Corridor Management Committee

June 15, 2017

Today's Topics

- Approval of Meeting Minutes
- Chair's Update
- Traffic Signal Coordination
- 60% Plans Update
  - Advanced Construction: Bassett Creek Storm Sewer Relocation
- Project Schedule Update

Chair’s Update

Traffic Signal Coordination

Introduction

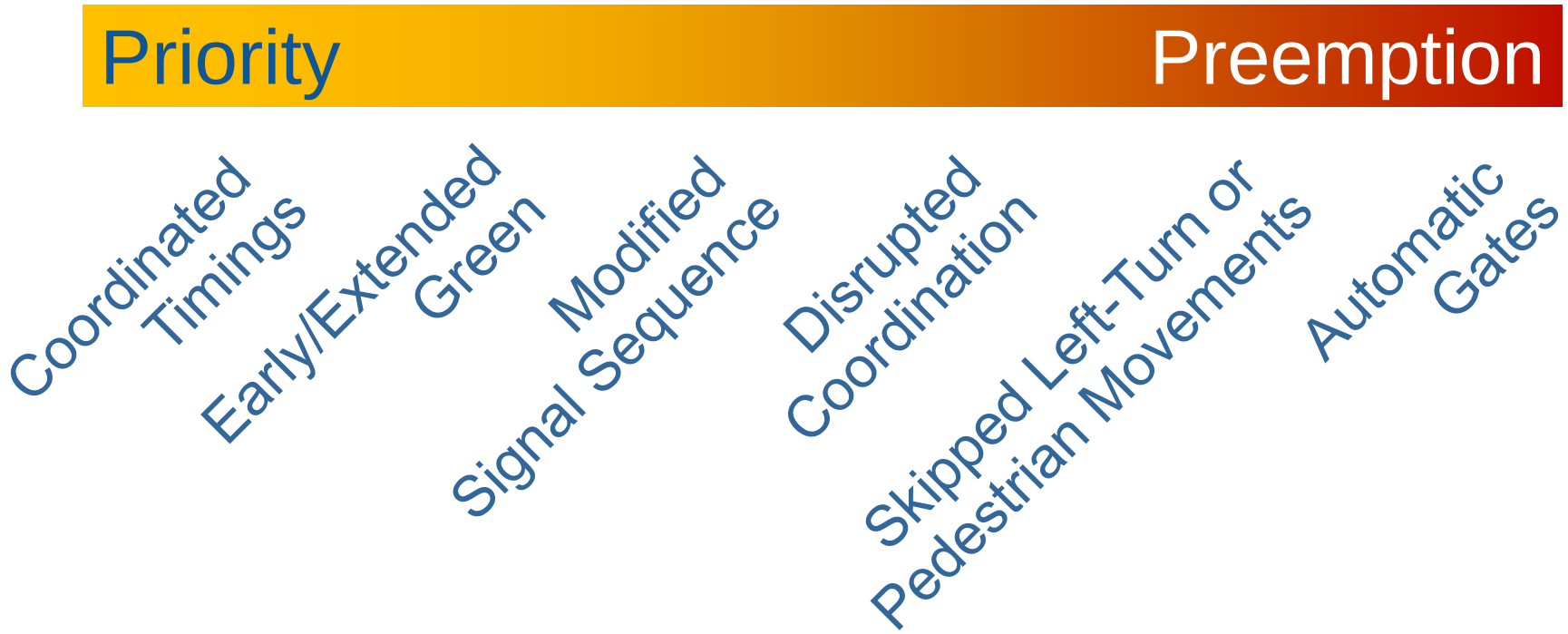
- Automatic Block Signaling (ABS) LRT Operation
  - Freight railroad corridor
  - Corridor is separated into sections or “blocks” and LRV spacing and movements are controlled with a series of automatic rail signals
- Bar Signals: Line-of-Sight LRT Operation
  - Olson Memorial Hwy and W Broadway Ave
  - Bars signals, which are part of the traffic signal system, control LRV movements through intersections

Transit Signal Priority and Preemption

- Transit Signal Priority (TSP)
  - Changes to traffic signal timing to assist the efficient movement of transit vehicles
- Preemption
  - Typically associated with Emergency Vehicle Preemption (EVP) or Railroad Preemption

Transit Signal Priority and Preemption

A spectrum from priority to preemption



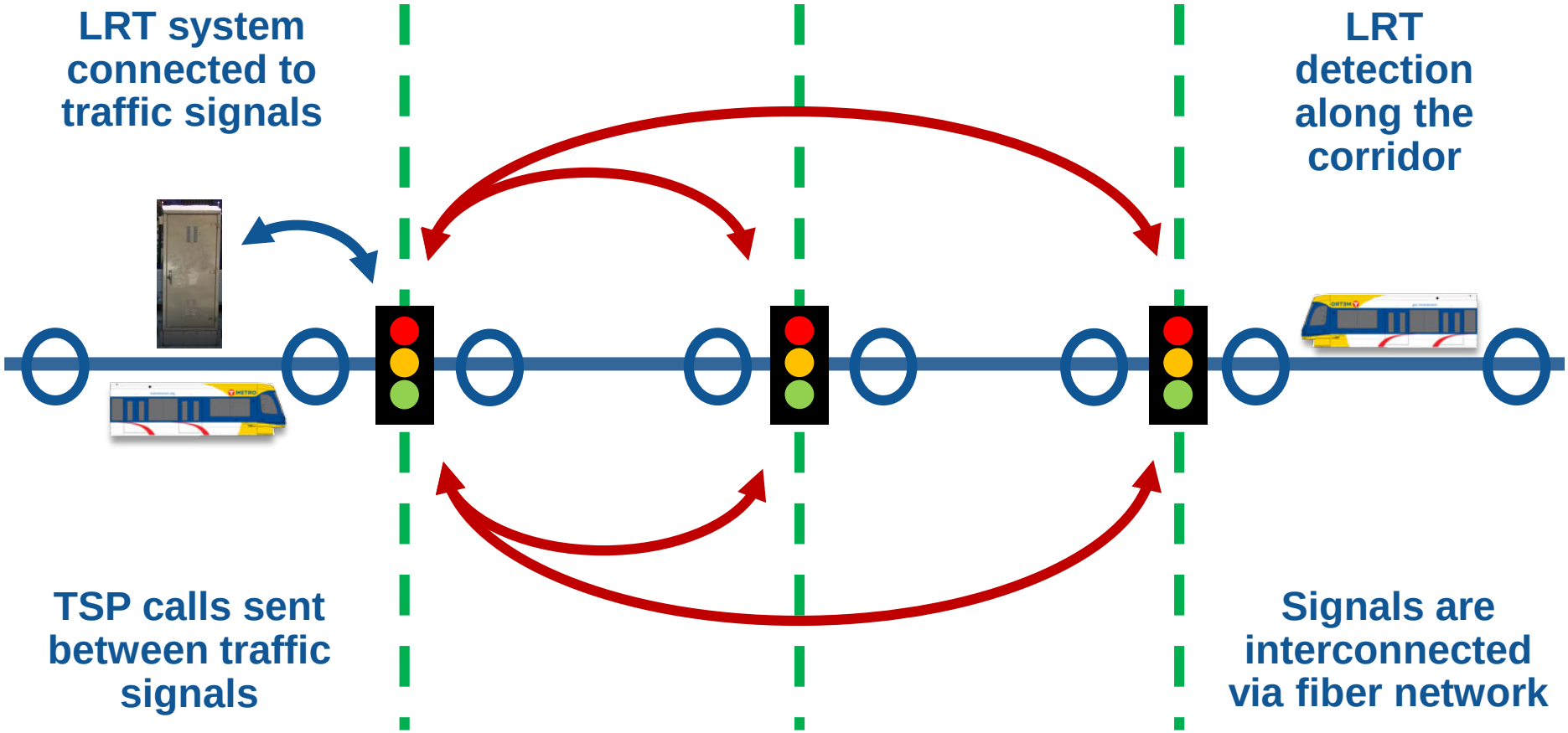
Transit Signal Priority and Preemption

- 23 intersections controlled by bar signals
  - Example: Olson Memorial Hwy and Penn Ave
- 8 highway-railroad grade crossings with automatic gates
  - Example: Corvallis Ave-railroad grade crossing
- 3 highway-railroad grade crossings with automatic gates and traffic signal preemption
  - Example: Bass Lake Rd-railroad grade crossing

Transit Signal Priority and Preemption

- TSP Goal: Provide **efficient** and **reliable** transit travel times without unduly impacting other modes
- Each intersection is evaluated to determine the appropriate level of priority
  - LRT needs
  - Pedestrian and bicycle needs
  - Vehicle traffic needs
- Technology advances continue to improve TSP capabilities

BLRT Operations



Predictive Priority

- Use LRT detection upstream
- Serve LRT phase when the LRV arrives at the intersection, if possible
  - EVP overrides LRT call
  - Pedestrian clearance always served
  - Minimum vehicle phases always served
- Controllers can serve other phases with demand immediately after LRV clears
  - Gives left-turn and cross street traffic more opportunities to be served, especially during longer cycle lengths

Next Steps

- Design a robust detection system
  - Provides flexibility in operations
- Investigate signal controller capabilities during design and operations planning
- Work with operating agencies to identify operational priorities and understand tradeoffs
- Use a data-driven approach to identify impacts and determine if adjustments are needed

60% Plans Update

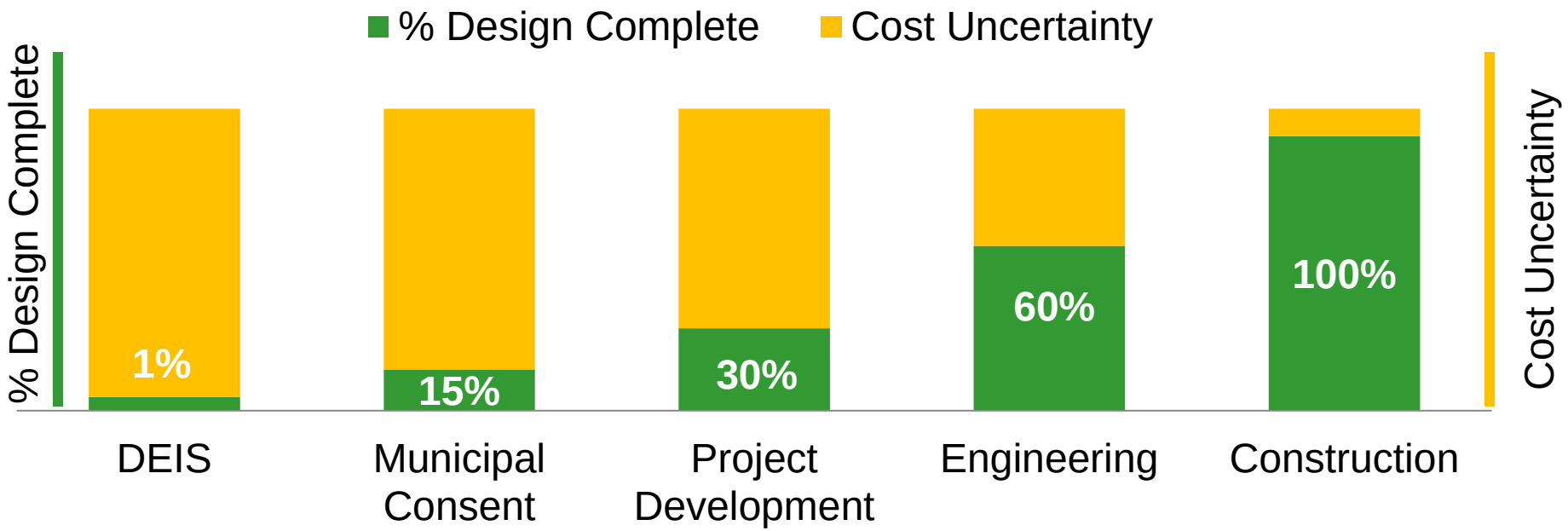
Design: 60% Plans Update

- Completed May 10
- Plans shared with project partners for review and comment
- Comments are being addressed and changes will be included in 90% plans
- Design details to resolve prior to 90% plan production
  - Robbinsdale Park and Ride
  - Oak Grove Park and Ride
  - West Broadway streetscape
  - Olson Memorial Highway streetscape

Project Budget: 60% Engineering

	30% Estimate	60% Estimate
Project Budget (Met Council Approved 9/28/2016)	$1.536 B	$1.536 B
Total Project Contingency	29%	25%
Escalation Factor	3%	3%
Base Year Estimate	2016	2017
Forecast Year	$YOE (2018, 2019 and 2020)	$YOE (2018, 2019 and 2020)

Cost Uncertainty By Project Phase



Advanced Construction:
Bassett Creek Storm Sewer Relocation

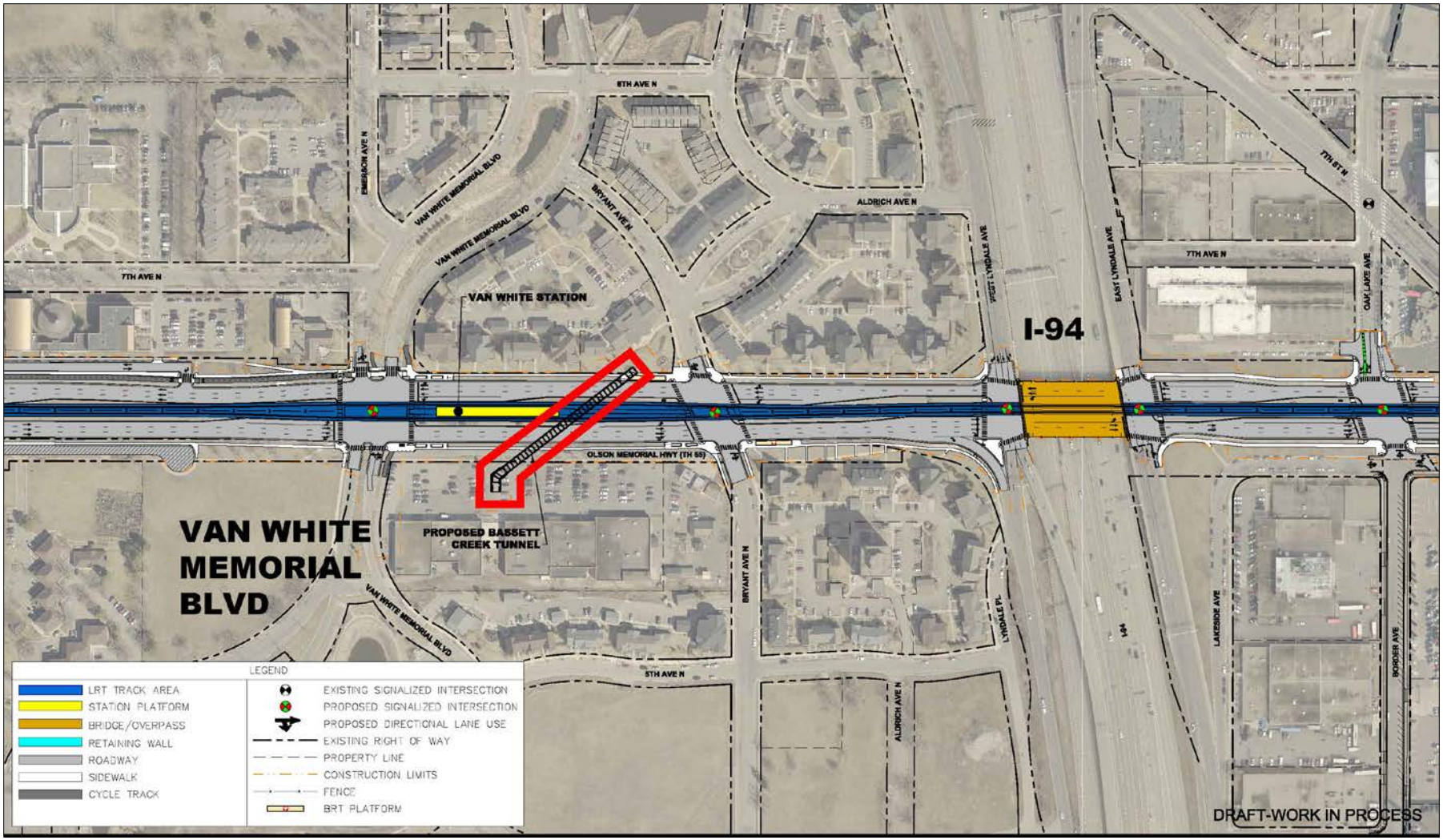
Bassett Creek Culvert: Circa 1884

BASSETT'S CREEK CULVERT.

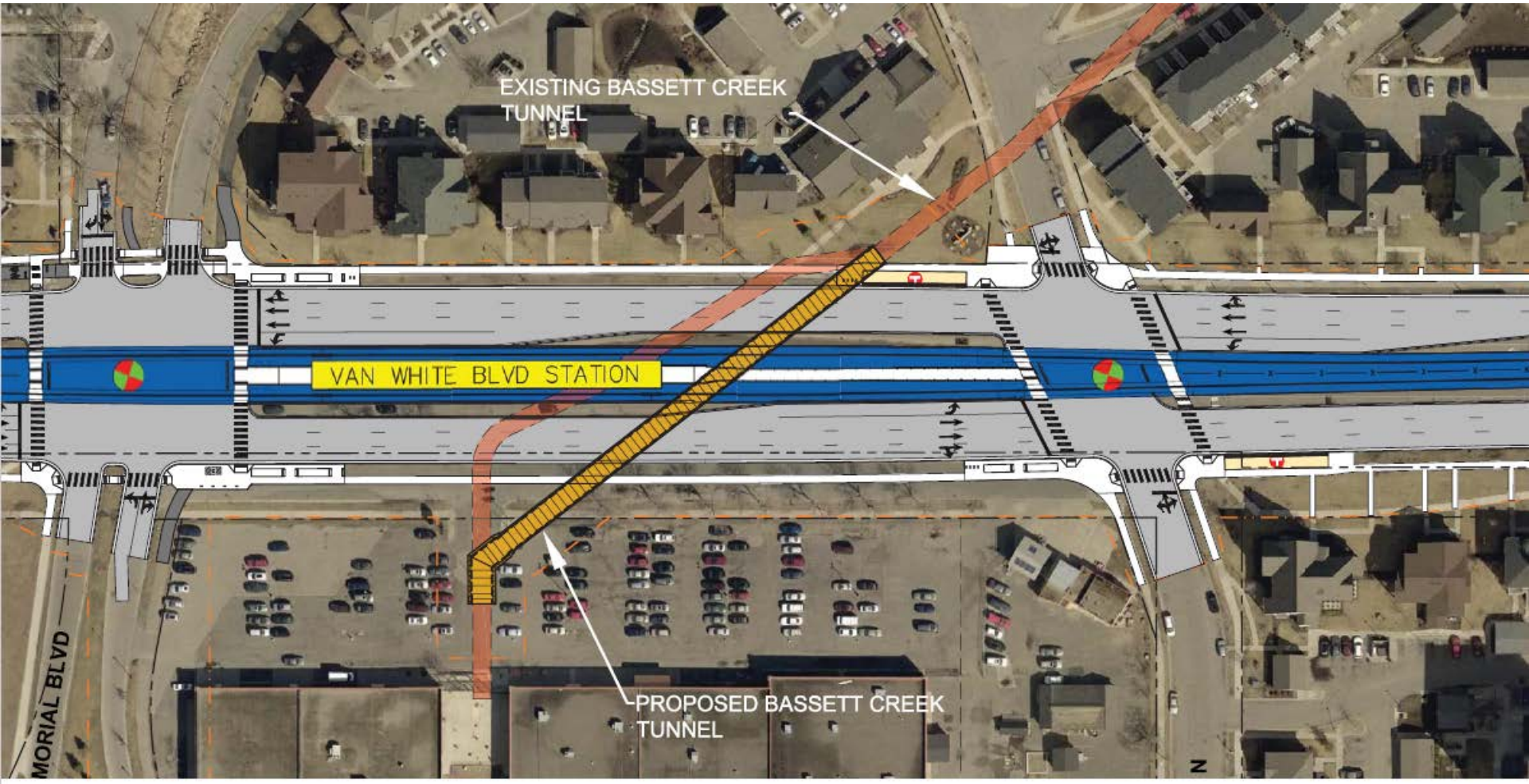
Bassett Creek Storm Sewer Relocation

- Storm sewer conflicts with Van White Station and LRT guideway
- Critical path element: reduces construction staging and phasing of Olson Memorial Highway (OMH)
- Relocation needs to occur during storm water low flow time period: Fall/Winter
- Identified on MnDOT structurally deficient list

Bassett Creek Storm Water Overview



Bassett Creek Storm Water Overview



Bassett Creek Storm Sewer Utility Relocation

- June: Two bid packages released
  - Material procurement
  - Tunnel construction bid package
- July: Award material procurement contract
- September: Award construction package
- Fall 2017: Construction begins
  - Closure of OMH to start after Oct 27, 2017 allowing completion of I-94 work
  - Up to 12 day closure of OMH
- Estimated project cost: $4.4M

Project Schedule Update

Major Project Milestones Achieved

- September 2016
  - Completed NEPA environmental process
  - Completed Project Development phase of the New Starts process
  - Set project scope and budget at $1.536 B
- January 2017
  - FTA granted Entry into Engineering
- March 2017
  - Completed 60% Civil and OMF design
- May 2017
  - Completed 60% Systems design

Next Steps

- Complete 90% design
- Secure full local funding commitment
  - CTIB dissolution and increase in Hennepin County sales tax allows for Hennepin County to assume remaining local funding share
  - FTA completes Financial Capacity Assessment
- Negotiate freight rail agreements
  - Conclude negotiations with BNSF
- Secure Federal funding
  - Recognized as one of five projects in Engineering in the May 2017 Annual FTA report with Medium-High rating
  - Seek congressional appropriations in FY2018 budget
- Submit FFGA application in May 2018

Schedule Update

Milestone	Previous	Updated
Advanced Utility Work	October 2017	October 2017
90% Plans	August 2017	November 2017
100% Plans	December 2017	April 2018
Advanced Construction	October 2017	May 2018
Apply For FFGA	September 2017	May 2018
Receive FFGA	April 2018	October 2018
Heavy Construction	2018 - 2020	2019 - 2021
Operational Testing	Late 2020 - 2021	Mid 2021 - 2022
Revenue Service Date	Late 2021	Mid 2022

More Information

Website: BlueLineExt.org

Email: BlueLineExt@metrotransit.org

Twitter: @BlueLineExt