

SOUTHWEST

Green Line LRT Extension



Corridor Management Committee

April 3, 2013





Today's Topics

- Legislative Update
- MAP-21 Guidance
- Technical Issue #23 – Operations and Maintenance Facility (OMF)
- Technical Issue #21 – Freight Rail
- Communications and Outreach Update
 - BAC Report
 - CAC Report

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Legislative Update





MAP-21 Guidance



New Starts and Small Starts Program: Final Rule and Proposed Policy Guidance



Presentation Outline

- Project Justification Rating Criteria
 - SAFETEA-LU New Starts Rating System
 - Central Corridor LRT (CCLRT)
 - Southwest LRT (SWLRT)
 - MAP-21 New Starts Rating System
 - Comparison of Project Justification Factors
 - Economic Development
 - Land Use
 - Cost Effectiveness
 - Environmental Benefit
 - Mobility Improvements
- Financial Rating Criteria



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New Starts Evaluation and Rating Process Under SAFETEA-LU



New Starts Project Rating – under SAFETEA-LU

	CCLRT (PE)	CCLRT (FFGA)	SWLRT (PE)
Project Justification Rating	Medium	Medium	Medium
Economic Development	Medium-High	High	Medium-High
Land Use	Medium-High	Medium-High	Medium
Cost Effectiveness	Medium-Low	Medium-Low	Medium-Low
Environmental Benefits	Medium	Medium	Medium
Mobility Improvements	Medium	Medium	Medium
Operating Effectiveness	Medium	Medium	Medium
Local Commitment Financial Rating	Medium	Medium-High	Medium
Non-New Starts Share	Medium	Medium-High	Medium
Capital Plan	Medium	Medium-High	Medium
Operating Plan	Medium-High	Medium-High	Medium-High
Overall Project Rating	Medium	Medium-High	Medium



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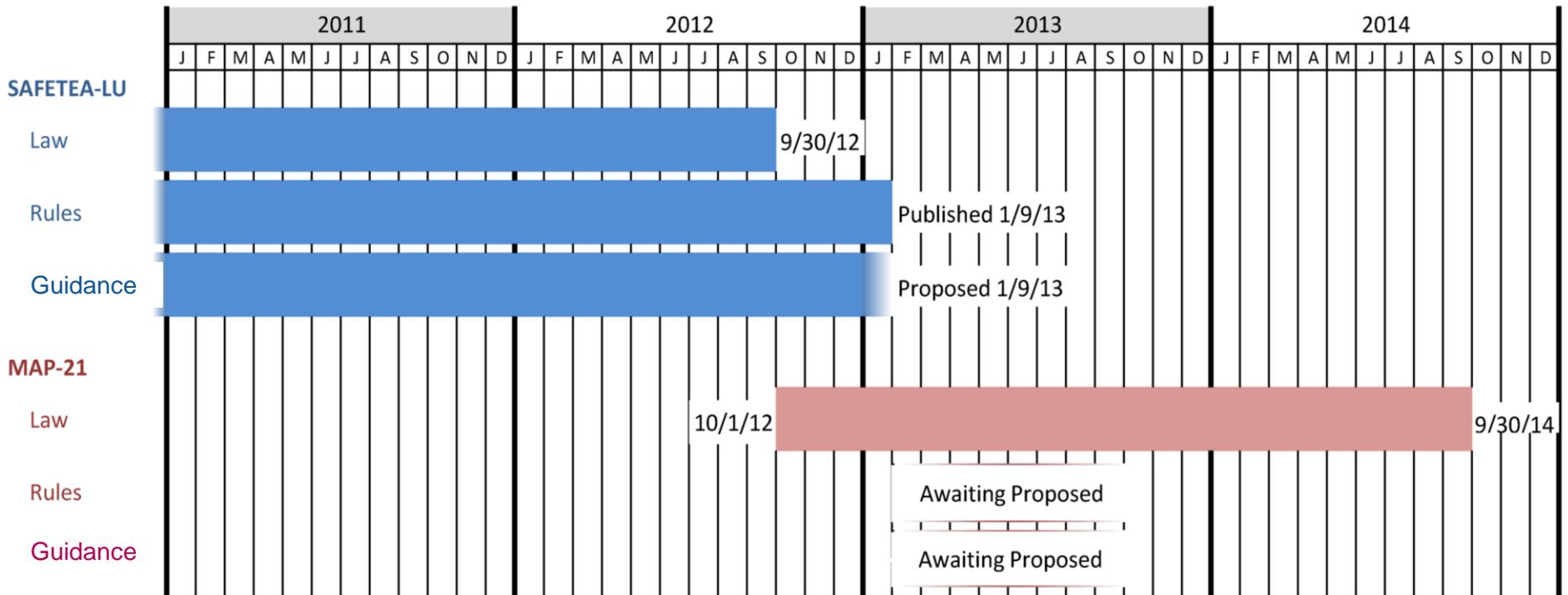
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New Starts Evaluation and Rating System Under MAP-21



SAFETEA-LU → MAP-21 Transition





MAP-21 New Starts Rating Process

Summary Rating

Project Justification Rating

Financial Rating

Other Factors

Economic Development
(16.66%)

Mobility Improvements
(16.66%)

Environmental Benefits
(16.66%)

Operating Efficiencies
(10%)

Cost Effectiveness
(16.66%)

Land Use
(16.66%)

Congestion Relief
(16.66%)

Current Capital/
Operating Condition
(25%)

Commitment of Capital/
Operating Funds
(25%)

Reasonableness of
Capital/Operating
Cost Estimates
(50%)



MAP-21 Project Justification Process

Project Justification Rating

~~Other Factors~~

Economic Development
(16.66%)

Mobility Improvements
(16.66%)

Environmental Benefits
(16.66%)

~~Operating Efficiencies
(10%)~~

Cost Effectiveness
(16.66%)

Land Use
(16.66%)

Congestion Relief
(16.66%)



“The Station” on Washington Avenue and Walnut Street





Economic Development: MAP-21

- All of the SAFETEA-LU measures
- New Measure:
 - Plans, policies and financial incentives to maintain or increase affordable housing in corridor
- Rating partly based on relationships with private sector
 - Transit agencies establish a joint development program in order to earn high rating
 - Demonstrate private development along corridor and at station areas



Economic Development: MAP-21

- High Rating Factors (Future Conditions):
 - Adopted and enforceable growth management and land use conservation policies in the region
 - Conceptual plans for corridor and station areas are developed
 - Working proactively with locals, developers and public
 - Significant amount of land available for new development or re-development
 - Comprehensive affordable housing plans/policies; robust financial incentives available regionally



Land Use: MAP-21

- All of the SAFTEA-LU measures
- New Measure:
 - Existing “legally binding affordability restricted” housing
 - Existing station area population densities
 - Existing total employment served by the project
 - Pedestrian accessibility
- New measures rating assignment primarily ***quantitative***

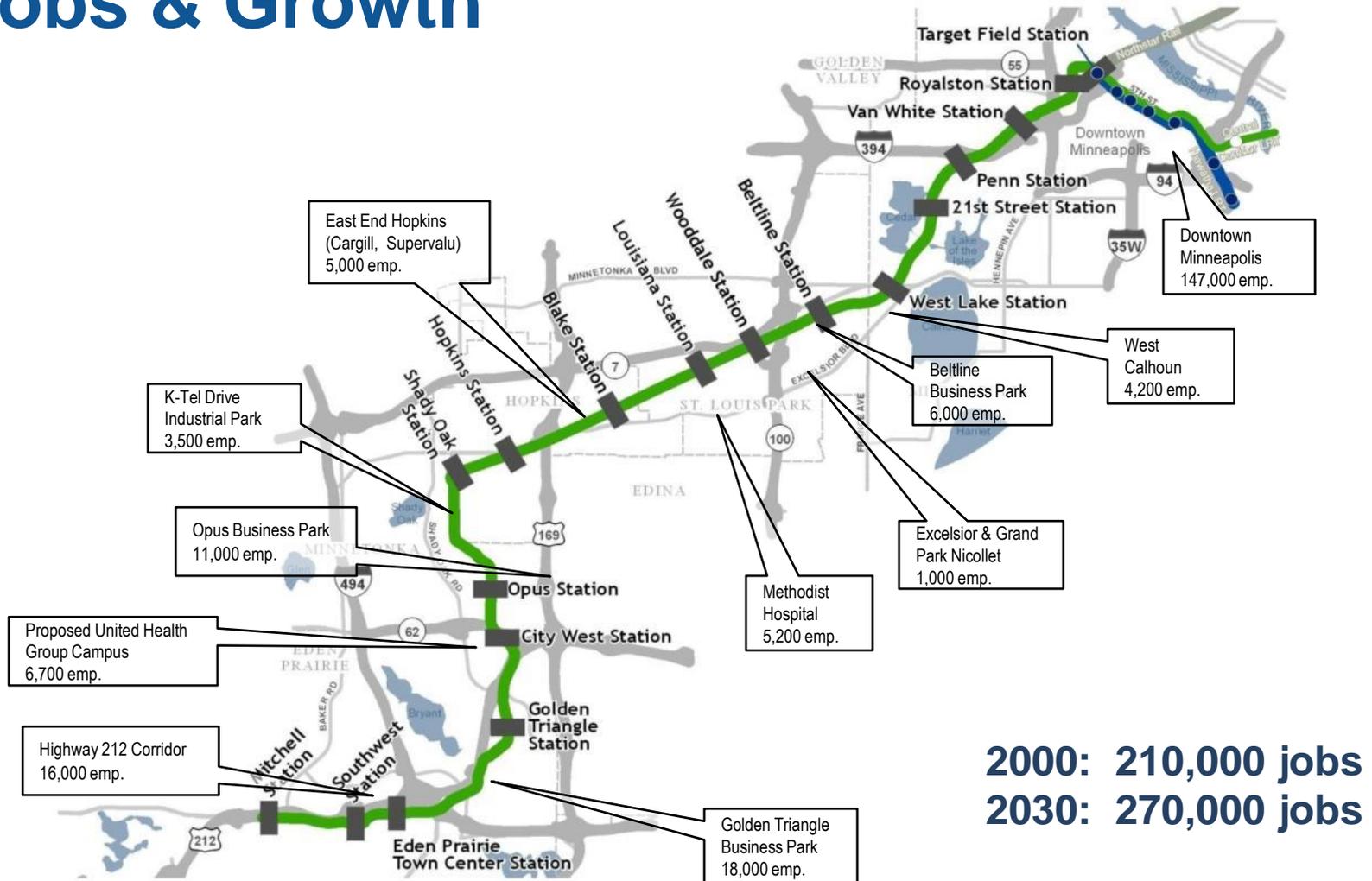


Land Use: MAP-21

- High Rating Factors (Existing Conditions):
 - Employment served by system > 250,000
 - Average population density > 15,000 persons/square mile
 - CBD parking cost > \$16 per day
 - Corridor's share of "Legally Binding Affordability Restricted Housing" > 10% of Region's share



SWLRT Corridor Serves Existing Jobs & Growth





Cost Effectiveness: MAP-21

- New Measure: Annualized capital and annual operating cost per passenger trip
 - Focus on ridership
 - Comparison of no-build to build

- Formula:
$$\frac{\text{Annualized Capital} + \text{Annual Operating Cost}}{\text{Number of Passenger Trips}}$$



Cost Effectiveness: MAP-21

- High Rating Factors:
 - Minimize capital and operating costs
 - Maximize transit riders on transitway
 - Capital and operating cost per rider < \$4.00 to earn “High” rating



Environmental Benefit: MAP-21

- New Measure: Monetized environmental benefit scaled by project
 - Focus on human health, safety, energy and air quality
 - VMT reduction  High benefit
- Formula
$$\frac{\text{Air Quality} + \text{GHG} + \text{Energy Use} + \text{Safety}}{\text{Annualized Capital Cost} + \text{Annual Operating Cost}}$$



Environmental Benefit: MAP-21

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Environmental Benefit: MAP-21

- High Rating Factors:
 - Reduce vehicle miles traveled
 - Minimize capital and operating costs
 - Maximize monetary benefit



Mobility Improvements: MAP-21

- New measure: Total number of linked-trips
- Transit dependent riders will be counted twice
- FTA defines transit dependent as persons from zero car households



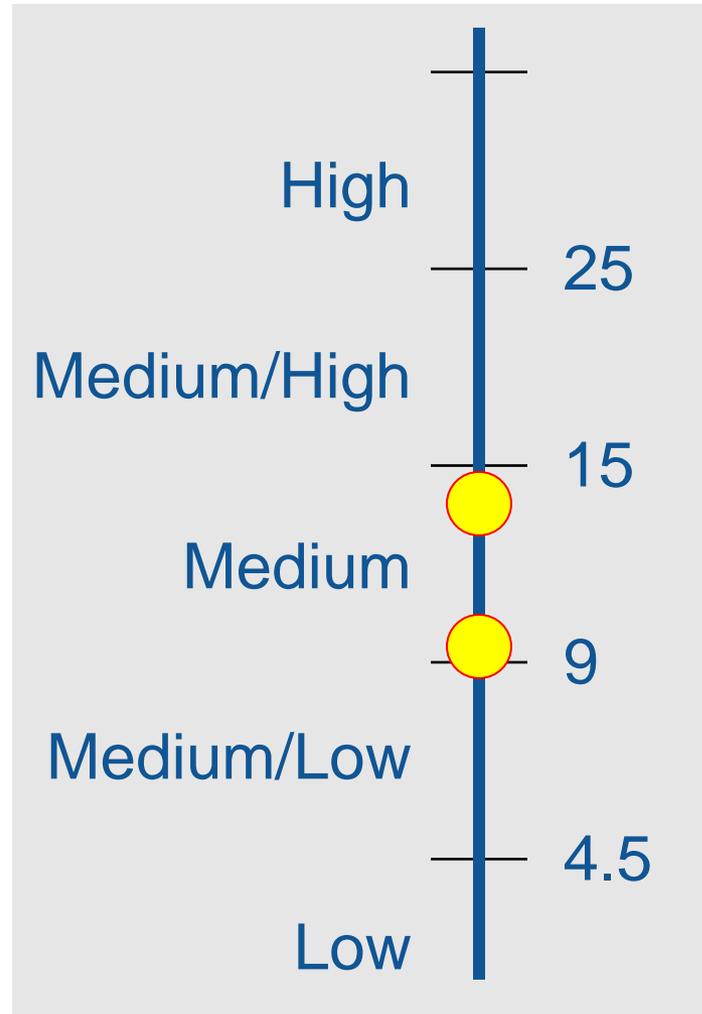
Mobility Improvements: MAP-21

- High Rating Factors: Total estimated annual trips including 2x for transit dependents > 25 million
- Green line forecasted 2030 annual ridership before transit dependent factor:
 - CCLRT 2030 13.5 million – Medium
 - SWLRT 2030 9.8 million – Medium



Mobility Improvements

Estimated SWLRT
2030 Annual
Trips (Including
and excluding
transit
dependent
trips x2)



14.2 (SWLRT:
Map-21)

9.8 (SWLRT:
SAFETEA-LU)

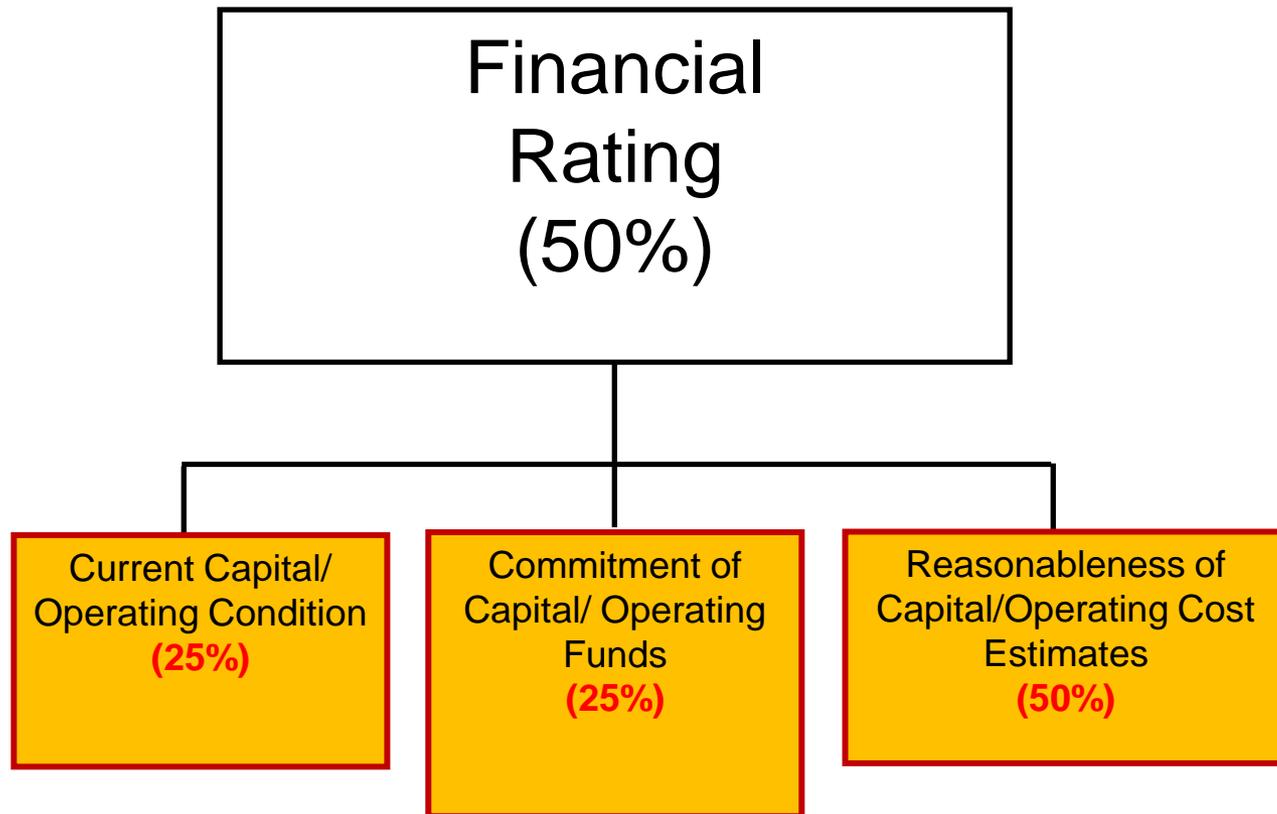


Small Starts Rating Criteria: MAP-21

- Economic Development: Increase affordable housing
- Land Use: Same breakpoints as New Starts
- Cost-Effectiveness: Only annualized federal cost share
- Environmental Benefit: Only annualized federal cost share
- Mobility Improvements: Same breakpoints as New Starts



Financial Rating Criteria: New Starts





Financial Rating Criteria: New Starts

Current Capital/Operating Conditions (25%)

- Average bus fleet age
- Bond rating within past two years
- Historical positive cash flow
- Ratio of assets to liabilities
- Service cutbacks in recent years



Financial Rating Criteria: New Starts

Commitment of Capital/Operating Funds (25%)

- Share of non-Section 5309 capital funds committed or budgeted
- Share of operation and maintenance funds committed or budgeted



Financial Rating Criteria: New Starts

Reasonableness of Capital/Operating Cost Estimates (50%)

- Conservative planning assumptions – comparable to historical experience
- Reasonableness of the capital cost estimate
- Access to funds to cover cost increases or funding shortfalls including debt, cash reserve, other committed funds
- Financial capacity to withstand cost increase or funding shortfalls



Financial Rating Criteria: Small Starts

- Definition: Projects with total capital cost <\$250M and <\$75M in federal funds
- Simplified financial evaluation
 - Reasonable plan for securing local share
 - Additional operating and maintenance costs <5% of operating budget
 - Sponsor is in reasonably good financial condition
- High rating if meet requirements and request \leq 50% federal funding



Local Financial Commitment: Key Issues

- Projects receive one-level boost for providing a greater than 50% local match
- Requires local sources of capital and operating funds to be stable, reliable and available within project timetable
 - Statutorily required consideration: dedicated funding sources
- Still does not address whether local expenses for Project Development will be eligible local match for the FFGA
 - Expected to be addressed in next policy guidance



Program of Interrelated Projects: MAP-21

- Requires at least two fixed guideway or core capacity projects with logical connectivity
- PoP is evaluated as a whole and must meet FTA criteria
- Must have implementation plan demonstrating commencement of construction within reasonable time frame
- Repayment required if PoP not implemented within reasonable time frame (with interest and penalties)
- Rulemaking and policy guidance not yet issued

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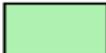


SWLRT PE Technical Issues





SWLRT PE Technical Issues

-  PEC West
-  PEC East
-  Joint PEC West/PEC East

Technical issues:

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

9. PEC West/PEC East Interface Point

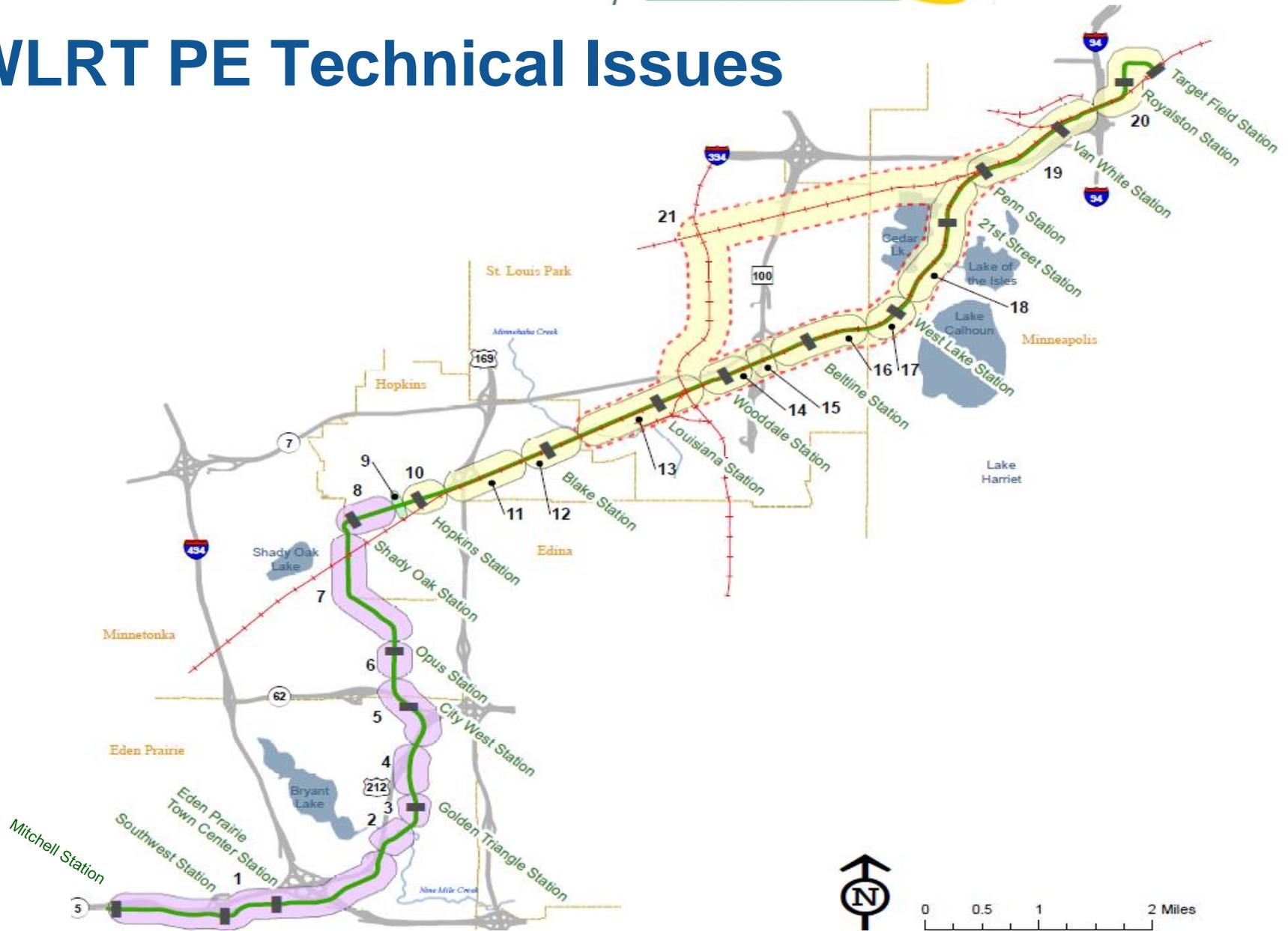
10. Hopkins Station
11. Excelsior Blvd. Crossing
12. Blake Station
13. Louisiana Station
14. Wooddale Station
15. TH 100
16. Beltline Station
17. West Lake Station
18. Kenilworth Corridor
19. Bassett Creek Valley Corridor
20. Royalston Station/Interchange Project Connection
21. Freight Rail Co-location/Relocation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

System-wide technical issues (not shown):

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



SWLRT PE Technical Issues



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Technical Issue #23: Operations and Maintenance Facility (OMF)



Operation and Maintenance Facility (OMF)

- OMF Activities:
 - LRV cleaning
 - LRV maintenance
- Central Corridor OMF:
 - 180+ jobs



Interior of Franklin (Hiawatha) OMF



OMF Initial Site Selection Criteria

- Site size of 10 to 15 acres
- Flat/rectangular site
- Efficient LRT train movements to/from
- Good roadway access to site
- Compatible with adjacent land use



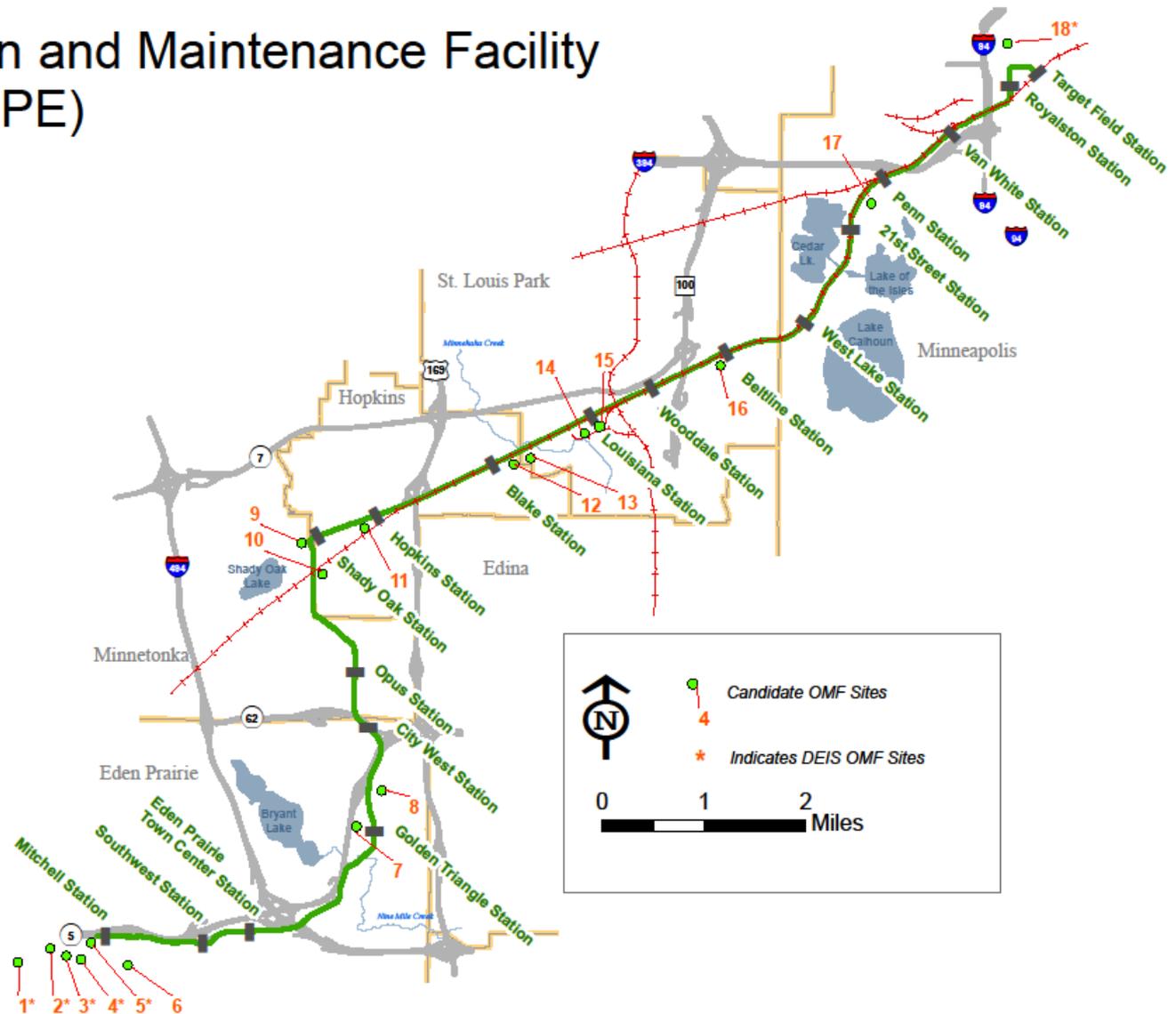
OMF Candidate Sites

OMF Site #	Description	City
1*	212 ROW	Eden Prairie
2*	Wallace Road	Eden Prairie
3*	City Garage West	Eden Prairie
4*	City Garage East	Eden Prairie
5*	Mitchell West	Eden Prairie
6	Mitchell East	Eden Prairie
7	Flying Cloud/W. 70 th Street	Eden Prairie
8	Shady Oak/W. 70 th Street	Eden Prairie
9	K-Tel	Minnetonka
10	7 th Street (Landfill)	Hopkins
11	11 th Avenue	Hopkins
12	Excelsior West	Hopkins
13	Excelsior East	Hopkins/St. Louis Park
14	Louisiana West	St. Louis Park
15	Louisiana East	St. Louis Park
16	Beltline	St. Louis Park
17	Penn	Minneapolis
18*	5 th Street North	Minneapolis

* From DEIS



SWLRT Operation and Maintenance Facility Candidate Sites (PE)



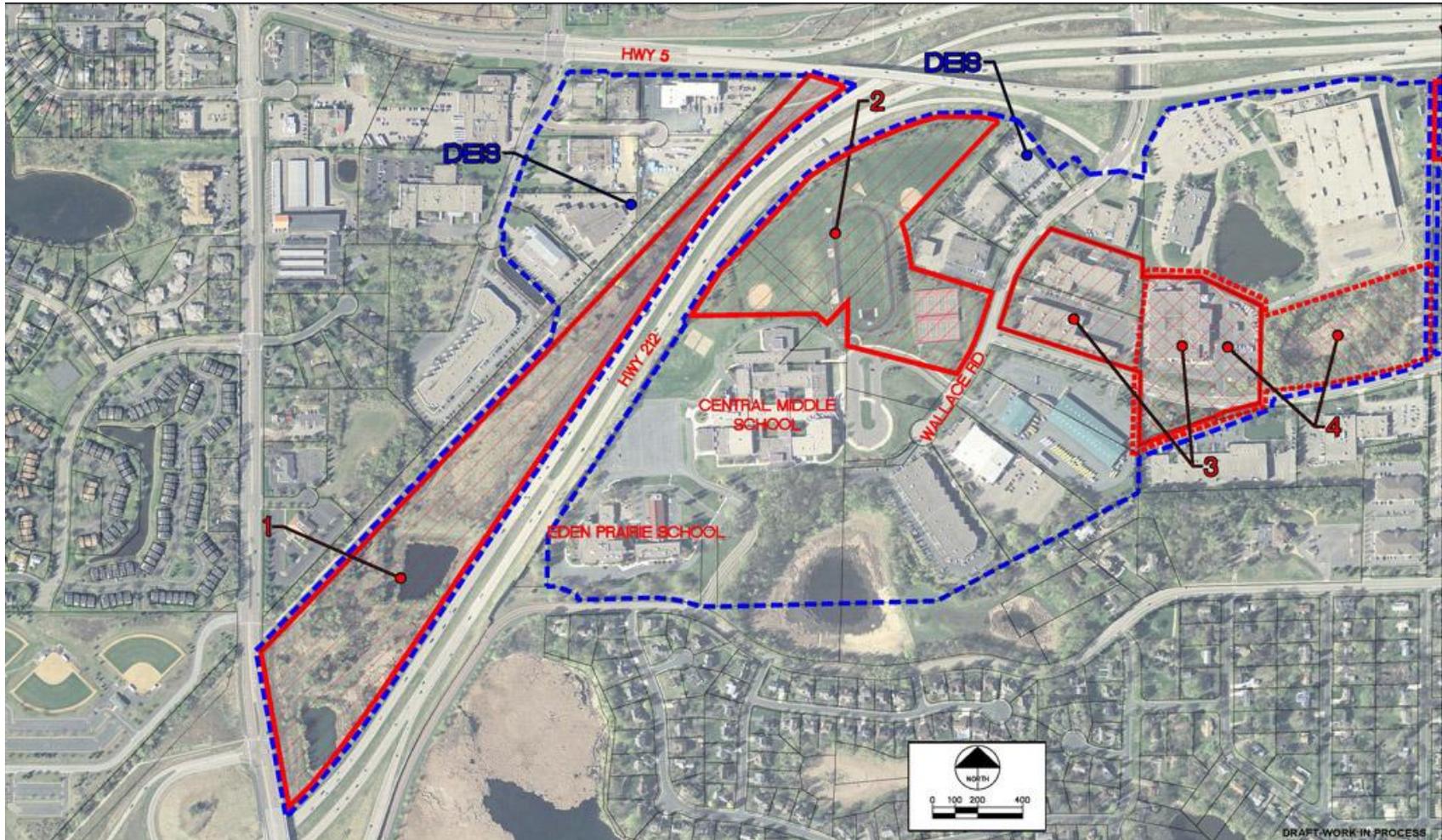


SWLRT OMF Evaluation Criteria

Operational Characteristics	
1	Site Configuration: operational effectiveness
2	Alignment Proximity/Connectivity: distance/connection to mainline
3	Alignment Location: geometric position on mainline
4	Site Access: access for operations staff
Site Characteristics	
5	Adjacent Land Use Compatibility
6	TOD/Mixed Use/Economic Development Considerations
7	Zoning
8	Site & Facilities Cost: facilities, grading, utilities, soils
9	Real Estate Acquisition: cost, complexity, legalities
10	Relocation Cost: displaced occupants and uses
11	Environmental Impact: wetlands, hazardous materials
12	Cultural Resources: cultural, historical
13	Stormwater Management: drainage, treatment



Candidate OMF Sites 1 – 4



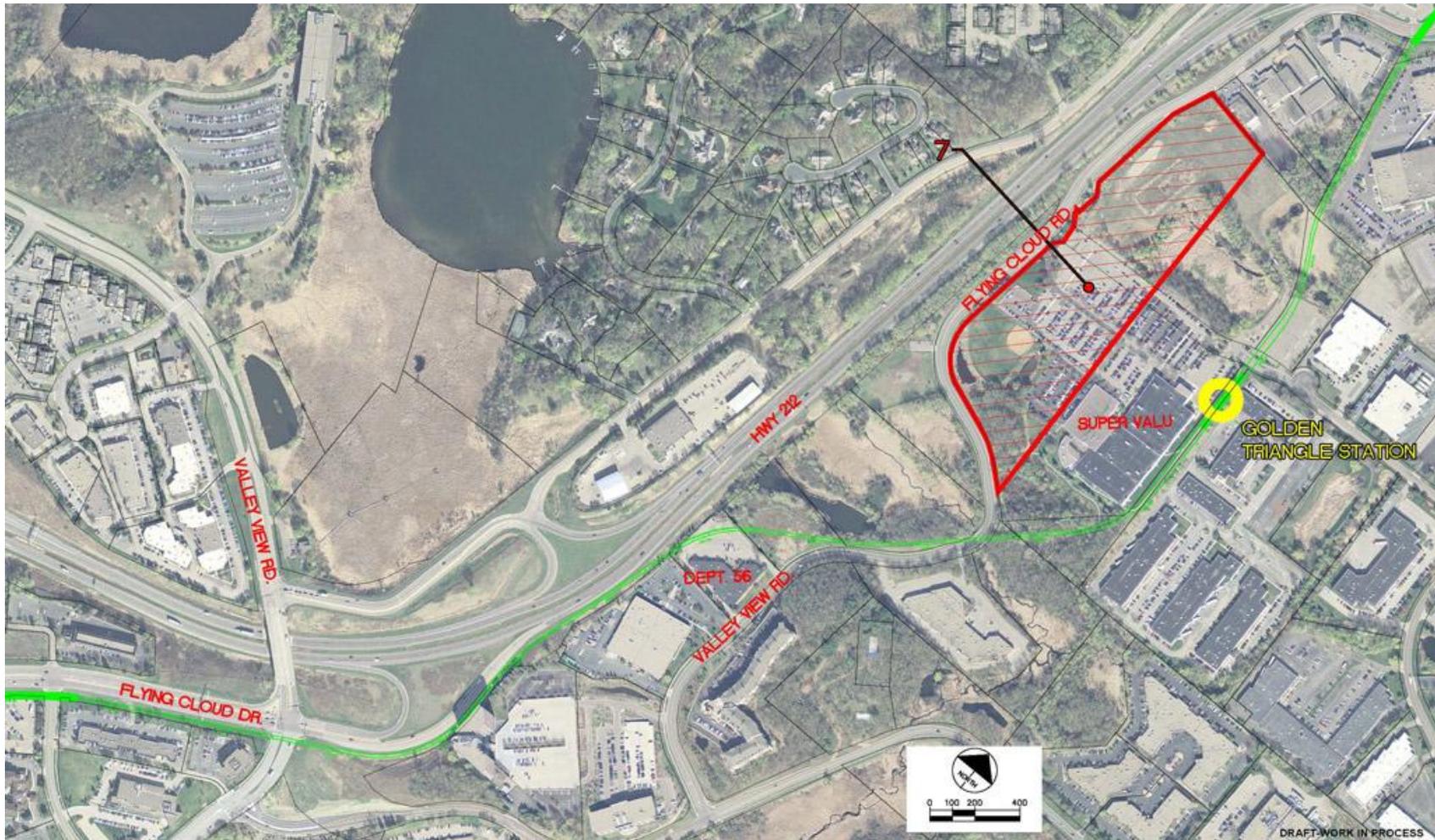


Candidate OMF Sites 5 & 6



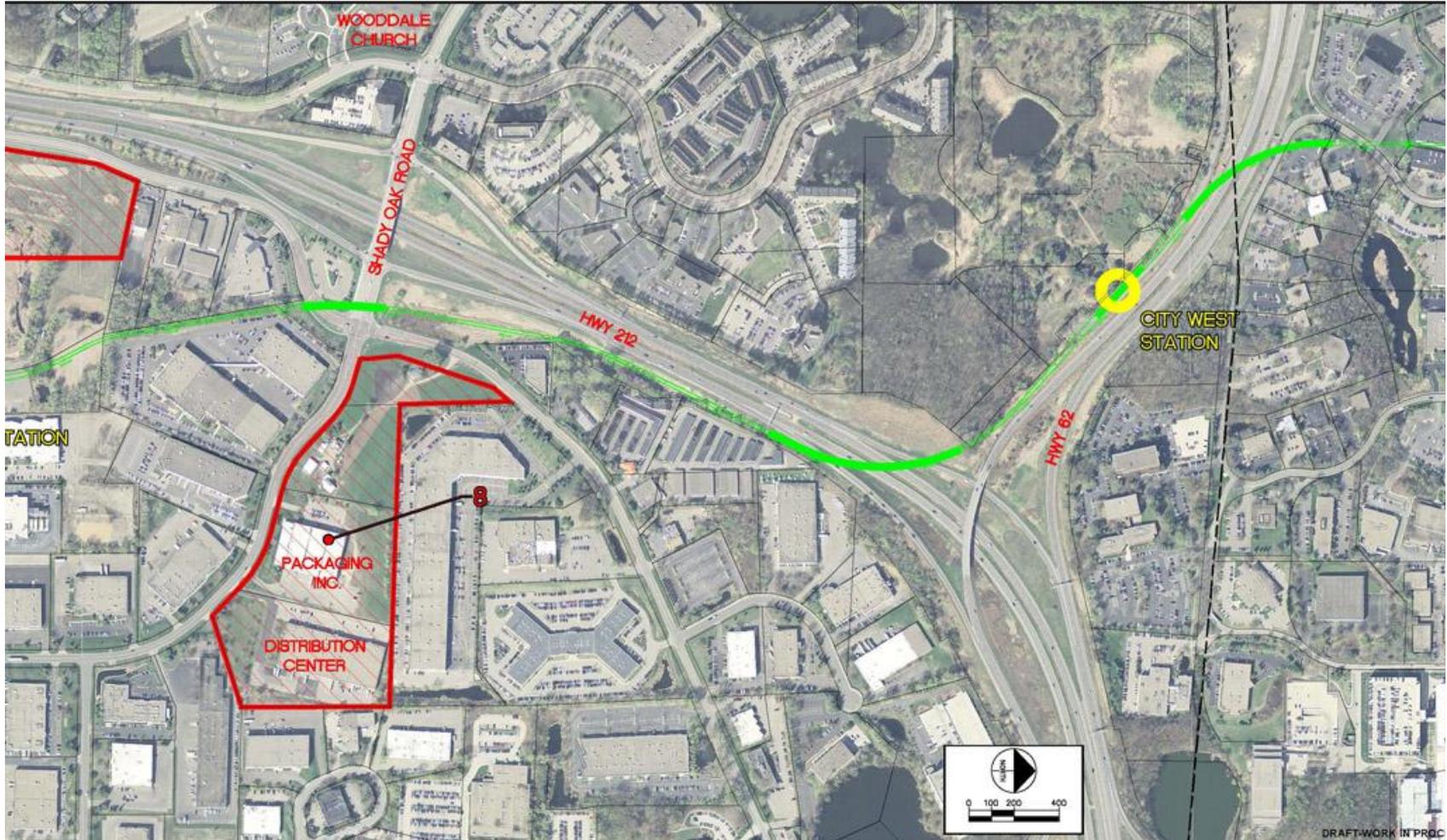


Candidate OMF Site 7



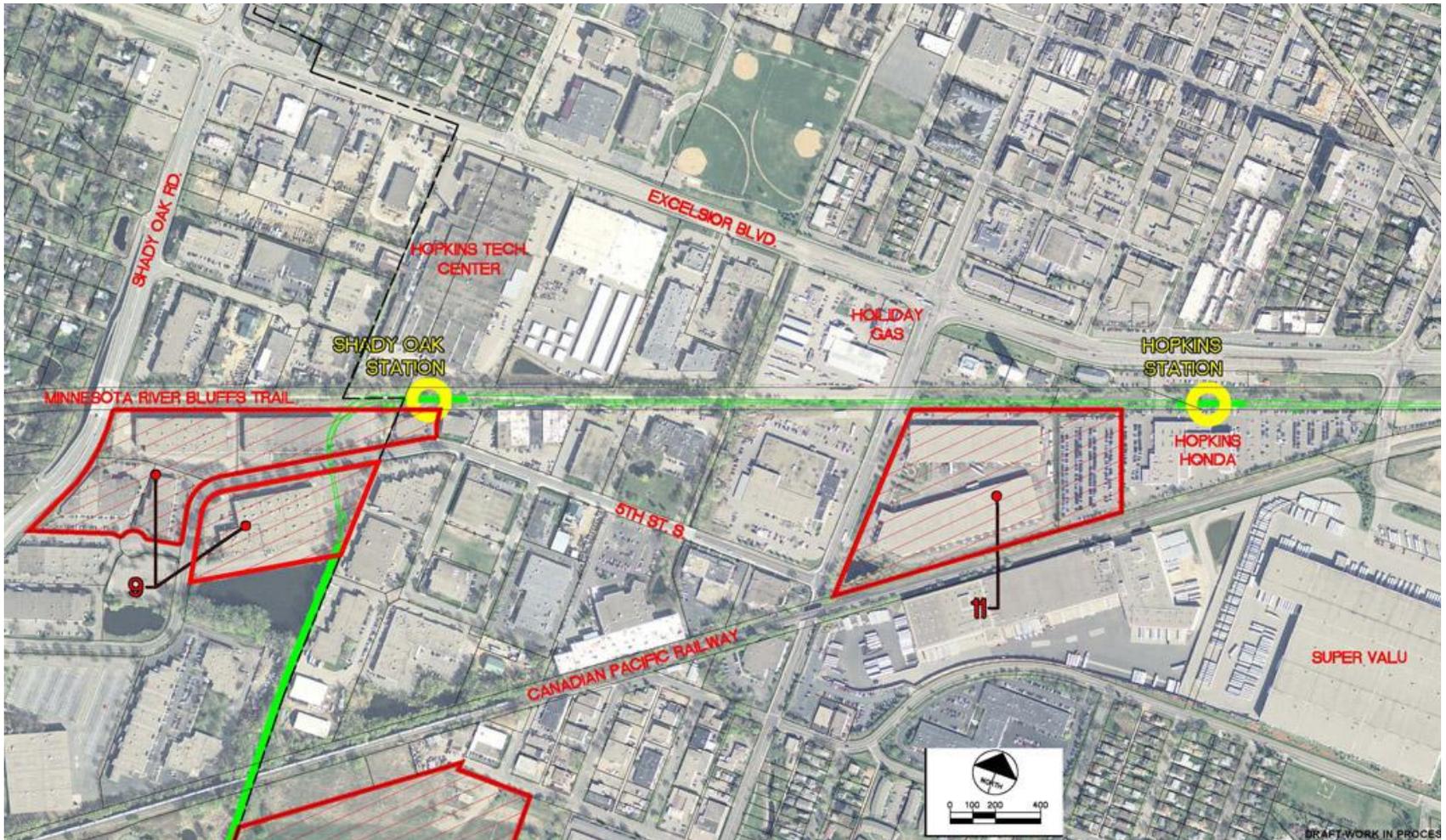


Candidate OMF Site 8



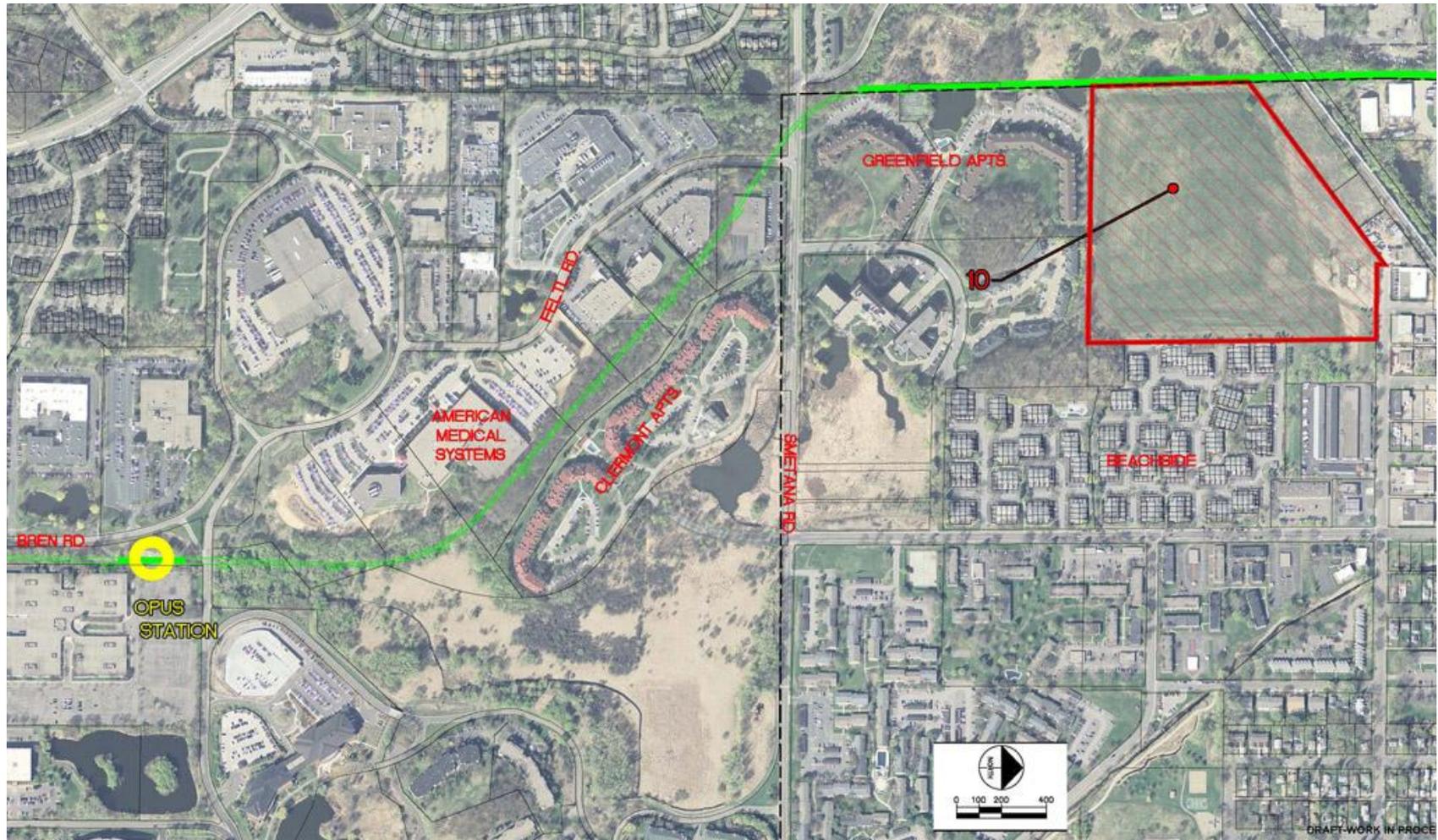


Candidate OMF Sites 9 & 11





Candidate OMF Site 10





Candidate OMF Sites 12 & 13





Candidate OMF Sites 14 & 15





Candidate OMF Site 16



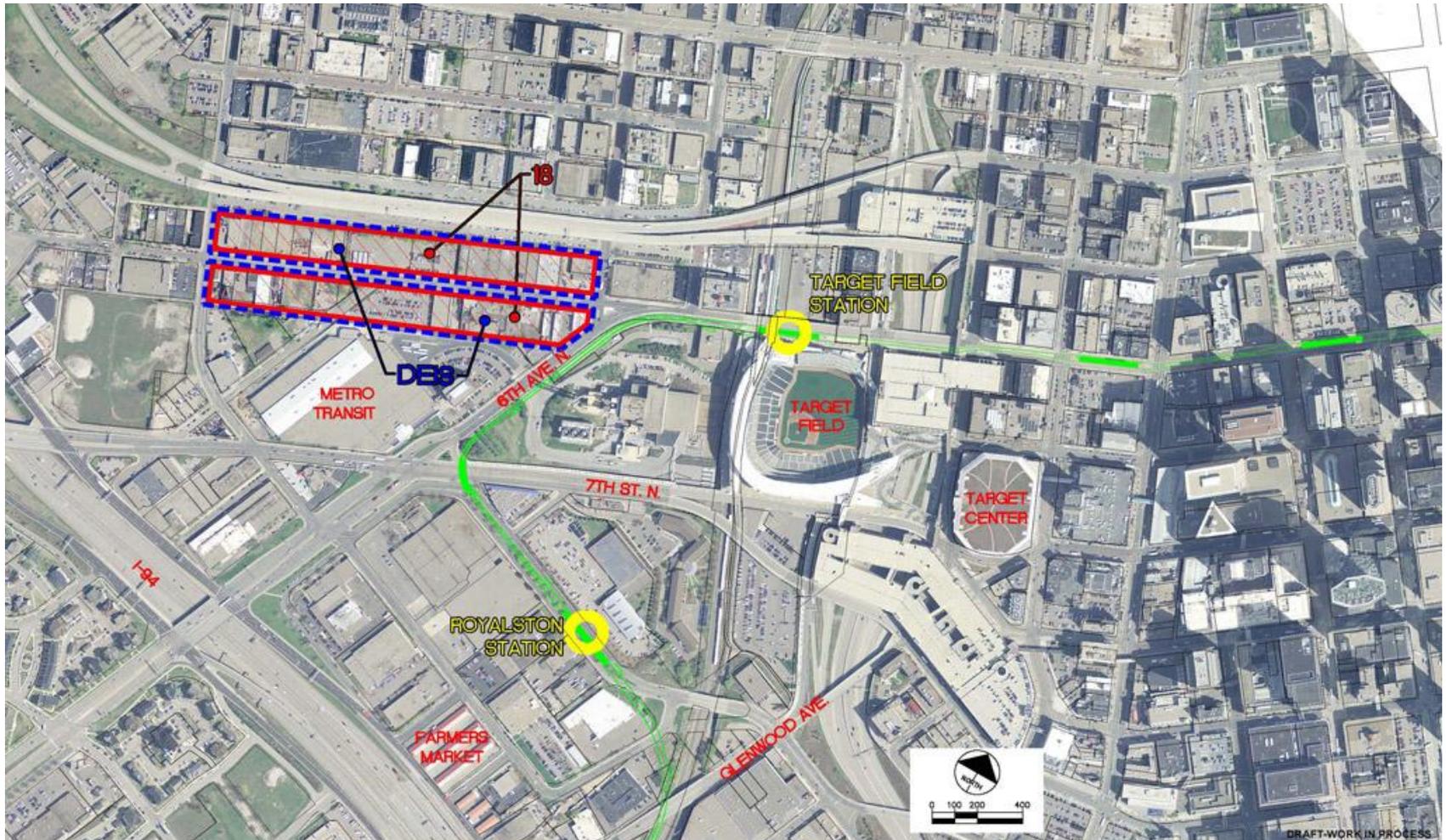


Candidate OMF Site 17





Candidate OMF Site 18





BAC and CAC OMF Comments

- March 27 BAC Meeting Key Themes:
 - Traffic impacts
 - Redevelopment/development impacts
 - Compatible land use
 - Removal of property from tax rolls
- March 28 CAC Meeting Key Themes:
 - Impacts to neighborhoods: noise, vibration
 - Compatible land use
 - Opportunity to serve multiple purposes on one site: i.e. station and OMF or existing business and OMF



OMF Technical Issue #23 Next Steps

- Narrow candidate list to 5 or 6 sites for input:
 - BAC – April 24
 - CAC – April 25
 - SWCMC – May 1
- Public open houses in cities where one or more of the 5/6 sites reside: May

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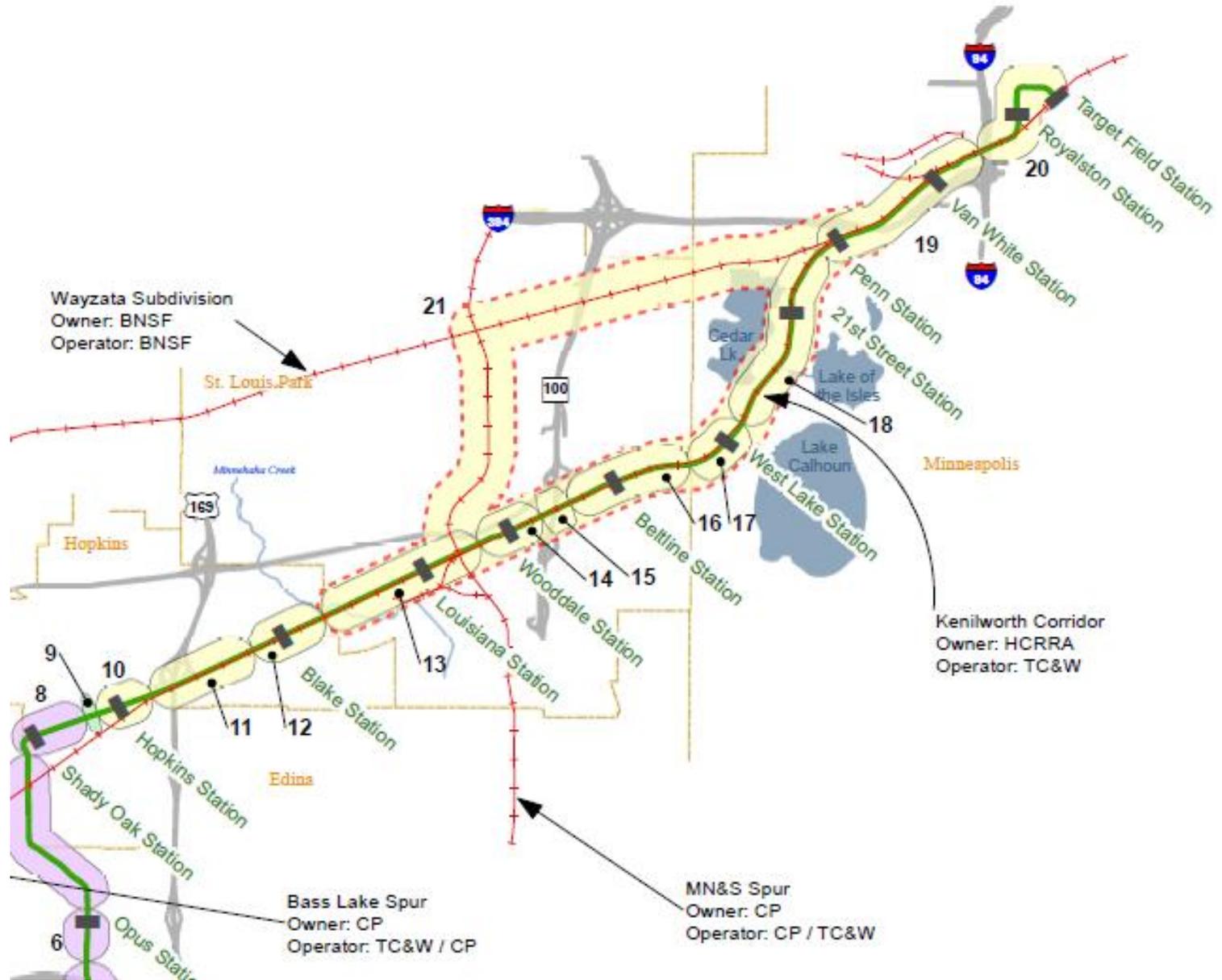
Technical Issue #21: Freight Rail





Freight Rail Technical Issue #21

- Background:
 - Co-location and relocation analysis required by FTA as a condition to enter PE
 - Part of the Metropolitan Council's due diligence and responsibility as project sponsor





Freight Rail Technical Issue #21

- Review existing information
 - Train Volumes
 - Preliminary co-location Kenilworth Corridor review
 - DEIS proposed freight rail relocation route



Freight Rail Technical Issue #21

Existing Train Volumes

Railroad and Route	Avg. Weekly Trains	Avg. Number of Cars Per Train	Typical Commodities
TC&W/ Bass Lake and Kenilworth	14	65 – 75	Agri-goods
	3	80 – 125	Ethanol, Grain, Coal
CP/ MN&S	10	10 – 25	Local Services
BNSF/ Wayzata Subdivision	91	80 – 125	Wide Variety

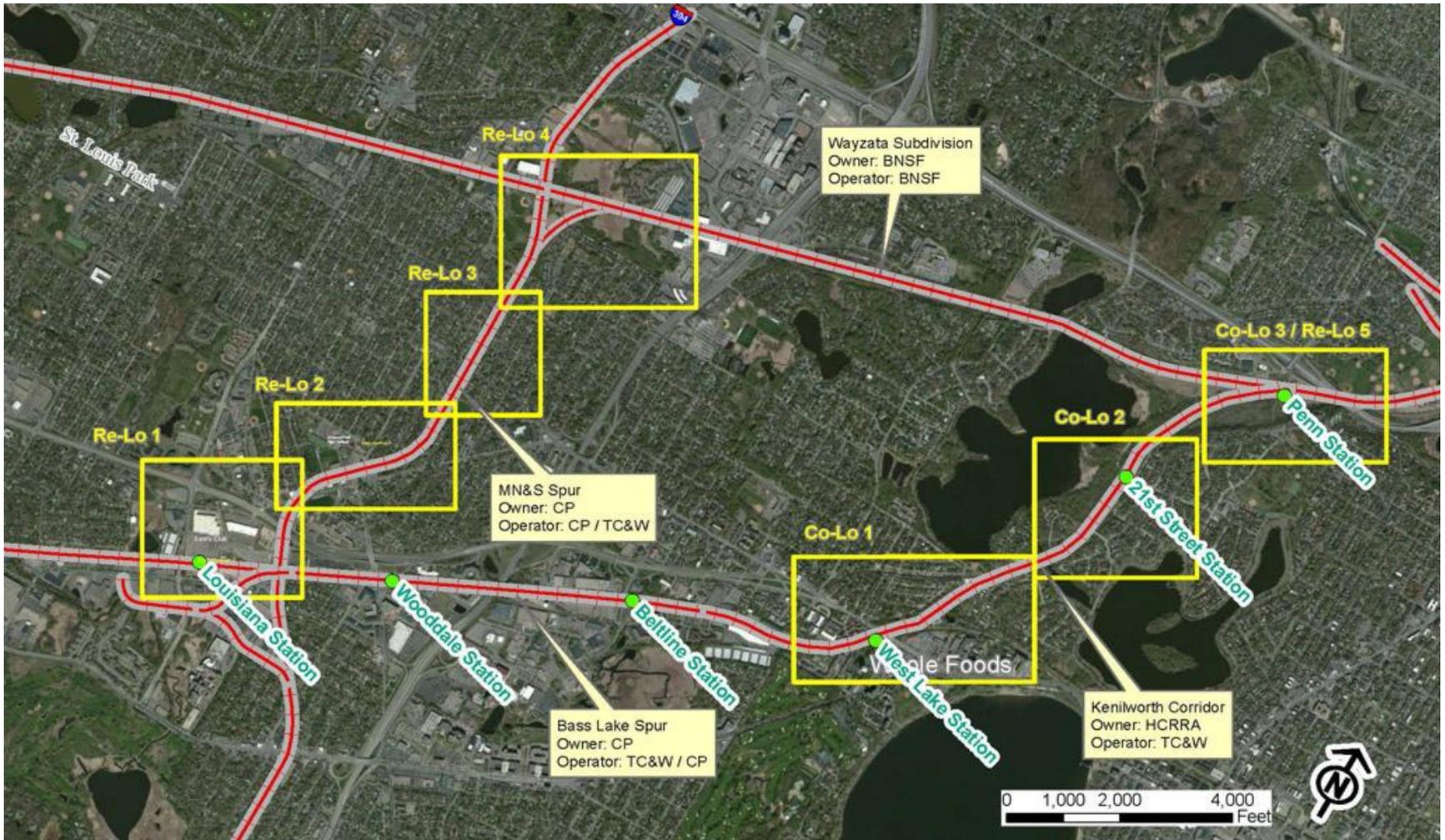


Freight Rail Technical Issue #21

- Overview of Track Characteristics:
 - Curvature
 - Maximum Grade
 - Maximum Compensated Grade (curvature + maximum grade)
- Challenges
- Opportunities



Overview





Co-Location 1





Co-Location 2



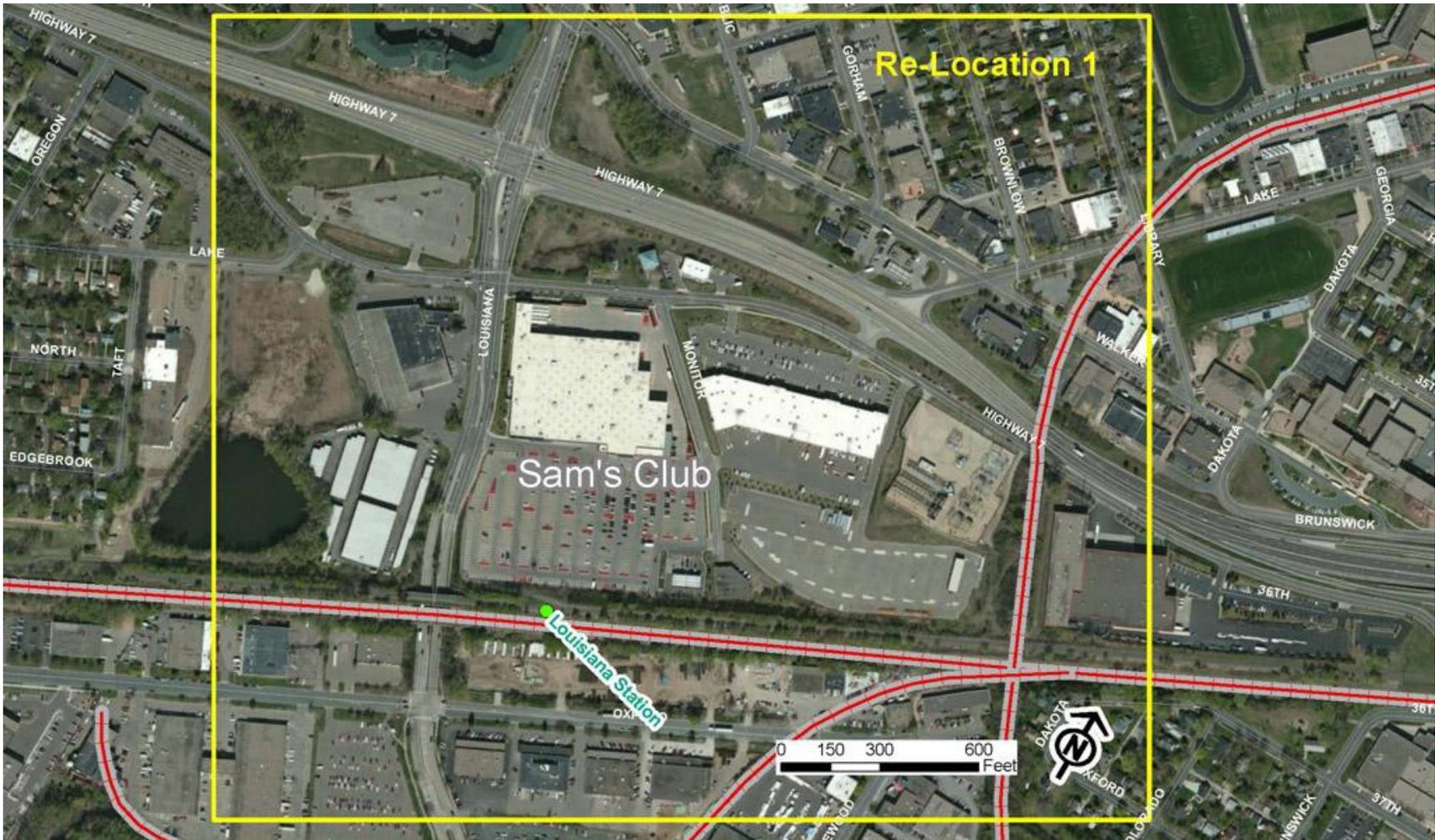


Co-Location 3





Re-Location 1





Re-Location 2



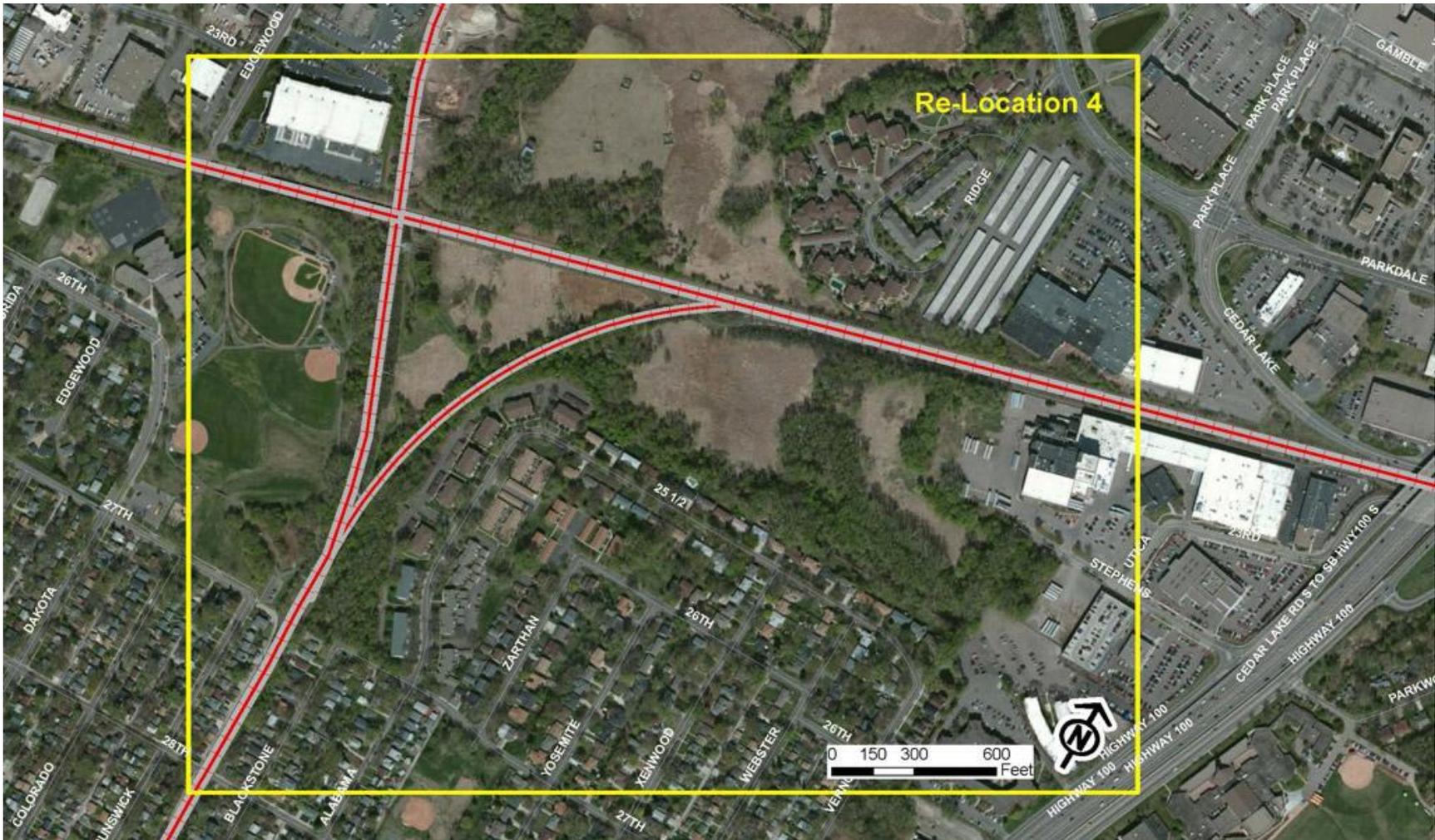


Re-Location 3





Re-Location 4





Re-Location 5





BAC and CAC Freight Rail Comments

- March 27 BAC Meeting Key Themes:
 - Re-location of trails may produce ample space for co-location alternative
 - Impacts to commercial properties need to be quantified
- March 28 CAC Meeting Key Themes:
 - Strong opinions about the location of freight rail
 - Explore other options: e.g. stacking LRT and freight in co-location
 - Questions about the Surface Transportation Board and their authority



Freight Rail Technical Issue #21

Next Steps

- Co-locate and relocation design workshop
 - BAC – May 29
 - CAC – May 30
 - SWCMC – June 5
- Corridor-wide public open houses: June/July

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Communications and Outreach Update





SPO Community Outreach Activities

Date	Event/Sponsor	SPO Activity
Mar 06	Minneapolis Business Breakfast Club	SWLRT presentation given
Mar 08	TwinWest Chamber Legislative Meeting	Staff shared project information
Mar 13	West Calhoun Neighborhood Meeting	Staff shared project information
Mar 12	West Calhoun Neighborhood Meeting	Staff attended
Mar 16	Safety in the Park Freight Rail Walking Tour	Staff attended
Mar 23	Kenilworth Alliance Group	Staff shared project information
Mar 26	Hopkins Lions Meeting	Staff shared project information
Mar 29	Centro de Trabajadores Unidos en la Lucha (CTUL)	Staff shared project information
Apr 1	Royalston Business Tour	Staff attended

March 27 BAC Meeting

- Transit Return on Investment Report Overview
 - Jay Cowles, Co-chair Itasca Project Transportation Committee
- Station Area Action Plans (TSAAP) Overview
- Technical Issues Discussion: Operations and Maintenance Facility
- Technical Issues Discussion: Freight Rail Co-location/Relocation



March 27 BAC meeting

March 28 CAC Meeting

- Station Area Action Plans (TSAAP) Overview
- Eden Prairie Workshop Summary
- Technical Issues Discussion: Operations and Maintenance Facility
- Technical Issues Discussion: Freight Rail Co-location/Relocation



March 28 CAC meeting



Website Redesign www.SWLRT.org



COMMUNITIES PARKS TRANSPORTATION WASTEWATER & WATER HOUSING PLANNING



SOUTHWEST LRT

Project Facts

Route

Stations

Public Involvement

Environmental

Project Partners

Committees

SOUTHWEST LIGHT RAIL TRANSIT

Green Line Extension – Eden Prairie to Downtown Minneapolis

Alternatives for improved transit in the Southwest Corridor have been under study since the mid-1980s. In November 2009, the Hennepin County Regional Railroad Authority (HCRRA) recommended construction of a light rail transit (LRT) line between Eden Prairie and downtown Minneapolis. The proposed line would connect near Target Field with the Blue Line (Hiawatha LRT, in service since 2004) and the Green Line (Central Corridor LRT, entering service in 2014), as well as the Northstar commuter rail line. As currently proposed, the line would be 15.8 miles long with 17 new stations. The total project cost of \$1.25 billion would be funded through a mix of federal, state and local sources.

Project Status

The Southwest LRT/Green Line Extension Project is currently in the Engineering phase of project development. The Project received approval to enter Preliminary Engineering (PE) from the Federal Transit Administration (FTA) in September 2011. In



More Information

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