

Charlotte Railroad Improvement & Safety Program



CRISP

Presented by
NCDOT Rail Division
October 2009



Charlotte Railroad Improvement & Safety Program

Presentation:

- ❑ Project Purpose and Need
- ❑ CSXT/NS Mainline Separation Project
- ❑ NS Mainline Improvements South
- ❑ NS Mainline Improvements North
- ❑ Other Area Projects
- ❑ Funding/Timeline
- ❑ Next Steps

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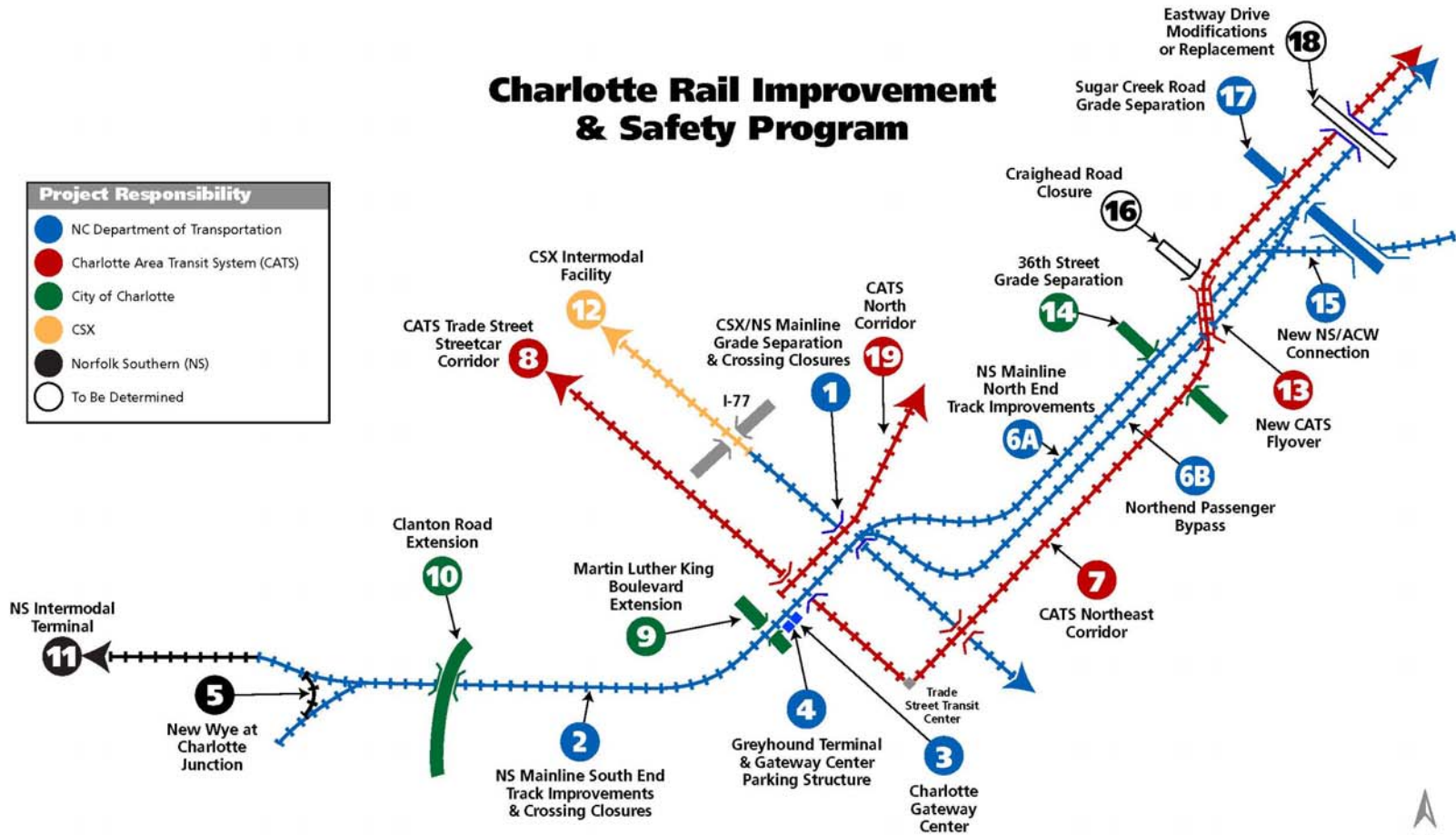
Purpose of CRISP:

- ❑ Modernize existing track infrastructure in and around Charlotte, with a planning/design window of 50 years
- ❑ Improve speed and capacity of rail infrastructure in Charlotte to help implement Southeast High Speed passenger rail service
- ❑ Improve safety and efficiency of freight commerce (NS, CSXT) and transit (CATS)
- ❑ Improve safety for vehicles and pedestrians
- ❑ Improve environment and local quality of life

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Project Responsibility	
●	NC Department of Transportation
●	Charlotte Area Transit System (CATS)
●	City of Charlotte
●	CSX
●	Norfolk Southern (NS)
 	To Be Determined



Revised October 7, 2009



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Program Need:

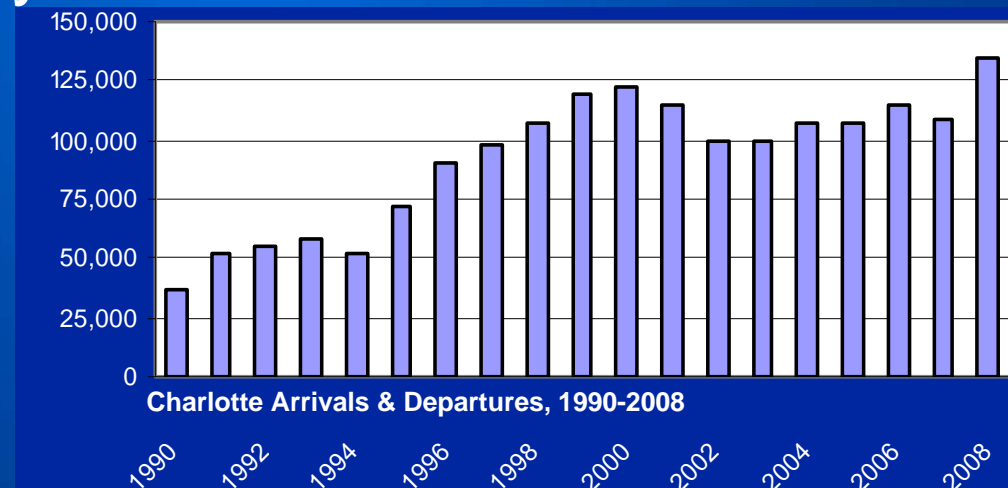
- ❑ Congestion: Vehicle Miles Traveled (VMT) outpacing population growth in NC
- ❑ Freight railroads anticipate continued growth, esp. via intermodal containers from ports



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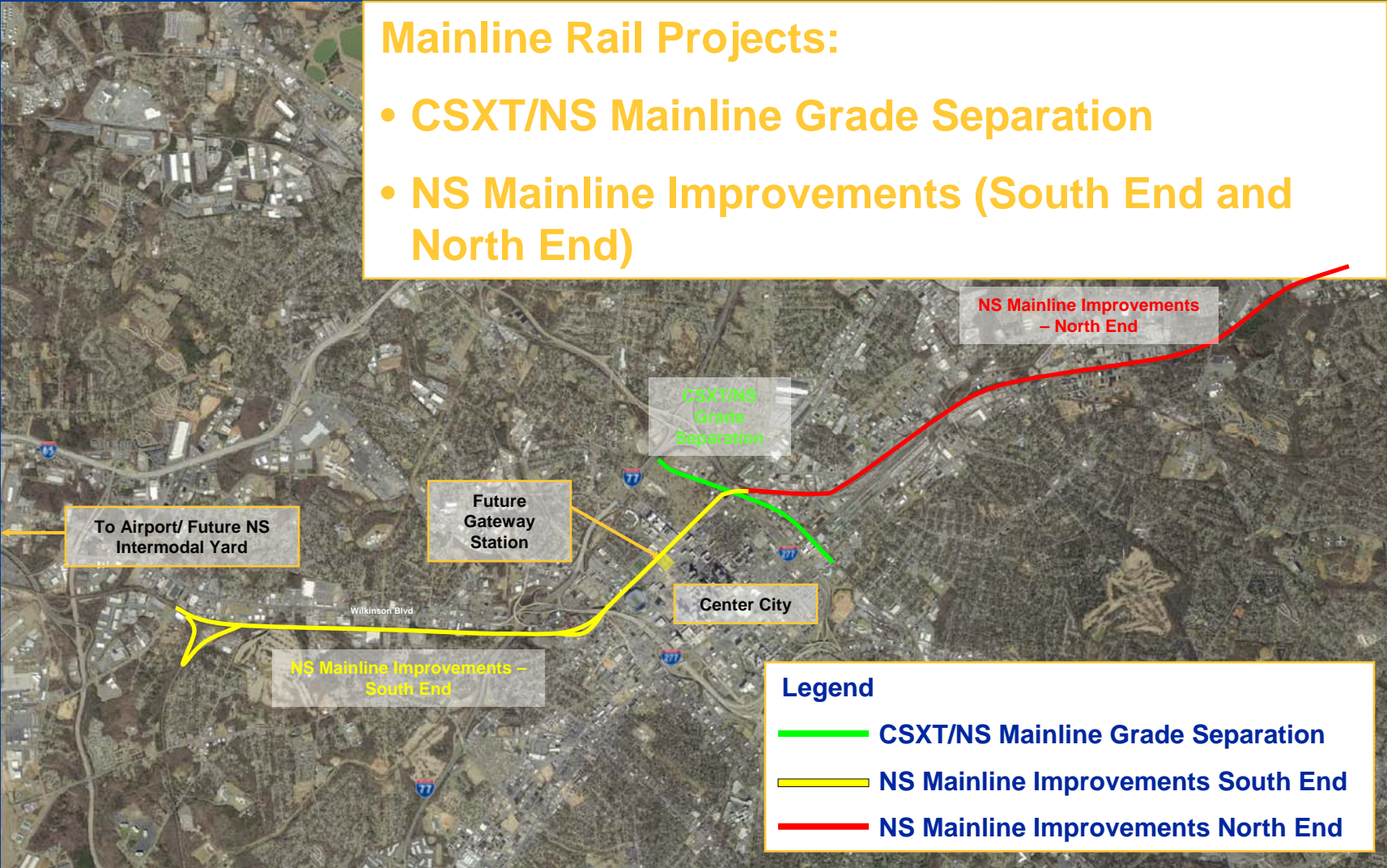
Program Need:

- Charlotte intercity passenger rail ridership increased 370% since 1990
- HSR would add 1M+ annual passenger trips
- USDOT Study: SEHSR would produce more revenue than any other HSR corridor



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- ## Mainline Rail Projects:
- CSXT/NS Mainline Grade Separation
 - NS Mainline Improvements (South End and North End)



**CSXT / Norfolk Southern
Mainline Rail Grade Separation**

Mainline Grade Separation



Existing Conditions -- CSXT



RR Diamond looking east along CSXT



Eastbound CSXT train awaiting NS clearance to cross diamond



CSXT, looking west, ADM to left



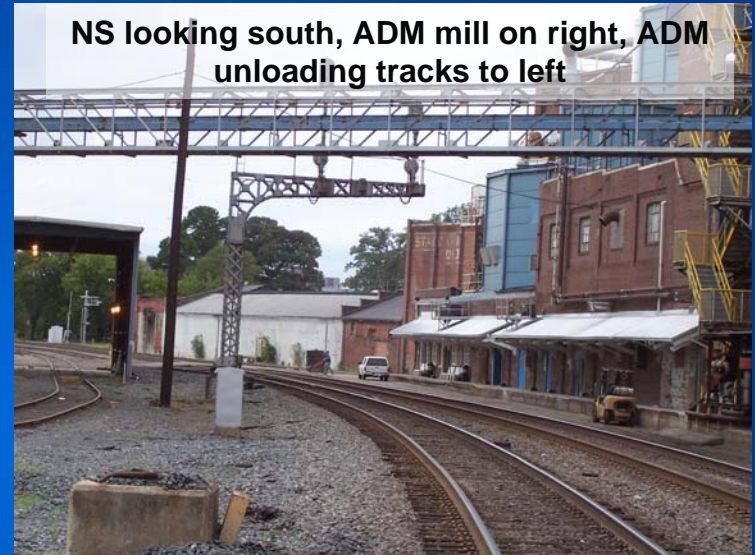
ADM private crossing of CSXT

Existing Conditions -- NS

RR Diamond looking north along NS



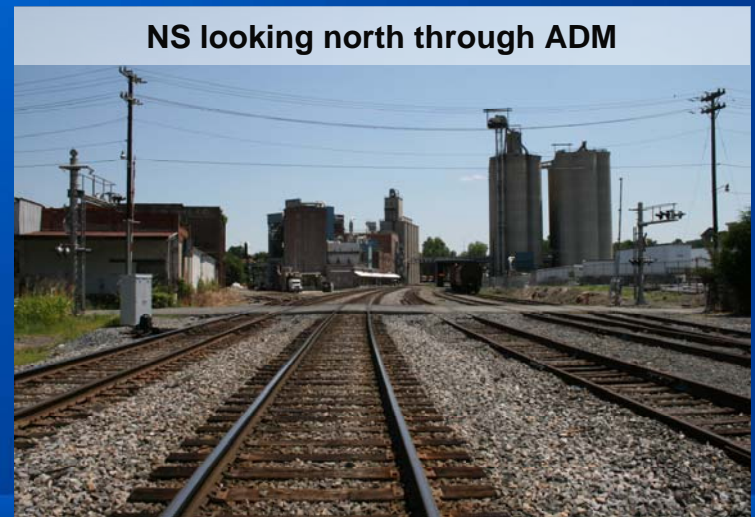
NS looking south, ADM mill on right, ADM unloading tracks to left



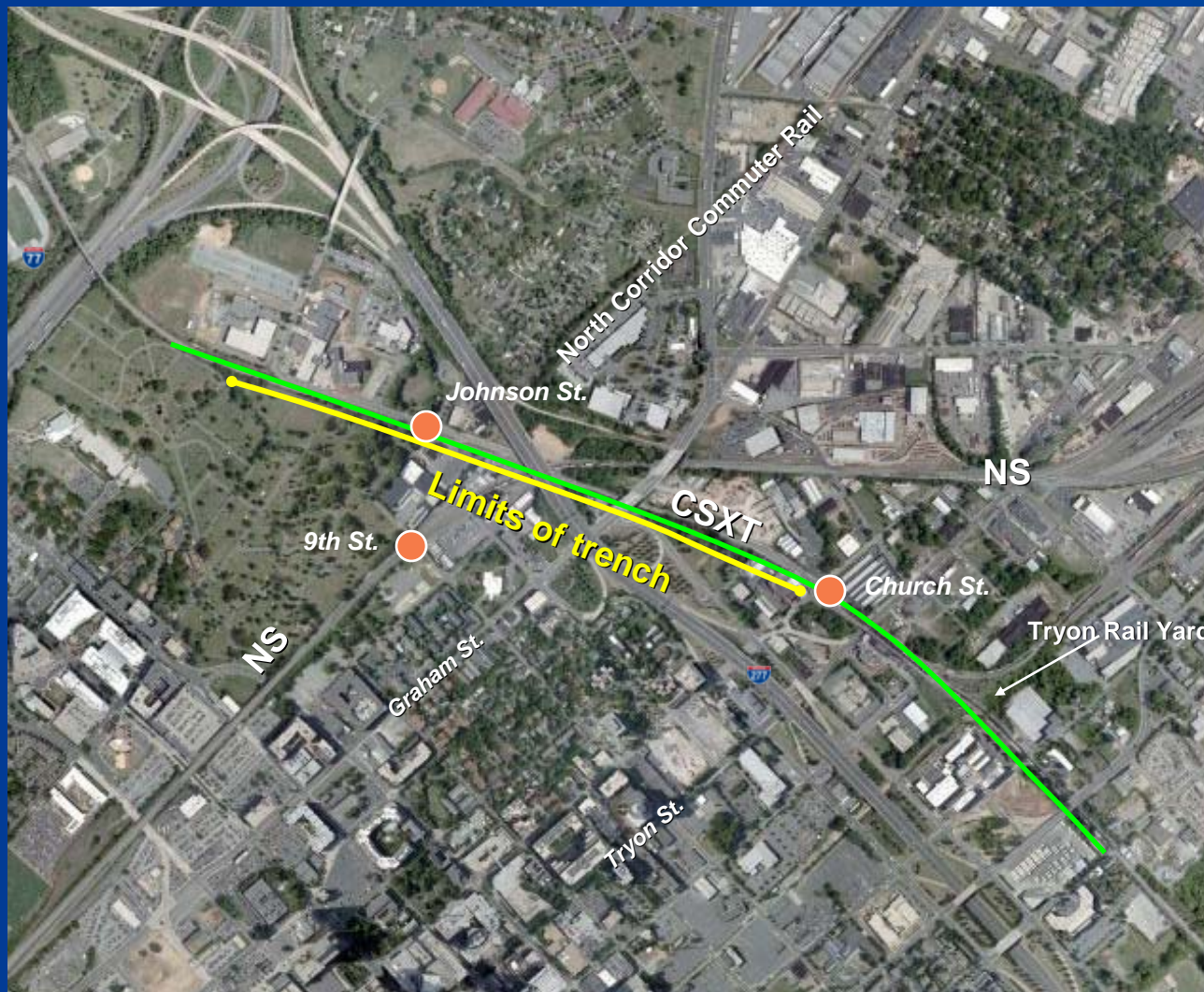
NS looking south, through ADM site



NS looking north through ADM



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- ❑ Place CSXT in trench below NS, CATS North Corridor
- ❑ Detour tracks needed for CSXT and NS
- ❑ Closure of crossings at 9th St, Johnson St, Church St
- ❑ Relocation of CSXT yard
- ❑ Modifications to ADM Mill

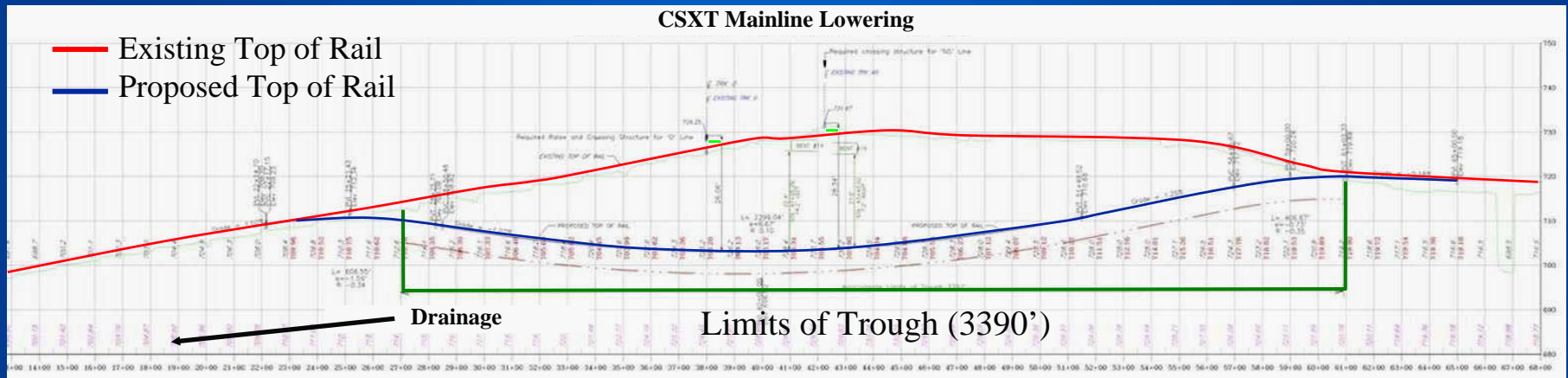
Why Grade Separate Railroads?

- ❑ NS Freight and Intermodal growth
- ❑ CSXT Freight and Intermodal growth
- ❑ Safety
- ❑ Quality of Life
 - Emissions
 - Noise
- ❑ Delays
 - CSXT
 - Autos and crossings

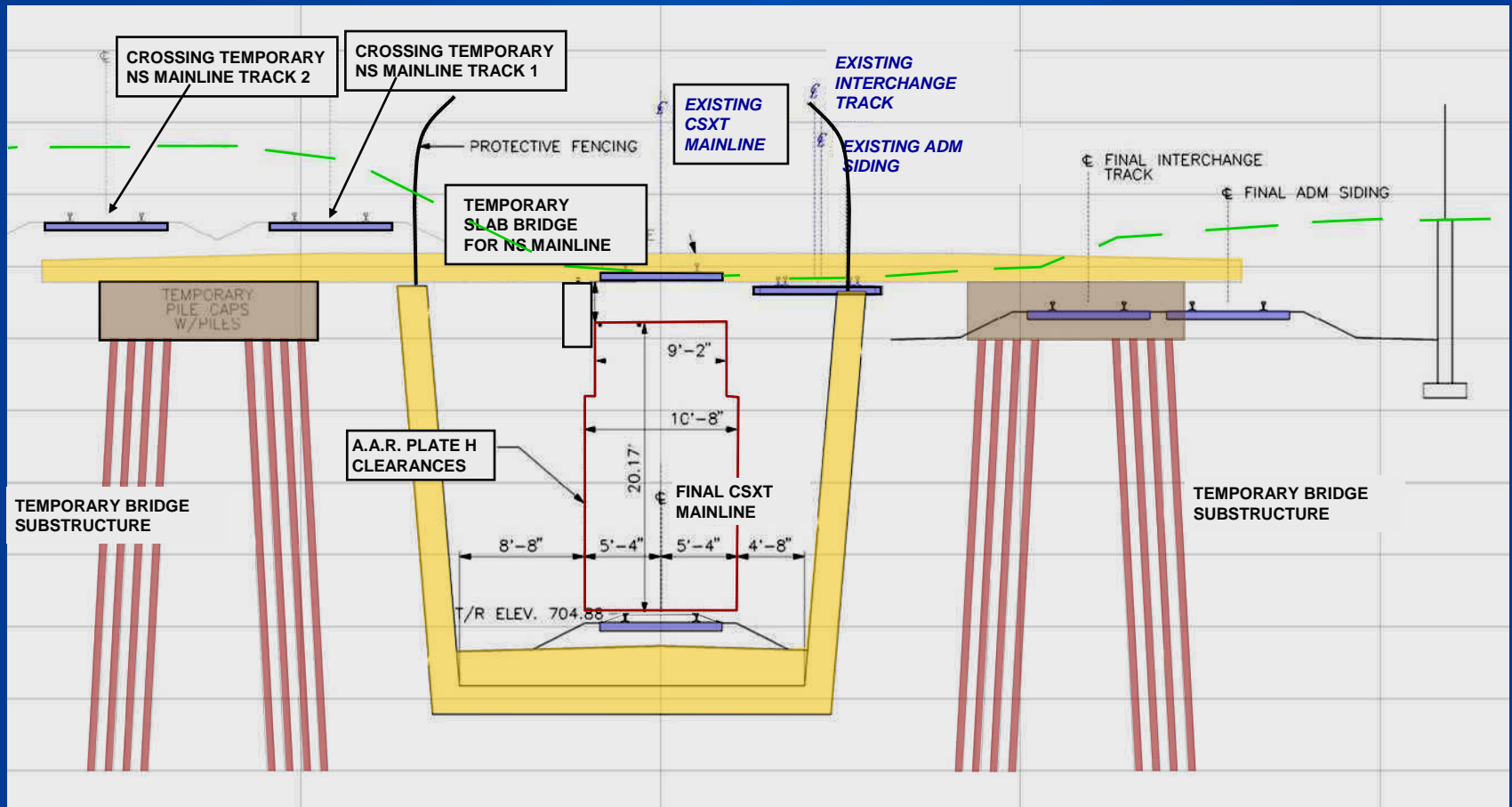
Why Grade Separate Railroads? Number of Trains Crossing Diamonds

	Current	2015
NS	34	50
CSXT	14	20
Amtrak	2	10
Total	50	80

CSXT/NS Grade Separation – Proposed Plan



CSXT/NS Grade Separation – Proposed Plan



ADM Current Operations



- ❑ Largest and oldest ADM mill in South
- ❑ Operates 24/7/365
- ❑ Capacity of 1.3 million lbs. of flour every 24 hours
- ❑ Adjacent to busiest RR corridors in the state



Crossing Closures

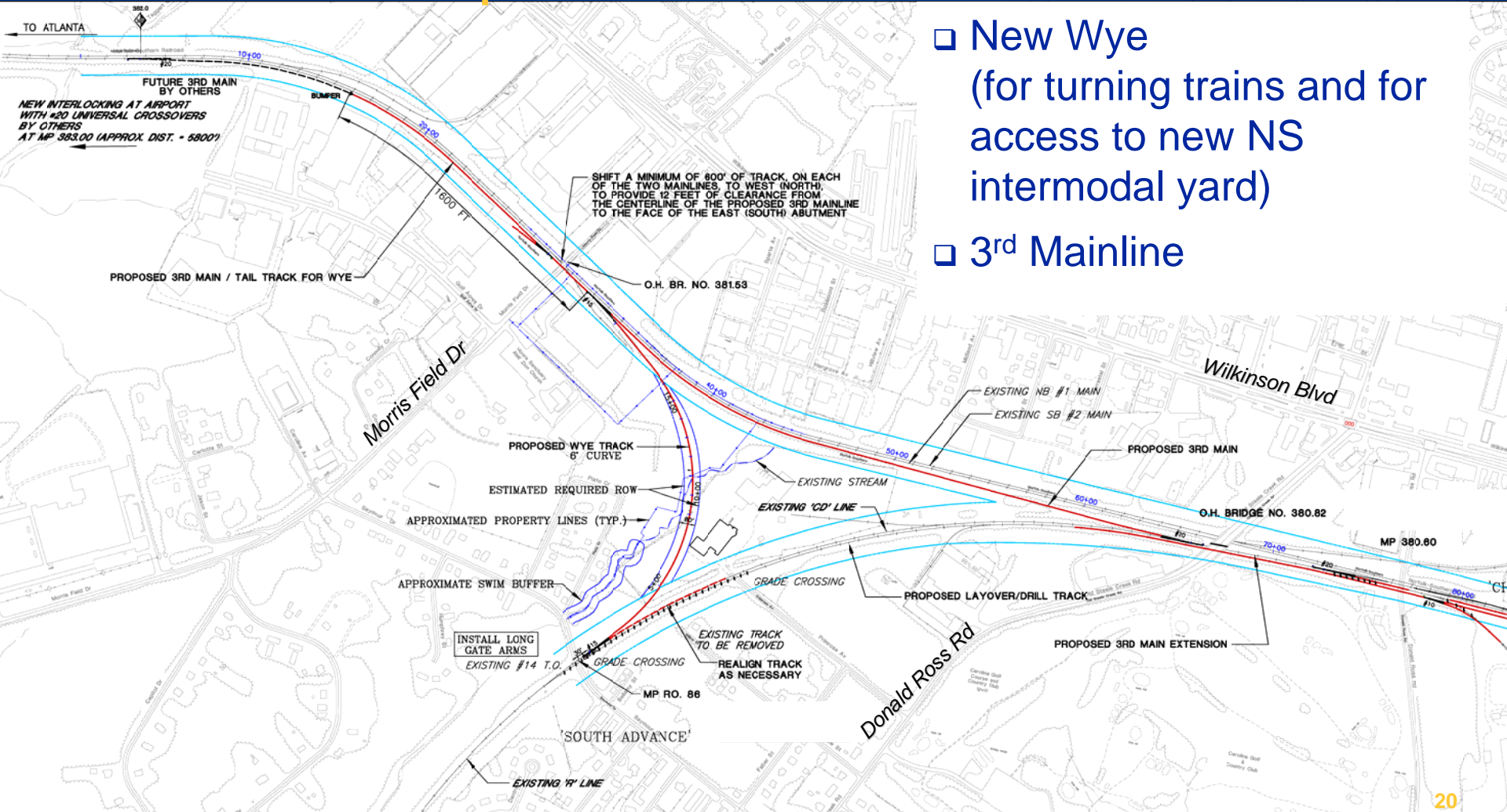
- ❑ Seaboard/Smith Street – closed 2008
- ❑ 9th Street (closure underway)
- ❑ Johnson Street to be closed when trench constructed
- ❑ Church Street (plans underway; must be closed with trench)



NS Mainline Track Improvements South End

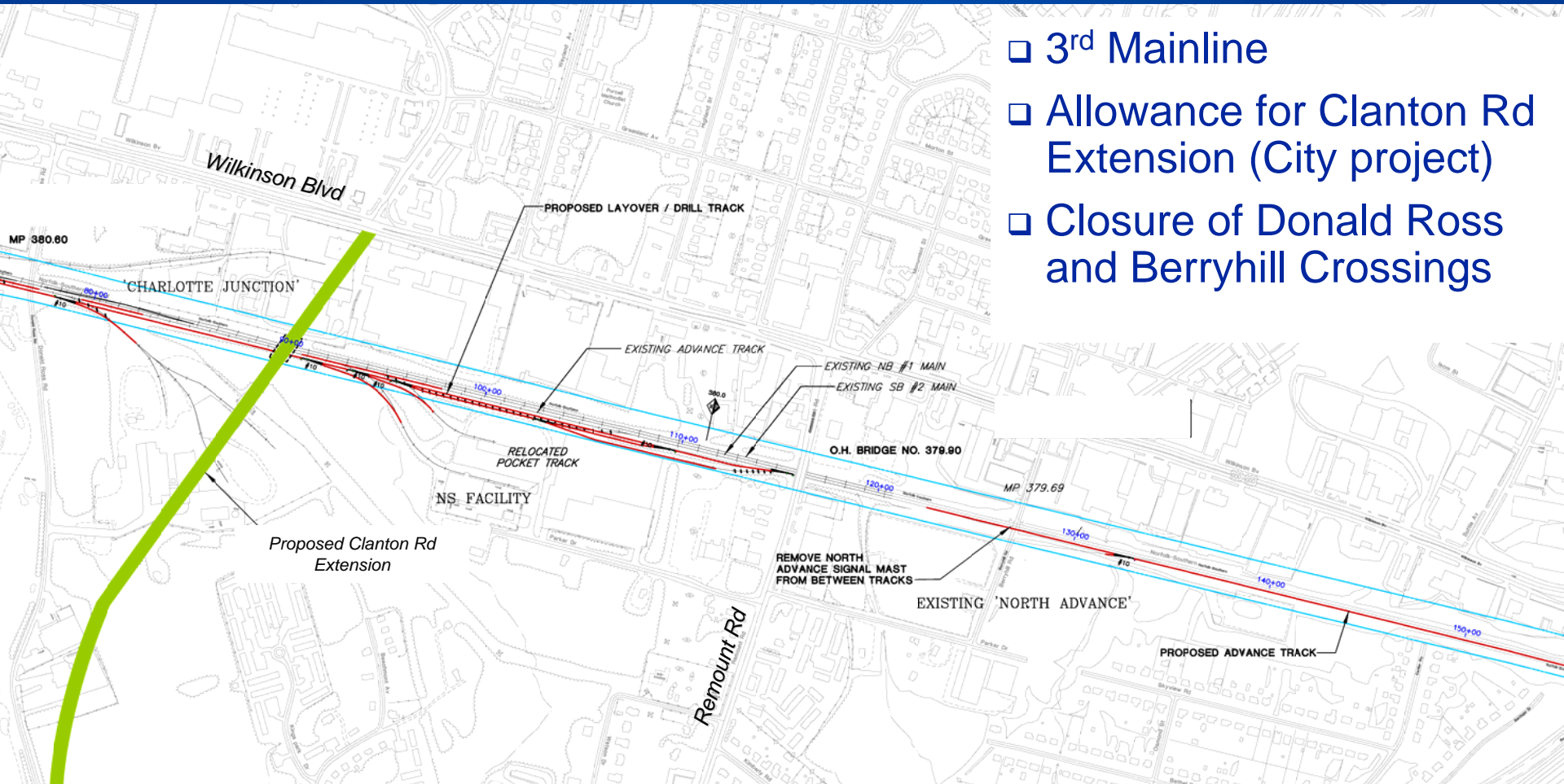
NS Improvements – South End

- New Wye (for turning trains and for access to new NS intermodal yard)
- 3rd Mainline



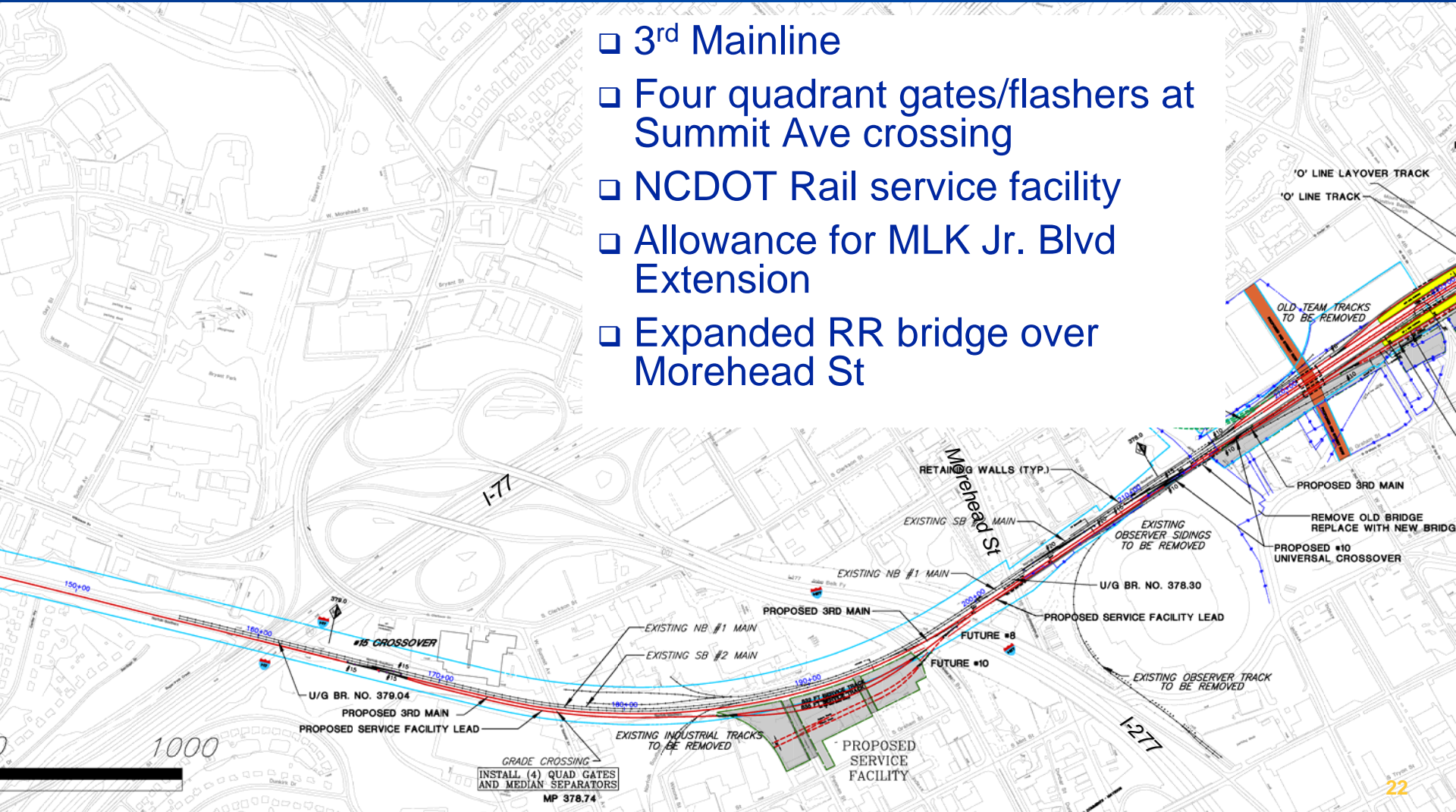
NS Improvements – South End

- 3rd Mainline
- Allowance for Clanton Rd Extension (City project)
- Closure of Donald Ross and Berryhill Crossings

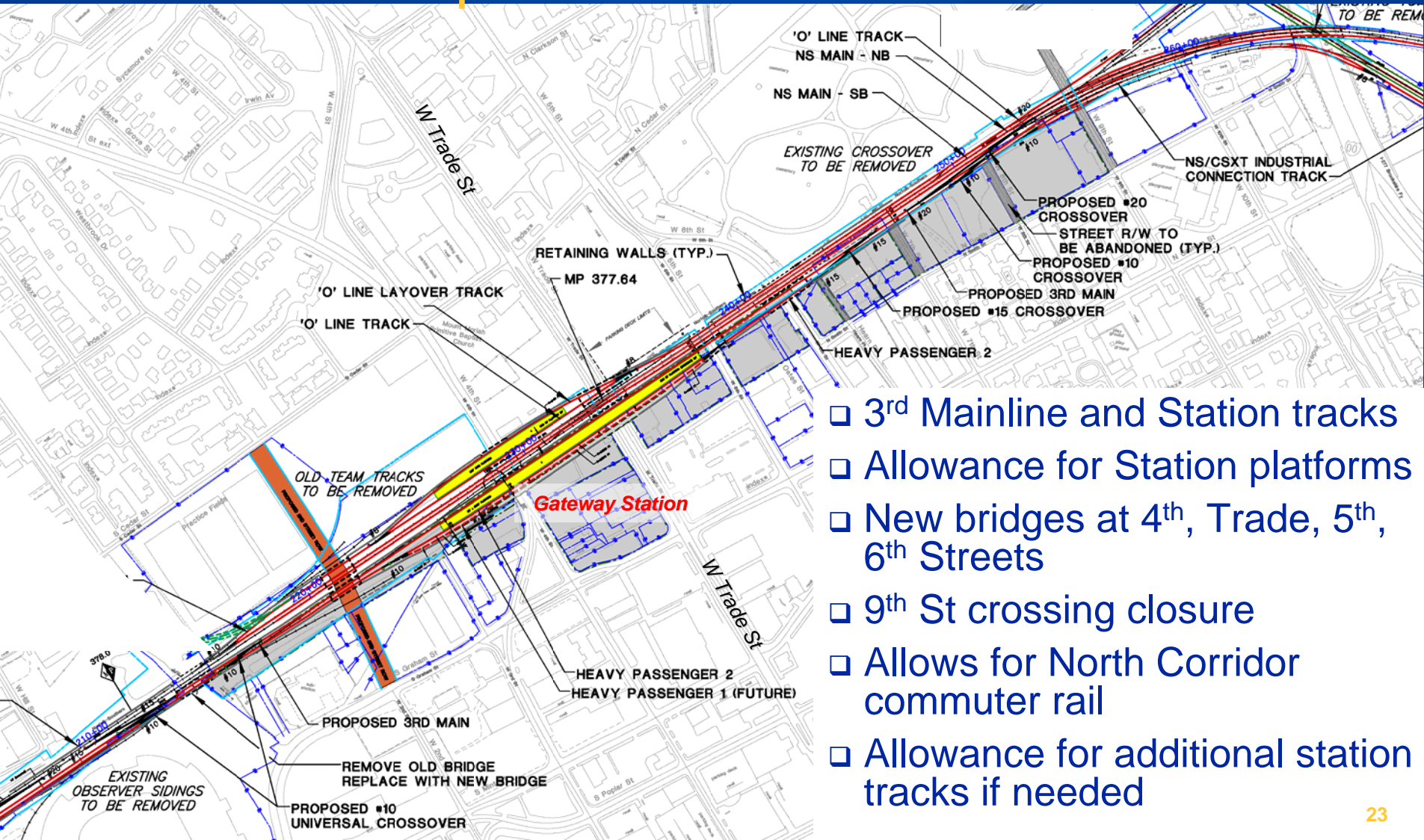


NS Improvements – South End

- 3rd Mainline
- Four quadrant gates/flashers at Summit Ave crossing
- NCDOT Rail service facility
- Allowance for MLK Jr. Blvd Extension
- Expanded RR bridge over Morehead St



NS Improvements – South End



- ❑ 3rd Mainline and Station tracks
- ❑ Allowance for Station platforms
- ❑ New bridges at 4th, Trade, 5th, 6th Streets
- ❑ 9th St crossing closure
- ❑ Allowance for North Corridor commuter rail
- ❑ Allowance for additional station tracks if needed

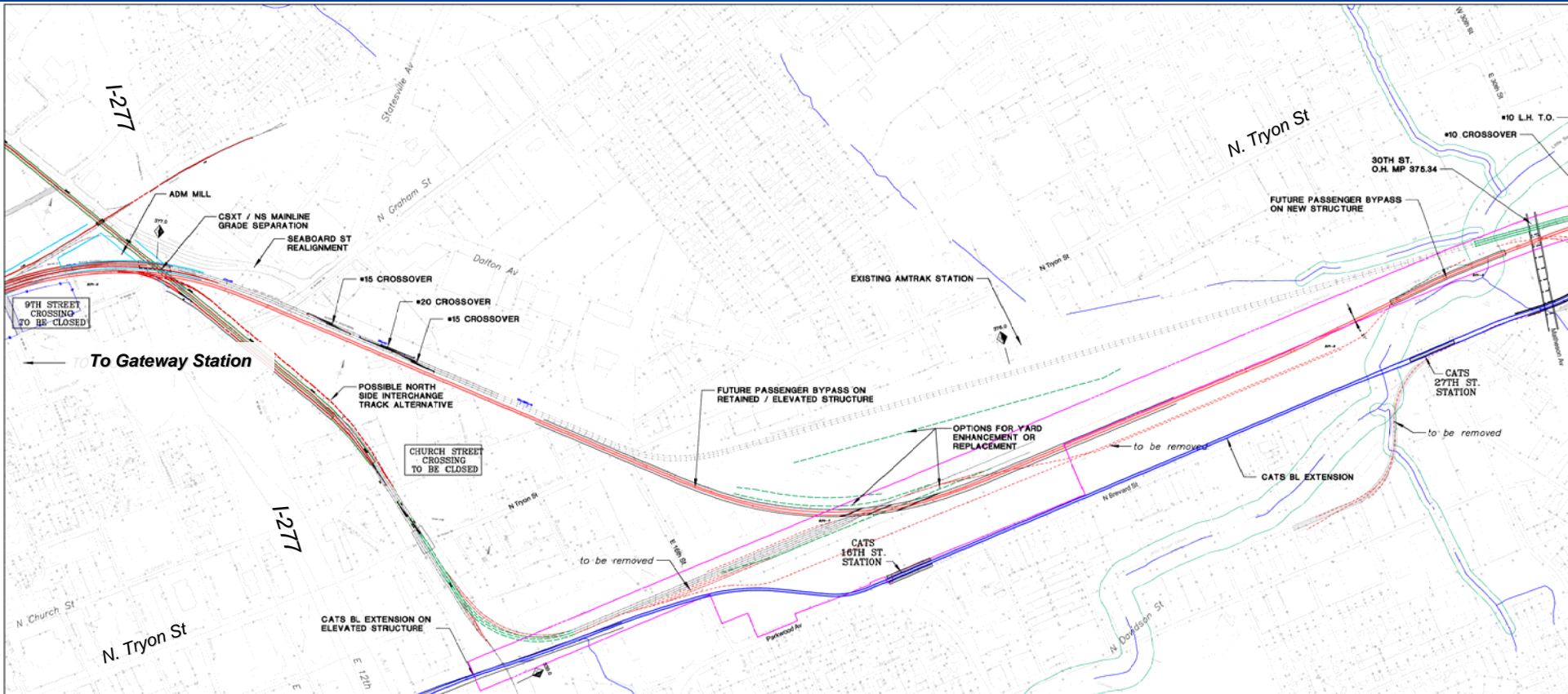
NS Improvements – South End

New Rail Bridges – Center City



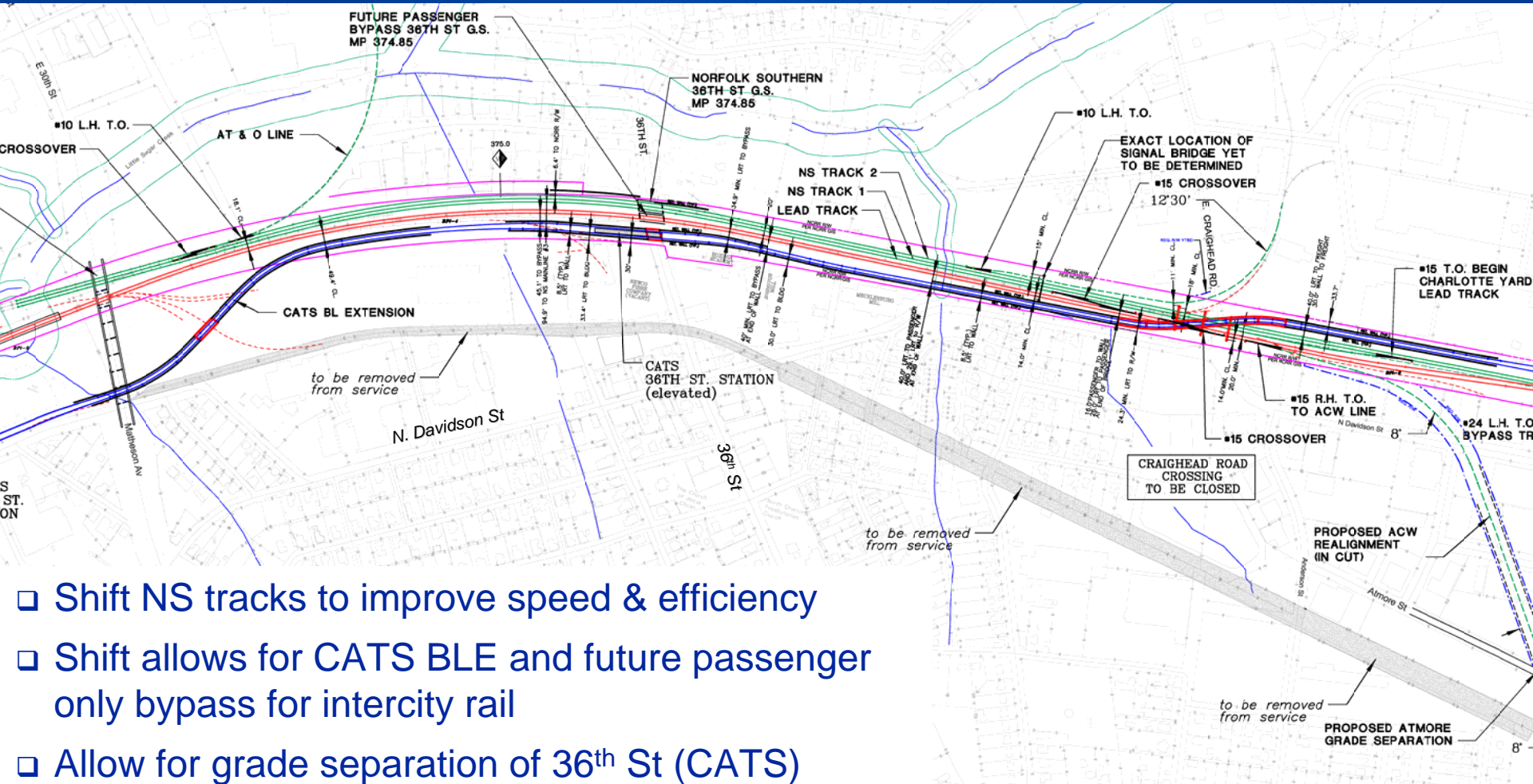
NS Mainline Track Improvements North End

NS Improvements – North End



- First phase: passenger trains share existing NS tracks and addition of 3rd mainline
- Second phase: passenger only bypass tracks constructed

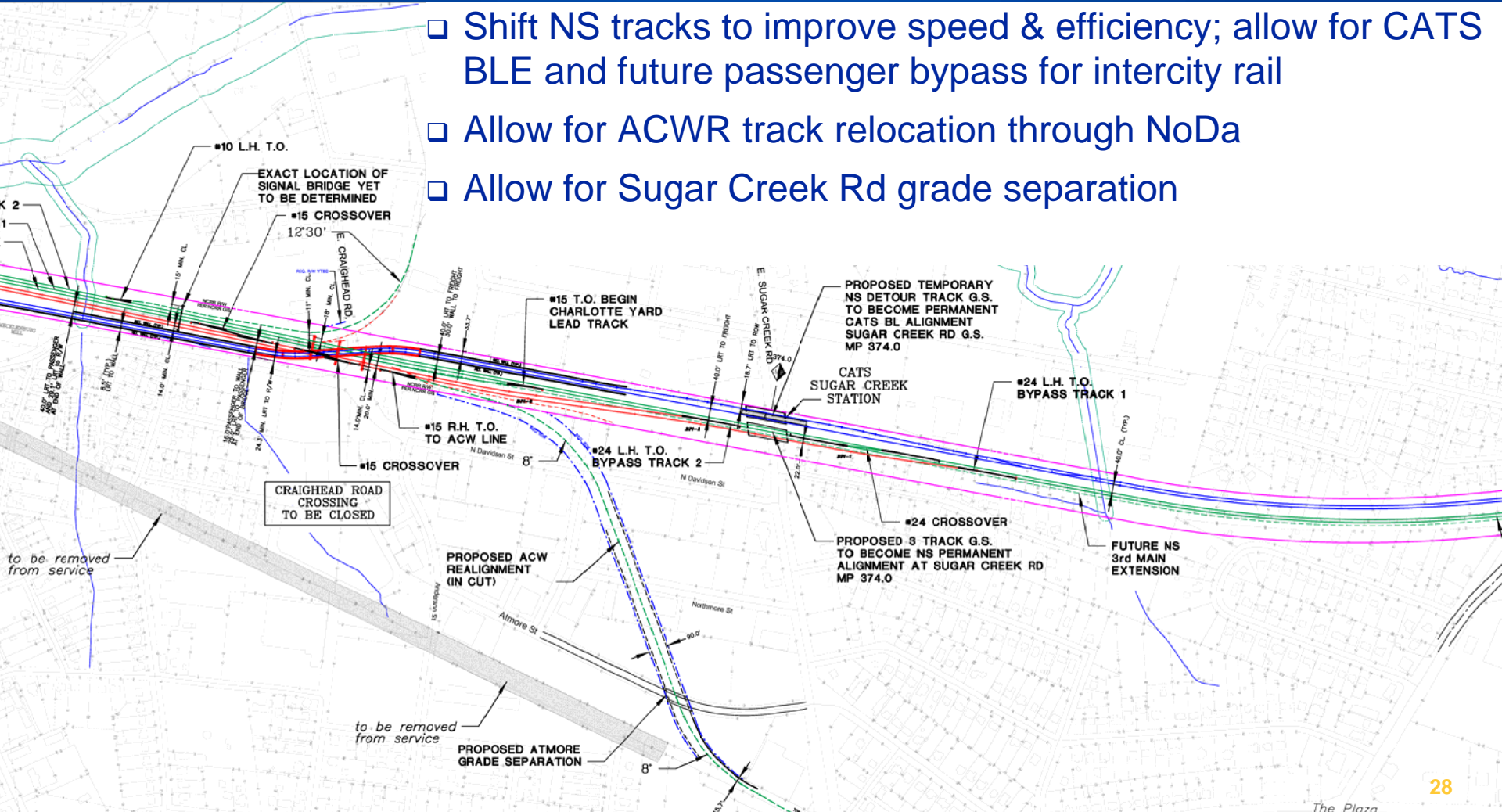
NS Improvements – North End



- ❑ Shift NS tracks to improve speed & efficiency
- ❑ Shift allows for CATS BLE and future passenger only bypass for intercity rail
- ❑ Allow for grade separation of 36th St (CATS)
- ❑ Closure of Craighead Rd crossing
- ❑ Allow for ACWR track relocation through NoDa

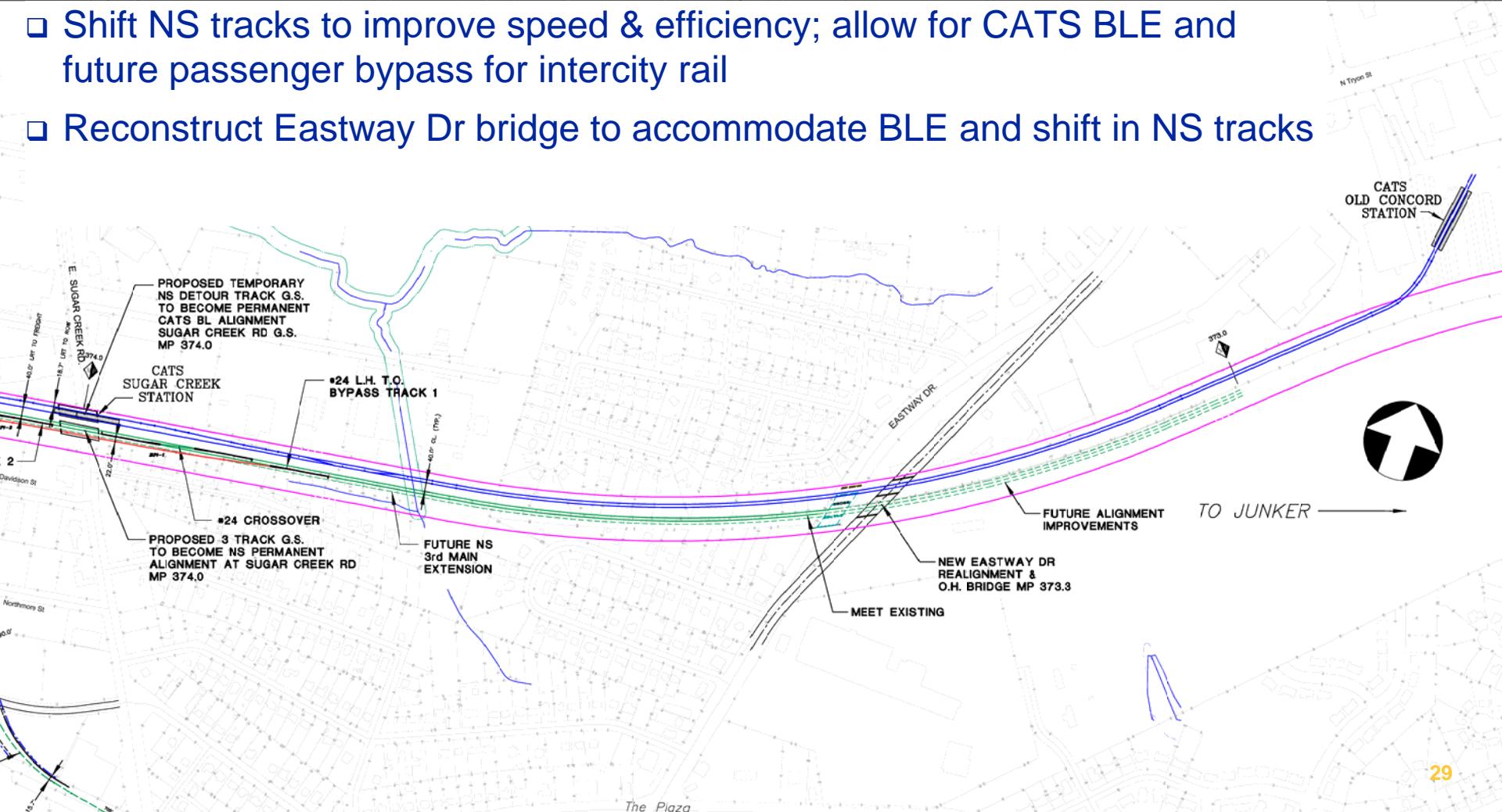
NS Improvements – North End

- Shift NS tracks to improve speed & efficiency; allow for CATS BLE and future passenger bypass for intercity rail
- Allow for ACWR track relocation through NoDa
- Allow for Sugar Creek Rd grade separation



NS Improvements – North End

- Shift NS tracks to improve speed & efficiency; allow for CATS BLE and future passenger bypass for intercity rail
- Reconstruct Eastway Dr bridge to accommodate BLE and shift in NS tracks



Coordination with other area projects:

- ❑ CATS North Corridor
- ❑ CATS Blue Line Extension
- ❑ Clanton Road Extension (grade separation) – closure of Donald Ross Rd crossing
- ❑ NS intermodal yard moved to Charlotte/Douglas Airport
- ❑ CSXT intermodal yard expansion
- ❑ MLK Jr. Boulevard Extension
- ❑ Back Creek Church Rd & McLean Rd RR Crossing improvements
- ❑ Double track Orr Rd to Concord

Project Funding:

- ❑ Requested ARRA (Stimulus) funding
- ❑ Other HSR funds

Project Timeline:

- ❑ CSXT/NS mainline separation 2010 - 2015
- ❑ NS South improvements – 2013 - 2017
- ❑ NS North improvements – 2013 - 2017

Next Steps:

- ❑ Continue planning efforts; revise cost estimates
- ❑ Learn status of ARRA Funding early 2010
- ❑ Complete environmental documents and begin final design work for CRISP early 2010

Questions?

