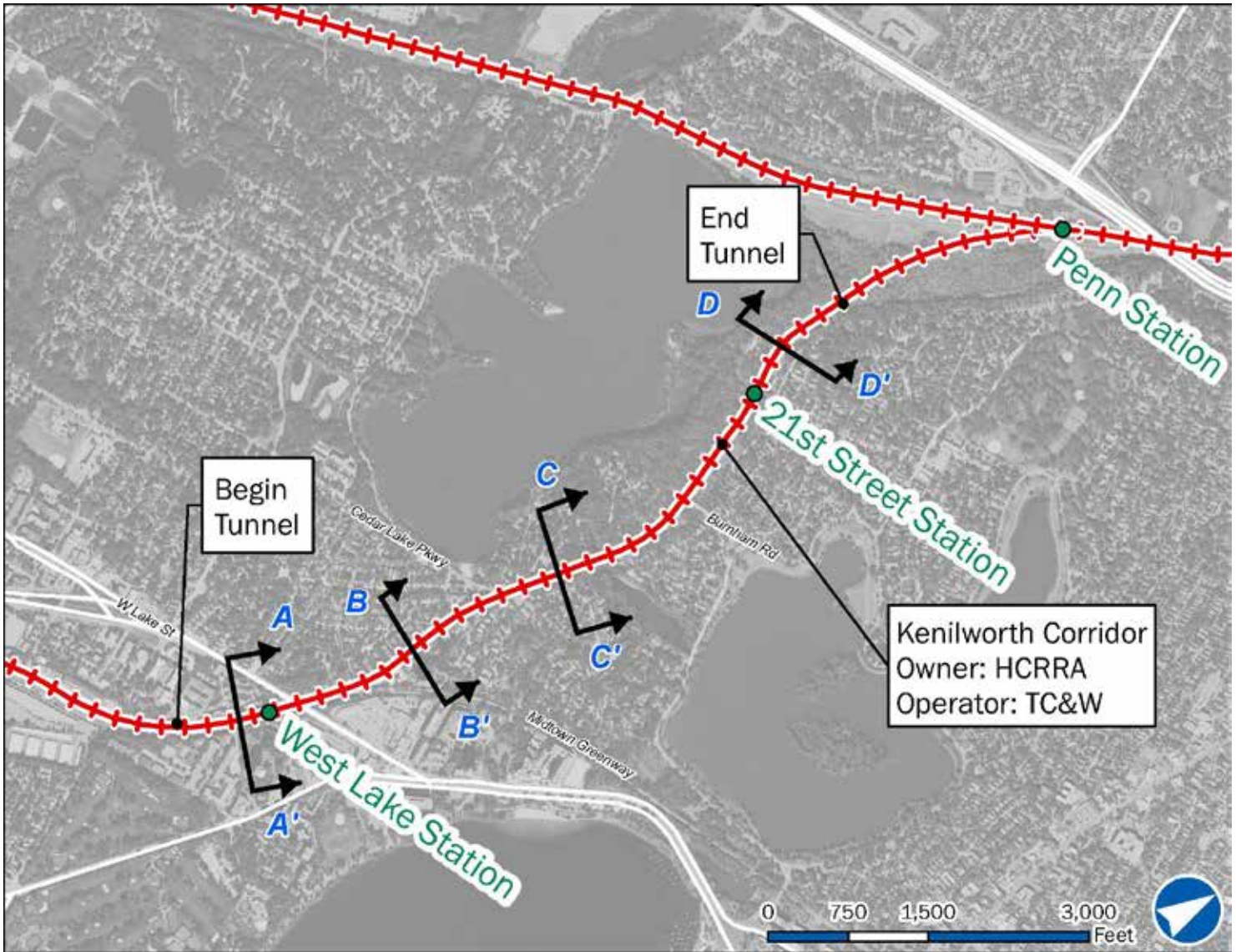
TI #21 Freight Rail
Design Options Summary

Description
Brunswick Central Freight Rail Relocation
Kenilworth Deep Bore LRT Tunnel
Kenilworth Shallow LRT Tunnel

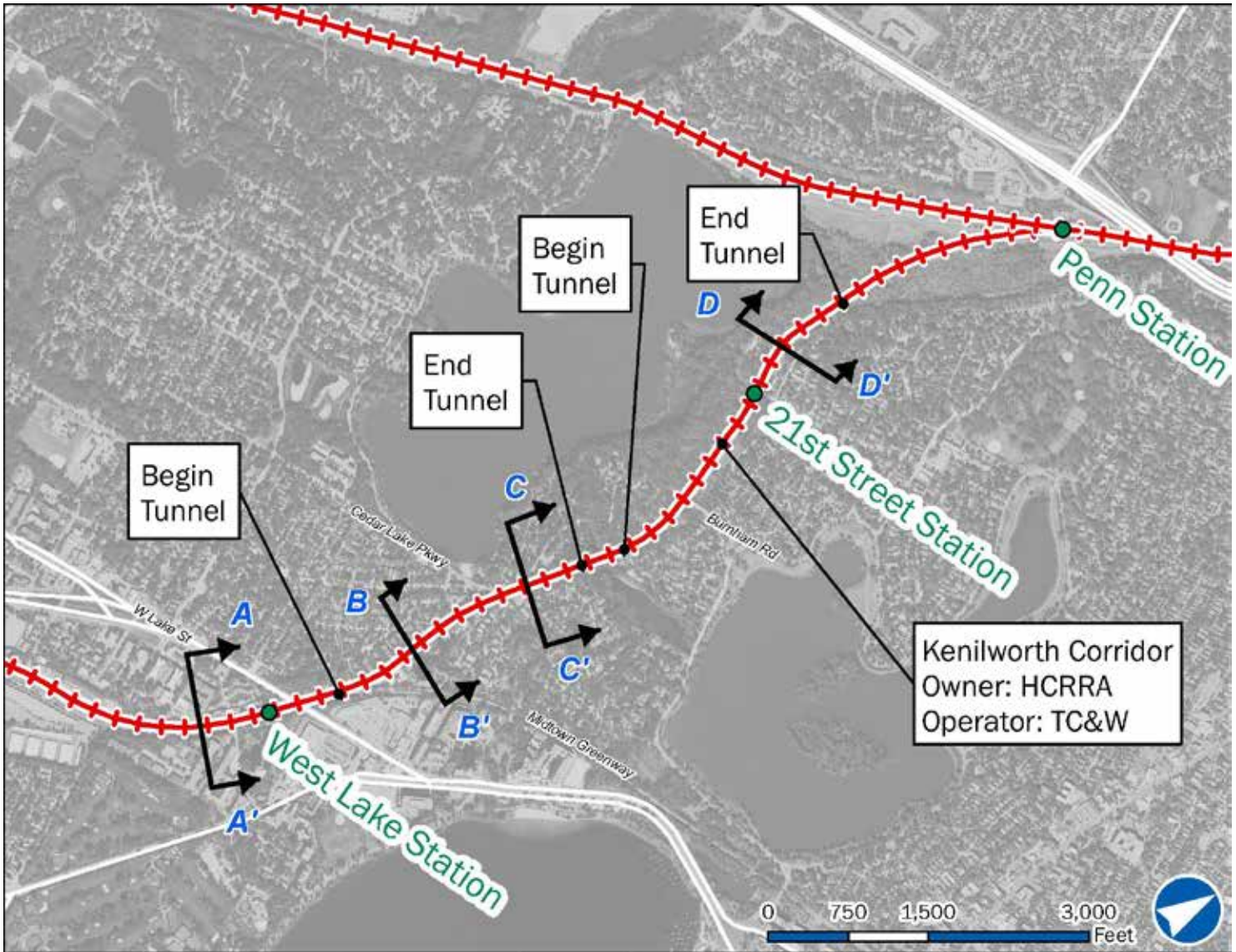
Brunswick Central Freight Rail Relocation



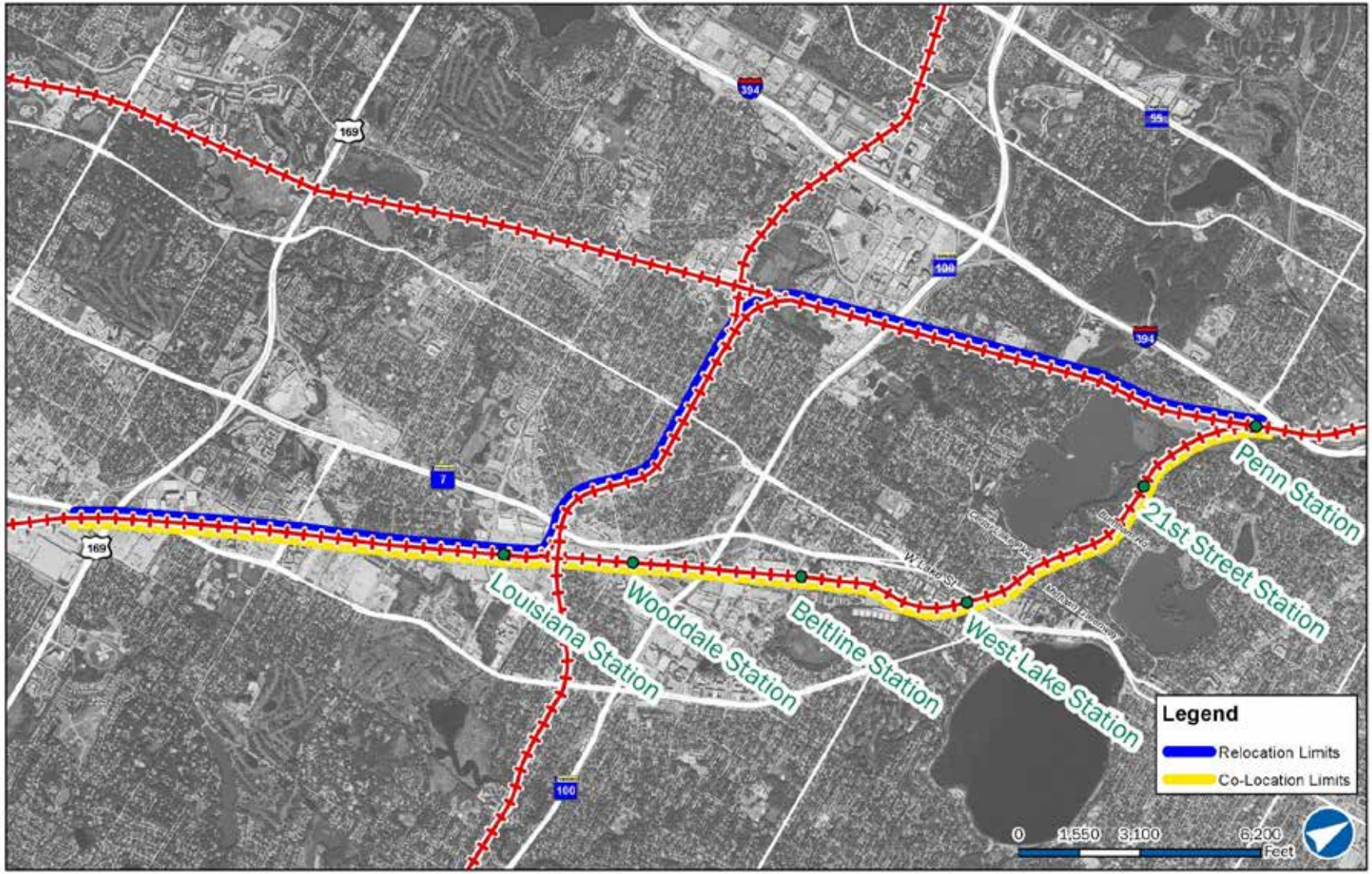
Kenilworth Deep Bore LRT Tunnel



Kenilworth Shallow LRT Tunnel



Freight Rail – Cost Estimate Limits



Brunswick Central – Freight Rail Relocation

- Primary cost drivers:
  - Acquisition of homes and businesses
  - Freight rail bridge structures and retained fill/berms
  - Pedestrian underpasses
  - Lowering of TH 7 and frontage road
  - Reconfiguration of existing street network

Kenilworth Deep Bore LRT Tunnel

- Primary cost drivers:
  - Tunnel boring machine and access pits
  - Tunnel boring operations & ground settlement control
  - Subway tunnel station at West Lake
  - Vertical circulation at West Lake station
  - Ventilation systems
  - West Lake Street bridge reconstruction
  - Ground water management systems

Kenilworth Shallow LRT Tunnel

- Primary cost drivers:
  - Cut and cover excavation
  - Restricted construction area west of Channel Creek crossing
  - Ground stabilization at Burnham Road bridge piers

Freight Rail Common Scope Elements:

- Primary cost drivers:
  - Freight rail track
  - Freight rail bridge over Minnehaha Creek
  - Freight rail bridge over Louisiana Avenue
  - CP ROW swap
  - Southerly connection (Bass Lake Spur to MN&S Spur)
- Common scope elements cost: $85M - $90M
  - Cost of common scope elements is additive to each design option

Freight Rail Cost Estimate Summary

	Freight Rail Cost Estimate (M)	LPA Δ M
Freight Rail Common Elements	$85 - $90	$85 - $90

Design Option	Freight Rail Cost Estimate (M)	LPA Δ M
Brunswick Central Freight Rail	$190 - $200	$190 - $200
Kenilworth Deep Bore LRT Tunnel	$320 - $330	$320 - $330
Kenilworth Shallow LRT Tunnel	$150 - $160	$150 - $160

SOUTHWEST
Green Line LRT Extension

LRT and Freight Rail
Cost Estimate Summary

LRT Subtotal Cost Estimate Summary

LRT Project Cost LPA = $1,250 M

Description	Revised Design Cost Estimate (M)	LPA Δ M
Design adjustments TI #1 – 20, 22 - 25	$885 - $915	$100 - $130
Vehicles	$115 - $125	$0 - $10
Design Related Costs	$350 -$360	$0 - $10
LRT Subtotal	**$1,350 - $1,400**	**$100 - $150**

Total Project Cost Estimate Summary (LRT + Freight)

LRT Project Cost LPA = $1,250 M

Description	Revised Design Cost Estimate (M)	LPA Δ M
Design adjustment cost estimate (LRT Subtotal)	$1,350 - $1,400	$100 - $150
Freight rail common costs	$85 - $90	$85 - $90
Freight rail cost estimate	$150 - $330	$150 - $330
SWLRT Total Project Costs	**$1,585 – $1,820**	**$335 - $570**

Ridership Refresh

Description	2030 Ridership
LPA	29,660
LPA Refresh*	34,000 – 36,000

*Ridership drivers:

- 2010 Census data
- 2010 On-board survey
- Regional socio-economic forecasts

Summary

- Project scope and costs reflect 1000's of hours of stakeholder meetings and comments received from cities, agencies, businesses and the public

- Ridership projections are trending upwards; 4,000+ additional trips by 2030; FTA reviewing refreshed forecast

Project Scope and Cost Rollout: Next Steps

- Present / seek input
  - Business and Community Advisory Committees – July 25
  - SWLRT Corridor Management Committee – August 7
  - HCRRA – August 13

- Present recommended scope and cost / seek input
  - SWLRT Corridor Management Committee – August 14
  - Metropolitan Council – August 14

- Request approval on scope and cost
  - Transportation Committee – August 26
  - Metropolitan Council – August 28

A Look Ahead: Design & Engineering

- Q3 2013: Submit Municipal Consent SWLRT Plans for City and County Review
- Q4 2013: Complete Municipal Consent Approval Process
- Q1 2014: Finalize 30% Design Plans and Specs

Summary of BAC and CAC Comments

Next Meeting

- BAC: Wednesday, August 28
- Time: 8:00 – 9:30 AM
- Location: Southwest Project Office

- CAC: Thursday, August 29
- Time: 6:00 – 8:30 PM
- Location: Southwest Project Office

SOUTHWEST
Green Line LRT Extension

Community Outreach Coordinators

St. Louis Park & Minneapolis

Stations: Royalston, Van White, Penn, 21st St, West Lake, Beltline, Wooddale, Louisiana

Sophia Ginis
612-373-3895
Sophia.Ginis@metrotransit.org

Minnetonka, Hopkins & Edina

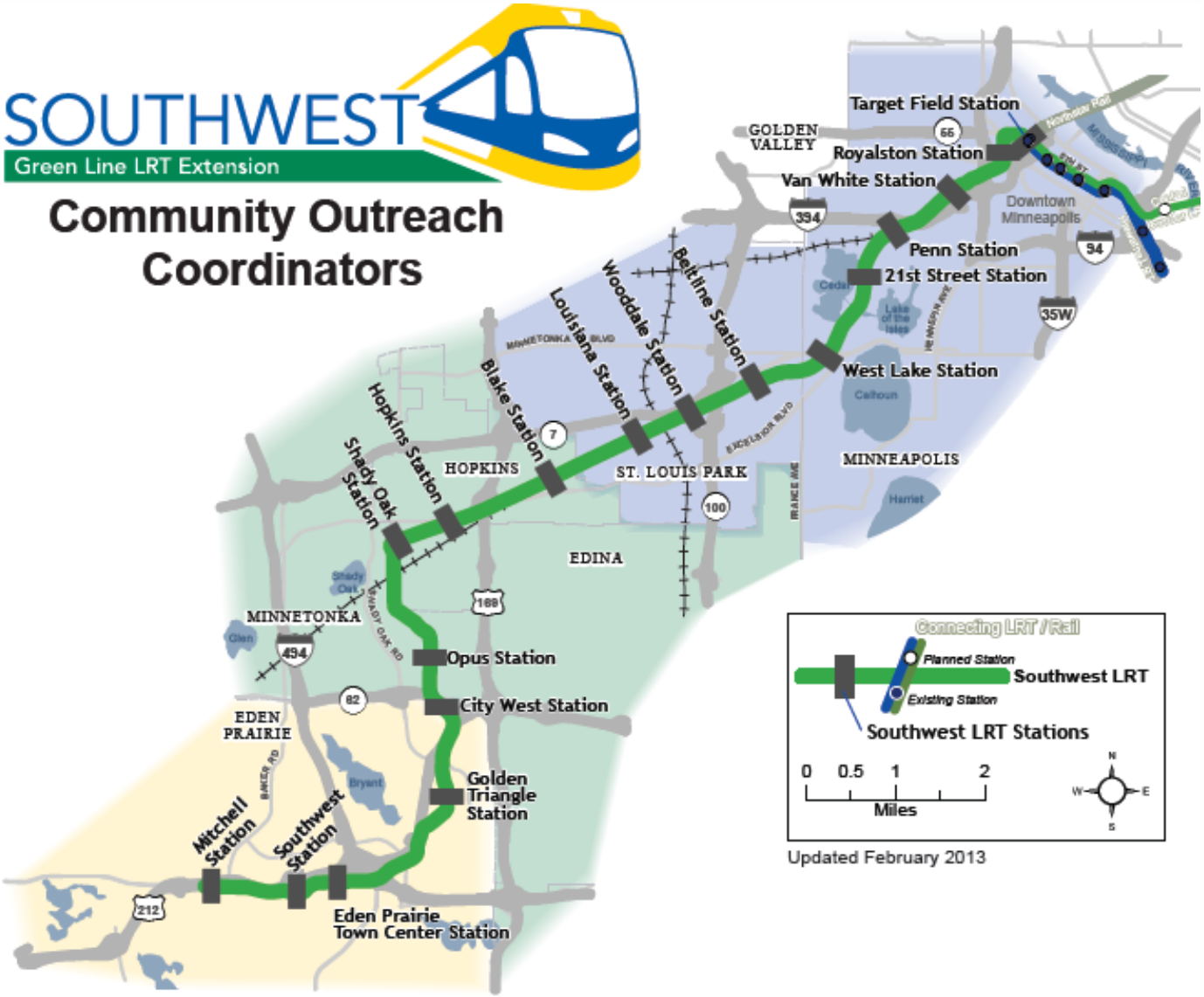
Stations: Blake, Hopkins, Shady Oak, Opus

Dan Pfeiffer
612-373-3897
Daniel.Pfeiffer@metrotransit.org

Eden Prairie

Stations: City West, Golden Triangle, Eden Prairie Town Center, Southwest, Mitchell

Daren Nyquist
612-373-3894
Daren.Nyquist@metrotransit.org



Updated February 2013

More Information

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