METRO BLUE LINE EXTENSION

Bottineau LRT

Corridor Management Committee

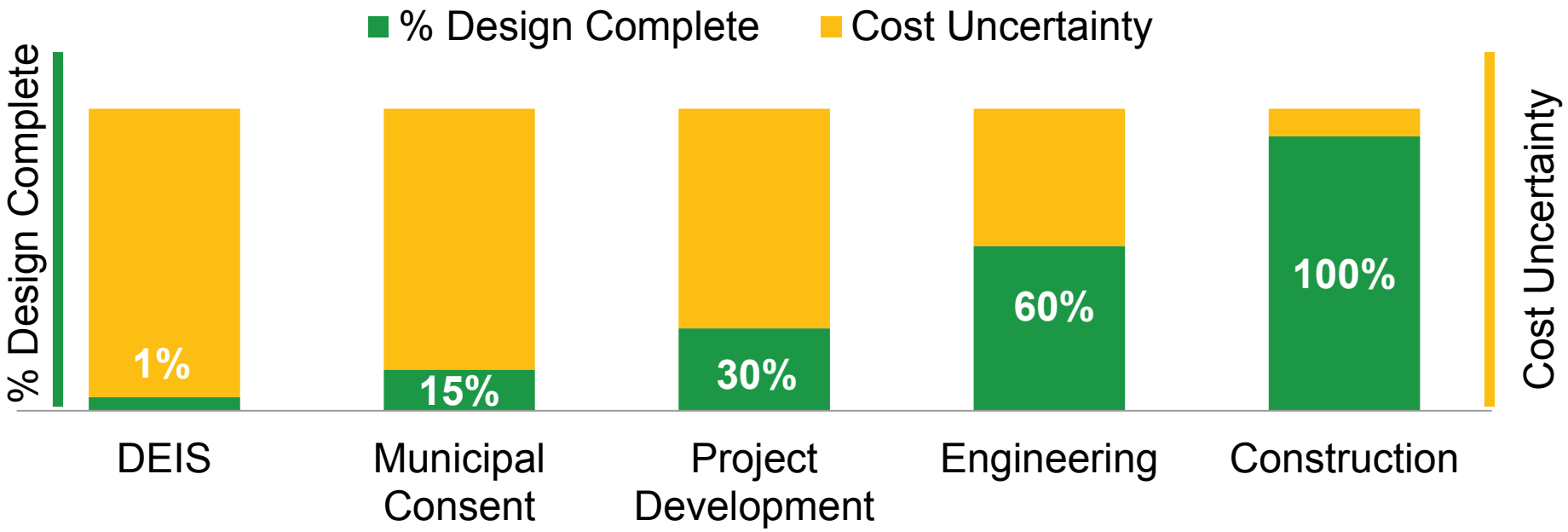
October 29, 2015

METROPOLITAN COUNCIL | Metro Transit | FTA | Counties Transit Improvement Board | Minnesota Department of Transportation | Hennepin

Today's Topics

- Revised Cost Estimate
- Revised Project Scope
  - Technical Issue Recommendations
  - Revised Scope Summary
- Cost Estimate Overview
- Discussion
- Next Steps

Cost Uncertainty By Project Phase



Cost Estimates and Budget Timeline

COST ESTIMATE → BUDGET

DEIS Cost Estimate 1% Engineering	Updated Cost Estimate 15% Engineering	Project Budget 30% Engineering
August 2014 Enter Project Development	**December 2015** Begin Municipal Consent	**August 2016** Apply to Enter Engineering

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DEIS Cost Estimate Assumptions

DEIS Cost Estimate (1% Eng.)	$1.002 B
Total Project Contingency	34%
Escalation Factor	3%
Base Year Estimate	2012
Forecast Year	2017 (mid-point of construction)

Revised Cost Estimate

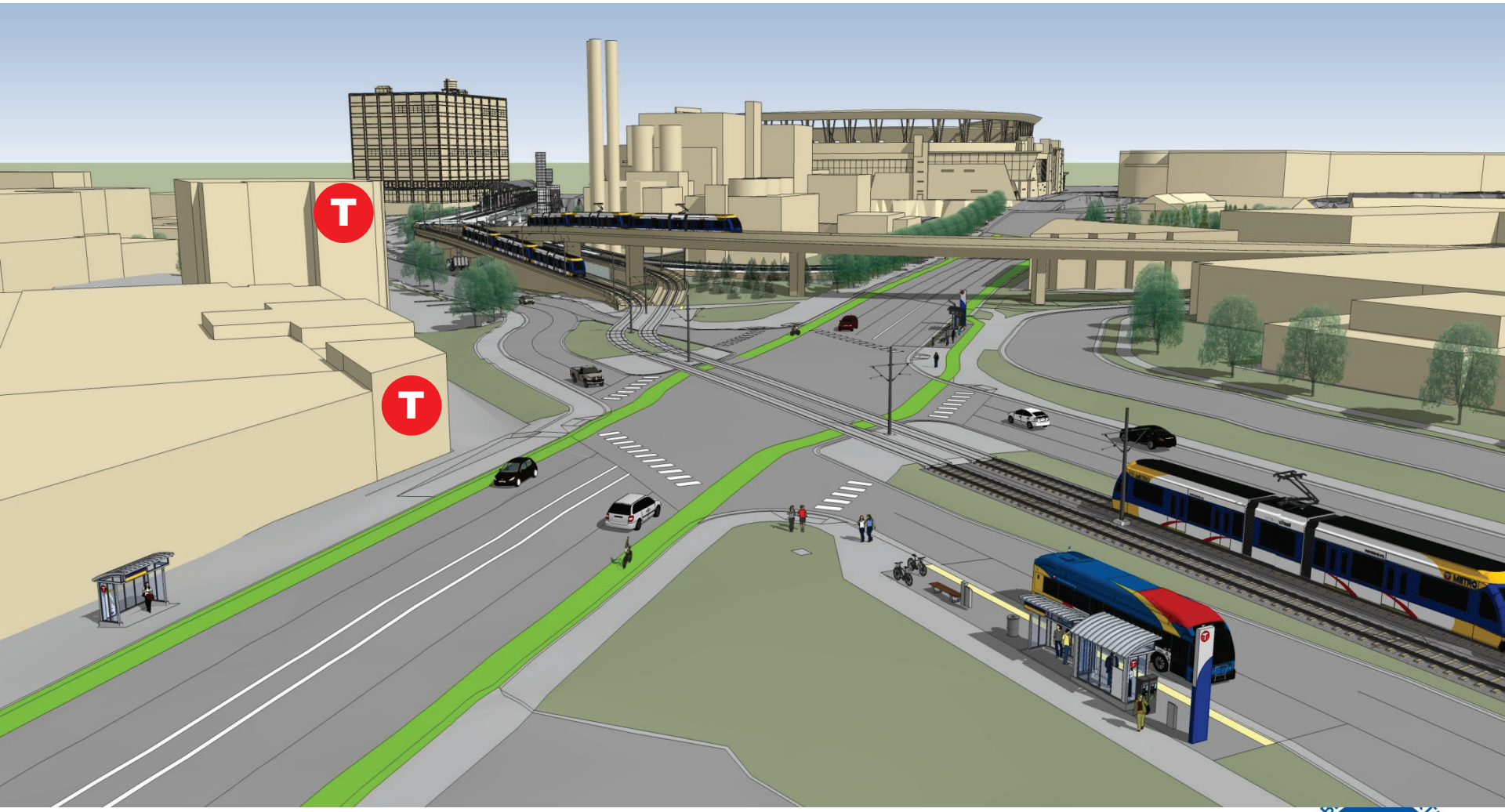
Cost Estimate (15% Eng.)	$1.488 B
Total Project Contingency	30%
Escalation Factor	3%
Base Year Estimate	2015
Forecast Year	$YOE (2018, 2019 and 2020)

Revised Project Scope

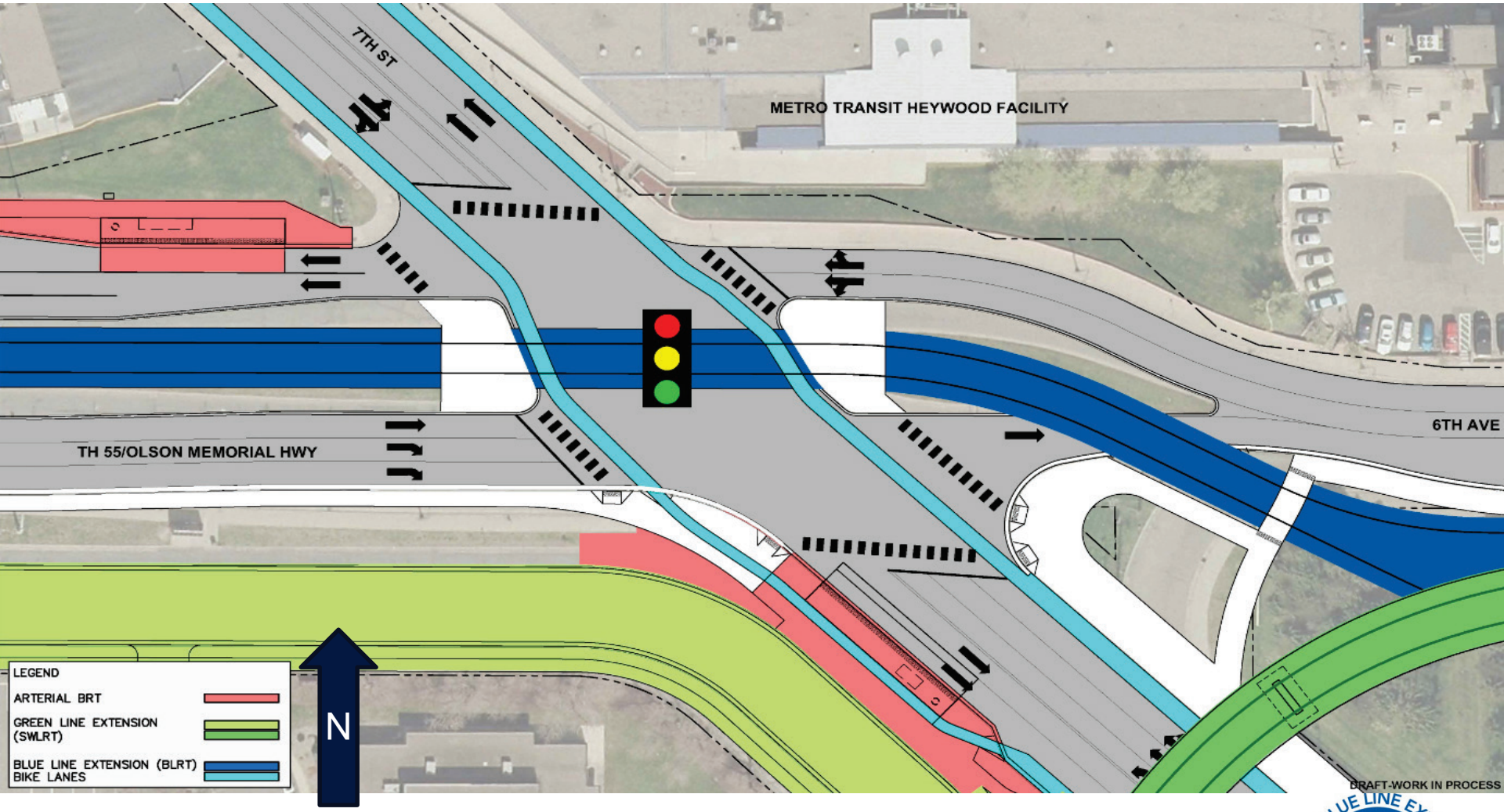
Project Scope Refinement During Project Development

- Resolves issues identified by Technical Advisory Group during DEIS
- Reflects input and coordination:
  - DEIS: 1,231+ public comments
  - City/County/Agency: 105+ Issue Resolution Team meetings
  - Advisory Committees: TPAC, BAC, CAC, CMC
  - Public: 14 public open houses (1,600+ attendees; 530+ public comments) and 112+ community meetings
- Establishes scope for Municipal Consent Plans and Final Environmental Impact Statement
- Provides context for continued discussions with stakeholders

Target Field Station Connection Viewed Through 7th Street Intersection



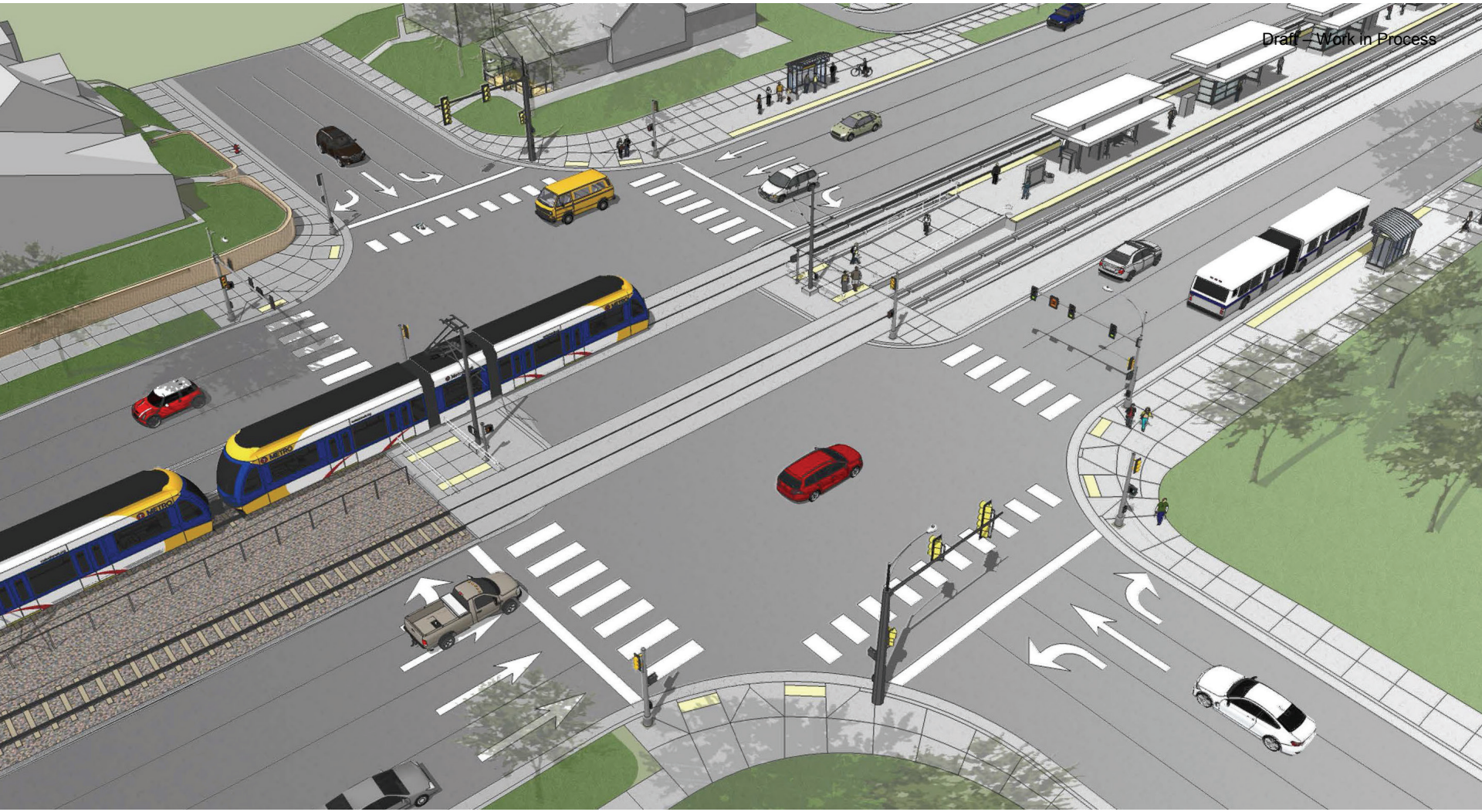
7th Street and Olson Memorial Highway Intersection



Target Field Station Connection: Recommendation

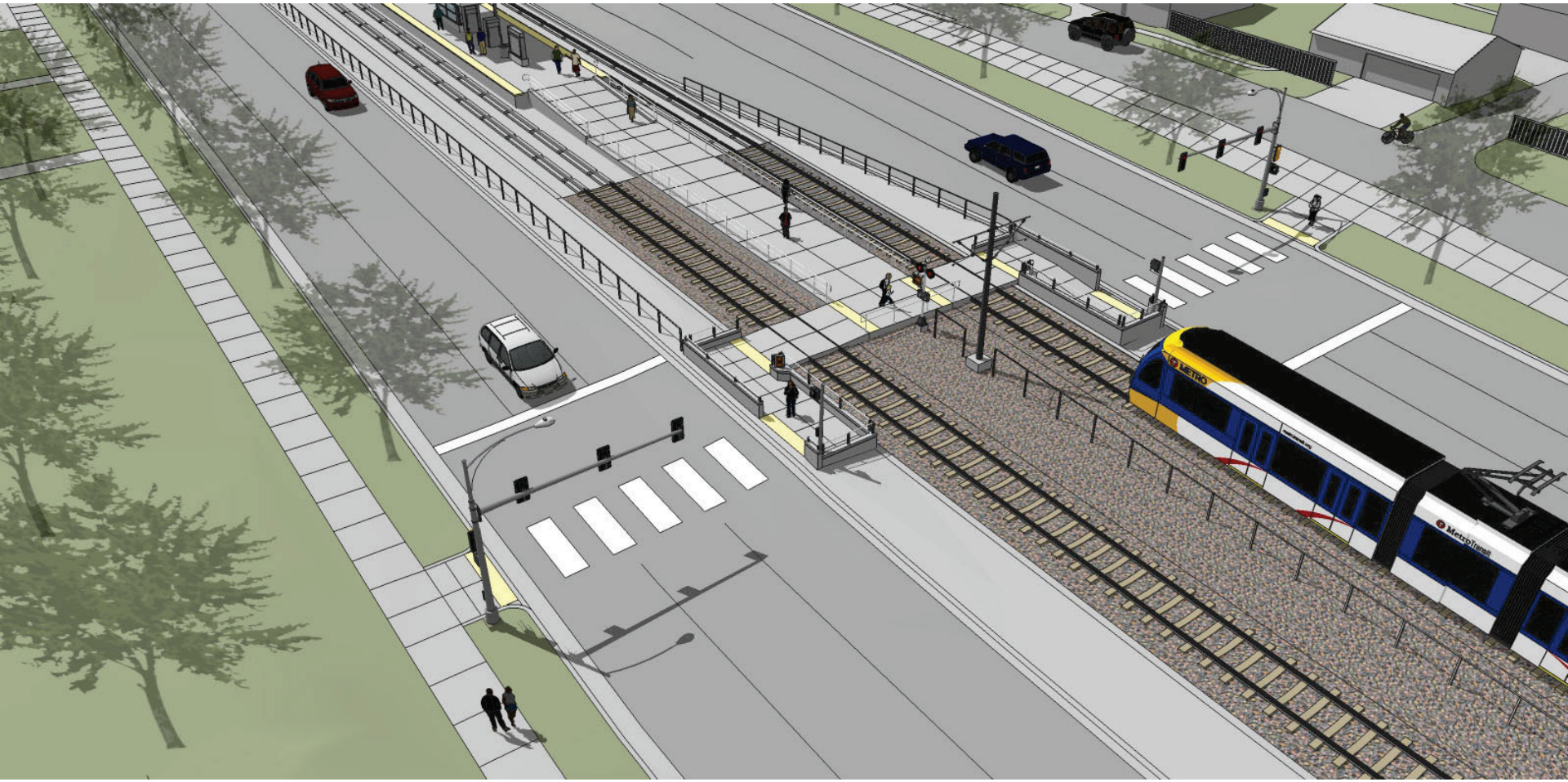
- Tracks cross to center median east of 7th Street
- Tracks at-grade through 7th Street intersection
- LRT center running on TH55/Olson Memorial Highway

Olson Memorial Highway



Olson Memorial Highway and Penn Avenue: Looking northeast

Olson Memorial Highway

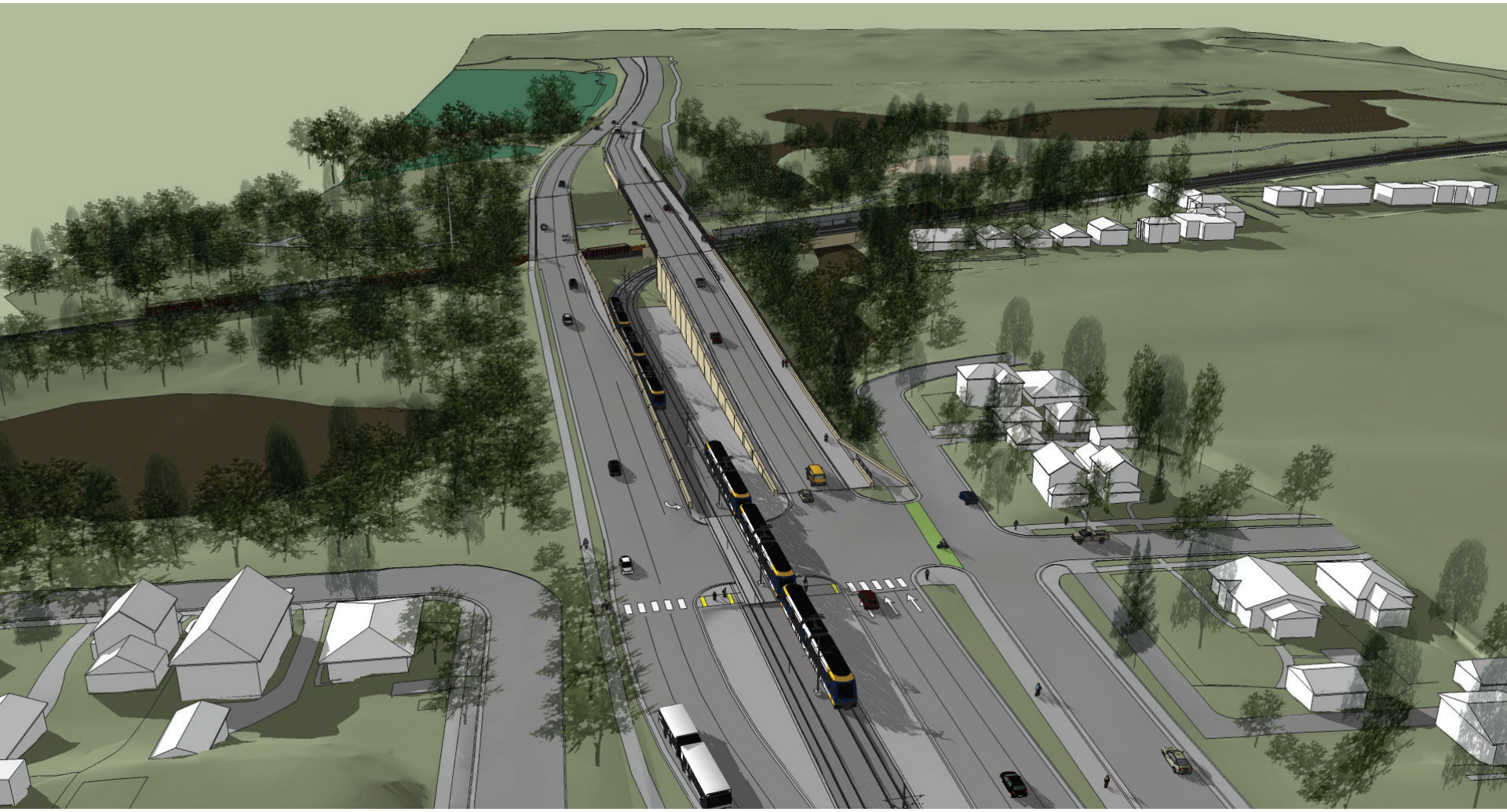


Olson Memorial Highway between Newton Avenue and Oliver Avenue: Looking northwest

Olson Memorial Highway: Recommendation

- 6-lane principal arterial
- Center running LRT
- 10’ boulevards
- 6’ sidewalk on both sides
- 3 mid-block pedestrian crossings
- Preserve space for future 12’ cycle track on north side

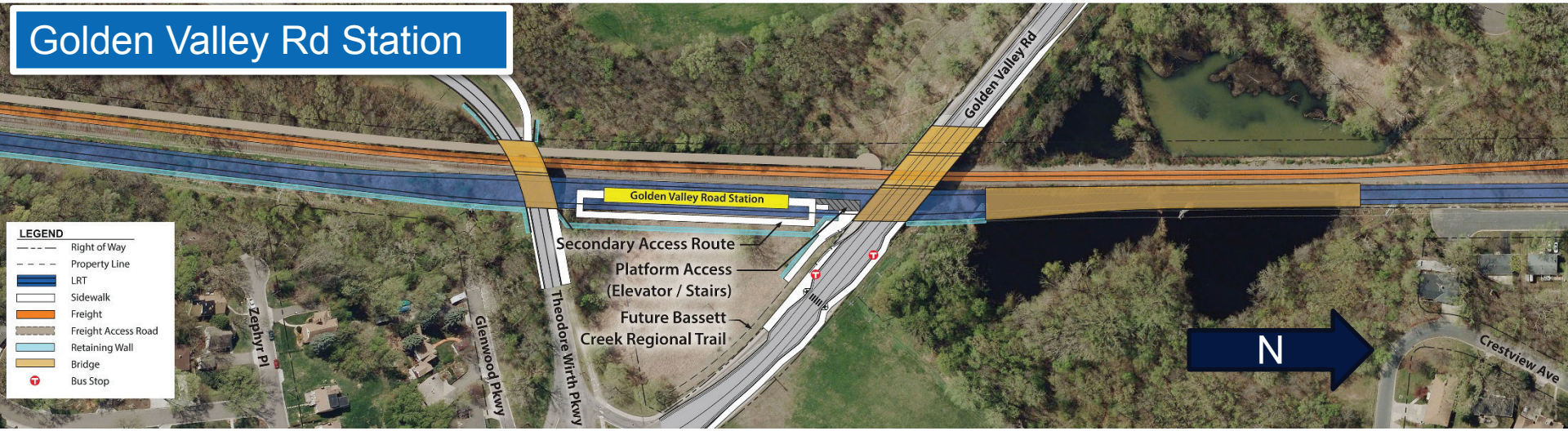
Olson Memorial Highway Crossing



Olson Memorial Highway Crossing: Recommendation

- Maintain eastbound Olson Memorial Highway bridge over freight corridor
- Reconstruct westbound Olson Memorial Highway bridge over freight corridor
- Center running LRT
- LRT transitions to freight rail corridor under new westbound Olson Memorial Highway bridge

Plymouth Ave/Golden Valley Rd Station: Recommendation



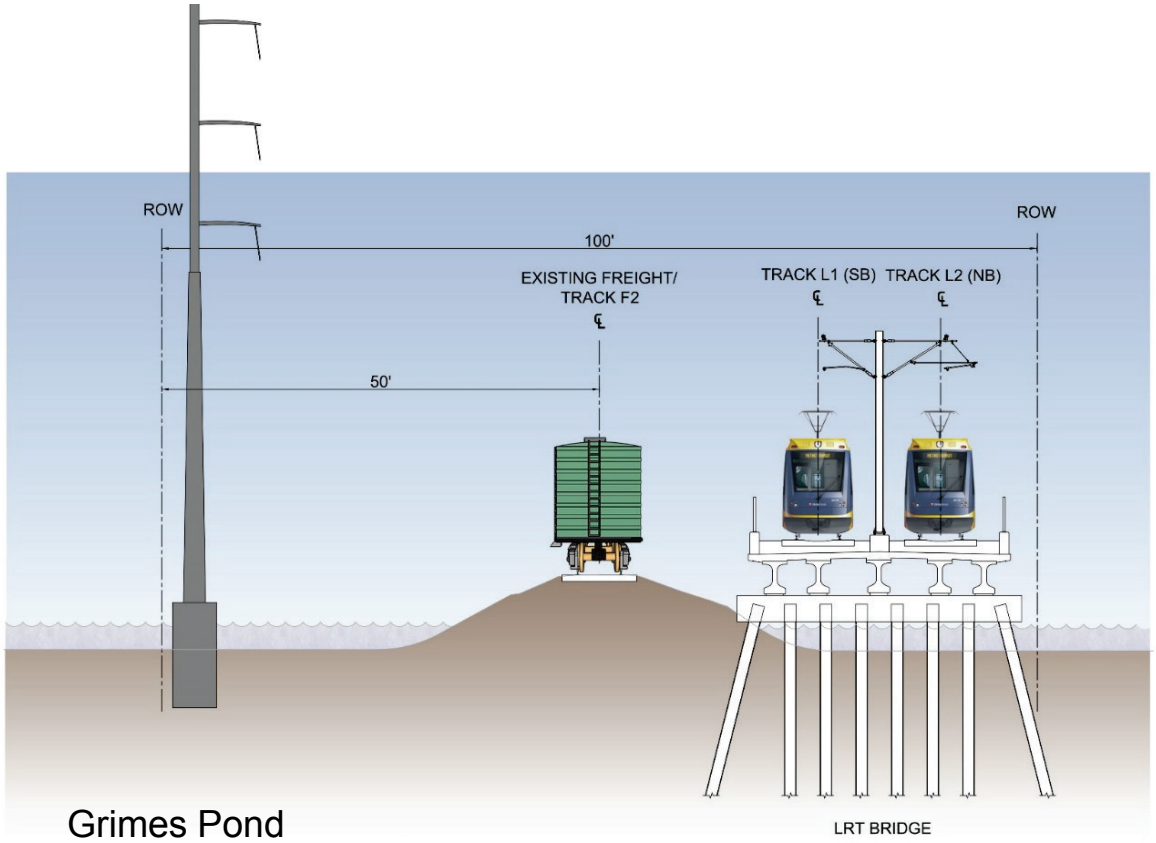
Plymouth Ave/Golden Valley Rd Station: Recommendation

- Advance design of Plymouth Ave and Golden Valley Rd stations, include in cost estimate
  - Golden Valley Rd Station parking not included in cost estimate

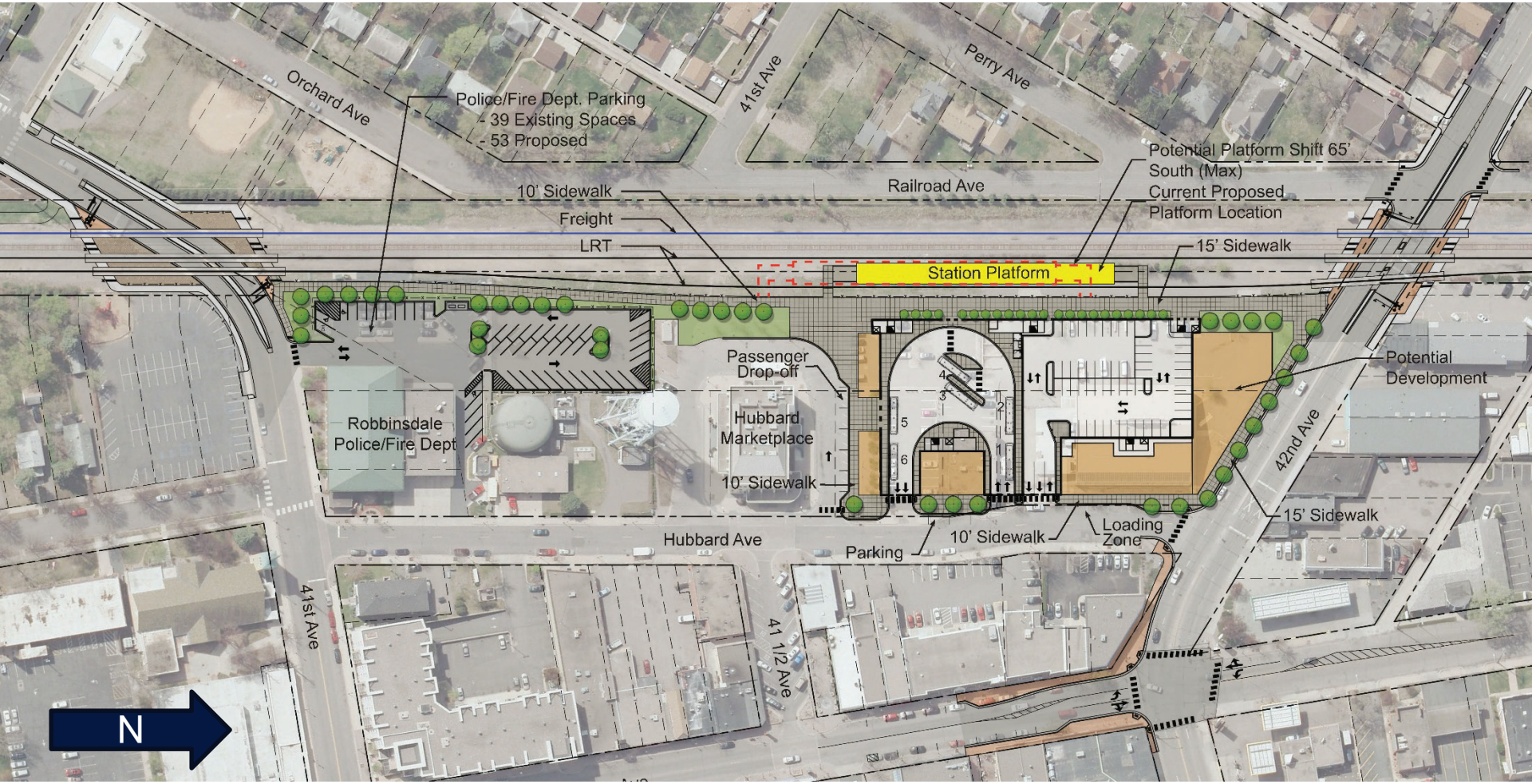
- Continue coordination with Minneapolis Park and Recreation Board on property impacts and design of potential Golden Valley Rd station park and ride

Golden Valley Alignment: Recommendation

- Minimize floodplain impacts by retaining freight rail on existing embankment and constructing LRT bridges



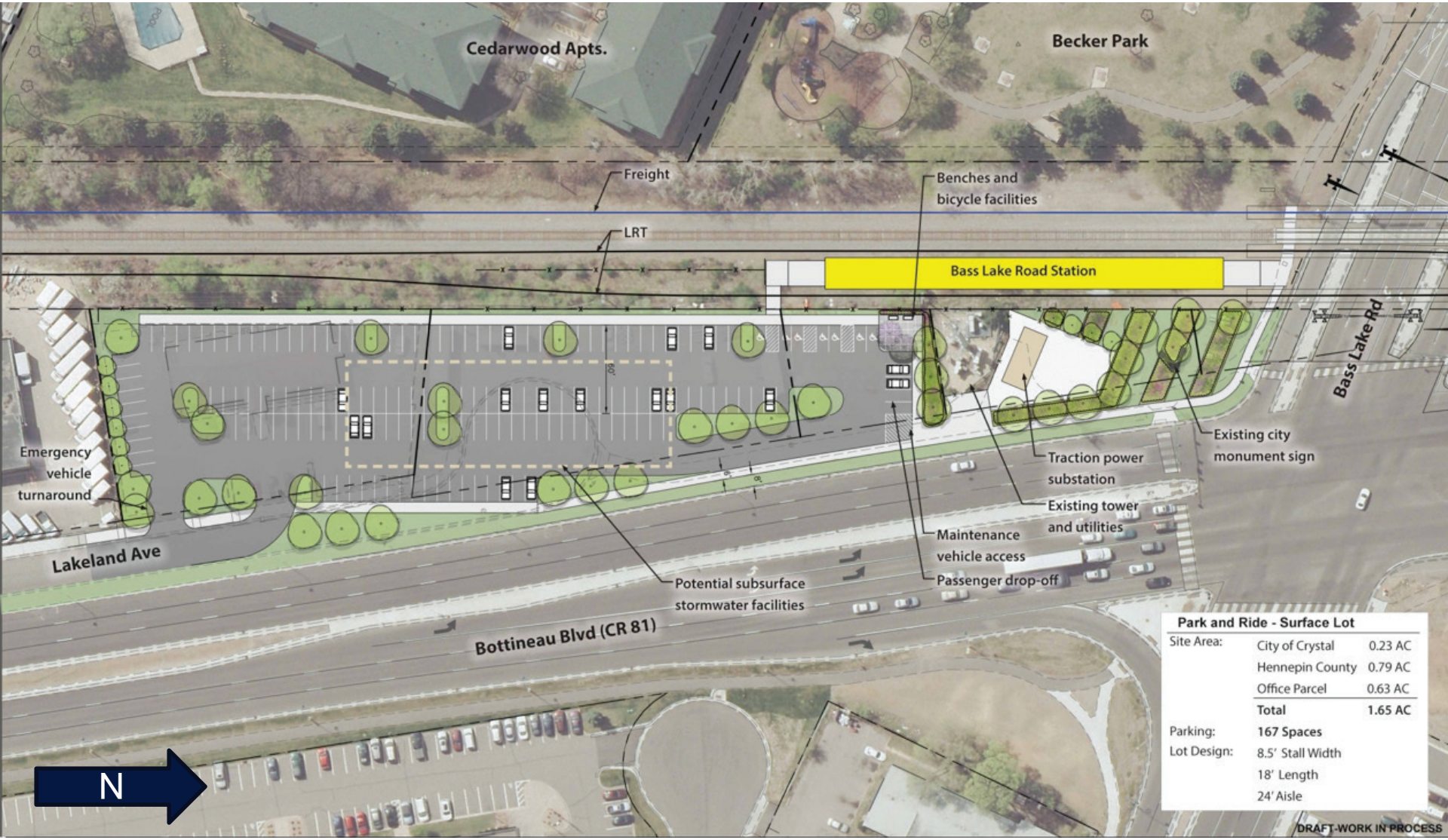
Robbinsdale Station: Station, Parking Ramp & Development Opportunities



Robbinsdale Station: Recommendation

- Center station platform south of 42nd Ave N
- Park and ride with 550 spaces adjacent to station incorporates existing transit center function, provides opportunity for development
- Traffic improvements to West Broadway and 42nd Ave
- At-grade pedestrian crossing at 41st Ave N
- At-grade roadway and LRT crossing at 42nd Ave N with gates

Bass Lake Rd Station



Park and Ride - Surface Lot		
Site Area:	City of Crystal	0.23 AC
	Hennepin County	0.79 AC
	Office Parcel	0.63 AC
	Total	**1.65 AC**
Parking:	**167 Spaces**	
Lot Design:	8.5' Stall Width	
	18' Length	
	24' Aisle	

Bass Lake Rd Station: Recommendations

- Center station platform south of Bass Lake Rd
- Surface park and ride lot with 170 spaces
- At-grade roadway and LRT crossing at Bass Lake Rd

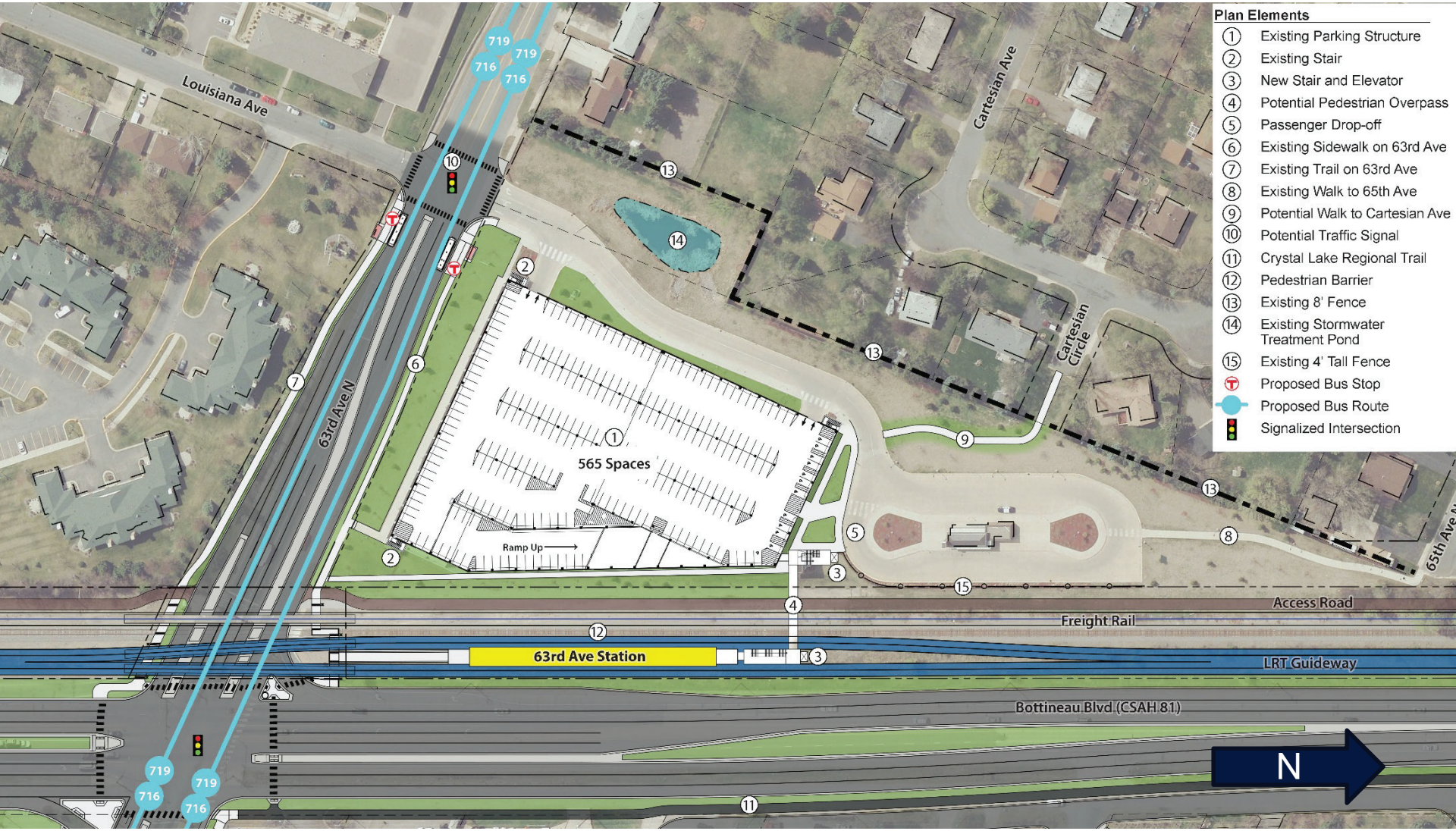
West Broadway Crossing Recommendation

METRO BLUE LINE EXTENSION
Bottineau LRT

West Broadway Crossing: Recommendation

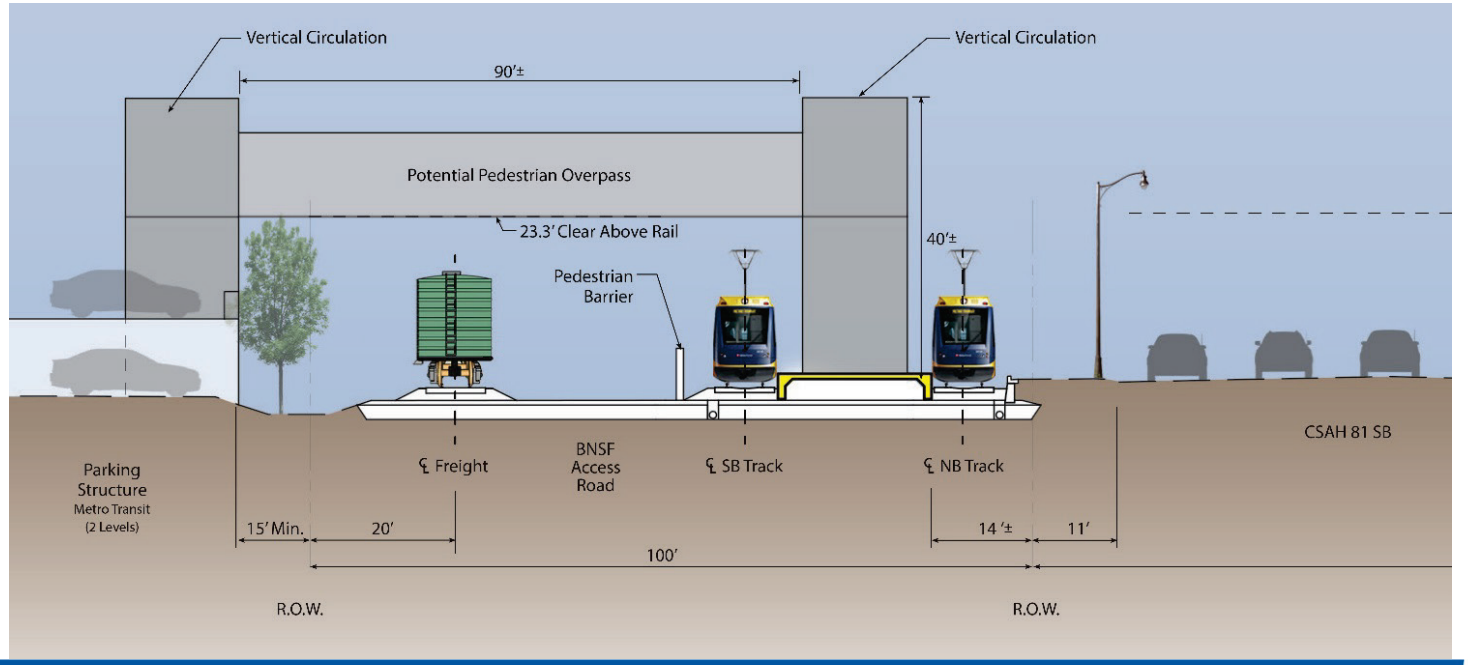
- Roundabout on east side of LRT alignment
  - Quiet zone ready design
  - Maintain full access to 48th Ave/Welcome Ave

63rd Ave Park & Ride



63rd Ave Park & Ride: Recommendation

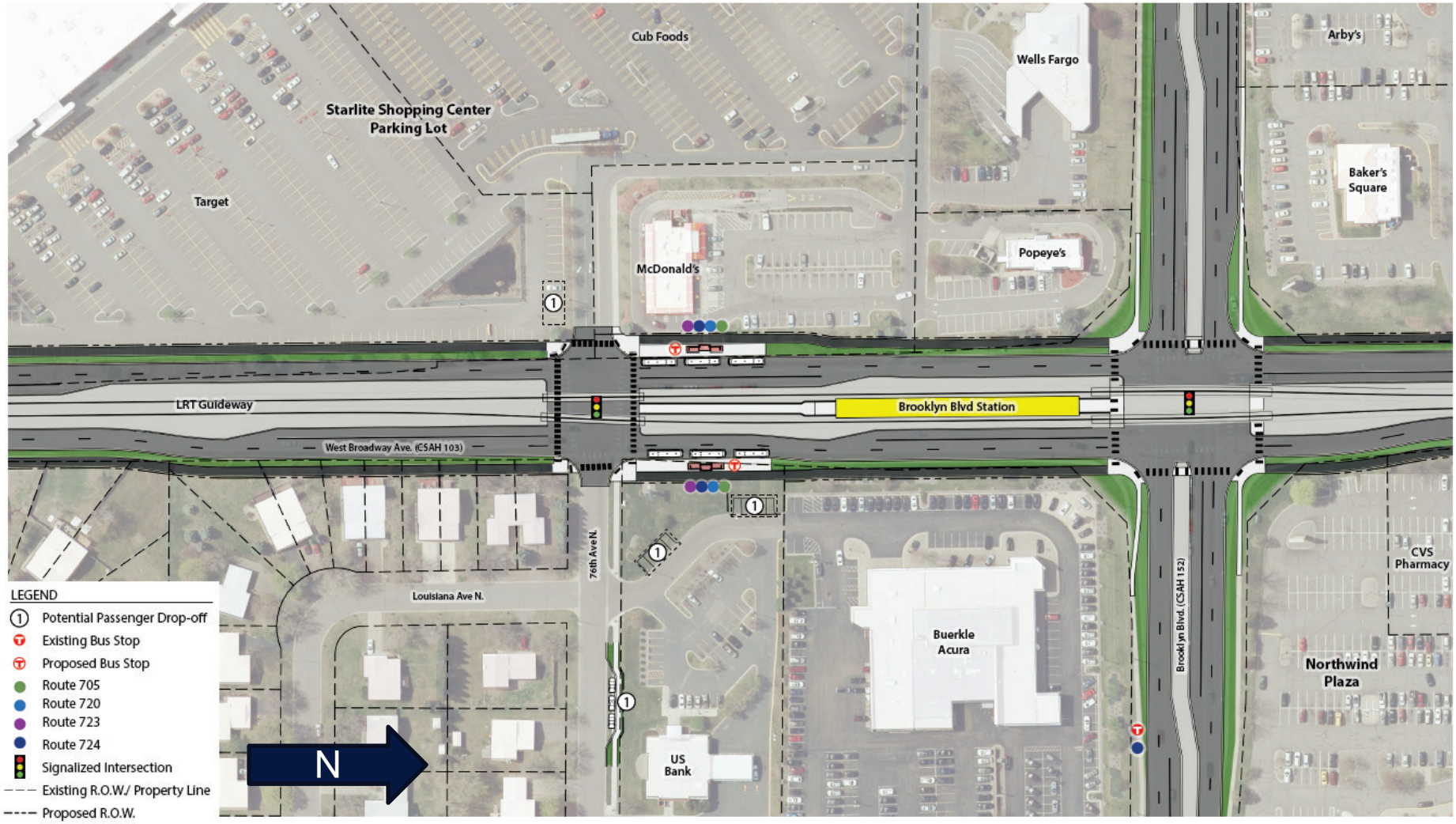
- Center station platform north of 63rd Ave
- Existing park and ride with 565 spaces
- Bus stops on 63rd Ave
- Pedestrian overpass from parking ramp over freight and LRT track to platform



LRT Crossing of CR 81 at 73rd Ave: Recommendation

- Add LRT bridge over CR 81 north of 73rd Ave N
  - Addresses safety and maintenance concerns

Brooklyn Boulevard Station



DRAFT-WORK IN PROCESS

Brooklyn Blvd Station: Recommendation

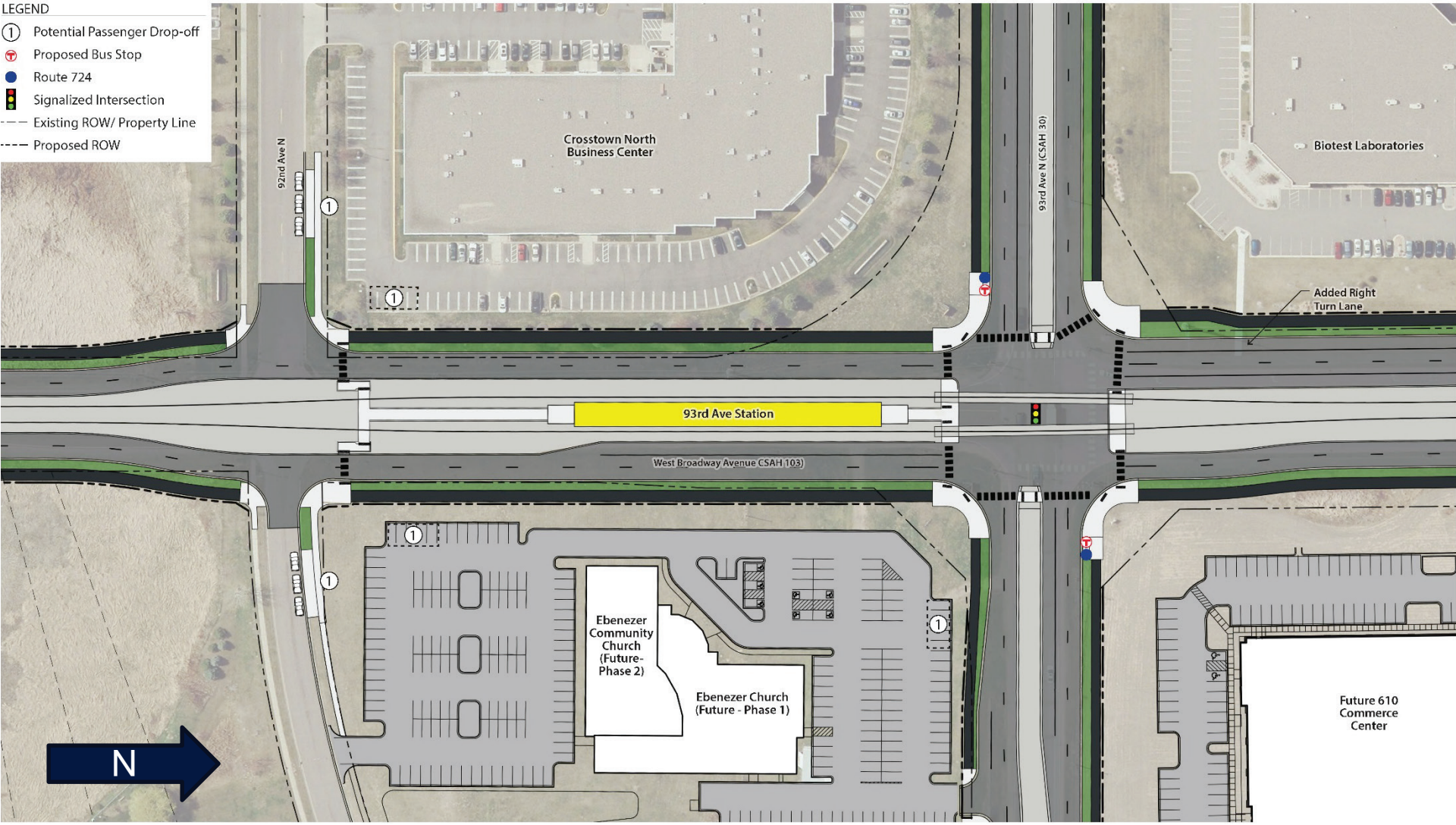
- Center station platform south of Brooklyn Blvd
- Pedestrian access
  - Access from traffic signal at Brooklyn Blvd
  - Access from traffic signal at 76th Ave North
- Bus stops on West Broadway and Brooklyn Blvd

West Broadway Reconstruction: Recommendation

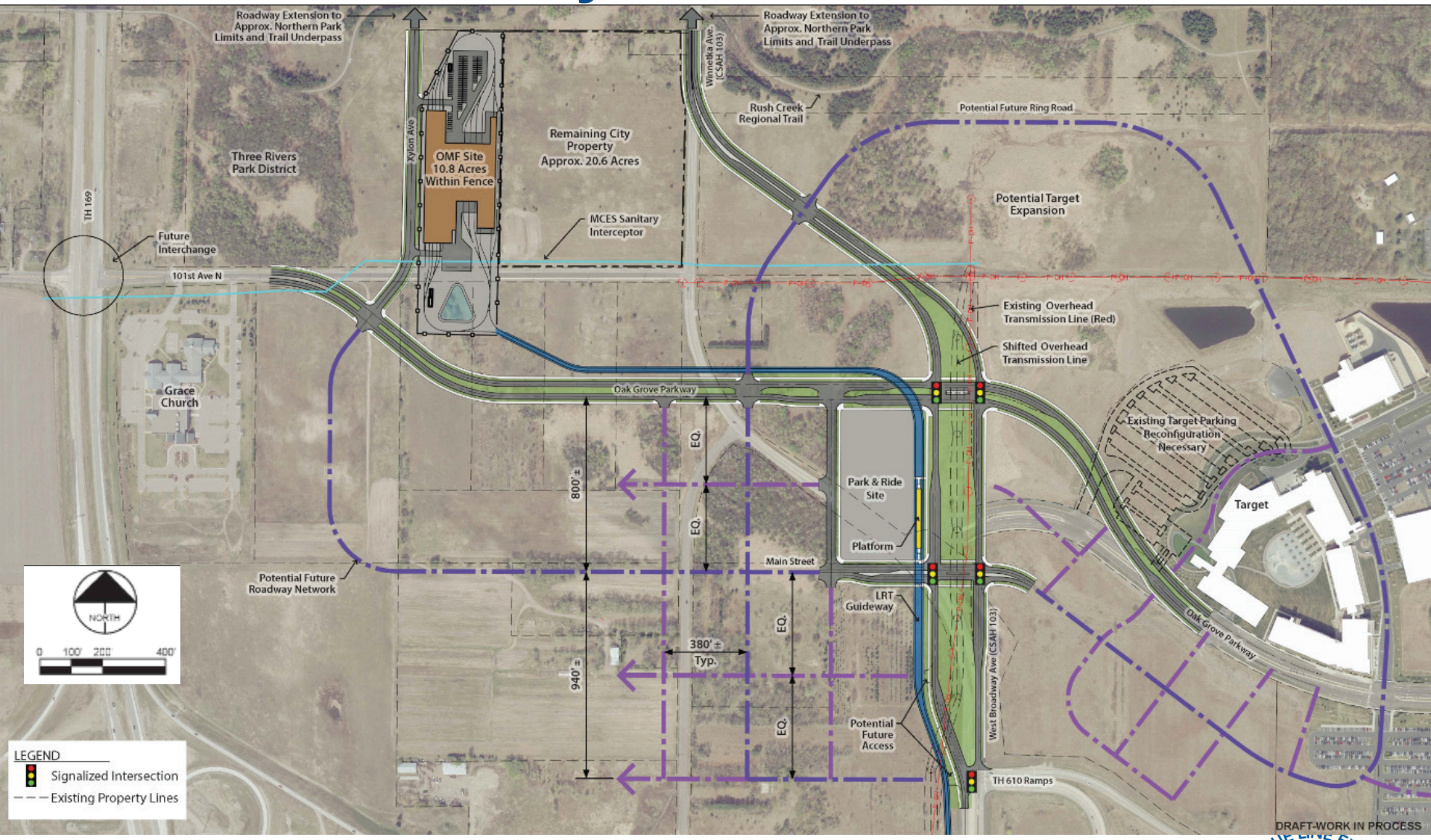
West Broadway Reconstruction: Recommendation

- Reconstruct West Broadway from Candlewood Dr to 93rd Ave by Hennepin County
- Center running LRT constructed as part of BLRT project
- Continued coordination with Hennepin County

93rd Ave Station



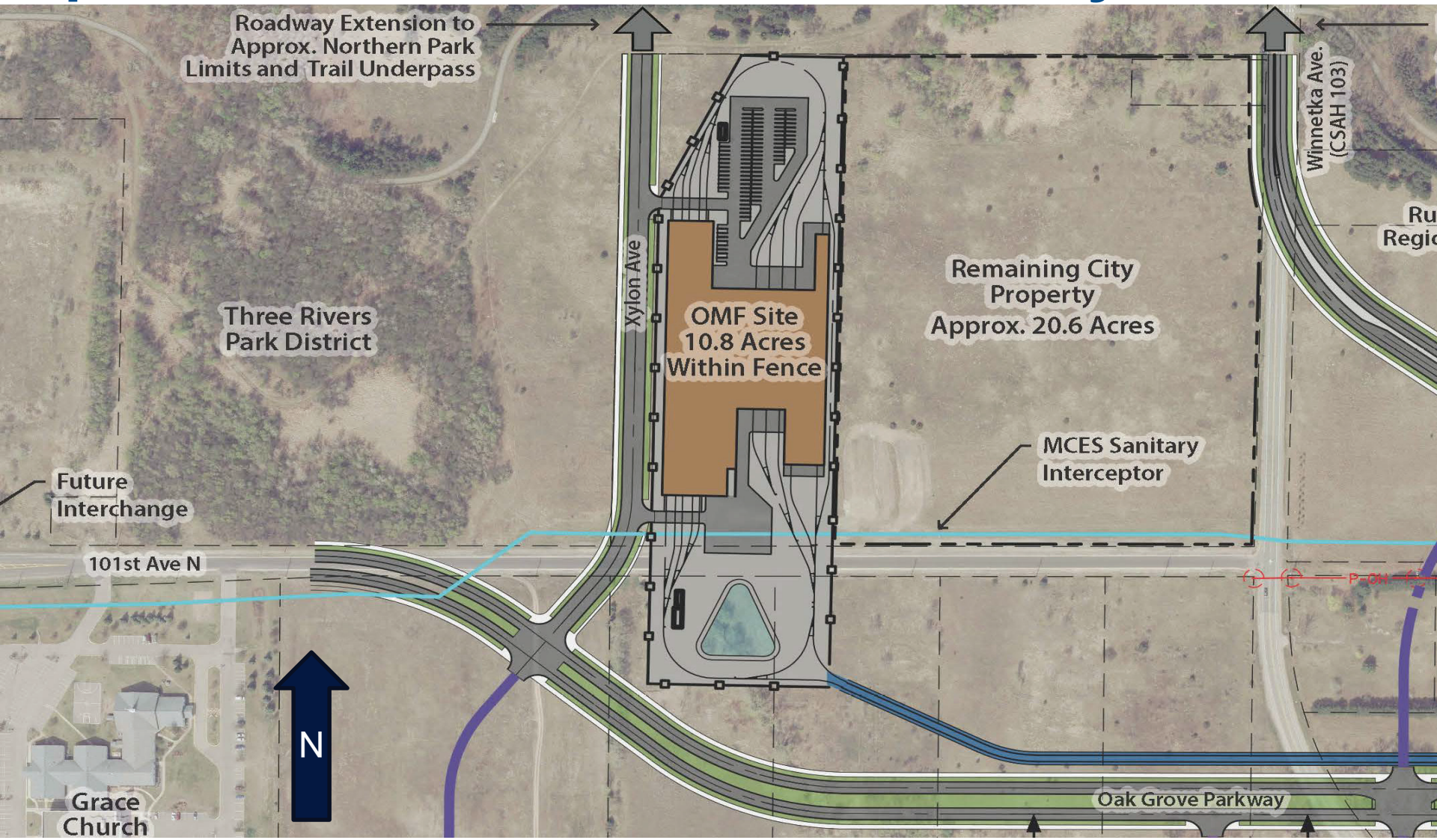
Oak Grove Parkway Station



93rd Ave/Oak Grove Parkway Stations: Recommendation

- 93rd Ave Station: Center station platform south of 93rd Ave
- Oak Grove Parkway Station: Center station platform and 850 space park and ride
- Roadway
  - Construct West Broadway with wide center median to account for Xcel transmission lines
  - Construct Oak Grove Parkway from Target Campus to 101st west of operations and maintenance facility
  - Construct Main Street and access to ramp
  - Develop cost participation for roadway improvements

Operations and Maintenance Facility



OMF Location: Recommendation

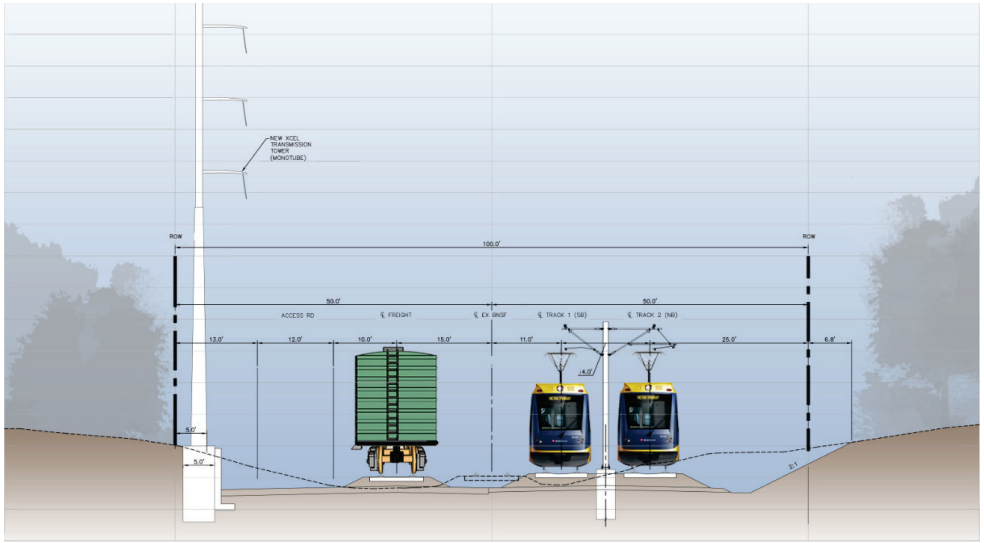
- Operations and Maintenance Facility near 101st Ave N and new Xylon Ave N in north/south orientation

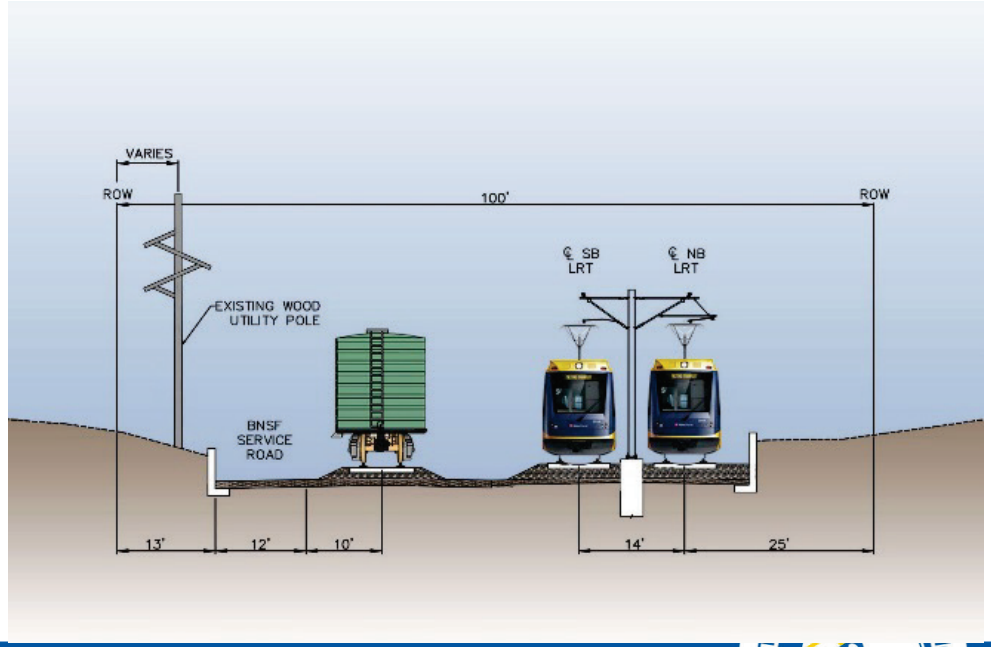
Freight Rail: Recommendation

- Operate LRT on approximate eastern 50 feet of railroad Right of Way
- Design site-appropriate corridor protection treatments
  - Ditch (moat), retained embankment or wall
- Reconstruct 4 roadway bridges over BNSF corridor
  - Plymouth Ave
  - Theodore Wirth Pkwy
  - Golden Valley Rd
  - 36th Ave
- Design freight/LRT/road grade crossings as quiet zone ready

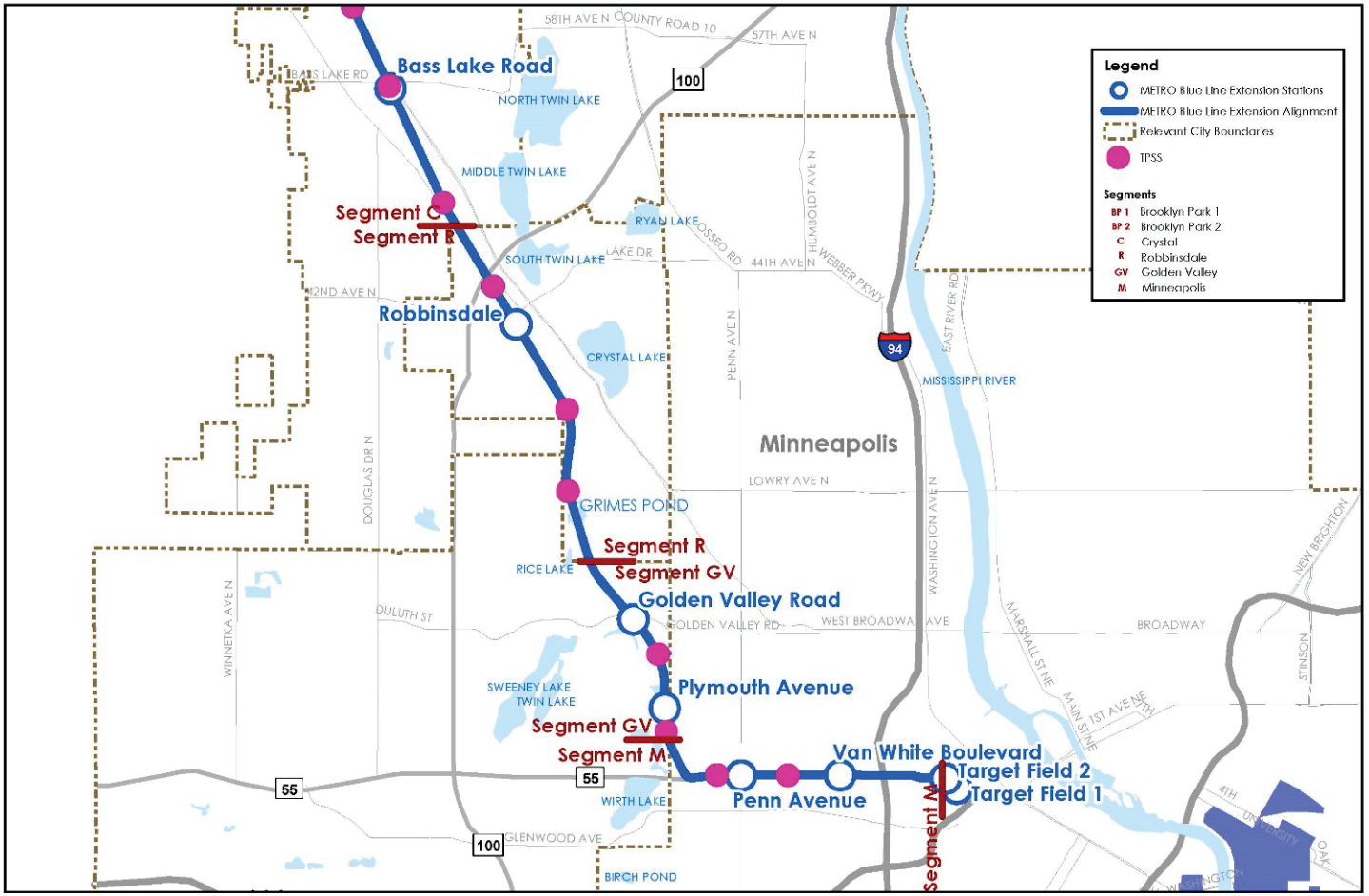
Transmission Line Coordination: Recommendation

- South of Indiana Substation:
  - Shift existing Xcel 115 kV transmission line to new poles west of BNSF track
- North of Indiana Substation:
  - Leave existing Xcel 115 kV transmission line in-place west of BNSF track





TPSS Locations: Minneapolis, Golden Valley, Robbinsdale and Crystal



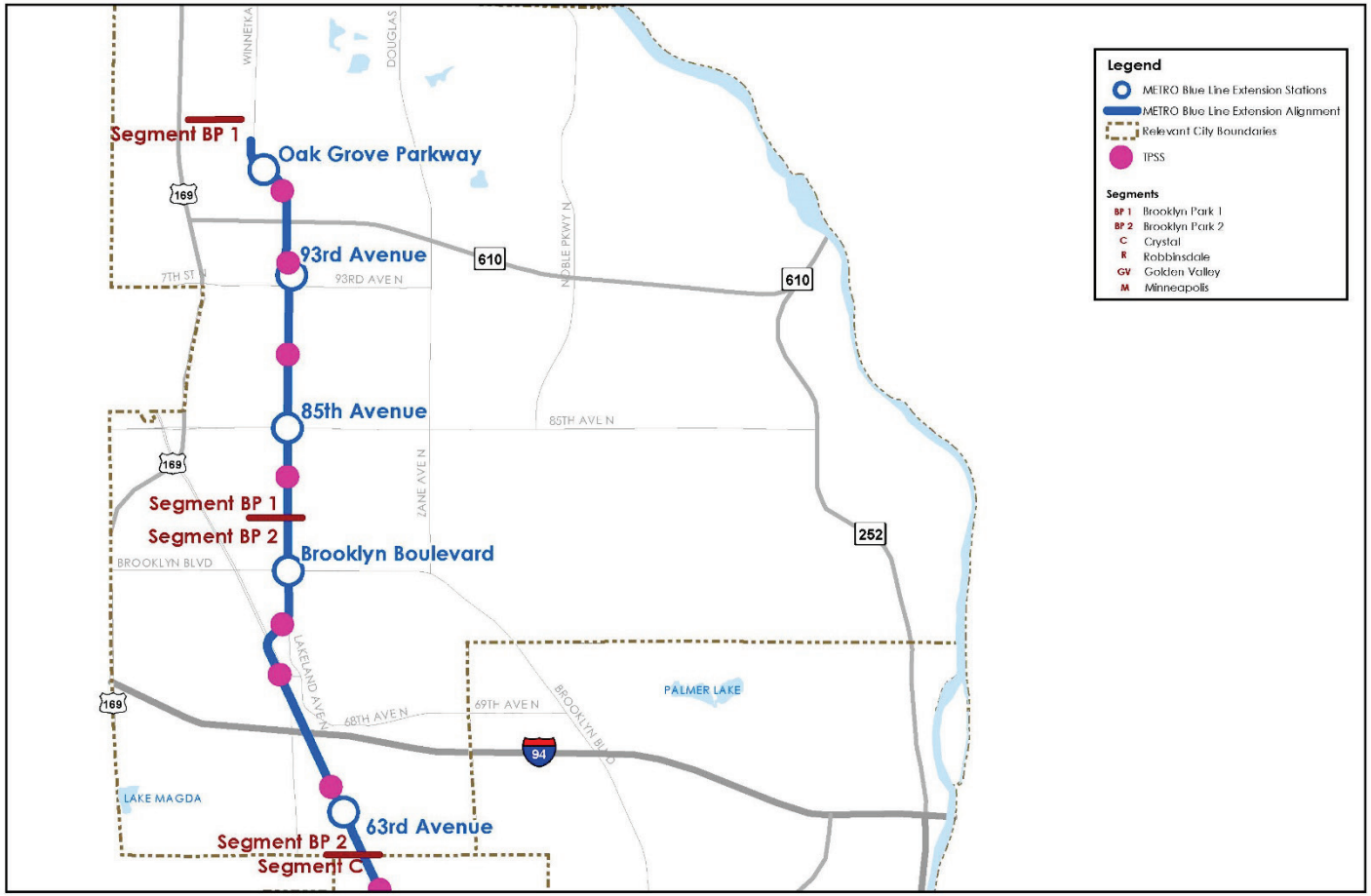
METRO Blue Line LRT Extension TPSS

0 0.5 1 Miles

Kimley»Horn METRO BLUE LINE EXTENSION METROPOLITAN COUNCIL

METRO BLUE LINE EXTENSION Bottineau LRT

TPSS Locations: Brooklyn Park



METRO Blue Line LRT Extension TPSS

0 0.5 1 Miles

TPSS Locations: Recommendation

- 17 TPSS locations identified along LRT corridor
- Continue working with project stakeholders to finalize locations through continued design process

Parks: Recommendation

- Continue coordination with park agencies on:
  - Sochacki Park
  - Trails connections
  - Theodore Wirth Regional Park
  - Right of Way and construction impacts

Revised Project Scope Summary

Project Recommendation Summary

- Target Field Station connection
- 7th St at-grade traffic signal crossing
- I-94 bridge rehabilitation to accommodate LRT
- **Olson Memorial Highway reconstruction ***
- Van White Station
- Penn Ave Station
- Westbound OMH (TH 55) bridge reconstruction
- **Plymouth Ave Station and vertical circulation ***
- Golden Valley Rd Station and vertical circulation

* New scope requirement, not in DEIS cost estimate

Project Recommendation Summary

- **Grimes Pond and Golden Valley Pond LRT structures ***
- **Roadway bridge reconstruction ***
  - Plymouth Ave
  - Theodore Wirth Prkwy
  - Golden Valley Rd
  - 36th Ave
- Robbinsdale Station and park and ride structure
- LRT bridge construction over TH 100
- LRT bridge construction over CP Rail
- Bass Lk Rd Station **and surface park and ride facility ***

* New scope requirement, not in DEIS cost estimate

Project Recommendation Summary

- 63rd Ave Station **and pedestrian overpass (over freight to platform) ***
- **LRT bridge construction over CR 81 at 73rd Ave ***
- West Broadway reconstruction from 74th Ave to Candlewood
- Brooklyn Blvd Station
- 85th Ave Station
- 93rd Ave Station
- **Roadway network north of TH 610 ***
- Oak Grove Pkwy Station and park and ride structure
- Operations and Maintenance Facility

* New scope requirement, not in DEIS cost estimate

Project Recommendation Summary: Corridor Wide

- 28 light rail vehicles **(2 more than DEIS) ***
- 13.5 miles of ballasted double LRT tracks
- 8 miles of ballasted single freight track
- **Freight rail corridor protection treatments ***
- System elements
  - Traction Power Substations
  - Rail Signal System
  - 10 at-grade shared (freight/LRT) crossings
- Right of Way acquisition
- Poor soils mitigation

* New scope requirement, not in DEIS cost estimate

Scope Project Recommendation Summary: Reductions

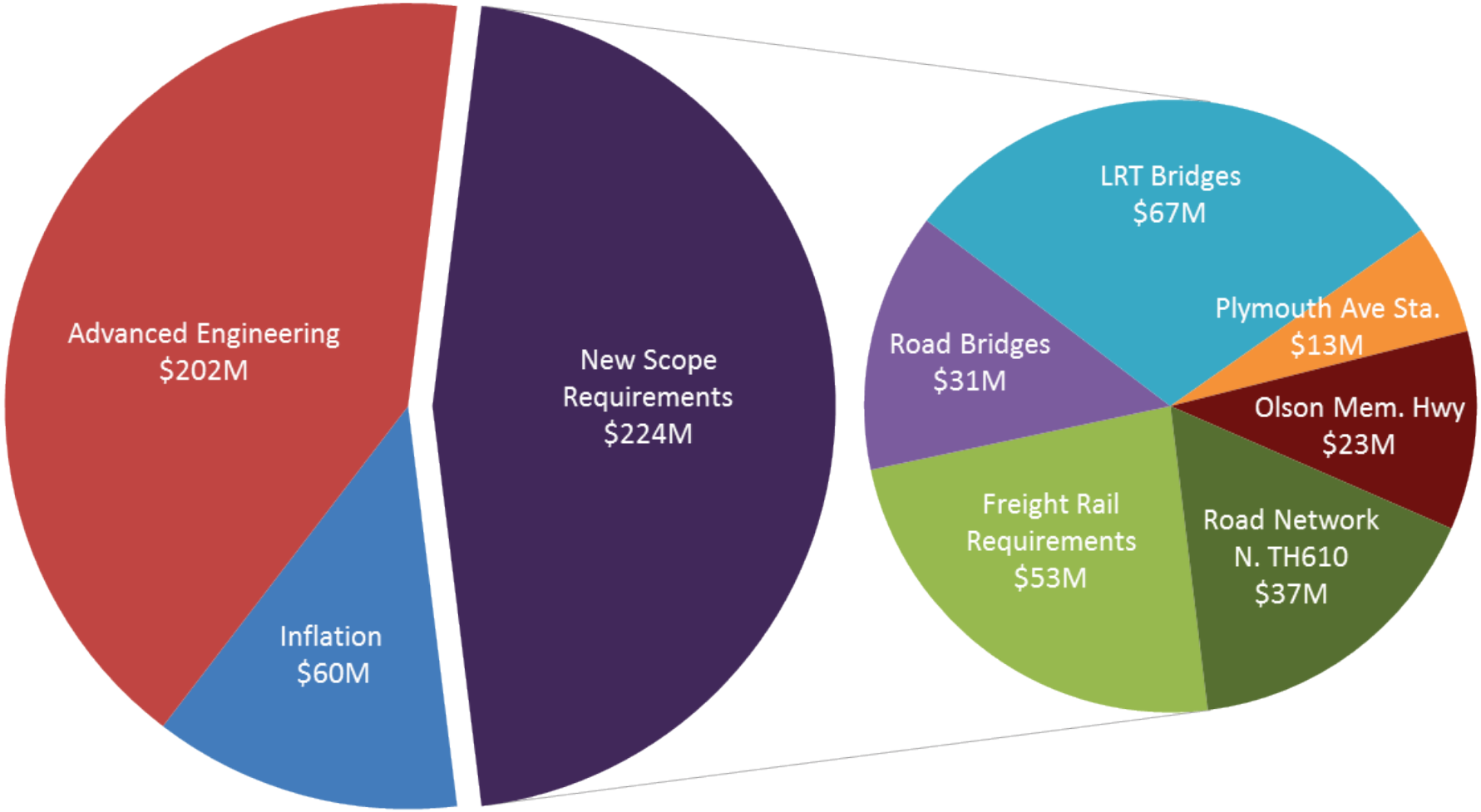
- Modified split platform stations to center platforms
- Reduced size of OMF building and site footprint
- Minimized need for floodplain mitigation by building bridge structures over ponds
- Eliminated need for adding floors to existing 63rd park and ride ramp

Cost Estimate Overview

Overall Cost Estimate Methodology

- Cost Estimates
  - Total Project costs include capital improvements, ROW acquisition, vehicles, engineering and environmental consultants, contingency, and finance costs
  - Base year costs: 2015
  - Costs are escalated to Year of Expenditure ($YOE)

Project Cost Drivers



Cost Effectiveness Index (CEI)

- CEI measures cost effectiveness of a federal New Starts project based on estimated ridership, capital and operating costs
- CEI is one of six project justification criteria FTA uses to evaluate projects
- CEI anticipated to improve from **Medium-Low** to **Medium** under new federal rules

Discussion/Questions

Next Steps

Project Scope and Cost Rollout: Next Steps

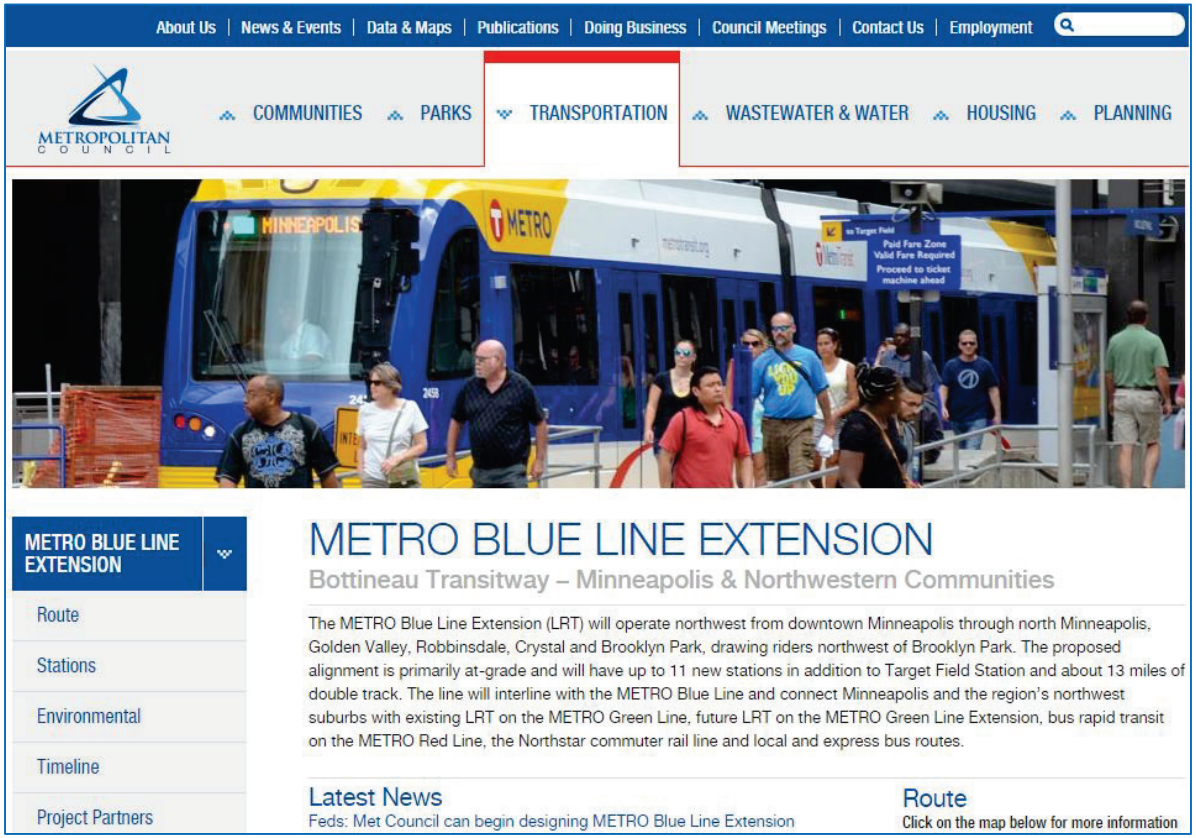
- Seek recommendation/resolution on project scope and cost estimate
  - CMC: Nov 12

- Request approval on scope and cost estimate
  - Transportation Committee: Nov 23
  - Metropolitan Council: Dec 9

A Look Ahead: Design & Engineering

- Dec 2015: Submit Municipal Consent Plans for City and County Review
- Mar 2016: Complete Municipal Consent Approval Process
- Aug 2016: Finalize 30% Design Plans and Specs
- Aug 2016: Apply to Enter Engineering

More Information



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