

AIR QUALITY IMPACT ASSESSMENT
P.I. No. 0010425
Gwinnett County
February 2014

Grade Separation of Walther Boulevard Over SR 316

2013 ADT: 3,650
2036 ADT: 8,400

Executive Summary:

The proposed project would construct a bridge over SR 316 at Walther Boulevard in Gwinnett County, Georgia. In complying with the Clean Air Act Amendments, the project was evaluated for its consistency with state and federal air quality goals, including Carbon Monoxide (CO), Ozone, PM 2.5 and MSATs as part of this assessment. Results indicate that the project is in compliance with both state and federal air quality standards.

Prepared By:



Christen Vickery
Atkins

QA/QC By:



Henry Borovich
Atkins

Reviewed By:



Date:



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Introduction

The Clean Air Act (CAA) section 176(c) requires that Federal transportation projects are consistent with state air quality goals, found in the State Implementation Plan (SIP). The process to ensure this consistency is called Transportation Conformity. Conformity to the SIP means that transportation activities will not cause new violations of the national ambient air quality standards (NAAQS), worsen existing violations of the standards, or delay timely attainment of the relevant standard.

Transportation conformity is required for Federal transportation projects in areas that have been designated by the U.S. Environmental Protection Agency (EPA) as not meeting the NAAQS. These areas are called nonattainment areas if they currently do not meet air quality standards or maintenance areas if they have previously violated air quality standards, but currently meet them and have an approved maintenance plan.

On January 5, 2005, The US EPA designated 24 counties and three partial counties in Georgia as non-attainment areas for fine particulate matter, called PM 2.5. This designation became effective on April 5, 2005, 90 days after EPA's published action in the Federal Register. Transportation Conformity for the PM 2.5 standards applies as of April 5, 2006, after the one year grace period provided by the CAA. Metropolitan PM 2.5 nonattainment areas are now required to have a transportation improvement program (TIP) and long range transportation plan (LRTP) that conforms to the PM 2.5 standard.

In addition to PM 2.5 assessments, Mobile Source Air Toxics (MSAT) assessments are required statewide for most Federal transportation projects. Based on the example projects defined in the Federal Highway Administration (FHWA) guidance "Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents," dated December 6, 2012, the grade separation at Walther Boulevard can be classified as a project with *No Meaningful MSAT Impact*.

Project Description

Georgia Department of Transportation (GDOT) P.I. No. 0010425 would remove the existing access to Walther Boulevard from SR 316 and provide a grade separation of Walther Boulevard over SR 316 in Gwinnett County. The proposed project is approximately 0.3 mile in length. The existing typical section of Walther Boulevard consists of two 12-foot travel lanes (one in each direction) with a 12-foot flush median. The proposed typical section of Walther Boulevard would consist of two 12-foot travel lanes (one in each direction) with a 14-foot two way left turn

lane and a 12-foot shoulder. Four foot bike lanes and 5-foot sidewalk would be located on both sides of the roadway. The proposed Walther Boulevard bridge over SR 316 would be a four span bridge 404 feet in length. Refer to Figure 1 for the project location.

Air Quality Assessment

This project is in an area where the SIP contains transportation control measures. The CAA requires Transportation Plans and TIPs in areas not meeting the NAAQS to conform to the emissions budget of the SIP for air quality. The FY 2012-2017 TIP is the current adopted plan for the Atlanta area showing the region's highest transportation priorities. It was adopted by the Atlanta Regional Commission Board on August 18, 2011 and was approved by US DOT on September 6, 2011.

This project is identified in the FY 2012-2017 TIP by reference number GW-379.

Carbon Monoxide (CO)

The project was evaluated for the potential to result in increased CO concentrations in the project area. Based on traffic volumes (8,400 ADT in Build Year 2036) and project type (bridge construction with no signal) it has been determined that this project would not increase traffic congestion or increase idle emissions and CO concentrations therefore the project is consistent with State and Federal air quality goals for CO.

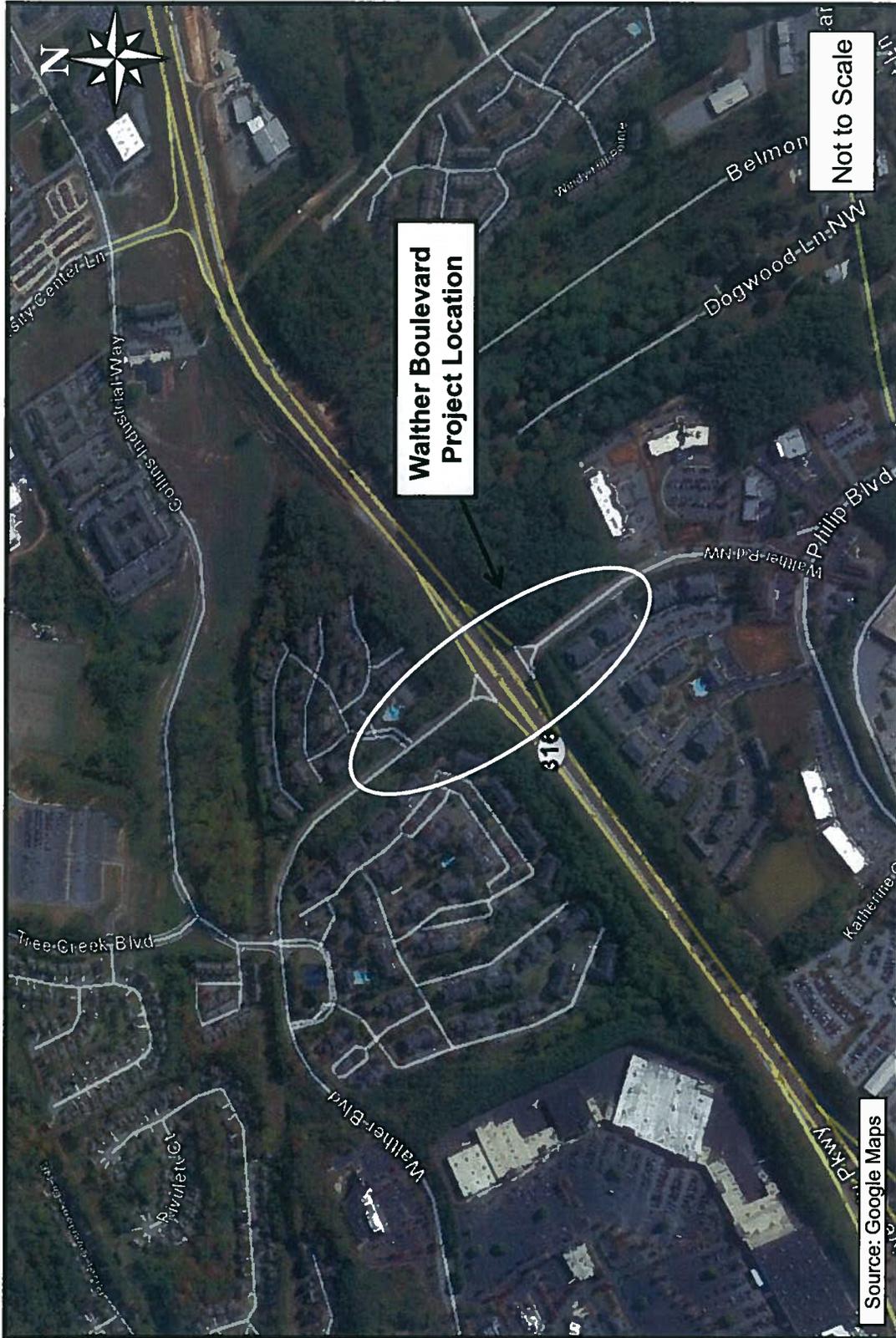
PM 2.5 Qualitative Analysis

This project has been evaluated by an interagency group consisting of FHWA, EPA, EPD and the MPO and they agreed that it does NOT appear to be a "Project of Concern" per the Transportation Conformity Rule and thus meets the statutory and regulatory requirements for PM2.5 hotspots without a qualitative analysis on February 4, 2014. Documentation and correspondence are included in Attachment 1.

Mobile Source Air Toxics

The purpose of this project is to create a grade separated roadway by constructing a bridge over SR 316 in Gwinnett County, Georgia. This project has been determined to generate minimal air quality impacts for CAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the No Build Alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-



**Project
Location Map**
Figure 1

**Walther Boulevard Grade Separation
P.I. Number 0010425
Gwinnett County, Georgia**

miles of travel are projected to increase by over 100 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Construction

All phases of construction operations would temporarily contribute to air pollution. Particulates would increase slightly in the corridor as dust from construction collects in the air surrounding the project. The construction equipment would also produce slight amounts of exhaust emissions. The Rules and Regulations for Air Quality Control outlined in Chapter 391-3-1, Rules of Georgia Department of Natural Resources' Environmental Protection Division, would be followed during the construction of the project. These include covering earth-moving trucks to keep dust levels down, watering haul roads, and refraining from open burning, except as may be permitted by local regulations.

The EPA has listed a number of approved diesel retrofit technologies; many of these can be deployed as emissions mitigation measures for equipment used in construction. This listing can be found at: www.epa.gov/otaq/retrofit/retroverifiedlist.htm.

Conclusion

This project was evaluated for its consistency with State and Federal air quality goals, including CO, Ozone, PM 2.5 and MSATs as part of this assessment. Results indicated that the project is consistent with the SIP for the attainment of clean air quality in Georgia and is in compliance with both State and Federal air quality standards.

Attachment 1
Correspondence

Vickery, Christen S

From: Clay, Andrew [anclay@dot.ga.gov]
Sent: Thursday, February 06, 2014 9:00 AM
To: Vickery, Christen S
Subject: FW: PM 2.5 Determination, Gwinnett 0010425
Attachments: 0010425_LOD_2014.01.16.pdf

The concurrence is back.

From: Smith, Dianna [<mailto:Smith.Dianna@epa.gov>]
Sent: Tuesday, February 04, 2014 10:46 AM
To: Kelly.Wade@dot.gov; Katy.Allen@dot.gov; Somerville, Amanetta; Phillips, Amber; andrew.edwards@dot.gov; Benjamin, Lynorae; Chetna.Dixon@dot.gov; ddonofrio@atlantaregional.com; dhaynes@atlantaregional.com; Jennifer.Giersch@dot.gov; Heath, Andrew; Huff, Tamaya; james_kelly@dnr.state.ga.us; Crane, Jason; JBarrett@atlantaregional.com; JOrr@atlantaregional.com; Jackson, Keisha; Gwin, Kelly; kkim@atlantaregional.com; Keith.Melton@dot.gov; stanley.a.mitchell@dot.gov; rgoodwin@grta.org; Syamala@hallcounty.org; Shakshuki, Soli
Cc: Smith, Dianna
Subject: RE: PM 2.5 Determination, Gwinnett 0010425

Hello Kelly,

Thanks for sending this for our review. We have completed our review and agree that these project(s) do NOT appear to be a "Project of Concern" per the Transportation Conformity Rule, and thus meets the statutory and regulatory requirements for PM 2.5 hotspots without a quantitative analysis.

Dianna B. Smith

Environmental Scientist

Regional Transportation Conformity Contact

Air Quality Modeling and Transportation Section

Phone: (404) 562-9207 Fax: (404) 562-9019

e-mail smith.dianna@epa.gov

From: Kelly.Wade@dot.gov [<mailto:Kelly.Wade@dot.gov>]
Sent: Tuesday, January 21, 2014 8:46 AM
To: Katy.Allen@dot.gov; Somerville, Amanetta; aphillips@dot.ga.gov; andrew.edwards@dot.gov; Benjamin, Lynorae; Chetna.Dixon@dot.gov; ddonofrio@atlantaregional.com; dhaynes@atlantaregional.com; Smith, Dianna; Jennifer.Giersch@dot.gov; aheath@dot.ga.gov; thuff@dot.ga.gov; james_kelly@dnr.state.ga.us; jcrane@dot.ga.gov; JBarrett@atlantaregional.com; JOrr@atlantaregional.com; kejackson@dot.ga.gov; kgwin@dot.ga.gov; Kelly.Wade@dot.gov; kkim@atlantaregional.com; Keith.Melton@dot.gov; stanley.a.mitchell@dot.gov; rgoodwin@grta.org; Syamala@hallcounty.org; sshakshuki@dot.ga.gov
Subject: PM 2.5 Determination, Gwinnett 0010425

Hello Interagency,

A PM 2.5 Determination for a project within the Atlanta Nonattainment area is attached. FHWA, GA Division has determined that the project is not a Project of Air Quality Concern per the Transportation Conformity Rule.

Please review and provide comments back by 2/4/14.

If no comments are received from your agency, consensus with this determination will be assumed.

Thanks,

Kelly Wade
Environmental Specialist
Federal Highway Administration
61 Forsyth Street, SW
Suite 17T100
Atlanta, GA 30303
Phone: 404-562-3584
Fax: 404-562-3703
Kelly.wade@dot.gov

During inclement winter weather, Georgia DOT commits to achieve and maintain passable road conditions on two lanes of interstates first and then state routes from the most heavily traveled to the least traveled. The Department urges travelers to exercise caution, be patient, and call 511 for updated information on roadway conditions before getting on the road during a winter weather event.

Visit us at <http://www.dot.ga.gov/winterweather> ; or follow us on <http://www.facebook.com/GeorgiaDOT> and <http://twitter.com/gadepoftrans>

The IS team in Atkins has scanned this email and any attachments for viruses and other threats; however no technology can be guaranteed to detect all threats. Always exercise caution before acting on the content of an email and before opening attachments or following links contained within the email.

Determination of Project Categorization for PM2.5 Hotspot Requirements for Gwinnett County

Project Name: Grade Separation of Walther Boulevard Over SR 316
Project Number: PI Number: 0010425
Location: Gwinnett County
Document Type: CE
Project Status: Design/Build
FHWA Contact: Kelly Wade
GDOT NEPA Planner: Sean Diehl

Description:

GDOT P.I. No. 0010425 is the grade separation of Walther Boulevard over SR 316 in Gwinnett County. The proposed project is approximately 0.3 mile in length. The existing typical section of Walther Boulevard consists of two 12-foot travel lanes (one in each direction) with a 12-foot flush median. The proposed typical section of Walther Boulevard would consist of two 12-foot travel lanes with a 14-foot two way left turn lane and a 12-foot shoulder. Four foot bike lanes and 5-foot sidewalk would be located on both sides of the roadway. The proposed Walther Boulevard bridge over SR 316 would be a four lane span bridge 404 ft in length. Refer to Figure 1 for the project location.

Is this project in a conforming Plan/TIP?

Yes. This project is in the FY 2012-2017 Transportation Improvement Program (TIP) with the reference number GW-379.

Is the project on a new highway that has a significant number of diesel vehicles (such as a facility with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic) or an expanded highway with a significant increase in the number of diesel vehicles?

No. The proposed project would only extend existing Walther Boulevard over SR 316 via a bridge, and the 24 hour truck percentage is 3%.

	Existing Year 2013	Open Year 2016	Design Year Build 2036
Walther Boulevard over SR 316			
ADT (Vehicles per day)	N/A	6,800	8,400
Trucks per day		204	252
Percent Trucks (rounded)		3%	3%

*Walther Blvd does not currently extend over SR 316; therefore, neither existing nor a No-Build scenario can be included in this table.

Does the project construct new exit ramps or other highway facility improvements that connect a highway or expressway to a major freight, bus, or intermodal terminal? **No**

Does the project expand an existing highway or other facility that affects a congested intersection (Operates at LOS D, E, or F) that has a significant increase in the number of diesel trucks? **No.**

Does the highway project involve a significant increase in the number of diesel transit buses and / or diesel trucks? **No.**

Based on the above, a qualitative PM2.5 hotspot analysis is not required for this project since it is NOT a project of local air quality concern under 40 CFR 93.123(b)(1). The Clean Air Act and 40CFR 93.116 requirements were met without a hotspot analysis since this project has been found not to be of air quality concern under 40CFR 93.123(b)(1). Therefore, the project meets statutory and regulatory transportation conformity requirements without a hot-spot analysis.



**Project
Location Map**
Figure 1

Walther Boulevard Grade Separation
P.I. Number 0010425
Gwinnett County, Georgia

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE Gwinnett County **OFFICE** Planning
P.I. # 0010425
DATE December 6, 2013

FROM Cynthia L. VanDyke, State Transportation Planning Administrator

TO Darryl Duane VanMeter, State Innovative Program Delivery Engineer
Attention: Andrew Hoenig

SUBJECT **Updated Design Traffic Review** for SR 316 @ CR 3929/WALTHER BLVD
– GRADE SEPARATION.

We have reviewed the consultant's updated design traffic for the above project. The Design Traffic is approved.

If you have any questions concerning this information, please contact Rhonda Niles at (404) 631-1924.

CLV/RFN

FY 2012-2017 Transportation Improvement Program - Sorted by ARC Project Number

GW-357	US 23 (BUFORD HIGHWAY) MEDIANS	Jurisdiction Gwinnett County	Existing	Planned	Length (mi.)	Network Year 2020
0010330	FROM SR. 140 (JIMMY CARTER BOULEVARD) TO SR. 378 (BEAVER RUIN ROAD)	Sponsor City of Norcross	N/A	N/A	1.5	
Programmed		Service Type Roadway / Operations & Safety	Analysis Exempt from Air Quality Analysis (40 CFR 93)			

Status	Year	Fund Type	Federal	State	Local	Bonds	Total
PE AUTH	2011	STP - Urban (>200K) (ARC)	\$220,000	\$0,000	\$55,000	\$0,000	\$275,000
ROW AUTH	2014	Local Jurisdiction/Municipality Funds	\$0,000	\$0,000	\$170,000	\$0,000	\$170,000
CST	2016	STP - Urban (>200K) (ARC)	\$1,403,535	\$0,000	\$373,829	\$0,000	\$1,777,364
			\$1,623,535	\$0,000	\$528,829	\$0,000	\$2,222,364

GW-379	WALTHER BOULEVARD GRADE SEPARATION	Jurisdiction Gwinnett County	Existing	Planned	Length (mi.)	Network Year 2020
0010425	AT SR 316	Sponsor GDOT	0	2	0.2	
Programmed		Service Type Roadway / General Purpose Capacity	Analysis In the Region's Air Quality Conformity Analysis			

Status	Year	Fund Type	Federal	State	Local	Bonds	Total
PE AUTH	2012	National Highway System	\$204,000	\$51,000	\$0,000	\$0,000	\$255,000
ROW	2014	Local Jurisdiction/Municipality Funds	\$0,000	\$0,000	\$1,400,000	\$0,000	\$1,400,000
CST	2015	National Highway Performance Program (NHPP)	\$2,597,837	\$649,459	\$0,000	\$0,000	\$3,247,296
			\$2,801,837	\$700,459	\$1,400,000	\$0,000	\$4,902,296

GW-380	US 23/SR 13 (BUFORD HIGHWAY) BICYCLE AND PEDESTRIAN FACILITIES	Jurisdiction Gwinnett County	Existing	Planned	Length (mi.)	Network Year 2020
0011639	FROM MCGINNIS FERRY ROAD TO ENTRANCE OF GEORGE PIERCE PARK	Sponsor City of Suwanee	N/A	N/A	1.65	
Programmed		Service Type Last Mile Connectivity / Joint Bike-Ped Facilities	Analysis Exempt from Air Quality Analysis (40 CFR 93)			

Status	Year	Fund Type	Federal	State	Local	Bonds	Total
PE AUTH	2013	STP - Urban (>200K) (ARC)	\$300,000	\$0,000	\$75,000	\$0,000	\$375,000
CST	2016	Congestion Mitigation & Air Quality Improvement (CMAQ)	\$2,996,230	\$0,000	\$749,058	\$0,000	\$3,745,288
			\$3,296,230	\$0,000	\$824,058	\$0,000	\$4,120,288

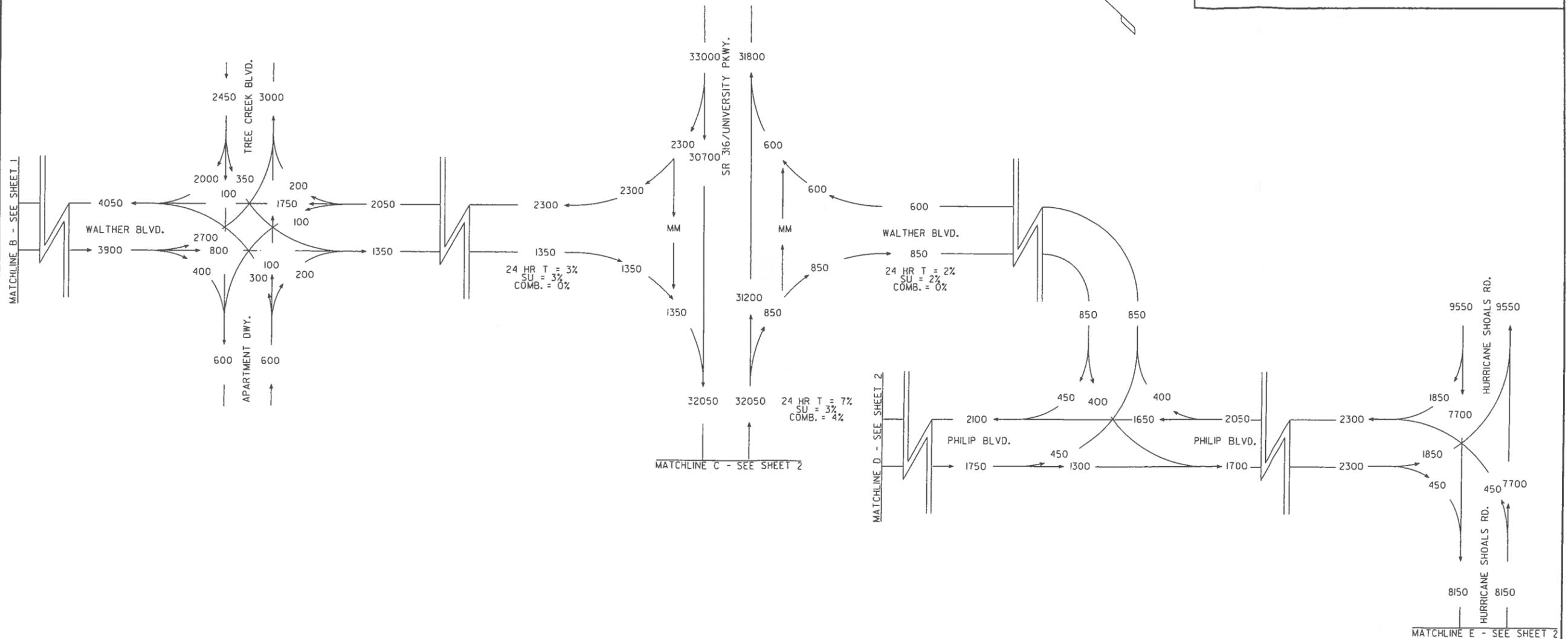
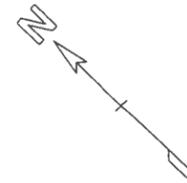
Attachment 2
Traffic Diagrams

2013 EXISTING ADT

GWINNETT COUNTY

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

HNTB 3715 NORTHSIDE PARKWAY, NW
200 NORTHCREEK, SUITE 800
ATLANTA, GEORGIA 30327



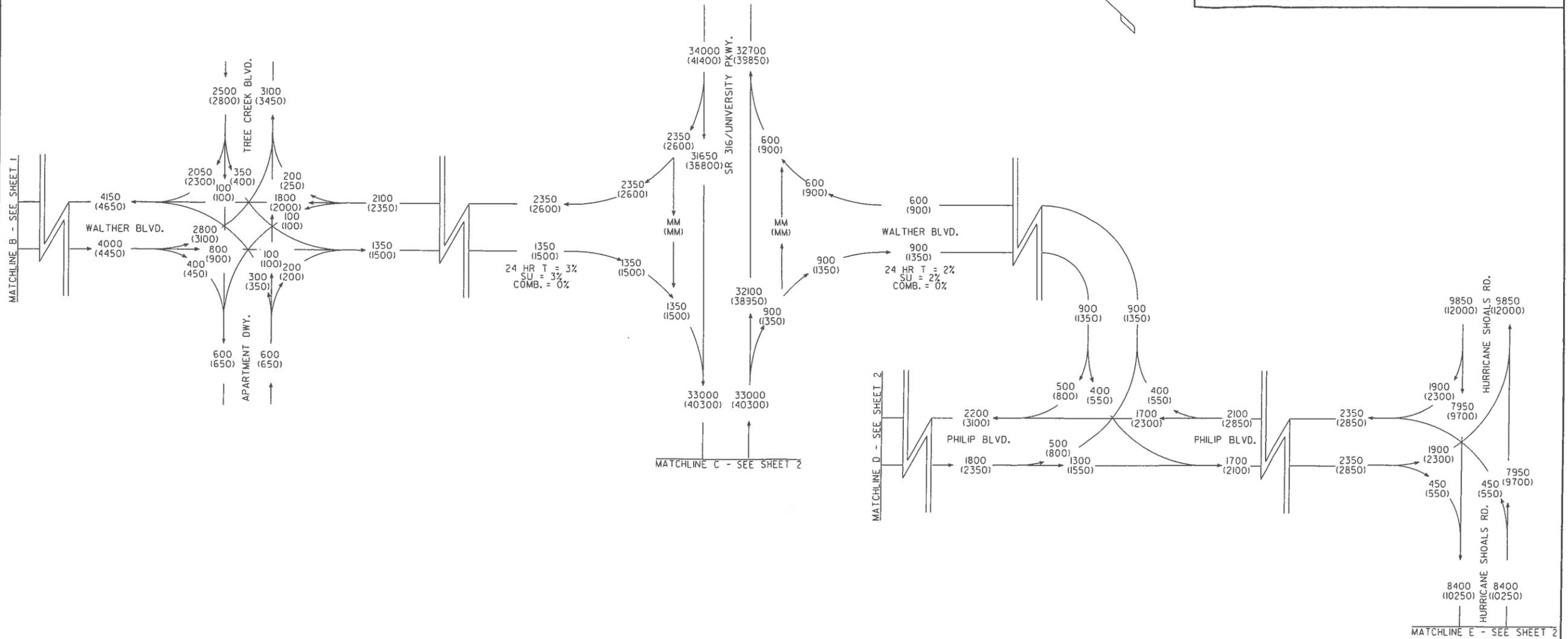
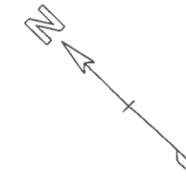
PI# 0010425
GWINNETT COUNTY
GRADE SEPARATION OF
CR 3929 (WALTHER BLVD.)
OVER SR 316

2016/2036 NO-BUILD ADT

GWINNETT COUNTY

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

HNTB 3715 NORTHSIDE PARKWAY, NW
200 NORTHCREEK, SUITE 800
ATLANTA, GEORGIA 30327



PI# 0010425
 GWINNETT COUNTY
 GRADE SEPARATION OF
 CR 3929 (WALTHER BLVD.)
 OVER SR 316
 2016/2036 NO BUILD ADT
 2016 ADT = 0000
 2036 ADT = (0000)
 KAM 11/13

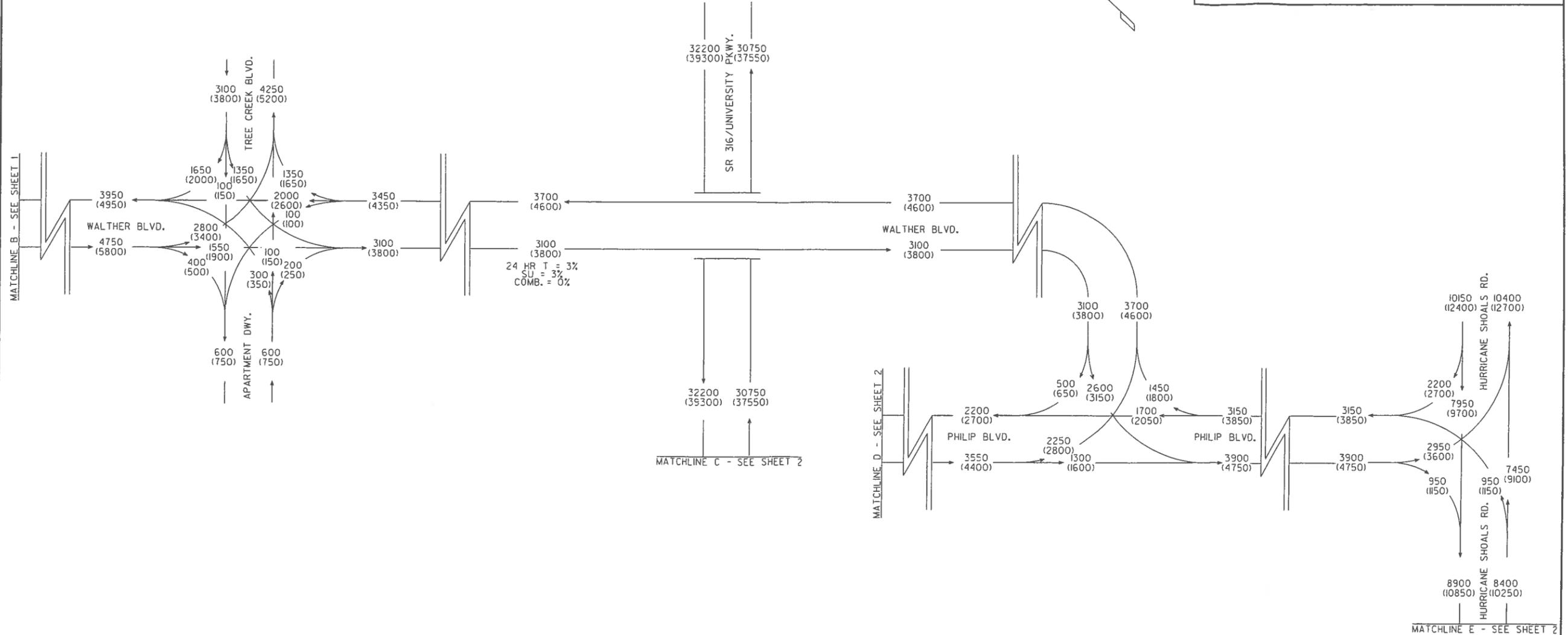
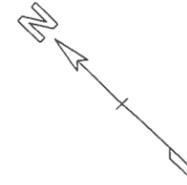
SHEET 18 OF 24

2016/2036 BUILD ADT

WINNETT COUNTY

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF PLANNING

HNTB 3715 NORTHSIDE PARKWAY, NW
200 NORTHCREEK, SUITE 800
ATLANTA, GEORGIA 30327



PI# 0010425
 WINNETT COUNTY
 GRADE SEPARATION OF
 CR 3929 (WALTHER BLVD.)
 OVER SR 316

2016/2036 BUILD ADT
 2016 ADT = 0000
 2036 ADT = (0000)

KAM 1/14