

May 4, 2021

Project Level Traffic Forecast Update

U-5766

Widening of NC 160 from I-485 to South Carolina / North Carolina State Line

WBS # 50179.1.1

Prepared for:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Transportation Planning Division
Raleigh, North Carolina



Prepared by:



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TRAFFIC FORECAST COVER LETTER

MEMORANDUM TO: Donald Griffith, NCDOT Division 10 DM-STIP Project Manager

FROM: Nita Bhawe

DATE: May 4, 2021

SUBJECT: Traffic Forecast, Mecklenburg County;
U-5766 - Widening NC 160 from I-485 to the South Carolina Stateline

This forecast was approved by the NCDOT Transportation Planning Division on May 3, 2021.

Please find attached the updated 2045 future year Traffic Forecast for U-5766 located in Mecklenburg County. This U-5766 forecast was initially completed in July 2017 and had a 2040 future year. This forecast update was requested by NCDOT on March 11, 2020, to incorporate growth rates using the newly revised travel demand model.

U-5766 is a project to widen NC 160 from the South Carolina border to I-485 from 2 lanes to 4 lanes. This is located southwest of Charlotte, in Mecklenburg County (NCDOT Division 10, Charlotte Regional Transportation Planning Organization). U-5766 is in the 2020-2029 NCDOT State Transportation Improvement Program (STIP) and the CRTPO Metropolitan Transportation Plan (MTP) dated March 2018.

The Metrolina Regional Travel Demand Model (MRM19v1.0), effective March 2020, was utilized for this forecast along with previously collected traffic counts and historical AADTs.

The following two (2) scenarios are provided in the forecast:

- 2045 No Build Forecast
- 2045 Build Forecast

Certain assumptions were made in the development of the forecast, detailed below.

Fiscal Constraints:

For projects falling within an MPO, forecasts are fiscally constrained to match the assumptions of the MPO's MTP. The CRTPO MTP is dated March 2018. This forecast assumes that all projects within the MTP are constructed and open to traffic in 2045.

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Interpolation:

To determine any intermediate years, straight-line interpolation may be used. AADT volumes may be extrapolated for up to two years immediately following 2045. If it is determined that any of these assumptions have become inconsistent with the project and surrounding area activity, please request updated information.

If you have any questions, or I can be of further assistance, please do not hesitate to call me at 919-376-2700, or e-mail me at nita.bhave@wsp.com. Thank you.

cc: FILE (Mecklenburg County, Project U-5766)

cc: (via e-mail as PDF attachments):

Clark Morrison, PhD, PE -- NCDOT Pavement Management Unit (cmorrison@ncdot.gov)

Stuart Basham -- NCDOT Division 10 Planning Engineer (slbasham@ncdot.gov)

Tim Boland, PE -- NCDOT Division 10 Project Development Engineer (tboland@ncdot.gov)

Mike Reese, PE -- NCDOT Congestion Management Unit (mikereese@ncdot.gov)

Mark Eatman, PE -- NCDOT Corridor Development Unit (mreatman@ncdot.gov)

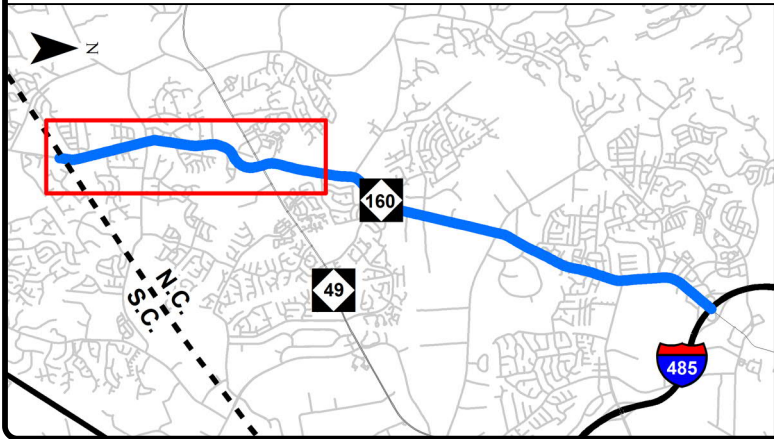
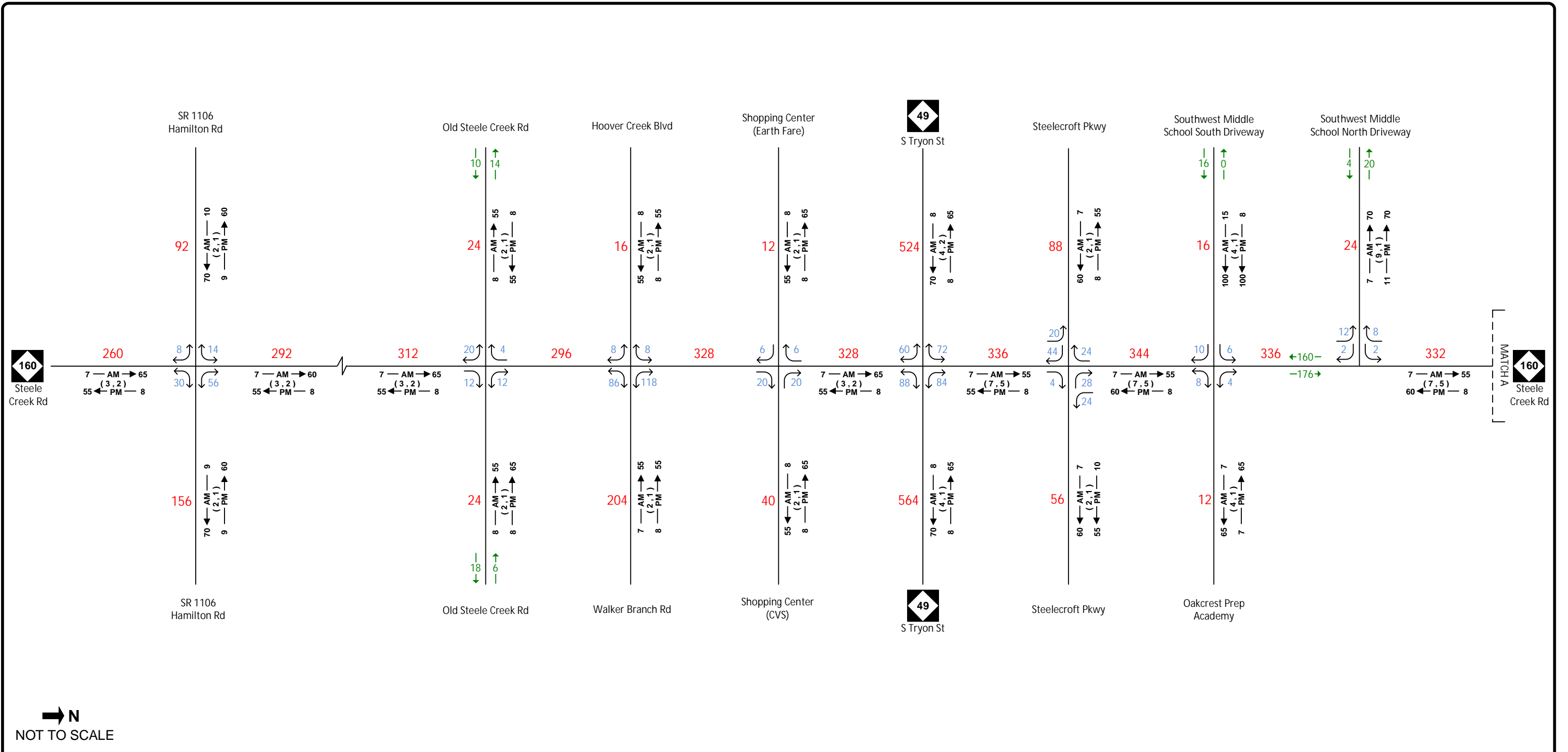
Keith Dixon -- NCDOT Transportation Planning Division (kgdixon@ncdot.gov)

Robert Cook, AICP -- NCDOT contact to CRTPO (jrcook@ncdot.gov)

Neil Burke -- CRTPO MPO (nburke@ci.charlotte.nc.us)

NCDOT Traffic Forecasting GIS Support (trafficforecastinggissupport@ncdot.gov)

NCDOT Roadway Design Unit (roadwaydesign@ncdot.gov)

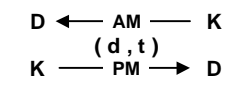


2045 AVERAGE ANNUAL DAILY TRAFFIC

SHEET 1 of 3

NO BUILD ALTERNATIVE

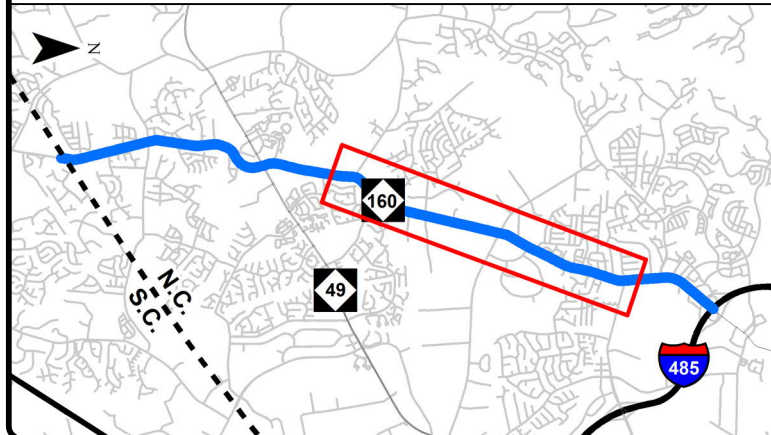
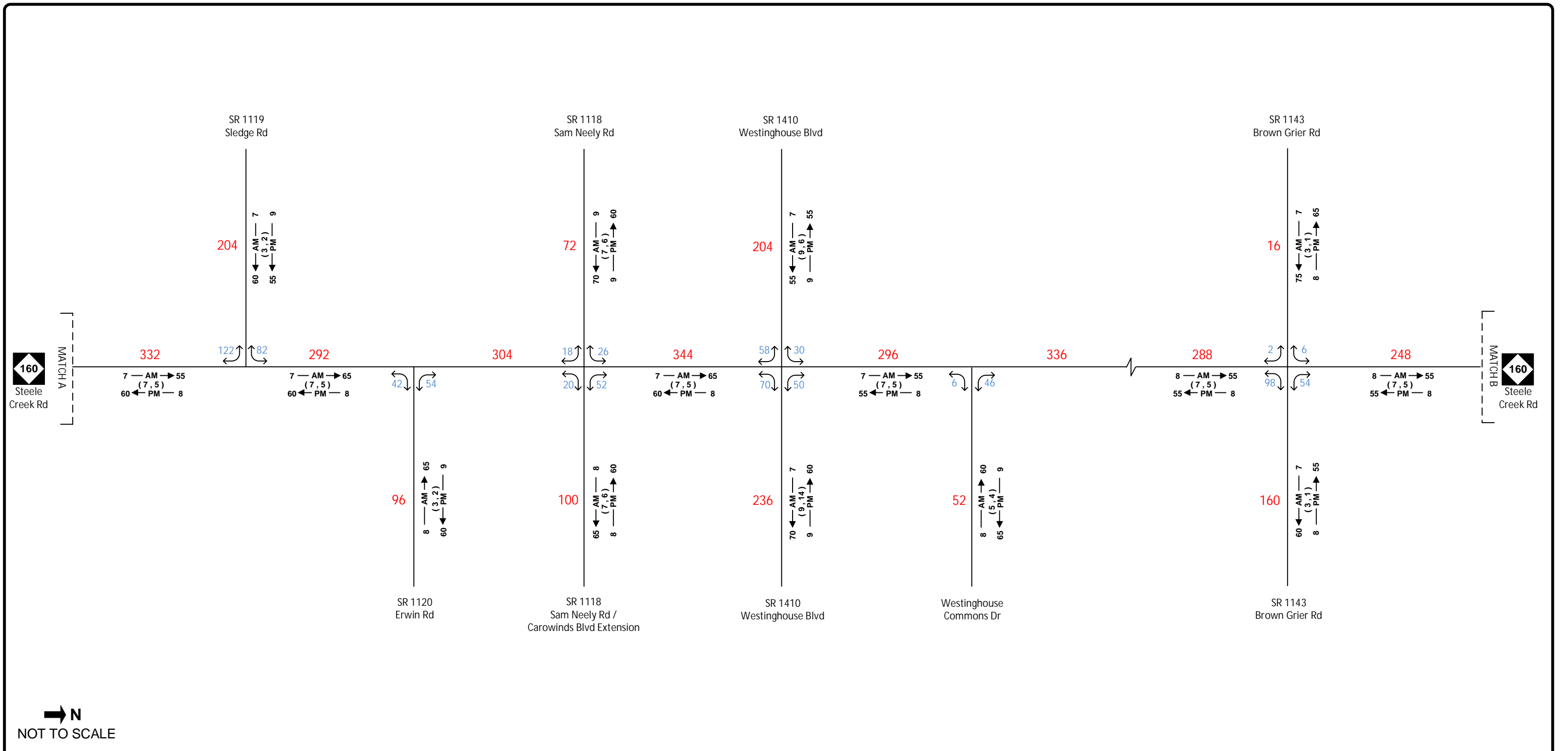
LEGEND



- ### Vehicles Per Day (VPD) in 100s
- 1- Less than 50 VPD
- xx Turning Movements VPD
- Roadway
- Existing Interchange

- K Design Hour Factor
- PM PM Peak Hour
- D Peak Hour Directional Split
- Indicates Direction of D
- (d, t) Duals, TT-STs (%)

TIP: U - 5677	WBS: 48478.2.6
COUNTY: Mecklenburg	DIVISION: 10
DATE: May 4, 2021	
PREPARED BY: WSP USA, Inc	
LOCATION: NC 160 / Steele Creek Rd from NC-SC State line to SR 1155 (Shopton Rd)	
PROJECT: NC 160 Roadway Widening	

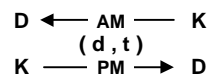


2045 AVERAGE ANNUAL DAILY TRAFFIC

SHEET 2 of 3

NO BUILD ALTERNATIVE

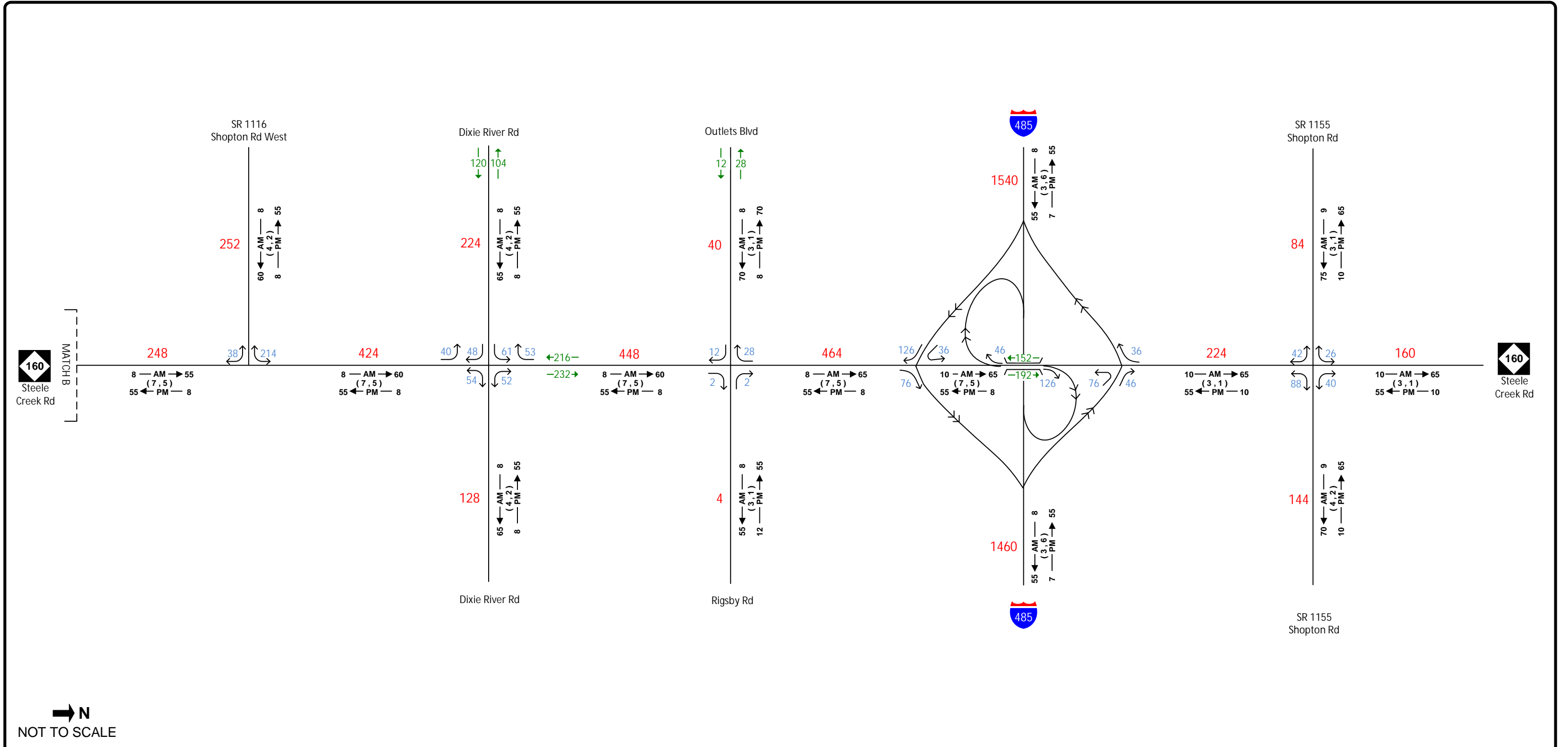
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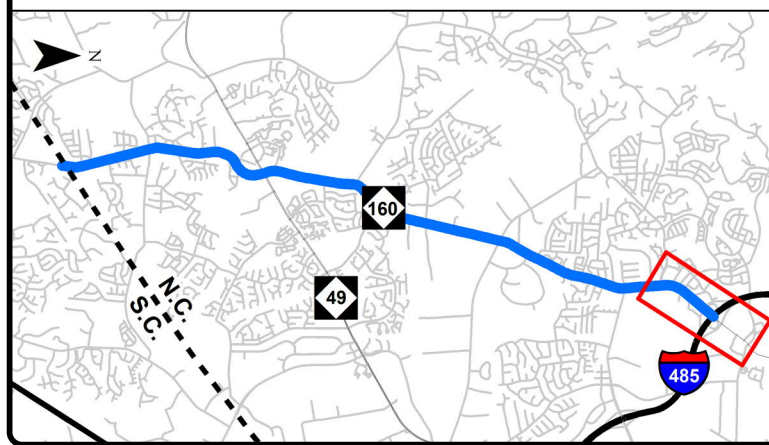
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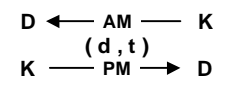


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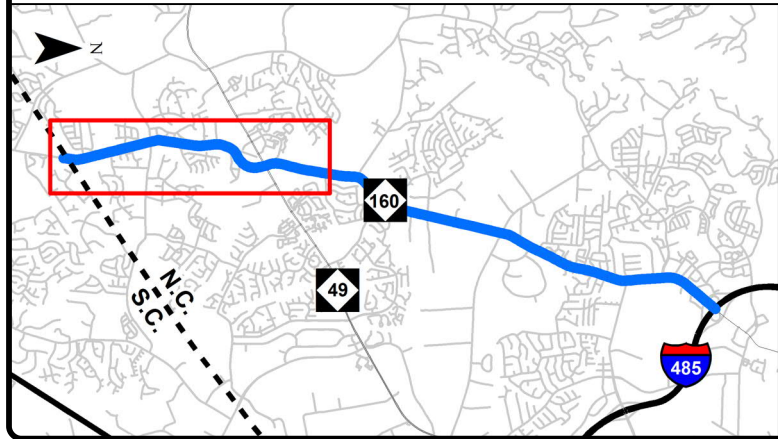
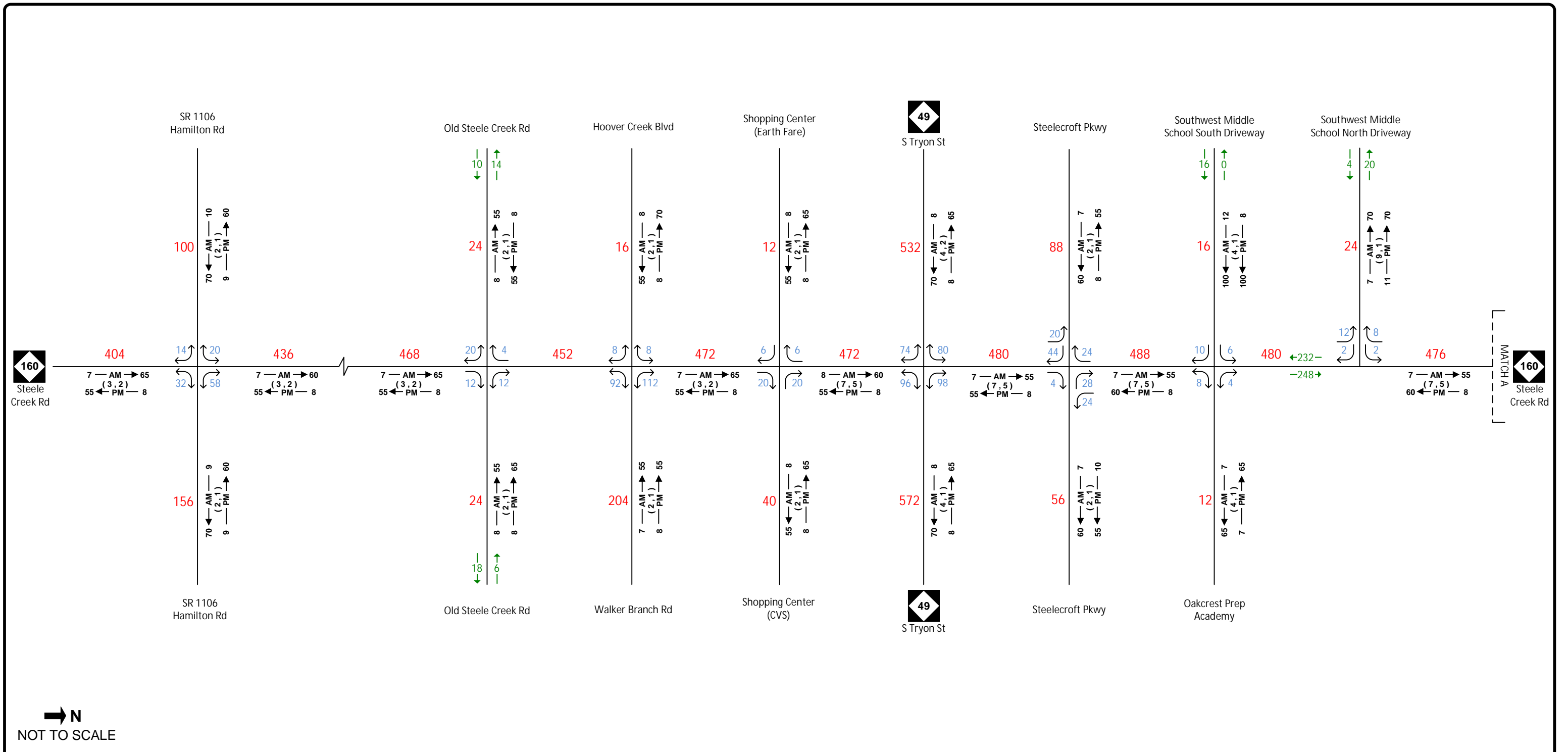
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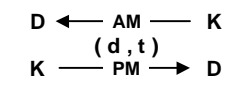


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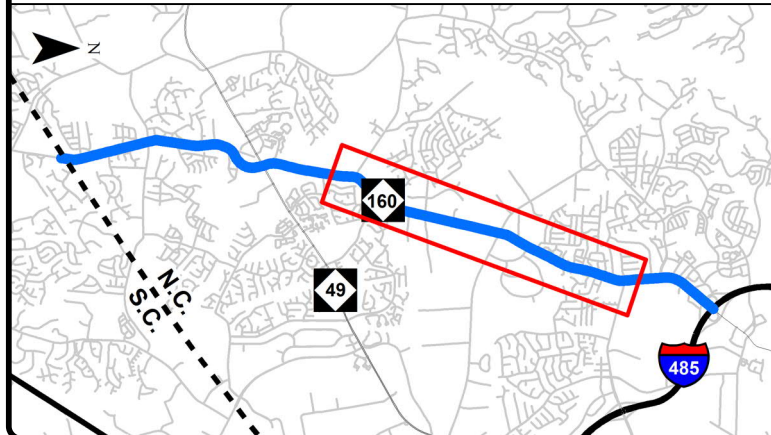
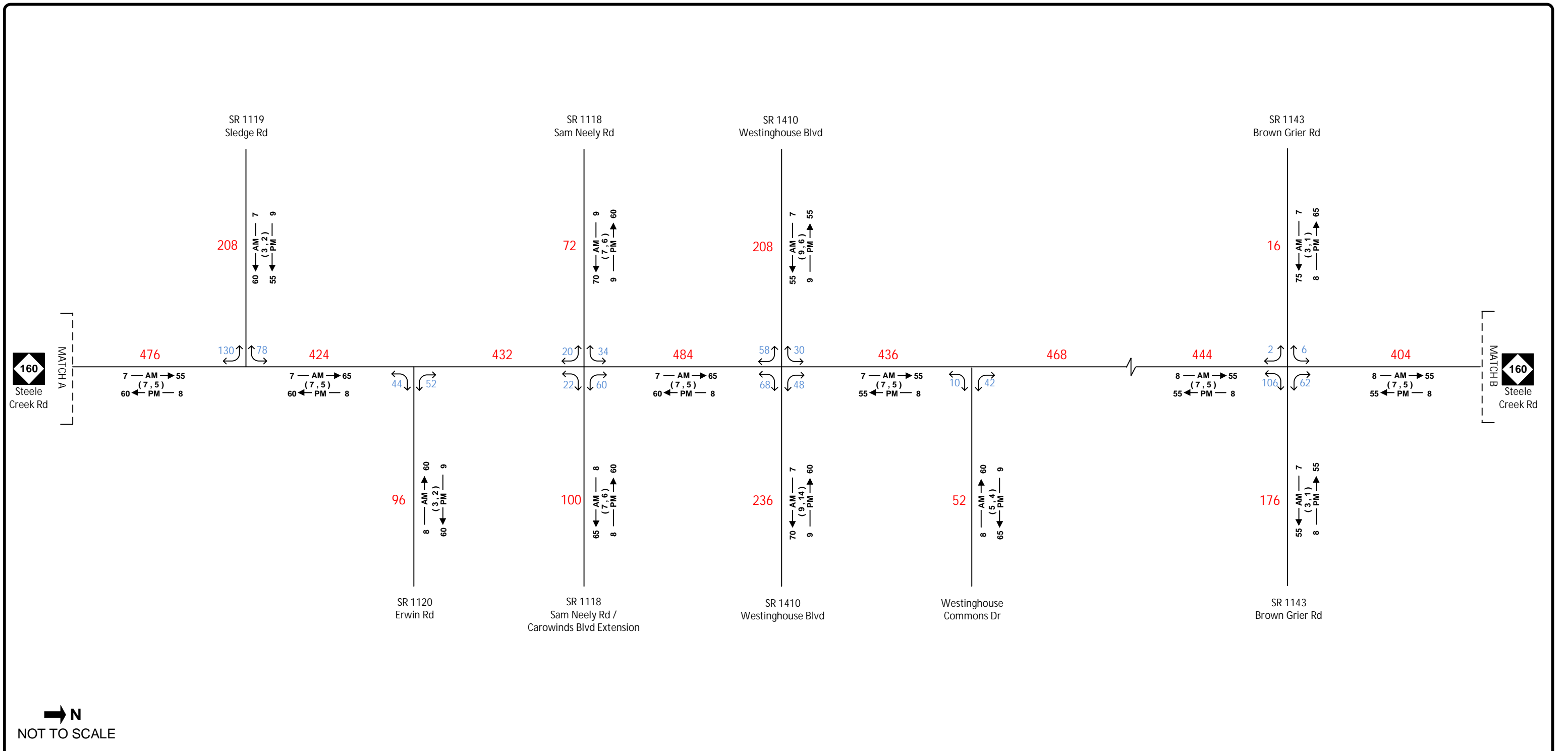
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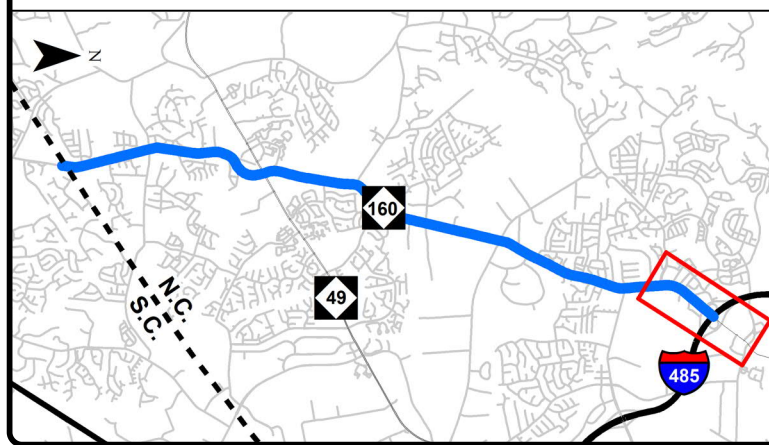
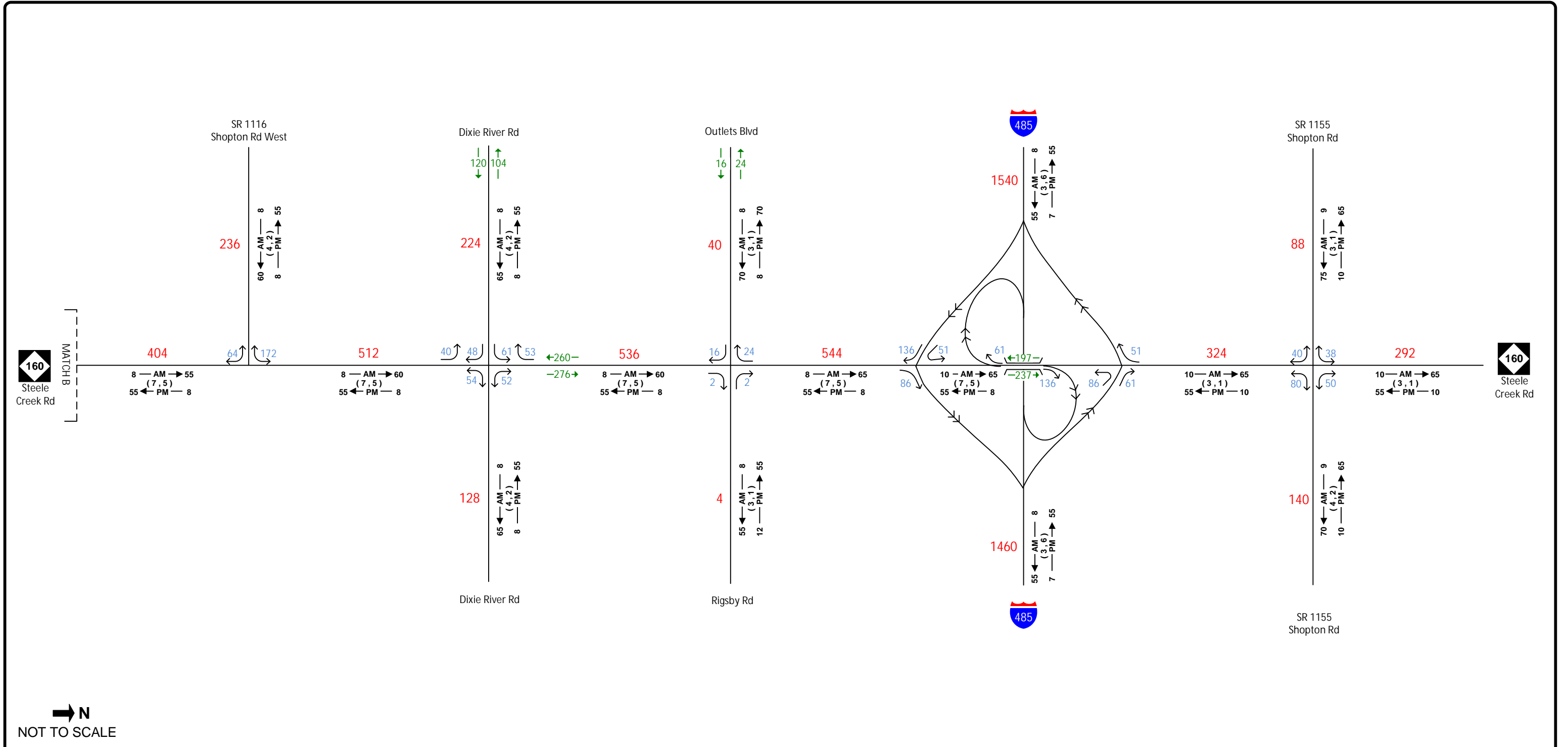
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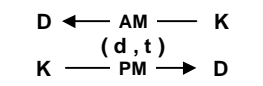


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