



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Agenda

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

Opening

1. Call to Order
2. Attendance
3. Rules & Procedures

Minutes

4. Approval of Minutes-July 1, 2021

Requests

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4]. **Applicant is requesting to withdraw without prejudice.**
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*

New Business

Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

4. Approval of Minutes-July 1, 2021



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Minutes

The Putnam County Planning & Zoning Commission conducted a public hearing on Thursday, July 1, 2021, at 6:30 P.M. in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, Georgia.

Opening

1. Call to Order
2. Vice-Chairman Tim Pierson called the meeting to order
3. Attendance
Ms. Lisa Jackson called the Attendance.

PRESENT:

Vice-Chairman Tim Pierson
Member Maurice Hill, Jr.
Member Martha Farley
Member John Mitchell

ABSENT:

Chairman James Marshall, Jr.

STAFF:

Ms. Lisa Jackson
Ms. Courtney Andrews
Mr. Ben Schmitt
Putnam County Attorney, Mr. Adam Nelson

4. Rules of Procedures
Ms. Courtney Andrews read the Rules of Procedures.

Minutes

4. Approval of Minutes- June 3, 2021
Motion to approve the June 3, 2021 minutes made by **Member Farley**, Seconded by **Member Hill**
Voting Yea: **Vice-Chairman Pierson, Member Hill, Member Farley, Member Mitchell**

Requests

5. Request by **Thomas Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [**Map 115C, Parcel 019, District 3**]. **Mrs. Beverly Ralston** represented this request. She stated that they are asking for a variance of 23 feet to add a covered porch on the left side of her house. That side of the house faces left, and they get a 20-50 degree change of temperature change in the house because of the heat from the sun and the reflection from the lake. She added that they replaced their bay windows twice

because of the sun, heat, and rain hitting the windows. She specified that if they had a porch or overhang, they would be able to have more shade and it would help the energy efficiency of the house. She stated that there were some discrepancies in the staff recommendation. The staff recommendations stated that there were three means of ingress and egress into the home, but they only have two. One entryway is located under the carport, and the second entrance is by the laundry room. She added that the roadside of the home faces a retaining wall and does not have a door. When they built the home, they added on to an existing cabin. In the process of building, they came across rock that would have needed to be blasted. She stated that the blast would ruin the water table, so they chose not to proceed. **Mrs. Ralston** stated that they planned on taking the bay windows out and replace them with a sliding door that would lead out to the porch. **No one spoke in opposition of this request.**

Member Mitchell asked if this was a fee simple or Georgia Power leased lot. **Mrs. Ralston** stated that it was not a Georgia Power lot. She stated that it was purchased in 1963 and there was an 800 square foot cabin on the lot that they made additions to over the years. **Mr. Mitchell** asked if the retaining wall was preventing them from another location option. **Mrs. Ralston** said yes. She added that the septic system is located on the right side of the home, and the lakeside would be the only option. **Vice-Chairman Pierson** read the staff recommendations and asked for comments. **Member Mitchell** stated that this seemed to be an extraordinary situation for the owners. He added that he realized that when the board goes against what the ordinance requires, they put themselves in jeopardy because of subsequent requests. He believed that the Ralston's request had substantial merit. He stated that he understood how uncomfortable it could be living on the lake in July and August. **Vice-Chairman Pierson** asked Member Mitchell to explain his fee simple question. **Member Mitchell** stated that he wanted to know if they were getting close to approving something that Georgia Power would not accept. **Vice-Chairman Pierson** asked for a motion.

Member Mitchell made a motion to approve the request by **Thomas Ralston** for a rear yard setback variance at 189 S. Spring Road. **Member Farley** asked what the recommendation was from staff. **Vice-Chairman Pierson** restated the staff recommendation. **Ms. Lisa Jackson** asked if she could make a statement. She stated that when she spoke with the applicants, she asked them questions about the doors, and she believed there was a misunderstanding. She added that she was under the impression that they had 3 doors on the house when they talked. The location of the doors would be one on the roadside and one on both the left and right sides of the home. **Mrs. Ralston** stated that there was no door on the roadside of the property. **Ms. Jackson** requested if they could table the item until the following month so that staff could do a reevaluation of the property, due to the misunderstanding.

There was not second to Member Mitchell's motion.

Motion to approve the recommendation by staff to **table the request at 189 S. Spring Road [Map 115C, Parcel 019]** made by **Member Hill**, seconded by **Member Farley**.

Voting Yea: **Vice-Chairman Pierson, Member Hill, Member Farley, Member Mitchell**

6. Request by **Robert & Susan Dods** for a rear yard setback variance at 101 Twisting Hill Ln. Presently zoned R-2. **[Map 111C, Parcel 043, District 4]**. **Mr. Robert Dods** represented this request. He stated that they are requesting to put an open-air carport on the backside of

their house. Due to the slope and asymmetrical non-conforming lot, this was the only location for the carport. He added that he worked with staff to find the best location for the carport. **No one spoke in opposition of this request.**

Member Hill asked if the entrance to the parking area was on the front or side of the house. **Mr. Dods** stated that it was on the side located on Twisting Hill Road with its own entrance.

Motion to approve the request by **Robert & Susan Dods** for a 28-foot rear yard setback variance, being 37 feet from the nearest point to the lake; and a 10-foot front yard setback variance being 20 feet from the road with the condition that the structure be moved over to the 84-foot buildable area at 101 Twisting Hill Ln made by **Member Hill** and seconded by **Member Farley**.

Voting Yea: **Vice-Chairman Pierson, Member Hill, Member Farley, Member Mitchell**

7. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3]. **The applicant is requesting to withdraw without prejudice. No one spoke in opposition of this request.**

Motion to approve the request by **Wallace Gerald Wright** to withdraw without prejudice at 149 Collis Marina Road made by **Member Hill** and seconded by **Member Mitchell**.

Voting Yea: **Vice-Chairman Pierson, Member Hill, Member Farley, Member Mitchell**

The following items were moved to the August 5, 2021 agenda.

8. Request by **James Key (Jamie)** to rezone 1.264 acres on Crooked Creek Drive from R-2 to C-1. [Map 110D, Parcel 045, District 3]. *
9. Request by **James Key (Jamie)** to rezone 1.04 acres on Crooked Creek Drive from R-2 to C-1. [Map 110D, Parcel 045001, District 3]. *
10. Request by **James Key (Jamie)** to rezone 0.689 acres on Crooked Creek Drive from R-2 to C-1. [Map 110D, Parcel 045002, District 3]. *
11. Request by **James Key (Jamie)** to rezone 0.72 acres on Crooked Creek Drive from R-2 to C-1. [Map 110D, Parcel 046, District 3]. *
12. Request by **James Key (Jamie)** to rezone 0.976 acres on Crooked Creek Drive from R-2 to C-1. [Map 110D, Parcel 046001, District 3]. *
13. Request by **James Key (Jamie)** to rezone 1.23 acres on Crooked Creek Drive from R-2 to C-1. [Map 110D, Parcel 046002, District 3]. *
14. Request by **Christie Key** to rezone 0.708 acres on Crooked Creek Road from R-2 to C-1. [Map 110D, Parcel 047, District 3]. *
15. Request by **Christie Key** to rezone 0.796 acres on Crooked Creek Road from R-2 to C-1. [Map 110D, Parcel 047001, District 3]. *

16. Request by **Christie Key** to rezone 0.694 acres on Crooked Creek Drive from R-2 to C-1. [**Map 110D, Parcel 047002, District 3**]. *
17. Request by **James Key (Jamie)** to rezone 0.698 acres on Crooked Creek Road from R-2 to C-1. [**Map 110D, Parcel 049, District 3**]. *
18. Request by **James Key (Jamie)** to rezone 0.881 acres on Crooked Creek Road from R-2 to C-1. [**Map 110D, Parcel 049001, District 3**]. *

New Business

Getting board members registered for the upcoming Summer GAZA conference soon.

Adjournment

The meeting adjourned at approximately 7:19 P.M.

Attest:

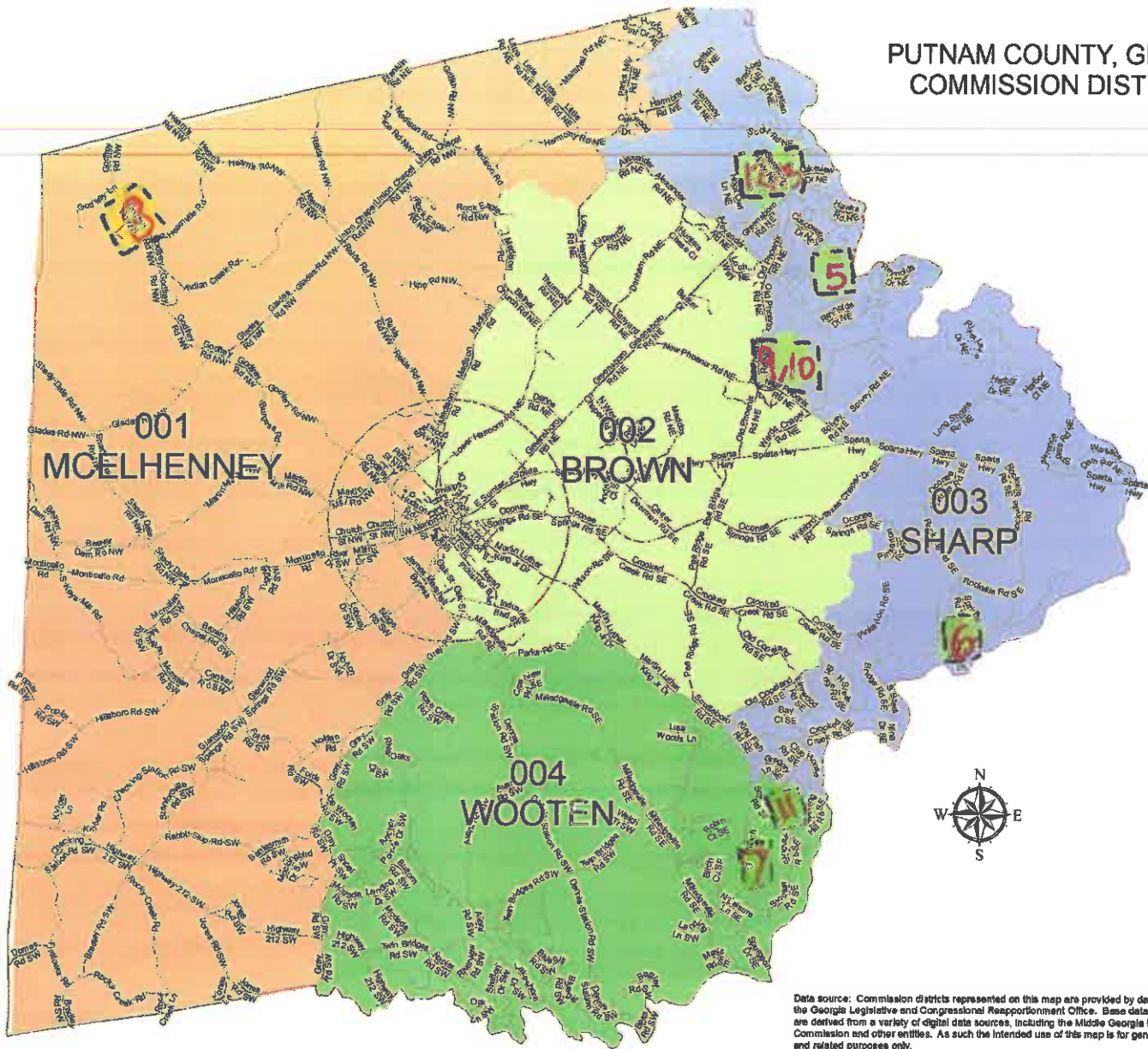
Lisa Jackson
Director

Tim Person
Vice-Chairman

File Attachments for Item:

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Date source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.26' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

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12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*



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PLAN 2021-01131

APPLICATION FOR ZONING ACTION: VARIANCE

Application Information

(same as owner Yes No)

Name: Wallace Gerald Wright

Address: 149 Collis Marina Rd.

Eatonton Ga 31024

Phone: 678-521-9732

Email: wright991@windstream.net

Fax: _____

Arterial/State Road. Yes: _____ No: X

Property Information

Address: 149 Collis Marina Rd, Eatonton, Ga 31024

Map: 104 Parcel: 1048013

Presently Zoned: R-1 Com. District: X3 738

Total Acreage: .599

In Conservation Use: Yes No

State Waters on Property: Yes No

SETBACKS: Front: 20' Rear: 11/A Lakeside: 65' Left: 10' Right: 10'

TOTAL SQ. FT. (existing structure) 1250' TOTAL FOOTPRINT (proposed structure) 2277'

LOT LENGTH (the total length of the lot) 105'

LOT WIDTH AT BUILDING SETBACK (how wide the lot is where you are proposing to build) 112'

REASON FOR REQUEST: The lot is very abnormally shaped and the current home does not conform to the current guidelines. The new home will need the requested variances to be built.

SUPPORTING INFORMATION ATTACHED TO APPLICATION:

RECORDED PLAT: LETTER OF AGENCY _____ LETTER OF INTENT

SITE APPROVAL/LAYOUT OF SEPTIC SYSTEM FROM HEALTH DEPARTMENT Piedmont water/sewer

PROPOSED LOCATION MUST BE STAKED OFF

*SIGNATURE OF APPLICANT: Wallace Gerald Wright DATE: 5-27-21

*APPLICANT HEREBY AFFIRMS THAT APPLICANT IS THE PROPERTY OWNER OR HAS THE LEGAL AUTHORITY TO SIGN THIS FORM ON OWNER'S BEHALF, AND APPLICANT AGREES TO INDEMNIFY AND HOLD PUTNAM COUNTY/CITY OF EATONTON HARMLESS IN THE EVENT IT IS DETERMINED APPLICANT DOES NOT HAVE SUCH LEGAL AUTHORITY.

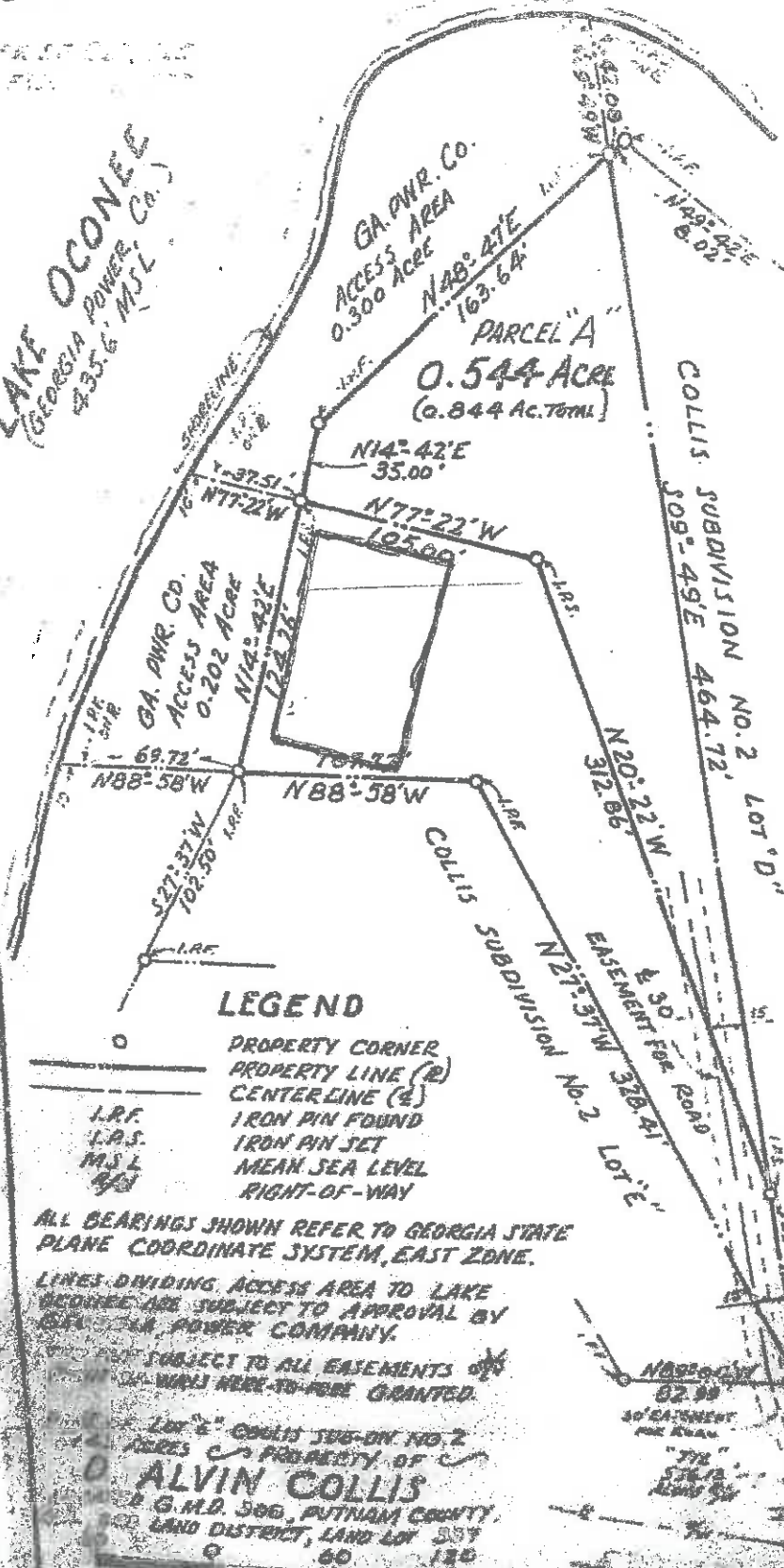
DATE FILED <u>5/27/21</u>	FEE: \$ <u>220.00</u>	CK. NO. <u>8636</u>	CASH <input type="checkbox"/>	C. CARD <input type="checkbox"/>	INITIALS <u>GW</u>
RECEIPT # _____					
DATE OF NEWSPAPER AD: _____	DATE SIGN POSTED: _____				
PLANNING & ZONING HEARING: _____	RESULT: _____				
COMMISSIONERS/CITY COUNCIL HEARING: _____	RESULT: _____				

TRANSIT & CHAIN SURVEY

10-180

SKETCH OF COLLIS SUBDIVISION

LAKE O'CONNOR
(GEORGIA POWER CO.)
435.6 M.S.L.



REFERENCES:
PLAT BOOK NO. 5
pg. 120
PLAT BOOK NO. 8
pg. 75

In my opinion this is a true and correct representation of the land plotted.
Geo. G. Dunn
Geo. G. DUNN
COUNTY SURVEYOR

LEGEND

- PROPERTY CORNER
- PROPERTY LINE (P)
- CENTERLINE (C)
- I.P.F. IRON PIN FOUND
- I.P.J. IRON PIN SET
- M.S.L. MEAN SEA LEVEL
- R.O.W. RIGHT-OF-WAY

ALL BEARINGS SHOWN REFER TO GEORGIA STATE PLANE COORDINATE SYSTEM, EAST ZONE.

LIRES DIVIDING ACCESS AREA TO LAKE O'CONNOR ARE SUBJECT TO APPROVAL BY GEORGIA POWER COMPANY.

ALL ARE SUBJECT TO ALL EASEMENTS AND ENCUMBRANCES HERE-TO-FORE GRANTED.

Lot 2 - COLLIS SUB-DIV. NO. 2
ACRES - PROPERTY OF
ALVIN COLLIS
G.H.D. 306, PUTNAM COUNTY
LAND DISTRICT, LAND LOT 307
60 130

SCALE IN FEET

AMERICAN TESTING LABORATORIES

FILE NO. 157-H

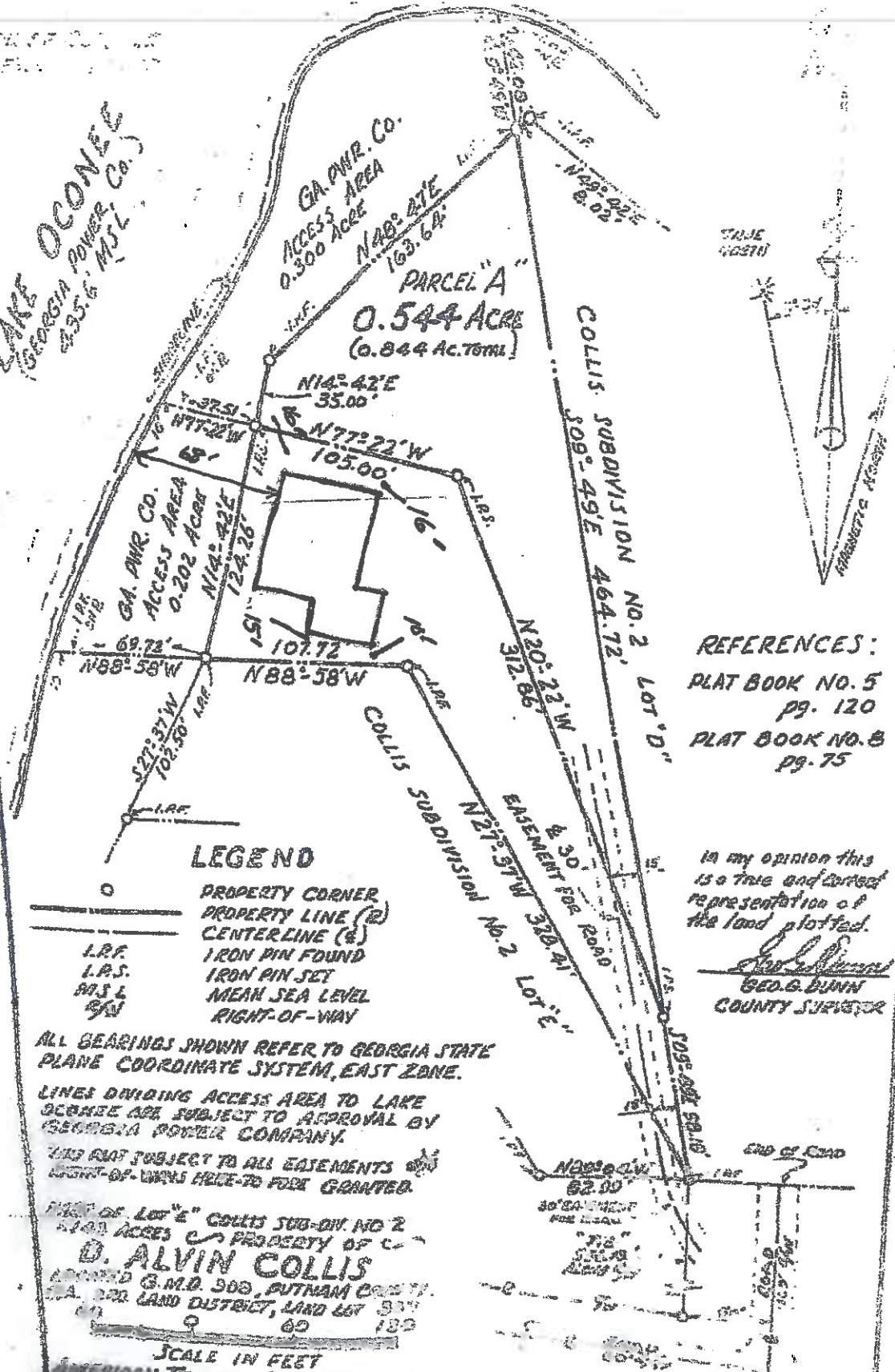
REC'D MAY 27 '21
C.D.

TRANSIT & CHAIN SURVEY

10-180

SCALE OF 1" = 100'

LAKE O'CONNOR
(GEORGIA POWER CO.)
435.6' M.S.L.



REFERENCES:
PLAT BOOK NO. 5
pg. 120
PLAT BOOK NO. 8
pg. 75

In my opinion this is a true and correct representation of the land plotted.
Geo. B. Dunn
GEO. B. DUNN
COUNTY SUPERVISOR

LEGEND
PROPERTY CORNER (O)
PROPERTY LINE (—)
CENTERLINE (---)
IRON PIN FOUND (IPF)
IRON PIN SET (IPS)
MEAN SEA LEVEL (M.S.L.)
RIGHT-OF-WAY (R.O.W.)

ALL BEARINGS SHOWN REFER TO GEORGIA STATE PLANE COORDINATE SYSTEM, EAST ZONE.

LINE DIVIDING ACCESS AREA TO LAKE O'CONNOR ARE SUBJECT TO APPROVAL BY GEORGIA POWER COMPANY.

THIS PLAT SUBJECT TO ALL EASEMENTS AND RIGHT-OF-WAYS HELD TO HAVE GRANTED.

PORTION OF LOT "E" COLLIS SUB-DIV. NO. 2 0.100 ACRES IS PROPERTY OF
D. ALVIN COLLIS
CORPORATED G.M.D. 908, PUTNAM COUNTY, GA. 1000 LAND DISTRICT, LAND LOT 874

SCALE IN FEET
AMERICAN TESTING LABORATORIES
BIRMINGHAM, ALABAMA

FILE NO. 157-H

Wallace and Darlyne Wright

149 Collis Marina Rd

Eatonton, GA 31024

July 7, 2021

Putnam County Planning & Development

Director Lisa Jackson

117 Putnam Dr. Suite B

Eatonton, GA 31024

Dear Putnam Count Planning & Development:

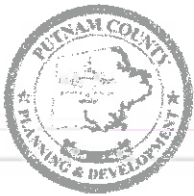
We own the property located at 149 Collis Marina Road and plan to build a retirement home. We are requesting a 10' variance on both sides of the property to allow the home to meet handicap accessibility guidelines and manage the waste/stormwater runoff. The lot has a steep incline that does not allow the garage to have access to the house without stairs if built in front of the main structure. If the house was raised to the level of the garage it would be excessively high and costly to obtain a level transition. This variance request will allow the garage to be built on the same level as the main house and achieve a main living area on one level.

On the front left corner, the attached garage would be 10' from the property line and the left rear garage corner would be 15' from the property line. The front and back right corners will be 14' – 16' from the property line. The variance approval also would allow us to direct/manage the stormwater runoff to the right side of the lot using the natural slope of the land. We would be eliminating three current non-conforming structures by removing the current mobile home which is 8' off the property line, removing an old storage building that is 2' off the property line and an unused propane tank that is 1' off the property line.

Please contact us at 678-521-9733 if you have questions or require further information. Your consideration of our request is appreciated.

Respectfully,

Wallace and Darlyne Wright



PUTNAM COUNTY PLANNING & DEVELOPMENT

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Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

REC'D MAY 27 2011
20

CAMPAIGN CONTRIBUTION DISCLOSURE

Has applicant made \$250 or more campaign contributions to a local government official within two years immediately preceding the filing of this application? Yes No If yes, please complete contribution affidavit.

If the business of the applicant or owner, or the applicant or owner individually, have made contributions or gifts having a total value of over \$250 or more to any elected official in Putnam County within two (2) years preceding the date of this application, the following must be completed:

Name of Recipient	Date	Contribution Amount	Description of Gift	Value of Gift

Name of Business: _____

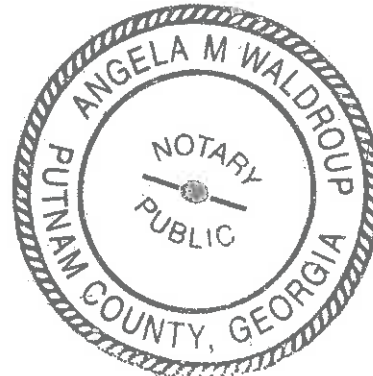
Business Ownership Interest: _____ Property Ownership Interest: _____

I hereby depose and say that all statements herein are true, correct, and complete to the best of my knowledge and belief.

Wallace Sewell Wright
Owner or Applicant Signature

Angela M. Waldroup
Notary Public

Sworn and subscribed before me this
27 day of May 20 21.



From: Alexis Browning abrowning@piedmontwater.com
Subject: Confirmation of Available Sewer
Date: Apr 12, 2021 at 4:54:40 PM
To: Wriauto@windstream.net

REC'D
MAY 27 2021
CJ

Good Afternoon Mr. Wright,

This email is to confirm that sewer is available at 149 Collis Marina Road, Eatonton, GA 31024, with Piedmont Water Company.

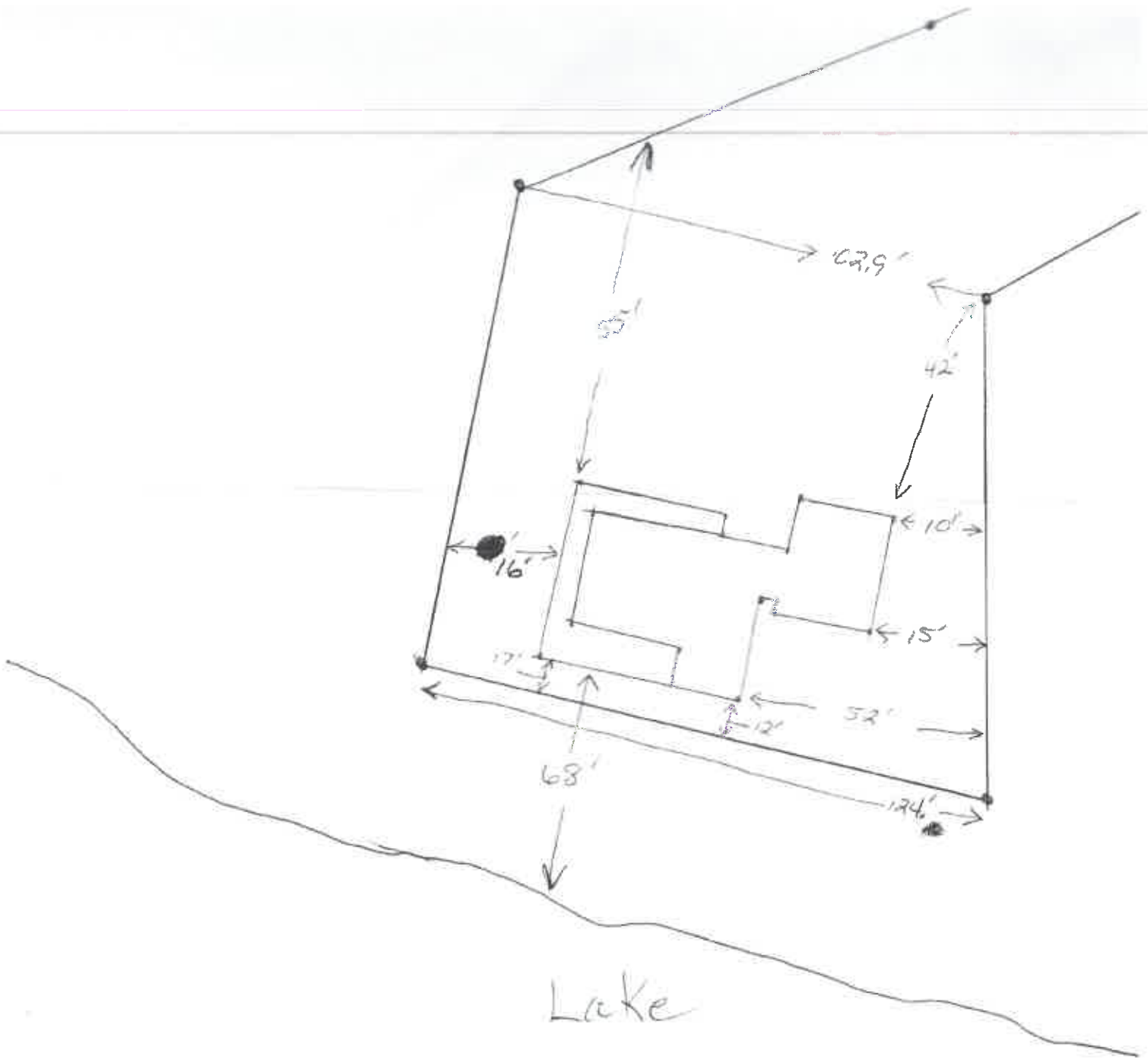
Thanks,

Alexis Browning
Customer Service Department
Piedmont Water Company
abrowning@piedmontwater.com
Office: 800/248-7689



Please save our 800-248-7689 as a contact in your cell phone, as we will use this number for our broadcast messages and all phone correspondence.

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Overview



Legend

- City Limit
- Parcels
- Parcel Numbers
- Address Numbers
- Zoning**
- A-1 CITY
- A-1 and AG-1
- AG-1
- AG-2
- C-1
- C-1 CITY
- C-2
- C-2 CITY
- C-2 PUD
- I-1 CITY
- I-2 CITY
- I-M
- MHP
- PUBLIC
- PUBLIC CITY
- R-1 CITY
- R-2 CITY
- R-3 CITY
- R-4 CITY
- R-1
- R-1R
- R-2
- RM-1
- RM-2
- RM-3
- VILLAGE
- Roads**
- Flood Map**
- A - 100 Year Flood Area - Areas of 1% annual chance flood also known as the base flood. Base Flood Elevations

FLOOD ELEVATIONS
(BFE) have not been
determined.

■ AE -100 Year Flood
Area - Areas of 1%
annual chance flood
also known as the
base flood.
Determined by
detailed methods
with Base Flood
Elevations (BFE).

■ VE: Coastal SFHA
with BFE & velocity
wave action -
Coastal flood zone
with velocity
hazard (wave
action); Base Flood
Elevations
determined.

X: 500 Year Flood -
Areas of 0.2%
annual chance floo

Parcel ID 104B013
Real Key / Acct 3748
Class Code Residential
Taxing District PUTNAM
Acres 0.6

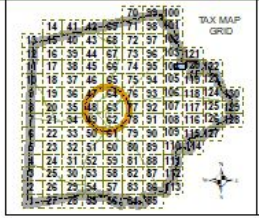
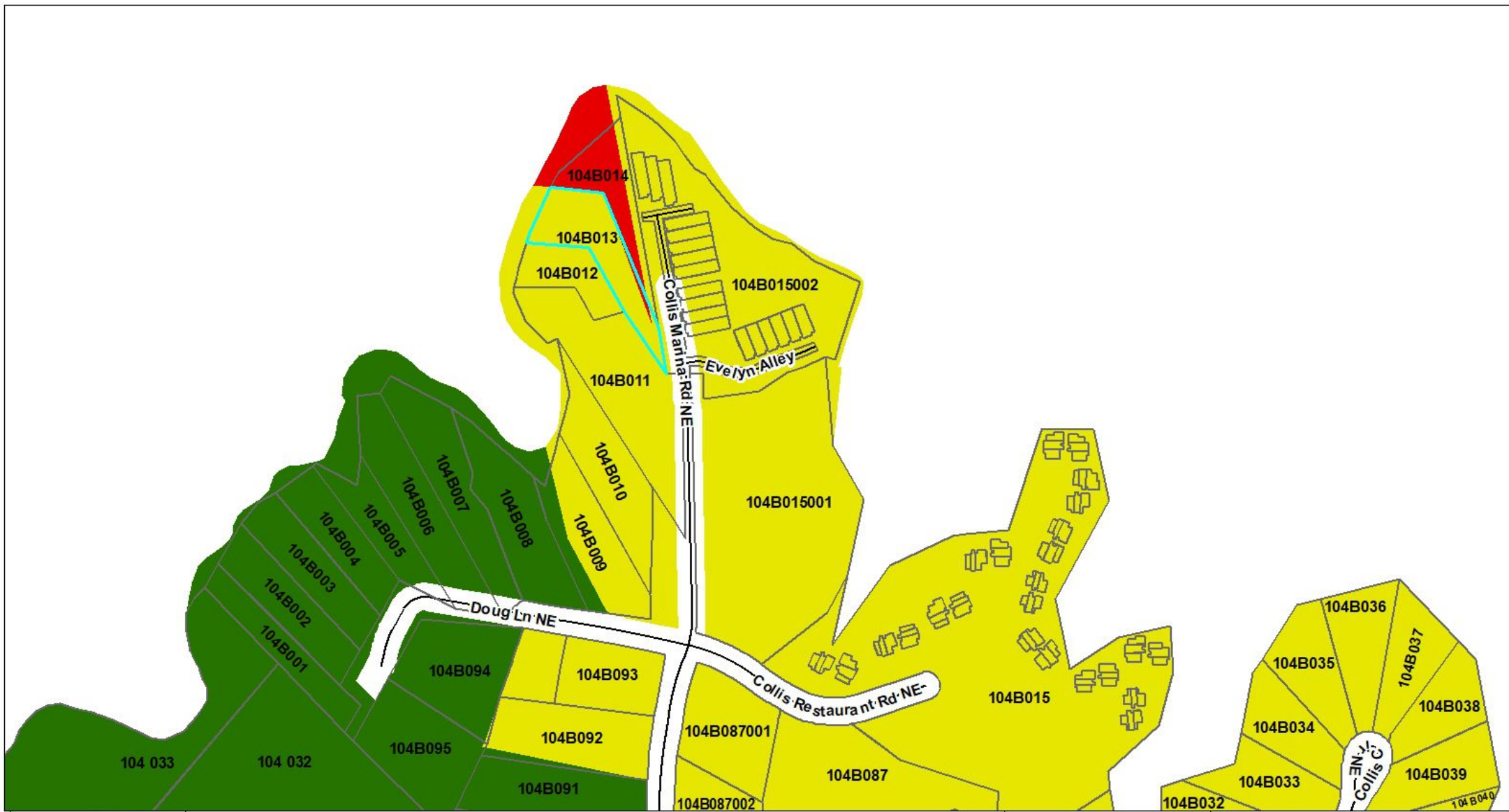
Owner WRIGHT LYNDAD & WALLACE G
400 PINE CIRCLE
MONROE, GA 30655
Physical Address 149 COLLIS MARINA RD
Land Value \$275000
Improvement Value \$10169
Accessory Value \$3730
Current Value \$288899

Last 2 Sales			
Date	Price	Reason	Qual
9/21/2018	0	SD	U
9/21/2018	\$199000	MH	U

(Note: Not to be used on legal documents)

Date created: 5/27/2021
Last Data Uploaded: 5/27/2021 6:59:11 AM

Developed by  Schneider
GEOSPATIAL



GEOGRAPHIC FEATURE LEGEND

Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel_Hooks			

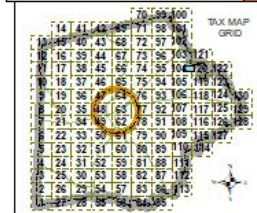
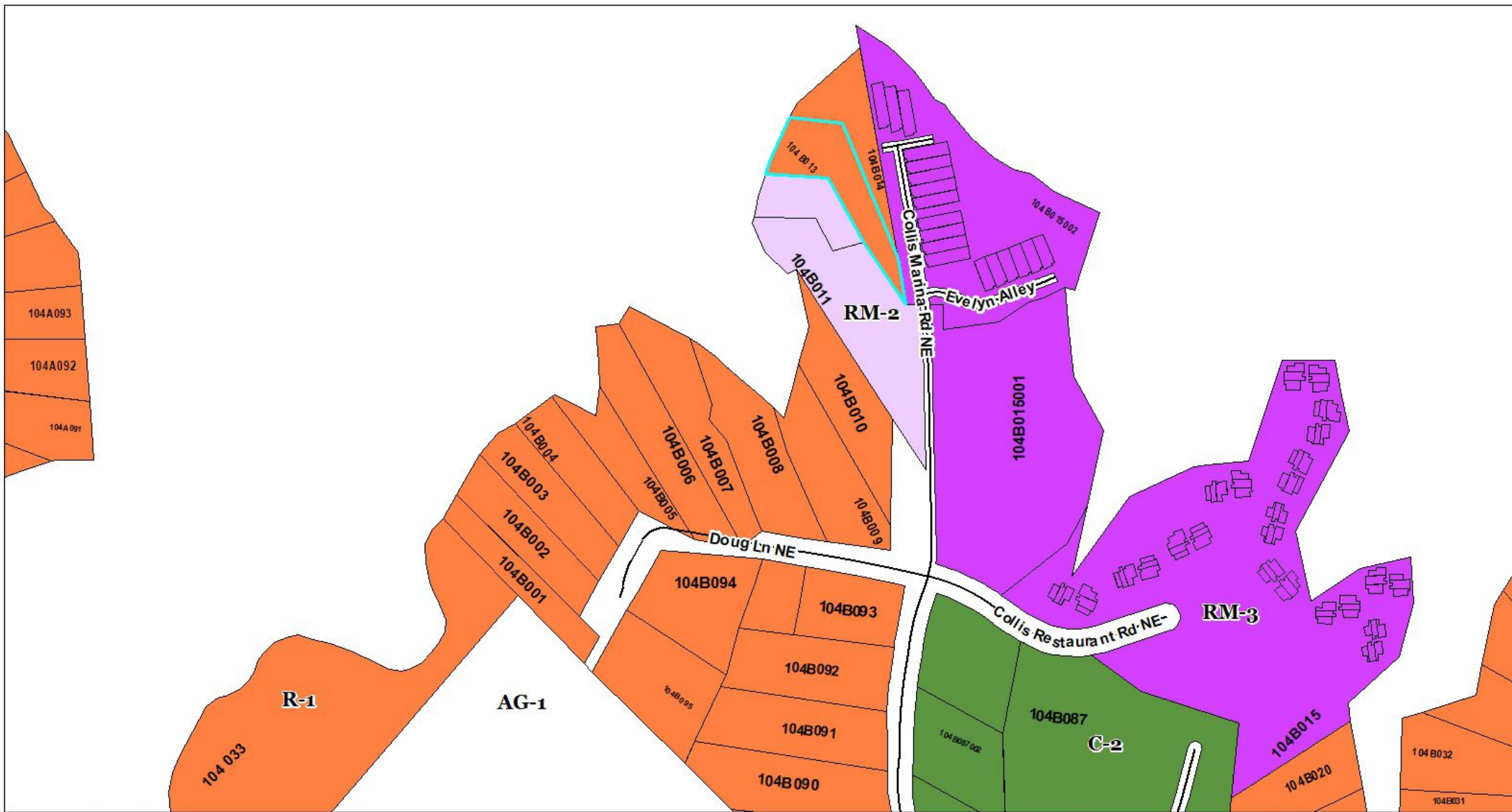
MGRCA
 Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
FUTURE LAND USE MAPS

MAP 104B

19

MAP SCALE: 1" = 200' SCALE RATIO: 1:2,400 DATE: JUNE 2021



GEOGRAPHIC FEATURE LEGEND

Eatonton Limits	Overlay District	AG-2	C-2 CITY	IND-2 CITY	R - 1 CITY	RM-2
County Boundary	No Code	C-1	I-M	MHP	R - 2 CITY	RM-3
Roads	AG-1	C-1 CITY	IND-1 CITY	R - 3 CITY	R-2	VILLAGE
Parcels	AG-1 CITY	C-2	IND-2	PUBLIC	R - 4 CITY	RM-1
Parcel Hooks				PUBLIC CITY		

LMGR
Middle Georgia Regional Commission
175 Emery Hwy
Suite C
Macon, Georgia 31217
(478) 751-6160
Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
ZONING MAPS

MAP 104B

SCALE: 1" = 200'
SCALE RATIO: 1:2,400
DATE: JUNE 2021

20



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [**Map 104B, Parcel 013, District 3**]. The applicant is requesting a 10-foot side yard setback variance, being 10 feet from both side property lines. He is seeking to replace the current manufactured home with a site-built home. The proposed footprint of the new home is 2,277 feet, with an attached garage and second floor. This is a uniquely flag-shaped lot that is narrow on the roadside and widens towards the lake. The lot width at the building setback is approximately 122 feet. Although the lot measures approximately 459 feet in length, approximately 326 feet is in the unbuildable area of this lot. As a result, any new structures will need to be placed in a limited area closer to the lake. The new structure's main floor will be level with the garage to allow for full handicap accessibility. Upon visitation by staff, the measurements on-site matched those provided in documentation to be 16 feet from the right side property line, when facing the lake; 10 feet on the front left corner, when facing the lake; and 15 feet on the rear left corner, when facing the lake. Due to limited buildable area, a variance would be needed to make further improvements. Therefore, this request meets the conditions stated in Putnam County, Code of Ordinances, Chapter 66-157(c).



Staff recommendation is for approval of a 4-foot side yard setback variance being 16 feet from the right-side property line, when facing the lake; and a 5-foot side yard setback being 15 feet from the left rear corner, when facing the lake; and a 10-foot side yard setback variance being 10 feet from the left front corner, when facing the lake at 149 Collis Marina Road [Map 104B, Parcel 013, District 3].

New Business Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

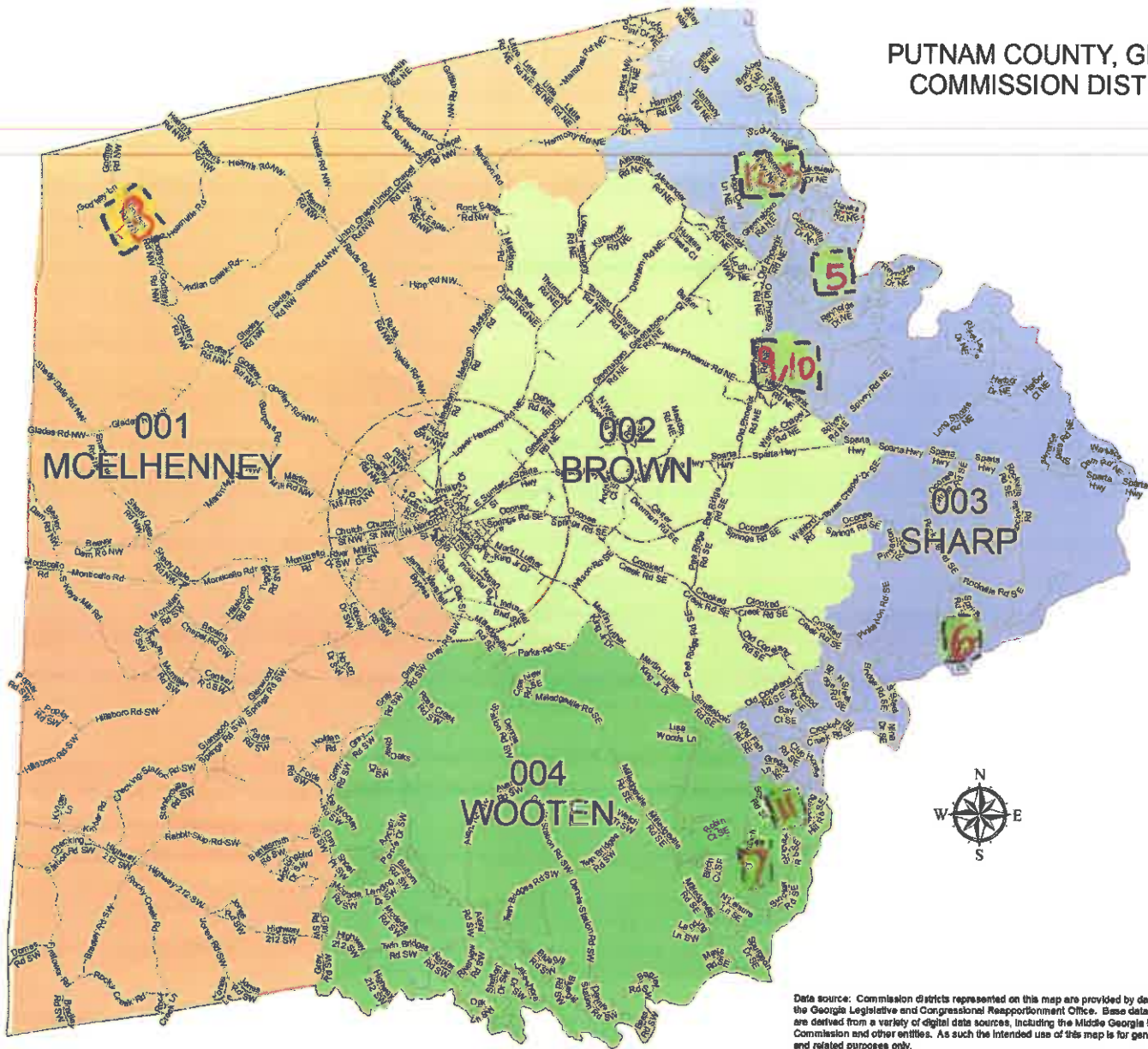
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [**Map 115C, Parcel 019, District 3**].

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Data source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.26' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

APPLICATION FOR ZONING ACTION: VARIANCE

Permit # Plan 2021-00912

Application Information

(same as owner Yes No)

Name: Thomas Ralston/Gwen Ralston

Address: 189 S. Springs Rd
Eatonton, GA 31024

Phone: 706-485-9493 (H) 706-473-

Email: gc.ralston@outlook.com 0555

Fax: N/A

Arterial/State Road. Yes: No:

Property Information

Address: 189 S. Springs Rd, Eatonton

Map: 115C Parcel: 019

Presently Zoned: R2 Com. District: 3

Total Acreage: 2

In Conservation Use: Yes No

State Waters on Property: Yes No

SETBACKS: Front: 912' Rear: N/A Lakeside: 41' ~~41'~~ Left: 107' Right: 70'

TOTAL SQ. FT. (existing structure) 24459 sq ft, TOTAL FOOTPRINT (proposed structure) 37x12

LOT LENGTH (the total length of the lot) 0969' Elevation From Lake to Bottom

LOT WIDTH AT BUILDING SETBACK (how wide the lot is where you are proposing to build) 225'
of Porch - 7'

REASON FOR REQUEST: The Lakeside setback will not be as prescribed once porch is built.

SUPPORTING INFORMATION ATTACHED TO APPLICATION:

RECORDED PLAT: LETTER OF AGENCY N/A LETTER OF INTENT

SITE APPROVAL/LAYOUT OF SEPTIC SYSTEM FROM HEALTH DEPARTMENT N/A

PROPOSED LOCATION MUST BE STAKED OFF

*SIGNATURE OF APPLICANT: Thomas H. Ralston DATE: 5-3-21

*APPLICANT HEREBY AFFIRMS THAT APPLICANT IS THE PROPERTY OWNER OR HAS THE LEGAL AUTHORITY TO SIGN THIS FORM ON OWNER'S BEHALF, AND APPLICANT AGREES TO INDEMNIFY AND HOLD PUTNAM COUNTY/CITY OF EATONTON HARMLESS IN THE EVENT IT IS DETERMINED APPLICANT DOES NOT HAVE SUCH LEGAL AUTHORITY.

DATE FILED <u>5/3/21</u>	FEE: \$ <u>220.00</u>	CK. NO. _____	CASH <input type="checkbox"/>	C. CARD <input type="checkbox"/>	INITIALS _____
RECEIPT # _____					
DATE OF NEWSPAPER AD: _____	DATE SIGN POSTED: _____				
PLANNING & ZONING HEARING: _____	RESULT: _____				
COMMISSIONERS/CITY COUNCIL HEARING: _____	RESULT: _____				



PUTNAM COUNTY PLANNING & DEVELOPMENT

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Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

OWNER AUTHORIZATION


Submission of inaccurate information may be cause for denial of the requestor, if discrepancies are realized after the approval for the petition or issuance of the relevant local permits, cause for the revocation of the approval and any related permits by the Board of Commissioners. The following documents must be submitted with this application before the application deadline.

Incomplete applications will not be accepted or processed.

1. Payment of appropriate fee (please make checks payable to Putnam County Planning & Development)
2. Plat or site plan, drawn to scale, showing the locations of structures or uses for which the variance is sought, as well as the relationship to existing structures. Dimensions must be included.
3. A written description of your request in a letter format addressed to Putnam County Planning & Development. All required criteria (attached) must be addressed in the written description. Specific sections of the ordinance that would cause hardship must be identified, along with a description of the particular hardship.


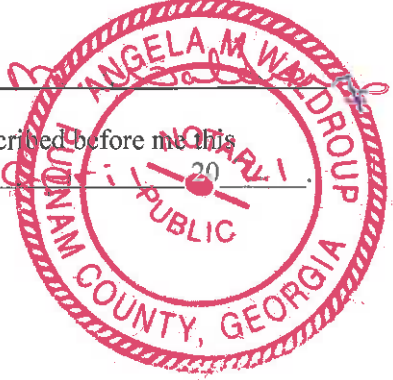
The documents listed above are the minimum requirements. Staff may require additional documentation depending on the nature of the Variance Request. All submitted documents are public records and subject to Opens Records Law.

I have reviewed the application procedures and all applicable criteria and regulations in the Putnam County Zoning Ordinance for the above-requested Variance Request. I hereby claim that this application fulfills said procedures and meets the criteria for approval.

Applicant Signature:  Date: 5-3-2021
~~April 27, 2021~~

I swear that I am the owner of the property listed above. I authorize Thomas Rabata (applicant's name) to apply for a zoning action (zoning map amendment, conditional use, variance) at the above listed address, as identified on the attached application.


Owner signature


Notary Public
Sworn and subscribed before me this 3rd day of April, 2021


Letter of Intent -Variance Request
April 27, 2021

From:
Thomas H. & Gwen Ralston
189 S. Spring Road
Eatonton, GA 31024

To:
Putnam County Planning & Development
Lisa Jackson, Director
117 Putnam Dr., Suite B
Eatonton, GA 31024

Dear Planning & Development Committee:

We own the property located at 189 S. Spring Road near Oconee Springs Park. The Lot was purchased in 1963 by W.C.Ralston and an 800 sq.foot, two-bedroom "fishing" cabin was built on it in 1964. At the time, the roads were gravel.

We acquired the property in 1992 and remodeled the house into a three-bedroom, three bath, two-story, full-time residence. The Lot is 1.98 Acres and "pie-slice" shaped with the narrow 100' end at the road and the wider Lake end measuring 230'. Currently the house is 69' from the seawall.

We are requesting a variance to add a 12' wide covered porch to the Lakeside of the house. The porch will be the length of the house, 37 ft. The house faces West and we get full afternoon sun, which has caused the wood around the windows to rot and the seal between the plate glass to fail. Hard rains also beat on the glass and high winds cause the glass to flex. We have replaced these Bay windows twice already.

Also, the sun causes the Living space to be 10-15 degrees hotter until the sun goes down. Having a covered buffer should eliminate most of our issues.

Although the porch plan will encroach on the Lakeside setback, there will be an approximate 7 ft. rise in elevation from the seawall to the porch bottom. The position of the porch will not impact Septic system or electrical/phone lines. *Requesting a 24' Rear variance bump 41' to nearest point to the Lake.* *MR*
Many "pre-permit" houses in this area sit close to the Lake. Our variance request is consistent with properties in the neighborhood.

We appreciate your timely consideration.
Should you have additional questions, please call 706-473-0555.

Regards,

Thomas Ralston
Thomas Ralston



115C020

115C019

115C105

115C017

115C018

100'

969'
Length
of LOT

Drain
Field

Retaining Wall

SS

107'

70'

41'

69'

230'

189 S. Spring Rd.
Thomas H. Ralston

Proposed Porch
37' x 12'



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CAMPAIGN CONTRIBUTION DISCLOSURE

Has applicant made \$250 or more campaign contributions to a local government official within two years immediately preceding the filing of this application? Yes No If yes, please complete contribution affidavit.

If the business of the applicant or owner, or the applicant or owner individually, have made contributions or gifts having a total value of over \$250 or more to any elected official in Putnam County within two (2) years preceding the date of this application, the following must be completed:

Name of Recipient	Date	Contribution Amount	Description of Gift	Value of Gift

Name of Business: N/A

Business Ownership Interest: _____ Property Ownership Interest: _____

I hereby depose and say that all statements herein are true, correct, and complete to the best of my knowledge and belief.

[Signature]
Owner or Applicant Signature

N/A

[Signature]
Notary Public

Sworn and subscribed before me this
3 day of April 2021.



Ralston
Existing House



Ralston
Existing
House



Ralston
189 S. Spring Rd.
Eatonton, GA 31024

TREVOR J. ADDISON
CLERK OF SUPERIOR COURT
104 S. JEFFERSON AVE., STE 234
EATONTON, GEORGIA 31024

SOC 04-27-2021

Book 3 Page 36





Overview



Legend

- City Limit
- Parcels
- Parcel Numbers
- Zoning**
- A-1 CITY
- A-1 and AG-1
- AG-1
- AG-2
- C-1
- C-1 CITY
- C-2
- C-2 CITY
- C-2 PUD
- I-1 CITY
- I-2 CITY
- I-M
- MHP
- PUBLIC
- PUBLIC CITY
- R - 1 CITY
- R - 2 CITY
- R - 3 CITY
- R - 4 CITY
- R-1
- R-1R
- R-2
- RM-1
- RM-2
- RM-3
- VILLAGE
- Roads**

Flood Map

- A - 100 Year Flood Area - Areas of 1% annual chance flood also known as the base flood. Base Flood Elevations (BFE) have not b

determined.

■ AE -100 Year Flood Area - Areas of 1% annual chance flood also known as the base flood.

Determined by detailed methods with Base Flood Elevations (BFE).

■ VE: Coastal SFHA with BFE & velocity wave action - Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

■ X: 500 Year Flood - Areas of 0.2% annual chance flood

Parcel ID 115C019
Real Key / Acct 10363
Class Code Residential
Taxing District PUTNAM
Acres 1.98

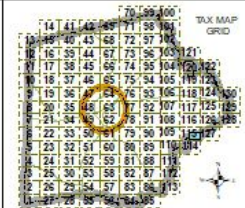
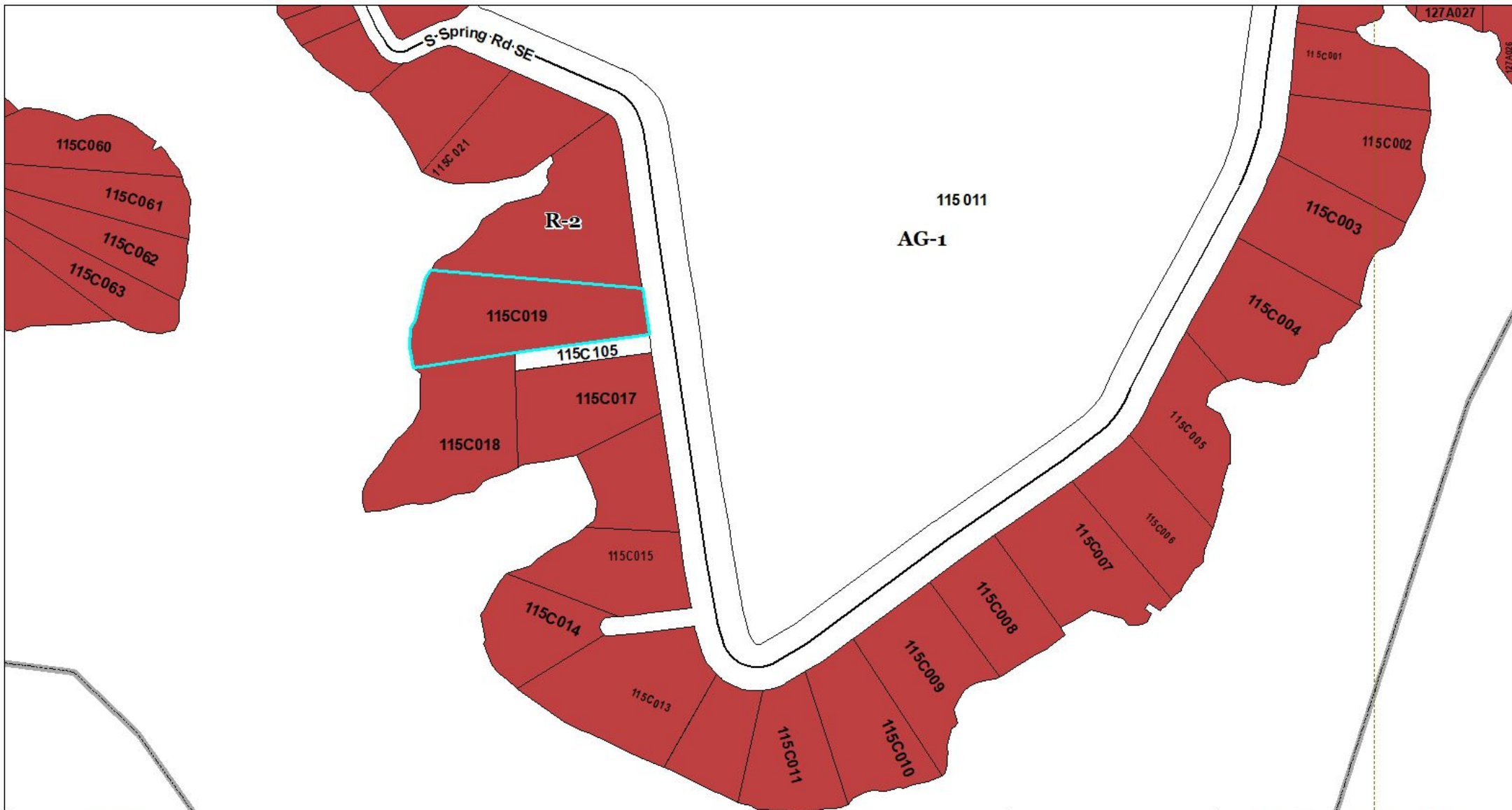
Owner RALSTON THOMAS H
189 S SPRING RD SE
EATONTON, GA 31024
Physical Address 189 S SPRING RD
Land Value \$156250
Improvement Value \$199203
Accessory Value \$18636
Current Value \$374089

Last 2 Sales
Date Price Reason Qual
n/a 0 n/a n/a
n/a 0 n/a n/a

(Note: Not to be used on legal documents)

Date created: 5/3/2021
Last Data Uploaded: 5/2/2021 6:50:30 AM

Developed by  Schneider
GEOSPATIAL



- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel Hooks

GEOGRAPHIC FEATURE LEGEND

Zoning

- | | | | | | | |
|------------------|----------|------------|-------------|------------|------|---------|
| Overlay District | AG-2 | C-2 CITY | IND-2 CITY | R - 1 CITY | R-1 | RM-2 |
| No Code | C-1 | I-M | MHP | R - 2 CITY | R-1R | RM-3 |
| AG-1 | C-1 CITY | IND-1 CITY | PUBLIC | R - 3 CITY | R-2 | VILLAGE |
| AG-1 CITY | C-2 | IND-2 | PUBLIC CITY | R - 4 CITY | RM-1 | |



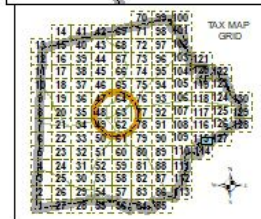
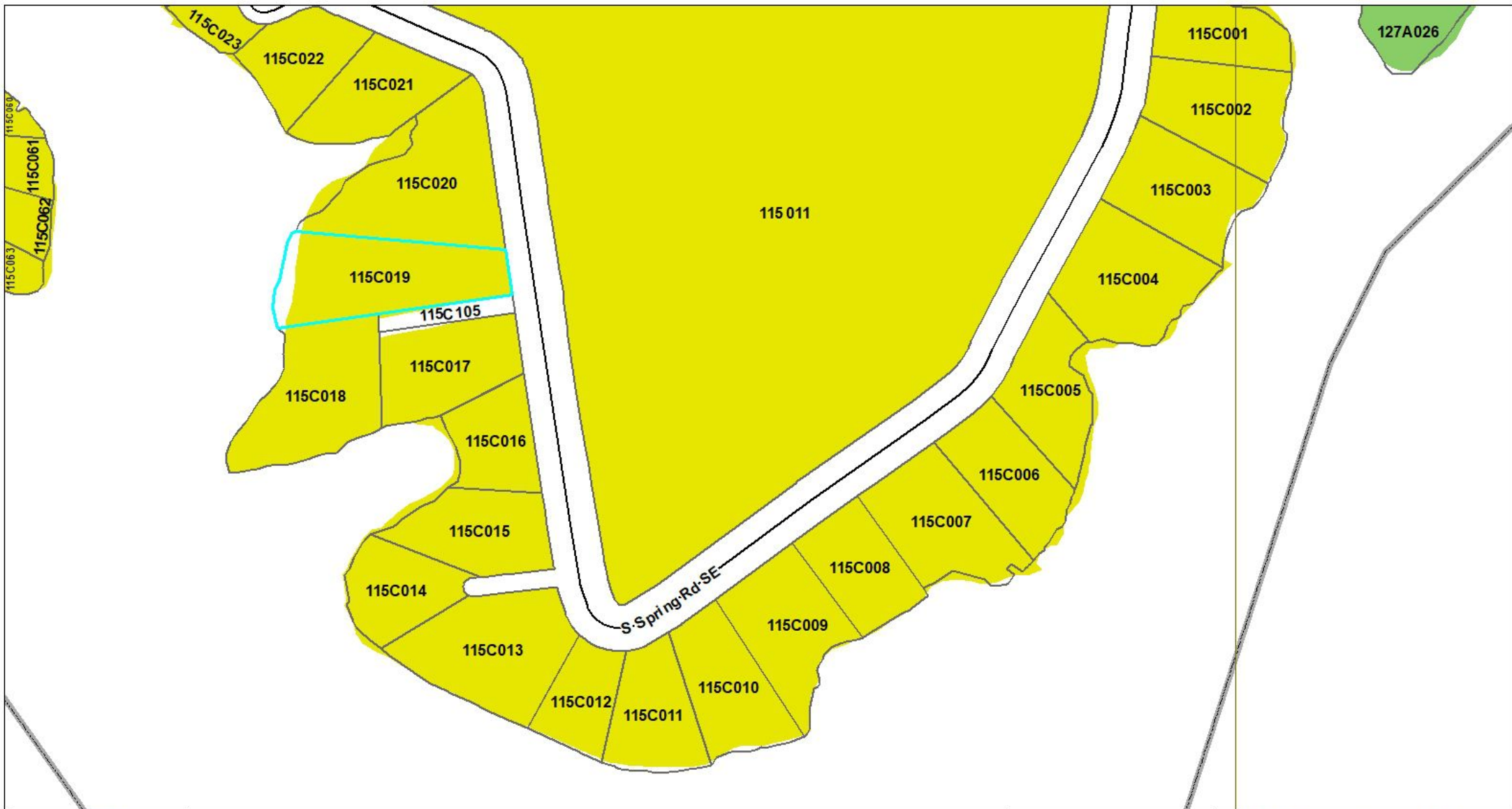
Middle Georgia Regional Commission
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PUTNAM COUNTY, GEORGIA ZONING MAPS



MAP 115C

36



GEOGRAPHIC FEATURE LEGEND			
Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel_Hooks			

MGRC
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PUTNAM COUNTY, GEORGIA
FUTURE LAND USE MAPS

MAP 115C

37

MAP SCALE: 1" = 200' SCALE RATIO: 1:2,400 DATE: JUNE 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

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Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

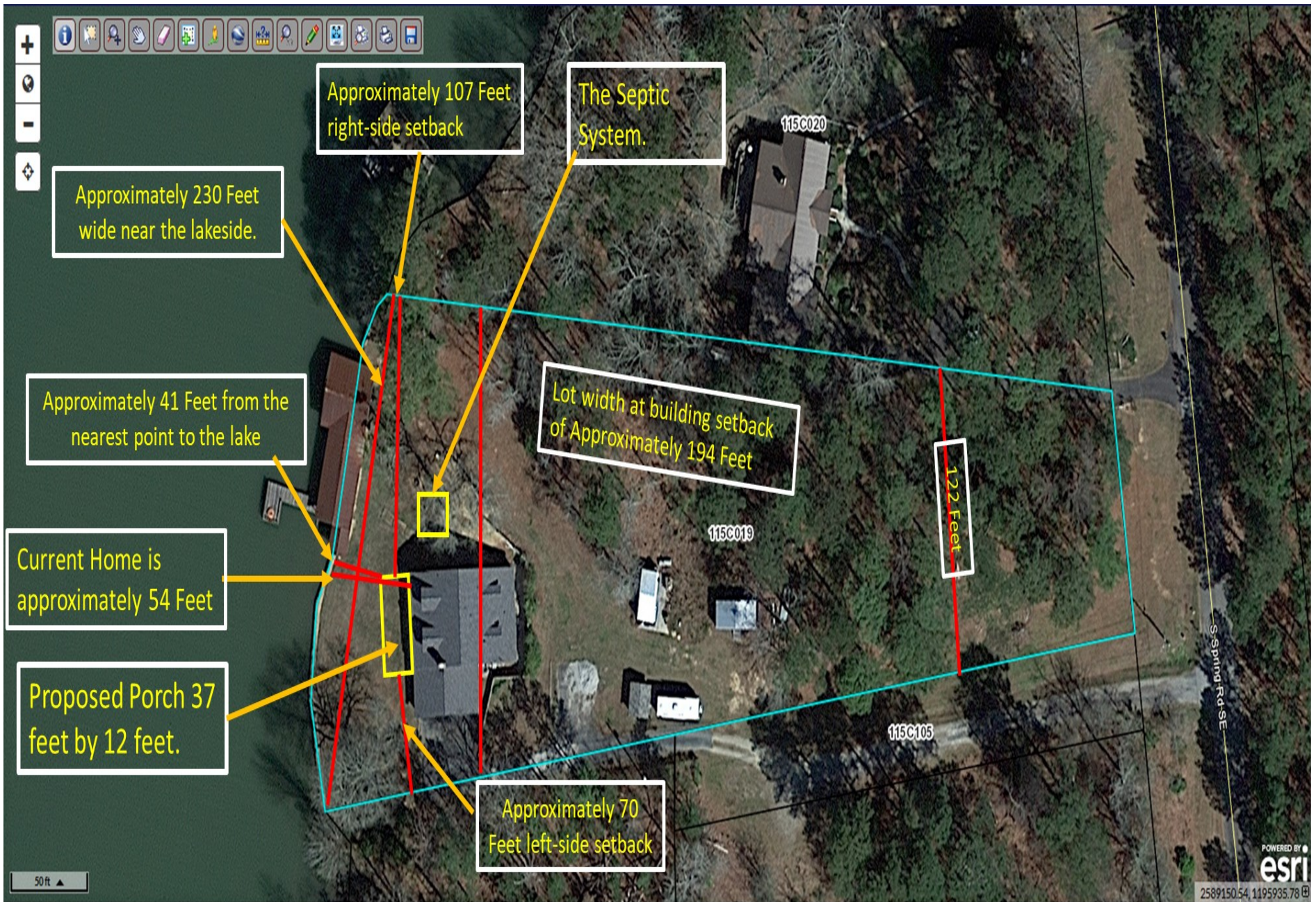
TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3]. The applicants are requesting a 24-foot rear yard setback variance, being 41 feet from the nearest point of the lake. They would like to build a 37ft. X 12ft. (444 sq ft.) covered porch at the rear of their house. The applicants suggested that over the years, the sun and rain have caused substantial damage to their bay windows as well as portions of the interior of the house. The proposed deck will have a roof that will cover that area and rectify the problem. This is a long conforming parcel that widens towards the lake. According to the tax assessors, this house was constructed in 1966, and Putnam County Zoning Ordinance was established in 1992. The existing house was originally built as an 800 sq. ft. cabin. As such, the existing structure is a legal nonconforming dwelling due to the nonconforming 54-foot setback from the lake. In the early '90s, the original home was enlarged to a 3,225 sq. ft single-story dwelling, including the installation of two bay windows on the lakeside of the property. As it stands, the current structure exceeds the minimum heated square foot requirement for the R-2 zoning district as stated in section 66-85(g) of the Putnam County Code of Ordinances. Staff visited the site and determined that there are two means of ingress and egress doors, both of which have landings as the main entrance. In addition, the location of the proposed deck does not have an existing entrance. While the applicant would like to add the deck and roof at the proposed location to address the rain damage and sun issue, the bay windows were installed by the owners. In addition, there is no existing entrance on this side of the house which would justify the necessity for increasing the nonconformity any further. Staff recommends that the applicants consider other alternatives that will provide coverage over the bay windows extending from the roofline only. Therefore, this request does not meet the conditions stated in Putnam County, Code of Ordinances, Chapter 66-157(c).



Staff recommendation is for denial of a 24-foot rear yard setback variance, being 41 feet to the nearest point to the lake at 189 S. Spring Road [Map 115C, Parcel 019].

New Business
Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

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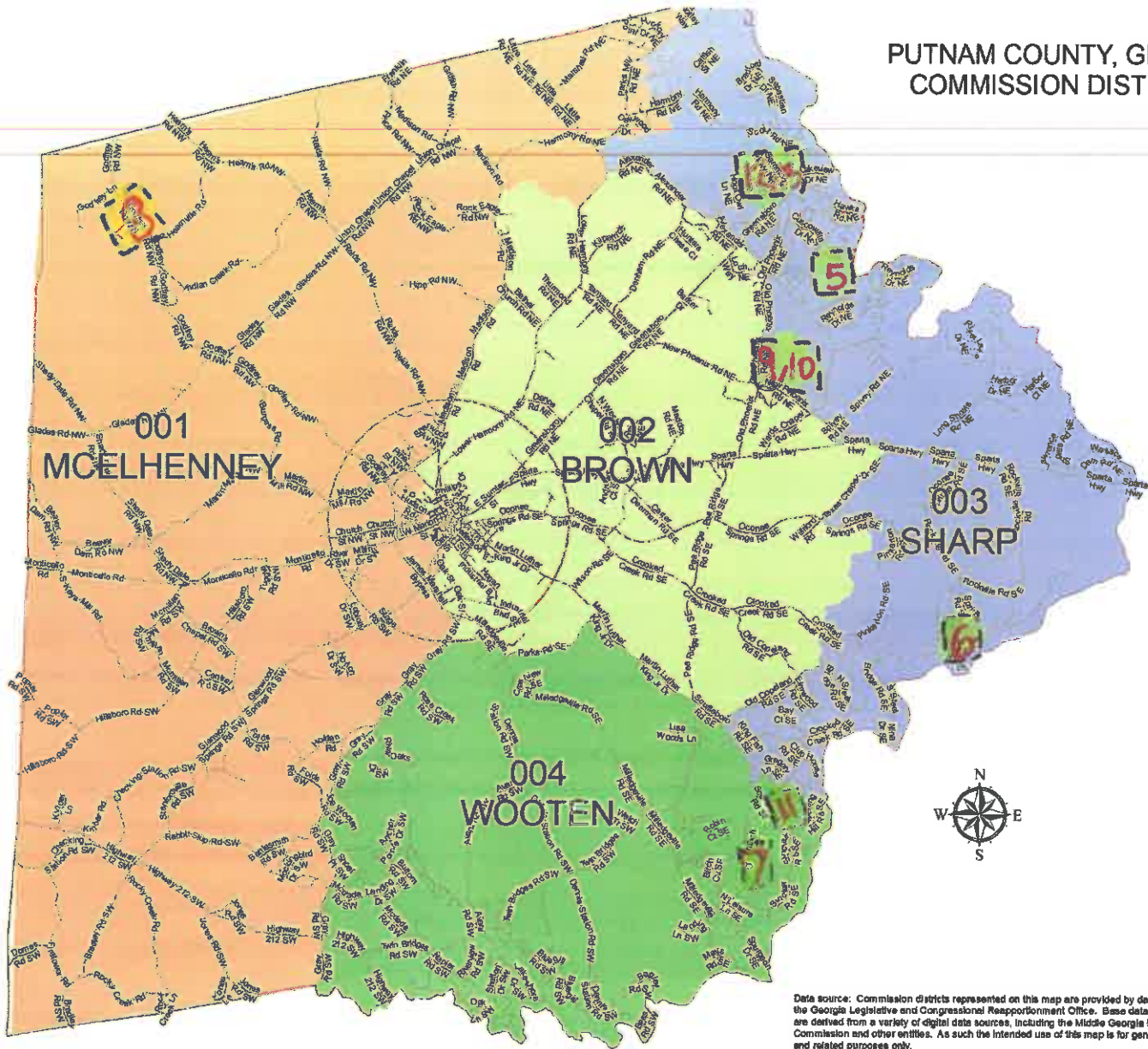
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File Attachments for Item:

7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [**Map 112C, Parcel 009, District 4**].

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



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Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

APPLICATION FOR ZONING ACTION: VARIANCE

Permit # 2021-01333

Application Information

(same as owner Yes No)

Name: THOMAS W GARDNER

Address: 348 COLD BRANCH ROAD
LOT A, EATONTON, GA 31024

Phone: 678-485-6252

Email: TGARDNERFIRE@CHARTER.NET

Fax: _____

Arterial/State Road. Yes: _____ No:

SETBACKS: Front: 68' Rear: N/A Lakeside: 37'-6" Left: 23' Right: 15'

TOTAL SQ. FT. (existing structure) 1896 SF HOUSE TOTAL FOOTPRINT (proposed structure) 4060 SF GARAGE ADDITION

LOT LENGTH (the total length of the lot) 180'

LOT WIDTH AT BUILDING SETBACK (how wide the lot is where you are proposing to build) 117'

REASON FOR REQUEST: DETACHED GARAGE IS SMALL AND I DESIRE TO EXPAND TO ADD A WOOD SHOP WITH BEDROOM/BATH/OFFICE ABOVE NOW THAT MY JOB IS WORK FROM HOME DUE TO COVID. GARAGE EXPANSION IS CLOSER TO ROAD COMPARED TO HOUSE BUT 1.5' CLOSER TO LAKE DUE TO SHAPE OF SEAWALL.
SUPPORTING INFORMATION ATTACHED TO APPLICATION

RECORDED PLAT: LETTER OF AGENCY LETTER OF INTENT

SITE APPROVAL/LAYOUT OF SEPTIC SYSTEM FROM HEALTH DEPARTMENT

PROPOSED LOCATION MUST BE STAKED OFF

*SIGNATURE OF APPLICANT: Thomas W. Gardner DATE: 6/23/2021

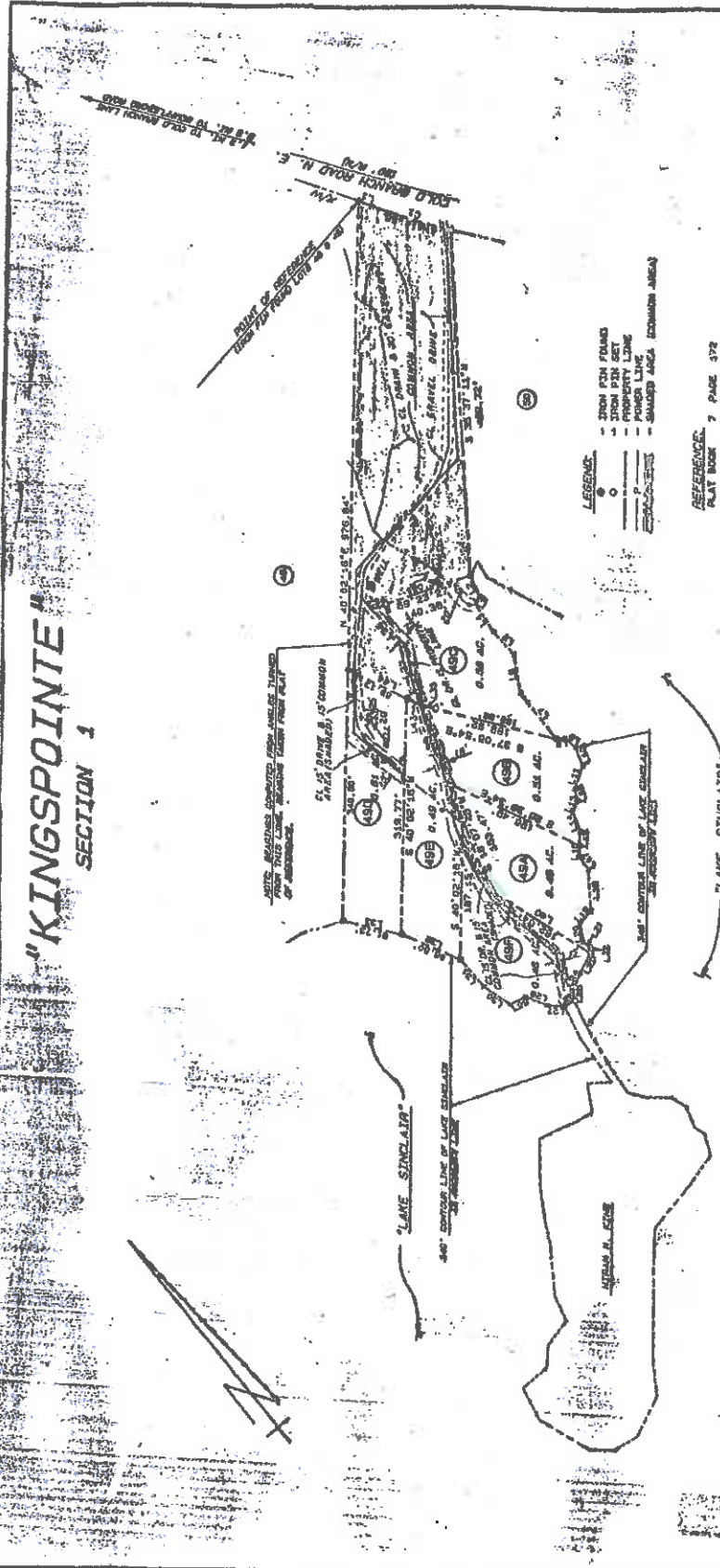
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DATE FILED <u>6/24/21</u>	FEE: \$ <u>220.00</u>	CK. NO. _____	CASH _____	C. CARD <input checked="" type="checkbox"/>	INITIALS <u>dtw</u>
RECEIPT # _____					
DATE OF NEWSPAPER AD: _____			DATE SIGN POSTED: _____		
PLANNING & ZONING HEARING: _____			RESULT: _____		
COMMISSIONERS'/CITY COUNCIL HEARING: _____			RESULT: _____		

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"KINGSPOINTE"
SECTION 1



- LEGEND:**
- IRON PIN MARK
 - IRON PIPE
 - PROPERTY LINE
 - POWER LINE
 - SHADOWED AREA COMMON AREA

REFERENCE:
PLAT BOOK 7 PAGE 372
CLIENT'S OFFICE PUTNAM COUNTY
SUPERIOR COURT.

- NOTES:**
1. ALL SUPPLY TO BE FURNISHED BY A COMMUNITY WATER SYSTEM.
 2. COMMON AREAS ARE SHOWN AS SHADOWED AREAS.
 3. DISTANCES ALONG CURVES ARE ARC DISTANCES.



SUBDIVISION SURVEY

FOR **HIRAM M. KING**

FORMERLY PART OF TRACT 3 OF CHASE-ILLINOIS DEV. COMP.
LOT 49
L. L. 257 2ND. LAND DISTRICT
333TH. S. M. DISTRICT
PUTNAM COUNTY, GEORGIA

Scale: 1" = 100.0' Date: APR 11 6 1967

OSLETRIE, SMITH & ASSOCIATES
MILLEDGEVILLE, GEORGIA



LINE	BEARING	DISTANCE
1	N. 89° 15' 15" E.	876.84'
2	S. 89° 15' 15" W.	876.84'
3	N. 00° 00' 00" E.	100.00'
4	S. 00° 00' 00" W.	100.00'
5	N. 00° 00' 00" E.	100.00'
6	S. 00° 00' 00" W.	100.00'
7	N. 00° 00' 00" E.	100.00'
8	S. 00° 00' 00" W.	100.00'
9	N. 00° 00' 00" E.	100.00'
10	S. 00° 00' 00" W.	100.00'
11	N. 00° 00' 00" E.	100.00'
12	S. 00° 00' 00" W.	100.00'
13	N. 00° 00' 00" E.	100.00'
14	S. 00° 00' 00" W.	100.00'
15	N. 00° 00' 00" E.	100.00'
16	S. 00° 00' 00" W.	100.00'
17	N. 00° 00' 00" E.	100.00'
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98	S. 00° 00' 00" W.	100.00'
99	N. 00° 00' 00" E.	100.00'
100	S. 00° 00' 00" W.	100.00'

THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS BEEN OBTAINED BY MEASUREMENTS MADE BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED SURVEYOR OF THE STATE OF GEORGIA. I HEREBY CERTIFY THAT THIS MAP OR PLAT IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND THE BOUNDARIES THEREOF AS SHOWN BY THE FIELD DATA AND THE COMPASS BEARING, THIS MAP OR PLAT HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED SURVEYOR OF THE STATE OF GEORGIA.

THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS BEEN OBTAINED BY MEASUREMENTS MADE BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED SURVEYOR OF THE STATE OF GEORGIA. I HEREBY CERTIFY THAT THIS MAP OR PLAT IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND THE BOUNDARIES THEREOF AS SHOWN BY THE FIELD DATA AND THE COMPASS BEARING, THIS MAP OR PLAT HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A LICENSED SURVEYOR OF THE STATE OF GEORGIA.

Handwritten signature: Andy R. Mardall, Deputy Clerk

Thomas & Laura Gardner
348 Cold Branch Road • Lot A • Eatonton • Georgia • 31024

June 23, 2021

Putnam County Planning & Development
Director Lisa Jackson
117 Putnam Dr., Suite B
Eatonton, Georgia 31024

Dear Putnam County Planning & Development:

We own the property located at 348 Cold Branch Road, Lot A, Eatonton, Georgia 31024 and plan to turn it into our retirement home. We originally purchased the property (with a single-family home and a detached garage) as a weekend lake place. With the COVID-19 pandemic our jobs changed and we both work from home now. So, we sold our full-time home and moved to Eatonton full time which was always our dream but commuting made that an impossibility until last year.

This home is by no means a large home; it is a very typical Lake Sinclair "A Frame" structure with two bedrooms and a loft open to the living room/kitchen/dining room. Therefore, there is no real good arrangement for two people to work from home and have enough quiet while we both conduct business on the telephone/zoom calls.

To turn this into our forever home, we are requesting a variance so we can add 20 feet onto our garage which will allow us:

- Room to park our cars in the garage again (it has become my wood shop)
- To not "lose" the wood shop for the indoor parking
- An office above the wood shop so one of us can work in the new addition and one of us can work in the existing home's loft area.
- A third bedroom so our sons/daughters-in-law/grandchildren can visit without sleeping on the couch and the floor. This is also important as our grandchildren are allergic to our animals so the grandchildren can sleep in the new bedroom above the garage (no animals will be allowed in the garage addition).

Our existing home (as purchased) is setback 39 feet from the nearest point of the lake. We are requesting a variance as the new 20-foot addition of the detached garage would result in a

RECEIVED JUN 24 2021 *KV*

setback from the nearest point of the lake of 37.5 feet where the seawall wraps around into a small "cove" area.

Even though the garage would be 1.5 feet closer to the nearest point of the lake than the existing house is, this is only true because of the small "cove" area where the seawall juts in towards the road at the only area we have available on our lot to build more usable space. We would consider expanding our house towards the street, but this is impossible as the existing septic tank is one foot away from the house.

With the new garage addition, the garage exterior wall facing the lake (facing south) will be 37 feet further north than the house (also facing south) but closer to the lake due to the configuration of the seawall "cove" area.

We respectfully request a favorable ruling of this variance application as our house is too small to accommodate our daily jobs and too small to have our immediate family comfortably stay overnight. We have staked off the proposed garage addition and invite you to see our situation for yourselves.

If you would like additional information about this request, you can telephone me at 678-485-6252.

Very truly yours,



Thomas W. Gardner

RECEIVED JUN 24 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

OWNER AUTHORIZATION

Submission of inaccurate information may be cause for denial of the requestor, if discrepancies are realized after the approval for the petition or issuance of the relevant local permits, cause for the revocation of the approval and any related permits by the Board of Commissioners. The following documents must be submitted with this application before the application deadline.

Incomplete applications will not be accepted or processed.

1. Payment of appropriate fee (please make checks payable to Putnam County Planning & Development)
2. Plat or site plan, drawn to scale, showing the locations of structures or uses for which the variance is sought, as well as the relationship to existing structures. Dimensions must be included.
3. A written description of your request in a letter format addressed to Putnam County Planning & Development. All required criteria (attached) must be addressed in the written description. Specific sections of the ordinance that would cause hardship must be identified, along with a description of the particular hardship.

The documents listed above are the minimum requirements. Staff may require additional documentation depending on the nature of the Variance Request. All submitted documents are public records and subject to Opens Records Law.

I have reviewed the application procedures and all applicable criteria and regulations in the Putnam County Zoning Ordinance for the above-requested Variance Request. I hereby claim that this application fulfills said procedures and meets the criteria for approval.

Applicant Signature: _____

Date: _____

06/23/2021

I swear that I am the owner of the property listed above. I authorize _____ (applicant's name) to apply for a zoning action (zoning map amendment, conditional use, variance) at the above listed address, as identified on the attached application.

Owner signature

Notary Public

Sworn and subscribed before me this

24 day of June 20 21.



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PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

CAMPAIGN CONTRIBUTION DISCLOSURE

Has applicant made \$250 or more campaign contributions to a local government official within two years immediately preceding the filing of this application? Yes No If yes, please complete contribution affidavit.

If the business of the applicant or owner, or the applicant or owner individually, have made contributions or gifts having a total value of over \$250 or more to any elected official in Putnam County within two (2) years preceding the date of this application, the following must be completed:

Name of Recipient	Date	Contribution Amount	Description of Gift	Value of Gift

Name of Business: _____

Business Ownership Interest: _____ Property Ownership Interest: _____

I hereby depose and say that all statements herein are true, correct, and complete to the best of my knowledge and belief.

[Signature]
Owner or Applicant Signature

[Signature]
Notary Public

Sworn and subscribed before me this
24 day of June 2021.



RECEIVED JUN 24 2021 [initials]

Existing On-site Sewage Management System Performance Evaluation Report Form

Property Owner/System Owner Name: <u>Tom Gardner</u> 678-485-6252		Reason for Existing Sewage System Evaluation: (circle)	
Property/System Address: <u>348 A Cold Branch Rd.</u>		<input type="checkbox"/> (1) Loan Closing for Home Sale	
Subdivision Name:	Lot: <u>49A</u>	Block:	<input type="checkbox"/> (2) Refinance
Existing System Information: Water Supply (circle)	Number of Bedrooms/GPD: <u>3</u>	Garbage Grinder: (circle)	<input type="checkbox"/> (3) Home Addition (Non-bedroom) Type: _____
<input checked="" type="checkbox"/> (1) Public <input type="checkbox"/> (2) Private Well <input type="checkbox"/> (3) Community		<input type="checkbox"/> (1) Yes <input checked="" type="checkbox"/> (2) No	<input type="checkbox"/> (4) Swimming Pool Construction
			<input checked="" type="checkbox"/> (5) Structure Addition to Property Type: _____
			<input type="checkbox"/> (6) Mobile Home Relocation

SECTION A - System on Record

<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	Existing On-site Sewage Management System inspection records indicate that all components of the system were properly constructed and installed at the time of the original inspection.	Comments: <u>Adding to existing Garage addition 30' x 20' 4" Bedroom, Bath, Wood shop.</u>
<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	A copy of the original On-site Sewage Management System Inspection Report is attached.	
<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	Maintenance records indicate that the system has been pumped out or serviced within the last five (5) years or the system was installed within that timeframe.	
<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	A site evaluation of the system on this date revealed no evidence of system failure or of conditions which would adversely affect the functioning of the system.	
Evaluating Environmentalist:	Title:	Date:
I verify this data to be correct at the time of the evaluation. This verification shall not be construed as a guarantee of the proper functioning of this system for any given period of time. No liability is assumed for future damages that may be caused by malfunction.		

SECTION B - System Not on Record

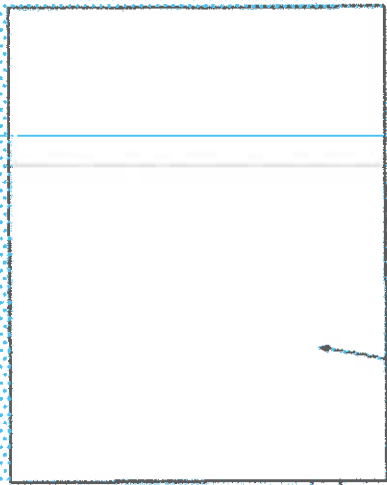
<input checked="" type="checkbox"/> (1) Yes	No inspection records are on file showing the On-site Sewage Management System was inspected and approved at the time of the installation.	Comments: _____ _____ _____ _____ _____
<input type="checkbox"/> (1) Yes <input checked="" type="checkbox"/> (2) No	The septic tank was uncovered at the time of the evaluation and it appears to meet the required design, construction and installation criteria.	
<input type="checkbox"/> (1) Yes <input checked="" type="checkbox"/> (2) No	Documentation from a Georgia Certified Installer has been provided as to the condition of the septic tank and its respective components, certifying its design, construction, and installation criteria. A copy is attached.	
<input type="checkbox"/> (1) Yes <input checked="" type="checkbox"/> (2) No	Maintenance records indicate that the system has been pumped out or serviced within the last five (5) years or the system was installed within that timeframe.	
<input checked="" type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	A site evaluation of the system on this date revealed no evidence of system failure or of conditions which would adversely affect the functioning of the system; however, appropriateness of the sizing and installation cannot be verified since no initial inspection records exist.	
Evaluating Environmentalist:	Title:	Date:
<u>Bob</u>	<u>EHS III</u>	<u>6-24-21</u>
I verify this data to be correct at the time of the evaluation. This verification shall not be construed as a guarantee of the proper functioning of this system for any given period of time. No liability is assumed for future damages that may be caused by malfunction.		

SECTION C - System Not Approved

<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	The On-site Sewage Management System was disapproved at the time of the initial installation and is thus not considered an approved system.	Comments: _____ _____ RECEIVED JUN 24 2021 K
<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	Evaluation of the system revealed evidence of system failure or malfunction, and will therefore require corrective action in order to obtain approval of the system.	
<input type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	Evaluation of the system revealed conditions which would adversely affect the proper functioning of the system, and will therefore require corrective action in order to obtain approval of the system.	
Evaluating Environmentalist:	Title:	Date:
I verify this data to be correct at the time of the evaluation. This verification shall not be construed as a guarantee of the proper functioning of this system for any given period of time. No liability is assumed for future damages that may be caused by malfunction.		

SECTION D - Addition to Property or Relocation of Home (section completed in conjunction with A, B, or C above)

<input checked="" type="checkbox"/> (1) Yes <input type="checkbox"/> (2) No	An existing On-site Sewage Management System is located on the property listed above and has been evaluated in accordance with Section A or B above.	Comments: <u>No repair area available for drain field.</u>
<input type="checkbox"/> (1) Yes <input checked="" type="checkbox"/> (2) No	A site evaluation on this date as well as the provided information indicate that the proposed construction to home or property or that the proposed relocation of the home should not adversely affect the proper functioning of the existing system provided that no additional sewage load is added to the system for the listed size home adjacent.	
Evaluating Environmentalist:	Title:	Date:
<u>Bob</u>	<u>EHS III</u>	<u>6-24-21</u>
I verify this data to be correct at the time of the evaluation. This verification shall not be construed as a guarantee of the proper functioning of this system for any given period of time. No liability is assumed for future damages that may be caused by malfunction.		



Existing Double Boat Dock

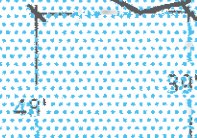
LAKE SINCLAIR
Lake Sinclair

Boat Dock Walkway

Existing Seawall

LAKE SINCLAIR

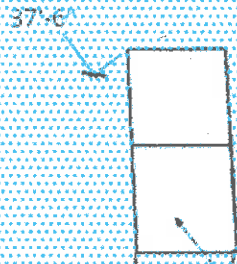
LOT F



Existing Steps to Grade

Existing Covered Porch

LOT B



Existing "A" Frame House

Existing Garage

DRIVEWAY

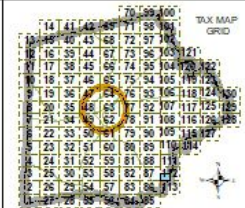
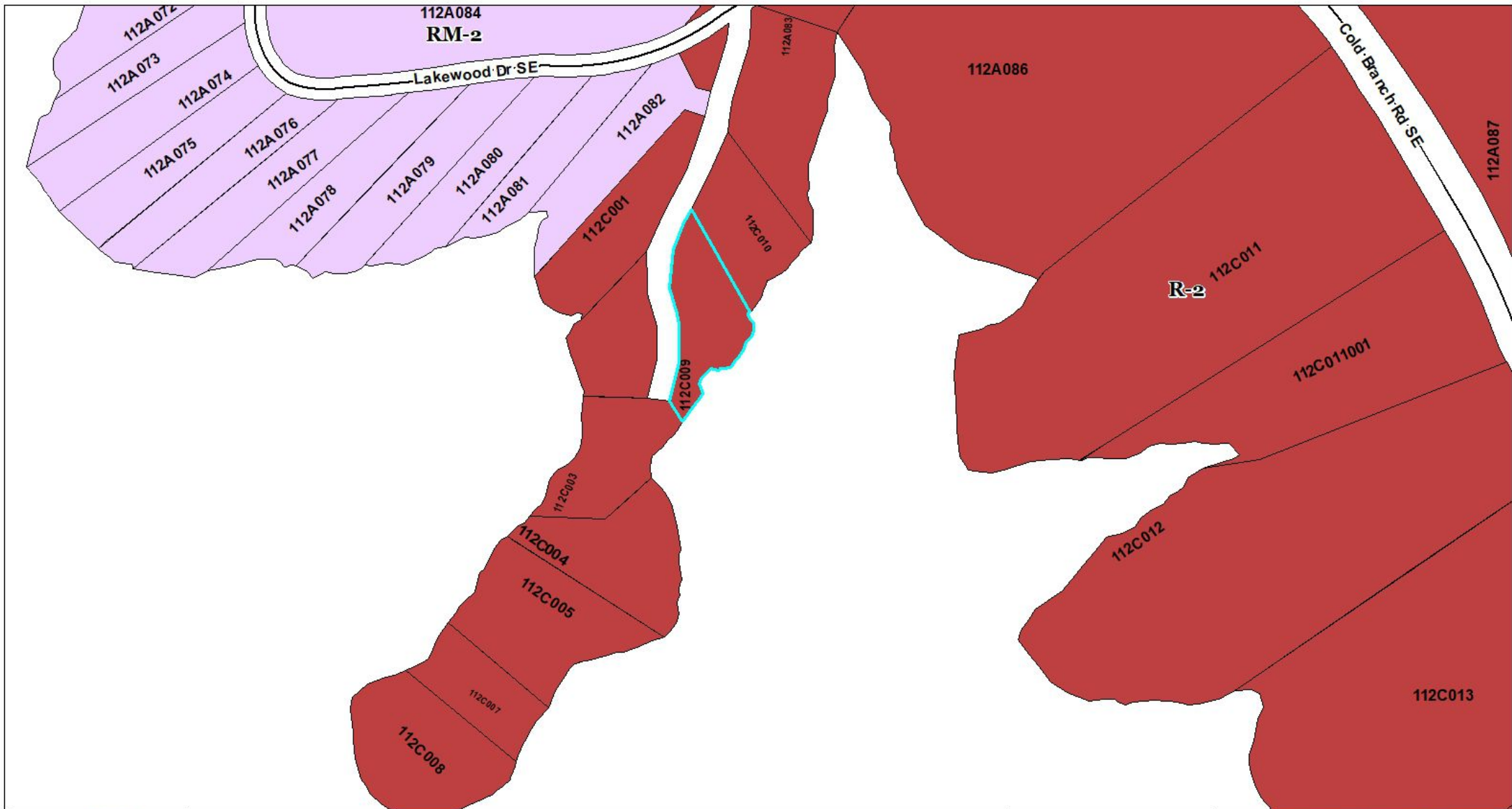
ROAD

Site Plan
348 Cold Branch Road
Lot A
Eatonton, GA 31024



RECEIVED JUN 24 2021

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- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel Hooks

GEOGRAPHIC FEATURE LEGEND

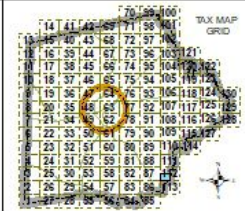
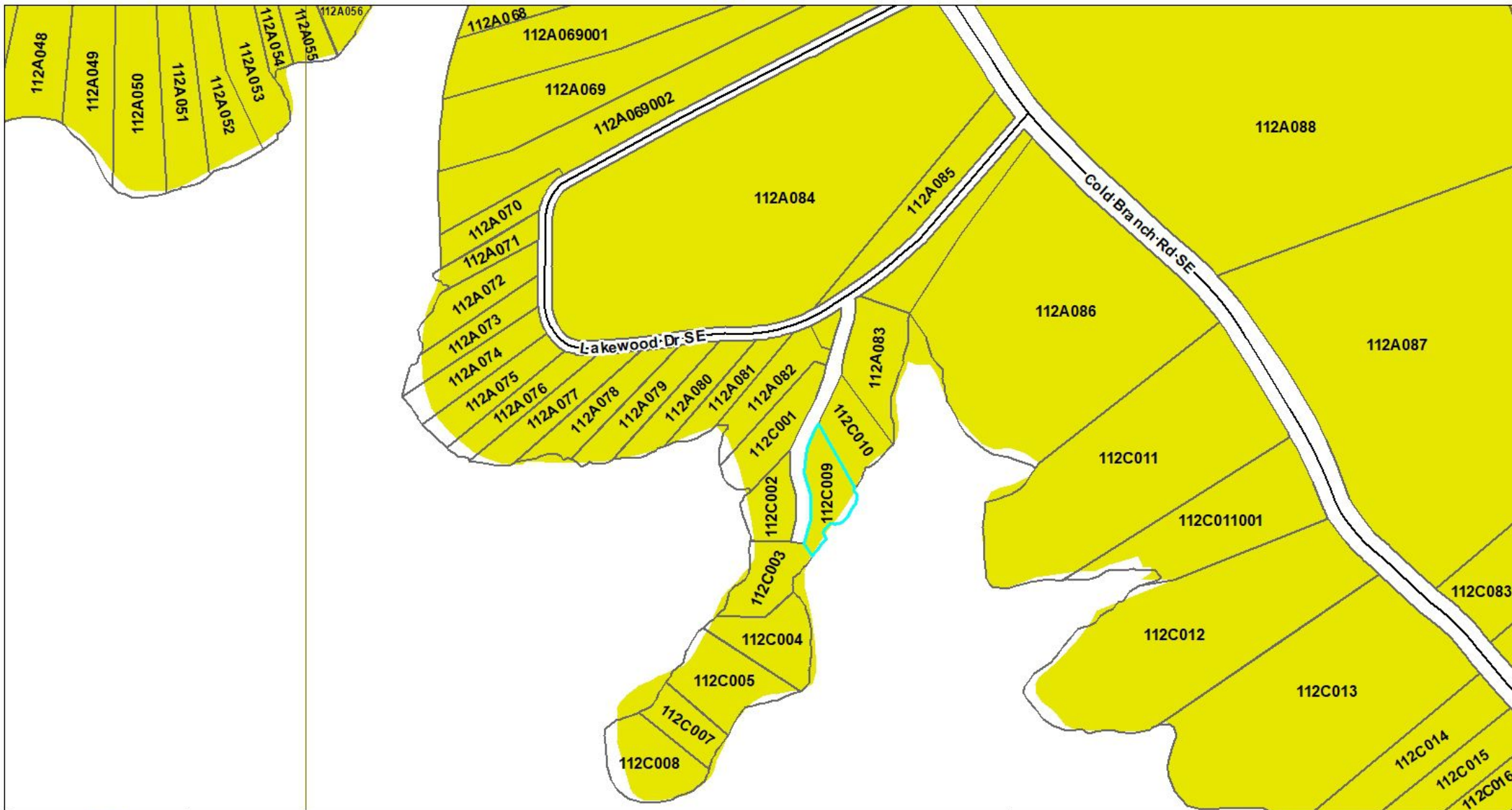
Overlay District	AG-2	C-2 CITY	IND-2 CITY	R - 1 CITY	RM-2
No Code	C-1	I-M	MHP	R - 2 CITY	RM-3
AG-1	C-1 CITY	IND-1 CITY	PUBLIC	R - 3 CITY	VILLAGE
AG-1 CITY	C-2	IND-2	PUBLIC CITY	R - 4 CITY	RM-1

MGRC
Middle Georgia Regional Commission
175 Emery Hwy
Suite C
Macon, Georgia 31217
(478) 751-6160
Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
ZONING MAPS

MAP 112C

MAP SCALE: 1" = 125' SCALE RATIO: 1:1,500 DATE: JULY 2021



GEOGRAPHIC FEATURE LEGEND

Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel_Hooks			

MGRC
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PUTNAM COUNTY, GEORGIA
FUTURE LAND USE MAPS

MAP 112C

52

MAP SCALE: 1" = 200' SCALE RATIO: 1:2,400 DATE: JULY 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

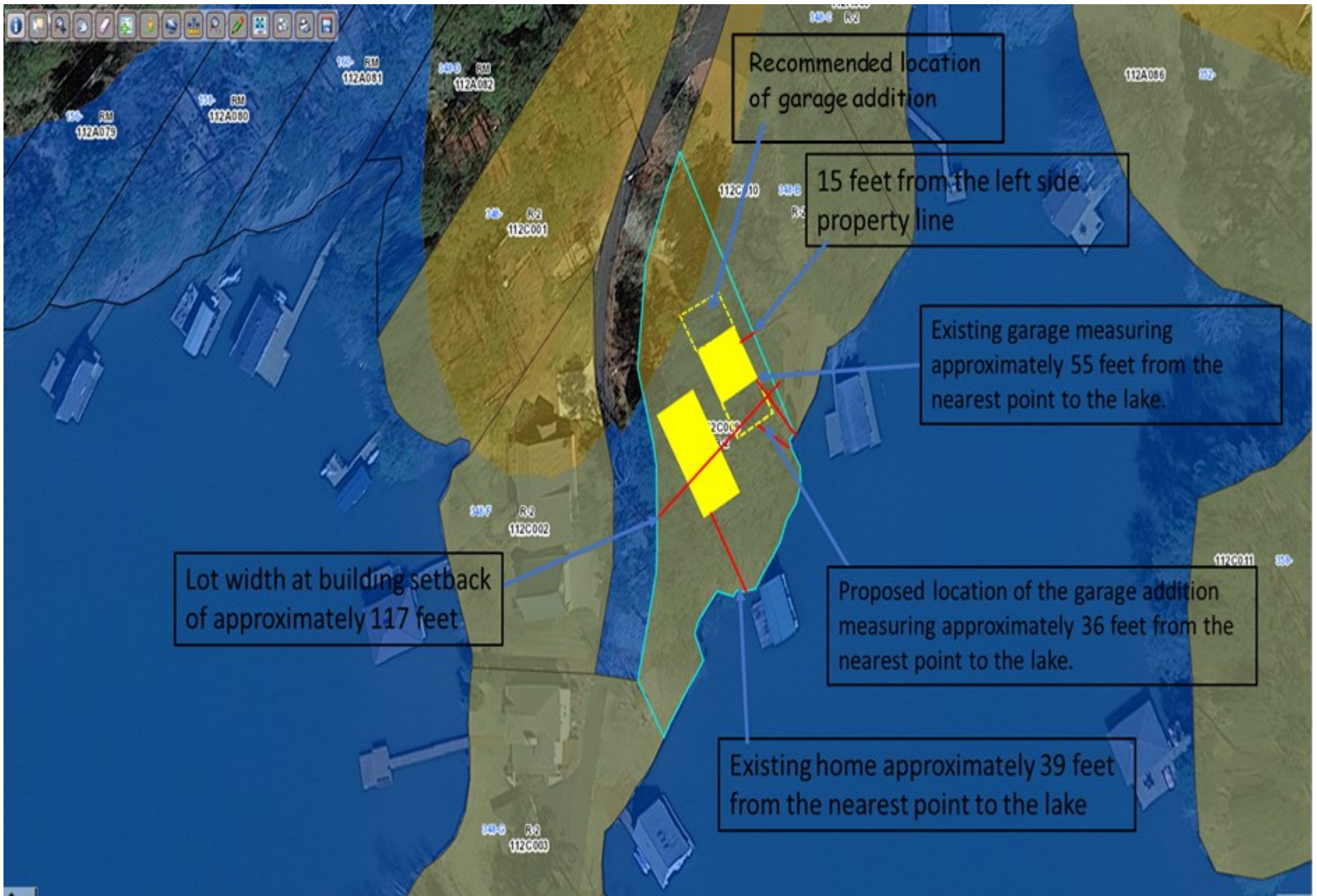
TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4]. The applicant is requesting a 27.4-foot rear yard setback variance, being 37.6 feet from the nearest point to the lake. He would like to add 406 sq.ft. to the existing 493 sq.ft. garage. This lot measures 180 feet in length and is 117 feet wide. There is an existing 1,896 sq.ft. home on the property that currently sits 39 feet from the nearest point to the lake. The existing garage currently sits 55 feet from the nearest point to the lake. Upon visitation, staff spoke with the owner and developed new options for the location of the addition. Staff suggested that the addition be placed to the right side of the garage, facing the lake, or placed in the front of the garage, facing the roadside. It was determined that the best location for the addition would be in front of the garage, therefore meeting all required setbacks. Therefore, this request does not meet the conditions stated in Putnam County, Code of Ordinances, Chapter 66-157(c). **The applicant is requesting to withdraw without prejudice.**



Staff recommendation is for approval to withdraw without prejudice at 348A Cold Branch Road [Map 112C, Parcel 009, District 4].

New Business Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

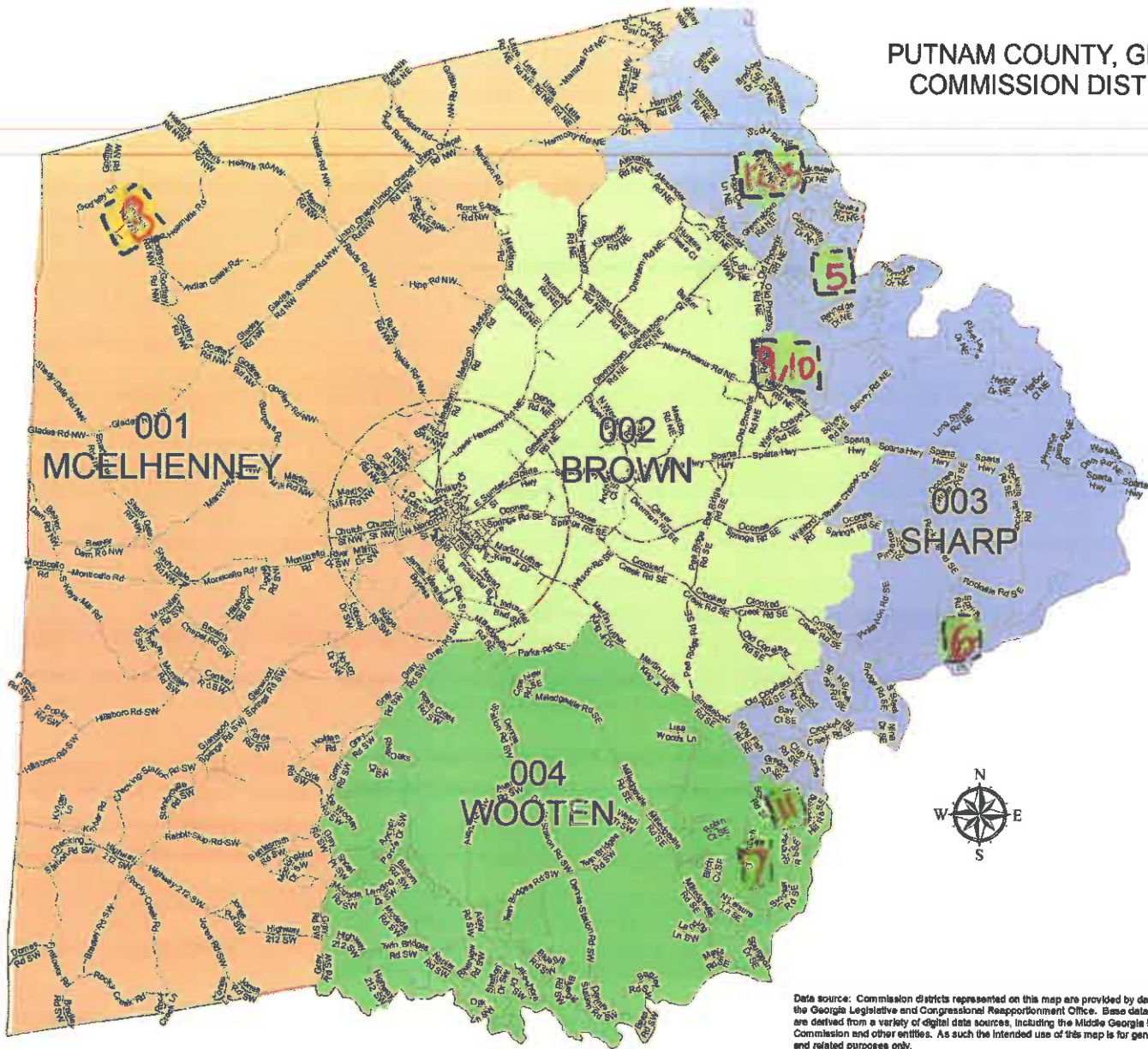
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [**Map 016, Parcel 015, District 1**].

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Data source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.26' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

APPLICATION FOR ZONING ACTION: VARIANCE

Permit # PLAN 2021-01326

Application Information

(same as owner Yes No)

Name: Mt Pleasant Baptist Church

Address: 1628 Godfrey Rd NW

Eatonton Ga 31024

Phone: 706 473-6495 Jesse Little

Email: j.little119@yahoo.com

Fax: NONE

Arterial/State Road. Yes: No:

Property Information

Address: 1628 Godfrey Rd NW

Map: 016 Parcel: 015

Presently Zoned: AG Com. District: 1

Total Acreage: 1.75

In Conservation Use: Yes No

State Waters on Property: Yes No

SETBACKS: Front: 82' Rear: 130' Lakeside: NA Left: 100+ Right: 10

TOTAL SQ. FT. (existing structure) 3600 TOTAL FOOTPRINT (proposed structure) 2297

LOT LENGTH (the total length of the lot) 245.18

LOT WIDTH AT BUILDING SETBACK (how wide the lot is where you are proposing to build) 308.80

REASON FOR REQUEST: We would like to add classrooms pastor's study and kitchen to existing building. The addition cannot be on left side due to parking area. We cannot expand back 10 feet on the rear of building due to drain field and septic tank. Need 10 feet variance on right side. No other options.

SUPPORTING INFORMATION ATTACHED TO APPLICATION:

RECORDED PLAT: LETTER OF AGENCY LETTER OF INTENT Variance on right side

SITE APPROVAL/LAYOUT OF SEPTIC SYSTEM FROM HEALTH DEPARTMENT No other options.

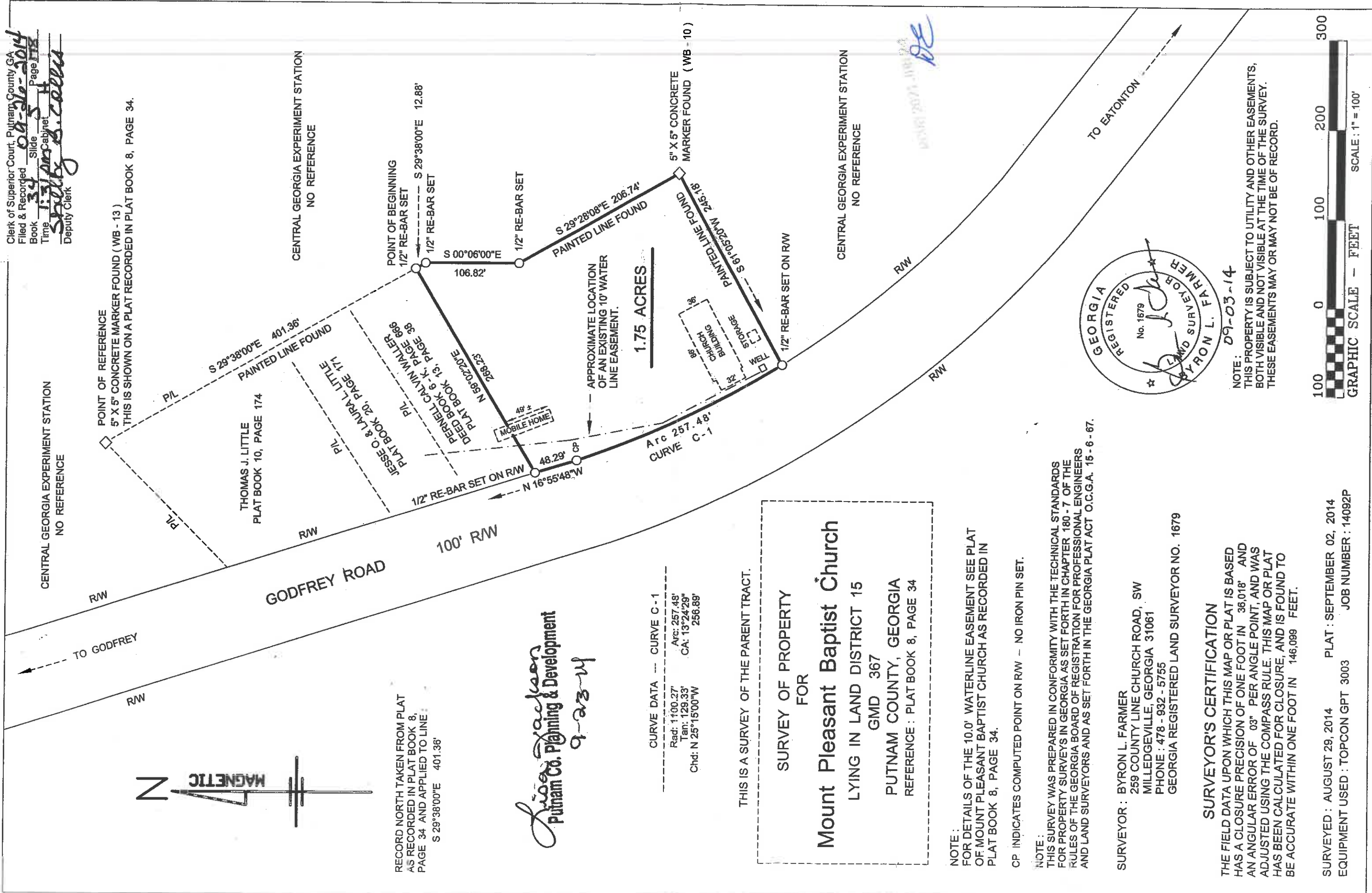
PROPOSED LOCATION MUST BE STAKED OFF

*SIGNATURE OF APPLICANT: Jesse O. Little DATE: 6-22-21 and cemetery

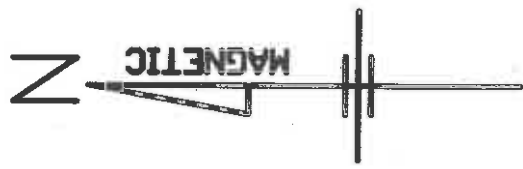
*APPLICANT HEREBY AFFIRMS THAT APPLICANT IS THE PROPERTY OWNER OR HAS THE LEGAL AUTHORITY TO SIGN THIS FORM ON OWNER'S BEHALF, AND APPLICANT AGREES TO INDEMNIFY AND HOLD PUTNAM COUNTY/CITY OF EATONTON HARMLESS IN THE EVENT IT IS DETERMINED APPLICANT DOES NOT HAVE SUCH LEGAL AUTHORITY.

DATE FILED	<u>6/24/21</u>	FEE: \$	<u>220.00</u>	CK. NO.	<u>8578</u>	CASH	<input type="checkbox"/>	C. CARD	<input type="checkbox"/>	INITIALS	_____
RECEIPT #	_____										
DATE OF NEWSPAPER AD:	_____										
DATE SIGN POSTED:	_____										
PLANNING & ZONING HEARING:	_____					RESULT:	_____				
COMMISSIONERS/CITY COUNCIL HEARING:	_____					RESULT:	_____				

RECEIVED 06/24/21 2:00 PM
[Signature]



POINT OF REFERENCE
 5" X 5" CONCRETE MARKER FOUND (WB - 13)
 THIS IS SHOWN ON A PLAT RECORDED IN PLAT BOOK 8, PAGE 34.



RECORD NORTH TAKEN FROM PLAT
 AS RECORDED IN PLAT BOOK 8,
 PAGE 34 AND APPLIED TO LINE:
 S 29°38'00"E 401.36'

Shelby B. Coles
 Putnam Co. Planning & Development
 9-23-14

CURVE DATA -- CURVE C-1
 Rad: 1100.27' Arc: 257.48'
 Tan: 129.33' CA: 13°24'29"
 Chd: N 25°15'00"W 256.89'

THIS IS A SURVEY OF THE PARENT TRACT.

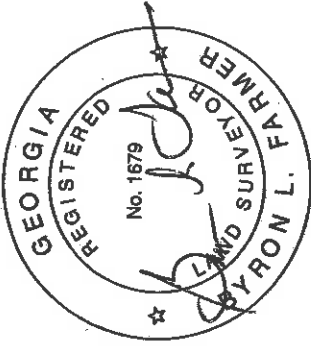
SURVEY OF PROPERTY
 FOR
Mount Pleasant Baptist Church
 LYING IN LAND DISTRICT 15
 GMD 367
 PUTNAM COUNTY, GEORGIA
 REFERENCE: PLATBOOK 8, PAGE 34

NOTE:
 FOR DETAILS OF THE 10.0' WATERLINE EASEMENT SEE PLAT
 OF MOUNT PLEASANT BAPTIST CHURCH AS RECORDED IN
 PLAT BOOK 8, PAGE 34.

CP INDICATES COMPUTED POINT ON RW -- NO IRON PIN SET.

NOTE:
 THIS SURVEY WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS
 FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE
 RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS
 AND LAND SURVEYORS AND AS SET FORTH IN THE GEORGIA PLAT ACT O.C.G.A. 15-6-67.

SURVEYOR: BYRON L. FARMER
 259 COUNTY LINE CHURCH ROAD, SW
 MILLEDGEVILLE, GEORGIA 31061
 PHONE: 478 - 932 - 5755
 GEORGIA REGISTERED LAND SURVEYOR NO. 1679

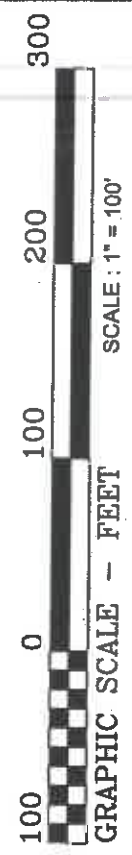


SURVEYOR'S CERTIFICATION

THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED
 HAS A CLOSURE PRECISION OF ONE FOOT IN 36,018' AND
 AN ANGULAR ERROR OF 03" PER ANGLE POINT, AND WAS
 ADJUSTED USING THE COMPASS RULE. THIS MAP OR PLAT
 HAS BEEN CALCULATED FOR CLOSURE, AND IS FOUND TO
 BE ACCURATE WITHIN ONE FOOT IN 146,099 FEET.

NOTE:
 THIS PROPERTY IS SUBJECT TO UTILITY AND OTHER EASEMENTS,
 BOTH VISIBLE AND NOT VISIBLE AT THE TIME OF THE SURVEY.
 THESE EASEMENTS MAY OR MAY NOT BE OF RECORD.

SURVEYED: AUGUST 29, 2014 PLAT: SEPTEMBER 02, 2014
 EQUIPMENT USED: TOPCON GPT 3003 JOB NUMBER: 14092P





PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

OWNER AUTHORIZATION

Submission of inaccurate information may be cause for denial of the requestor, if discrepancies are realized after the approval for the petition or issuance of the relevant local permits, cause for the revocation of the approval and any related permits by the Board of Commissioners. The following documents must be submitted with this application before the application deadline.

Incomplete applications will not be accepted or processed.

1. Payment of appropriate fee (please make checks payable to Putnam County Planning & Development)
2. Plat or site plan, drawn to scale, showing the locations of structures or uses for which the variance is sought, as well as the relationship to existing structures. Dimensions must be included.
3. A written description of your request in a letter format addressed to Putnam County Planning & Development. All required criteria (attached) must be addressed in the written description. Specific sections of the ordinance that would cause hardship must be identified, along with a description of the particular hardship.

The documents listed above are the minimum requirements. Staff may require additional documentation depending on the nature of the Variance Request. All submitted documents are public records and subject to Opens Records Law.


I have reviewed the application procedures and all applicable criteria and regulations in the Putnam County Zoning Ordinance for the above-requested Variance Request. I hereby claim that this application fulfills said procedures and meets the criteria for approval.

Applicant Signature: *James O. Little* Date: 6-22-21

I swear that I am the owner of the property listed above. I authorize *James O. Little* (applicant's name) to apply for a zoning action (zoning map amendment, conditional use, variance) at the above listed address, as identified on the attached application.

James O. Little
Owner signature

Chenetta E. Thompson
Notary Public
Sworn and subscribed before me this
24th day of June 2021





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Applicant Signature:

Mr. Pleasant Pastorek Cook
Jesse O. Kuller

Date:

6-22-21

I swear that I am the owner of the property listed above. I authorize *Jesse O. Kuller* (applicant's name) to apply for a zoning action (zoning map amendment, conditional use, variance) at the above listed address, as identified on the attached application.

Raymond Little

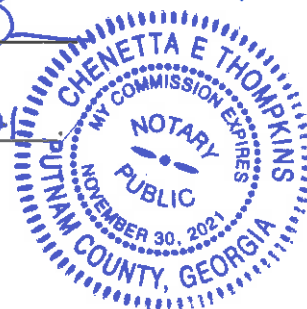
Owner signature

Chenetta E. Thompkins

Notary Public

Sworn and subscribed before me this

24th day of *June* 20 *21*





PUTNAM COUNTY PLANNING & DEVELOPMENT

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Applicant Signature: _____

Wt Pleasant Bayliff
Jesse O. Hill

Date: _____

REC'D 2021 JUN 24
6-22-21

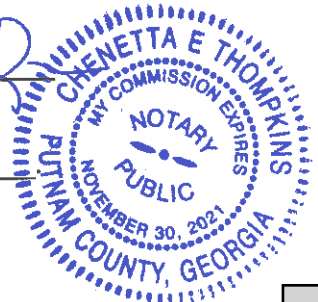
I swear that I am the owner of the property listed above. I authorize _____ (applicant's name) to apply for a zoning action (zoning map amendment, conditional use, variance) at the above listed address, as identified on the attached application.

Colvin P. Waddy
Owner signature

Cherette E Thompson
Notary Public

Sworn and subscribed before me this

24th day of June 2021





PUTNAM COUNTY PLANNING & DEVELOPMENT

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Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

CAMPAIGN CONTRIBUTION DISCLOSURE

Has applicant made \$250 or more campaign contributions to a local government official within two years immediately preceding the filing of this application? Yes No If yes, please complete contribution affidavit.

If the business of the applicant or owner, or the applicant or owner individually, have made contributions or gifts having a total value of over \$250 or more to any elected official in Putnam County within two (2) years preceding the date of this application, the following must be completed:

Name of Recipient	Date	Contribution Amount	Description of Gift	Value of Gift

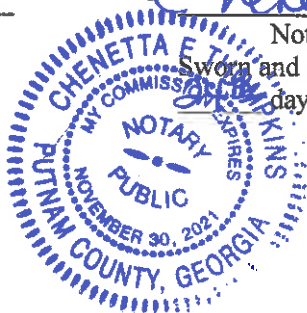
Name of Business: _____

Business Ownership Interest: _____ Property Ownership Interest: _____

I hereby depose and say that all statements herein are true, correct, and complete tot the best of my knowledge and belief.

Raymond Little
Owner or Applicant Signature

Chenetta E. Jenkins
Notary Public



Sworn and subscribed before me this _____ day of June 2021.

RL



PUTNAM COUNTY PLANNING & DEVELOPMENT

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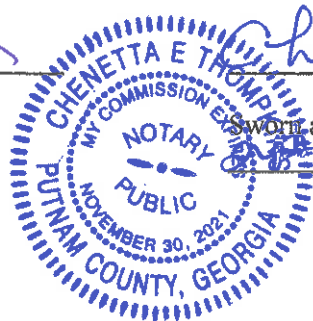
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Name of Business: _____

Business Ownership Interest: _____ Property Ownership Interest: _____

I hereby depose and say that all statements herein are true, correct, and complete tot the best of my knowledge and belief.

Colvin P. Walker
Owner or Applicant Signature



Chenetta E. Thompson
Notary Public

sworn and subscribed before me this _____ day of June 2021.

REC'D 2021 JUN 21 RE



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnameountyga.us

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Name of Business: _____

Business Ownership Interest: _____ Property Ownership Interest: _____

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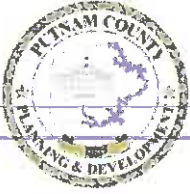
Reuben Little
Owner or Applicant Signature

Chenetta Thompson
Notary Public



Sworn and subscribed before me this
day of June 2021.

DE



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

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I hereby depose and say that all statements herein are true, correct, and complete to the best of my knowledge and belief.

M. Pleasant Baptist Church
Owner or Applicant Signature

Chenetta E. Thompkins
Notary Public

Jesse Little

Sworn and subscribed before me this
24th day of June 2021





Mt. Pleasant Baptist Church

1628 Godfrey Road
Eatonton, GA 31024
706-623-2023

Mt. Pleasant Baptist Church
1628 Godfrey Rd. NW
Eatonton, Ga 31024

June 22, 2021


Putnam County Planning & Development
Director Lisa Jackson
117 Putnam Dr. Suite B
Eatonton, Ga 31024

Dear Putnam County Planning & Development:

We the members of the Mt. Pleasant Baptist Church own the property located at 1628 Godfrey Rd. NW and plan to build an addition to our current building. We are requesting a 10 feet variance on the right side of the building. Our current fellowship hall, kitchen and pastor's study are very small. We do not have any classrooms. The (2300 square feet) addition will include classrooms, a larger kitchen, fellowship hall and pastor's study. This addition will help us meet our needs for future growth.

We have some challenges on constructing the addition due to location of current building. The addition cannot be built on the left side because it will significantly reduce the parking area and parking will have to be beside the street and this will be unsafe. The addition can only be extended 10 feet on the rear due to drain field and septic tank. The church cemetery is only a few feet below the septic tank and drain field. We have no other options but to have the majority of the addition to be constructed on the right side of building.

Please contact me if any further information is needed. Thanking you in advance for your consideration.


Deacon Jessie Little
Church Administrator
706-473-6495 cell

REC'D 2021 JUN 24



**Georgia Department of Human Resources
APPLICATION FOR CONSTRUCTION PERMIT AND SITE APPROVAL
For On-Site Sewage Management System**

COUNTY: PUTNAM	SUBDIVISION:	LOT NUMBER:	BLOCK:
PROPERTY LOCATION (STREET ADDRESS): 1628 Godfrey Rd NW Eatonton Ga 31024			

I hereby apply for a construction permit to install an On-Site Sewage Management System and agree that the system will be installed to conform to the requirements of the rules of the Georgia Department of Human Resources, Chapter 290-5-26. By my signature, I understand that final inspection is required and will notify the County Health Department upon completion of construction and before applying final cover material to the system.

PROPERTY OWNER'S/AUTHORIZED AGENT'S SIGNATURE: <i>[Signature]</i>	DATE: 5/26/2021
PROPERTY OWNER'S NAME: Mt Pleasant Baptist Church	PHONE NUMBER: 706 485-9911
PROPERTY OWNER'S ADDRESS: 1628 Godfrey Rd NW Eatonton Ga 31024	ALTERNATE PHONE NUMBER: 706 473-6495
AUTHORIZED AGENT'S NAME (IF OTHER THAN OWNER): <i>[Signature]</i>	RELATIONSHIP TO OWNER: Church administrator

Section A - General Information

1. REQUIRED SETBACK FROM RECEIVING BODIES (wells, lakes, sinkholes, streams, etc.) EVALUATED: (1) Yes (2) No	5. TYPE OF STRUCTURE (single/multi-family residence, commercial, restaurant, etc.): * Commercial	9. SOIL SERIES (e.g. Pacolet, Orangeburg, etc.): φ
2. WATER SUPPLY: (2) Private (1) Public (3) Community	6. WATER USAGE BY: (1) Bedroom Numbers (2) Gallons per Day	10. PERCOLATION RATE / HYDRAULIC LOADING RATE: φ
3. SEWAGE SYSTEM TO BE PERMITTED: (3) Addition (1) New (2) Repair	7. NO. OF BEDROOMS / GPD: NA	11. RESTRICTIVE SOIL HORIZON DEPTH (INCHES): φ
4. LOT SIZE (SQUARE FEET / ACRES): 2 acres	8. LEVEL OF PLUMBING OUTLET: (1) Ground Level (2) Basement (3) Above Ground Level	12. SOIL TEST PERFORMED BY: ROUND 21 JUN 24

Section B - Primary / Pretreatment

1. DISPOSAL METHOD: (1) Septic Tank (2) Privy (3) Aerobic Unit (4) Other:	3. SEPTIC TANK CAPACITY (GALLONS): 1000	4. AEROBIC UNIT CAPACITY (GALLONS):	5. DOSING TANK CAPACITY (GALLONS):	6. GREASE TRAP CAPACITY (GALLONS):
2. GARBAGE DISPOSAL: (2) No (1) Yes	7. PRESCRIBED TANK LOCATION / REMARKS: Moving tank, Crush, fill, old tank			

Section C - Secondary Treatment

1. ABSORPTION FIELD DESIGN: (4) Distribution Box (1) Level Field (2) Serial (3) Drip (5) Mound / Area Fill	4. TOTAL ABSORPTION FIELD SQUARE FEET REQUIRED: 0	7. NUMBER OF ABSORPTION TRENCHES:
2. ABSORPTION FIELD PRODUCT: φ	5. TOTAL ABSORPTION FIELD LINEAR FEET REQUIRED: 0	8. SPECIFIED LENGTH OF ABSORPTION TRENCHES:
3. AGGREGATE DEPTH (inches):	6. DEPTH OF ABSORPTION TRENCHES (range in inches): 0-10	9. DISTANCE BETWEEN ABSORPTION TRENCHES:

② Back wall to extend 10 ft. ③ Reconnect new tank to existing drainfield
Noted adding classrooms, kitchen, fellowship hall

Permit

A PERMIT IS HEREBY GRANTED TO INSTALL THE ON-SITE SEWAGE MANAGEMENT SYSTEM DESCRIBED ABOVE. THIS PERMIT IS NOT VALID UNLESS PROPERLY SIGNED BELOW. THIS PERMIT EXPIRES TWELVE (12) MONTHS FROM DATE OF ISSUANCE.

ANY GRADING, FILLING, OR OTHER LANDSCAPING SUBSEQUENT TO ISSUANCE OF A PERMIT MAY RENDER PERMIT VOID. FAILURE TO FOLLOW SITE PLAN MAY RENDER PERMIT VOID. ANY GRADING, FILLING, OR OTHER LANDSCAPING SUBSEQUENT TO FINAL INSPECTION BY COUNTY HEALTH DEPARTMENT, WHICH ADVERSELY AFFECTS THE FUNCTION OF THE ON-SITE SEWAGE MANAGEMENT SYSTEM, MAY RENDER APPROVAL VOID. INSTALLATION CONTRACTOR IS RESPONSIBLE FOR LOCATING PROPER DISTANCES FROM BUILDINGS, WELLS, PROPERTY LINES, ETC.

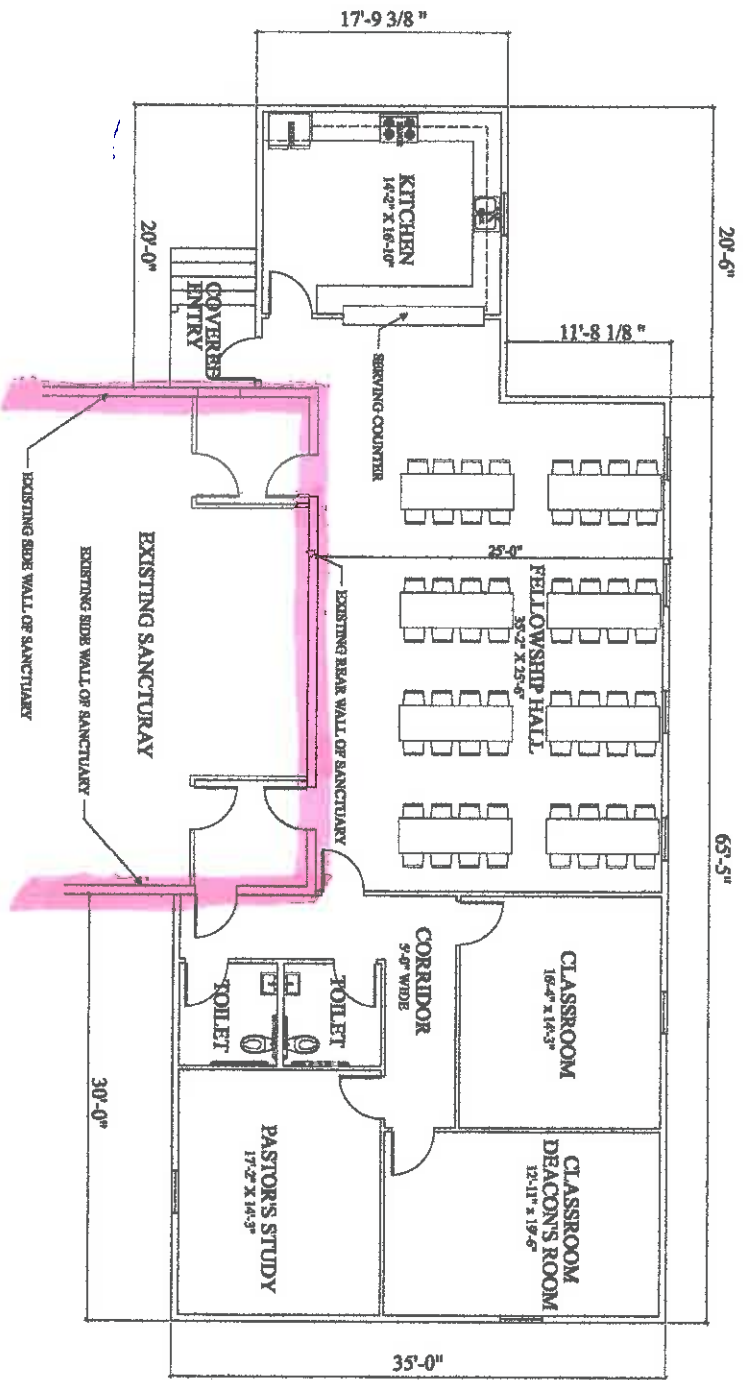
ISSUANCE OF A CONSTRUCTION PERMIT FOR AN ON-SITE SEWAGE MANAGEMENT SYSTEM, AND SUBSEQUENT APPROVAL OF SAME BY REPRESENTATIVES OF THE GEORGIA DEPARTMENT OF HUMAN RESOURCES OR COUNTY BOARD OF HEALTH SHALL NOT BE CONSTRUED AS A GUARANTEE THAT SUCH SYSTEMS WILL FUNCTION SATISFACTORILY FOR A GIVEN PERIOD OF TIME; FURTHERMORE, SAID REPRESENTATIVE(S) DO NOT, BY ANY ACTION TAKEN IN EFFECTING COMPLIANCE WITH THESE RULES, ASSUME ANY LIABILITY FOR DAMAGES WHICH ARE CAUSED, OR WHICH MAY BE CAUSED, BY THE MALFUNCTION OF SUCH SYSTEM.

1. SITE APPROVED AS SPECIFIED ABOVE:

(1) Yes (2) No

APPROVING ENVIRONMENTALIST: <i>[Signature]</i>	TITLE: EHS County Manager	DATE: 5/26/2021	CONSTRUCTION PERMIT NUMBER: 21-118
---	-------------------------------------	---------------------------	--

Existing Building



FLOOR PLAN

SCALE 1/4" = 1'-0"

- 1,247 SQUARE FT. KITCHEN AND FELLOWSHIP HALL (PHASE 1)
- 1,050 SQUARE FT. FOR CLASSROOMS, PASTOR'S STUDY AND TOILETS (PHASE 2)
- 2,297 TOTAL SQUARE FT. NEW ADDITIONS

ALTERATIONS AND ADDITIONS TO
MT. PLEASANT BAPTIST CHURCH
 1628 GODFREY RD. EASTONTON, GA.





- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel Hooks

GEOGRAPHIC FEATURE LEGEND

Zoning	
Overlay District	AG-2
No Code	C-1
AG-1	C-1 CITY
AG-1 CITY	C-2
IND-2 CITY	I-M
MHP	IND-1 CITY
IND-2	PUBLIC
PUBLIC CITY	R - 4 CITY
R - 1 CITY	R-1
R - 2 CITY	R-2
R - 3 CITY	R-3
R - 4 CITY	R-1R
RM-1	RM-2
RM-3	VILLAGE



Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgia.org

**PUTNAM COUNTY, GEORGIA
 ZONING MAPS**



MAP 016

70



- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel_Hooks

GEOGRAPHIC FEATURE LEGEND

- | | | |
|----------------------|------------------------------|--|
| Agriculture/Forestry | Mixed Use | Residential |
| Commercial | Park/Recreation/Conservation | Transportation/Communication/Utilities |
| Industrial | Public/Institutional | Undeveloped/Vacant |



Middle Georgia Regional Commission
175 Emery Hwy
Suite C
Macon, Georgia 31217

(478) 751-6160

Web:
www.middlegeorgia.org

**PUTNAM COUNTY, GEORGIA
FUTURE LAND USE MAPS**



MAP 016

71



PUTNAM COUNTY PLANNING & DEVELOPMENT

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Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

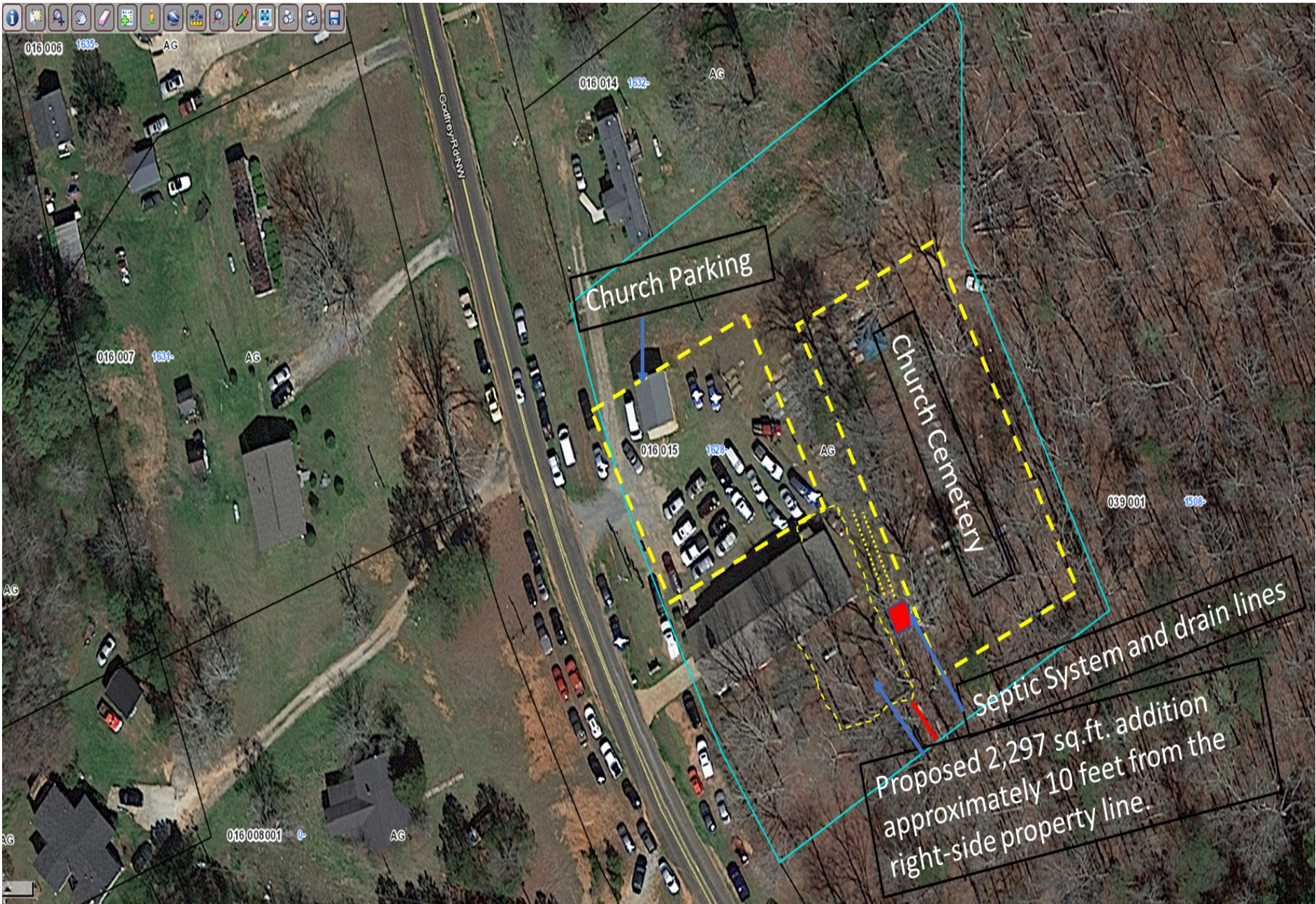
TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [**Map 016, Parcel 015, District 1**]. The applicant is requesting a 10-foot side yard setback variance, being 10 feet from the right-side property line. They are seeking to add 2,297 sq. ft. to the existing 3,168 sq. ft. church. The addition will increase the kitchen size and provide the church with space for classrooms, restrooms, a pastor's study, and a fellowship hall. The current structure is 3,168 sq. ft and was built in 1878. The parcel measures approximately 245 feet in length and has a lot width of approximately 308 feet at building setback. Although this lot is considered conforming, it has very little buildable area due to the location of the existing church, parking lot, cemetery, and septic system. The church is approximately 46 feet from the front property line, the parking lot is located directly to the left side, and the septic system and the cemetery is behind the building. Therefore, the addition can only extend 10 feet towards the rear of the church because of the location of the cemetery, drain field, and septic tank. Thus, leaving the right side of the property the only available avenue for improvement. Hence, this request meets the conditions stated in the Putnam County Code of Ordinances, Chapter 66-157(C).



Staff recommendation is for approval of a 10-foot side yard setback variance, being 10 feet from the right-side property line at 1628 Godfrey Road [Map 016, Parcel 015, District 1].

New Business Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

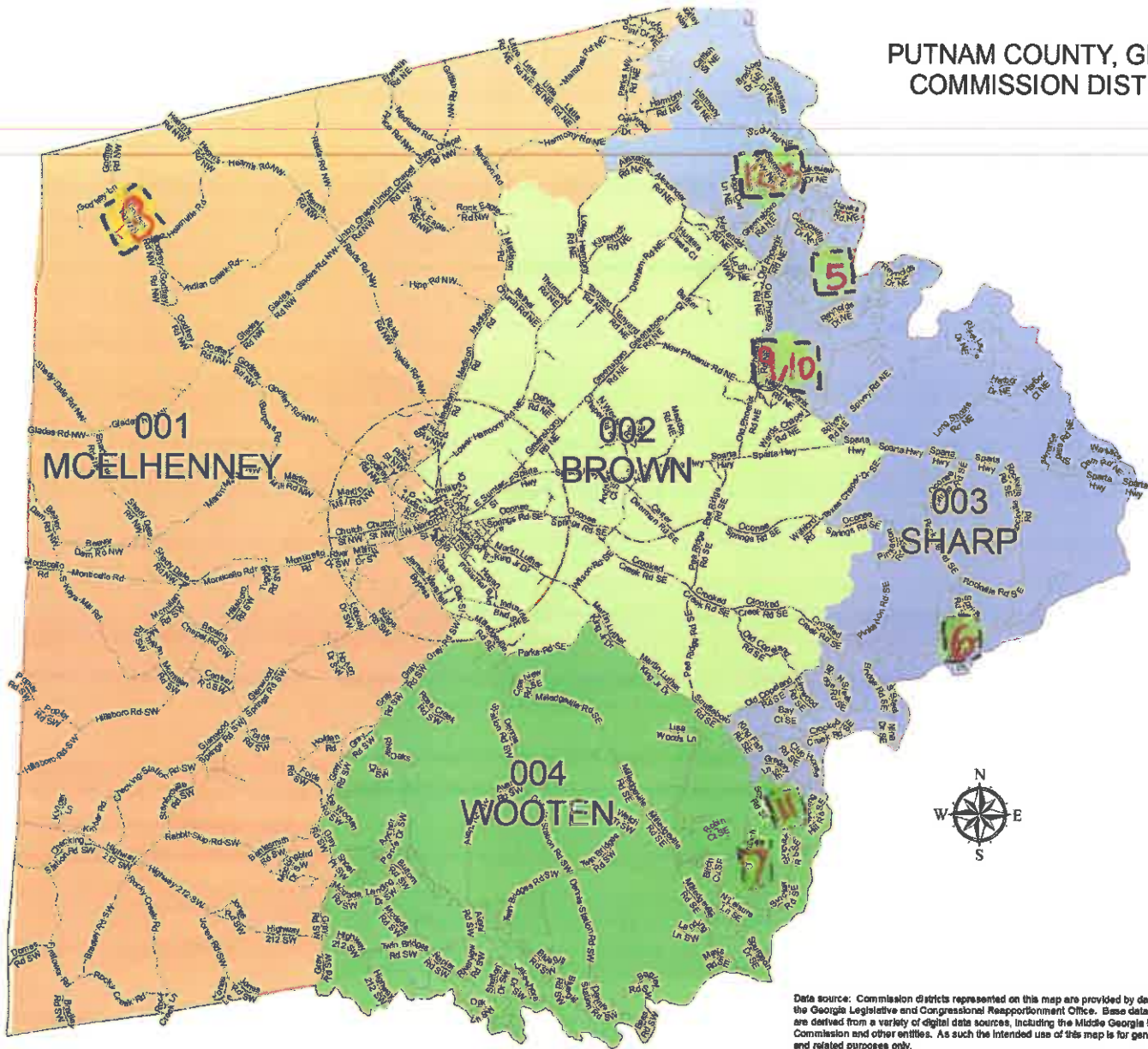
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. **[Map 106, Parcel 002, District 2]**.

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Data source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.26' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

APPLICATION FOR ZONING ACTION: VARIANCE

Application Information

(same as owner Yes No)

Name: SDH Atlanta LLC

Address: e/o J.V. Dell

1040 Founders Row, Ste B
Greensboro, GA 30642

Phone: 706-453-4800

Email: jay.dell@jvdelllaw.com

Fax: 706-453-4488

Arterial/State Road. Yes: _____ No:

Property Information

Address: Old Phoenix Road

Map: 106 Parcel: 002

Presently Zoned: AG 1* Com. District: 32 732

Total Acreage: 29.5 * Pending application to rezone to R-PUC

In Conservation Use: Yes No

State Waters on Property: Yes No

SETBACKS: Front: N/A Rear: N/A Lakeside: N/A Left: 10' Right: 10'

TOTAL SQ. FT. (existing structure) N/A TOTAL FOOTPRINT (proposed structure) N/A

LOT LENGTH (the total length of the lot) Varies

LOT WIDTH AT BUILDING SETBACK (how wide the lot is where you are proposing to build) Varies

REASON FOR REQUEST: New R-PUD zoning class requires setbacks. Setbacks are usually not required in PUD zoning. New setbacks will comply with adjacent subdivision - Phoenix Crossing.

SUPPORTING INFORMATION ATTACHED TO APPLICATION:

RECORDED PLAT: LETTER OF AGENCY LETTER OF INTENT

SITE APPROVAL/LAYOUT OF SEPTIC SYSTEM FROM HEALTH DEPARTMENT N/A

PROPOSED LOCATION MUST BE STAKED OFF

*SIGNATURE OF APPLICANT: J.V. Dell DATE: 6/24/2021
Attorney for SDH Atlanta, LLC

*APPLICANT HEREBY AFFIRMS THAT APPLICANT IS THE PROPERTY OWNER OR HAS THE LEGAL AUTHORITY TO SIGN THIS FORM ON OWNER'S BEHALF, AND APPLICANT AGREES TO INDEMNIFY AND HOLD PUTNAM COUNTY/CITY OF EATONTON HARMLESS IN THE EVENT IT IS DETERMINED APPLICANT DOES NOT HAVE SUCH LEGAL AUTHORITY.

DATE FILED <u>6/25/21</u>	FEE: \$ <u>220.00</u>	CK. NO. <u>7240</u>	CASH <input type="checkbox"/>	C. CARD <input type="checkbox"/>	INITIALS <u>JDW</u>
RECEIPT # _____					
DATE OF NEWSPAPER AD: _____	DATE SIGN POSTED: _____				
PLANNING & ZONING HEARING: _____	RESULT: _____				
COMMISSIONERS'/CITY COUNCIL HEARING: _____	RESULT: _____				

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Letter of Intent

June 24, 2021

Putnam County Planning and Development
Attn: Lisa Jackson, Director
117 Putnam Drive, Ste. B
Eatonton, GA 3124

RE: Variance Application of SDH Atlanta LLC
Current Owner: Maddox Family Partnership LLLP
Tax Map Parcel: 106 002
Address: Old Phoenix Road, Eatonton, GA

Dear Lisa:

Simultaneously herewith, we are filing an application to rezone the above referenced property from AG-1 to R-PUD. The new R-PUD zoning class requires 20' side setbacks. In PUD zoning classification setbacks are normally not required, so the developer can achieve the full purpose of the PUD – a planned community. As stated in our rezoning application, the intent of this rezoning is to develop the property in the exact same manner as the adjacent subdivision, Phoenix Crossing. The plan for this community is to be an extension of Phoenix Crossing and develop a similar product at a similar price point. In order to achieve this goal a side setback variance is required. The current zoning of Phoenix Crossing allows 10' side setbacks. We are requesting a variance to allow 10' side setbacks to match that of the adjacent development, Phoenix Crossing.

Thank you for your consideration and we look forward to working with and in Putnam County, GA.

Sincerely,

SDH Atlanta, LLC

By: *Tina Hughes*
Name: Tina Hughes

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SIGNATURE CERTIFICATE



REFERENCE NUMBER

925D1100-DF1A-49F0-B203-2D4A7B87F827

TRANSACTION DETAILS

Reference Number
925D1100-DF1A-49F0-B203-2D4A7B87F827

Transaction Type
Signature Request

Sent At
06/24/2021 15:01 EDT

Executed At
06/24/2021 15:43 EDT

Identity Method
email

Distribution Method
email

Signed Checksum
23ccd522d27ac7c7840f4da4765361cc482521b11fcad5e1756f99623cf17d58

Signer Sequencing
Disabled

Document Passcode
Disabled

DOCUMENT DETAILS

Document Name
Loi 210624 Variance

Filename
loi_210624_variance.pdf

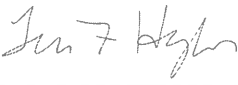
Pages
1 page

Content Type
application/pdf

File Size
63.8 KB

Original Checksum
d6a39a21284ba160673b12130a0f3afb27581842427d00f1cf9e193c3da3ec96

SIGNERS

SIGNER	E-SIGNATURE	EVENTS
<p>Name Tina Hughes</p> <p>Email thughes@smithdouglas.com</p> <p>Components 1</p>	<p>Status signed</p> <p>Multi-factor Digital Fingerprint Checksum 8d3a80620e0713672d487b594e2d048bcef2fd81cf4fb5c11065d4c7be870f49</p> <p>IP Address 166.205.218.30</p> <p>Device Mobile Safari via iOS</p> <p>Drawn Signature </p> <p>Signature Reference ID BBA119F4</p> <p>Signature Biometric Count 219</p>	<p>Viewed At 06/24/2021 15:42 EDT</p> <p>Identity Authenticated At 06/24/2021 15:43 EDT</p> <p>Signed At 06/24/2021 15:43 EDT</p>

AUDITS

TIMESTAMP	AUDIT
06/24/2021 15:01 EDT	Jay Dell (jay.dell@jvdelllaw.com) created document 'loi_210624_variance.pdf' on Chrome via Windows from 64.191.61.149.
06/24/2021 15:01 EDT	Tina Hughes (thughes@smithdouglas.com) was emailed a link to sign.
06/24/2021 15:42 EDT	Tina Hughes (thughes@smithdouglas.com) viewed the document on Mobile Safari via iOS from 166.205.218.30.
06/24/2021 15:43 EDT	Tina Hughes (thughes@smithdouglas.com) authenticated via email on Mobile Safari via iOS from 166.205.218.30.
06/24/2021 15:43 EDT	Tina Hughes (thughes@smithdouglas.com) signed the document on Mobile Safari via iOS from 166.205.218.30.



PUTNAM COUNTY PLANNING & DEVELOPMENT

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OWNER AUTHORIZATION

Submission of inaccurate information may be cause for denial of the requestor, if discrepancies are realized after the approval for the petition or issuance of the relevant local permits, cause for the revocation of the approval and any related permits by the Board of Commissioners. The following documents must be submitted with this application before the application deadline.

Incomplete applications will not be accepted or processed.

1. Payment of appropriate fee (please make checks payable to Putnam County Planning & Development)
2. Plat or site plan, drawn to scale, showing the locations of structures or uses for which the variance is sought, as well as the relationship to existing structures. Dimensions must be included.
3. A written description of your request in a letter format addressed to Putnam County Planning & Development. All required criteria (attached) must be addressed in the written description. Specific sections of the ordinance that would cause hardship must be identified, along with a description of the particular hardship.

The documents listed above are the minimum requirements. Staff may require additional documentation depending on the nature of the Variance Request. All submitted documents are public records and subject to Opens Records Law.

I have reviewed the application procedures and all applicable criteria and regulations in the Putnam County Zoning Ordinance for the above-requested Variance Request. I hereby claim that this application fulfills said procedures and meets the criteria for approval.

Applicant Signature: _____

[Handwritten Signature]
Attorney At Law for SDH Atlanta, LLC

Date: 6/24/2021

I swear that I am the owner of the property listed above. I authorize Jay Dell (applicant's name) to apply for a zoning action (zoning map amendment, conditional use, variance) at the above listed address, as identified on the attached application.

Owner signature _____

[Handwritten Signature]

Notary Public _____

Sworn and subscribed before me this 24th day of June 2021.

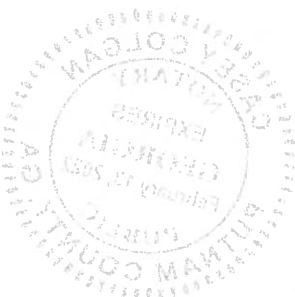
[Handwritten Signature]



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2014
2014



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PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

LETTER OF AGENCY- *Variance Application*

WE, THE UNDERSIGNED OWNERS OF REAL PROPERTY LOCATED IN THE CITY OF EATONTON/PUTNAM COUNTY, GEORGIA, HEREBY APPOINT SDH Atlatna LLC and Jay V. Dell, attorney at law TO BE MY AGENT FOR THE PURPOSE OF APPLYING FOR variance OF PROPERTY DESCRIBED AS MAP 106 PARCEL 002 , CONSISTING OF 29.5 ACRES, WHICH HAS THE FOLLOWING ADDRESS: Old Phoenix Raod, EATONTON, GEORGIA 31024. ATTACHED HERETO IS A COPY OF A DEED AND OR PLAT OF SURVEY DESCRIBING THE PROPERTY OWNED BY THE PROPERTY OWNER(S) TO WHICH THIS LETTER OF AGENCY APPLIES.

THE ABOVE NAMED AGENT HEREBY IS AUTHORIZED TO COMPLETE AND SIGN THE CITY OF EATONTON/PUTNAM COUNTY APPLICATION FOR variance ON OUR BEHALF. WE UNDERSTAND THAT THIS LETTER OF AGENCY WILL BE ATTACHED TO AND MADE PART OF SAID FORM AND WILL BE RELIED UPON BY THE CITY OF EATONTON/PUTNAM COUNTY. FOR AND IN CONSIDERATION OF THE CITY OF EATONTON/PUTNAM COUNTY ACCEPTING THIS LETTER OF AGENCY, WE HEREBY INDEMNIFY AND HOLD HARMLESS THE CITY OF EATONTON/PUTNAM COUNTY AND ITS AGENTS AND/OR EMPLOYEES IN THE EVENT THAT THE ABOVE NAMED AGENT SHOULD MISUSE THIS LETTER OF AGENCY AND WE SUFFER DAMAGES AS A RESULT.

THIS 24th DAY OF June, 2021.

PROPERTY OWNER(S): Maddox Family Partnerhsip LLLP by Jeff Maddox

NAME (PRINTED)

Jeff Maddox Jr

[Signature]
SIGNATURE

ADDRESS: 167 N Wesley Chapel Road

Eatonton, GA 31024

PHONE: 706 473 3456

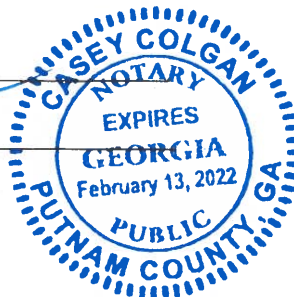
ALL SIGNATURES WERE HEREBY SWORN TO AND SUBSCRIBED BEFORE ME THIS

24th DAY OF June, 2021

NOTARY

MY COMMISSION EXPIRES: _____

[Signature]

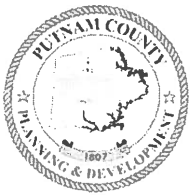


RECEIVED JUN 24 2021 *[initials]*



1958

RECEIVED JAN 24 1958



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

DISCLOSURE OF APPLICANT'S CAMPAIGN CONTRIBUTION

The *Putnam County Code of Ordinances*, Section 66-167(c) states as follows:

“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Maddox Family Partnership LLC

2. Address: 167 N Wesley Chapel Rd
Eatonton, GA 31024

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: _____

Date: 06/24/2021

RECEIVED JUN 24 2021 *KW*



PUTNAM COUNTY PLANNING & DEVELOPMENT

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Tel: 706-485-2776 ◊ 706-485-0552 fax ◊ www.putnamcountyga.us

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1. Name: SDH Atlanta, LLC

2. Address: 110 Village Trail, Ste 215
Woodstock, GA 30188

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: [Signature]
Date: 5/27/21

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PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024
Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

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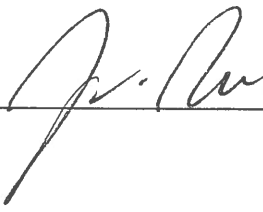
a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Jay Bell

2. Address: 1040 Founders Row, Ste. B
Greensboro, GA 30642

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: 
Date: 6 / 24 / 21

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007908

This space for use of Clerk of Court:

667

FILED IN OFFICE OF THE
CLERK OF SUPERIOR COURT
PUTNAM COUNTY, GEORGIA

2002 DEC 31 AM 10: 27

BOOK 797 PAGE 667-668
S. H. Hays

Putnam County, Georgia

Real Estate Transfer Tax

Paid \$ 0.00

Date 12/31/02

Jeff A. Maddox, Jr.
WARRANTY DEED AT SHERIFF

After filing, please return to:

Law Offices of TRENTON BROWN III, P.C., Attorney at Law
105 South Jefferson Avenue, Eatonton, Georgia 31024-3085

STATE OF GEORGIA
COUNTY OF PUTNAM

WARRANTY DEED
(NO TITLE OPINION GIVEN)

THIS INDENTURE, made the 30TH day of December, 2002 between Jeff A. Maddox, Sr. as party or parties of the first part, hereinafter called Grantor, and The Maddox Family Partnership, LLLP., as party or parties of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors, and assigns where the context requires or permits).

WITNESSETH that: Grantor, for and in consideration of the sum of ten dollars and 00/100 (\$10.00) and other valuable consideration in hand paid at or before the sealing and delivery of these presents, the receipt and sufficiency whereof is hereby acknowledged, by these presents does hereby grant, bargain, sell, alien, convey and confirm unto said Grantee,

See Exhibit "A" attached hereto and by reference made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said Grantee forever in FEE SIMPLE.

AND THE SAID Grantor will warrant and forever defend the right and title to the above described property unto the said Grantees against the claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

Sandra M. Barr
Witness

Jeff A. Maddox, Sr.

Jeff Maddox, Jr. (SEAL)
BY: Jeff A. Maddox, Jr., Attorney in fact

Charles S. Beard
Notary Public
My Commission expires Notary Public, Putnam
My Commission Expires

Leonell M. Alligood (SEAL)
BY: Leonell M. Alligood, Attorney in fact

Margaret M. Johnson (SEAL)
BY: Margaret M. Johnson, Attorney in fact

SEAL AFFIXED

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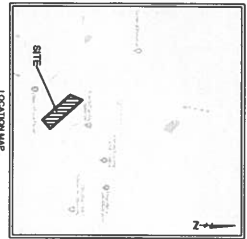
EXHIBIT "A"

All that tract or parcel of land, lying and being in the 308th G. M. District, Putnam County, Georgia, containing 29.535 acres, more or less, and being designated as Parcel No 1 of the "Bonner Place" Tract as shown on a plat prepared for the Frank Maddox Estate by Robert H. Harwell, Georgia Registered Land Surveyor No. 1683, dated November 6th, 1998, and recorded in Cabinet D, Plat Book 27, Slide 40, Page 282, Clerk's Office, Putnam County Superior Court, and by reference said plat is hereby made a part of this description.

RECEIVED JUN 24 2021 *kw*

Legal Description
Tax Map Parcel 106 002
Old Phoenix Road, Putnam County, GA

All that tract or parcel of land, lying and being in the 2081h G.M. District, Putnam County, Georgia, containing 29.535 acres, more or less, and being designated as Parcel No.1 of the "Bonner Place" Tract as shown on a plat prepared for the Frank Maddox Estate by Robert H. Harwell, Georgia Registered Land Surveyor No. 1683, dated November 6, 1998, and recorded in Cabinet D, Plat Book 27, Slide 40, Page 282, Cleric's Office, Putnam County Superior Court, and by reference said plat is hereby made a part of this description.



NOTE:
THE TOPOGRAPHIC AND ELEVATION DATA SHOWN HEREIN
WAS OBTAINED FROM THE PUTNAM COUNTY GIS DEPARTMENT
IN CONNECTION WITH THE CONDUCT OF THIS ENGINEER. USERS OF THIS DATA DO SO
AT THEIR OWN RISK.



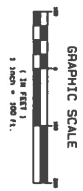
NOTE: THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROPOSED TRACT AND HAS FOUND NO EVIDENCE OF FLOODING OR OTHER HAZARDOUS CONDITIONS. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROPOSED TRACT AND HAS FOUND NO EVIDENCE OF FLOODING OR OTHER HAZARDOUS CONDITIONS. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS OF THE PROPOSED TRACT AND HAS FOUND NO EVIDENCE OF FLOODING OR OTHER HAZARDOUS CONDITIONS.

OWNER/APPLICANT:
SPRINTLUM, LLC
110 WILSON ROAD, SUITE 315
WOODBRIDGE, GA 30188
PHONE (770) 324-1112
FAX (770) 324-1112
WWW.SPRINTLUM.COM

ENGINEER:
WATTS & SPOONING ENGINEERS, INC.
1000 W. BROADWAY, SUITE 1000
MARIETTA, GA 30060
PHONE (770) 427-1111
WWW.WATTS-AND-SPOONING.COM

REFERENCE MATERIAL:
1. SURVEY DATA OF PROPERTY OF BANK AND/OR SET, LOCATED IN PUTNAM COUNTY, GEORGIA, PROVIDED BY ROBERT HANWELL, S.L.S., NO. 1663.
2. PUTNAM COUNTY ZONING ORDINANCES, PROVIDED BY PUTNAM COUNTY GIS DEPARTMENT.
3. PUTNAM COUNTY ZONING ORDINANCES, PROVIDED BY PUTNAM COUNTY GIS DEPARTMENT.
4. PUTNAM COUNTY ZONING ORDINANCES, PROVIDED BY PUTNAM COUNTY GIS DEPARTMENT.

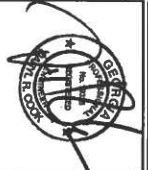
GENERAL DATA	
TOTAL SITE AREA	2.285 AC
DENSITY	1.8 UNITS/AC
PROPOSED ZONING	R-10
SETBACKS (MINIMUM)	15'
SETBACKS (MAXIMUM)	20'
STREET	OLD PHOENIX ROAD
SECTION	20'



NATIONAL ECOLOGICAL CONSULTANTS, INC.
FIRM
FLOOD HAZARD ANALYSIS
FOR THE PROPOSED TRACT
AT THE INTERSECTION OF
OLD PHOENIX ROAD AND
GARRETT DRIVE
MARIETTA, GA 30060
DATE: SEPTEMBER 14, 2011
BY: [Signature]

RECEIVED JUN 24 2021

CONCEPT PLAN / REZONING EXHIBIT
FOR
OLD PHOENIX ROAD TRACT
G.M.D. 308
PUTNAM COUNTY, GEORGIA



W&S
WATTS & SPOONING ENGINEERS, INC.
CIVIL ENGINEERS & LAND SURVEYORS
1000 W. BROADWAY, SUITE 1000
MARIETTA, GA 30060
PHONE (770) 427-1111
WWW.WATTS-AND-SPOONING.COM

SCALE:	1" = 100'
DESIGNED BY:	JTC
DRAWN BY:	JTC
CHECKED BY:	JTC
DATE:	09/29/2011
JOB NUMBER:	210403
SHEET NUMBER:	1



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP**, for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [**Map 106, Parcel 002, District 2**]. The applicant is requesting a 10-foot side yard setback variance, being 10 feet from both the left and right-side property lines. The intent is to rezone the property from AG to R-PUD and develop the property in the same manner as the adjacent Phoenix Crossing Subdivision. The side setback requirement of R-PUD is 20 feet, as stated in Sec. 66-118 of the Putnam County Code of Ordinances. The 10-foot side yard setback variance will allow the new phase to mirror the approved 10-foot side setback of Phoenix Crossing. The new phase of the subdivision will create 53 single-family housing lots. To achieve this goal, a side setback variance would be required. Therefore, this request meets the conditions stated in the Putnam County, Code of Ordinances, Chapter 66-157(C).

New Business
Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

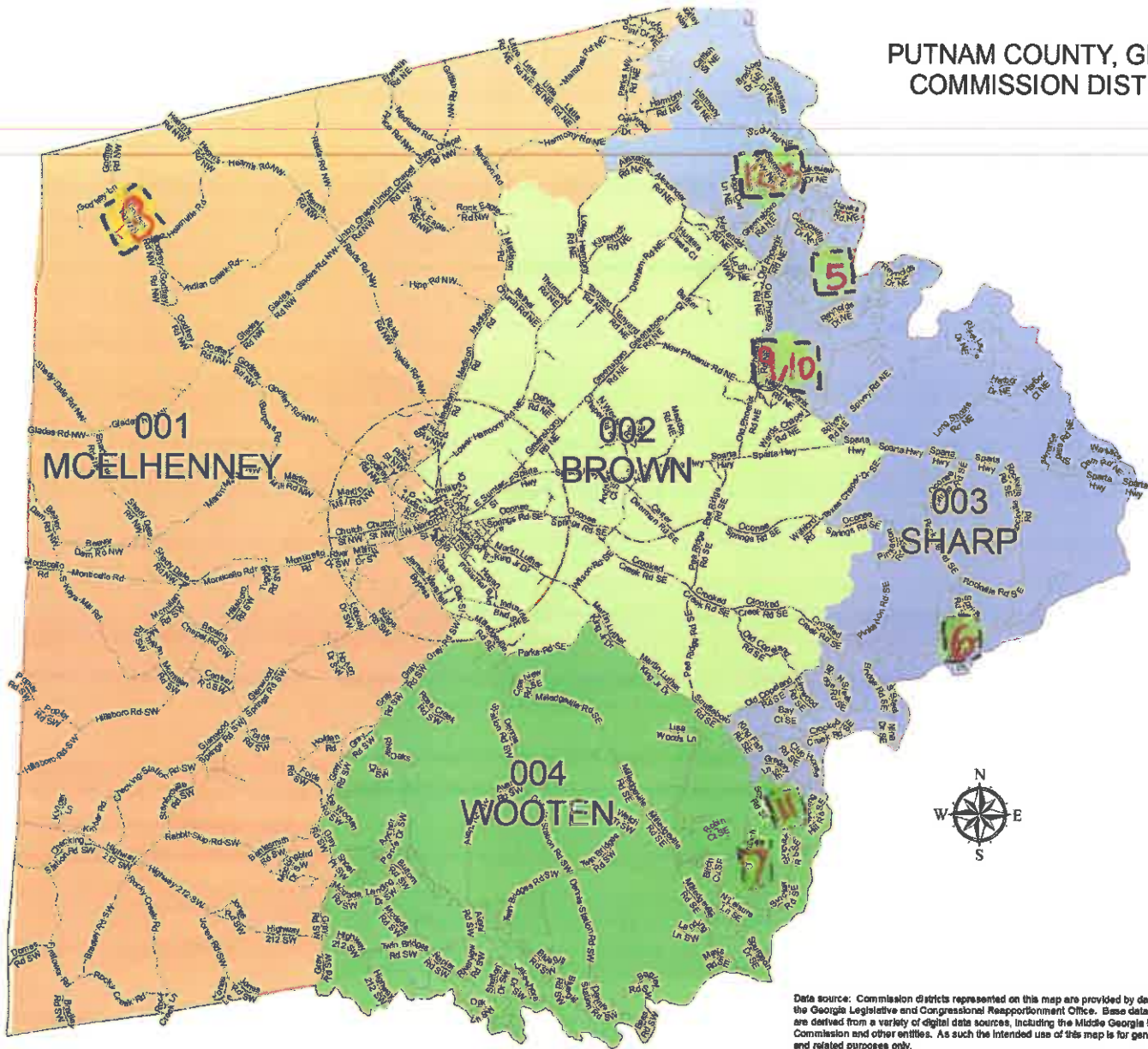
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. **[Map 106, Parcel 002, District 2].***

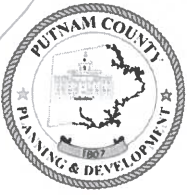
PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Data source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.28' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

APPLICATION FOR REZONING

REZONING

PERMIT# PLAN-2021-01133

APPLICATION NO. _____

DATE: 6/24/2021

MAP 106 PARCEL 002 ZONING DISTRICT 3

1. Owner Name: Maddox Family Partnership LLLP

2. Applicant Name (If different from above): SDH Atlanta LLC

3. Mailing Address: c/o J.V. Dell, P.C., 1040 FOUNDERS ROW, STE B. GREENSBORO, GA 30642

4. Email Address: jay.dell@jvdelllaw.com

5. Phone: (home) N/A (office) 706-453-4800 (cell) 706-347-0987

6. The location of the subject property, including street number, if any: Old Phoenix Road

7. The area of land proposed to be rezoned (stated in square feet if less than one acre):
29.5 acres

8. The proposed zoning district desired: R-PUO

9. The purpose of this rezoning is (Attach Letter of Intent)
Develop single family residential subdivision similar to adjacent property. See attached letter of Intent.

10. Present use of property: Vacant Land Desired use of property: single-family residential

11. Existing zoning district classification of the property and adjacent properties:
Existing: AG 2
North: R28-PUO South: AG 2 East: AG 2 West: AG 2

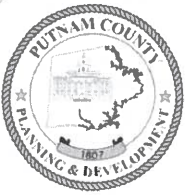
12. Copy of warranty deed for proof of ownership and if not owned by applicant, please attach a signed and notarized letter of agency from each property owner for all property sought to be rezoned. See attached

13. Legal description and recorded plat of the property to be rezoned. See attached

14. The Comprehensive Plan Future Land Use Map category in which the property is located. (If more than one category applies, the areas in each category are to be illustrated on the concept plan. See concept plan insert.): Residential

15. A detailed description of existing land uses: Vacant land

16. Source of domestic water supply: well _____, community water _____, or private provider .
If source is not an existing system, please provide a letter from provider. See attached.



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- 17. Provision for sanitary sewage disposal: septic system _____, or sewer . If sewer, please provide name of company providing same, or, if new development, provide a letter from sewer provider. *see attached*
- 18. Complete attachment of Disclosure of Campaign Contributions Form by the applicant and/or the applicant's attorney as required by the Georgia Conflict of Interest in Zoning Act (O.C.G.A. 36-67A). *See attached*
- 19. The application designation, date of application and action taken on all prior applications filed for rezoning for all or part of the subject property. (Please attach on separate sheet.) *Not applicable*
- 20. Proof that property taxes for the parcel(s) in question have been paid. *see attached.*
- 21. Concept plan. *See attached.*
 - If the application is for less than 25 single-family residential lots, a concept plan need not be submitted. (See attachment.)
 - A concept plan may be required for commercial development at director's discretion
- 22. Impact analysis. *See attached*
 - If the application is for less than 25 single-family residential lots, an impact analysis need not be submitted. (See attachment.)
 - An Impact analysis (including a traffic study) is required when rezoning from residential zoned or used property to commercial or industrial districts.

THE ABOVE STATEMENTS AND ACCOMPANYING MATERIALS ARE COMPLETE AND ACCURATE. APPLICANT HEREBY GRANTS PERMISSION FOR PLANNING AND DEVELOPMENT PERSONNEL OR ANY LEGAL REPRESENTATIVE OF PUTNAM COUNTY TO ENTER UPON AND INSPECT THE PROPERTY FOR ALL PURPOSES ALLOWED AND REQUIRED BY THE PUTNAM COUNTY CODE OF ORDINANCES

By: *[Signature]* 6/24/2021
Signature (Property Owner) (Date)

*Maddox Family Partnership LLC
Rebecca Bason*

Notary Public

[Signature] 6/24/2021
Signature (Applicant) (Date)

*J.V. Dell attorney at law
for
SPH Atlanta LLC
Rebecca Bason*

Notary Public



Office Use:

Paid: \$ _____ (cash) _____ (check) _____ (credit card) _____
 Receipt No. _____ Date Paid: _____
 Date Application Received: _____
 Reviewed for completeness by: _____
 Date of BOC hearing: _____ Date submitted to newspaper: _____
 Date sign posted on property: _____ Picture attached: yes _____ no _____

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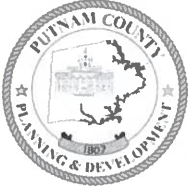
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LETTER OF AGENCY- Rezoning Application

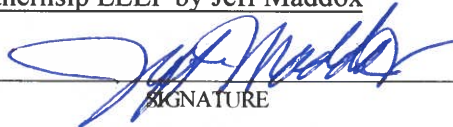
WE, THE UNDERSIGNED OWNERS OF REAL PROPERTY LOCATED IN THE CITY OF EATONTON/PUTNAM COUNTY, GEORGIA, HEREBY APPOINT SDH Atlanta LLC and Jay V. Dell, attorney at law TO BE MY AGENT FOR THE PURPOSE OF APPLYING FOR rezoning OF PROPERTY DESCRIBED AS MAP 106 PARCEL 002 , CONSISTING OF 29.5 ACRES, WHICH HAS THE FOLLOWING ADDRESS: Old Phoenix Raod, EATONTON, GEORGIA 31024. ATTACHED HERETO IS A COPY OF A DEED AND OR PLAT OF SURVEY DESCRIBING THE PROPERTY OWNED BY THE PROPERTY OWNER(S) TO WHICH THIS LETTER OF AGENCY APPLIES.

THE ABOVE NAMED AGENT HEREBY IS AUTHORIZED TO COMPLETE AND SIGN THE CITY OF EATONTON/PUTNAM COUNTY APPLICATION FOR rezoning ON OUR BEHALF. WE UNDERSTAND THAT THIS LETTER OF AGENCY WILL BE ATTACHED TO AND MADE PART OF SAID FORM AND WILL BE RELIED UPON BY THE CITY OF EATONTON/PUTNAM COUNTY. FOR AND IN CONSIDERATION OF THE CITY OF EATONTON/PUTNAM COUNTY ACCEPTING THIS LETTER OF AGENCY, WE HEREBY INDEMNIFY AND HOLD HARMLESS THE CITY OF EATONTON/PUTNAM COUNTY AND ITS AGENTS AND/OR EMPLOYEES IN THE EVENT THAT THE ABOVE NAMED AGENT SHOULD MISUSE THIS LETTER OF AGENCY AND WE SUFFER DAMAGES AS A RESULT.

THIS 24th DAY OF June , 2021.

PROPERTY OWNER(S): Maddox Family Partnerhsip LLLP by Jeff Maddox

NAME (PRINTED)


SIGNATURE

ADDRESS: 167 N Wesley Chapel Road

Eatonton, GA 31024

PHONE: 706 473 3456

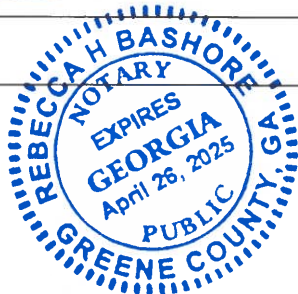
ALL SIGNATURES WERE HEREBY SWORN TO AND SUBSCRIBED BEFORE ME THIS

24th DAY OF June , 2021



NOTARY

MY COMMISSION EXPIRES: _____





Letter of Intent

June 24, 2021

Putnam County Planning and Development
Attn: Lisa Jackson, Director
117 Putnam Drive, Ste. B
Eatonton, GA 3124

RE: Rezoning Application of SDH Atlanta LLC
Current Owner: Maddox Family Partnership LLLP
Tax Map Parcel: 106 002
Address: Old Phoenix Road, Eatonton, GA

Dear Lisa:

We are filing an application to rezone the above referenced property from AG-1 to R-PUD. The property consists of 29.5 acres and is adjacent to Old Phoenix Road and the existing subdivision known as Phoenix Crossing. The intent is to develop this tract for entry level single family detached housing. This will fill a desperate need in the County for affordable single family housing. The development will be similar in all respects to Phoenix Crossing subdivision.

There will be 53 total lots with open space as shown on the Concept Plan submitted herewith. The subdivision will have access from Old Phoenix Road and Garrett Drive (within Phoenix Crossing). We plan on 15' front setbacks, 20' rear setbacks, and 10' side setbacks (the same as Phoenix Crossing). The housing type will primarily be ranch style, but there will be some 2-story houses, ranging from approximately 1400 - 2500 square feet with 3 and 4 bedroom plans. Each house will have an attached 2 car garage with landscaping similar to Phoenix Crossing.

We are currently developing Phoenix Crossing and this product has been hugely successful. We are currently selling 5.4 homes per month with an average sales price of \$220,000. Our target market will be the families and workers that live and work in our local community.

Thank you for your consideration and we look forward to working with and in Putnam County, GA.

Sincerely,

SDH Atlanta, LLC

By: Tina Hughes
Name: Tina Hughes

SIGNATURE CERTIFICATE



REFERENCE NUMBER
30974793-9352-424D-AE2F-68FBEEED18CDC

TRANSACTION DETAILS

Reference Number
30974793-9352-424D-AE2F-68FBEEED18CDC

Transaction Type
Signature Request

Sent At
06/24/2021 12:00 EDT

Executed At
06/24/2021 12:07 EDT

Identity Method
email

Distribution Method
email

Signed Checksum
4b8a9746d802a26460346f780627c06383fb5994a9943614f0d90e3ccc0eb399

Signer Sequencing
Disabled

Document Password
Disabled

DOCUMENT DETAILS

Document Name
Loi 210624

Filename
loi_210624.pdf

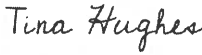
Pages
1 page

Content Type
application/pdf

File Size
66.1 KB

Original Checksum
1fb5bb99c73aea889a37e8a24924d416598134ad23183a22a8500ed0fc993ca0

SIGNERS

SIGNER	E-SIGNATURE	EVENTS
<p>Name Tina Hughes</p> <p>Email thughes@smithdouglas.com</p> <p>Components 1</p>	<p>Status signed</p> <p>Multi-factor Digital Fingerprint Checksum 23850f82f962fba89bd9fdb706ab488be82add0029707ecda583154920de2ded</p> <p>IP Address 45.24.130.179</p> <p>Device Chrome via Windows</p> <p>Typed Signature </p> <p>Signature Reference ID F6D93740</p>	<p>Viewed At 06/24/2021 12:04 EDT</p> <p>Identity Authenticated At 06/24/2021 12:07 EDT</p> <p>Signed At 06/24/2021 12:07 EDT</p>

AUDITS

TIMESTAMP	AUDIT
06/24/2021 12:00 EDT	Jay Dell (jay.dell@jvdelllaw.com) created document 'loi_210624.pdf' on Chrome via Windows from 64.191.61.149.
06/24/2021 12:00 EDT	Tina Hughes (thughes@smithdouglas.com) was emailed a link to sign.
06/24/2021 12:04 EDT	Tina Hughes (thughes@smithdouglas.com) viewed the document on Chrome via Windows from 45.24.130.179.
06/24/2021 12:07 EDT	Tina Hughes (thughes@smithdouglas.com) authenticated via email on Chrome via Windows from 45.24.130.179.
06/24/2021 12:07 EDT	Tina Hughes (thughes@smithdouglas.com) signed the document on Chrome via Windows from 45.24.130.179.

REGULAR AND LINEAR MEASUREMENTS TAKEN BY SURVEYOR TO ALL CORNERS AND/OR POINTS OF INTEREST. THE PLAT IS BASED UPON THE DATA OBTAINED BY USE OF A TOPCON GTS-30 TOTAL STATION. THIS PLAT IS BASED UPON THE DATA OBTAINED BY USE OF A TOPCON GTS-30 TOTAL STATION. THE PLAT IS BASED UPON THE DATA OBTAINED BY USE OF A TOPCON GTS-30 TOTAL STATION.

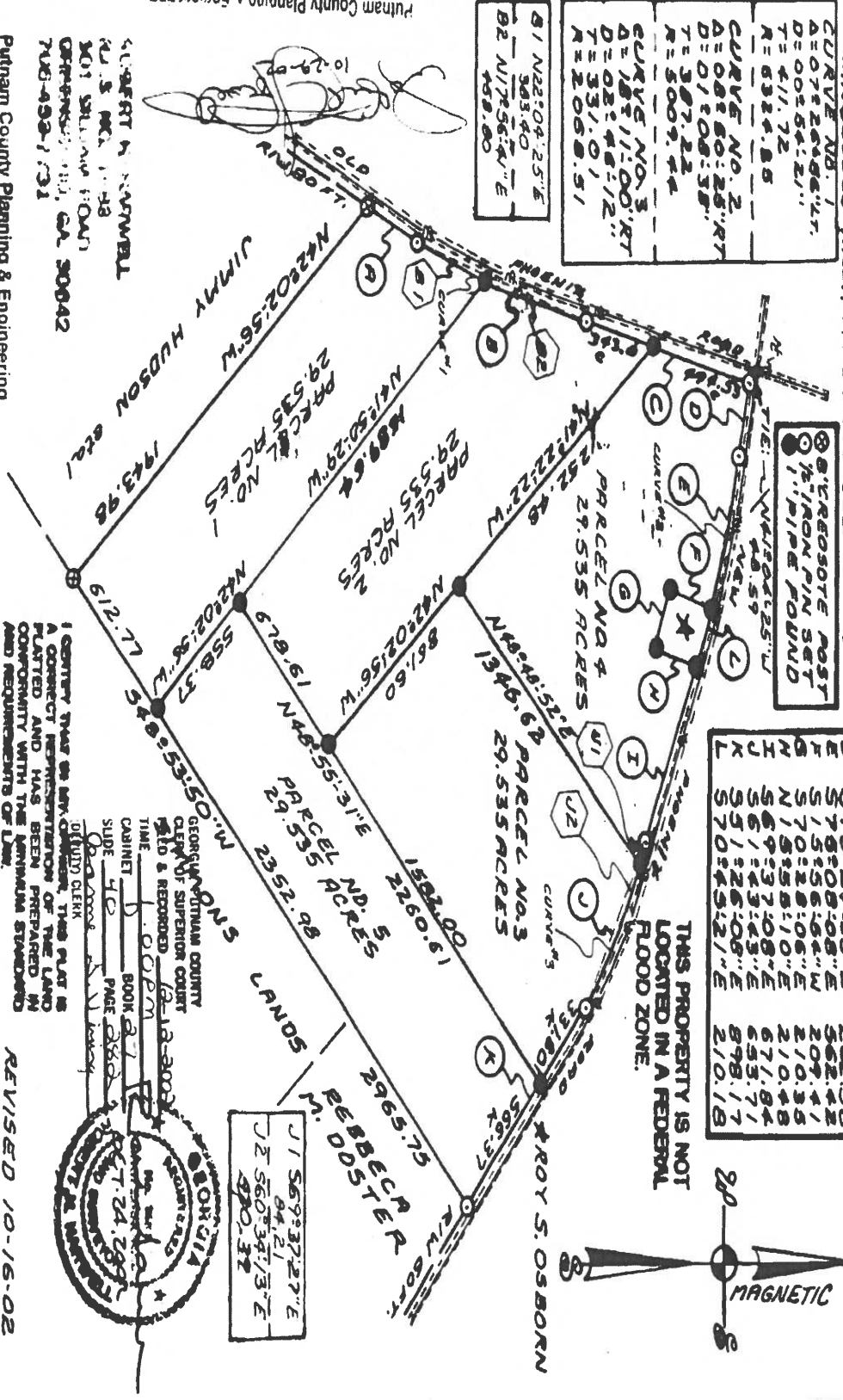
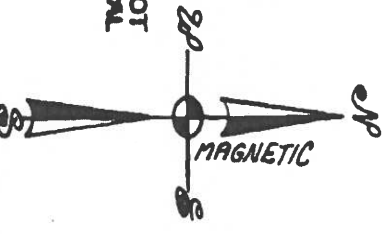
INCLUDES AREA IN CURVE SEGMENTS

CURVE NO. 1	11.0000
A=078.2486"LT	11.0000
D=002.8412"R	11.0000
T=411.72	11.0000
R=6324.85	11.0000
CURVE NO. 2	11.0000
A=085.5035"RT	11.0000
D=015.0838"R	11.0000
T=387.22	11.0000
R=5009.44	11.0000
CURVE NO. 3	11.0000
A=185.1100"RT	11.0000
D=031.4612"R	11.0000
T=331.0151	11.0000
R=2069.51	11.0000

B1 N22°04'25"E	583.40
B2 N17°56'4"E	459.80

R	N 23° 04' 45" E	321.68
Q	N 19° 46' 11" E	821.70
P	N 19° 23' 49" E	837.53
O	N 17° 50' 27" E	262.58
N	N 7° 50' 08" E	562.41
M	N 5° 55' 06" W	209.41
L	N 7° 02' 28" E	210.35
K	N 19° 33' 10" E	210.48
J	N 5° 55' 06" E	671.84
I	N 19° 23' 49" E	553.71
H	N 19° 46' 11" E	879.17
G	N 23° 04' 45" E	210.18

THIS PROPERTY IS NOT LOCATED IN A FEDERAL FLOOD ZONE.



Putnam County Planning & Engineering

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS A CLOSURE PRECISION OF ONE PART IN 250,000 FEET AND AN ANGULAR ERROR OF 2.5 SECONDS PER ANGLE POINT AND WAS ADJUSTED USING THE COMPASS RULE.

THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND FOUND TO BE ACCURATE TO WITHIN ONE FOOT IN 115,000 FEET.

I CERTIFY THAT ON MY EXAMINATION, THIS PLAT IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND HAS BEEN PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND REQUIREMENTS OF LAW.

GEORGIN PUTNAM COUNTY CLERK OF SUPERIOR COURT
 J. L. OSBORN
 CLERK OF SUPERIOR COURT
 10-16-2002
 TIME 1:00 PM
 CABINET BOOK 27 PAGE 282
 SLIDE 10
 DEPUTY CLERK
 J. L. OSBORN
 OCT 24 2002
 REGISTERED IN PLAT BOOK 27 PAGE 282

J1 S69°37'27"E	84.21
J2 S60°34'13"E	820.32

"BONNER PLACE"
 PLAT OF PROPERTY OF
 FRANK MADDOX EST.
 PUTNAM COUNTY (PART)
 L.L. 2796284

LOCATED IN PUTNAM COUNTY
 GMD 308
 SCALE: 1"=500'
 500' 1000' 1500' 2000' 2500'

IN GEORGIA
 L.D.3
 DATE: 11-16-98

007908

667

This space for use of Clerk of Court:

FILED IN OFFICE OF THE
CLERK OF SUPERIOR COURT
PUTNAM COUNTY, GEORGIA

2002 DEC 31 AM 10: 27

Putnam County, Georgia
Real Estate Transfer Tax

Paid \$ 2.00

Date 12/31/02

Alfredo J. Johnson
Notary Public

COURT 397 PAGE 667-668
Shirley M. Rogers

After filing, please return to:

Law Offices of **TRENTON BROWN III, P.C.**, Attorney at Law
105 South Jefferson Avenue, Eatonton, Georgia 31024-3085

STATE OF GEORGIA
COUNTY OF PUTNAM

**WARRANTY DEED
(NO TITLE OPINION GIVEN)**

THIS INDENTURE, made the 30TH day of December, 2002 between **Jeff A. Maddox, Sr.** as party or parties of the first part, hereinafter called Grantor, and **The Maddox Family Partnership, LLLP.**, as party or parties of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors, and assigns where the context requires or permits).

WITNESSETH that: Grantor, for and in consideration of the sum of ten dollars and 00/100 (\$10.00) and other valuable consideration in hand paid at or before the sealing and delivery of these presents, the receipt and sufficiency whereof is hereby acknowledged, by these presents does hereby grant, bargain, sell, alien, convey and confirm unto said Grantee,

See Exhibit "A" attached hereto and by reference made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said Grantee forever in **FEE SIMPLE**.

AND THE SAID Grantor will warrant and forever defend the right and title to the above described property unto the said Grantees against the claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

Jandra M. Barr
Witness

Charles S. Beard
Notary Public
My Commission expires Notary Public, Putnam
My Commission Expires 2/28/04

Jeff A. Maddox, Sr.

Jeff Maddox (SEAL)
BY: Jeff A. Maddox, Jr., Attorney in fact

Leonell M. Allgood (SEAL)
BY: Leonell M. Allgood, Attorney in fact

Margaret M. Johnson (SEAL)
BY: Margaret M. Johnson, Attorney in fact

SEAL AFFIXED

EXHIBIT "A"

All that tract or parcel of land, lying and being in the 308th G. M. District, Putnam County, Georgia, containing 29.535 acres, more or less, and being designated as Parcel No 1 of the "Bonner Place" Tract as shown on a plat prepared for the Frank Maddox Estate by Robert H. Harwell, Georgia Registered Land Surveyor No. 1683, dated November 6th, 1998, and recorded in Cabinet D, Plat Book 27, Slide 40, Page 282, Clerk's Office, Putnam County Superior Court, and by reference said plat is hereby made a part of this description.

Legal Description
Tax Map Parcel 106 002
Old Phoenix Road, Putnam County, GA

All that tract or parcel of land, lying and being in the 2081h G.M. District, Putnam County, Georgia, containing 29.535 acres, more or less, and being designated as Parcel No.1 of the "Bonner Place" Tract as shown on a plat prepared for the Frank Maddox Estate by Robert H. Harwell, Georgia Registered Land Surveyor No. 1683, dated November 6, 1998, and recorded in Cabinet D, Plat Book 27, Slide 40, Page 282, Cleric's Office, Putnam County Superior Court, and by reference said plat is hereby made a part of this description.



May 26, 2021

Smith Douglas Homes
Tina Hughes

Subject: Water & Sewer Capacity, Putnam County Parcel 106 002

Ms. Hughes:

Piedmont Water Company will make available water and sewer capacity for up to 53 homes on the above referenced property subject to the following conditions:

- Customer will acquire easements for water and sewer line extensions from the Phoenix Crossing water and sewer system
- The execution of a Customer User Agreement

Any additional improvements to the Phoenix Crossing systems to provide these services will be the responsibility of the developer, as will on-site infrastructure on the site.

Please call if you have any additional questions on this matter.

Sincerely,

A handwritten signature in black ink that reads "Brent Hurst". The signature is written in a cursive, flowing style.

Brent Hurst
Chief Operating Officer



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

DISCLOSURE OF APPLICANT'S CAMPAIGN CONTRIBUTION

The *Putnam County Code of Ordinances*, Section 66-167(c) states as follows:

“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

a. The name and official position of the local government official to whom the campaign contribution was made; and

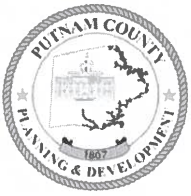
b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: SDH Atlanta, LLC

2. Address: 110 Village Trail, Ste 215
Woodstock, GA 30188

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: [Signature]
Date: 5/27/21



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“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:


a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Jay Bell

2. Address: 1040 Founders Row, Ste. B
Greensboro, GA 30642

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____.

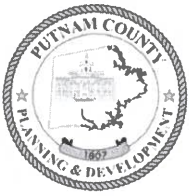
Signature of Applicant: 
Date: 6 / 24 / 21

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CA 90000

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PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

DISCLOSURE OF APPLICANT'S CAMPAIGN CONTRIBUTION

The *Putnam County Code of Ordinances*, Section 66-167(c) states as follows:

“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

- 1. Name: Maddox Family Partnership LLC
- 2. Address: 167 N Wesley Chapel Rd
Eatonton, GA 31024

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: 
Date: 06 / 24 / 2021

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Address Family Pharmacy
157 W. 1st St. N
Evanston, IL 60201

5/24/2021

Taxes

INTERNET TAX RECEIPT

2020 014318
MADDOX FAMILY PARTNERSHIP LLLP

PARECEL 1 BONNER PLACE
106 002

DESCRIPTION	TAX AMOUNT	EXEMPTION	MILLAGE
FAIR MARKET VALUE	\$141,862		
COUNTY	\$37.88	\$51,978.00	8.078
SCHOOL	\$73.92	\$51,978.00	15.772
SPEC SERV	\$1.77	\$51,978.00	0.378

ORIGINAL TAX DUE	\$113.55
INTEREST	
COLLECTION COST	
FIFA CHARGE	
PENALTY	
TOTAL PAID	\$113.55
TOTAL DUE	\$0.00

TO MADDOX FAMILY PARTNERSHIP LLLP
167 N WESLEY CHAPEL RD
EATONTON, GA 31024

FROM Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1081
(706) 485-6441



Date Paid: 11/30/2020



Scan this code with
your mobile phone
to view this bill

INTERNET TAX RECEIPT

Traffic Impact Study

Proposed Old Phoenix Road Residential Subdivision
Putnam County, Georgia

June 24, 2021

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING



Traffic Impact Study
Proposed Old Phoenix Road Residential Subdivision
Putnam County, Georgia

study prepared for:

Smith Douglas Homes
110 Village Trail, Suite 215
Woodstock, GA 30188

June 24, 2021



MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

858 Myrtle Street, NE
Atlanta, Georgia 30308
(678) 637-1763

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Contents

INTRODUCTION	1
EXISTING TRAFFIC CONDITIONS	2
DESCRIPTION OF EXISTING ROADWAYS	2
PEDESTRIAN, BICYCLE, AND TRANSIT ACCESSIBILITY	2
EXISTING TRAFFIC VOLUMES	3
EXISTING INTERSECTION OPERATIONS.....	4
NO-BUILD TRAFFIC CONDITIONS	6
PROGRAMMED TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS	7
NO-BUILD INTERSECTION OPERATIONS	7
PROJECT TRAFFIC CHARACTERISTICS	8
PROJECT DESCRIPTION	8
TRIP GENERATION	9
TRIP DISTRIBUTION AND ASSIGNMENT	9
FUTURE TRAFFIC CONDITIONS	11
LANE CONFIGURATION AT SUBDIVISION ACCESS.....	12
FUTURE INTERSECTION OPERATIONS	13
CONCLUSIONS AND RECOMMENDATIONS	15
APPENDIX	

Tables

TABLE 1 – EXISTING INTERSECTION OPERATIONS	5
TABLE 2 – HISTORIC GEORGIA DOT TRAFFIC VOLUME COUNTS AND ANNUAL GROWTH RATES	6
TABLE 3 – NO-BUILD INTERSECTION OPERATIONS	7
TABLE 4 – OLD PHOENIX ROAD SUBDIVISION TRIP GENERATION	9
TABLE 5 – GEORGIA DOT LEFT TURN LANE VOLUME STANDARDS	13
TABLE 6 – FUTURE INTERSECTION OPERATIONS	14

Figures

FIGURE 1 – SITE LOCATION MAP	1
FIGURE 2 – EXISTING WEEKDAY A.M. AND P.M. PEAK HOUR TRAFFIC VOLUMES.....	4
FIGURE 3 – SITE PLAN FOR PROPOSED SUBDIVISION	8
FIGURE 4 – WEEKDAY A.M. AND P.M. PEAK HOUR PROJECT TRIPS AND TRIP DISTRIBUTION PERCENTAGES.....	10
FIGURE 5 – FUTURE WEEKDAY A.M. AND P.M. PEAK HOUR VOLUMES	11

Introduction

This study assesses the traffic impact of a proposed residential subdivision in Putnam County, Georgia. The site is located on the east side of Old Phoenix Road, as shown in the location map in Figure 1. The project will include 53 single-family homes. One full-movement vehicular access will be provided on Old Phoenix Road and one full-movement access will be provided on Garrett Drive, which connects between Old Phoenix Road and New Phoenix Road.

The purpose of this traffic impact study is to determine existing traffic operating conditions in the vicinity of the proposed subdivision, project future traffic volumes, assess the impact of the subject development, then develop conclusions and recommendations to mitigate the project traffic impact and ensure safe and efficient existing and future traffic conditions in the vicinity of the project.

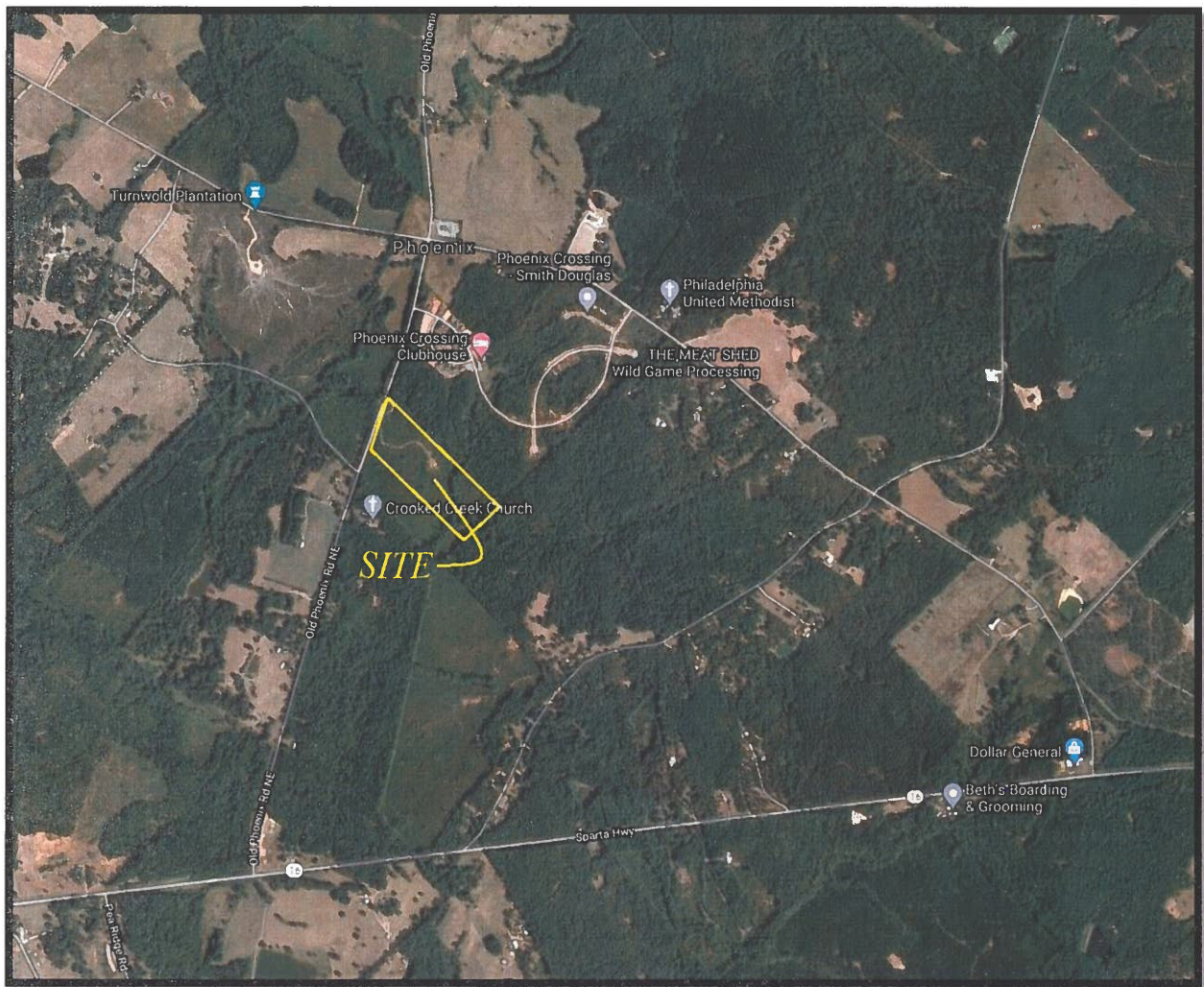


Figure 1 – Site Location Map

Existing Traffic Conditions

Existing traffic operating conditions in the vicinity of the proposed subdivision were assessed. The following is a description of existing transportation facilities, traffic volumes, and intersection operations.

Description of Existing Roadways

Old Phoenix Road is a two lane rural major collector that begins at a side street stop sign controlled intersection at GA 16, passes the subject site, intersects New Phoenix Road at an all-way stop sign controlled intersection, then continues to the north. The terrain along Old Phoenix Road is very gently rolling and the posted speed limit is 55 mph, with an advisory 45 mph limit in the vicinity of the subject site. A 24-hour bi-directional traffic volume count collected for this study at the project access location on Tuesday, June 15, 2021, showed a northbound volume of 2,226 vehicles and a southbound volume of 2,123 vehicles, for a two-way volume of 4,349 vehicles.

New Phoenix Road is a two lane collector that begins at a side street stop sign controlled intersection at GA 16, intersects with Old Phoenix Road, then continues to the west and terminates at GA 44. The terrain is gently rolling and the posted speed limit is 55 mph.

Sparta Highway (Georgia State Route 16) is an east/west rural major collector that provides regional mobility through this area of central Georgia. The terrain is very gently rolling and the posted speed limit is 55 mph. In 2019 (the latest year for which data was available at this location) the Georgia Department of Transportation (Georgia DOT) recorded an Annual Average Daily Traffic (AADT) volume of 1,740 vehicles per day (vpd) on GA 16 east of Old Phoenix Road. A 24-hour bi-directional traffic volume count collected for this study at this same location on Tuesday, June 15, 2021, showed a two-way volume of 2,399 vehicles.

Garrett Drive is a two lane local road that connects Old Phoenix Road to New Phoenix Road through the Phoenix Crossing subdivision.

Pedestrian, Bicycle, and Transit Accessibility

There are no sidewalks or dedicated bicycle lanes adjacent to the proposed development on either Old Phoenix Road or New Phoenix Road. There is no regularly scheduled mass transit service in the vicinity of the site.

Existing Traffic Volumes

Existing full turning movement peak hour traffic volume counts were collected at the following intersections:

1. Old Phoenix Road at New Phoenix Road
2. Sparta Highway (GA 16) at Old Phoenix Road
3. New Phoenix Road at Garrett Drive

The counts were collected on Tuesday, June 15, 2021, from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Area schools were in not session on the day on which the counts were recorded and volumes may or may not be atypical due to the COVID-19 pandemic, addressed below.

In addition to the intersection counts, 24-hour traffic volume counts were collected on Old Phoenix Road at the project access location and on GA 16 at the location of Georgia DOT Count Station 237-0114. This second 24-hour was compared with the Georgia DOT counts from pre-COVID-19 conditions to develop an adjustment factor to account for the pandemic and school being in recess, as described below.

In order to account for possibly-decreased volumes due to the pandemic and school being in recess, an adjustment factor was considered to be applied to the counted volumes. The 2019 Georgia DOT AADT volume closest to the site (Count Station 237-0114 on US 16 east of Old Phoenix Road, data presented later in Table 2), was compared to the 24-hour count collected at that location for this study. The 2019 Georgia DOT AADT was 1,740 vpd and the five year average growth rate was -2.1%, with the last year having a decrease of -14.3%, at that count station. Because the trend on GA 16 has been decreasing, extrapolating that AADT from 2019 to 2021 would result in an even lower AADT. The count collected for this study is 2,399 vehicles, which is 38% higher than the 2019 AADT. Because the current counted 24-hour volume is so much higher than the expected 2021 AADT, the volumes counted for this study were not adjusted/increased and the current counts are considered to be representative of “normal” existing conditions. It is noted that the effect of the ending of the pandemic and return to pre-pandemic conditions in the Fall of 2021 may be tempered by lifestyle changes that occurred during the pandemic, such as working from home and some degree of at-home schooling, so that any adjusting of the counts collected for this study, in light of the above volume comparison, would be considered highly speculative.

From the intersection turning movement count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the existing weekday a.m. and p.m. peak hour traffic volumes at each intersection and are shown in Figure 2. The raw count data is found in Appendix A.

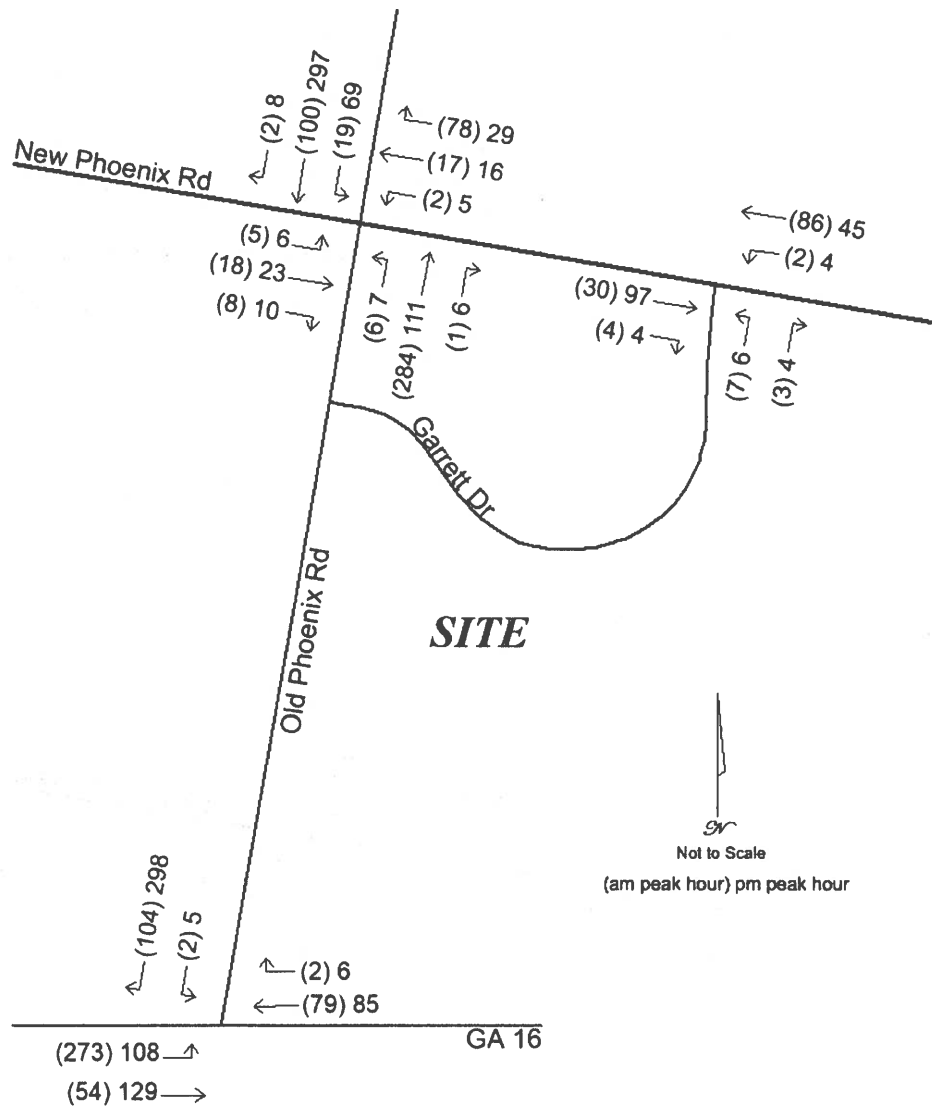


Figure 2 – Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

Existing Intersection Operations

Existing traffic operations were analyzed at the study intersections using Synchro software, version 10, in accordance with the methodology presented in the Transportation Research Board’s 2016 *Highway Capacity Manual (HCM 6)*. This methodology is presented in Appendix B. The results of the analysis are shown in Table 1. Computer printouts containing detailed results of the existing analysis are located in Appendix C. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 1 – Existing Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Old Phoenix Road at New Phoenix Road	A	9.8	B	11.3
northbound approach	B	10.7	A	8.9
southbound approach	A	9.1	B	12.8
eastbound approach	A	8.5	A	8.7
westbound approach	A	8.6	A	8.6
2. GA 16 at Old Phoenix Road	A	6.3	A	6.6
southbound left turn	C	19.5	B	12.2
southbound right turn	A	9.3	B	10.9
eastbound left turn	A	8.2	A	7.7
3. New Phoenix Road at Garrett Drive	A	0.9	A	1.0
northbound approach	A	9.2	A	9.3
westbound left turn	A	7.3	A	7.5

The existing analysis reveals good operating conditions at all study intersections. No mitigation is identified for the existing condition.

No-Build Traffic Conditions

A no-build condition was developed. This represents the traffic conditions that will exist in the future at the anticipated time of the build-out of the proposed subdivision, but not including the subdivision's trips. The purpose of the analysis of this condition is to isolate the traffic impacts of the proposed development from background growth in volumes that are expected to occur in the area while the subdivision is under construction.

Georgia DOT AADT volume counts were obtained on nearby roadways for the five years from 2015 to 2019 (the latest year for which volumes are available). Table 2 presents the historic Georgia DOT counts and the annual growth rates between the counts.

Table 2 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	GA 16 E of Old Phoenix	Annual Growth	Old Phoenix S of Lake Oconee	Annual Growth
Station ID	237-0114		237-0178	
2015	1,930		3,560	
2016	2,030	5.2%	3,770	5.9%
2017	2,060	1.5%	3,880	2.9%
2018	2,030	-1.5%	3,830	-1.3%
2019	1,740	-14.3%	3,820	-0.3%
<i>avg growth</i>		-2.1%		1.4%

Growth in the area has been generally low, with average annual growth ranging from -2.1% to 1.4%, and with the most recent year of growth being negative and ranging from -14.3% to -0.3%. Based on the growth trends identified in Table 2, no background growth factor was applied to the existing volumes when projecting the future no-build volumes. However, the Phoenix Crossing subdivision, adjacent to the subject development, is approved for 110 single family homes. As of the date of this study, 53 of those homes are occupied, while 37 are under construction and 20 are undeveloped. Therefore, the trips for the remaining (unbuilt or under construction homes) were calculated and assigned to the study intersections to develop a no-build condition. The trips were calculated using the ITE *Trip Generation Manual* and assigned using the same trip distribution as the subject subdivision of this study. Trip generation and distribution is discussed further in the Project Traffic Characteristics section of this report. The existing volumes plus the trips from the approved but unbuild and unoccupied homes in the Phoenix Crossing subdivision produce the no-build traffic volumes that will be on the roadway network in the future when the proposed subdivision is completely developed, but excluding the proposed subdivision's trips.

Programmed Transportation Infrastructure Improvements

The Georgia DOT projects website was reviewed for planned (anticipated) and programmed (scheduled and funded) transportation infrastructure improvements in the study area. No projects were identified at the study intersections or in the immediate vicinity within the anticipated build-out time of the proposed subdivision.

No-Build Intersection Operations

The no-build condition includes the no-build traffic volumes, as described above. These were entered into the Synchro model and the no-build traffic operations were analyzed at the study intersections using Synchro 10 software in accordance with the HCM 6 methodology. The results of the no-build analysis are shown in Table 3. Computer printouts containing detailed results of the no-build analysis are located in Appendix D. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 3 – No-Build Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Old Phoenix Road at New Phoenix Road	A	10.0	B	12.0
northbound approach	B	11.1	A	9.1
southbound approach	A	9.3	B	13.8
eastbound approach	A	8.6	A	8.9
westbound approach	A	8.8	A	8.8
2. GA 16 at Old Phoenix Road	A	6.4	A	6.7
southbound left turn	C	19.8	B	12.4
southbound right turn	A	9.4	B	11.0
eastbound left turn	A	8.2	A	7.7
3. New Phoenix Road at Garrett Drive	A	1.6	A	1.5
northbound approach	A	9.4	A	9.4
westbound left turn	A	7.4	A	7.5

The no-build analysis shows modest increases in delays and continued good operations at all study locations. Therefore, no mitigation is identified for the no-build condition.

Project Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed subdivision, including a project description, how much traffic the project will generate, and where that traffic will travel.

Project Description

The site will be developed with 53 single-family homes. One full-movement vehicular access will be provided on Old Phoenix Road and one full-movement access will be provided on Garrett Drive, which connects between Old Phoenix Road and New Phoenix Road. The site plan is presented in Figure 3.



Figure 3 – Site Plan for Proposed Subdivision

Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed development. The volume of traffic that will be generated by the subdivision was calculated using the equations in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition – with Supplement*. ITE Land Use 210 – Single-Family Detached Housing was chosen as representative of the single family homes. The trip generation for the subdivision is presented in Table 4.

Table 4 – Old Phoenix Road Subdivision Trip Generation

Land Use	ITE Code	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour
			In	Out	Total	In	Out	Total	2-Way
Single Family Homes	210	53 homes	10	32	42	35	20	55	580

The proposed subdivision will generate 42 a.m. peak hour trips, 55 p.m. peak hour trips, and 580 weekday trips.

Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project’s trips will travel to and from various directions. The trip distribution percentages for the subdivision were developed based on the locations and proximity of likely trip origins and destinations including regional employment centers, retail and offices in the area, nearby schools, other regional trip attractors, and the major routes of travel in the area, including GA 16 to the south and Interstate 20, a bit distant to the north. The new project trips, shown in Table 4, were assigned to the roadway network based on the distribution percentages. The trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the proposed subdivision are shown in Figure 4.

Future Traffic Conditions

The future volumes consist of the no-build volumes plus the trips that will be generated by the proposed subdivision. The future volumes are shown in Figure 5.

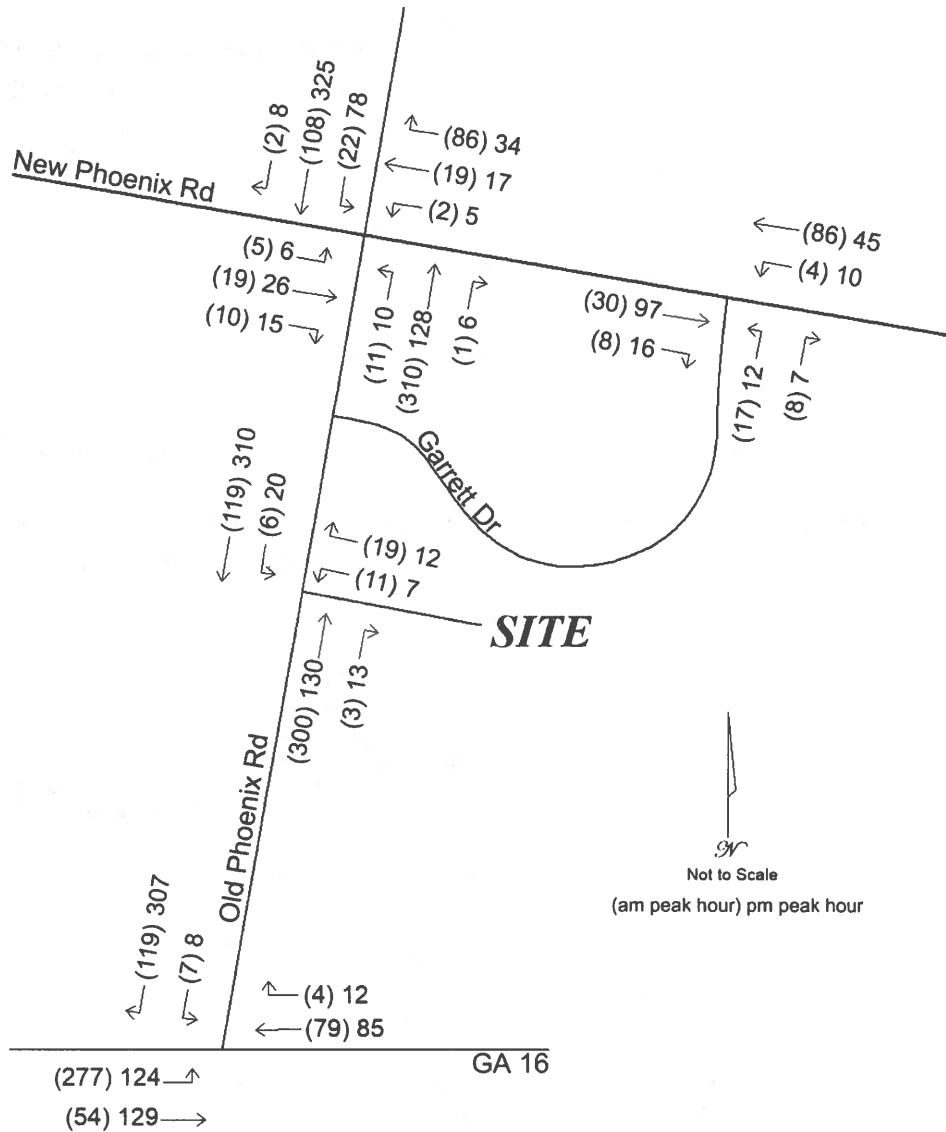


Figure 5 – Future Weekday A.M. and P.M. Peak Hour Volumes

Lane Configuration at Subdivision Access

The Putnam County Code of Ordinances, Chapter 28 – Development Regulations, Article I – In General, Section 28-66 – Required Improvements, (k) Deceleration lanes and center turn lanes states:

- (1) Deceleration lanes or a center turn lane are required if sight distances required by this chapter cannot be achieved or the number of dwelling units in a development exceeds 50, at each entrance to a multifamily or nonresidential development project intersecting a county collector or a county arterial road, or if the director deems either a deceleration or turn lane or both are necessary to protect the safety of the public.
- (2) Deceleration and turn lane construction standards.
 - a. Deceleration lanes shall be designed and installed in accordance with the Georgia Department of Transportation Regulations for Driveway and Encroachment Control. The lane shall be 12 feet in width exclusive of the curb and gutter width. Additional right-of-way to accommodate the deceleration lane and a ten-foot shoulder shall be dedicated by the developer to the county.
 - b. Left turn lanes may be required if the average daily traffic (ADT) exceeds 2,000 vehicles per day or if the director has knowledge of other information that would warrant a detailed traffic impact study as established by the Georgia Department of Transportation to determine if a left turn is needed. The study shall be prepared in accordance with the Georgia Department of Transportation Regulations for Driveway and Encroachment Control.
 - c. Other project access improvements as deemed necessary by the director of the planning and development department in addition to a required deceleration lane in order to ensure adequate site access, pedestrian access, convenience, and safety to the motoring public may be required.

The number of dwelling units in the proposed subdivision is 53, which exceeds the 50 unit threshold and, therefore a northbound right turn lane is required on Old Phoenix Road at the proposed subdivision access. This study agrees with that requirement.

For a southbound left turn lane on Old Phoenix Road at the project access, the code states that a left turn lane may be required if the ADT exceeds 2,000 vpd and then references the Georgia DOT standards. A left turn lane analysis was performed for this location using the Georgia DOT standards as presented in their *Regulations for Driveway and Encroachment Control, revision 5.0, July 3, 2019*. Georgia DOT Table 4-7a Minimum Volumes Requiring Left Turn Lanes is reproduced below as Table 5.

Table 5 – Georgia DOT Left Turn Lane Volume Standards

LEFT TURN REQUIREMENTS-FULL CONSTRUCTION				
Posted Speed	2 Lane Routes		More than 2 Lanes on Main Road	
	ADT		ADT	
	<6000	>=6000	<10000	>=10000
35 MPH or Less	300 LTV a day	200 LTV a day	400 LTV a day	300 LTV a day
40 to 50 MPH	250 LTV a day	175 LTV a day	325 LTV a day	250 LTV a day
>= 55 MPH	200 LTV a day	150 LTV a day	250 LTV a day	200 LTV a day

Table 4-7a Minimum Volumes Requiring Left Turn Lanes

Based on a posted speed limit of 55 mph and a 24-hour volume of less than 6,000 vehicles (counted for this study as 4,349 vehicles, with a flat-to-decreasing trend) on Old Phoenix Road, the left turn volume threshold above which a left turn lane would be required is 200 left turn vehicles per day. This study projects 174 southbound left turns into the project. This is below the 200 left turn vehicles per day threshold and, therefore, according to the Georgia DOT standard, no left turn lane is required on Old Phoenix Road at the project access.

The project access at Old Phoenix Road should be built with one entering and one exiting lane, or as required by the County. The exiting approach should be controlled by side street stop sign and accompanying stop bar. This lane configuration was used in the operational analysis.

No turn lanes are considered necessary to serve the project's access at Garrett Drive because Garrett Drive is a low volume, low speed local street. This access should also be built with one entering and one exiting lane, or as required by the County. The exiting approach should be controlled by side street stop sign and accompanying stop bar.

The project will add minimal trips to the already-low volumes at the New Phoenix Road / Garrett Drive intersection and, therefore, no changes are recommended for that intersection.

Future Intersection Operations

An operational analysis was performed for the anticipated future project build-out. Table 6 presents the results of the future analysis. Computer printouts containing detailed results of the future analysis are located in Appendix E. Levels of service and delays are provided for each overall intersection and for each controlled approach or movement. Locations that operate unacceptably (LOS E or LOS F) are presented in bold type.

Table 6 – Future Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Old Phoenix Road at New Phoenix Road	B	10.3	B	12.6
northbound approach	B	11.5	A	9.3
southbound approach	A	9.4	B	14.7
eastbound approach	A	8.7	A	9.0
westbound approach	A	9.0	A	8.9
2. GA 16 at Old Phoenix Road	A	6.5	A	6.7
southbound left turn	C	20.2	B	12.8
southbound right turn	A	9.4	B	11.1
eastbound left turn	A	8.2	A	7.7
3. New Phoenix Road at Garrett Drive	A	1.7	A	1.6
northbound approach	A	9.3	A	9.4
westbound left turn	A	7.4	A	7.5
4. Old Phoenix Road at Subdivision Access	A	0.9	A	0.8
southbound left turn (entering project)	A	8.0	A	7.6
westbound approach (exiting project)	B	11.1	B	10.6

The future analysis shows continued good traffic operations at all study locations. No mitigation is identified for the future condition other than the right turn lane required at the project access on Old Phoenix Road.

Conclusions and Recommendations

This study assesses the traffic impact of a proposed residential subdivision in Putnam County, Georgia. The site is located on the east side of Old Phoenix Road and the project will include 53 single-family homes. One full-movement vehicular access will be provided on Old Phoenix Road and one full-movement access will be provided on Garrett Drive, which connects between Old Phoenix Road and New Phoenix Road. The following are the findings and recommendations of this study:

1. Existing operations at the studied intersections are good and no mitigation is identified for the existing condition.
2. Traffic volume growth in this area has been low-to-negative. Therefore, no background growth factor was applied in developing the no-build condition. However, the approved but undeveloped homes in the adjacent Phoenix Crossing subdivision were added to the no-build analysis.
3. The no-build condition will see moderate increases in delays and continued good traffic operations. Therefore, no mitigation is identified for the no-build condition.
4. The proposed subdivision will generate 42 a.m. peak hour trips, 55 p.m. peak hour trips, and 580 weekday trips.
5. With the addition of the subdivision's trips, delays will increase slightly from the no-build condition, but all locations, including the project access on Old Phoenix Road, will operate well. Therefore, no mitigation is identified other than the right turn lane required at the project access.
6. A northbound right turn lane is required by County Code on Old Phoenix Road at the project access.
7. Both project accesses should be built with one entering and one exiting lane, or as required by the County. Each exiting approach should be controlled by side street stop sign and accompanying stop bar.
8. The site engineer should comply with all applicable design standards at the site accesses and internal site roadways, including sight distances, turn radii, driveway widths, islands, angles with the adjacent roadways, and grades.

Appendix A

Traffic Count Data and Volume Worksheets

Old Phoenix Road Subdivision Traffic Impact Study
Putnam County, Georgia

June 2021

Intersection: 1. Old Phoenix Road at New Phoenix Road

	Northbound Old Phoenix Road			Southbound Old Phoenix Road			Eastbound New Phoenix Road			Westbound New Phoenix Road				
	L	T	R	L	T	R	L	T	R	L	T	R	Tot	
Weekday A.M. Peak Hour														
Counted Volumes (Tuesday, June 15, 2021, 7:30-8:30)	6	284	1	19	100	2	5	18	8	2	17	78	97	
COVID-19 adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Existing, Adjusted Volumes	6	284	1	19	100	2	5	18	8	2	17	78	97	
Total Annual Background Growth Remaining Phoenix Crossing Homes Trips	3	9	0	3	3	0	0	0	0	0	2	8	10	
No-Build Volumes	9	293	1	22	103	2	5	19	9	2	19	86	107	
Proposed Old Phoenix Road Subdivision Trips	2	17	0	0	5	0	5	0	1	1	0	0	0	
Build Volumes	11	310	1	22	108	2	10	19	10	34	19	86	107	

	Northbound Old Phoenix Road			Southbound Old Phoenix Road			Eastbound New Phoenix Road			Westbound New Phoenix Road			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Weekday P.M. Peak Hour													
Counted Volumes (Tuesday, June 15, 2021, 4:45-5:45)	7	111	6	69	297	8	6	23	10	39	16	29	50
COVID-19 adjustment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Existing, Adjusted Volumes	7	111	6	69	297	8	6	23	10	39	16	29	50
Total Annual Background Growth Remaining Phoenix Crossing Homes Trips	2	6	0	9	10	0	0	0	3	6	0	1	6
No-Build Volumes	9	117	6	78	307	8	6	26	13	45	5	17	56
Proposed Old Phoenix Road Subdivision Trips	1	11	0	0	18	0	18	0	2	2	0	0	0
Build Volumes	10	128	6	78	325	8	144	26	15	47	17	34	56

MARC R. ACAMPORA, PE, LLC

Old Phoenix Road Subdivision Traffic Impact Study
Putnam County, Georgia

June 2021

Intersection: 2. Sparta Highway (Georgia State Route 16) at Old Phoenix Road

Weekday A.M. Peak Hour	Southbound Old Phoenix Road			Eastbound GA 16			Westbound GA 16		
	L	R	Tot	L	T	Tot	T	R	Tot
Counted Volumes (Tuesday, June 15, 2021, 7:15-8:15)	2	104	106	273	54	327	79	2	81
COVID-19 adjustment	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Existing, Adjusted Volumes	2	104	106	273	54	327	79	2	81
Total Annual Background Growth	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Remaining Phoenix Crossing Homes Trips	2	7	9	2	0	2	0	1	1
No-Build Volumes	4	111		275	54		79	3	
Proposed Old Phoenix Road Subdivision Trips	3	8	11	2	0	2	0	1	1
Build Volumes	7	119	126	277	54	331	79	4	83

Weekday P.M. Peak Hour	Southbound Old Phoenix Road			Eastbound GA 16			Westbound GA 16		
	L	R	Tot	L	T	Tot	T	R	Tot
Counted Volumes (Tuesday, June 15, 2021, 4:45-5:45)	5	298	303	108	129	237	85	6	91
COVID-19 adjustment	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Existing, Adjusted Volumes	5	298	303	108	129	237	85	6	91
Total Annual Background Growth	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Remaining Phoenix Crossing Homes Trips	1	4	5	7	0	7	0	2	2
No-Build Volumes	6	302		115	129		85	8	
Proposed Old Phoenix Road Subdivision Trips	2	5	7	9	0	9	0	4	4
Build Volumes	8	307	315	124	129	253	85	12	97

MARC R. ACAMPORA, PE, LLC

Old Phoenix Road Subdivision Traffic Impact Study
Putnam County, Georgia

June 2021

Intersection: 3. New Phoenix Road at Garrett Drive

Weekday A.M. Peak Hour	Northbound Garrett Drive			Eastbound New Phoenix Road			Westbound New Phoenix Road		
	L	R	Tot	T	R	Tot	L	T	Tot
Counted Volumes (Tuesday, June 15, 2021, 7:15-8:15)	7	3	10	30	4	34	2	86	88
COVID-19 adjustment	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Existing, Adjusted Volumes	7	3	10	30	4	34	2	86	88
Total Annual Background Growth	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Remaining Phoenix Crossing Homes Trips	10	3	13	0	4	4	1	0	1
No-Build Volumes	17	6	23	30	8	38	3	86	89
Proposed Old Phoenix Road Subdivision Trips	0	2	2	0	0	0	1	0	1
Build Volumes	17	8	25	30	8	38	4	86	90

Weekday P.M. Peak Hour	Northbound Garrett Drive			Eastbound New Phoenix Road			Westbound New Phoenix Road		
	L	R	Tot	T	R	Tot	L	T	Tot
Counted Volumes (Tuesday, June 15, 2021, 5:00-6:00)	6	4	10	97	4	101	4	45	49
COVID-19 adjustment	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Existing, Adjusted Volumes	6	4	10	97	4	101	4	45	49
Total Annual Background Growth	0.0%	0.0%		0.0%	0.0%		0.0%	0.0%	
Remaining Phoenix Crossing Homes Trips	6	2	8	0	12	12	4	0	4
No-Build Volumes	12	6	18	97	16	113	8	45	53
Proposed Old Phoenix Road Subdivision Trips	0	1	1	0	0	0	2	0	2
Build Volumes	12	7	19	97	16	113	10	45	55

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Old Phoenix Road Subdivision Traffic Impact Study
Putnam County, Georgia

June 2021

Intersection: 4. Old Phoenix Road at Proposed Old Phoenix Road Subdivision Access

Weekday A.M. Peak Hour	Northbound Old Phoenix Road			Southbound Old Phoenix Road			Westbound Project Access		
	T	R	Tot	L	T	Tot	L	R	Tot
Counted Volumes (Tuesday, June 15, 2021, 7:30-8:30)	297		297	110		110			
COVID-19 adjustment	0.0%		0.0%	0.0%		0.0%			
Existing, Adjusted Volumes	297		297	110		110			
Total Annual Background Growth	3		3	9		9			
Remaining Phoenix Crossing Homes Trips	300		300	119		119			
No-Build Volumes	0	3	3	6	0	6			
Proposed Old Phoenix Road Subdivision Trips	300	3	303	6	119	125	11	19	30
Build Volumes							11	19	30

Weekday P.M. Peak Hour	Northbound Old Phoenix Road			Southbound Old Phoenix Road			Westbound Project Access		
	T	R	Tot	L	T	Tot	L	R	Tot
Counted Volumes (Tuesday, June 15, 2021, 4:45-5:45)	121		121	305		305			
COVID-19 adjustment	0.0%		0.0%	0.0%		0.0%			
Existing, Adjusted Volumes	121		121	305		305			
Total Annual Background Growth	9		9	5		5			
Remaining Phoenix Crossing Homes Trips	130		130	310		310			
No-Build Volumes	0	13	13	20	0	20	7	12	19
Proposed Old Phoenix Road Subdivision Trips	130	13	143	20	310	330	7	12	19
Build Volumes							7	12	19

Old Phoenix Road at project access to Tuesday, June 15, 2021
Peak Hour Calculation

	NB	Hourly	SB	Hourly	2-Way	Hourly
07:00 AM	54		11		65	
07:15 AM	51		27		78	
07:30 AM	93		26		119	
07:45 AM	80		21	85	101	363
08:00 AM	65	289	35	109	100	398
08:15 AM	59	297	28	110	87	407
08:30 AM	75	279	30	114	105	393
08:45 AM	50	249	23	116	73	365
04:00 PM	21		42		63	241
04:15 PM	25		54		79	215
04:30 PM	25		65		90	232
04:45 PM	26	97	61	222	87	319
05:00 PM	32	108	74	254	106	362
05:15 PM	32	115	89	289	121	404
05:30 PM	29	119	82	306	111	425
05:45 PM	28	121	60	305	88	426
06:00 PM	22	111	43	274	65	385
06:15 PM	22	101	48	233	70	334
24-Hour	2226		2123		4349	

COVID 19 adjustmtns 0% NB SB 2-Way
am peak increased by COVID 19 adjust 297 110 407
pm peak increased by COVID 19 adjust 121 305 426
24 hour increased by COVID 19 adjust 2226 2123 4349

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TMC Data
 Old Phoenix Rd @ New Phoenix Rd
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040001
 Site Code : 45040001
 Start Date : 6/15/2021
 Page No : 1

Groups Printed- Cars, Buses and Trucks

Start Time	Old Phoenix Rd Northbound					Old Phoenix Rd Southbound					New Phoenix Rd Eastbound					New Phoenix Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	5	48	0	0	53	2	9	0	0	11	1	1	1	0	3	1	5	9	0	15	82
07:15 AM	2	61	0	0	63	5	19	1	0	25	0	3	3	0	6	1	11	12	0	24	118
07:30 AM	0	68	1	0	69	2	26	1	0	29	3	5	1	0	9	0	6	15	0	21	128
07:45 AM	1	80	0	0	81	2	17	1	0	20	0	2	3	0	5	1	7	25	0	33	139
Total	8	257	1	0	266	11	71	3	0	85	4	11	8	0	23	3	29	61	0	93	467
08:00 AM	4	72	0	0	76	9	32	0	0	41	1	6	3	0	10	0	1	18	0	19	146
08:15 AM	1	64	0	0	65	6	25	0	0	31	1	5	1	0	7	1	3	20	0	24	127
08:30 AM	0	52	0	0	52	4	26	0	0	30	2	1	2	0	5	4	1	10	0	15	102
08:45 AM	3	55	1	0	59	7	17	2	0	26	2	1	2	0	5	0	2	13	0	15	105
Total	8	243	1	0	252	26	100	2	0	128	6	13	8	0	27	5	7	61	0	73	480
*** BREAK ***																					
04:00 PM	2	25	2	0	29	11	43	0	0	54	2	2	2	0	6	0	2	8	0	10	99
04:15 PM	1	16	1	0	18	12	56	4	0	72	0	3	0	0	3	1	4	6	0	11	104
04:30 PM	2	26	1	0	29	15	58	1	0	74	1	7	1	0	9	2	3	2	0	7	119
04:45 PM	1	29	0	0	30	13	56	3	0	72	0	7	3	0	10	1	3	6	0	10	122
Total	6	96	4	0	106	51	213	8	0	272	3	19	6	0	28	4	12	22	0	38	444
05:00 PM	1	22	0	0	23	18	71	0	0	89	2	5	1	0	8	1	5	6	0	12	132
05:15 PM	3	33	1	0	37	18	93	2	0	113	2	5	1	0	8	1	3	8	0	12	170
05:30 PM	2	27	5	0	34	20	77	3	0	100	2	6	5	0	13	2	5	9	0	16	163
05:45 PM	1	20	1	0	22	12	58	1	0	71	1	10	2	0	13	1	5	6	0	12	118
Total	7	102	7	0	116	68	299	6	0	373	7	26	9	0	42	5	18	29	0	52	583
Grand Total	29	698	13	0	740	156	683	19	0	858	20	69	31	0	120	17	66	173	0	256	1974
Apprch %	3.9	94.3	1.8	0		18.2	79.6	2.2	0		16.7	57.5	25.8	0		6.6	25.8	67.6	0		
Total %	1.5	35.4	0.7	0	37.5	7.9	34.6	1	0	43.5	1	3.5	1.6	0	6.1	0.9	3.3	8.8	0	13	

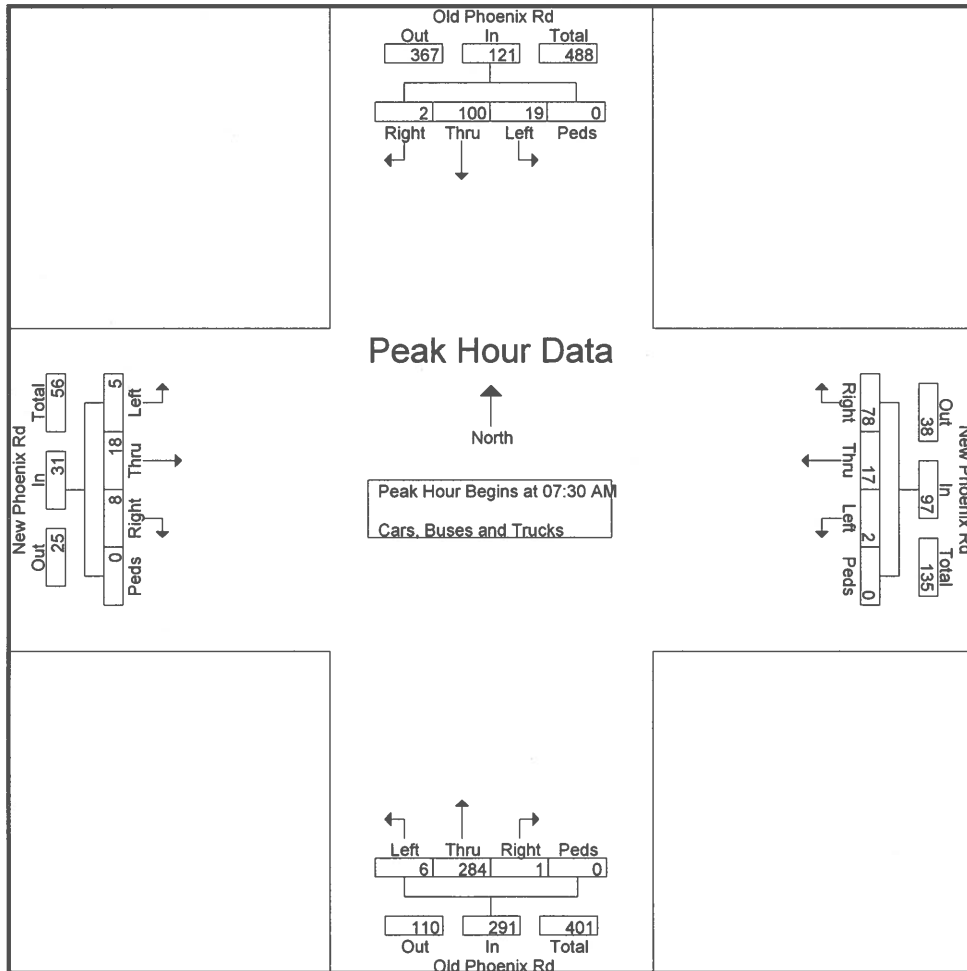
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TMC Data
 Old Phoenix Rd @ New Phoenix Rd
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040001
 Site Code : 45040001
 Start Date : 6/15/2021
 Page No : 2

Start Time	Old Phoenix Rd Northbound					Old Phoenix Rd Southbound					New Phoenix Rd Eastbound					New Phoenix Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	68	1	0	69	2	26	1	0	29	3	5	1	0	9	0	6	15	0	21	128
07:45 AM	1	80	0	0	81	2	17	1	0	20	0	2	3	0	5	1	7	25	0	33	139
08:00 AM	4	72	0	0	76	9	32	0	0	41	1	6	3	0	10	0	1	18	0	19	146
08:15 AM	1	64	0	0	65	6	25	0	0	31	1	5	1	0	7	1	3	20	0	24	127
Total Volume	6	284	1	0	291	19	100	2	0	121	5	18	8	0	31	2	17	78	0	97	540
% App. Total	97.6					15.7	82.6						16.1	58.1	25.8	17.5					80.4
PHF	.375	.888	.250	.000	.898	.528	.781	.500	.000	.738	.417	.750	.667	.000	.775	.500	.607	.780	.000	.735	.925



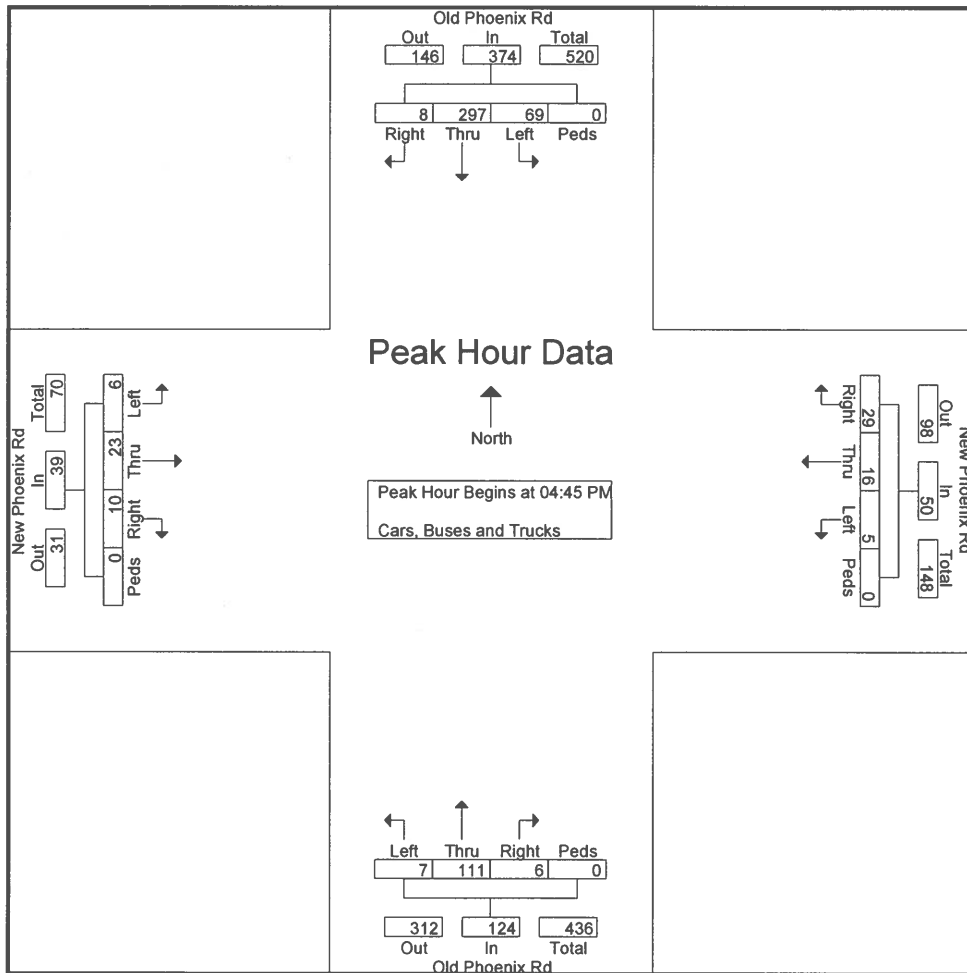
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TMC Data
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 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040001
 Site Code : 45040001
 Start Date : 6/15/2021
 Page No : 3

Start Time	Old Phoenix Rd Northbound					Old Phoenix Rd Southbound					New Phoenix Rd Eastbound					New Phoenix Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	1	29	0	0	30	13	56	3	0	72	0	7	3	0	10	1	3	6	0	10	122
05:00 PM	1	22	0	0	23	18	71	0	0	89	2	5	1	0	8	1	5	6	0	12	132
05:15 PM	3	33	1	0	37	18	93	2	0	113	2	5	1	0	8	1	3	8	0	12	170
05:30 PM	2	27	5	0	34	20	77	3	0	100	2	6	5	0	13	2	5	9	0	16	163
Total Volume	7	111	6	0	124	69	297	8	0	374	6	23	10	0	39	5	16	29	0	50	587
% App. Total	89.5					18.4	79.4					15.4	25.6								
PHF	.583	.841	.300	.000	.838	.863	.798	.667	.000	.827	.750	.821	.500	.000	.750	.625	.800	.806	.000	.781	.863



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TMC Data
 New Phoenix Rd @ Garrett Dr
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040002
 Site Code : 45040002
 Start Date : 6/15/2021
 Page No : 1

Groups Printed- Cars, Buses and Trucks

Start Time	Garrett Dr Northbound					Southbound					New Phoenix Rd Eastbound					New Phoenix Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	0	0	1	0	0	0	0	0	0	4	0	0	4	0	18	0	0	18	23
07:15 AM	1	0	0	0	1	0	0	0	0	0	0	5	3	0	8	2	18	0	0	20	29
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	6	1	0	7	0	23	0	0	23	31
07:45 AM	2	0	2	0	4	0	0	0	0	0	0	4	0	0	4	0	28	0	0	28	36
Total	5	0	2	0	7	0	0	0	0	0	0	19	4	0	23	2	87	0	0	89	119
08:00 AM	3	0	1	0	4	0	0	0	0	0	0	15	0	0	15	0	17	0	0	17	36
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	8	1	0	9	0	19	0	0	19	29
08:30 AM	1	0	0	0	1	0	0	0	0	0	0	7	1	0	8	0	15	0	0	15	24
08:45 AM	4	0	0	0	4	0	0	0	0	0	0	6	1	0	7	1	12	0	0	13	24
Total	9	0	1	0	10	0	0	0	0	0	0	36	3	0	39	1	63	0	0	64	113
*** BREAK ***																					
04:00 PM	1	0	0	0	1	0	0	0	0	0	0	15	1	0	16	0	9	0	0	9	26
04:15 PM	1	0	1	0	2	0	0	0	0	0	0	17	1	0	18	0	11	0	0	11	31
04:30 PM	2	0	0	0	2	0	0	0	0	0	0	20	2	0	22	0	5	0	0	5	29
04:45 PM	2	0	0	0	2	0	0	0	0	0	0	18	1	0	19	1	8	0	0	9	30
Total	6	0	1	0	7	0	0	0	0	0	0	70	5	0	75	1	33	0	0	34	116
05:00 PM	1	0	3	0	4	0	0	0	0	0	0	20	1	0	21	0	11	0	0	11	36
05:15 PM	2	0	0	0	2	0	0	0	0	0	0	22	2	0	24	3	10	0	0	13	39
05:30 PM	2	0	1	0	3	0	0	0	0	0	0	29	1	0	30	0	12	0	0	12	45
05:45 PM	1	0	0	0	1	0	0	0	0	0	0	26	0	0	26	1	12	0	0	13	40
Total	6	0	4	0	10	0	0	0	0	0	0	97	4	0	101	4	45	0	0	49	160
Grand Total	26	0	8	0	34	0	0	0	0	0	0	222	16	0	238	8	228	0	0	236	508
Apprch %	76.5	0	23.5	0		0	0	0	0		0	93.3	6.7	0		3.4	96.6	0	0		
Total %	5.1	0	1.6	0	6.7	0	0	0	0	0	0	43.7	3.1	0	46.9	1.6	44.9	0	0	46.5	

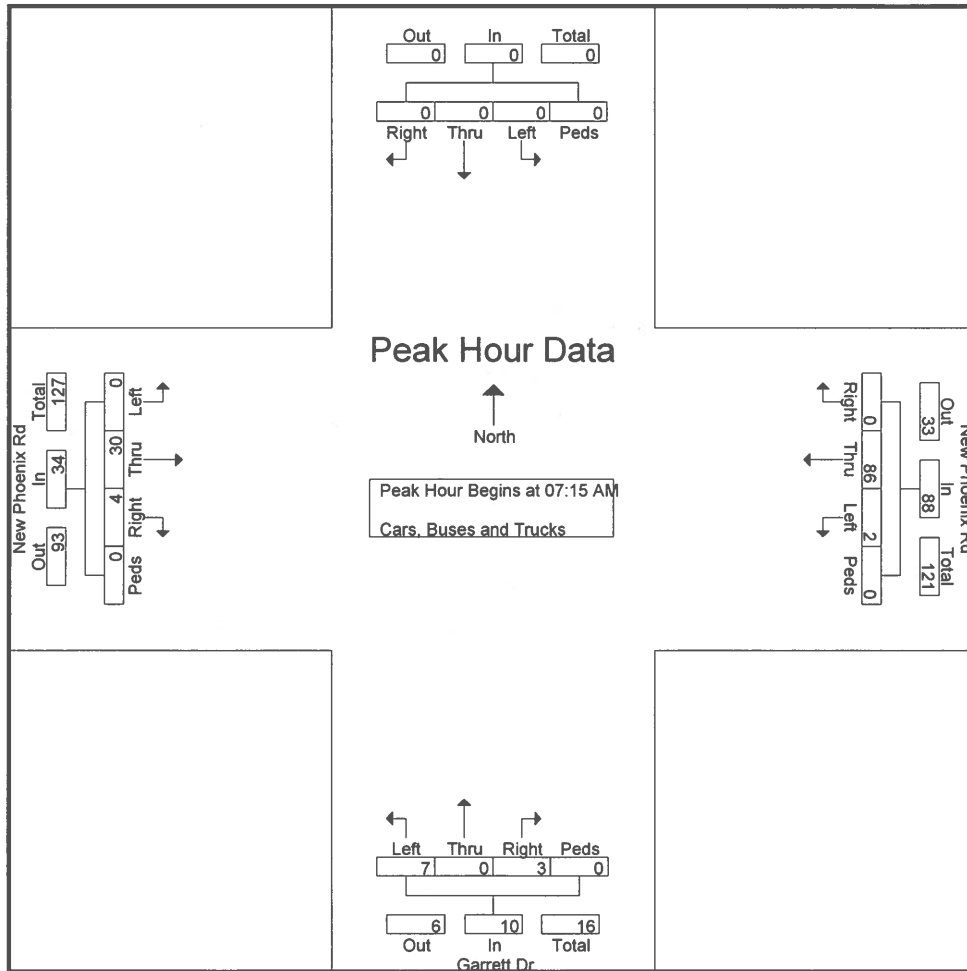
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TMC Data
 New Phoenix Rd @ Garrett Dr
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040002
 Site Code : 45040002
 Start Date : 6/15/2021
 Page No : 2

Start Time	Garrett Dr Northbound					Southbound					New Phoenix Rd Eastbound					New Phoenix Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	0	0	0	1	0	0	0	0	0	0	5	3	0	8	2	18	0	0	20	29
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	6	1	0	7	0	23	0	0	23	31
07:45 AM	2	0	2	0	4	0	0	0	0	0	0	4	0	0	4	0	28	0	0	28	36
08:00 AM	3	0	1	0	4	0	0	0	0	0	0	15	0	0	15	0	17	0	0	17	36
Total Volume	7	0	3	0	10	0	0	0	0	0	0	30	4	0	34	2	86	0	0	88	132
% App. Total												88.2	11.8				97.7				
PHF	.583	.000	.375	.000	.625	.000	.000	.000	.000	.000	.000	.500	.333	.000	.567	.250	.768	.000	.000	.786	.917



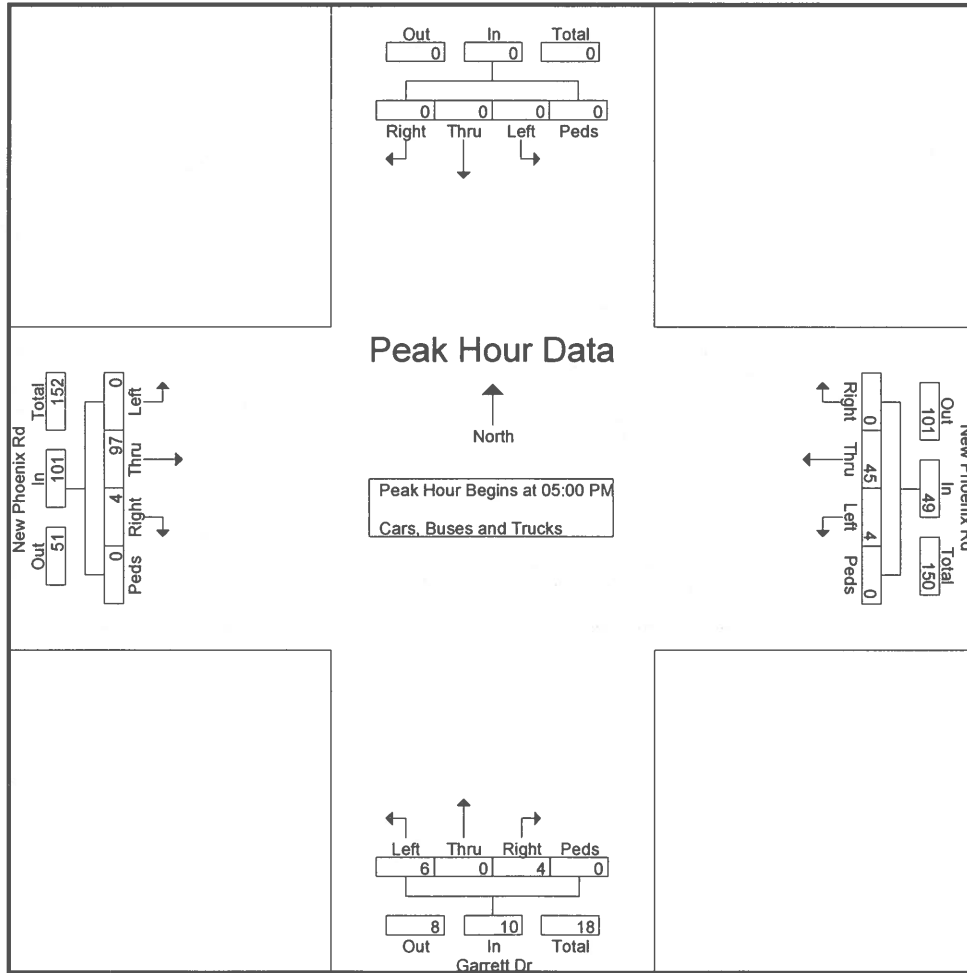
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TMC Data
 New Phoenix Rd @ Garrett Dr
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040002
 Site Code : 45040002
 Start Date : 6/15/2021
 Page No : 3

Start Time	Garrett Dr Northbound					Southbound					New Phoenix Rd Eastbound					New Phoenix Rd Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	3	0	4	0	0	0	0	0	0	20	1	0	21	0	11	0	0	11	36
05:15 PM	2	0	0	0	2	0	0	0	0	0	0	22	2	0	24	3	10	0	0	13	39
05:30 PM	2	0	1	0	3	0	0	0	0	0	0	29	1	0	30	0	12	0	0	12	45
05:45 PM	1	0	0	0	1	0	0	0	0	0	0	26	0	0	26	1	12	0	0	13	40
Total Volume	6	0	4	0	10	0	0	0	0	0	0	97	4	0	101	4	45	0	0	49	160
% App. Total																91.8					
PHF	.750	.000	.333	.000	.625	.000	.000	.000	.000	.000	.000	.836	.500	.000	.842	.333	.938	.000	.000	.942	.889



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TMC Data
 Old Phoenix Rd @ Sparta Hwy (GA16)
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040003
 Site Code : 45040003
 Start Date : 6/15/2021
 Page No : 1

Groups Printed- Cars, Buses and Trucks

Start Time	Private Drwy (Gated) Northbound					Old Phoenix Rd Southbound					Sparta Hwy (GA16) Eastbound					Sparta Hwy (GA16) Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	12	0	12	55	9	0	0	64	0	28	1	0	29	105
07:15 AM	0	0	0	0	0	1	0	24	0	25	65	10	0	0	75	0	23	1	0	24	124
07:30 AM	0	0	0	0	0	0	0	28	0	28	66	18	0	0	84	0	19	1	0	20	132
07:45 AM	0	0	0	0	0	1	0	21	0	22	84	20	0	0	104	0	20	0	0	20	146
Total	0	0	0	0	0	2	0	85	0	87	270	57	0	0	327	0	90	3	0	93	507
08:00 AM	0	0	0	0	0	0	0	31	0	31	58	6	0	0	64	0	17	0	0	17	112
08:15 AM	0	0	0	0	0	1	0	27	0	28	65	13	0	0	78	0	17	0	0	17	123
08:30 AM	0	0	0	0	0	0	0	29	0	29	68	4	0	0	72	0	15	1	0	16	117
08:45 AM	0	0	0	0	0	0	0	23	0	23	47	18	0	0	65	0	18	2	0	20	108
Total	0	0	0	0	0	1	0	110	0	111	238	41	0	0	279	0	67	3	0	70	460
*** BREAK ***																					
04:00 PM	0	0	0	0	0	1	0	39	0	40	16	25	0	0	41	0	23	0	0	23	104
04:15 PM	0	0	0	0	0	1	0	52	0	53	30	22	0	0	52	0	27	0	0	27	132
04:30 PM	0	0	0	0	0	0	0	63	0	63	27	26	1	0	54	0	22	1	0	23	140
04:45 PM	0	0	0	0	0	2	0	64	0	66	23	37	0	0	60	0	23	1	0	24	150
Total	0	0	0	0	0	4	0	218	0	222	96	110	1	0	207	0	95	2	0	97	526
05:00 PM	0	1	0	0	1	2	0	79	0	81	33	27	0	0	60	0	27	0	0	27	169
05:15 PM	0	0	0	0	0	0	0	86	0	86	29	34	0	0	63	0	15	2	0	17	166
05:30 PM	0	0	0	0	0	1	0	69	0	70	23	31	0	0	54	0	20	3	0	23	147
05:45 PM	0	0	0	0	0	1	0	62	0	63	28	24	0	0	52	0	26	0	0	26	141
Total	0	1	0	0	1	4	0	296	0	300	113	116	0	0	229	0	88	5	0	93	623
Grand Total	0	1	0	0	1	11	0	709	0	720	717	324	1	0	1042	0	340	13	0	353	2116
Apprch %	0	100	0	0		1.5	0	98.5	0		68.8	31.1	0.1	0		0	96.3	3.7	0		
Total %	0	0	0	0	0	0.5	0	33.5	0	34	33.9	15.3	0	0	49.2	0	16.1	0.6	0	16.7	

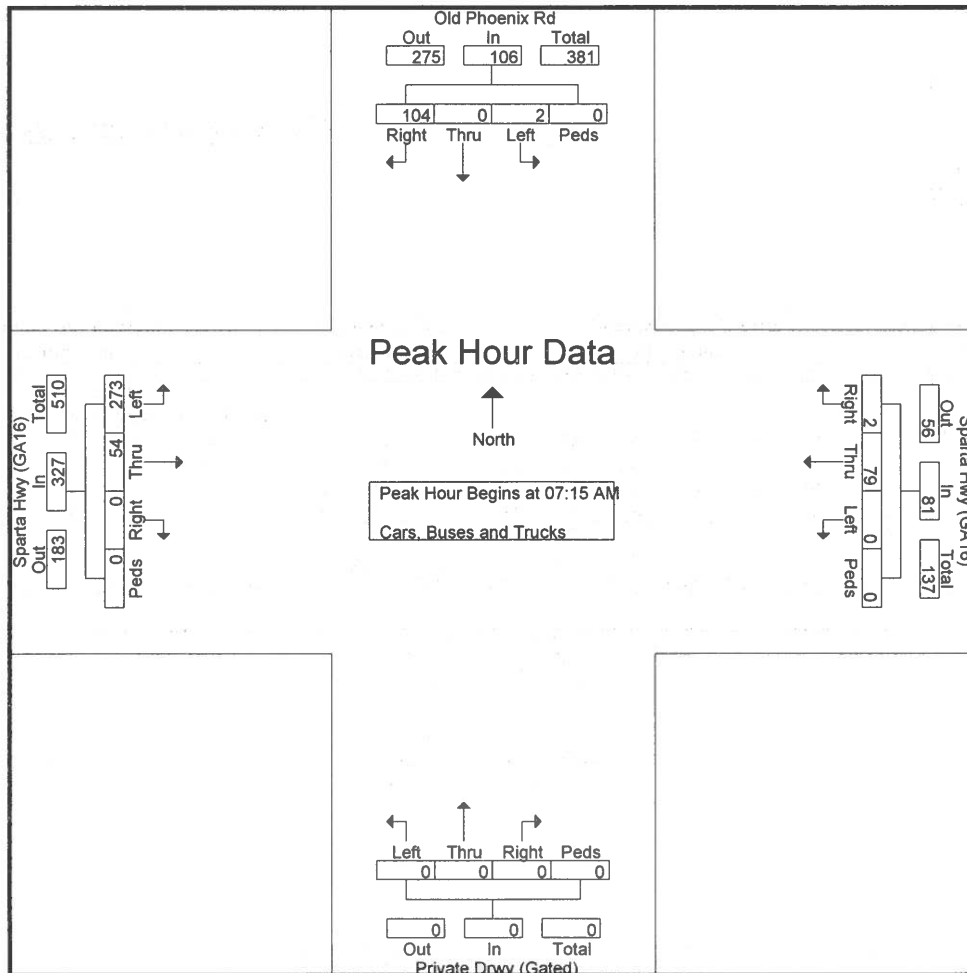
Reliable Traffic Data Services

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 Info@reliabletraffic.org | www.reliabletraffic.org

TMC Data
 Old Phoenix Rd @ Sparta Hwy (GA16)
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040003
 Site Code : 45040003
 Start Date : 6/15/2021
 Page No : 2

Start Time	Private Drwy (Gated) Northbound					Old Phoenix Rd Southbound					Sparta Hwy (GA16) Eastbound					Sparta Hwy (GA16) Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	1	0	24	0	25	65	10	0	0	75	0	23	1	0	24	124
07:30 AM	0	0	0	0	0	0	0	28	0	28	66	18	0	0	84	0	19	1	0	20	132
07:45 AM	0	0	0	0	0	1	0	21	0	22	84	20	0	0	104	0	20	0	0	20	146
08:00 AM	0	0	0	0	0	0	0	31	0	31	58	6	0	0	64	0	17	0	0	17	112
Total Volume	0	0	0	0	0	2	0	104	0	106	273	54	0	0	327	0	79	2	0	81	514
% App. Total								98.1			83.5	16.5					97.5				
PHF	.000	.000	.000	.000	.000	.500	.000	.839	.000	.855	.813	.675	.000	.000	.786	.000	.859	.500	.000	.844	.880



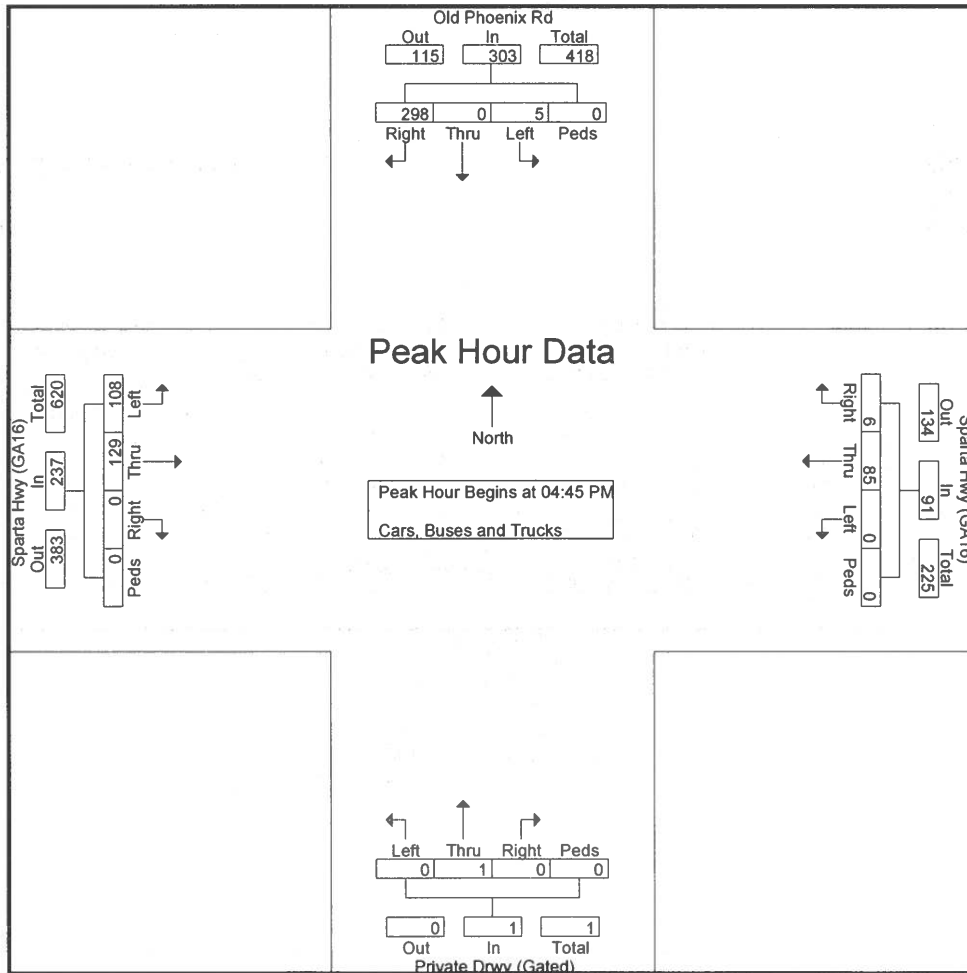
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TMC Data
 Old Phoenix Rd @ Sparta Hwy (GA16)
 Eatonton, GA
 7-9 AM | 4-6 PM

File Name : 45040003
 Site Code : 45040003
 Start Date : 6/15/2021
 Page No : 3

Start Time	Private Drwy (Gated) Northbound					Old Phoenix Rd Southbound					Sparta Hwy (GA16) Eastbound					Sparta Hwy (GA16) Westbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	2	0	64	0	66	23	37	0	0	60	0	23	1	0	24	150
05:00 PM	0	1	0	0	1	2	0	79	0	81	33	27	0	0	60	0	27	0	0	27	169
05:15 PM	0	0	0	0	0	0	0	86	0	86	29	34	0	0	63	0	15	2	0	17	166
05:30 PM	0	0	0	0	0	1	0	69	0	70	23	31	0	0	54	0	20	3	0	23	147
Total Volume	0	1	0	0	1	5	0	298	0	303	108	129	0	0	237	0	85	6	0	91	632
% App. Total								98.3			45.6	54.4					93.4				
PHF	.000	.250	.000	.000	.250	.625	.000	.866	.000	.881	.818	.872	.000	.000	.940	.000	.787	.500	.000	.843	.935



Reliable Traffic Data Services

ADT Data

Tel: (770) 578-8158 | Fax: (770) 578-8159
 Info@reliabletraffic.org | www.reliabletraffic.org

Site Code: 45040101
 Old Phoenix Rd south of Garrett Dr
 Eatonton, GA

Start Time	15-Jun-21 Tue	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	38			0	32				
12:15		0	25			4	38				
12:30		0	31			1	40				
12:45		0	38	0	132	1	22	6	132	6	264
01:00		0	30			1	35				
01:15		0	41			1	26				
01:30		0	38			1	32				
01:45		0	37	0	146	0	37	3	130	3	276
02:00		0	29			1	42				
02:15		1	30			2	32				
02:30		0	32			0	36				
02:45		0	30	1	121	0	31	3	141	4	262
03:00		0	40			0	34				
03:15		1	31			0	54				
03:30		2	24			0	35				
03:45		3	45	6	140	0	57	0	180	6	320
04:00		0	21			1	42				
04:15		2	25			3	54				
04:30		1	25			1	65				
04:45		1	26	4	97	1	61	6	222	10	319
05:00		8	32			3	74				
05:15		12	32			5	89				
05:30		13	29			0	82				
05:45		22	28	55	121	3	60	11	305	66	426
06:00		22	22			4	43				
06:15		26	22			9	48				
06:30		38	30			9	31				
06:45		53	23	139	97	7	21	29	143	168	240
07:00		54	15			11	30				
07:15		51	14			27	26				
07:30		93	24			26	28				
07:45		80	8	278	61	21	13	85	97	363	158
08:00		65	10			35	14				
08:15		59	22			28	13				
08:30		75	16			30	19				
08:45		50	7	249	55	23	16	116	62	365	117
09:00		44	7			15	8				
09:15		40	7			31	13				
09:30		47	6			29	5				
09:45		40	9	171	29	30	16	105	42	276	71
10:00		36	9			25	8				
10:15		35	11			28	11				
10:30		32	9			34	11				
10:45		41	3	144	32	27	11	114	41	258	73
11:00		34	7			25	5				
11:15		34	2			36	10				
11:30		37	3			31	8				
11:45		30	1	135	13	29	6	121	29	256	42
Total		1182	1044			599	1524			1781	2568
Percent		53.1%	46.9%			28.2%	71.8%			41.0%	59.0%
Grand Total		1182	1044			599	1524			1781	2568
Percent		53.1%	46.9%			28.2%	71.8%			41.0%	59.0%

ADT

ADT 4,349

AADT 4,349

Reliable Traffic Data Services

ADT Data

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 Info@reliabletraffic.org | www.reliabletraffic.org

Site Code: 45040102
 Sparta Hwy (GA16) east of Old Phoenix Rd
 Eatonton, GA

Start Time	15-Jun-21 Tue	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	14			1	24				
12:15		1	18			0	15				
12:30		1	18			1	19				
12:45		0	19	2	69	0	9	2	67	4	136
01:00		1	16			0	14				
01:15		1	14			0	25				
01:30		1	28			0	16				
01:45		0	18	3	76	0	23	0	78	3	154
02:00		1	17			1	15				
02:15		0	19			0	19				
02:30		0	17			0	19				
02:45		0	26	1	79	0	17	1	70	2	149
03:00		0	19			2	28				
03:15		1	24			1	16				
03:30		1	17			1	15				
03:45		7	32	9	92	0	20	4	79	13	171
04:00		3	23			3	24				
04:15		1	31			2	25				
04:30		3	24			4	26				
04:45		0	35	7	113	10	24	19	99	26	212
05:00		2	32			5	25				
05:15		5	33			11	22				
05:30		6	39			16	25				
05:45		3	26	16	130	14	26	46	98	62	228
06:00		16	22			17	17				
06:15		6	16			24	15				
06:30		16	24			15	10				
06:45		9	9	47	71	26	12	82	54	129	125
07:00		9	17			25	20				
07:15		10	17			27	11				
07:30		19	15			24	11				
07:45		22	10	60	59	20	9	96	51	156	110
08:00		10	8			15	9				
08:15		12	15			19	9				
08:30		12	9			17	6				
08:45		17	7	51	39	20	4	71	28	122	67
09:00		18	8			18	3				
09:15		16	12			26	5				
09:30		17	8			10	5				
09:45		16	10	67	38	22	7	76	20	143	58
10:00		16	11			21	0				
10:15		14	6			18	7				
10:30		20	2			20	5				
10:45		15	6	65	25	17	1	76	13	141	38
11:00		22	6			9	2				
11:15		14	2			18	0				
11:30		18	3			24	3				
11:45		8	2	62	13	18	1	69	6	131	19
Total		390	804			542	663			932	1467
Percent		32.7%	67.3%			45.0%	55.0%			38.8%	61.2%
Grand Total		390	804			542	663			932	1467
Percent		32.7%	67.3%			45.0%	55.0%			38.8%	61.2%

ADT

ADT 2,399

AADT 2,399

Appendix B

Intersection Analysis Methodology

Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2016 edition (HCM 6). Synchro 10 software, which emulates the HCM 6 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and roundabouts and stop-sign controlled (unsignalized) intersections. Levels of service (LOS) are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay.

Signalized Intersections and Roundabouts – Level of service for a signalized intersection and a roundabout is defined in terms of control delay per vehicle. For signalized intersections and roundabouts, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections and roundabouts than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals/roundabouts, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections and roundabouts are shown in Table A.

Table A – Level of Service Criteria for Signalized Intersections and Roundabouts

Control Delay (s/veh)	LOS
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

Source: *Highway Capacity Manual 6*

Unsignalized Intersections – Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory, factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream. The level of service criteria for unsignalized intersections are presented in Table B.

Table B – Level of Service Criteria for Unsignalized Intersections

Control Delay (s/veh)	LOS
0 – 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

Source: *Highway Capacity Manual 6*

Appendix C

Existing Intersection Operational Analysis

Old Phoenix Road Subdivision
 1: Old Phoenix Road & New Phoenix Road

existing a.m.

Intersection

Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	18	8	2	17	78	6	284	1	19	100	2
Future Vol, veh/h	5	18	8	2	17	78	6	284	1	19	100	2
Peak Hour Factor	0.78	0.78	0.78	0.74	0.74	0.74	0.90	0.90	0.90	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	4	2
Mvmt Flow	6	23	10	3	23	105	7	316	1	26	135	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.6	10.7	9.1
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	16%	2%	16%
Vol Thru, %	98%	58%	18%	83%
Vol Right, %	0%	26%	80%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	291	31	97	121
LT Vol	6	5	2	19
Through Vol	284	18	17	100
RT Vol	1	8	78	2
Lane Flow Rate	323	40	131	164
Geometry Grp	1	1	1	1
Degree of Util (X)	0.407	0.056	0.168	0.215
Departure Headway (Hd)	4.531	5.109	4.626	4.725
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	792	697	772	757
Service Time	2.571	3.169	2.676	2.771
HCM Lane V/C Ratio	0.408	0.057	0.17	0.217
HCM Control Delay	10.7	8.5	8.6	9.1
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2	0.2	0.6	0.8

Old Phoenix Road Subdivision
2: GA 16 & Old Phoenix Road

existing a.m.

Intersection

Int Delay, s/veh 6.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↗		↘	↗
Traffic Vol, veh/h	273	54	79	2	2	104
Future Vol, veh/h	273	54	79	2	2	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	320	-	-	-	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	84	84	86	86
Heavy Vehicles, %	4	19	19	4	4	4
Mvmt Flow	346	68	94	2	2	121

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	96	0	855
Stage 1	-	-	95
Stage 2	-	-	760
Critical Hdwy	4.14	-	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	2.236	-	3.536
Pot Cap-1 Maneuver	1485	-	326
Stage 1	-	-	924
Stage 2	-	-	458
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1485	-	250
Mov Cap-2 Maneuver	-	-	250
Stage 1	-	-	709
Stage 2	-	-	458

Approach	EB	WB	SB
HCM Control Delay, s	6.8	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1485	-	-	-	250	956
HCM Lane V/C Ratio	0.233	-	-	-	0.009	0.126
HCM Control Delay (s)	8.2	-	-	-	19.5	9.3
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.9	-	-	-	0	0.4

Old Phoenix Road Subdivision
 3: Garrett Drive & New Phoenix Road

existing a.m.

Intersection

Int Delay, s/veh 0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Vol, veh/h	30	4	2	86	7	3
Future Vol, veh/h	30	4	2	86	7	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	115	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	57	57	79	79	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	7	3	109	11	5

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	60	0	168 53
Stage 1	-	-	-	-	53 -
Stage 2	-	-	-	-	115 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1544	-	822 1014
Stage 1	-	-	-	-	970 -
Stage 2	-	-	-	-	910 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1544	-	820 1014
Mov Cap-2 Maneuver	-	-	-	-	820 -
Stage 1	-	-	-	-	970 -
Stage 2	-	-	-	-	908 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	870	-	-	1544	-
HCM Lane V/C Ratio	0.018	-	-	0.002	-
HCM Control Delay (s)	9.2	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Old Phoenix Road Subdivision
 1: Old Phoenix Road & New Phoenix Road

existing p.m.

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	23	10	5	16	29	7	111	6	69	297	8
Future Vol, veh/h	6	23	10	5	16	29	7	111	6	69	297	8
Peak Hour Factor	0.75	0.75	0.75	0.78	0.78	0.78	0.84	0.84	0.84	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	4	2
Mvmt Flow	8	31	13	6	21	37	8	132	7	83	358	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	8.6	8.9	12.8
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	15%	10%	18%
Vol Thru, %	90%	59%	32%	79%
Vol Right, %	5%	26%	58%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	124	39	50	374
LT Vol	7	6	5	69
Through Vol	111	23	16	297
RT Vol	6	10	29	8
Lane Flow Rate	148	52	64	451
Geometry Grp	1	1	1	1
Degree of Util (X)	0.193	0.076	0.09	0.553
Departure Headway (Hd)	4.696	5.252	5.029	4.42
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	762	679	709	816
Service Time	2.741	3.312	3.086	2.455
HCM Lane V/C Ratio	0.194	0.077	0.09	0.553
HCM Control Delay	8.9	8.7	8.6	12.8
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.7	0.2	0.3	3.4

Old Phoenix Road Subdivision
2: GA 16 & Old Phoenix Road

existing p.m.

Intersection

Int Delay, s/veh 6.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	108	129	85	6	5	298
Future Vol, veh/h	108	129	85	6	5	298
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	320	-	-	-	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	84	84	88	88
Heavy Vehicles, %	4	19	19	4	4	4
Mvmt Flow	115	137	101	7	6	339

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	108	0	0 472 105
Stage 1	-	-	- 105 -
Stage 2	-	-	- 367 -
Critical Hdwy	4.14	-	- 6.44 6.24
Critical Hdwy Stg 1	-	-	- 5.44 -
Critical Hdwy Stg 2	-	-	- 5.44 -
Follow-up Hdwy	2.236	-	- 3.536 3.336
Pot Cap-1 Maneuver	1470	-	- 547 944
Stage 1	-	-	- 914 -
Stage 2	-	-	- 696 -
Platoon blocked, %		-	- -
Mov Cap-1 Maneuver	1470	-	- 504 944
Mov Cap-2 Maneuver	-	-	- 504 -
Stage 1	-	-	- 843 -
Stage 2	-	-	- 696 -

Approach	EB	WB	SB
HCM Control Delay, s	3.5	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1470	-	-	-	504	944
HCM Lane V/C Ratio	0.078	-	-	-	0.011	0.359
HCM Control Delay (s)	7.7	-	-	-	12.2	10.9
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0	1.6

Old Phoenix Road Subdivision
 3: Garrett Drive & New Phoenix Road

existing p.m.

Intersection

Int Delay, s/veh 1

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↑	↗		↖	↘	
Traffic Vol, veh/h	97	4	4	45	6	4
Future Vol, veh/h	97	4	4	45	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	115	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	94	94	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	5	4	48	10	6

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	120	0	171	115
Stage 1	-	-	-	-	115	-
Stage 2	-	-	-	-	56	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1468	-	819	937
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1468	-	817	937
Mov Cap-2 Maneuver	-	-	-	-	817	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	964	-

Approach EB WB NB

HCM Control Delay, s	0	0.6	9.3
HCM LOS			A

Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT

Capacity (veh/h)	861	-	-	1468	-
HCM Lane V/C Ratio	0.018	-	-	0.003	-
HCM Control Delay (s)	9.3	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Appendix D

No-Build Intersection Operational Analysis

Old Phoenix Road Subdivision
 1: Old Phoenix Road & New Phoenix Road

no-build a.m.

Intersection

Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	19	9	2	19	86	9	293	1	22	103	2
Future Vol, veh/h	5	19	9	2	19	86	9	293	1	22	103	2
Peak Hour Factor	0.78	0.78	0.78	0.74	0.74	0.74	0.90	0.90	0.90	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	4	2
Mvmt Flow	6	24	12	3	26	116	10	326	1	30	139	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.8	11.1	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	15%	2%	17%
Vol Thru, %	97%	58%	18%	81%
Vol Right, %	0%	27%	80%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	303	33	107	127
LT Vol	9	5	2	22
Through Vol	293	19	19	103
RT Vol	1	9	86	2
Lane Flow Rate	337	42	145	172
Geometry Grp	1	1	1	1
Degree of Util (X)	0.429	0.061	0.188	0.229
Departure Headway (Hd)	4.589	5.179	4.688	4.794
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	781	687	761	745
Service Time	2.636	3.249	2.746	2.848
HCM Lane V/C Ratio	0.431	0.061	0.191	0.231
HCM Control Delay	11.1	8.6	8.8	9.3
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.2	0.2	0.7	0.9

Old Phoenix Road Subdivision
2: GA 16 & Old Phoenix Road

no-build a.m.

Intersection

Int Delay, s/veh 6.4

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations						
Traffic Vol, veh/h	275	54	79	3	4	111
Future Vol, veh/h	275	54	79	3	4	111
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	320	-	-	-	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	84	84	86	86
Heavy Vehicles, %	4	19	19	4	4	4
Mvmt Flow	348	68	94	4	5	129

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	98	0	-	0	860	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	764	-
Critical Hdwy	4.14	-	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.236	-	-	-	3.536	3.336
Pot Cap-1 Maneuver	1483	-	-	-	324	955
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	456	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1483	-	-	-	248	955
Mov Cap-2 Maneuver	-	-	-	-	248	-
Stage 1	-	-	-	-	706	-
Stage 2	-	-	-	-	456	-

Approach EB WB SB

HCM Control Delay, s	6.8	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 SBLn2

Capacity (veh/h)	1483	-	-	-	248	955
HCM Lane V/C Ratio	0.235	-	-	-	0.019	0.135
HCM Control Delay (s)	8.2	-	-	-	19.8	9.4
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.9	-	-	-	0.1	0.5

Old Phoenix Road Subdivision
 3: Garrett Drive & New Phoenix Road

no-build a.m.

Intersection

Int Delay, s/veh 1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	30	8	3	86	17	6
Future Vol, veh/h	30	8	3	86	17	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	115	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	57	57	79	79	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	14	4	109	25	9

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	67
Stage 1	-	-	53
Stage 2	-	-	117
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1535	820
Stage 1	-	-	970
Stage 2	-	-	908
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1535	818
Mov Cap-2 Maneuver	-	-	818
Stage 1	-	-	970
Stage 2	-	-	905

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	861	-	-	1535	-
HCM Lane V/C Ratio	0.04	-	-	0.002	-
HCM Control Delay (s)	9.4	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Old Phoenix Road Subdivision
 1: Old Phoenix Road & New Phoenix Road

no-build p.m.

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	26	13	5	17	34	9	117	6	78	307	8
Future Vol, veh/h	6	26	13	5	17	34	9	117	6	78	307	8
Peak Hour Factor	0.75	0.75	0.75	0.78	0.78	0.78	0.84	0.84	0.84	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	4	2
Mvmt Flow	8	35	17	6	22	44	11	139	7	94	370	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	8.8	9.1	13.8
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	
Vol Left, %		7%	13%	9%	20%
Vol Thru, %		89%	58%	30%	78%
Vol Right, %		5%	29%	61%	2%
Sign Control		Stop	Stop	Stop	Stop
Traffic Vol by Lane		132	45	56	393
LT Vol		9	6	5	78
Through Vol		117	26	17	307
RT Vol		6	13	34	8
Lane Flow Rate		157	60	72	473
Geometry Grp		1	1	1	1
Degree of Util (X)		0.209	0.089	0.102	0.59
Departure Headway (Hd)		4.78	5.326	5.108	4.482
Convergence, Y/N		Yes	Yes	Yes	Yes
Cap		746	668	696	805
Service Time		2.834	3.399	3.18	2.523
HCM Lane V/C Ratio		0.21	0.09	0.103	0.588
HCM Control Delay		9.1	8.9	8.8	13.8
HCM Lane LOS		A	A	A	B
HCM 95th-tile Q		0.8	0.3	0.3	3.9

Old Phoenix Road Subdivision
2: GA 16 & Old Phoenix Road

no-build p.m.

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	115	129	85	6	6	302
Future Vol, veh/h	115	129	85	6	6	302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	320	-	-	-	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	84	84	88	88
Heavy Vehicles, %	4	19	19	4	4	4
Mvmt Flow	122	137	101	7	7	343

Major/Minor

	Major1	Major2	Minor2		
Conflicting Flow All	108	0	0	486	105
Stage 1	-	-	-	105	-
Stage 2	-	-	-	381	-
Critical Hdwy	4.14	-	-	6.44	6.24
Critical Hdwy Stg 1	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	5.44	-
Follow-up Hdwy	2.236	-	-	3.536	3.336
Pot Cap-1 Maneuver	1470	-	-	537	944
Stage 1	-	-	-	914	-
Stage 2	-	-	-	686	-
Platoon blocked, %		-	-		
Mov Cap-1 Maneuver	1470	-	-	492	944
Mov Cap-2 Maneuver	-	-	-	492	-
Stage 1	-	-	-	838	-
Stage 2	-	-	-	686	-

Approach

	EB	WB	SB
HCM Control Delay, s	3.6	0	11
HCM LOS			B

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1470	-	-	-	492	944
HCM Lane V/C Ratio	0.083	-	-	-	0.014	0.364
HCM Control Delay (s)	7.7	-	-	-	12.4	11
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0	1.7

Old Phoenix Road Subdivision
 3: Garrett Drive & New Phoenix Road

no-build p.m.

Intersection

Int Delay, s/veh 1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Vol, veh/h	97	16	8	45	12	6
Future Vol, veh/h	97	16	8	45	12	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	115	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	94	94	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	19	9	48	18	9

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	134	0	181
Stage 1	-	-	-	-	115
Stage 2	-	-	-	-	66
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1451	-	808
Stage 1	-	-	-	-	910
Stage 2	-	-	-	-	957
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1451	-	803
Mov Cap-2 Maneuver	-	-	-	-	803
Stage 1	-	-	-	-	910
Stage 2	-	-	-	-	951

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	843	-	-	1451	-
HCM Lane V/C Ratio	0.033	-	-	0.006	-
HCM Control Delay (s)	9.4	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Appendix E

Future Intersection Operational Analysis

Old Phoenix Road Subdivision
1: Old Phoenix Road & New Phoenix Road

future a.m.

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	19	10	2	19	86	11	310	1	22	108	2
Future Vol, veh/h	5	19	10	2	19	86	11	310	1	22	108	2
Peak Hour Factor	0.78	0.78	0.78	0.74	0.74	0.74	0.90	0.90	0.90	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	4	2
Mvmt Flow	6	24	13	3	26	116	12	344	1	30	146	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	9	11.5	9.4
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	15%	2%	17%
Vol Thru, %	96%	56%	18%	82%
Vol Right, %	0%	29%	80%	2%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	322	34	107	132
LT Vol	11	5	2	22
Through Vol	310	19	19	108
RT Vol	1	10	86	2
Lane Flow Rate	358	44	145	178
Geometry Grp	1	1	1	1
Degree of Util (X)	0.458	0.063	0.191	0.239
Departure Headway (Hd)	4.605	5.235	4.756	4.824
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	780	678	749	740
Service Time	2.657	3.313	2.819	2.886
HCM Lane V/C Ratio	0.459	0.065	0.194	0.241
HCM Control Delay	11.5	8.7	9	9.4
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.4	0.2	0.7	0.9

Old Phoenix Road Subdivision
2: GA 16 & Old Phoenix Road

future a.m.

Intersection						
Int Delay, s/veh	6.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	277	54	79	4	7	119
Future Vol, veh/h	277	54	79	4	7	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	320	-	-	-	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	84	84	86	86
Heavy Vehicles, %	4	19	19	4	4	4
Mvmt Flow	351	68	94	5	8	138

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	99	0	867
Stage 1	-	-	97
Stage 2	-	-	770
Critical Hdwy	4.14	-	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	2.236	-	3.536
Pot Cap-1 Maneuver	1481	-	321
Stage 1	-	-	922
Stage 2	-	-	453
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1481	-	245
Mov Cap-2 Maneuver	-	-	245
Stage 1	-	-	703
Stage 2	-	-	453

Approach	EB	WB	SB
HCM Control Delay, s	6.8	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1481	-	-	-	245	954
HCM Lane V/C Ratio	0.237	-	-	-	0.033	0.145
HCM Control Delay (s)	8.2	-	-	-	20.2	9.4
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.9	-	-	-	0.1	0.5

Old Phoenix Road Subdivision
 3: Garrett Drive & New Phoenix Road

future a.m.

Intersection

Int Delay, s/veh 1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	30	8	4	86	17	8
Future Vol, veh/h	30	8	4	86	17	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	115	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	57	57	79	79	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	14	5	109	24	11

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	67
Stage 1	-	-	53
Stage 2	-	-	119
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1535	818
Stage 1	-	-	970
Stage 2	-	-	906
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1535	816
Mov Cap-2 Maneuver	-	-	816
Stage 1	-	-	970
Stage 2	-	-	903

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	870	-	-	1535	-
HCM Lane V/C Ratio	0.041	-	-	0.003	-
HCM Control Delay (s)	9.3	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Old Phoenix Road Subdivision
 4: Old Phoenix Road & project access

future a.m.

Intersection

Int Delay, s/veh 0.9

Movement WBL WBR NBT NBR SBL SBT

Lane Configurations	W		↑	↑		↑
Traffic Vol, veh/h	11	19	300	3	6	119
Future Vol, veh/h	11	19	300	3	6	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	90	90	74	74
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	14	24	333	3	8	161

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	510	333	0	0	336	0
Stage 1	333	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	523	709	-	-	1223	-
Stage 1	726	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	519	709	-	-	1223	-
Mov Cap-2 Maneuver	519	-	-	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	848	-	-	-	-	-

Approach WB NB SB

HCM Control Delay, s	11.1	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt NBT NBRWBLn1 SBL SBT

Capacity (veh/h)	-	-	625	1223	-
HCM Lane V/C Ratio	-	-	0.06	0.007	-
HCM Control Delay (s)	-	-	11.1	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Old Phoenix Road Subdivision
 1: Old Phoenix Road & New Phoenix Road

future p.m.

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	26	15	5	17	34	10	128	6	78	325	8
Future Vol, veh/h	6	26	15	5	17	34	10	128	6	78	325	8
Peak Hour Factor	0.75	0.75	0.75	0.78	0.78	0.78	0.84	0.84	0.84	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	4	2	2	4	2
Mvmt Flow	8	35	20	6	22	44	12	152	7	94	392	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	8.9	9.3	14.7
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	
Vol Left, %		7%	13%	9%	19%
Vol Thru, %		89%	55%	30%	79%
Vol Right, %		4%	32%	61%	2%
Sign Control		Stop	Stop	Stop	Stop
Traffic Vol by Lane		144	47	56	411
LT Vol		10	6	5	78
Through Vol		128	26	17	325
RT Vol		6	15	34	8
Lane Flow Rate		171	63	72	495
Geometry Grp		1	1	1	1
Degree of Util (X)		0.229	0.094	0.104	0.62
Departure Headway (Hd)		4.819	5.393	5.198	4.509
Convergence, Y/N		Yes	Yes	Yes	Yes
Cap		741	659	683	797
Service Time		2.88	3.471	3.275	2.555
HCM Lane V/C Ratio		0.231	0.096	0.105	0.621
HCM Control Delay		9.3	9	8.9	14.7
HCM Lane LOS		A	A	A	B
HCM 95th-tile Q		0.9	0.3	0.3	4.4

Old Phoenix Road Subdivision
2: GA 16 & Old Phoenix Road

future p.m.

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↖	↗
Traffic Vol, veh/h	124	129	85	12	8	307
Future Vol, veh/h	124	129	85	12	8	307
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	320	-	-	-	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	84	84	88	88
Heavy Vehicles, %	4	19	19	4	4	4
Mvmt Flow	132	137	101	14	9	349

Major/Minor

	Major1	Major2	Minor2
Conflicting Flow All	115	0	0 509 108
Stage 1	-	-	- 108 -
Stage 2	-	-	- 401 -
Critical Hdwy	4.14	-	- 6.44 6.24
Critical Hdwy Stg 1	-	-	- 5.44 -
Critical Hdwy Stg 2	-	-	- 5.44 -
Follow-up Hdwy	2.236	-	- 3.536 3.336
Pot Cap-1 Maneuver	1462	-	- 520 940
Stage 1	-	-	- 911 -
Stage 2	-	-	- 672 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1462	-	- 473 940
Mov Cap-2 Maneuver	-	-	- 473 -
Stage 1	-	-	- 829 -
Stage 2	-	-	- 672 -

Approach

	EB	WB	SB
HCM Control Delay, s	3.8	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1462	-	-	-	473	940
HCM Lane V/C Ratio	0.09	-	-	-	0.019	0.371
HCM Control Delay (s)	7.7	-	-	-	12.8	11.1
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.1	1.7

Old Phoenix Road Subdivision
 3: Garrett Drive & New Phoenix Road

future p.m.

Intersection

Int Delay, s/veh 1.6

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↑	↗		↖	↘	
Traffic Vol, veh/h	97	16	10	45	12	7
Future Vol, veh/h	97	16	10	45	12	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	115	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	94	94	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	19	11	48	18	10

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	134	0	185	115
Stage 1	-	-	-	-	115	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1451	-	804	937
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	953	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1451	-	798	937
Mov Cap-2 Maneuver	-	-	-	-	798	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	945	-

Approach EB WB NB

HCM Control Delay, s	0	1.4	9.4
HCM LOS			A

Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT

Capacity (veh/h)	844	-	-	1451	-
HCM Lane V/C Ratio	0.034	-	-	0.007	-
HCM Control Delay (s)	9.4	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Old Phoenix Road Subdivision
 4: Old Phoenix Road & project access

future p.m.

Intersection

Int Delay, s/veh 0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘		↑	↗		↖
Traffic Vol, veh/h	7	12	130	13	20	310
Future Vol, veh/h	7	12	130	13	20	310
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	70	70	84	84	83	83
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	10	17	155	15	24	373

Major/Minor

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	576	155	0
Stage 1	155	-	-
Stage 2	421	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	479	891	-
Stage 1	873	-	-
Stage 2	662	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	468	891	-
Mov Cap-2 Maneuver	468	-	-
Stage 1	873	-	-
Stage 2	647	-	-

Approach

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	668	1407
HCM Lane V/C Ratio	-	-	0.041	0.017
HCM Control Delay (s)	-	-	10.6	7.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1



**Watts & Browning
Engineers, Inc.**

Civil Engineering · Land Planning · Land Surveying

June 24, 2021 (revised 6/29/2021- open space)

**IMPACT ANALYSIS (IA)
PUTNAM COUNTY PLANNING & DEVELOPMENT
OLD PHOENIX TRACT**

- 1.a. The proposed use is consistent with the stated purpose of single-family residential development, effectively an additional phase to the adjoining development “Phoenix Crossing” Phases I and II.
- 1.b. The proposed use of the subject property is generally the same use and conditions of the adjoining “Phoenix Crossing” development approved and constructed a few years ago.
- 1.c. In my professional opinion the proposed use, identical to the adjacent development to the north. Said development has been quite the success and an additional phase intended to the south will likely benefit the “Phoenix Crossing” development. Likewise, the proposed development will have no adverse impact to the undeveloped property to the south and east, rather it will likely stimulate further like kind of a development which too will meet or exceed protection of streams, wetlands and stormwater management.
- 1.d. I believe the intent of the Comprehensive Plan would welcome such low to mid density developments as proposed and previously approved in the past, thus it should be accepted as compatible.
- 1.e. This vacant property could certainly remain in its current state; however, the current state does not depict the best and economical use of said property, thus the property currently as it effectively has no marketable use.

1.f. Based on recent developments adjacent and near this property a similar development as proposed will not have any excessive or burdensome use of public facilities or services or exceed the present or funded capabilities, included but not limited to streets, water or sewer utilities and police or fire protection. Rather, this proposed development will provide safe streets, setbacks and additional access to the adjacent community, creating open space, preservation of environmental resources. The streets will be sufficient to allow appropriate public safety (fire/police) access to new homeowners. All proposed infrastructure of streets, sanitary sewer, fire and domestic water, stormwater facilities and such will be funded solely by the developer. No city or county funds will be requested or needed.

1.g. In my professional opinion the proposed use is supported by the approval of similar developments nearby and adjacent. The proposed use is consistent with Comp Plan and precedence.

1.h. The proposed use as indicated on the zoning exhibits, traffic study, environmental study as well as my experience with the design and engineering of such developments are purposely conceived with a reasonable balance with the promotion of public health, safety, and a reasonable use of the property.

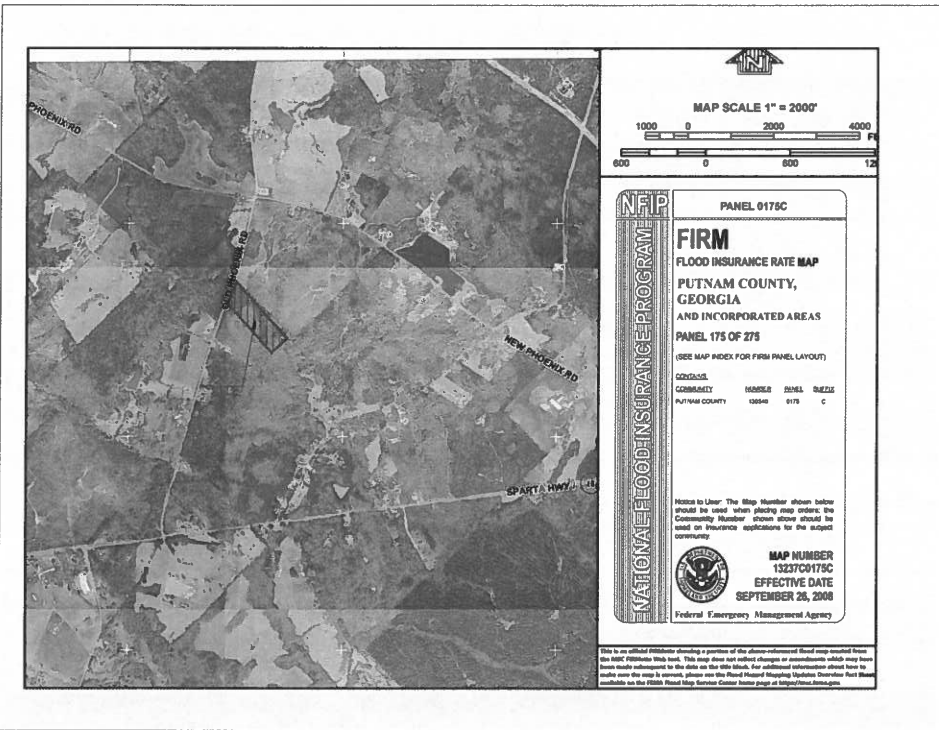
2. A Traffic Impact Study at Proposed Old Phoenix Road Residential Subdivision has been prepared by Marc R. Acampora, Traffic Engineering and provided with the entire zoning package.

3. The number of proposed dwelling units is 53 total. We believe the development would likely reflect approximately 32% open space net of storm water management areas. In any case, a minimum of 20% will be provided.

4. The environmental study prepared by a consultant indicated that there is a small stream and limited wetland areas (sources indicated in study to per provided as part of the application docs) which will be prepared and corroborated with the US Army Corps of Engineers prior to any land disturbance. Further Storm Water Management and erosion control BMP will be designed and implemented such that there would be no adverse to the environment, natural or historic, of surrounding the area to be rezoned.

5. The proposed development will have streets wider than that required per Appendix D of the Fire Apparatus Access Roads document. On street parking will not be allowed and ample parking on each home site will allow free and easy access to fire routes and access to homes.
6. The topography of the property is gentle and quite conducive to such a development. The one stream identified by the environmental consultant indicates a small relatively gentle gradient and will be protected and preserved during development. The road crossing of said creek will be coordinated and separately permitted by the USACOE.
7. The land use to the north is the essentially built out development named Phoenix Crossing, zoned R-1R and parcels to the south are generally vacant and zoned AG-1

Daryl R. Cook, P.E.
Watts & Browning Engineers, Inc.



MAP SCALE 1" = 2000'

1000 0 2000 4000
600 0 600 1200

PANEL 0175C

FIRM
FLOOD INSURANCE RATE MAP
PUTNAM COUNTY,
GEORGIA
AND INCORPORATED AREAS
PANEL 175 OF 275

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTRACT	ISSUES	REVISIONS	DATE
PUTNAM COUNTY	132540	0175	C

Please Note: The Map Number shown below should be used when placing any orders, the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
13237C0175C
EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

This is an official FloodMap showing a portion of the above-referenced flood map issued from the NFIP. It is not to be used for any other purpose. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to update your map to current, please see the Flood Hazard Mapping Update Overview Part II available on the FEMA Flood Map Service Center home page at <http://www.fema.gov>.

WATTS & BROWNING ENGINEERS, INC. HAS EXAMINED THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) AND BY GRAPHICALLY PLOTTING THE LOCATION OF THE SUBJECT PROPERTY ONTO PUTNAM COUNTY FIRM MAP NUMBER 13237C0175C, DATED SEPTEMBER 26, 2008 THE REFERENCED PROPERTY IS LOCATED IN THE ZONE LISTED BELOW:

ZONE X (UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THE FLOOD LINE, IF SHOWN, IS APPROXIMATE AND THE ACTUAL LIMITS OF FLOOD LINE BASED ON PUBLISHED ELEVATIONS MAY EXTEND BEYOND THOSE SHOWN HEREON.



OWNER/APPLICANT:

SDH ATLANTA, LLC
110 VILLAGE TRAIL, SUITE 215
WOODSTOCK, GA 30188
PHONE (404) 557-8309

ENGINEER:

WATTS & BROWNING ENGINEERS, INC.
1349 OLD 41 HWY NW, SUITE #225
MARIETTA, GA 30060
PHONE: (678) 324-6192
FAX: (770) 694-6870
CONTACT: DARYL COOK

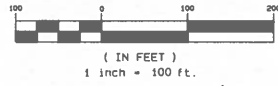
REFERENCE MATERIAL

1. SURVEY PLAT OF PROPERTY OF FRANK MADDOX EST. LOCATED IN GEORGIA G.M.D. 308, PUTNAM COUNTY, GEORGIA, PREPARED BY ROBERT HARWELL, R.L.S. NO. 1663, DATED NOVEMBER 15 1998, REVISED ON OCTOBER 16, 2002.
2. WETLANDS & CREEK DELINEATION PROVIDED BY AN AQUATIC RESOURCES FINDINGS REPORT BY CORBLU ECOLOGY GROUP, DATED JUNE 14, 2021.

DEVELOPMENT DATA

TOTAL SITE AREA	± 29.5 AC
OPEN SPACE REQUIRED:	5.9 AC (20%)
OPEN SPACE PROVIDED:	± 9.3 AC (32%)
(NET STORMWATER MANAGEMENT AREA)	
LOTS:	53
DENSITY:	1.8 UNITS/AC
EXISTING ZONING	AG-1
PROPOSED ZONING	R-PUD
SETBACKS (MINIMUM)	
FRONT-	15'
SIDE-	10'
REAR-	20'

GRAPHIC SCALE



CONCEPT PLAN / REZONING EXHIBIT

FOR
OLD PHOENIX ROAD TRACT
 G.M.D. 308
 PUTNAM COUNTY, GEORGIA

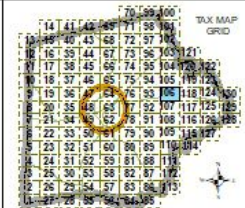
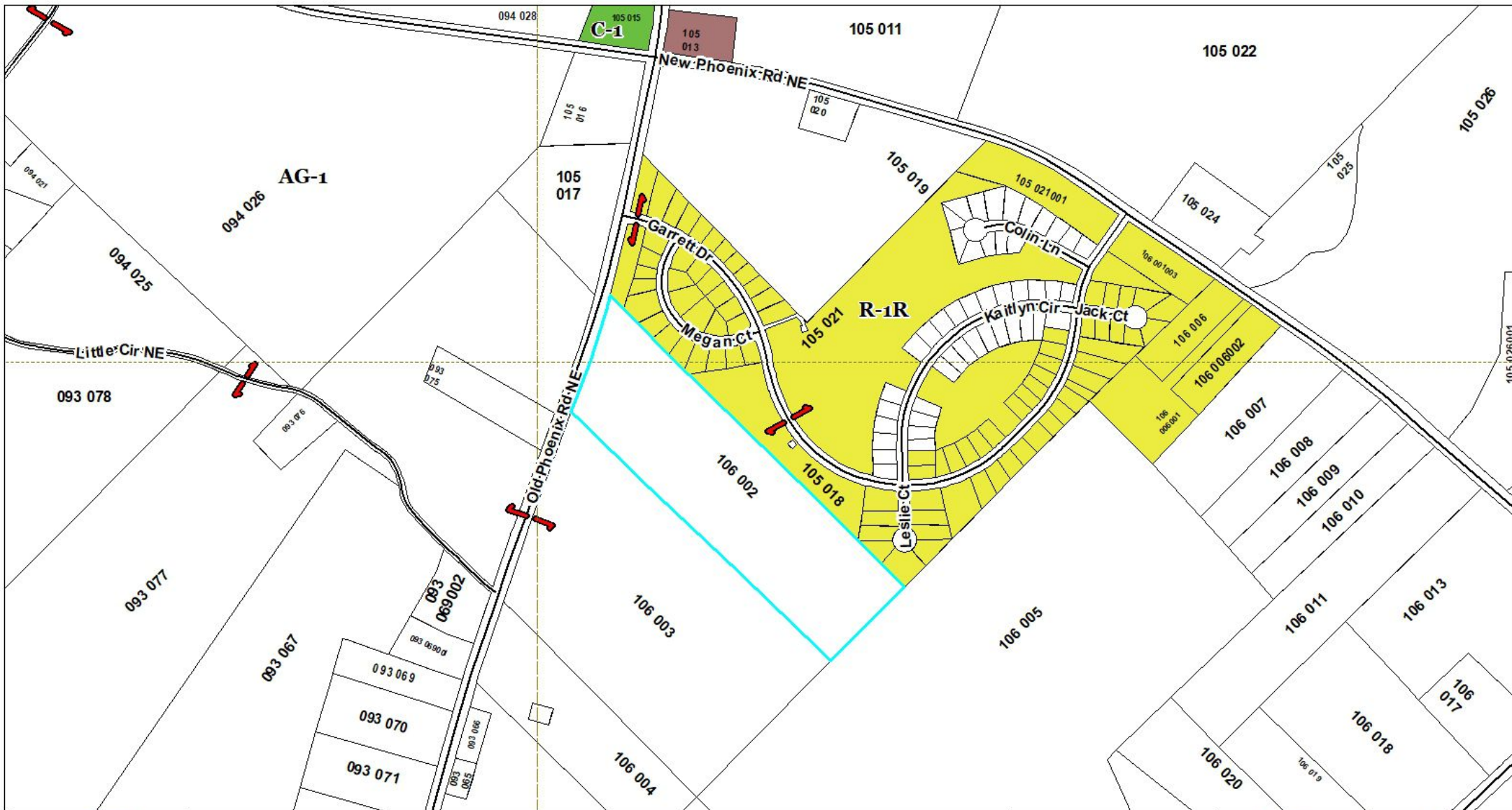


NO.	DATE	BY	DESCRIPTION
1.	06/15/21	JAT	REVISE LOTS & ADD WETLANDS.
2.	06/23/21	JAT	ADD 15' BUFFERS.
3.	06/29/21	JAT	ADD OPEN SPACE CALCULATIONS.

WATTS & BROWNING ENGINEERS, INC.
CIVIL ENGINEERS & LAND SURVEYORS
1349 OLD 41 HWY NW, SUITE #225
MARIETTA, GEORGIA 30060
PHONE: (678) 324-6192
FAX: (770) 694-6870
WWW.WBENGR.COM
LSF000429 - PEF000114

SCALE:	1" = 100'
DESIGNED BY:	DRC
DRAWN BY:	JJT
CHECKED BY:	DRC
INITIAL ISSUE DATE:	05/25/2021
JOB NUMBER:	210408

SHEET NUMBER:
1



GEOGRAPHIC FEATURE LEGEND

Eatonton Limits	Overlay District	AG-2	C-2 CITY	IND-2 CITY	R - 1 CITY	RM-2
County Boundary	No Code	C-1	I-M	MHP	R - 2 CITY	RM-3
Roads	AG-1	C-1 CITY	IND-1 CITY	PUBLIC	R - 3 CITY	VILLAGE
Parcels	AG-1 CITY	C-2	IND-2	PUBLIC CITY	R - 4 CITY	RM-1
Parcel Hooks						

LMGR
Middle Georgia Regional Commission
175 Emery Hwy
Suite C
Macon, Georgia 31217
(478) 751-6160
Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
ZONING MAPS

MAP 106

186

MAP SCALE: 1" = 500' SCALE RATIO: 1:5,000 DATE: JULY 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

TO: Planning & Zoning Commission

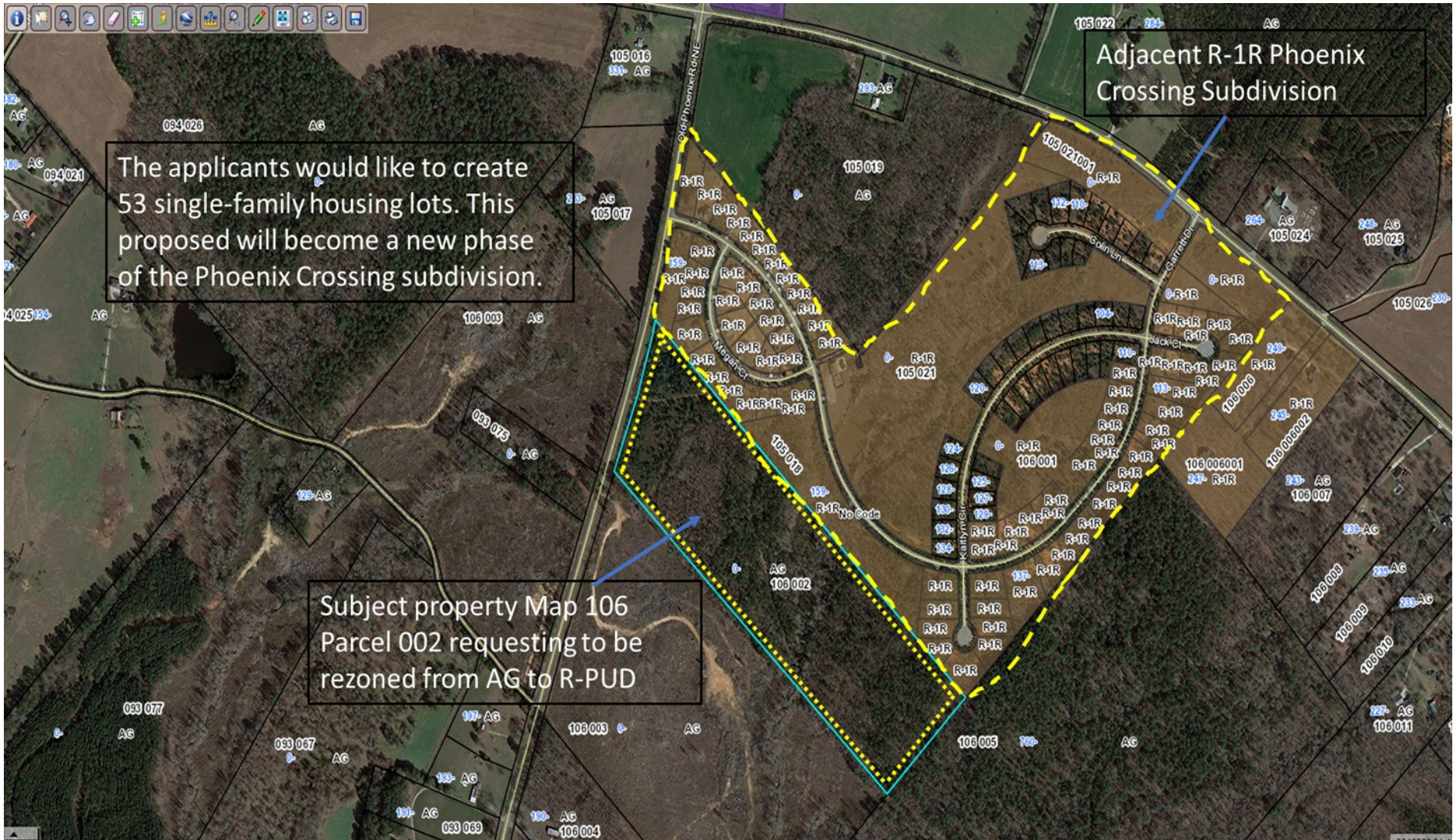
FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP**, to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2]. * The applicant is requesting to rezone 29.5 acres from AG to R-PUD. If approved, the 29.5 acres would become the third phase of the thriving Phoenix Crossing subdivision. The adjacent subdivision was rezoned in 2005 from AG to R-1R PUD. The original development consisted of 88.62 acres and was developed in two phases. The first phase consisted of 33 lots, and the second phase has 91 lots totaling 124 lots. The proposed development will consist of 53 lots. Piedmont Water is both the water and sewer provider for this development. According to the impact analysis, there will be one full-movement vehicular access on Old Phoenix and Garrett Drive. A 24-hour bi-directional traffic volume count collected on Tuesday, June 15, 2021, indicated a northbound volume of 2,226 vehicles and a southbound volume of 2,123 vehicles for a two-way volume of 4,349 vehicles. Growth in the area has been generally low, with average annual growth ranging from -2.1% to 1.4%, and with the most recent year of growth being negative and ranging from -14.3% to -0.3%. 4. The study shows that the proposed subdivision will generate 42 a.m. peak hour trips, 55 p.m. peak hour trips, and 580-weekday trips. It also suggests delays will increase slightly from the no-build condition, but all locations, including the project access on Old Phoenix Road, will operate well. In addition, both entrances should be constructed with one entering and one exiting lane, or as required by the County. Each exiting approach should be controlled by a side street stop sign and accompanying stop bar.

The proposed use is consistent with the allowed uses, as listed in [Sec. 66-119\(A\)](#) of the R-PUD zoning district. The future land use comprehensive plan is consistent with the proposed residential use. Therefore, the proposed use is compatible with the purpose and intent of the comprehensive plan. The surrounding properties are R-1R to the north and east, being Phoenix Crossing subdivision; to the west and south are AG properties. While the property can be used as it is currently zoned, it would be more marketable and of more significant benefit to the community rezoned. The rezoning will not adversely affect the existing use, value, or usability of adjacent or nearby properties. There is no evidence that the proposed development would cause excessive or burdensome use of public services, nor should it affect police, fire protection, or sewer services. If approved, the staff recommends that the developer should install a deceleration lane on Old Phoenix Road.



Staff recommendation is for approval to rezone 29.54 acres from AG to R-PUD on Old Phoenix Road [Map 106, Parcel 006, District 2] with the following conditions:

- (1) The developer shall construct a deceleration lane in accordance with the Georgia Department of Transportation Regulations for Driveway & Encroachment Control to service the main entrance on Old Phoenix Road.
- (2) Additional right-of-way to accommodate the deceleration lane and a ten-foot shoulder shall be dedicated by the developer to the County.

New Business Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

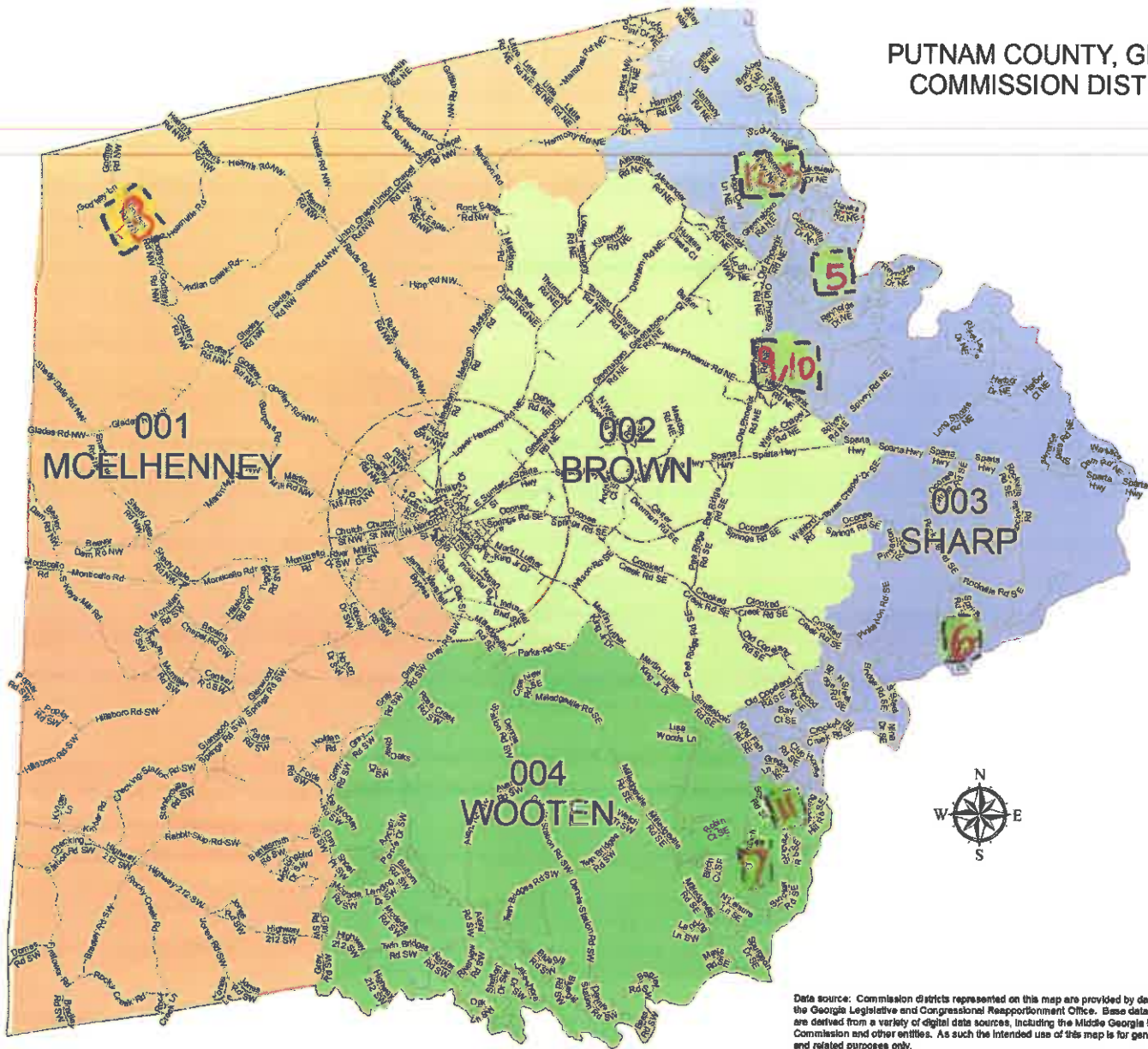
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. **[Map 111, Parcel 001044, District 4].***

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Data source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.26' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

APPLICATION FOR REZONING

REZONING

APPLICATION NO. PLAN 2021-01334

DATE: 6/24/21

MAP 111

PARCEL 001044

ZONING DISTRICT R1

1. Owner Name: Duane A. Gentes

2. Applicant Name (If different from above): N/A

3. Mailing Address: 125 Angelina Ln Eatonton GA 31024

4. Email Address: _____

5. Phone: (home) _____ (office) _____ (cell) 404 987 9725

6. The location of the subject property, including street number, if any: EMORY DR

7. The area of land proposed to be rezoned (stated in square feet if less than one acre): 5.40

8. The proposed zoning district desired: R-2

9. The purpose of this rezoning is (Attach Letter of Intent)
To put my property in one lot. I own both lot & lot 2

10. Present use of property: R1 Desired use of property: R2

11. Existing zoning district classification of the property and adjacent properties:
Existing: _____
North: R2 South: R1 East: R2 West: R1

12. Copy of warranty deed for proof of ownership and if not owned by applicant, please attach a signed and notarized letter of agency from each property owner for all property sought to be rezoned.

13. Legal description and recorded plat of the property to be rezoned.

14. The Comprehensive Plan Future Land Use Map category in which the property is located. (If more than one category applies, the areas in each category are to be illustrated on the concept plan. See concept plan insert.): _____

15. A detailed description of existing land uses: RAW LAND

16. Source of domestic water supply: well _____, community water , or private provider _____.
If source is not an existing system, please provide a letter from provider.

PLAN 2021-01334



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Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

- 17. Provision for sanitary sewage disposal: septic system or sewer . If sewer, please provide name of company providing same, or, if new development, provide a letter from sewer provider.
- 18. Complete attachment of Disclosure of Campaign Contributions Form by the applicant and/or the applicant's attorney as required by the Georgia Conflict of Interest in Zoning Act (O.C.G.A. 36-67A).
- 19. The application designation, date of application and action taken on all prior applications filed for rezoning for all or part of the subject property. (Please attach on separate sheet.)
- 20. Proof that property taxes for the parcel(s) in question have been paid.
- 21. Concept plan.
 - If the application is for less than 25 single-family residential lots, a concept plan need not be submitted. (See attachment.)
 - A concept plan may be required for commercial development at director's discretion
- 22. Impact analysis.
 - If the application is for less than 25 single-family residential lots, an impact analysis need not be submitted. (See attachment.)
 - An Impact analysis (including a traffic study) is required when rezoning from residential zoned or used property to commercial or industrial districts.

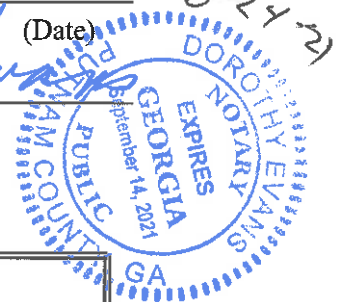
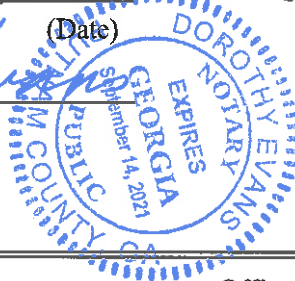
THE ABOVE STATEMENTS AND ACCOMPANYING MATERIALS ARE COMPLETE AND ACCURATE. APPLICANT HEREBY GRANTS PERMISSION FOR PLANNING AND DEVELOPMENT PERSONNEL OR ANY LEGAL REPRESENTATIVE OF PUTNAM COUNTY TO ENTER UPON AND INSPECT THE PROPERTY FOR ALL PURPOSES ALLOWED AND REQUIRED BY THE PUTNAM COUNTY CODE OF ORDINANCES.

Doree A. Smith 6-24-21
Signature (Property Owner) (Date)

Doree A. Smith 6-24-21
Signature (Applicant) (Date)

Dorothy Evans
Notary Public

Dorothy Evans
Notary Public



Office Use	
Paid: \$ <u>27500</u> (cash) _____ (check) <u>3141</u> (credit card) _____	
Receipt No. _____	Date Paid: <u>6-24-21</u>
Date Application Received: _____	
Reviewed for completeness by: _____	
Date of BOC hearing: _____	Date submitted to newspaper: _____
Date sign posted on property: _____	Picture attached: yes _____ no _____

PL 01 2021 JUN 24

PL 01 2021 JUN 24

Handwritten signature

06-24-2021

My name is Duane Gentes, I own the property at 000 Emory Dr. Map 111 Parcel 001044. I would like to rezone it from R1 to R2 so that I can combine it to the adjacent property which I own Map 111A Parcel 049.

Thanks



Duane Gentes

RCMD 2021 JUN 24



DOC# 004995
FILED IN OFFICE
11/03/2009 03:38 PM
BK:684 PG:681-682
SHEILA H. PERRY
CLERK OF SUPERIOR
COURT
Putnam Co Clerk of Court

Sheila H. Perry

After recording, please return to:
Dorothy J. Adams, Esq.
ADAMS & FORD, LLP
108 West Marion Street
Eatonton, Georgia 31024
706.485.2003
dja@adamsfordlaw.com

SPACE ABOVE THIS LINE RESERVED FOR USE OF CLERK

REAL ESTATE TRANSFER TAX
PAID: \$9.00

PT-61 117-2009-001365

WARRANTY DEED

State of Georgia, County of Putnam

THIS INDENTURE, made this **23RD** day of **October, 2009**, between **SHIRLEY TURNER, F/K/A SHIRLEY WANDA NOGALES AND SHIRLEY LEE NOGALES**, of Gwinnett County, Georgia, as party of the first part, hereinafter called Grantor, and **DUANE GENTES**, as party of the second part, hereinafter called Grantee, (the words "Grantor" and "Grantee" to include their respective heirs, successors, and assigns where the context requires or permits).

WITNESSETH: Grantor, for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, conveyed, and confirmed, and by these presents does hereby grant, bargain, sell, alien, convey, and confirm unto the said Grantee, the following described property, to-wit:

[See Exhibit "A" attached hereto]


TO HAVE AND TO HOLD the said lot, tract, or parcel of land, with all and singular the rights, members, and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit, and behoof of the said Grantee forever in **FEE SIMPLE**.

AND THE SAID Grantor will warrant and forever defend the right and title to the above-described property unto the said Grantee against the claims of all persons whomsoever.

IN WITNESS WHEREOF, the Grantor has signed and sealed this deed, the day and year first above written.

Shirley Turner [seal]
SHIRLEY TURNER

Signed, sealed, and delivered in the presence of:

[Signature]
Ordinary Witness
[Signature]
Notary Public


[Handwritten initials]

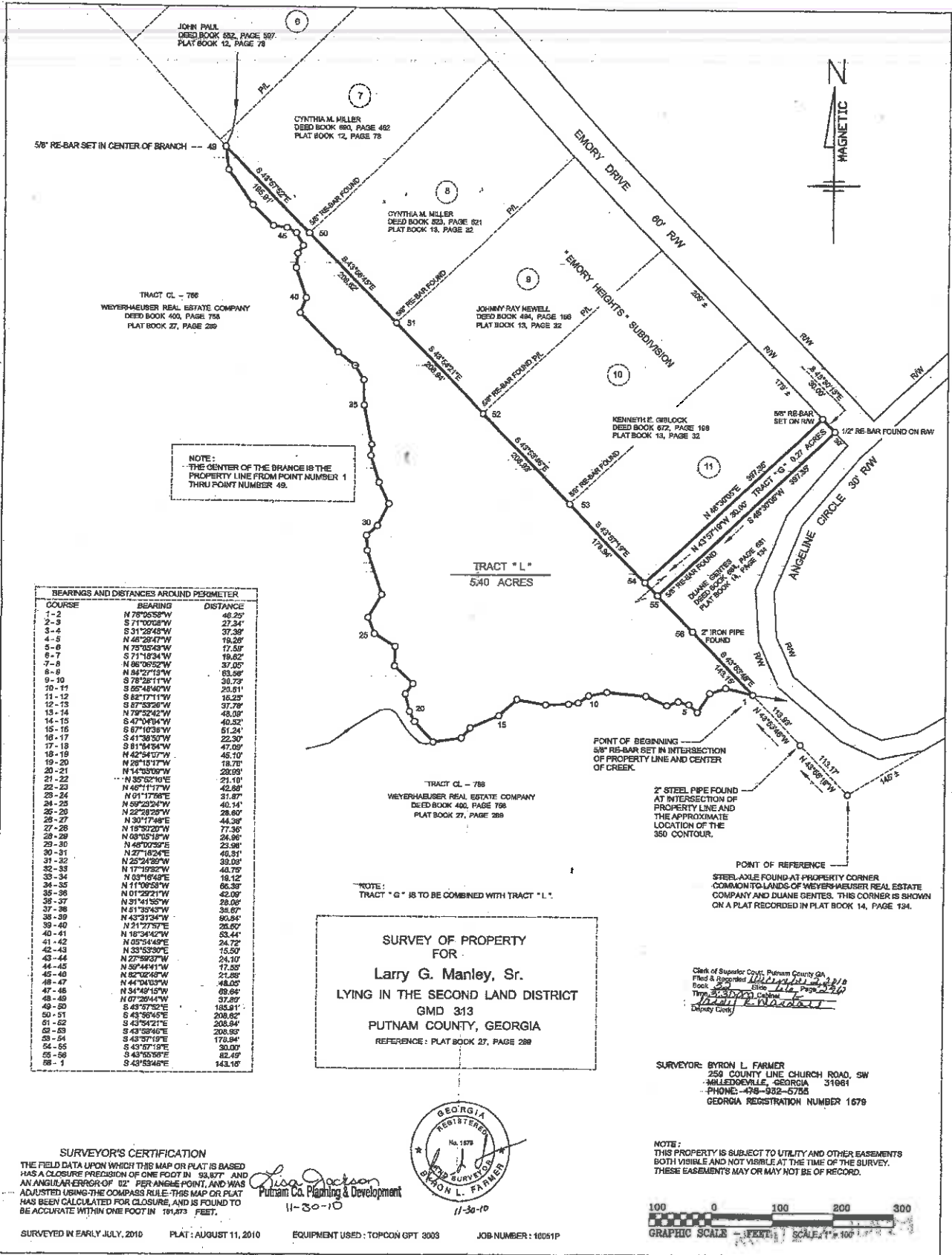
EXHIBIT "A"

All that tract or parcel of land, together with any improvements located thereon, situate, lying, and being in the 313th GMD, Putnam County, Georgia, known and designated as 1.158 acres as shown on that certain property survey prepared by Marshall Company, dated August 20, 1987 and recorded in Plat Book 14, Page 134, Clerk's Office, Putnam Superior Court, said plat and the record thereof incorporated herein and made a part hereof by reference thereto.

This is the same property as that described in that certain warranty deed recorded in Deed Book 7-C, Page 304, aforesaid records; this conveyance includes the interest in the access area shown on plat at Plat Book 12, Page 79 as set out in that warranty deed (.06 share per acre owned), and this property and conveyance is subject to the protective covenants set out in said deed.

REC'D 10/2/07 10:00 AM





BEARINGS AND DISTANCES AROUND PERIMETER

COURSE	BEARING	DISTANCE
1-2	N 78°05'58"W	48.25'
2-3	S 71°02'08"W	27.34'
3-4	S 1°28'43"W	37.35'
4-5	N 48°28'47"W	19.28'
5-6	N 73°03'43"W	17.55'
6-7	S 71°18'34"W	16.62'
7-8	N 86°05'52"W	37.05'
8-9	N 84°27'13"W	63.88'
9-10	S 78°28'11"W	35.73'
10-11	S 55°48'40"W	29.61'
11-12	S 82°17'11"W	16.23'
12-13	S 67°33'24"W	37.78'
13-14	N 78°52'42"W	48.08'
14-15	S 47°04'04"W	40.52'
15-16	S 67°10'38"W	51.24'
16-17	S 41°38'03"W	22.30'
17-18	S 81°04'54"W	47.09'
18-19	N 42°54'17"W	45.10'
19-20	N 68°13'17"W	18.78'
20-21	N 14°03'03"W	28.93'
21-22	N 35°52'10"E	21.18'
22-23	N 48°11'17"W	42.88'
23-24	N 01°17'03"E	31.87'
24-25	N 59°23'24"W	40.14'
25-26	N 22°28'25"W	28.80'
26-27	N 30°17'04"E	44.38'
27-28	N 18°50'20"W	77.35'
28-29	N 03°02'18"W	24.96'
29-30	N 48°02'02"E	23.98'
30-31	N 27°18'24"E	48.51'
31-32	N 25°24'28"W	39.09'
32-33	N 17°02'24"W	48.75'
33-34	N 03°16'49"E	18.12'
34-35	N 11°09'53"W	66.38'
35-36	N 01°32'11"W	42.09'
36-37	N 31°41'55"W	28.02'
37-38	N 21°35'43"W	38.67'
38-39	N 43°13'04"W	89.84'
39-40	N 21°27'57"E	28.50'
40-41	N 18°34'42"W	53.44'
41-42	N 05°54'09"E	24.72'
42-43	N 33°53'50"E	15.50'
43-44	N 27°59'37"W	24.10'
44-45	N 30°44'41"W	17.33'
45-46	N 62°04'14"W	21.88'
46-47	N 44°04'03"W	48.05'
47-48	N 34°48'15"W	89.84'
48-49	N 07°39'41"W	57.89'
49-50	S 43°57'52"E	185.91'
50-51	S 43°56'45"E	208.82'
51-52	S 43°54'12"E	208.94'
52-53	S 43°52'45"E	208.93'
53-54	S 43°51'19"E	178.94'
54-55	S 43°50'02"E	30.00'
55-56	S 43°50'59"E	82.49'
56-1	S 43°53'46"E	143.16'

SURVEY OF PROPERTY FOR
Larry G. Manley, Sr.
 LYING IN THE SECOND LAND DISTRICT
 GMD 313
 PUTNAM COUNTY, GEORGIA
 REFERENCE: PLAT BOOK 27, PAGE 288

SURVEYOR'S CERTIFICATION
 THE FIELD DATA UPON WHICH THIS MAP OR PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 93,877' AND AN ANGULAR ERROR OF 02" PER ANGLE POINT, AND WAS ADJUSTED USING THE COMPASS RULE. THIS MAP OR PLAT HAS BEEN CALCULATED FOR CLOSURE, AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 10,073' FEET.

Lisa Jackson
 Putnam Co. Planning & Development
 11-30-10



SURVEYOR: BYRON L. FARMER
 259 COUNTY LINE CHURCH ROAD, SW
 ALLEDORVILLE, GEORGIA 31861
 PHONE: 478-982-5755
 GEORGIA REGISTRATION NUMBER 1679

NOTE:
 THIS PROPERTY IS SUBJECT TO UTILITY AND OTHER EASEMENTS BOTH VISIBLE AND NOT VISIBLE AT THE TIME OF THE SURVEY. THESE EASEMENTS MAY OR MAY NOT BE OF RECORD.



SURVEYED IN EARLY JULY, 2010 PLAT: AUGUST 11, 2010 EQUIPMENT USED: TOPCON GPT 3003 JOB NUMBER: 10051P



PUTNAM COUNTY PLANNING & DEVELOPMENT

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Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

DISCLOSURE OF APPLICANT'S CAMPAIGN CONTRIBUTION

The *Putnam County Code of Ordinances*, Section 66-167(c) states as follows:

“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Duane A. Gentes

2. Address: NOA

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If-yes, who did you make the contributions to? : _____

Signature of Applicant: Duane Gentes

Date: 6/24/02

60372021311824
DE

2020 008245 ACCT # 7903R LT 10 ANGELINE CIR
 GENTES DUANE 111A 049

DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT	TOTAL TAX DUE
FAIR MARKET VALUE	21,886	GROSS ASSESSMENT	8,754	212.09
COUNTY EXEMPTION		NET COUNTY ASSESSMENT	8,754	INTEREST
SCHOOL EXEMPTION		NET SCHOOL ASSESSMENT	8,754	
COUNTY SCHOOL SPEC SERV	70.71 138.07 3.31			COLLECTION COST
				FIFA CHARGE
DUE 12/01/20	212.09	PAID IN FULL	10/21/2020	PENALTY
				TOTAL
				212.09

00000 01 T GENTES DUANE
 O

1421 BROMLEY DR
 SNELLVILLE GA 30078

FROM PAMELA K. LANCASTER
 PUTNAM COUNTY TAX COMM
 100 S JEFFERSON ST # 207
 EATONTON GA 31024

DUE IN FULL BY 12/01/2020

2020 008245 ACCT # 7903R LT 10 ANGELINE CIR
 GENTES DUANE 111A 049

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 EATONTON GA 31024

DUE IN FULL BY 12/01/2020

2020 008246 ACCT # 19696R TRACT L & TRACT G
 GENTES DUANE 111 001 044

DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT	TOTAL TAX DUE
FAIR MARKET VALUE	37,537	GROSS ASSESSMENT	15,015	363.79
COUNTY EXEMPTION		NET COUNTY ASSESSMENT	15,015	INTEREST
SCHOOL EXEMPTION		NET SCHOOL ASSESSMENT	15,015	1.00
COUNTY SCHOOL	121.29 236.82			COLLECTION COST
SPEC SERV	5.68			FIFA CHARGE
DUE 12/01/20	363.79	PAID IN FULL	01/11/2021	PENALTY
				TOTAL
				364.79

00000 01 T GENTES DUANE
 O

1421 BROMELY DR
 SNELLVILLE GA 30078

FROM PAMELA K. LANCASTER
 PUTNAM COUNTY TAX COMM
 100 S JEFFERSON ST # 207
 EATONTON GA 31024

DUE IN FULL BY 12/01/2020

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				TOTAL
				364.79

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 100 S JEFFERSON ST # 207
 EATONTON GA 31024

DUE IN FULL BY 12/01/2020

RCVD 2021 JUN 24 

2020 008246 ACCT # 19696R TRACT L & TRACT G
 GENTES DUANE 111 001 044

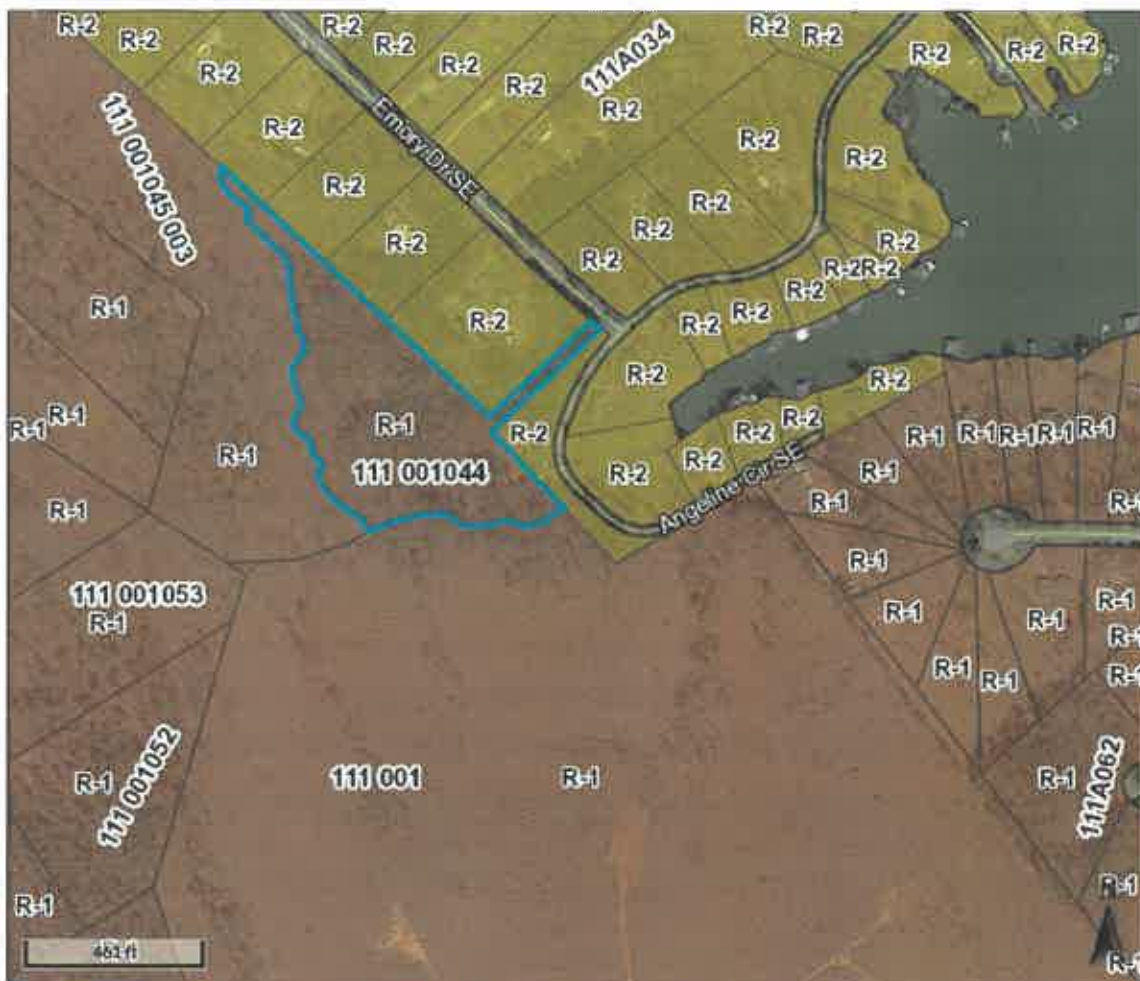
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				TOTAL
				364.79

00000 01 T GENTES DUANE
 O

1421 BROMELY DR
 SNELLVILLE GA 30078

FROM PAMELA K. LANCASTER
 PUTNAM COUNTY TAX COMM
 100 S JEFFERSON ST # 207
 EATONTON GA 31024

DUE IN FULL BY 12/01/2020



Overview



Legend

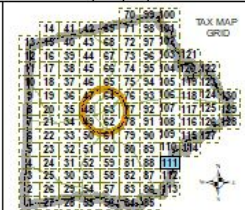
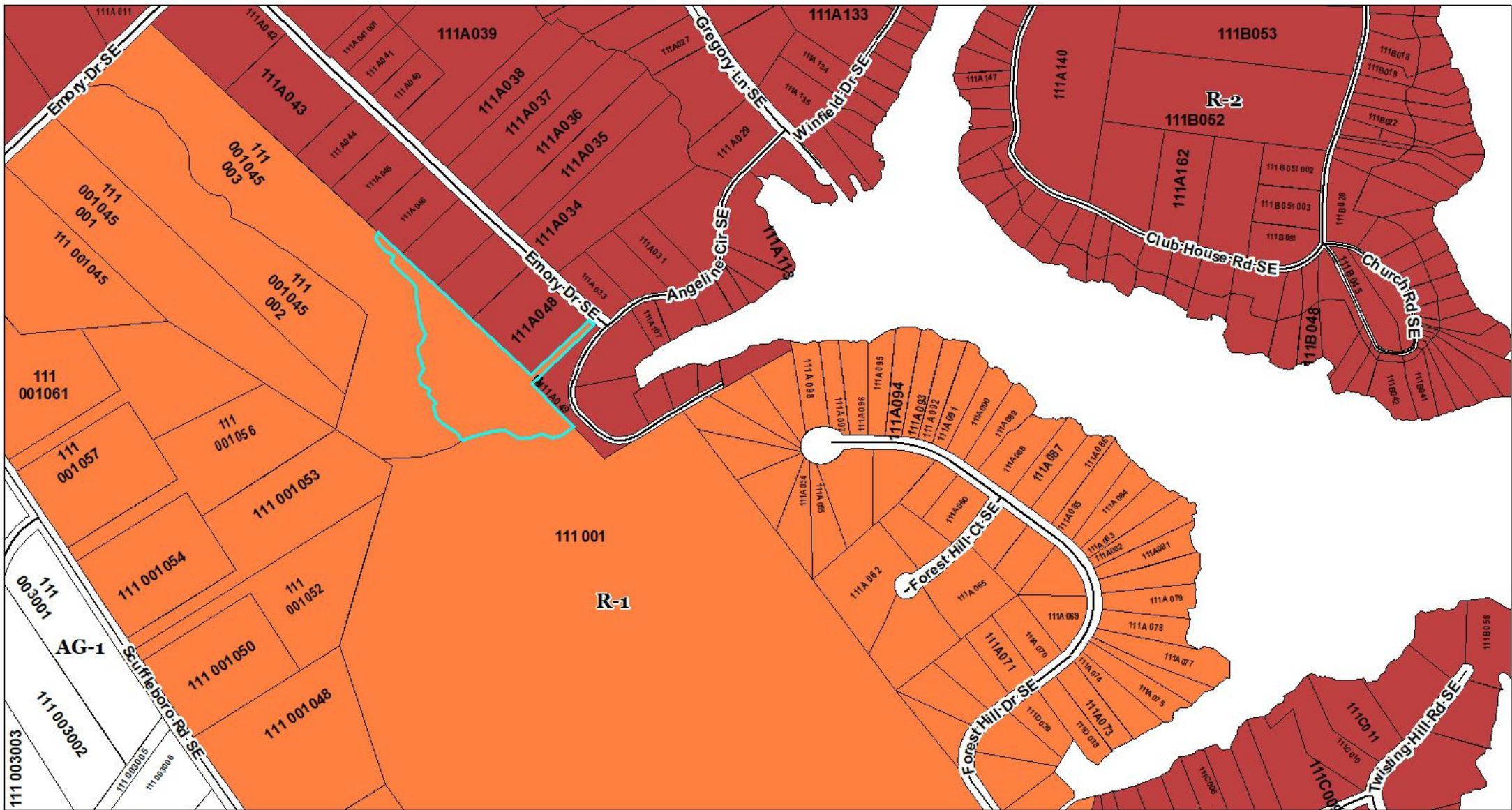
-  City Limit
-  Parcels
- Parcel Numbers**
- Zoning**
-  A-1 CITY
-  A-1 and AG-1
-  AG-1
-  AG-2
-  C-1
-  C-1 CITY
-  C-2
-  C-2 CITY
-  C-2 PUD
-  I-1 CITY
-  I-2 CITY
-  I-M
-  MHP
-  PUBLIC
-  PUBLIC CITY
-  R- 1 CITY
-  R- 2 CITY
-  R- 3 CITY
-  R- 4 CITY
-  R-1
-  R-1R
-  R-2
-  RM-1
-  RM-2
-  RM-3
-  VILLAGE
- Roads**

ROAD 202

Parcel ID 111001044
 Real Key / Acct 19696
 Class Code Residential
 Taxing District PUTNAM
 Acres 5.67

Owner GENTES DUANE
 1421 BROMELY DR
 SNELLVILLE, GA 30078
Physical Address EMORY DR
Land Value \$37537
Improvement Value
Accessory Value

Last 2 Sales			
Date	Price	Reason	Qual
7/28/2011	\$20000	FM	Q
12/10/2010	\$5000	NF	U



- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel Hooks

GEOGRAPHIC FEATURE LEGEND

Overlay District	AG-2	C-2 CITY	IND-2 CITY	R - 1 CITY	R-1	RM-2
No Code	C-1	I-M	MHP	R - 2 CITY	R-1R	RM-3
AG-1	C-1 CITY	IND-1 CITY	PUBLIC	R - 3 CITY	R-2	VILLAGE
AG-1 CITY	C-2	IND-2	PUBLIC CITY	R - 4 CITY	RM-1	



Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgia.org

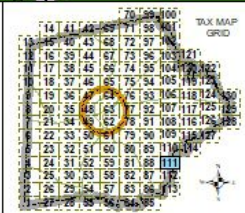
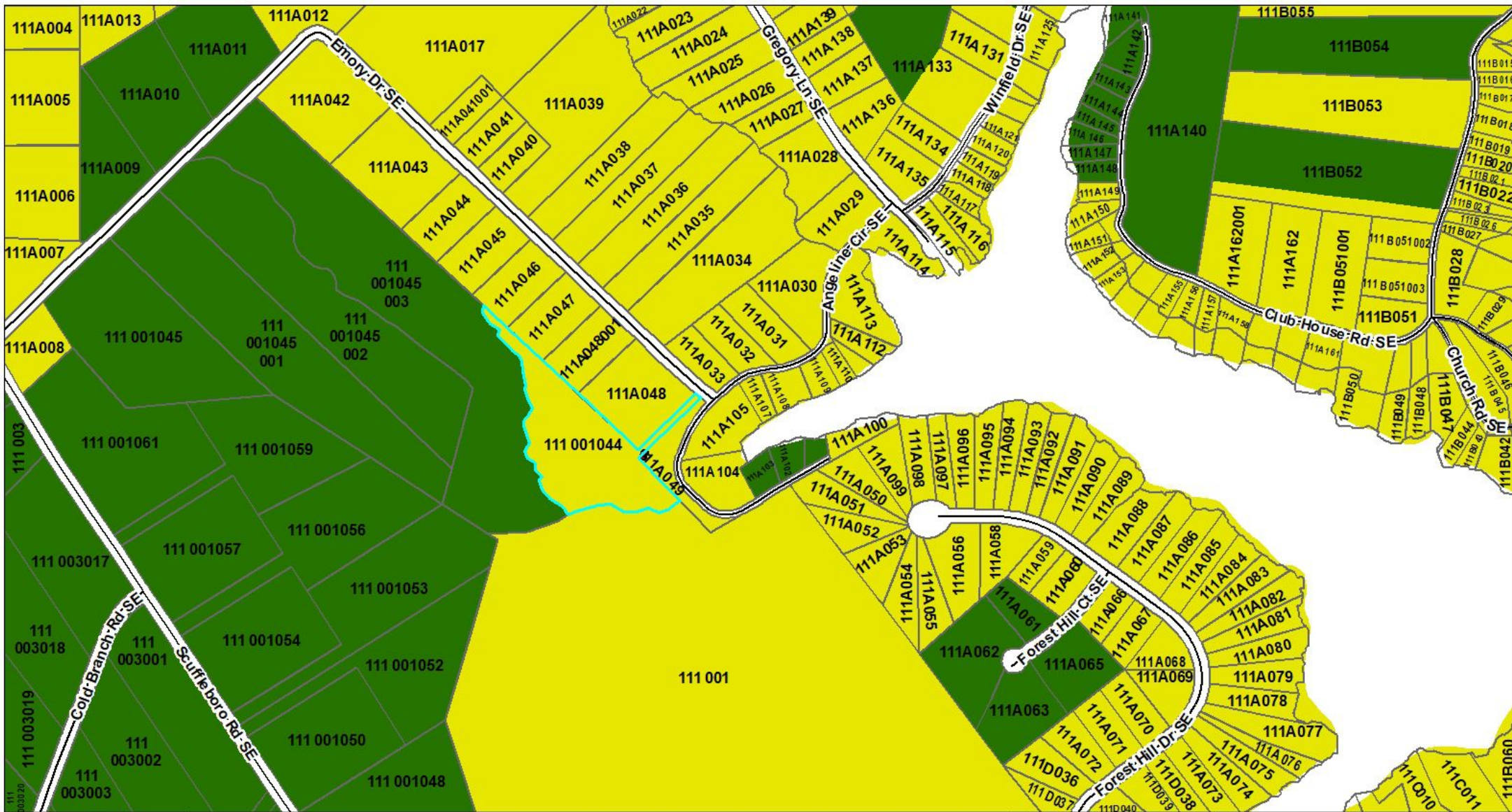
PUTNAM COUNTY, GEORGIA
ZONING MAPS

W
N
E
S

MAP 111

205

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



GEOGRAPHIC FEATURE LEGEND			
Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel_Hooks			

MGRC
 Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgiaarc.org

PUTNAM COUNTY, GEORGIA
 FUTURE LAND USE MAPS
MAP 111
 206
 MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

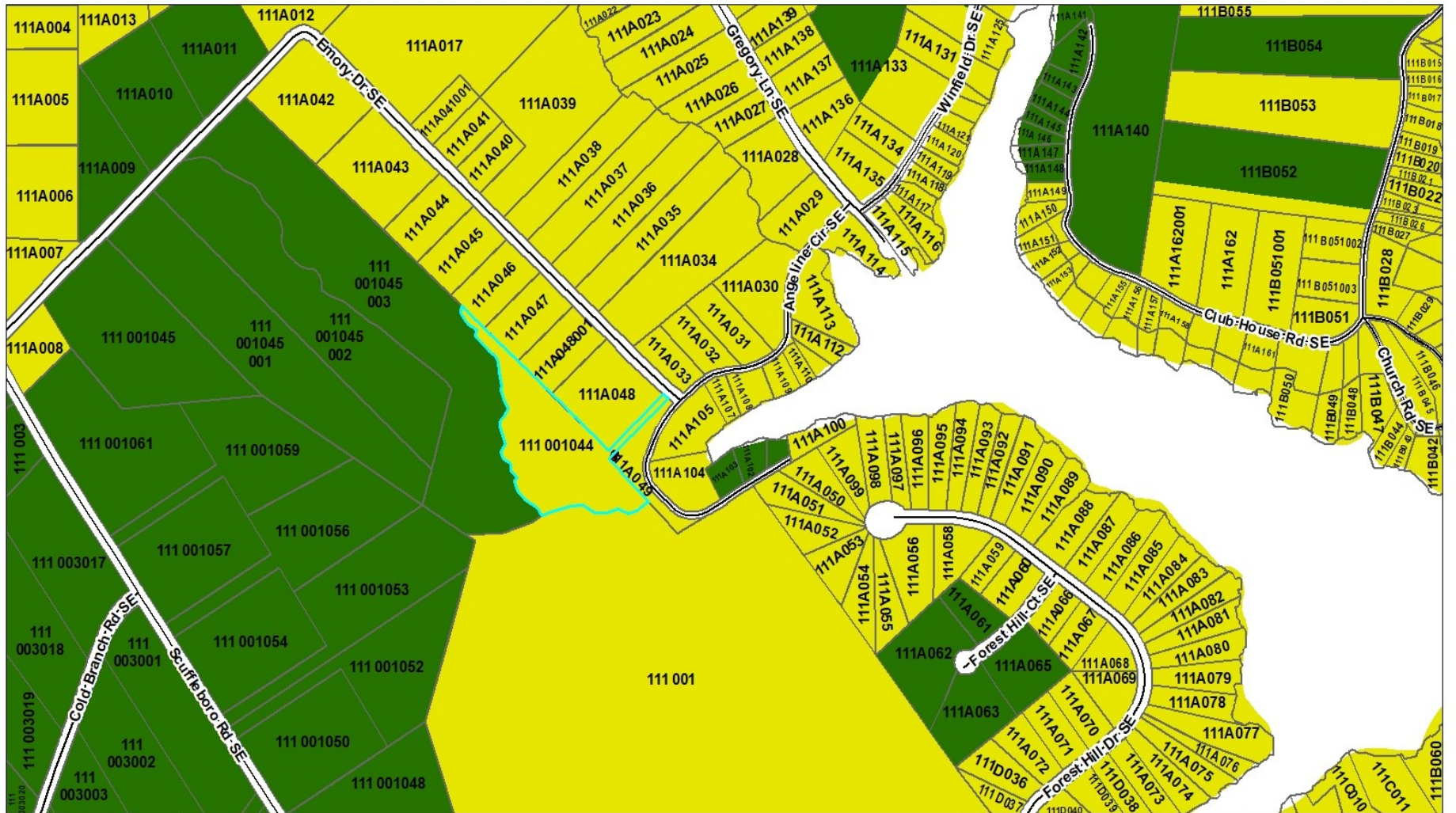
TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [**Map 111, Parcel 001044, District 4**]. * The applicant is requesting to rezone 5.40 acres from R-1 to R-2. He plans to combine this lot with the adjacent R-2 property he owns, identified as Map 111, Parcel 049. To combine the parcels, they must be the same zoning status. The surrounding lots on this street are all zoned R-2 with an R-1 neighborhood directly behind them. The proposed use is consistent with the allowed uses, as listed in Sec. 66-84-Uses allowed of the R-2 zoning district. This rezoning to R-2 will not adversely impact the use of public facilities or services. The Future Land Use Concept plan lists the property as residential. Additionally, the proposed use will not adversely the existing use, value, or useability of adjacent or nearby properties.



GEOGRAPHIC FEATURE LEGEND

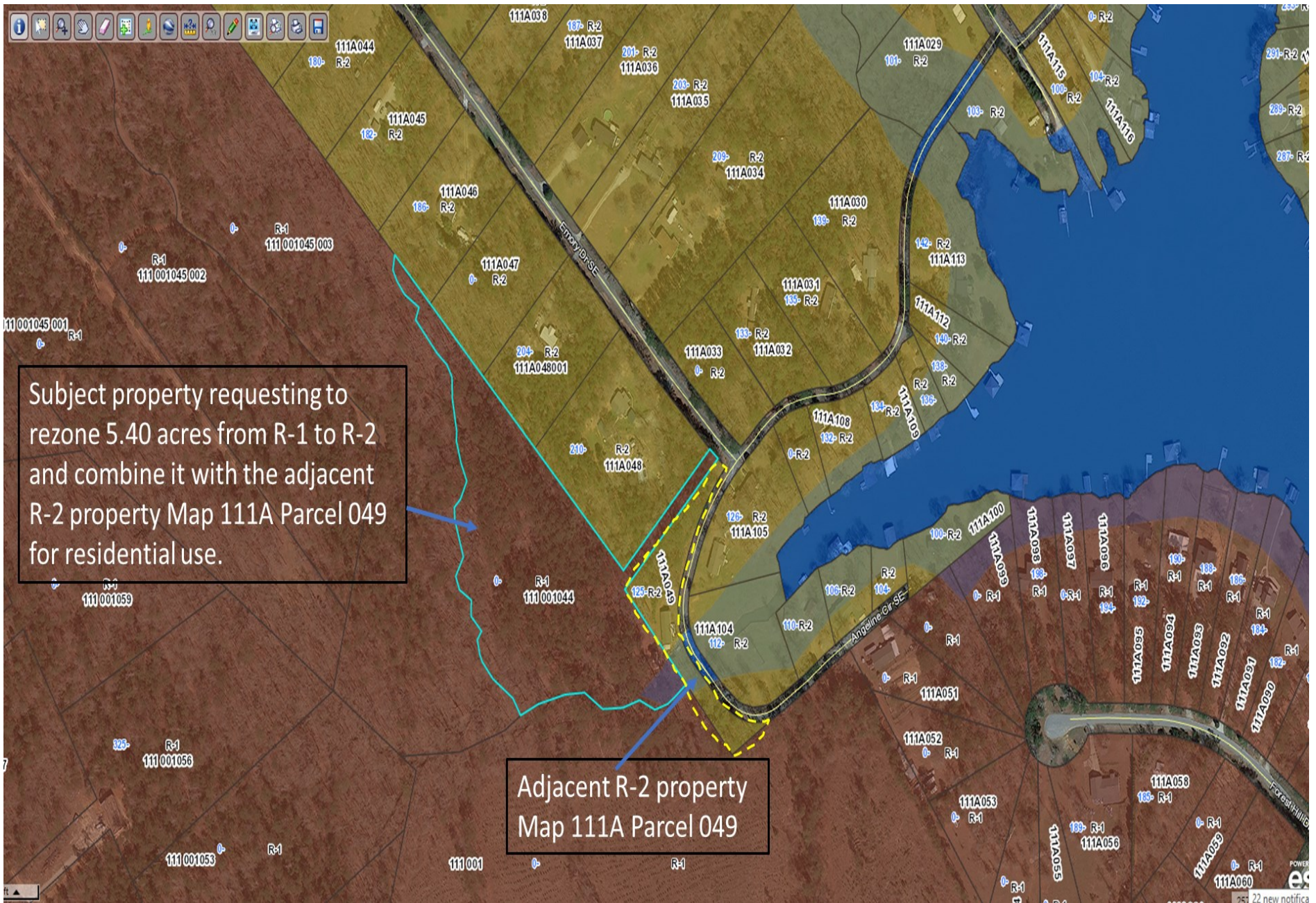
Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel Hooks			

MGRC
 Middle Georgia Regional Commission
 175 Emory Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6180
 Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
FUTURE LAND USE MAPS

MAP 111

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,000 DATE: JULY 2021



Staff recommendation is for approval to rezone 5.40 acres from R-1 to R-2 on Emory Drive [Map 111, Parcel 001044, District 4].

New Business
Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

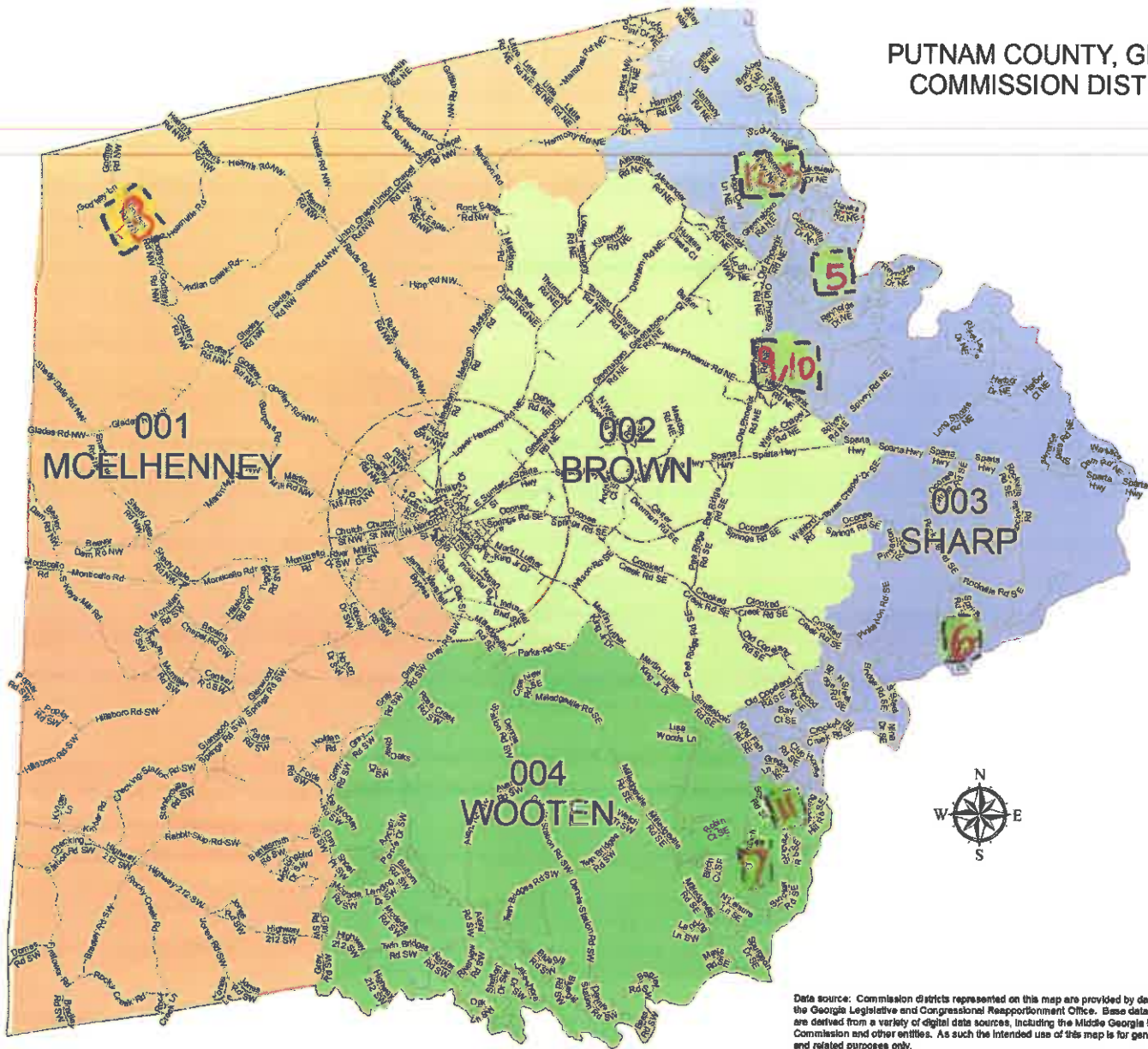
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. **[Map 103, Parcel 001001, District 3].***

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



Data source: Commission districts represented on this map are provided by data from the Georgia Legislative and Congressional Reapportionment Office. Base data features are derived from a variety of digital data sources, including the Middle Georgia Regional Commission and other entities. As such the intended use of this map is for general planning and related purposes only.

MAP SCALE: 1" = 5,697.26' SCALE RATIO: 1:88,367.34 DATE: JANUARY 2021

5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*

APPLICATION FOR REZONING

REZONING

PERMIT# PLAN2021-01330

APPLICATION NO. _____

DATE: June 24, 2021

MAP _____ PARCEL 103 001001

ZONING DISTRICT A5 - Agricultural AG 132

1. Owner Name: Peggy Allen, Susan Fox

2. Applicant Name (If different from above): James Stiff, Goodwill Industries of Middle Georgia, Inc.

3. Mailing Address: 3145 Washington Road, Augusta GA 30907

4. Email Address: jstiff@goodwillworks.org

5. Phone: (home) _____ (office) 706.854.4769 (cell) 478.471.4888

6. The location of the subject property, including street number, if any: 916 Harmony Road, Eatonton, GA 31024
Parcel B

7. The area of land proposed to be rezoned (stated in square feet if less than one acre):
66.557 Acres

8. The proposed zoning district desired: C-PUD

9. The purpose of this rezoning is (Attach Letter of Intent)
Please see enclosed Letter of Intent, Purpose and Impact Statement.

10. Present use of property: Agricultural & Residential Desired use of property: Mixed Use

11. Existing zoning district classification of the property and adjacent properties:
Existing: ~~Agricultural & Residential~~ 132
North: Residential South: Agricultural East: Commercial West: Residential

12. Copy of warranty deed for proof of ownership and if not owned by applicant, please attach a signed and notarized letter of agency from each property owner for all property sought to be rezoned.

13. Legal description and recorded plat of the property to be rezoned.

14. The Comprehensive Plan Future Land Use Map category in which the property is located. (If more than one category applies, the areas in each category are to be illustrated on the concept plan. See concept plan insert.): _____

15. A detailed description of existing land uses: _____
Existing zoning is agricultural with a residential unit on-site. There is a single family home on the property and a horse barn and pasture.

16. Source of domestic water supply: well _____, community water _____, or private provider X.
If source is not an existing system, please provide a letter from provider.



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

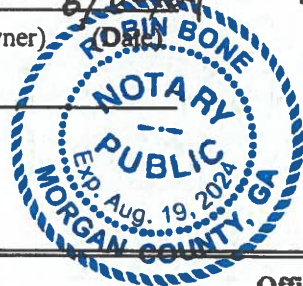
- 17. Provision for sanitary sewage disposal: septic system , or sewer . If sewer, please provide name of company providing same, or, if new development, provide a letter from sewer provider.
- 18. Complete attachment of Disclosure of Campaign Contributions Form by the applicant and/or the applicant's attorney as required by the Georgia Conflict of Interest in Zoning Act (O.C.G.A. 36-67A).
- 19. The application designation, date of application and action taken on all prior applications filed for rezoning for all or part of the subject property. (Please attach on separate sheet.)
- 20. Proof that property taxes for the parcel(s) in question have been paid.
- 21. Concept plan.
 - If the application is for less than 25 single-family residential lots, a concept plan need not be submitted. (See attachment.)
 - A concept plan may be required for commercial development at director's discretion
- 22. Impact analysis.
 - If the application is for less than 25 single-family residential lots, an impact analysis need not be submitted. (See attachment.)
 - An Impact analysis (including a traffic study) is required when rezoning from residential zoned or used property to commercial or industrial districts.

THE ABOVE STATEMENTS AND ACCOMPANYING MATERIALS ARE COMPLETE AND ACCURATE. APPLICANT HEREBY GRANTS PERMISSION FOR PLANNING AND DEVELOPMENT PERSONNEL OR ANY LEGAL REPRESENTATIVE OF PUTNAM COUNTY TO ENTER UPON AND INSPECT THE PROPERTY FOR ALL PURPOSES ALLOWED AND REQUIRED BY THE PUTNAM COUNTY CODE OF ORDINANCES.

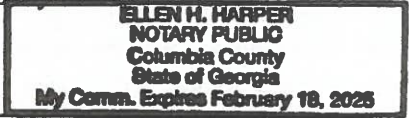
[Signature] 6/23/21
Signature (Property Owner)

James H. Smith 6/22/21
Signature (Applicant) (Date)

[Signature]
Notary Public



[Signature]
Notary Public



Office Use	
Paid: \$ <u>55000</u> (cash) _____ (check) x _____ (credit card) <input checked="" type="checkbox"/>	
Receipt No. _____	Date Paid: <u>6/24/21</u>
Date Application Received: _____	
Reviewed for completeness by: _____	
Date of BOC hearing: _____	Date submitted to newspaper: _____
Date sign posted on property: _____	Picture attached: yes _____ no _____



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ◊ Eatonton, GA 31024

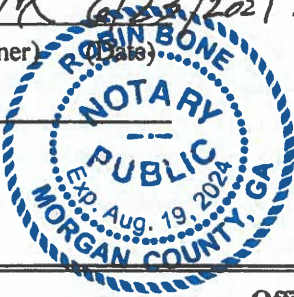
Tel: 706-485-2776 ◊ 706-485-0552 fax ◊ www.putnamcountyga.us

- 17. Provision for sanitary sewage disposal: septic system _____, or sewer . If sewer, please provide name of company providing same, or, if new development, provide a letter from sewer provider.
- 18. Complete attachment of Disclosure of Campaign Contributions Form by the applicant and/or the applicant's attorney as required by the Georgia Conflict of Interest in Zoning Act (O.C.G.A. 36-67A).
- 19. The application designation, date of application and action taken on all prior applications filed for rezoning for all or part of the subject property. (Please attach on separate sheet.)
- 20. Proof that property taxes for the parcel(s) in question have been paid.
- 21. Concept plan.
 - If the application is for less than 25 single-family residential lots, a concept plan need not be submitted. (See attachment.)
 - A concept plan may be required for commercial development at director's discretion
- 22. Impact analysis.
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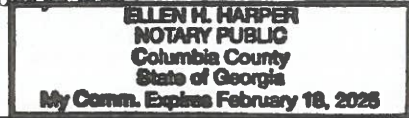
THE ABOVE STATEMENTS AND ACCOMPANYING MATERIALS ARE COMPLETE AND ACCURATE. APPLICANT HEREBY GRANTS PERMISSION FOR PLANNING AND DEVELOPMENT PERSONNEL OR ANY LEGAL REPRESENTATIVE OF PUTNAM COUNTY TO ENTER UPON AND INSPECT THE PROPERTY FOR ALL PURPOSES ALLOWED AND REQUIRED BY THE PUTNAM COUNTY CODE OF ORDINANCES.

Ausan Jx 6/23/2021 James H. Smith 6/22/21
Signature (Property Owner) (Date) Signature (Applicant) (Date)

[Signature]
Notary Public



[Signature]
Notary Public



Office Use	
Paid: \$ _____ (cash) _____ (check) <input checked="" type="checkbox"/> _____ (credit card) _____	
Receipt No. _____	Date Paid: _____
Date Application Received: _____	
Reviewed for completeness by: _____	
Date of BOC hearing: _____	Date submitted to newspaper: _____
Date sign posted on property: _____	Picture attached: yes _____ no _____

Item 9: Letter of Intent

LETTER OF INTENT – PURPOSE OF REZONING APPLICATION

Updated: June 22, 2021

This letter and its enclosed components detail the intent to rezone two (2) parcels in Eatonton, Georgia, along Harmony Road.

The purpose of this rezoning application is to support a new, mixed-use development to support the non-profit mission and vision of [Goodwill Industries](#) of Middle Georgia's Helms College expansion. Since its creation as the Helms Career Institute in 2007, the modern-day [Helms College](#) is a private, independent, postsecondary career school that provides experiential learning and career education for workforce development.

As a part of its strategic plan, Goodwill wishes to expand Helms College with a new, mixed-use development on Harmony Road in Eatonton, Georgia, to support the College's future growth to meet local talent needs in high demand occupation areas. Hereby referenced as the Lake Oconee Helms College campus, the proposed development will include:

- Educational buildings and classrooms.
- Retail and hotel components that support and complement degrees sponsored by Helms College.
- Residential units for students and others.
- Recreation amenities for guests and possibly nearby residents via a private club membership, such as tennis courts, jogging trails, and agritourism offerings.
- A conference retreat center with restaurant venues.

Intertwined throughout the campus is an agritourism theme, including gardens and farms, to provide hands-on experience for students and members of the community to learn about farm-to-table philosophies and offerings.

Item 12: Recorded Deeds & Letter of Agency

After Recording Return to:
Blasingame, Burch, Carrard & Ashley, P.C.
1040 Founders Row, Suite B
Greensboro, Georgia 30642
15668-0004/jvd

DOCN 004361
FILED IN OFFICE
08/21/2008 02:26 PM
BK=647 PG=198-198
SHEILA H. PERRY
CLERK OF SUPERIOR
COURT
Putnam Co Clerk of Court
Sheila H. Perry

REAL ESTATE TRANSFER TAX
PAID= \$0.00
PT-117-2008-001193

QUITCLAIM DEED

STATE OF GEORGIA, GREENE COUNTY

THIS INDENTURE, made the 30th day of July, 2008, by and between Nancy J. Allen, as party of the first part, hereinafter called Grantor, and Allen Investment Partners, LLLP, its heirs, successors and assigns, as party of the second part, hereinafter called Grantee, (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH:

That Grantor, for and in consideration of the sum of One Dollar (\$1.00) and other valuable consideration in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents does hereby remise, convey and forever QUITCLAIM unto the said Grantee, all of its entire right, title and interest passing hereunder, whatever the same be, in and to that certain property described as follows, to wit:

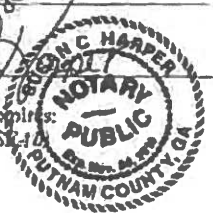
All that tract or parcel of land situate, lying, and being in 389th GM District, 3rd Land District, and Land Lots 341 and 352 of Putnam County, Georgia more particularly described as Parcel "B", containing 66.557 acres, more or less, as shown on that certain plat of survey prepared for Nancy Johnson Allen by James E. Smith, Jr., RLSN 1895, dated June 16, 2008 and recorded at Plat Book 22, Page 76, Putnam County, Georgia real estate records. Said plat of survey and the recorded copy thereof are incorporated herein by reference for all purposes.

This Conveyance is SUBJECT TO a reservation of 20' Ingress & Egress Easement as shown on the plat of survey referenced in the paragraph immediately above to Grantor, her heirs, successors and assigns that shall be appurtenant to and run with the title to Parcel "A", containing 5.000 acres, more or less, as shown on said plat of survey. Said 20' Ingress & Egress Easement shall be for the purpose of vehicular and pedestrian access to and from Parcel "A" and Harmony-Davis Road, being a public road with a 80' right-of-way.

TO HAVE AND TO HOLD the said described premises to Grantee, so that neither Grantor nor any person or persons claiming under Grantor shall at any time, by any means or ways, have, claim or demand any right or title to said premises or appurtenances, or any rights thereof.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered
in the presence of:

Sandra W. Poy
Unofficial Witness
[Signature]
Notary Public
My Commission Expires:
(AFFIX NOTARY SEAL)


Nancy J. Allen (SEAL)
Nancy J. Allen

E:\DATA\WPDOCS\15668\4\QCD Allen Investment Partners.doc

045046

275

457

When recorded, please return to:
Bussart & Liu, LLC
2500 Windy Ridge Parkway, Ste 320
Atlanta, GA 30339
B&L File #88-0312

GEORGIA, PUTNAM COUNTY
CLERK OF SUPERIOR COURT
FILED 12-14-98
TIME 11:10 AM
RECORDED 12-14-98
BOOK 1205 PAGE 157-957
William DA. J. White
DEPUTY CLERK

PUTNAM COUNTY, GEORGIA
Real Estate Transfer Tax
Paid \$ 0
Date 12-14-98
William DA. J. White
(Deputy Clerk of Superior Court)

ASSENT OF EXECUTOR TO DEVISE

State of Georgia
County of Fulton

WHEREAS, CHARLES MITCHELL ALLEN ("Decedent") died a resident of Fulton County, Georgia, leaving a will which was probated in solemn form in said County on August 30, 1995; and

WHEREAS, the undersigned, NANCY JOHNSON ALLEN, was qualified as Executrix of said Estate and was issued Letters Testamentary, which are recorded at LT Book 151, Page 157, Fulton County Records; and

WHEREAS, under the terms of said will the following described property was devised to NANCY J. ALLEN:

SEE EXHIBIT "A" ATTACHED HERETO AND INCORPORATED HEREIN BY REFERENCE.

WHEREAS, the undersigned duly qualified as Executor of the estate of the Decedent and is now administering the estate under the terms of said will; and it has been determined that all debts and claims against the estate have been fully paid.

NOW, THEREFORE, the undersigned, as Executor of the Will of the Decedent, hereby assents to the devise of said property under the terms of said will, so that full fee simple title thereto is vested in NANCY J. ALLEN, as provided in said will.

WITNESS my hand and seal, this 21st day of July, 1998.

Signed, sealed and delivered
in the presence of:

Lori Alexander
Witness
Paul E. Frank
Notary Public

Nancy Johnson Allen (seal)
NANCY JOHNSON ALLEN, as Executrix
under the Last Will and Testament of
Charles M. Allen, deceased

(Affix Notary Seal)



458

EXHIBIT "A"

ALL THAT TRACT or parcel of land lying and being in Land Lot 34.1 of the 3rd Land District, 389th G.M. District, Putnam County, Georgia, and being more particularly described as follows:

TO FIND THE TRUE POINT OF BEGINNING, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence south 45 degrees 22 minutes 07 seconds west a distance of 1,049.91 feet to an iron pin set and the TRUE POINT OF BEGINNING; thence south 45 degrees 22 minutes 07 seconds west a distance of 286.87 feet to an iron pin set; thence north 43 degrees 37 minutes 02 seconds west a distance of 792.18 feet to an iron pin set; thence north 48 degrees 22 minutes 58 seconds east a distance of 286.82 feet to an iron pin set; thence south 43 degrees 37 minutes 02 seconds east a distance of 787.10 feet to an iron pin set and the point of beginning; containing approximately 5.20 acres and being more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.

Being a portion of the property conveyed from John E. Singleton to Charles M. Allen and Nancy J. Allen by warranty deed dated October 4, 1984 and recorded at Deed Book 84, Page 156, Putnam County, Georgia Records.

TOGETHER WITH A 20-FOOT WIDE EASEMENT FOR INGRESS AND EGRESS TO AND FROM HARMONY-DAVIS ROAD, and being more particularly described as follows:

TO FIND THE CENTERLINE OF THE EASEMENT, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence north 32 degrees 57 minutes 18 seconds west along the westerly right of way of Harmony-Davis Road a distance of 556.70 to the centerline of a 10-foot drive and the CENTERLINE OF THE EASEMENT; thence the following calls along the centerline of said easement: south 80 degrees 34 minutes 20 seconds west 64.20 feet to a point; south 89 degrees 50 minutes 05 seconds west 22.18 feet to a point; south 54 degrees 03 minutes 54 seconds west 63.70 feet to a point; south 57 degrees 25 minutes 44 seconds west 97.12 feet to a point; south 57 degrees 07 minutes 38 seconds west 57.23 feet to a point; south 61 degrees 18 minutes 59 seconds west 92.08 feet to a point; south 70 degrees 27 minutes 06 seconds west 46.04 feet to a point; south 74 degrees 46 minutes 22 seconds west 19.00 feet to a point; south 16 degrees 31 minutes 51 seconds east 88.64 feet to a point; south 22 degrees 52 minutes 57 seconds west 143.24 feet to a point; south 33 degrees 34 minutes 26 seconds west 77.61 feet to a point; south 35 degrees 23 minutes 28 seconds west 193.38 feet to a point; south 50 degrees 29 minutes 35 seconds east 80.97 feet to a point; south 35 degrees 43 minutes 13 seconds west 71.40 feet to a point; south 44 degrees 47 minutes 48 seconds west 108.76 feet to a point; and south 26 degrees 33 minutes 55 seconds west 93.40 feet to a point located at the edge of the 5.20 property described above; all as more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.

DOC# 000177
FILED IN OFFICE
01/17/2012 01:50 PM
BK:740 PG:112-114
SHEILA H. PERRY
CLERK OF COURT
PUTNAM COUNTY

After Recording Return to:

Lantz & Reeves, P.C.
3735 Cherokee Street
Kennesaw, Georgia 30144
770 424-8131

REAL ESTATE TRANSFER T

AX
PAID: \$0.00

-----Above This Line Reserved For Official Use Only-----

DEED PREPARED ONLY.
NO TITLE EXAMINATION PERFORMED.

PT61-117-2012-000053

EXECUTOR'S DEED

STATE OF GEORGIA
COUNTY OF PUTNAM

THIS INDENTURE, made this the 13th day of December, 2011, between JANET ALLEN CRITTENDEN, as Executor of the Last Will and Testament of NANCY JOHNSON ALLEN, late of the State of Georgia and County of Putnam, deceased, as party of the first part (the "Grantor"), and ALLEN INVESTMENT PARTNERS, LLLP, a Georgia limited liability limited partnership, as party of the second part (the "Grantee"); the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits.

WITNESSETH: That the said Grantor (acting under and by virtue of the power and authority contained in the said Will, the same having been duly probated and recorded in the Probate Court of Putnam County, Georgia (estate no. 11ES0074), said Will having been proven in solemn form), for and in consideration of the sum of TEN AND 00/100 DOLLARS (\$10.00) and other good and valuable consideration, in hand paid at and before the sealing and delivery of the presents (the receipt of which is hereby acknowledged), has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell and convey unto the said Grantee, all that tract or parcel of land lying and being in Putnam County, Georgia and more particularly described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

See copy of Death Certificate (Exhibit "B") attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said Grantee, forever, IN FEE SIMPLE; in as full and ample a manner as the same was held, possessed and enjoyed, or might have been held, possessed and enjoyed, by the said decedent.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered
in the presence of:

Official Witness

Signed, sealed and delivered
in the presence of:

Notary Public

My commission expires:

[Notary seal here.]

Janet Allen Crittenden (Seal)
JANET ALLEN CRITTENDEN, as Executor as aforesaid

*please see attached California
Notary Acknowledgement*

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California
County of Siskiyou

} SS:

On December 13 2011, before me,
Kellie A. Sanders,
a Notary Public, personally appeared,
Taret Allen Crittenden

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

K Sanders
SIGNATURE OF NOTARY

MY COMMISSION EXPIRES ON: Aug. 27, 2014



(SEAL)

748.113

EXHIBIT "A"

ALL THAT TRACT OR PARCEL OF LAND SITUATE, LYING AND BEING IN 389TH GM DISTRICT, 3RD LAND DISTRICT, AND LAND LOT 341 OF PUTNAM COUNTY, GEORGIA MORE PARTICULARLY DESCRIBED AS PARCEL "A" CONTAINING 5.00 ACRES, MORE OR LESS, AS SHOWN ON THAT CERTAIN PLAT OF SURVEY PREPARED FOR NANCY JOHNSON ALLEN BY JAMES E. SMITH, JR., RLSN 1895, DATED JUNE 16, 2008 AND RECORDED AT PLAT BOOK 32, PAGE 76, PUTNAM COUNTY, GEORGIA REAL ESTATE RECORDS. SAID PLAT OF SURVEY AND THE RECORDED COPY THEREOF ARE INCORPORATED HEREIN BY REFERENCE FOR ALL PURPOSES.

INCLUDING A 20' INGRESS & EGRESS EASEMENT AS SHOWN ON THE PLAT OF SURVEY REFERENCED IN THE PARAGRAPH IMMEDIATELY ABOVE THAT IS APPURTENANT TO AND RUNS WITH THE TITLE TO PARCEL "A". SAID 20' INGRESS & EGRESS EASEMENT SHALL BE FOR THE PURPOSE OF VEHICULAR AND PEDESTRIAN ACCESS ACROSS PARCEL "B" TO AND FROM PARCEL "A" AND HARMONY-DAVIS ROAD, BEING A PUBLIC ROAD WITH AN 80' RIGHT-OF-WAY.

740.114

044597

273
652

GEORGIA, PUTNAM COUNTY
CLERK OF SUPERIOR COURT
FILED 11-16-98
TIME 11:50am
RECORDED 11-16-98
BOOK 213 PAGE 652-653
Clyde G. Bulfinch
(DEPUTY) CLERK

When recorded, please return to:
Bussard & Litt, LLC
2500 Windy Ridge Parkway, Suite 320
Atlanta, GA 30339
B&L File No. 88-0312

Putnam County, Georgia
Real Estate Transfer Tax
Paid \$ 10.40
Date 11-16-98
Clyde G. Bulfinch
(Deputy) Clerk of Superior

QUITCLAIM DEED

STATE OF GEORGIA
COUNTY OF Fulton

THIS INDENTURE made this 21st day of July, 1998, between

NANCY J. ALLEN,

of the State of Georgia, as party or parties of the first part, hereinafter called Grantor, and

PEGGY ALLEN,

as party or parties of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that: Grantor, for Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby remise, convey and forever QUITCLAIM unto the said grantee:

ALL THAT TRACT or parcel of land lying and being in Land 341 of the 3rd Land District, 389th G.M. District, Putnam County, Georgia and being more particularly described in Exhibit "A" attached hereto and incorporated herein by reference.

TO HAVE AND TO HOLD the said described premises to Grantee, so that neither Grantor nor any person or persons claiming under Grantor shall at any time, by any means or ways, have, claim or demand any right of title to said premises or appurtenances, or any rights thereof.

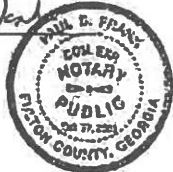
IN WITNESS WHEREOF, the Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

Lai Alexander
Unofficial Witness

Nancy J. Allen (SEAL)
NANCY J. ALLEN

Paul E. Franz
Notary Public
(Affix Notarial Seal)



less Excepted
w/ easement
TMP 103-002
PB 26-135

273
653

EXHIBIT "A"

ALL THAT TRACT or parcel of land lying and being in Land Lot 341 of the 3rd Land District, 309th G.M. District, Putnam County, Georgia, and being more particularly described as follows:

TO FIND THE TRUE POINT OF BEGINNING, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence south 45 degrees 22 minutes 07 seconds west a distance of 1,049.91 feet to an iron pin set and the TRUE POINT OF BEGINNING; thence south 45 degrees 22 minutes 07 seconds west a distance of 286.87 feet to an iron pin set; thence north 43 degrees 37 minutes 02 seconds west a distance of 792.18 feet to an iron pin set; thence north 48 degrees 22 minutes 58 seconds east a distance of 286.82 feet to an iron pin set; thence south 43 degrees 37 minutes 02 seconds east a distance of 787.10 feet to an iron pin set and the point of beginning; containing approximately 5.20 acres and being more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.

Being a portion of the property conveyed from John E. Singleton to Charles M. Allen and Nancy J. Allen by warranty deed dated October 4, 1984 and recorded at Deed Book 84, Page 156, Putnam County, Georgia Records.

TOGETHER WITH A 20-FOOT WIDE EASEMENT FOR INGRESS AND EGRESS TO AND FROM HARMONY-DAVIS ROAD, and being more particularly described as follows:

TO FIND THE CENTERLINE OF THE EASEMENT, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence north 32 degrees 57 minutes 18 seconds west along the westerly right of way of Harmony-Davis Road a distance of 656.70 to the centerline of a 10-foot drive and the CENTERLINE OF THE EASEMENT; thence the following calls along the centerline of said easement: south 80 degrees 34 minutes 20 seconds west 64.20 feet to a point; south 89 degrees 50 minutes 05 seconds west 22.18 feet to a point; south 54 degrees 03 minutes 54 seconds west 63.70 feet to a point; south 57 degrees 25 minutes 44 seconds west 97.12 feet to a point; south 57 degrees 07 minutes 39 seconds west 57.23 feet to a point; south 61 degrees 18 minutes 59 seconds west 82.08 feet to a point; south 70 degrees 27 minutes 06 seconds west 46.04 feet to a point; south 74 degrees 46 minutes 22 seconds west 19.00 feet to a point; south 16 degrees 31 minutes 51 seconds east 88.64 feet to a point; south 22 degrees 52 minutes 57 seconds west 143.24 feet to a point; south 33 degrees 34 minutes 26 seconds west 77.61 feet to a point; south 35 degrees 23 minutes 28 seconds west 193.38 feet to a point; south 50 degrees 29 minutes 35 seconds east 80.97 feet to a point; south 35 degrees 43 minutes 13 seconds west 71.40 feet to a point; south 44 degrees 47 minutes 48 seconds west 108.76 feet to a point; and south 26 degrees 33 minutes 55 seconds west 93.40 feet to a point located at the edge of the 5.20 property described above; all as more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B 0 Eatonton, GA 31024

Tel: 706-485-2776 0 706-485-0552 fax www.putnamcountyga.us

LETTER OF AGENCY-_____

WE, THE UNDERSIGNED OWNERS OF REAL PROPERTY LOCATED IN THE CITY OF EATONTON/PUTNAM COUNTY, GEORGIA, HEREBY APPOINT James Stiff TO BY MY AGENT FOR THE PURPOSE OF APPLYING FOR rezoning OF PROPERTY DESCRIBED AS MAP 103 PARCELS 001001 and 001, CONSISTING OF 71.554 ACRES, WHICH HAS THE FOLLOWING ADDRESS: 916 Harmony Road EATONTON, GEORGIA 31024. ATTACHED IS A COPY OF A DEED AND OR LAT OF SURVEY DESCRIBING THE PROPERTY OWNED BY THE PROPERTY OWNER(S) TO WHICH THIS LETTER OF AGENCY APPLIES.

THE ABOVE-NAMED AGENT HEREBY IS AUTHORIZED TO COMPLETE AND SIGN THE CITY OF EATONTON/PUTNAM COUNTY APPLICATION FOR rezoning ON OUR BEHALF. WE UNDERSTAND THAT THIS LETTER OF AGENCY WILL BE ATTACHED TO AND MADE PART OF SAID FORM AND WILL BE RELIED UPON BY THE CITY OF EATONTON/PUTNAM COUNTY. FOR AND IN CONSIDERATION OF THE CITY OF EATONTON/PUTNAM COUNTY ACCEPTING THIS LETTER OF AGENCY, WE HEREBY INDEMNIFY AND HOLD HARMLESS THE CITY OF EATONTON/PUTNAM COUNTY AND ITS AGENTS AND/OR EMPLOYEES IN THE EVEN THAT THE ABOVE NAMED AGENT SHOULD MISUSE THIS LETTER OF AGENCY AND WE SUFFER DAMAGES AS A RESULT.

THIS 22nd DAY OF June, 2021.

PROPERTY OWNER(S): Peggy Allen

Peggy Allen
NAME (PRINTED)

NAME (PRINTED)

Peggy Allen
SIGNATURE

SIGNATURE

ADDRESS: 918 Harmony Road, Eatonton, GA 31024

PHONE: _____

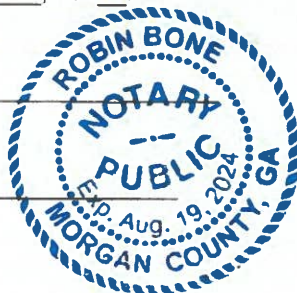
ALL SIGNATURES WERE HEREBY SWORN TO AND SUBSCRIBED BEFORE ME THIS

23 DAY OF June, 2021.

Robin Bone
NOTARY

NOTARY

MY COMMISSION EXPIRES: _____





PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B 0 Eatonton, GA 31024

Tel: 706-485-2776 0 706-485-0552 fax www.putnamcountyga.us

LETTER OF AGENCY-_____

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THE ABOVE-NAMED AGENT HEREBY IS AUTHORIZED TO COMPLETE AND SIGN THE CITY OF EATONTON/PUTNAM COUNTY APPLICATION FOR rezoning ON OUR BEHALF. WE UNDERSTAND THAT THIS LETTER OF AGENCY WILL BE ATTACHED TO AND MADE PART OF SAID FORM AND WILL BE RELIED UPON BY THE CITY OF EATONTON/PUTNAM COUNTY. FOR AND IN CONSIDERATION OF THE CITY OF EATONTON/PUTNAM COUNTY ACCEPTING THIS LETTER OF AGENCY, WE HEREBY INDEMNIFY AND HOLD HARMLESS THE CITY OF EATONTON/PUTNAM COUNTY AND ITS AGENTS AND/OR EMPLOYEES IN THE EVEN THAT THE ABOVE NAMED AGENT SHOULD MISUSE THIS LETTER OF AGENCY AND WE SUFFER DAMAGES AS A RESULT.
THIS 22nd DAY OF June, 2021.

PROPERTY OWNER(S): Sue Fox Susan Fox
NAME (PRINTED)
Susan Fox
SIGNATURE

ADDRESS: 108 Walking Horse Lane, Eatonton, GA 31024
PHONE: _____

ALL SIGNATURES WERE HEREBY SWORN TO AND SUBSCRIBED BEFORE ME THIS 23 DAY OF June, 2021.

[Signature]
NOTARY

MY COMMISSION EXPIRES: _____



Item 13: Legal Description & Recorded Plat

LEGAL DESCRIPTION
PARCEL "B"

All that Tract or Parcel of land, lying and being located in Land Lot 341 and Land Lot 352 of the 3rd District, in the 389th G.M. District, Putnam County, Georgia, containing 71.554 Acres (3,116,910 SQ.FT.), more or less and being more particularly described as follows:

BEGINNING at 1/2" rebar set on the southwestern most 80 foot Right of Way of Harmony Road, said 1/2" rebar set being located 1188.80 feet northwest from the right of way intersection of Georgia State Route No. 44; thence departing said right of way, proceed the following: South 45 degrees 05 minutes 27 seconds West for a distance of 544.83 feet to a 3/4" rebar found; thence South 45 degrees 03 minutes 46 seconds West for a distance of 108.94 feet to a point; thence South 45 degrees 07 minutes 02 seconds West for a distance of 69.90 feet to a point; thence South 44 degrees 55 minutes 38 seconds West for a distance of 64.11 feet to a point; thence South 45 degrees 05 minutes 26 seconds West for a distance of 79.87 feet to 3/4" rebar found; thence South 45 degrees 05 minutes 49 seconds West for a distance of 90.18 feet to a 3/4" rebar found; thence South 45 degrees 03 minutes 10 seconds West for a distance of 91.80 feet to a 1/2" rebar found; thence North 44 degrees 43 minutes 28 seconds West for a distance of 385.81 feet to a point; thence North 44 degrees 43 minutes 28 seconds West for a distance of 386.54 feet to a 1/2" rebar found; thence South 45 degrees 17 minutes 08 seconds West for a distance of 286.82 feet to a 1/2" rebar found; thence South 44 degrees 42 minutes 23 seconds East for a distance of 773.30 feet to a 3/8" rebar found; thence South 45 degrees 04 minutes 17 seconds West for a distance of 166.53 feet to a 3/8" rebar found; thence South 45 degrees 12 minutes 34 seconds West for a distance of 74.99 feet to a 3/8" rebar found; thence South 45 degrees 04 minutes 43 seconds West for a distance of 74.72 feet to a 3/8" rebar found; thence South 45 degrees 11 minutes 16 seconds West for a distance of 75.21 feet to a 3/8" rebar found; thence South 45 degrees 02 minutes 05 seconds West for a distance of 74.95 feet to a 3/8" rebar found; thence South 45 degrees 15 minutes 52 seconds West for a distance of 75.08 feet to a 3/8" rebar found; thence South 44 degrees 40 minutes 57 seconds West for a distance of 151.27 feet to a 1/2" rebar found; thence South 45 degrees 09 minutes 02 seconds West for a distance of 49.90 feet to a 1/2" rebar found; thence South 78 degrees 25 minutes 46 seconds West for a distance of 290.03 feet to a 5/8" rebar found on the easternmost 60 foot Right of Way of Lakemore Drive; thence proceed along the easternmost 60 foot Right of Way of Lakemore Drive, the following: thence North 04 degrees 54 minutes 06 seconds West for a distance of 265.91 feet to a point; thence with a curve turning to the left with an arc length of 372.52 feet, a radius of 1148.78 feet, a chord bearing of North 14 degrees 12 minutes 07 seconds West and a chord length of 370.89 feet to a point; thence North 23 degrees 29 minutes 30 seconds West for a distance of 597.34 feet to a point; thence with a curve turning to the left with an arc length of 92.74 feet, a radius of 50.00 feet, a chord bearing of North 23 degrees 29 minutes 07 seconds West and a chord length of 80.00 feet to a 1/2" rebar found; thence with a compound curve turning to the left with an arc length of 55.08 feet, a radius of 50.00 feet, a chord bearing of South 71 degrees 59 minutes 02 seconds West and a chord length of 52.34 feet to a

1/2" rebar found; thence departing said right of way, proceed the following: thence South 75 degrees 04 minutes 32 seconds West for a distance of 369.44 feet to a 1/2" rebar found; thence North 37 degrees 25 minutes 08 seconds East for a distance of 109.73 feet to a 1/2" rebar found; thence North 66 degrees 24 minutes 57 seconds West for a distance of 100.04 feet to a 1/2" rebar found; thence North 66 degrees 24 minutes 57 seconds West for a distance of 192.96 feet to a 1/2" rebar found; thence North 41 degrees 27 minutes 58 seconds West for a distance of 321.06 feet to a 1/2" ebar set; thence North 53 degrees 15 minutes 07 seconds East for a distance of 166.41 feet to a 1/2" rebar found; thence North 82 degrees 04 minutes 50 seconds East for a distance of 374.44 feet to a 1/2" rebar set on the westernmost 80 foot Right of Way of Lake Drive; thence proceed along the westernmost, southernmost and eastern most 80 foot Right of Way of Lake Drive, the following: thence South 07 degrees 53 minutes 44 seconds East for a distance of 80.00 feet to a 1/2" rebar set; thence North 82 degrees 04 minutes 50 seconds East for a distance of 80.00 feet to a 1/2" rebar set; thence North 07 degrees 53 minutes 44 seconds West for a distance of 80.00 feet to a 3/4" rebar found; thence North 82 degrees 06 minutes 16 seconds East for a distance of 649.94 feet to a 1/2" rebar found; thence North 82 degrees 06 minutes 16 seconds East for a distance of 130.06 feet to a 5/8" rebar found; thence North 44 degrees 59 minutes 20 seconds East for a distance of 186.04 feet to a 5/8" rebar found; thence North 44 degrees 59 minutes 20 seconds East for a distance of 236.20 feet to a 3/4" rebar found; thence North 44 degrees 59 minutes 20 seconds East for a distance of 384.74 feet to a nail found; thence North 44 degrees 59 minutes 20 seconds East for a distance of 159.93 feet to a 3/4" rebar found; thence North 44 degrees 59 minutes 20 seconds East for a distance of 204.00 feet to a 1/2" rebar found on the southwestern most 80 foot Right of Way of Harmony Road; thence proceed along the southwestern most 80 foot Right of Way of Harmony Road, the following: thence South 34 degrees 03 minutes 08 seconds East for a distance of 831.27 feet to a point; thence South 34 degrees 03 minutes 08 seconds East for a distance of 556.70 feet to a 1/2" rebar set and the **TRUE POINT OF BEGINNING**.

Said property contains 71.554 Acres (3,116,910 SQ.FT.),

Less and except Parcel "A" as described.

Items 16 & 17: Source of Domestic Water & Sewer Supply Provider Letter



georgia civil

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING

June 23, 2021

Lisa Jackson, MPA
Planning Director
Putnam County Planning & Development
117 Putnam Drive, Suite B
Eatonton, GA 31024

Re: Helms Farm Campus at Harmony Rd – Proposed Provider for Domestic Water Service & Sanitary Sewage Disposal

Dear Lisa,

As you are aware, Goodwill Industries of Middle Georgia is currently submitting an application to rezone two parcels in Eatonton, Georgia, along Harmony Road. The application requests information about the source of domestic water supply as well as sanitary sewer disposal. It is our understanding that Piedmont Water is the local provider in this area, and we have confirmed this with Brent Hurst, the Chief Operating Officer with Piedmont Water Company. Piedmont will provide both the domestic water as well as service sanitary sewage disposal. We are currently consulting with Piedmont Water to determine the anticipated demand so they can determine if the proposed development will have to pump sewage to an existing lift station with no upgrades, one with upgrades, or directly to the plant.

Please let us know if we can assist further in this matter or if you have any questions.

Sincerely,



Jason Brown, P.E.
President
PE#031684

Item 18: Disclosure of Campaign Contributions Forms



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

DISCLOSURE OF APPLICANT'S CAMPAIGN CONTRIBUTION

The *Putnam County Code of Ordinances*, Section 66-167(c) states as follows:

“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Peggy Allen

2. Address: 918 Harmond Rd
Eatonton 31024

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? _____

Signature of Applicant: 
Date: 10/19/21



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a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Susan Fox

2. Address: 108 Walking Horse Lane
Eatonton, Georgia 31024

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? _____ Yes No _____ If yes, who did you make the contributions to? : _____

Signature of Applicant: _____

Susan Fox
dotloop verified
06/18/21 4:16 PM EDT
Q3YS-ZVRN-LNXV-OVMZ

Date: 06/18/2021 / _____



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

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a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: James K. Stiff

2. Address: 3 Shadowbrook Circle
Augusta, GA. 30909

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: James K. Stiff

Date: 6 / 18 / 21
CEO
Goodwill Industries Middle Georgia, Inc.

Item 20: Property Taxes

Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1081
(706) 485-5441

Certain persons are eligible for certain homestead exemptions from ad valorem taxation. In addition to the regular homestead exemption authorized for all homeowners, certain elderly persons are entitled to additional exemptions. The full law relating to each exemption must be referred to in order to determine eligibility for the exemption. If you are eligible for one of these exemptions and are not now receiving the benefit of the exemption, you must apply for the exemption not later than April 1, 2021 in order to receive the exemption in future years. For more information on eligibility for exemptions or on the proper method of applying for an exemption, you may contact:



Scan this code with your mobile phone to view or pay this bill



Putnam County Tax Assessor
100 South Jefferson Ave Suite 109
Eatonton, GA 31024-1087
(706) 485-6376

ALLEN INVESTMENT PARTNERS LLLP
108 WALKING HORSE LANE
EATONTON, GA 31024

INTERNET TAX BILL

2020 State, County & School Ad Valorem Tax Notice

Bill No.	Property Description	Map Number	Fair Mkt Value	Assessed Value	Exempt Value	Taxable Value	Millage Rate	Tax Amount
000315	01 PARCEL B HARMONY RD	103 001 001	629624	251850	0	251850	24.228	6,101.82

Important Messages - Please Read

This gradual reduction and elimination of the state property tax and the reduction in your tax bill this year is the result of property tax relief passed by the Governor and the House of Representatives and the Georgia State Senate.

Local Option Sales Tax Information

Mills required to produce county budget	
Mills reduction due to sales tax rollback	
Actual mill rate set by county officials	
Tax savings due to sales tax rollback	24.86

Total of Bills by Tax Type

COUNTY	2,034.44
SCHOOL	3,972.18
SPEC SERV	95.20
PAYMENTS RECEIVED	6,101.82-
TOTAL DUE	0.00
DATE DUE	12/1/2020

Please detach here and return this portion in the envelope provided with your payment in full.

ALLEN INVESTMENT PARTNERS LLLP
108 WALKING HORSE LANE
EATONTON, GA 31024

PAYMENT INSTRUCTIONS

- Please Make Check or Money Order Payable to: Putnam County Tax Commissioner
- If a receipt is desired, please include a stamped, self-addressed envelope.
- If taxes are to be paid by a mortgage company, send them this portion only
- If you are paying after the due date, please call our office for the full amount due
- Interest on unpaid tax bills is applied in compliance with GA Code 48-2-40.
- Penalty on unpaid tax bills is applied in compliance with GA Code 48-2-44

Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1061
(706) 485-5441

Bill Number	Map Number	Tax Amount
2020 000315	103 001 001	6,101.82
DATE DUE		TOTAL DUE
12/1/2020		0.00

INTERNET TAX BILL

3/10/2021

Taxes

INTERNET TAX RECEIPT

2020 000315
ALLEN INVESTMENT PARTNERS LLLP

PARCEL B HARMONY RD
103 001 001

DESCRIPTION	TAX AMOUNT	EXEMPTION	MILLAGE
FAIR MARKET VALUE	\$629,624		
COUNTY	\$2,034.44	\$0.00	8.078
SCHOOL	\$3,972.18	\$0.00	15.772
SPEC SERV	\$95.20	\$0.00	0.378

ORIGINAL TAX DUE
\$6,101.82
INTEREST
COLLECTION COST
FIFA CHARGE
PENALTY
TOTAL PAID
\$6,101.82
TOTAL DUE
\$0.00

TO ALLEN INVESTMENT PARTNERS LLLP
108 WALKING HORSE LANE
EATONTON, GA 31024

FROM Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1061
(706) 485-5441



Date Paid: 12/3/2020



Scan this code with
your mobile phone
to view this bill

INTERNET TAX RECEIPT

Item 21: Concept Plan & Project Inspiration



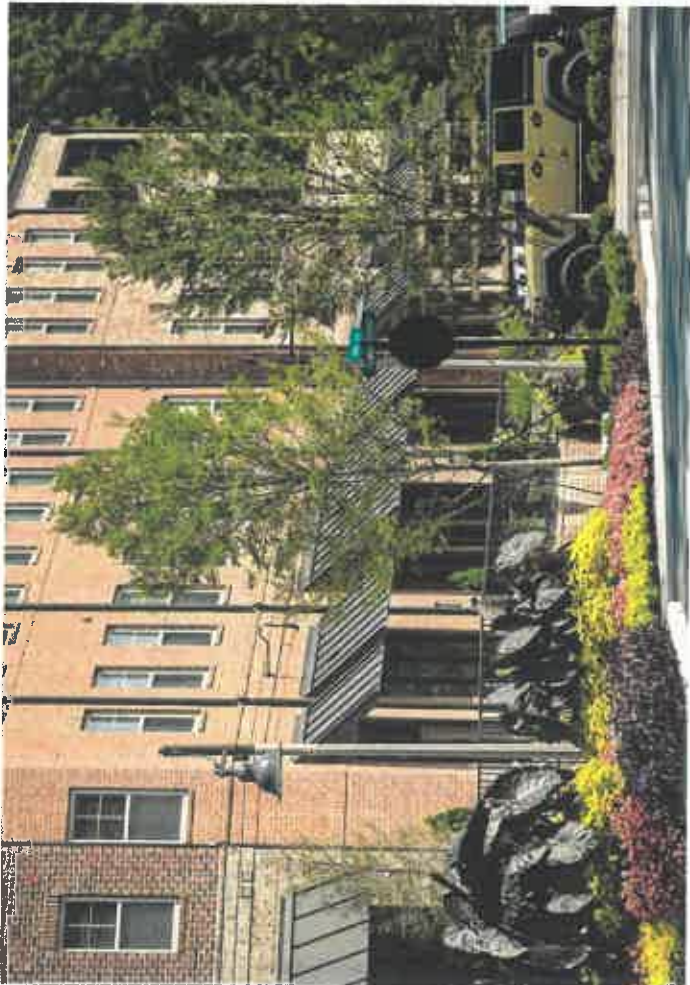
HELMS FARM
Campus Master Plan
Study 3.0

Issue: 23 June 2021
 Silver Studio Architects









Item 22: Impact Analysis

IMPACT ANALYSIS

Impact analysis. An impact analysis is required for all applications unless the application will result in fewer than 25 single-family residential lots. The impact analysis shall be prepared by a professional engineer, a registered land surveyor, a landscape architect, a land planner or any other person professionally involved in and familiar with land development activities.

1. The application must be accompanied by a written, documented analysis of the proposed zoning change with regard to each of the standards governing consideration, (which are enumerated under Putnam County Code of Ordinances, Chapter 66-Zoning, Sec. 66-165(d)) and are as follows:
 - a. Is the proposed use consistent with the stated purpose of the zoning district that is being requested?
 - b. Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?
 - c. Will the proposed use adversely affect the existing use, value or usability of adjacent or nearby property?
 - d. Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?
 - e. Are there substantial reasons why the property cannot or should not be used as currently zoned?
 - f. Will the proposed use cause an excessive or burdensome use of public facilities or services or exceed the present or funded capabilities, included but not limited to streets, water or sewer utilities, and police or fire protection?
 - g. Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?
 - h. Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, and a reasonable private use of the subject property?
2. A traffic impact analysis is to include the existing average daily traffic on road/streets leading to the nearest intersection and the projected average daily traffic. Additional requirements for the analysis may be provided by the Planning and Development Department and included with the application.
3. The estimated number of dwelling units and total floor area of non-residential uses (if applicable) of the proposed development.
4. Effect on the environment surrounding the area to be rezoned including the effect on all natural and historic resources. (State source of the information)
5. Impact on fire protection with respect to the need for additional firefighting equipment or personnel. (State source of the information)
6. What are the physical characteristics of the site with respect to topography and drainage courses?
7. Adjacent and nearby zoning and land use.

IMPACT ANALYSIS

1. The application must be accompanied by a written, documented analysis of the proposed zoning change with regard to each of the standards governing consideration, (which are enumerated under Putnam County Code of Ordinances, Chapter 66-Zoning, Sec. 66-165(d)) and are as follows:
 - a. Is the proposed use consistent with the stated purpose of the zoning district that is being requested?
Yes. The purpose of the planned unit development zoning is "to encourage the development of large tracts of land to produce logically organized development with compatible land uses." The proposed development meets this purpose.
 - b. Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?
Yes. Adjacent and nearby uses include commercial, residential, and agricultural, all components that will be incorporated into the planned unit development to serve as a bridge and connection to adjacent parcels.
 - c. Will the proposed use adversely affect the existing use, value or usability of adjacent or nearby property?
No.
 - d. Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?
Yes.
 - e. Are there substantial reasons why the property cannot or should not be used as currently zoned?
The current zoning does not allow for the proposed mixed-use program.
 - f. Will the proposed use cause an excessive or burdensome use of public facilities or services or exceed the present or funded capabilities, included but not limited to streets, water or sewer utilities, and police or fire protection?
No.
 - g. Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?
Yes.
 - h. Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, and a reasonable private use of the subject property?
Yes.
2. A traffic impact analysis is to include the existing average daily traffic on road/streets leading to the nearest intersection and the projected average daily traffic. Additional requirements for the analysis may be provided by the Planning and Development Department and included with the application.
The traffic impact analysis is attached as Item 22a: Traffic Impact Analysis.
3. The estimated number of dwelling units and total floor area of non-residential uses (if applicable) of the proposed development.
The development program may include up to approximately 150 dwelling units. The total floor area for the non-residential uses may include up to 250,550 square feet.

- Effect on the environment surrounding the area to be rezoned including the effect on all natural and historic resources. (State source of the information)

Studies for a Phase I Environmental Assessment and delineation of Waters of the State and wetlands disclosed no issues.

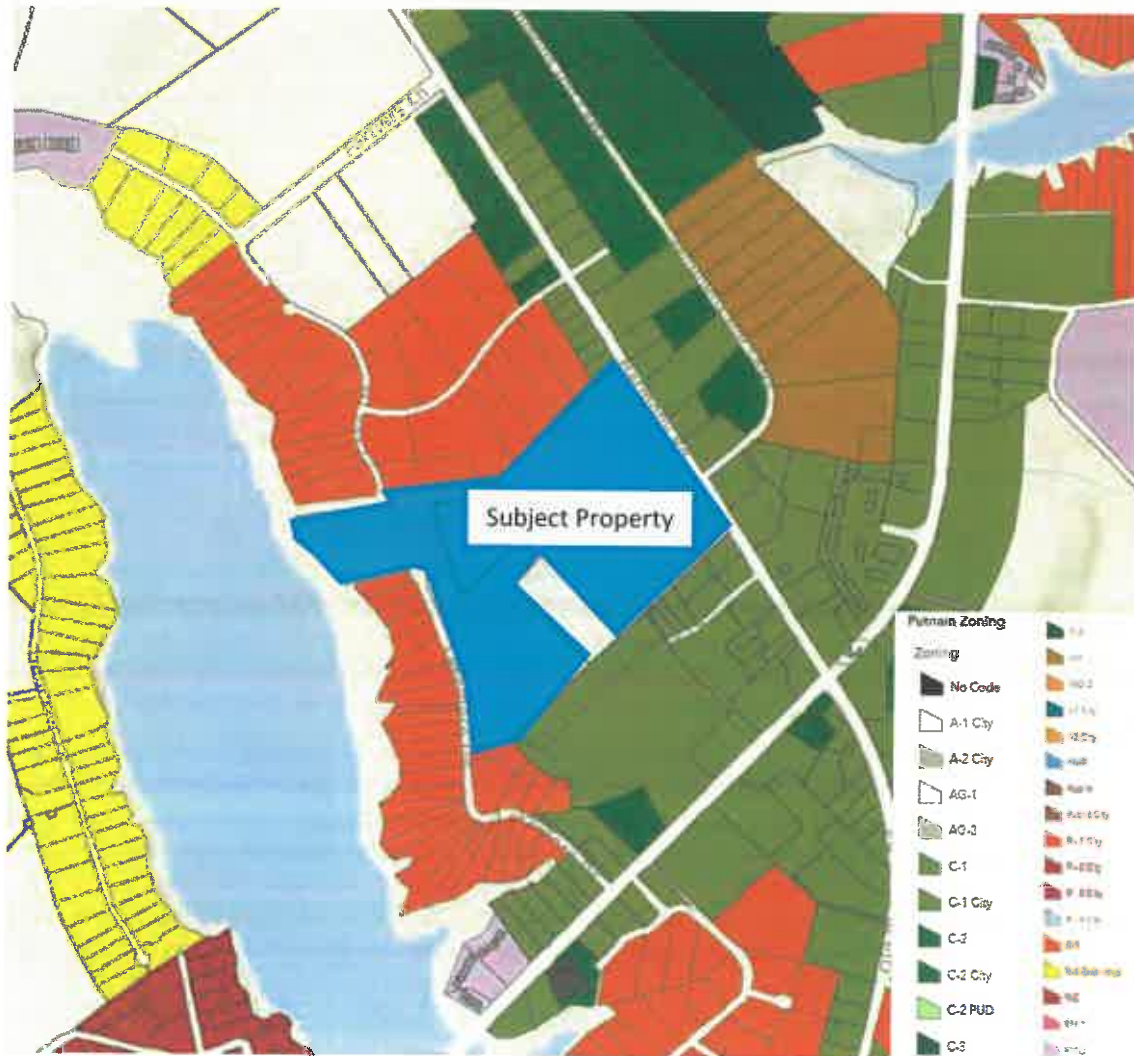
- Impact on fire protection with respect to the need for additional firefighting equipment or personnel. (State source of the information)

Per Georgia Civil, the site infrastructure being provided as part of this development will have adequate fire water service and protection with fire suppression systems to meet all life safety codes and provide access for all fire vehicle apparatus.

- What are the physical characteristics of the site with respect to topography and drainage courses?

An ALTA Survey is enclosed, the site generally slopes from Harmony Road to the lake.

- Adjacent and nearby zoning and land use:



Item 22a: Traffic Impact Analysis

**TRAFFIC STUDY
FOR
HELMS FARM CAMPUS AT HARMONY ROAD
PUTNAM COUNTY, GEORGIA**



Prepared for:

***Goodwill of Middle Georgia & The CSRA
5171 Eisenhower Parkway
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A & R Project # 21-082

TABLE OF CONTENTS

Item	Page
1.0 Introduction	1
2.0 Existing Facilities / Conditions	4
2.1.1 SR 44 (Greensboro Road).....	4
2.1.2 Harmony Road	4
2.1.3 Village Lane	4
2.1.4 Sammons Industrial Parkway.....	4
2.1.5 Harmony Lane	4
2.1.6 Scott Road	4
3.0 Study Methodology	5
3.1 Unsignalized Intersections	5
3.2 Signalized Intersections	5
4.0 Existing 2021 Traffic Analysis.....	7
4.1 Existing Traffic Volumes	7
4.2 Adjusted 2021 Traffic Volumes.....	7
4.3 Existing Traffic Operations	10
5.0 Proposed Development.....	12
5.1 Trip Generation	14
5.2 Trip Distribution	15
6.0 Future 2022 Traffic Analysis	18
6.1 Future “No-Build” Conditions	18
6.1.1 Annual Traffic Growth.....	18
Future “Build” Conditions	18
6.1.2 Auxiliary Lane Analysis	21
6.1.3 Left Turn Lane Analysis	21
6.1.4 Deceleration Turn Lane Analysis.....	22
6.2 Future Traffic Conditions	23
7.0 Conclusions and Recommendations.....	27
Appendix	

LIST OF TABLES

Item	Page
Table 1 – Level-of-service Criteria for Unsignalized Intersections.....	5
Table 2 – Level-of-service Criteria for Signalized Intersections	6
Table 3 – Existing Intersection Operations	10
Table 4 – Trip Generation	14
Table 5 - GDOT Requirements for Left Turn Lanes	21
Table 6 - GDOT Requirements for Deceleration Lanes	22
Table 7 – Future Intersection Operations.....	23

LIST OF FIGURES

Item	Page
Figure 1 – Location Map.....	3
Figure 2 – Existing Weekday Peak Hour Volumes during Covid-19	8
Figure 3 – Adjusted Existing Weekday Peak Hour Volumes	9
Figure 4 – Existing Traffic Control and Lane Geometry	11
Figure 5 – Site Plan.....	13
Figure 6 – Outer Leg Trip Distribution and Site Generated Peak Hour Volumes.....	16
Figure 7 – Site Peak Hour Pass-by Volumes.....	17
Figure 8 – Future (No-Build) Peak Hour Volumes	19
Figure 9 – Future (Build) Peak Hour Volumes.....	20
Figure 10 – GDOT’s PI 0006253 – Intersection Design	25
Figure 11 – Future Traffic Control and Lane Geometry	26

1.0 INTRODUCTION

The purpose of this study is to determine the traffic impact that will result from the proposed Helms Farm Campus development that will be located on Harmony Road across from Sammons Industrial Parkway (South), north of Village Lane in Putnam County, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. The development will consist of:

- Goodwill Store: 16,800 sf
- Helms College: 50 Students
- Edgar’s Bakery: 7,000 sf
- Retail including Spa: 26,920 sf
- High-Turn-over Sit-Down Restaurant: 13,100 sf
- Super Market: 14,500 sf
- Multi-family (mid-rise) Residential: 127 Units
- Student Housing: 18 Units
- Vacation Villas (Resorts): 41 Units
- Event Hall or Banquet Hall: 22,000 sf
- Hotel: 175 Rooms



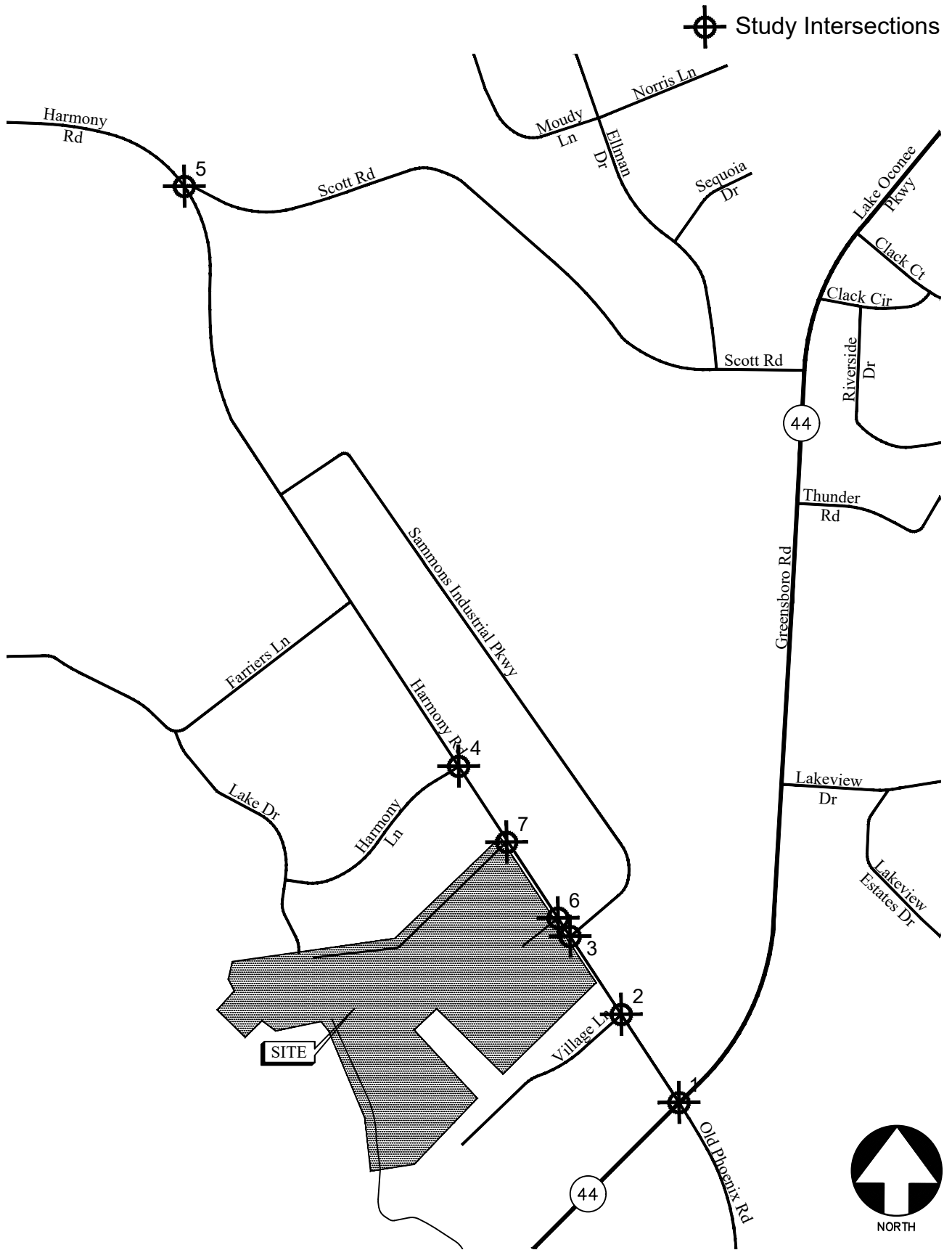
The development proposes two site driveways at the following locations:

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
- Site Driveway 2: Full-access (Northern) driveway on Harmony Road

Existing and future operations after completion of the project were analyzed at the intersections of:

- Harmony Road at SR 44 (Greensboro Road) / Old Phoenix Road
- Harmony Road at Village Lane
- Harmony Road at Sammons Industrial Parkway (South)
- Harmony Road at Harmony Lane
- Harmony Road at Scott Road / Private Driveway
- Harmony Road at Site Driveway 1 (Southern)
- Harmony Road at Site Driveway 2 (Northern) / Private Driveway

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding study network is shown in Figure 1.



LOCATION MAP

FIGURE 1

A&R Engineering Inc.

2.0 EXISTING FACILITIES / CONDITIONS

The following is a brief description of each of the roadway facilities located in proximity to the site:

2.1.1 SR 44 (Greensboro Road)

SR 44 (Greensboro Road) is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID 237-0146) indicate that the daily traffic volume on SR 44 (Greensboro Road) in 2019 was 15,200 vehicles per day north of Harmony Road. GDOT classifies SR 44 (Greensboro Road) as a Rural Minor Arterial roadway.

2.1.2 Harmony Road

Harmony Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID 237-0181) indicate that the daily traffic volume on Harmony Road in 2019 was 3,570 vehicles per day north of Scott Road. GDOT classifies Harmony Road as a Rural Minor Collector roadway.

2.1.3 Village Lane

Village Lane is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.4 Sammons Industrial Parkway

Sammons Industrial Parkway is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.5 Harmony Lane

Harmony Lane is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.6 Scott Road

Scott Road is a northwest-southeast, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the site.

3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections. At specific intersections in which HCM 6 is unable to report results due to limitations of the software version, HCM 2000 will be used instead. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

3.1 Unsignalized Intersections

For unsignalized intersections at which the side street or minor street is controlled by a stop sign, the criteria for evaluating traffic operations are the level-of-service (LOS) for the turning movements at the intersection and the level-of-service for the overall intersection. Level-of-service is based on the average controlled delay incurred at the intersection. Controlled delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the controlled delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross safely, resulting in extremely long total delays and long queues. The level-of-service criteria for two-way stop-controlled and all-way stop-controlled (unsignalized) intersections are given in Table 1.

Level-of-service	Average Delay (sec)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Source: Highway Capacity Manual

3.2 Signalized Intersections

For signalized intersections, it is necessary to evaluate both capacity and level-of-service in order to evaluate the overall operation of the intersection. The capacity analysis of an intersection is performed by comparing the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This results in a volume/capacity (v/c) ratio for each lane group. A v/c ratio greater

than 1.0 indicates that the volume of traffic has exceeded the capacity available, resulting in a temporary excess of demand. Although the capacity of the entire intersection is not defined, a composite v/c ratio for the sum of the critical lane groups within the intersection is computed. This composite v/c ratio is an indication of the overall intersection sufficiency.

Level-of-service for a signalized intersection is defined in terms of average controlled delay per vehicle, which is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The level-of-service criteria for signalized intersections, based on average controlled delay, are shown in Table 2. Level-of-service “A” indicates operations with very low controlled delay, while level-of-service “F” describes operations with extremely high average-controlled delay. Level-of-service “E” is typically considered to be the limit of acceptable delay, and level-of-service “F” is considered unacceptable by most drivers.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS	
Level-of-service	Average Control Delay (sec)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Source: Highway Capacity Manual

4.0 EXISTING 2021 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

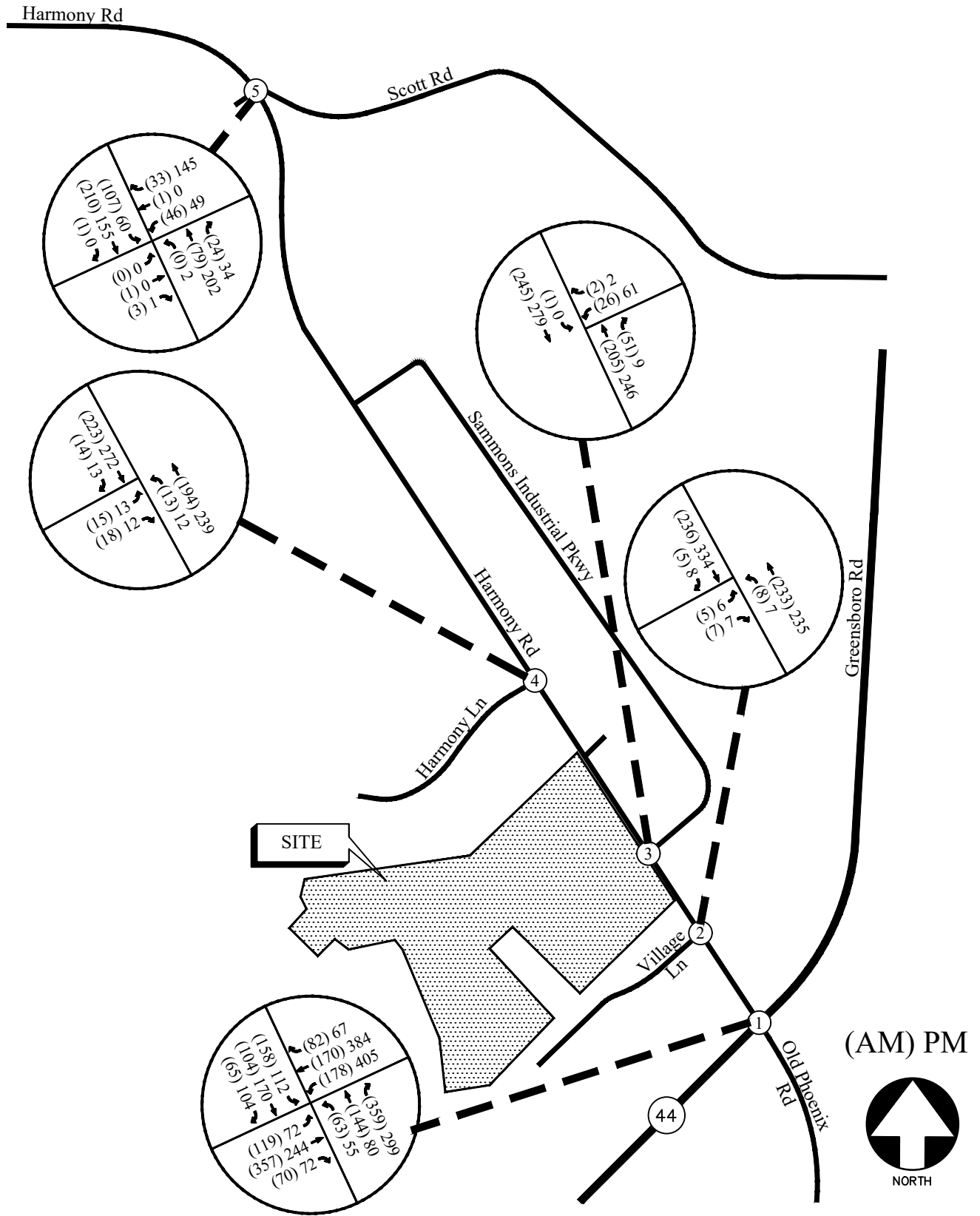
Traffic counts were obtained at the following study intersections:

- Harmony Road at SR 44 (Greensboro Road) / Old Phoenix Road
- Harmony Road at Village Lane
- Harmony Road at Sammons Industrial Parkway (South)
- Harmony Road at Harmony Lane
- Harmony Road at Scott Road / Private Driveway

Turning movement counts were collected on Thursday, May 27, 2021, at all the study intersections. A 24-hour bi-directional volume count was also collected on Harmony Road north of Scott Road at the same location where GDOT had collected historic ADT in the past. All turning movement counts were recorded during the AM and PM peak hours between 7:00am to 9:00am and 4:00pm to 6:00pm, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2.

4.2 Adjusted 2021 Traffic Volumes

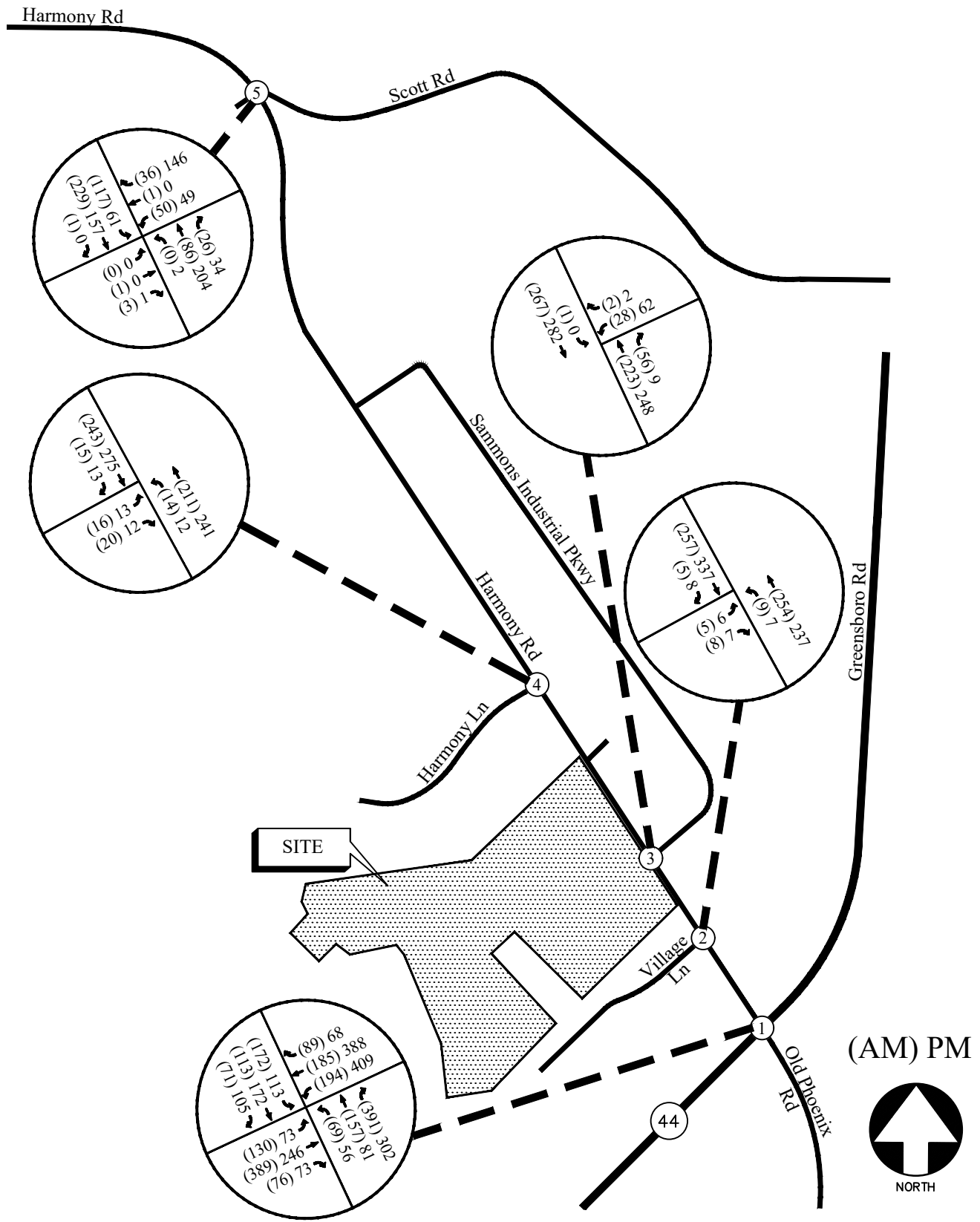
To account for the abnormal traffic pattern due to COVID-19, an adjustment factor was determined by calculating the difference between GDOT historical turning movements counts and current bi-directional counts at Harmony Road north of Scott Road. The historic 2017 turning movement counts from GDOT's (Station ID 237-0181) were increased by an annual growth rate of 2.5% for four years and compared to the existing bi-directional counts collected on Thursday, May 27, 2021, at the same location. The comparison of the two counts revealed that the adjusted historic traffic counts are 9% higher in the AM peak hour and 1% higher in the PM peak hour. Therefore, the 2021 AM and PM peak hour counts shown in Figure 2 were increased by 9% and 1%, respectively. The projected and/or adjusted existing peak hour volumes are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES
(DURING COVID-19)

FIGURE 2

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4.3 Existing Traffic Operations

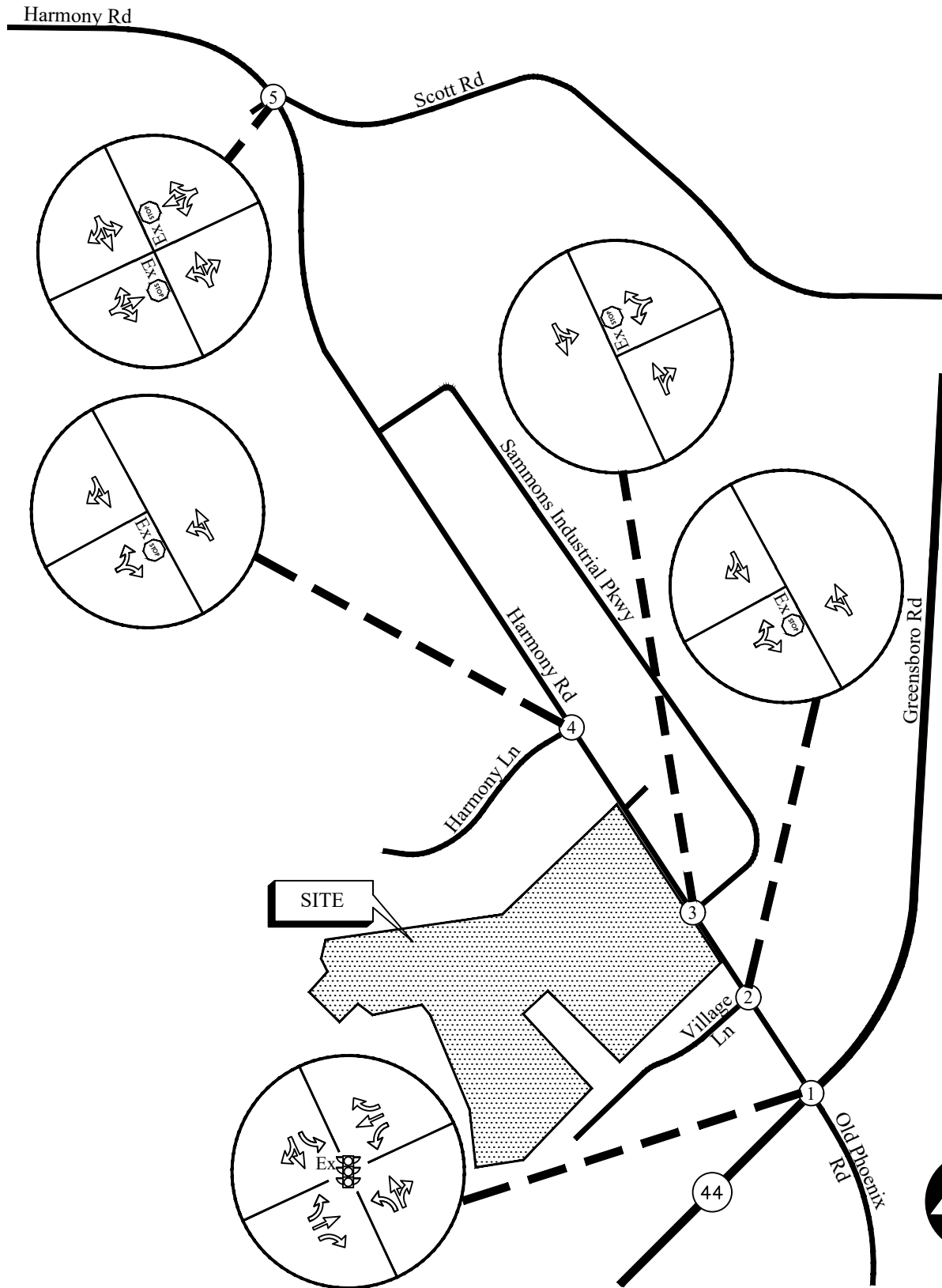
Existing 2021 traffic operations were analyzed at the study intersections in accordance with the HCM methodology using the volumes in Figure 3. The results of the analyses are shown in Table 3. The existing traffic control and lane geometry for the intersections are shown in Figure 4.

TABLE 3 – EXISTING INTERSECTION OPERATIONS				
Intersection		Traffic Control	LOS (Delay)	
			AM Peak Hour	PM Peak Hour
1	<u>SR 44 (Greensboro Road) @ Harmony Road / Old Phoenix Road</u>	Signalized	<u>D (47.7)</u>	<u>D (37.2)</u>
	-Eastbound Approach		D (44.3)	C (32.5)
	-Westbound Approach		C (29.4)	B (19.0)
	-Northbound Approach		E (68.6)	E (69.0)
	-Southbound Approach		D (36.1)	D (42.3)
2	<u>Harmony Road @ Village Lane</u>	Stop Controlled on Eastbound Approach	B (11.2)	B (12.4)
	-Eastbound Approach		A (7.9)	A (8.2)
3	<u>Harmony Road @ Sammons Industrial Parkway (S)</u>	Stop Controlled on Westbound Approach	B (14.2)	B (14.8)
	-Westbound Approach		A (7.9)	A (0.0)
4	<u>Harmony Road @ Harmony Lane</u>	Stop Controlled on Eastbound Approach	B (11.2)	B (12.0)
	-Eastbound Approach		A (7.8)	A (8.0)
5	<u>Harmony Road @ Scott Road / Private Driveway</u>	Stop Controlled on Eastbound and Westbound Approaches	B (11.0)	A (9.1)
	-Eastbound Approach		B (14.1)	B (13.3)
	-Westbound Approach		A (0.0)	A (7.6)
	-Northbound Left		A (7.7)	A (7.9)
	-Southbound Left			

The results of existing traffic operations analysis indicate that all the study intersections are operating at an level-of-service “D” or better in both AM and PM peak hours.

LEGEND

- Ex  Existing Signed Approach
-  Existing Lane Geometry
- Ex  Existing Traffic Signal



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 4

A&R Engineering Inc.

5.0 PROPOSED DEVELOPMENT

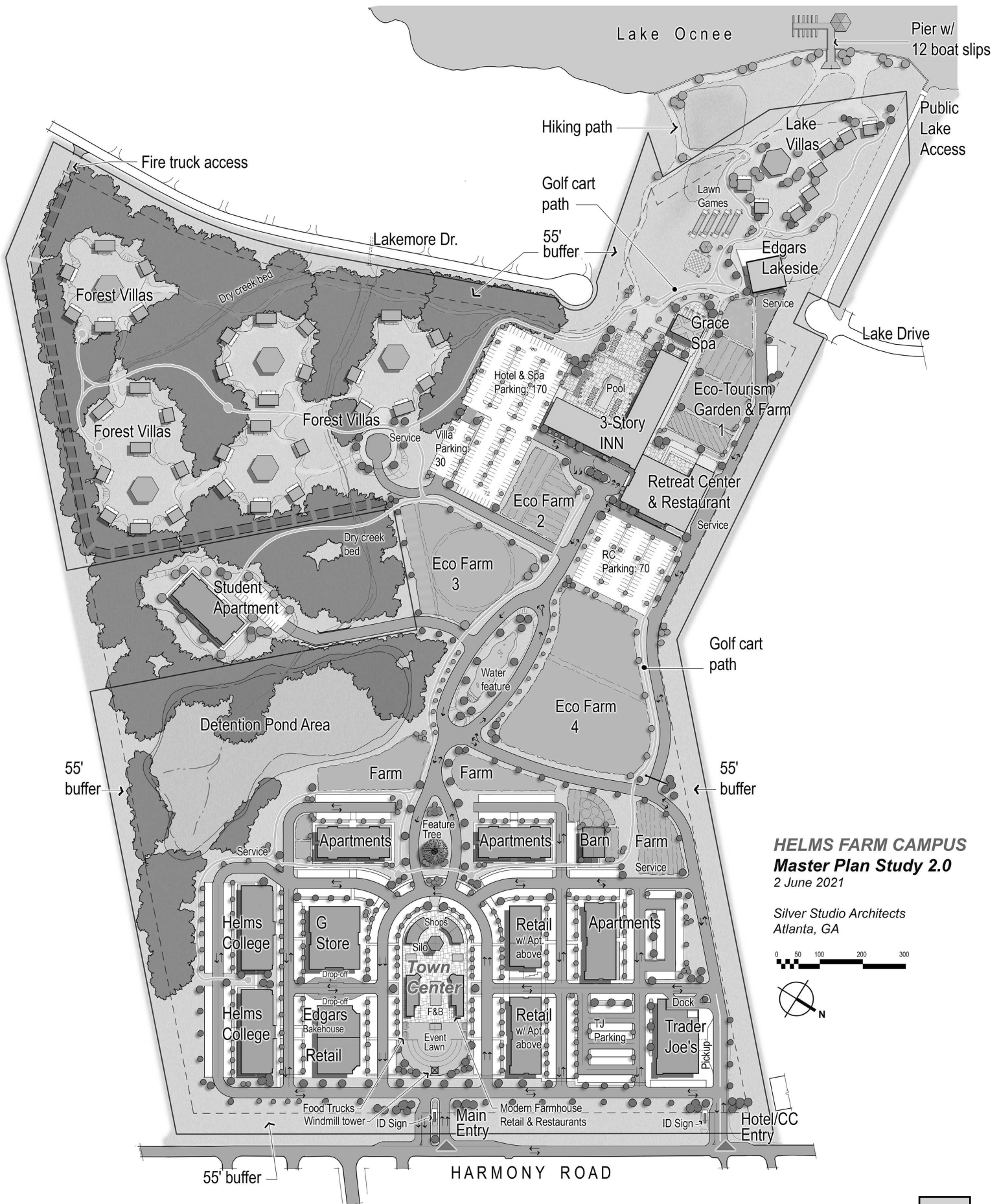
The proposed Helms Farm Campus that will be located on Harmony Road at Sammons Industrial Parkway (South), northeast of Harmony Road at Village Lane and southwest of Harmony Road at Harmony Lane in City of Eatonton, Putnam County, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. A site plan is shown in Figure 5. The development will consist of:

- Goodwill Store: 16,800 sf
- Helms College: 50 Students
- Edgar’s Bakery: 7,000 sf
- Retail including Spa: 26,920 sf
- High-Turn-over Sit-Down Restaurant: 13,100 sf
- Super Market: 14,500 sf
- Multi-family (mid-rise) Residential: 127 Units
- Student Housing: 18 Units
- Vacation Villas (Resorts): 41 Units
- Event Hall or Banquet Hall: 22,000 sf
- Hotel: 175 Rooms

The development proposes two site driveways at the following locations:

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
- Site Driveway 2: Full-access (Northern) driveway on Harmony Road

A site plan is included in Figure 5.



HELMS FARM CAMPUS
Master Plan Study 2.0
 2 June 2021

Silver Studio Architects
 Atlanta, GA



5.1 Trip Generation

Trip generation estimates for the project were based on the rates and equations published in the 10th edition of the Institute of Transportation Engineers (ITE) Trip Generation report for the daily, AM and PM peak hours. This reference contains traffic volume count data collected at similar facilities nationwide. The calculated total trip generation for the proposed developments are shown in Table 4.

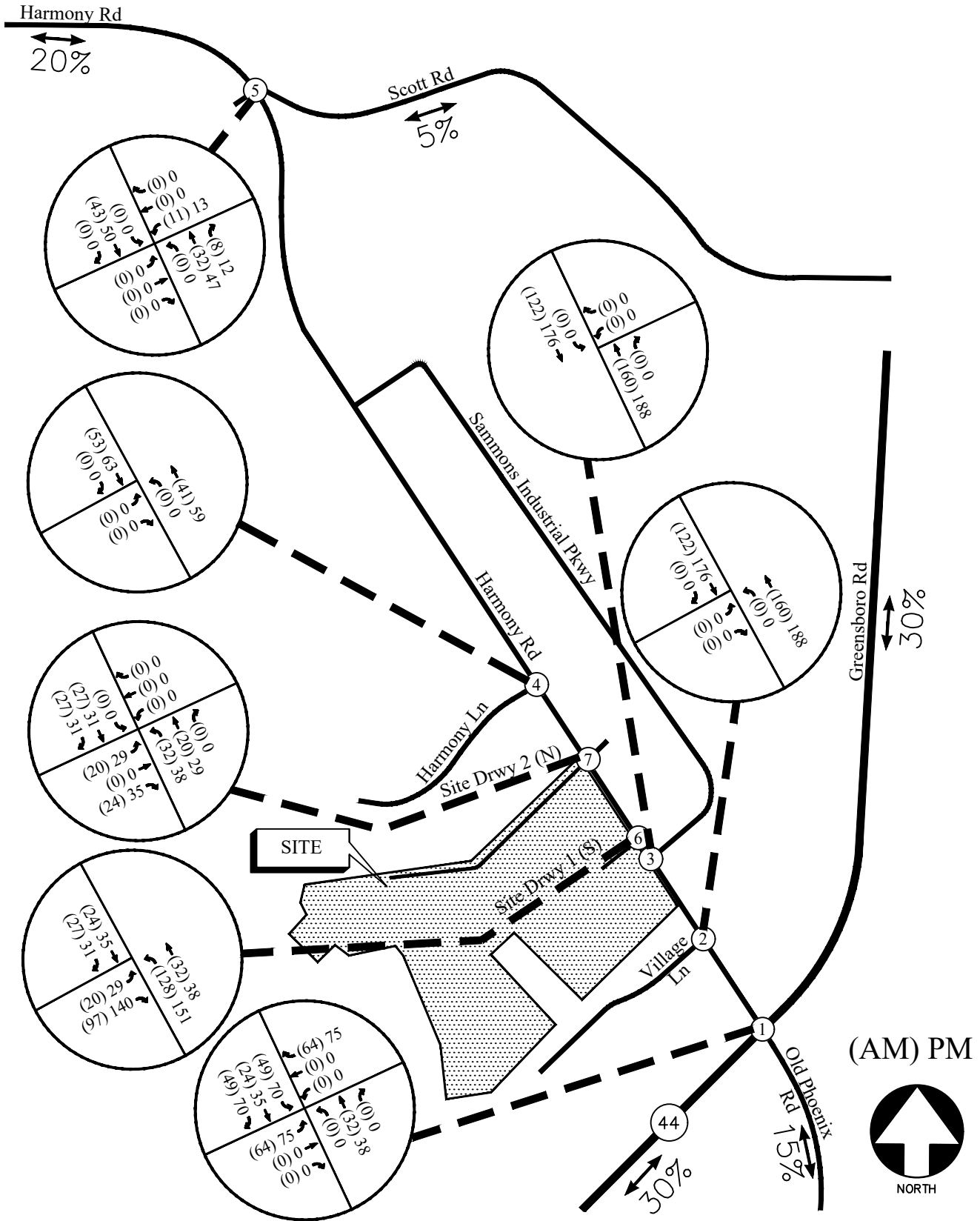
TABLE 4 – TRIP GENERATION								
Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	Two-way
815 – Free-Standing Discount Store	16,800 sf	14	6	20	40	41	81	892
	Mixed-Use Reduction	-3	-1	-2	-3	-3	-4	-7
	Pass-by Trips (0%) 17%	0	0	0	0	-6	-6	-12
930 – Fast Casual Restaurant	7,000 sf	10	4	14	54	45	99	2,206
	Mixed-Use Reduction	-9	-4	-4	-8	-8	-9	-17
	Pass-by Trips (49%) 50%	-66	-3	0	-3	-23	-18	-41
820 – Shopping Center	26,920 sf	15	10	25	49	54	103	1,016
	Mixed-Use Reduction	-3	-2	-2	-4	-4	-4	-8
	Pass-by Trips (0%) 34%	0	0	0	0	-15	-17	-32
932 -High-Turnover (Sit-Down) Rest.	13,100 sf	71	59	130	79	49	128	1,470
	Mixed-Use Reduction	-4	-2	-3	-5	-5	-6	-11
	Pass-by Trips (0%) 43%	0	0	0	0	-32	-18	-50
850 – Supermarket	14,500 sf	33	22	55	68	66	134	2,241
	Mixed-Use Reduction	-6	-4	-4	-8	-8	-9	-17
	Pass-by Trips (0%) 36%	0	0	0	0	-22	-21	-43
550 - University/Colleges	50 Students	6	2	8	2	6	8	78
	Mixed-Use Reduction	-2	-2	0	-2	-1	-1	-2
221- Multifamily Housing (Mid-Rise)	127 Units	11	32	43	34	22	56	690
	Mixed-Use Reduction	-6	-3	-3	-6	-7	-6	-13
225 - Off-Campus Student Apartment	18 Beds	3	4	7	3	4	7	57
	Mixed-Use Reduction	-1	0	0	0	-1	-1	-2
260 - Recreational Homes	41 Rooms	6	3	9	4	7	11	142
	Mixed-Use Reduction	-1	-1	-1	-2	-2	-1	-3
495 - Recreational Community Center	22,000 sf	26	13	39	24	27	51	634
	Mixed-Use Reduction	-6	-2	-2	-4	-6	-5	-11
310 –Hotel	175 Rooms	48	34	82	53	52	105	1,549
	Mixed-Use Reduction	-14	-6	-7	-13	-16	-13	-29
	Total Trips (without Reductions)	243	190	433	410	373	783	10,975
	New External Trips (with Reductions)	213	162	375	251	234	485	7,382

Daily pass-by reduction estimated to be ten times the PM pass-by volume.

The trip generation was based on the following ITE Land Uses: 221 – Multifamily Housing (Mid-Rise), 225 – Off-Campus Student Apartment, 260 – Recreational Homes, 310 – Hotel, 495 - Recreational Community Center, 550 - University/Colleges, 815 - Free-Standing Discount Store, 820 – Shopping center, 850 – Supermarket, 932 - High-Turnover (Sit-Down) Restaurant and 930 – Fast Casual Restaurant. Due to the nature of the development, pass-by and mixed-use reductions have been applied per ITE standards.

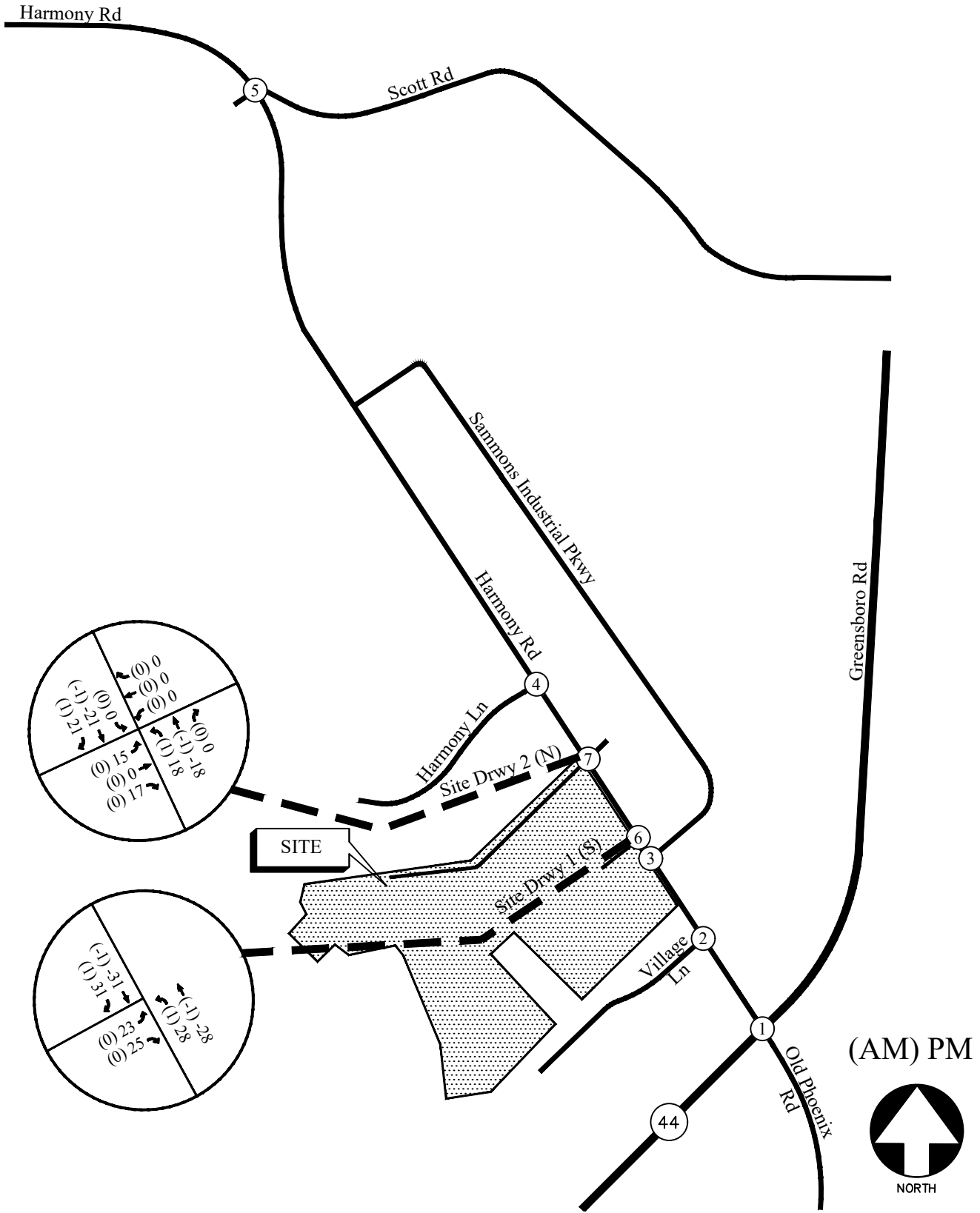
5.2 Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of GDOT ADT volumes and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 6. Pass-by volumes have also been distributed based on existing travel patterns and are shown in Figure 7.



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 6
A&R Engineering Inc.



SITE PEAK HOUR PASS-BY VOLUMES

FIGURE 7
A&R Engineering Inc.

6.0 FUTURE 2022 TRAFFIC ANALYSIS

The future 2025 traffic operations are analyzed for the “Build” and “No-Build” conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic. Note that survey and construction drawings would be needed to verify the feasibility and extent of additional right-of-way required for any recommended improvements.

Improvements that are identified as “System Improvements” address deficiencies that are found within the existing road network prior to any impacts from the proposed development’s added traffic. Improvements that are identified as “Site Mitigation Improvements” address further impacts that are a result of the proposed development’s added traffic.

6.1 Future “No-Build” Conditions

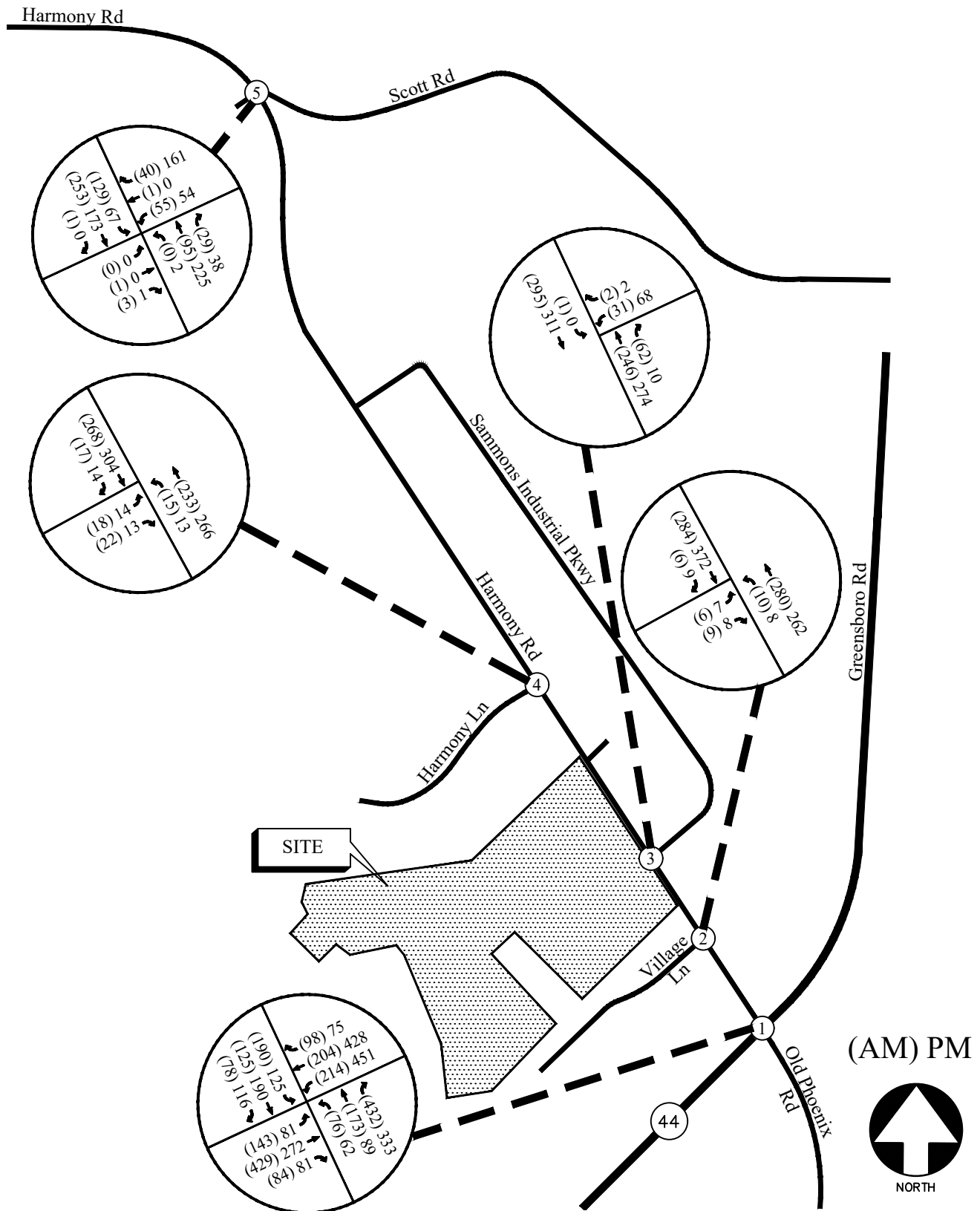
The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future “No-Build” volumes consist of the adjusted existing traffic volumes (Figure 3) plus increases for annual growth of through traffic.

6.1.1 Annual Traffic Growth

In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last three years revealed growth of approximately 2.5% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways in order to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future “No-Build” volumes on the roadway are shown in Figure 8.

Future “Build” Conditions

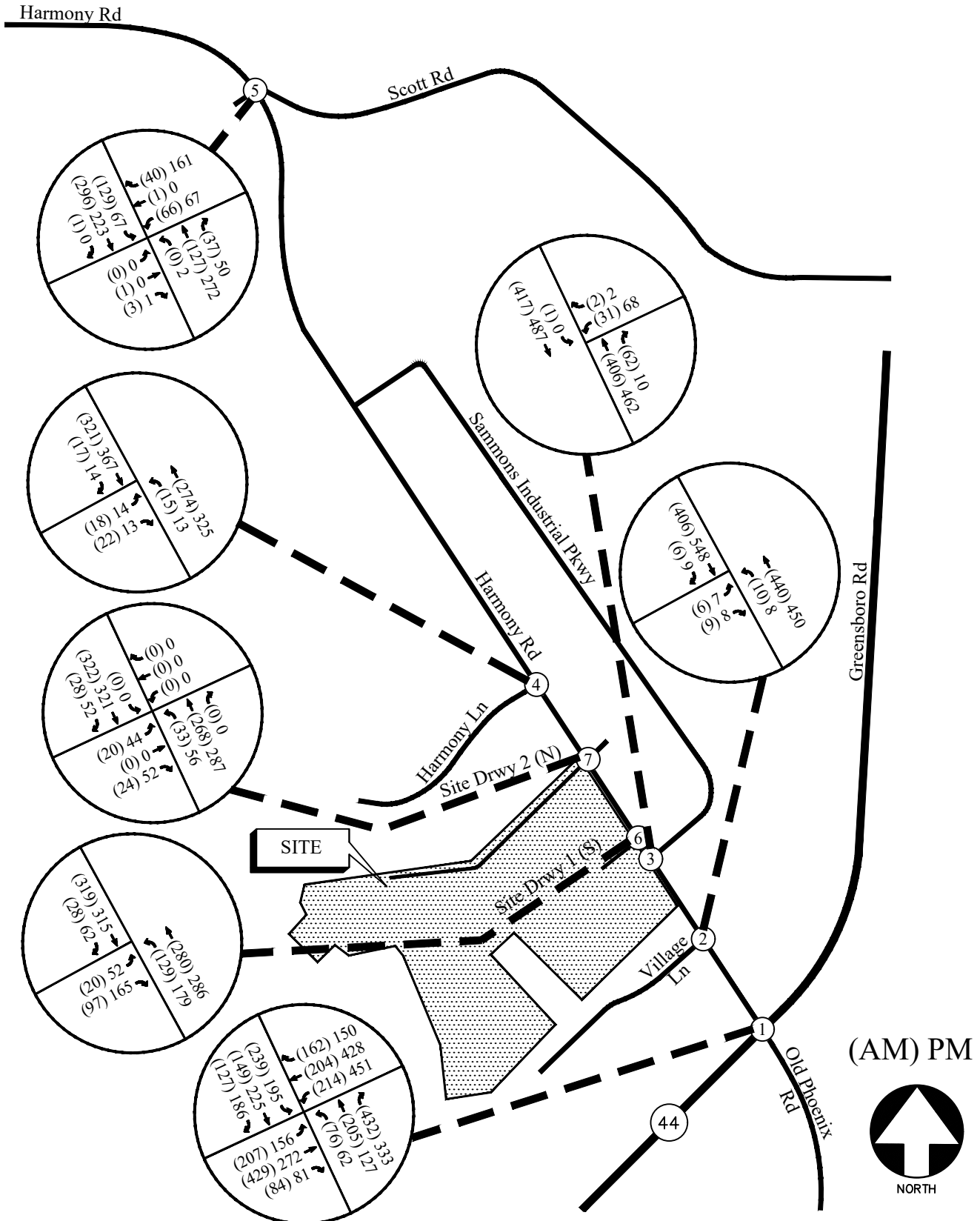
The “Build” or development conditions include the estimated background traffic from the “No-Build” conditions plus the added traffic from the proposed development. In order to evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 6) and pass-by volumes (Figure 7) were added to base traffic volumes (Figure 8) to calculate the future traffic volumes after the construction of the development. These total future traffic volumes are shown in Figure 9.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 8

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FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 9

A&R Engineering Inc.

6.1.2 Auxiliary Lane Analysis

Included below are analyses for left-turn lanes and deceleration lanes for all site driveways per GDOT standards. The analyses below are based off the “trip distribution”. According to the trip distribution, the total site generated trips is 10,975 and the mixed-use reduction is 1,814. Therefore, the 24-hour two-way volume the site is 9,161 vehicles.

6.1.3 Left Turn Lane Analysis

For two lane roadways with AADT’s less than 6,000 vehicles and a posted speed limit of 45 mph, the daily site generated left-turn threshold to warrant a left-turn lane is 250 left-turning vehicles. The projected left-turn volumes per day for each driveway is included below.

TABLE 5 - GDOT REQUIREMENTS FOR LEFT TURN LANES				
Intersection	Left- turn traffic (% entering)	Left-turn Volume (vehicle/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicle/day)
Harmony Road @ Site Driveway 1 (S)	60%	2,748 (Total trips – mixed use) ÷ 2 × 0.60 = (10,975 – 1,814) ÷ 2 × 0.60 = 2,748	45 mph / 2-lane/ <6,000	250
Harmony Road @ Site Driveway 2 (N)	15%	687 (Total trips – mixed use) ÷ 2 × 0.15 = (10,975 – 1,814) ÷ 2 × 0.15 = 687	45 mph / 2-lane/ <6,000	250

Since the projected number of left-turning vehicles at Site Driveway 1 and Site Driveway 2 exceed the threshold of 250 left turning vehicles, a left-turn lane is warranted at both site driveways per GDOT standards.

6.1.4 Deceleration Turn Lane Analysis

For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 45 mph, the daily site generated right-turn threshold to warrant a deceleration lane is 150 right turning vehicles. The projected right-turn volumes per day for each driveway is included in Table 6.

TABLE 6 - GDOT REQUIREMENTS FOR DECELERATION LANES				
Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicle/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicle/day)
Harmony Road @ Site Driveway 1 (S)	12.5%	573 (Total trips – mixed use) ÷ 2 × 0.125 = (10,975 – 1,814) ÷ 2 × 0.125 = 573	45 mph / 2-lane/ <6,000	150
Harmony Road @ Site Driveway 2 (N)	12.5%	573 (Total trips – mixed use) ÷ 2 × 0.125 = (10,975 – 1,814) ÷ 2 × 0.125 = 573	45 mph / 2-lane/ <6,000	150

Since the projected number of right turning vehicles at Site Driveway 1 and Site Driveway 2 exceed the threshold of 150 right turning vehicles, a deceleration lane is warranted at both site driveways per GDOT standards.

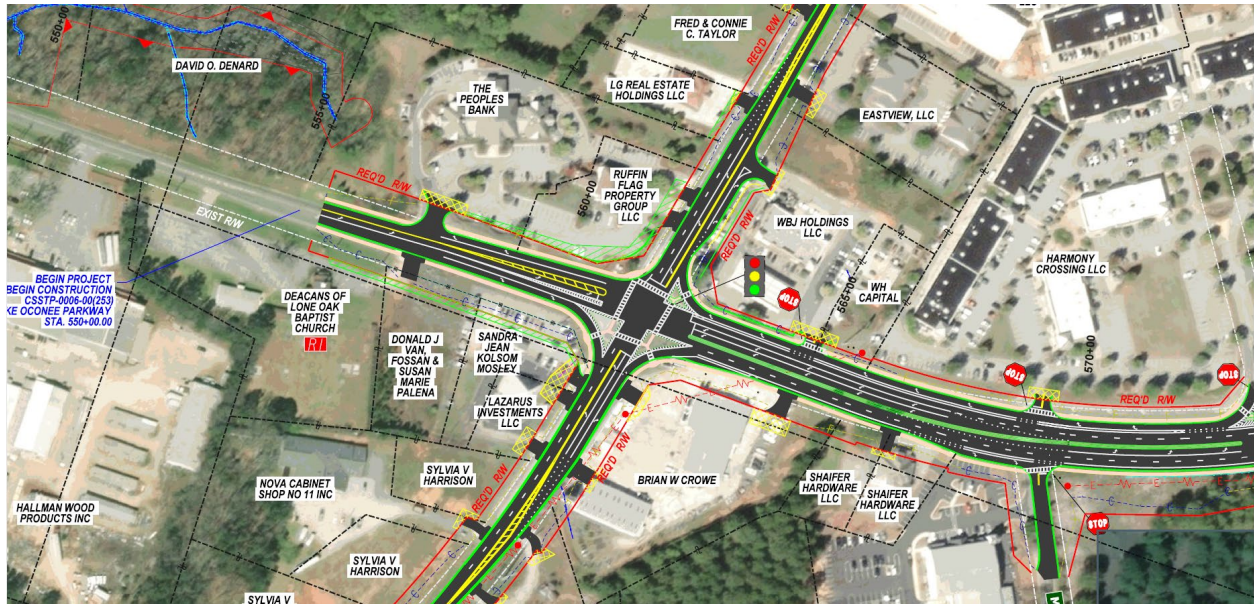
6.2 Future Traffic Conditions

The future 2025 “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 8 and Figure 9, respectively, and the results are shown in Table 7.







TABLE 7 – FUTURE INTERSECTION OPERATIONS					
Intersection		Future Condition: LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	<u>SR 44 (Greensboro Road) @ Harmony Road</u>	<u>E (62.5)</u>	<u>D (41.0)</u>	<u>E (75.4)</u>	<u>D (50.0)</u>
	-Eastbound Approach	D (47.4)	D (39.2)	E (64.7)	D (44.6)
	-Westbound Approach	D (35.9)	C (23.7)	E (67.2)	D (36.1)
	-Northbound Approach	F (102.9)	F (80.8)	F (110.6)	F (91.7)
	-Southbound Approach	D (42.9)	D (32.7)	D (46.5)	D (38.0)
2	<u>Harmony Road @ Village Lane</u>				
	-Eastbound Approach	B (11.7)	B (13.1)	B (14.4)	C (18.5)
	-Northbound Left	A (8.0)	A (8.3)	A (8.3)	A (8.9)
3	<u>Harmony Road @ Sammons Industrial Parkway (South)</u>				
	-Westbound Approach	C (15.2)	C (16.1)	C (21.8)	D (29.9)
	-Southbound Left	A (8.0)	A (0.0)	A (8.4)	A (0.0)
4	<u>Harmony Road @ Harmony Lane</u>				
	-Eastbound Approach	B (11.7)	B (12.6)	B (12.6)	B (14.0)
	-Northbound Left	A (7.9)	A (8.1)	A (8.1)	A (8.3)
5	<u>Harmony Road @ Scott Road / Private Driveway</u>				
	-Eastbound Approach	B (11.4)	A (9.2)	B (12.0)	A (9.5)
	-Westbound Approach	C (15.4)	B (14.5)	C (18.5)	C (18.0)
	-Northbound Left	A (0.0)	A (7.6)	A (0.0)	A (7.7)
	-Southbound Left	A (7.8)	A (8.0)	A (7.9)	A (8.2)
6	<u>Harmony Road @ Site Driveway 1 (S)</u>				
	-Eastbound Approach	-	-	B (12.6)	C (15.8)
	-Northbound Left			A (8.5)	A (8.8)
7	<u>Harmony Road @ Site Driveway 2 (N) / Private Driveway</u>				
	-Eastbound Approach			B (13.1)	C (14.6)
	-Westbound Approach	-	-	A (0.0)	A (0.0)
	-Northbound Left			A (8.2)	A (8.3)
	-Southbound Left			A (0.0)	A (0.0)

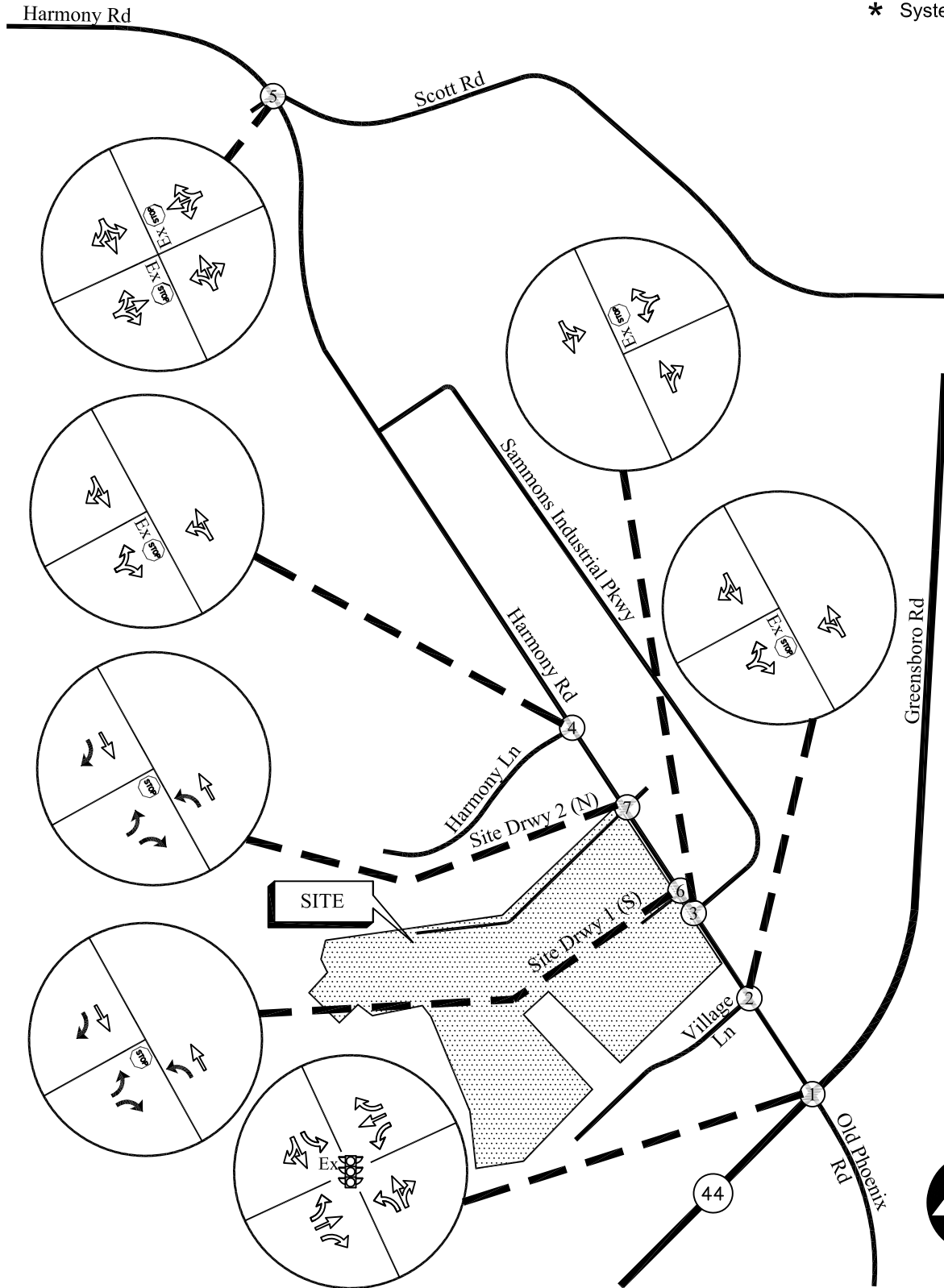
The results of future ‘No-Build’ traffic operations analysis indicate that the intersection of SR 44 (Greensboro Road) and Harmony Road will operate at level-of-service “E” in AM peak hour and the northbound approach of Old Phoenix Road will operate at level-of-service “F”. This approach has a large volume of right-turn movement but does not have a dedicated right-turn lane causing this approach experience longer delays. As part of GDOT’s SR 44 Widening project PI 0006253 this intersection will be improved by constructing a northbound right-turn lane on Old Phoenix Road and dual westbound left-turn lanes on SR 44 and an additional southbound through lane on Harmony Road. With these improvements, the intersection should operate at satisfactory levels-of service. Since the project

completion dates are not available, we did not include these 'System Improvements' in our analysis. All other intersections will be operating at satisfactory levels-of-service in both peak hours. GDOT's intersection improvement plan is shown below and in Figure 10. In future "Build" conditions all intersections will be operating at similar levels-of-service as in "No-Build" conditions. Recommendations for future traffic control and lane geometry is shown in Figure 11.



LEGEND

- Ex  Existing Signed Approach  Proposed Signed Approach
-  Existing Lane Geometry  Proposed Lane Geometry
- Ex  Existing Traffic Signal  Proposed Traffic Signal
- * System Improvement



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 11

A&R Engineering Inc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study is to determine the traffic impact that will result from the proposed Helms Farm Campus development that will be located on Harmony Road across from Sammons Industrial Parkway (South), north of Village Lane in City of Eatonton, Putnam County, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. The development will consist of:

- Goodwill Store: 16,800 sf
- Helms College: 50 Students
- Edgar’s Bakery: 7,000 sf
- Retail including Spa: 26,920 sf
- High-Turn-over Sit-Down Restaurant: 13,100 sf
- Super Market: 14,500 sf
- Multi-family (mid-rise) Residential: 127 Units
- Student Housing: 18 Units
- Vacation Villas (Resorts): 41 Units
- Event Hall or Banquet Hall: 22,000 sf
- Hotel: 175 Rooms

The development proposes three site accesses at the following locations:

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
- Site Driveway 2: Full-access (Northern) driveway on Harmony Road

Both AM and PM peak hours have been analyzed in this study. This study includes the evaluation of traffic operations at the intersections of:

- Harmony Road at SR 44 (Greensboro Road) / Old Phoenix Road
- Harmony Road at Village Lane
- Harmony Road at Sammons Industrial Parkway (South)
- Harmony Road at Harmony Lane
- Harmony Road at Scott Road / Private Driveway
- Harmony Road at Site Driveway 1 (Southern)
- Harmony Road at Site Driveway 2 (Northern) / Private Driveway

The analysis included the evaluation of “Existing” operations and future operations for “No-Build” and “Build” conditions, both of which account for increases in annual growth of through traffic. The results of the analysis are listed below:

Recommendations for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
 - The driveway to have two entering and two exiting lanes. The eastbound (driveway) approach to have separate left and right-turn lane for exiting traffic.
 - The intersection to be unsignalized with a STOP sign on the eastbound approach.
 - A northbound left-turn lane to be constructed on Harmony Road for entering traffic.
 - A southbound deceleration lane to be constructed on Harmony Road for entering traffic.

- Site Driveway 2: Full-access (Northern) driveway on Harmony Road
 - The driveway to have one entering and two exiting lanes. The eastbound (driveway) approach to have separate left and right-turn lane for exiting traffic.
 - The intersection to be unsignalized with a STOP sign on the eastbound approach.
 - A northbound left-turn lane to be constructed on Harmony Road for entering traffic.
 - A southbound deceleration lane is recommended to be constructed on Harmony Road for entering traffic.

The proposed Helms Farm Campus development will be completed in different phases as determined by the market conditions and demand. The projected phasing of the entire development is given below. This study was evaluated to determine improvements for the full build out in year 2025.

LAND USE	UNITS	PHASE 1 2023	PHASE 2 2024	PHASE 3 Early 2025	PHASE 4 Late 2025
Goodwill Store	16,800 sf	16,800 sf	-	-	-
Helms College	50 Students	25 Students	25 Students	-	-
Edgar’s Bakery	7,000 sf	7,000 sf	-	-	-
Retail	26,920 sf	3400	11,200 sf	12,320 sf	-
Sit-Down Restaurant	13,100 sf	-	2,500 sf	2,500 sf	8,100 sf
Super Market	14,500 sf	-	-	14,500 sf	-
Multi-family Apartments	127 Units	-	42	64	21
Student Housing	18 Units	-	6	9	3
Vacation Villas	41 Units	-	-	20 Units	21 Units
Event Hall/Banquet	22,000 sf	-	-	-	22,000 sf
Hotel	175 Rooms	-	-	175 Rooms	-

The most traffic impact from the project occurs during the AM and PM peak hours. The traffic volumes generated by the project during these peak hours in different directions is shown graphically in figure 6 on page 16. As shown on this figure, a maximum of 29 vehicles are projected to turn left at any of the two driveways. The northern driveway has only 35 vehicles turning right while the southern driveway will have 140 vehicles turning right. These turning movements amount to 1 or 2 vehicles per minute. This magnitude of traffic volumes will not create any significant impact on traffic on Harmony Road especially the development will construct left-turn lanes and deceleration lanes per our recommendations.

The results of future traffic operations analysis indicate that after addition of the new traffic generated by the proposed Helms Farm Campus development, all study intersections will continue to operate at similar levels-of-service as before. The existing delays at Old Phoenix Road at SR 44 (Greensboro Road) intersection will improve after the proposed SR 44 Widening project (PI 0006253) 10 is completed by GDOT.

Appendix

Existing Intersection Traffic Counts	
Linear Regression of Daily Traffic.....	
Existing Intersection Analysis.....	
Future “No-Build” Intersection Analysis	
Future “Build” Intersection Analysis.....	
Traffic Volume Worksheets	

EXISTING INTERSECTION TRAFFIC COUNTS

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Village Lane
7-9 am | 4-6 pm

File Name : 20210171
Site Code : 20210171
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Village Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	52	0	53	0	38	1	39	2	0	1	3	0	0	0	0	95
07:15 AM	2	48	0	50	0	50	2	52	1	0	1	2	0	0	0	0	104
07:30 AM	2	58	0	60	0	53	1	54	1	0	2	3	0	0	0	0	117
07:45 AM	1	75	0	76	0	61	1	62	1	0	2	3	0	0	0	0	141
Total	6	233	0	239	0	202	5	207	5	0	6	11	0	0	0	0	457
08:00 AM	2	54	0	56	0	59	2	61	2	0	1	3	0	0	0	0	120
08:15 AM	3	46	0	49	0	63	1	64	1	0	2	3	0	0	0	0	116
08:30 AM	1	42	0	43	0	56	0	56	2	0	1	3	0	0	0	0	102
08:45 AM	1	47	0	48	0	59	2	61	1	0	3	4	0	0	0	0	113
Total	7	189	0	196	0	237	5	242	6	0	7	13	0	0	0	0	451
*** BREAK ***																	
04:00 PM	1	66	0	67	0	68	1	69	2	0	2	4	0	0	0	0	140
04:15 PM	1	46	0	47	0	55	2	57	1	0	2	3	0	0	0	0	107
04:30 PM	2	57	0	59	0	60	1	61	3	0	1	4	0	0	0	0	124
04:45 PM	1	55	0	56	0	64	1	65	1	0	1	2	0	0	0	0	123
Total	5	224	0	229	0	247	5	252	7	0	6	13	0	0	0	0	494
05:00 PM	3	69	0	72	0	100	2	102	2	0	2	4	0	0	0	0	178
05:15 PM	2	63	0	65	0	91	3	94	1	0	1	2	0	0	0	0	161
05:30 PM	1	48	0	49	0	79	2	81	2	0	3	5	0	0	0	0	135
05:45 PM	1	47	0	48	0	64	1	65	3	0	2	5	0	0	0	0	118
Total	7	227	0	234	0	334	8	342	8	0	8	16	0	0	0	0	592
Grand Total	25	873	0	898	0	1020	23	1043	26	0	27	53	0	0	0	0	1994
Apprch %	2.8	97.2	0		0	97.8	2.2		49.1	0	50.9		0	0	0		
Total %	1.3	43.8	0	45	0	51.2	1.2	52.3	1.3	0	1.4	2.7	0	0	0	0	

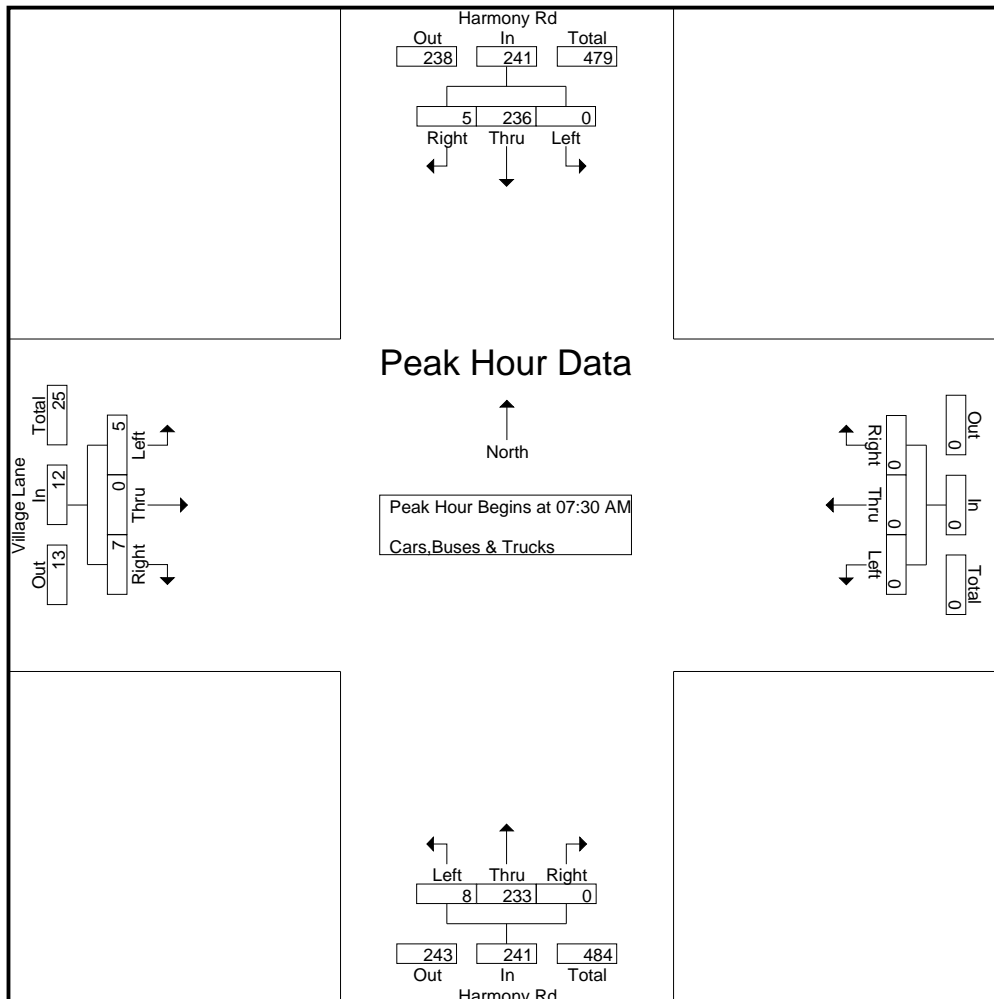
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Village Lane
7-9 am | 4-6 pm

File Name : 20210171
Site Code : 20210171
Start Date : 5/27/2021
Page No : 2

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Village Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	58	0	60	0	53	1	54	1	0	2	3	0	0	0	0	117
07:45 AM	1	75	0	76	0	61	1	62	1	0	2	3	0	0	0	0	141
08:00 AM	2	54	0	56	0	59	2	61	2	0	1	3	0	0	0	0	120
08:15 AM	3	46	0	49	0	63	1	64	1	0	2	3	0	0	0	0	116
Total Volume	8	233	0	241	0	236	5	241	5	0	7	12	0	0	0	0	494
% App. Total	3.3	96.7	0		0	97.9	2.1		41.7	0	58.3		0	0	0		
PHF	.667	.777	.000	.793	.000	.937	.625	.941	.625	.000	.875	1.00	.000	.000	.000	.000	.876



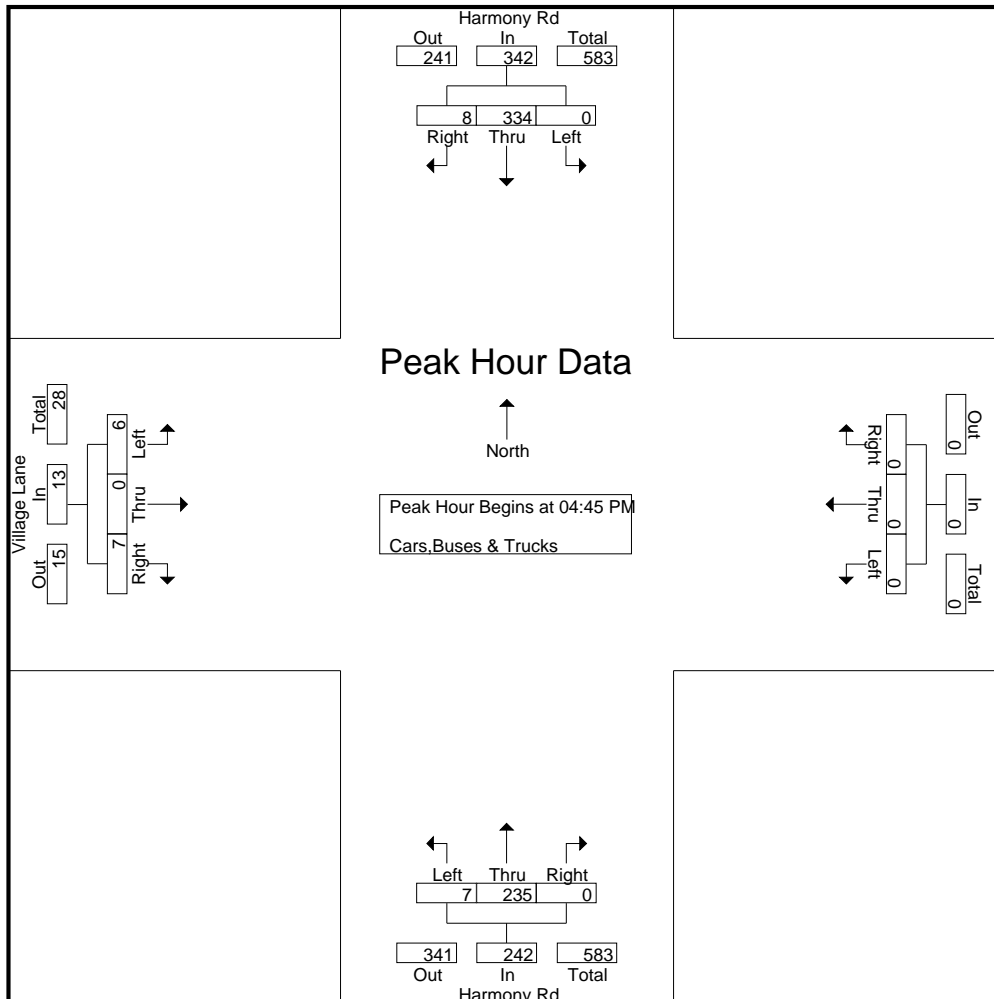
A & R Engineering, Inc.

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TMC Data
Harmony Rd @ Village Lane
7-9 am | 4-6 pm

File Name : 20210171
Site Code : 20210171
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Village Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	55	0	56	0	64	1	65	1	0	1	2	0	0	0	0	123
05:00 PM	3	69	0	72	0	100	2	102	2	0	2	4	0	0	0	0	178
05:15 PM	2	63	0	65	0	91	3	94	1	0	1	2	0	0	0	0	161
05:30 PM	1	48	0	49	0	79	2	81	2	0	3	5	0	0	0	0	135
Total Volume	7	235	0	242	0	334	8	342	6	0	7	13	0	0	0	0	597
% App. Total	2.9	97.1	0		0	97.7	2.3		46.2	0	53.8		0	0	0		
PHF	.583	.851	.000	.840	.000	.835	.667	.838	.750	.000	.583	.650	.000	.000	.000	.000	.838



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ SR 44 Greens boro Rd
7-9 am | 4-6 pm

File Name : 20210170
Site Code : 20210170
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars, Buses - Trucks

Start Time	Old Phonix Rd Northbound				Harmony Rd Southbound				Eastbound				SR 44 (Greensboro Rd) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	36	40	81	19	14	10	43	29	51	9	89	30	36	12	78	291
07:15 AM	18	32	69	119	27	15	16	58	25	68	13	106	37	42	10	89	372
07:30 AM	12	37	68	117	44	22	15	81	28	81	20	129	42	45	10	97	424
07:45 AM	16	43	99	158	34	21	16	71	47	95	12	154	35	41	20	96	479
Total	51	148	276	475	124	72	57	253	129	295	54	478	144	164	52	360	1566
08:00 AM	12	33	85	130	34	16	15	65	28	108	28	164	37	52	19	108	467
08:15 AM	13	30	97	140	54	36	17	107	28	76	16	120	53	36	27	116	483
08:30 AM	22	38	78	138	36	31	17	84	16	78	14	108	53	41	16	110	440
08:45 AM	6	33	85	124	45	28	16	89	15	70	15	100	64	42	19	125	438
Total	53	134	345	532	169	111	65	345	87	332	73	492	207	171	81	459	1828
*** BREAK ***																	
04:00 PM	10	36	69	115	40	45	17	102	14	51	12	77	90	77	20	187	481
04:15 PM	7	26	65	98	33	35	19	87	21	57	17	95	91	71	18	180	460
04:30 PM	14	20	64	98	31	27	22	80	18	46	17	81	95	77	25	197	456
04:45 PM	18	17	67	102	32	27	24	83	0	0	0	0	82	84	29	195	380
Total	49	99	265	413	136	134	82	352	53	154	46	253	358	309	92	759	1777
05:00 PM	23	15	78	116	40	53	29	122	22	56	17	95	95	87	26	208	541
05:15 PM	0	19	77	96	32	47	26	105	19	57	18	94	99	91	17	207	502
05:30 PM	16	24	76	116	21	38	25	84	17	68	22	107	112	105	13	230	537
05:45 PM	16	22	68	106	19	32	24	75	14	63	15	92	99	101	11	211	484
Total	55	80	299	434	112	170	104	386	72	244	72	388	405	384	67	856	2064
Grand Total	208	461	1185	1854	541	487	308	1336	341	1025	245	1611	1114	1028	292	2434	7235
Apprch %	11.2	24.9	63.9		40.5	36.5	23.1		21.2	63.6	15.2		45.8	42.2	12		
Total %	2.9	6.4	16.4	25.6	7.5	6.7	4.3	18.5	4.7	14.2	3.4	22.3	15.4	14.2	4	33.6	
Cars, Buses	200	444	1159	1803	496	459	297	1252	331	948	237	1516	1087	986	261	2334	6905
% Cars, Buses	96.2	96.3	97.8	97.2	91.7	94.3	96.4	93.7	97.1	92.5	96.7	94.1	97.6	95.9	89.4	95.9	95.4
Trucks	8	17	26	51	45	28	11	84	10	77	8	95	27	42	31	100	330
% Trucks	3.8	3.7	2.2	2.8	8.3	5.7	3.6	6.3	2.9	7.5	3.3	5.9	2.4	4.1	10.6	4.1	4.6

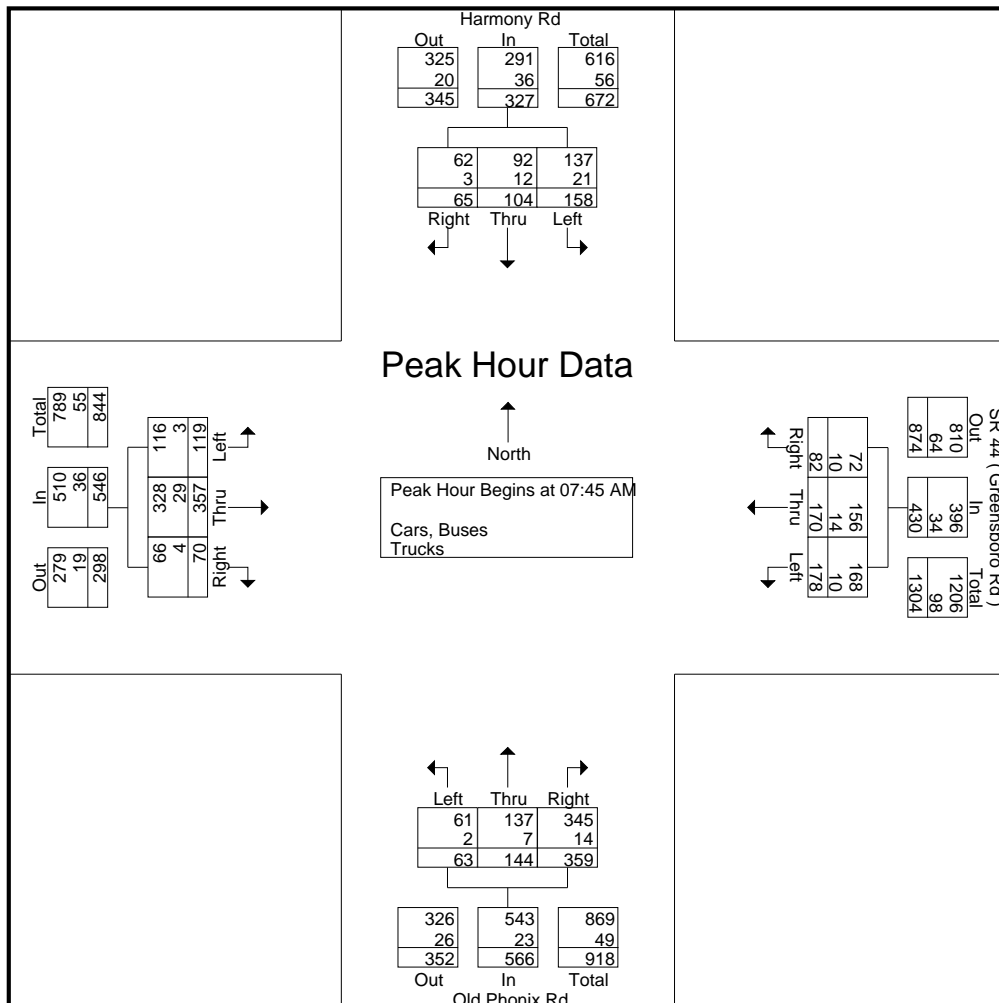
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ SR 44 Greens boro Rd
7-9 am | 4-6 pm

File Name : 20210170
Site Code : 20210170
Start Date : 5/27/2021
Page No : 2

Start Time	Old Phonix Rd Northbound				Harmony Rd Southbound				Eastbound				SR 44 (Greensboro Rd) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	16	43	99	158	34	21	16	71	47	95	12	154	35	41	20	96	479
08:00 AM	12	33	85	130	34	16	15	65	28	108	28	164	37	52	19	108	467
08:15 AM	13	30	97	140	54	36	17	107	28	76	16	120	53	36	27	116	483
08:30 AM	22	38	78	138	36	31	17	84	16	78	14	108	53	41	16	110	440
Total Volume	63	144	359	566	158	104	65	327	119	357	70	546	178	170	82	430	1869
% App. Total	11.1	25.4	63.4		48.3	31.8	19.9		21.8	65.4	12.8		41.4	39.5	19.1		
PHF	.716	.837	.907	.896	.731	.722	.956	.764	.633	.826	.625	.832	.840	.817	.759	.927	.967
Cars, Buses	61	137	345	543	137	92	62	291	116	328	66	510	168	156	72	396	1740
% Cars, Buses	96.8	95.1	96.1	95.9	86.7	88.5	95.4	89.0	97.5	91.9	94.3	93.4	94.4	91.8	87.8	92.1	93.1
Trucks	2	7	14	23	21	12	3	36	3	29	4	36	10	14	10	34	129
% Trucks	3.2	4.9	3.9	4.1	13.3	11.5	4.6	11.0	2.5	8.1	5.7	6.6	5.6	8.2	12.2	7.9	6.9



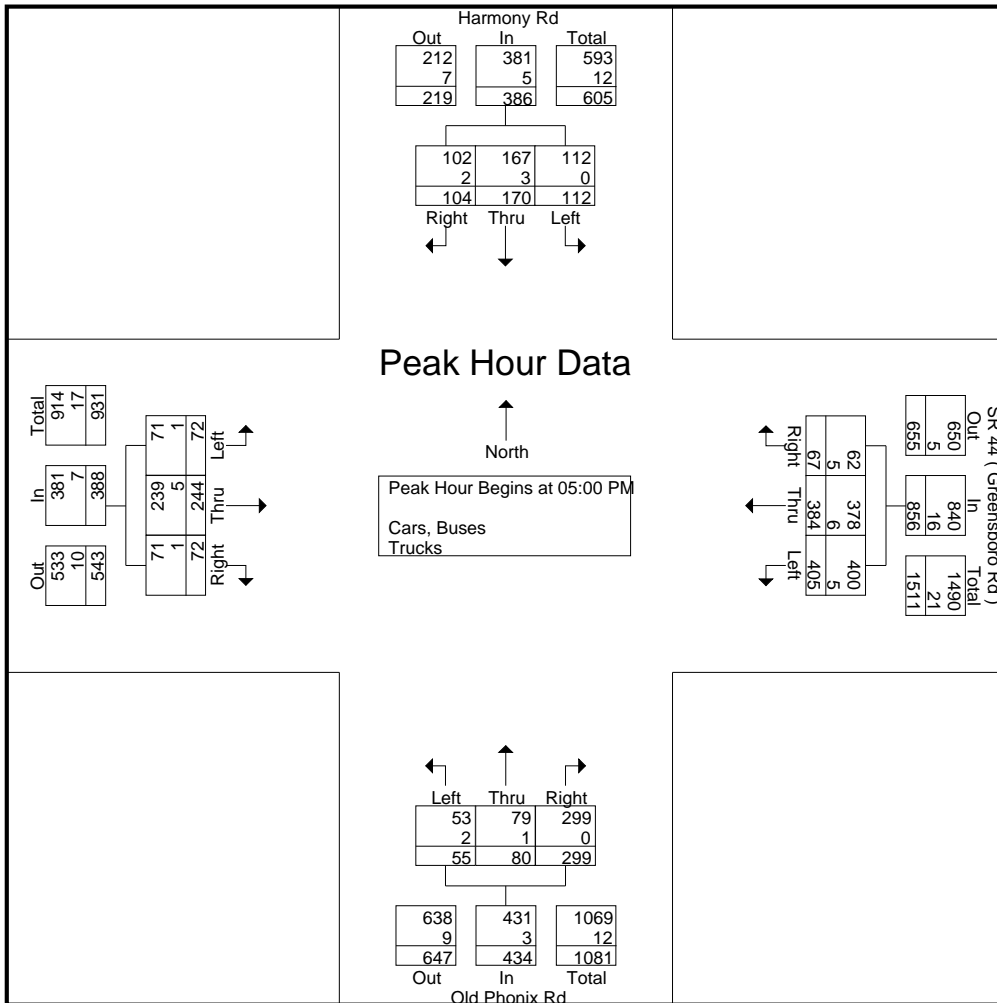
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Marietta, GA 30067

TMC Data
Harmony Rd @ SR 44 Greens boro Rd
7-9 am | 4-6 pm

File Name : 20210170
Site Code : 20210170
Start Date : 5/27/2021
Page No : 3

Start Time	Old Phonix Rd Northbound				Harmony Rd Southbound				Eastbound				SR 44 (Greensboro Rd) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	23	15	78	116	40	53	29	122	22	56	17	95	95	87	26	208	541
05:15 PM	0	19	77	96	32	47	26	105	19	57	18	94	99	91	17	207	502
05:30 PM	16	24	76	116	21	38	25	84	17	68	22	107	112	105	13	230	537
05:45 PM	16	22	68	106	19	32	24	75	14	63	15	92	99	101	11	211	484
Total Volume	55	80	299	434	112	170	104	386	72	244	72	388	405	384	67	856	2064
% App. Total	12.7	18.4	68.9		29	44	26.9		18.6	62.9	18.6		47.3	44.9	7.8		
PHF	.598	.833	.958	.935	.700	.802	.897	.791	.818	.897	.818	.907	.904	.914	.644	.930	.954
Cars, Buses	53	79	299	431	112	167	102	381	71	239	71	381	400	378	62	840	2033
% Cars, Buses	96.4	98.8	100	99.3	100	98.2	98.1	98.7	98.6	98.0	98.6	98.2	98.8	98.4	92.5	98.1	98.5
Trucks	2	1	0	3	0	3	2	5	1	5	1	7	5	6	5	16	31
% Trucks	3.6	1.3	0	0.7	0	1.8	1.9	1.3	1.4	2.0	1.4	1.8	1.2	1.6	7.5	1.9	1.5



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Sammons Ind Pkwy (South)
7-9 am | 4-6 pm

File Name : 20210169
Site Code : 20210169
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars, Buses - Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Eastbound				Sammons Ind Pkwy (South) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	44	10	54	1	38	0	39	0	0	0	0	5	0	0	5	98
07:15 AM	0	42	8	50	4	51	0	55	0	0	0	0	7	0	1	8	113
07:30 AM	0	45	18	63	0	52	0	52	0	0	0	0	6	0	0	6	121
07:45 AM	0	61	17	78	0	62	0	62	0	0	0	0	5	0	0	5	145
Total	0	192	53	245	5	203	0	208	0	0	0	0	23	0	1	24	477
08:00 AM	0	51	8	59	0	62	0	62	0	0	0	0	7	0	2	9	130
08:15 AM	0	48	8	56	1	69	0	70	0	0	0	0	8	0	0	8	134
08:30 AM	0	38	10	48	0	55	0	55	0	0	0	0	9	0	0	9	112
08:45 AM	0	47	6	53	1	59	0	60	0	0	0	0	7	0	0	7	120
Total	0	184	32	216	2	245	0	247	0	0	0	0	31	0	2	33	496
*** BREAK ***																	
04:00 PM	0	67	5	72	0	64	0	64	0	0	0	0	7	0	1	8	144
04:15 PM	0	50	3	53	0	55	0	55	0	0	0	0	3	0	1	4	112
04:30 PM	0	59	3	62	0	61	0	61	0	0	0	0	2	0	0	2	125
04:45 PM	0	57	7	64	0	59	0	59	0	0	0	0	8	0	1	9	132
Total	0	233	18	251	0	239	0	239	0	0	0	0	20	0	3	23	513
05:00 PM	0	76	0	76	0	78	0	78	0	0	0	0	23	0	0	23	177
05:15 PM	0	66	1	67	0	81	0	81	0	0	0	0	11	0	1	12	160
05:30 PM	0	47	1	48	0	61	0	61	0	0	0	0	19	0	0	19	128
05:45 PM	0	46	4	50	0	62	0	62	0	0	0	0	4	0	0	4	116
Total	0	235	6	241	0	282	0	282	0	0	0	0	57	0	1	58	581
Grand Total	0	844	109	953	7	969	0	976	0	0	0	0	131	0	7	138	2067
Apprch %	0	88.6	11.4		0.7	99.3	0		0	0	0		94.9	0	5.1		
Total %	0	40.8	5.3	46.1	0.3	46.9	0	47.2	0	0	0	0	6.3	0	0.3	6.7	
Cars, Buses	0	798	75	873	6	923	0	929	0	0	0	0	97	0	5	102	1904
% Cars, Buses	0	94.5	68.8	91.6	85.7	95.3	0	95.2	0	0	0	0	74	0	71.4	73.9	92.1
Trucks	0	46	34	80	1	46	0	47	0	0	0	0	34	0	2	36	163
% Trucks	0	5.5	31.2	8.4	14.3	4.7	0	4.8	0	0	0	0	26	0	28.6	26.1	7.9

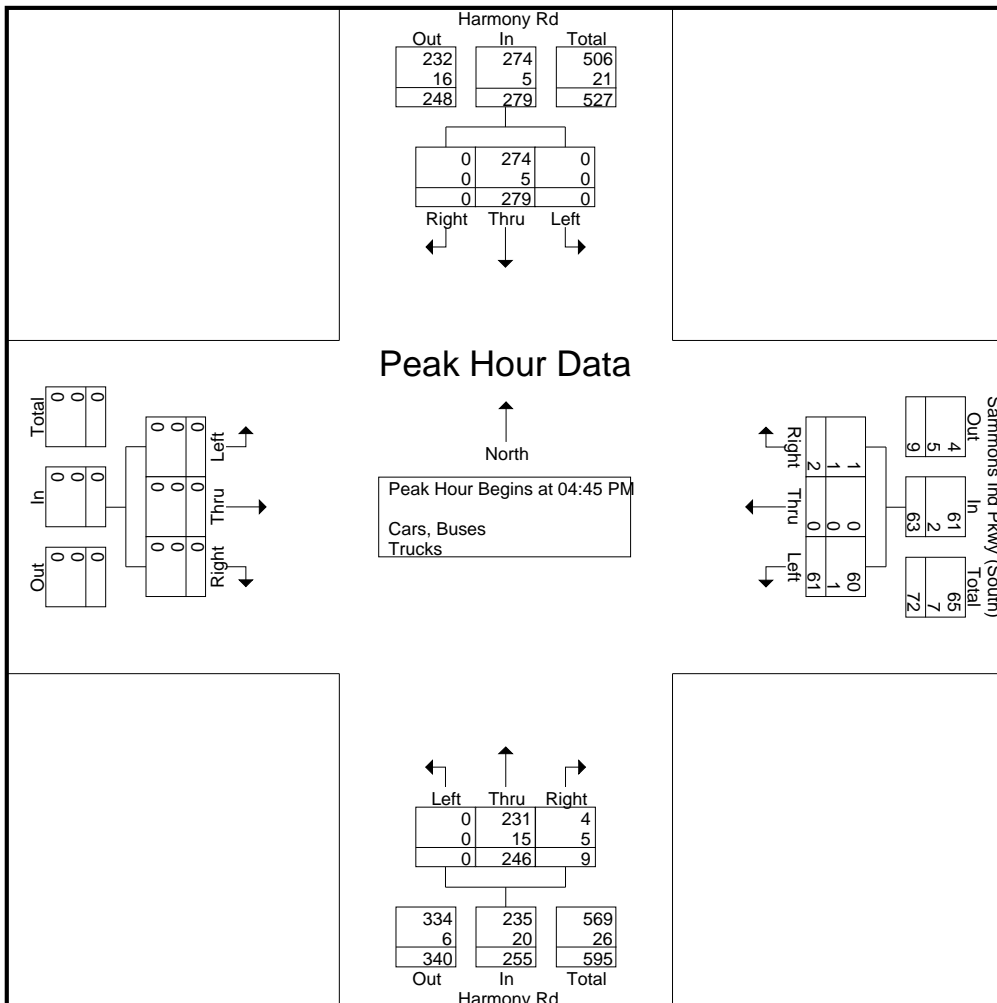
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Sammons Ind Pkwy (South)
7-9 am | 4-6 pm

File Name : 20210169
Site Code : 20210169
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Eastbound				Sammons Ind Pkwy (South) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	57	7	64	0	59	0	59	0	0	0	0	8	0	1	9	132
05:00 PM	0	76	0	76	0	78	0	78	0	0	0	0	23	0	0	23	177
05:15 PM	0	66	1	67	0	81	0	81	0	0	0	0	11	0	1	12	160
05:30 PM	0	47	1	48	0	61	0	61	0	0	0	0	19	0	0	19	128
Total Volume	0	246	9	255	0	279	0	279	0	0	0	0	61	0	2	63	597
% App. Total	0	96.5	3.5		0	100	0		0	0	0		96.8	0	3.2		
PHF	.000	.809	.321	.839	.000	.861	.000	.861	.000	.000	.000	.000	.663	.000	.500	.685	.843
Cars, Buses	0	231	4	235	0	274	0	274	0	0	0	0	60	0	1	61	570
% Cars, Buses	0	93.9	44.4	92.2	0	98.2	0	98.2	0	0	0	0	98.4	0	50.0	96.8	95.5
Trucks	0	15	5	20	0	5	0	5	0	0	0	0	1	0	1	2	27
% Trucks	0	6.1	55.6	7.8	0	1.8	0	1.8	0	0	0	0	1.6	0	50.0	3.2	4.5



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	17	3	20	9	24	0	33	0	0	1	1	3	0	6	9	63
07:15 AM	0	18	4	22	27	48	0	75	0	1	1	2	10	0	7	17	116
07:30 AM	0	23	5	28	23	59	0	82	0	0	2	2	10	1	4	15	127
07:45 AM	0	20	7	27	35	58	0	93	0	0	0	0	10	0	11	21	141
Total	0	78	19	97	94	189	0	283	0	1	4	5	33	1	28	62	447
08:00 AM	0	18	8	26	22	45	1	68	0	0	0	0	16	0	11	27	121
08:15 AM	0	25	5	30	17	48	0	65	0	0	1	1	7	0	9	16	112
08:30 AM	0	14	4	18	16	30	0	46	0	0	0	0	6	0	11	17	81
08:45 AM	0	19	9	28	18	53	0	71	0	0	0	0	6	0	14	20	119
Total	0	76	26	102	73	176	1	250	0	0	1	1	35	0	45	80	433
09:00 AM	1	27	4	32	27	44	0	71	1	0	1	2	14	0	5	19	124
09:15 AM	0	19	9	28	21	30	0	51	0	0	0	0	5	0	10	15	94
09:30 AM	0	24	7	31	14	26	0	40	0	0	0	0	8	0	6	14	85
09:45 AM	0	24	8	32	16	40	0	56	0	0	0	0	12	0	12	24	112
Total	1	94	28	123	78	140	0	218	1	0	1	2	39	0	33	72	415
10:00 AM	0	19	9	28	13	25	0	38	0	0	0	0	7	0	12	19	85
10:15 AM	0	22	8	30	14	38	0	52	0	0	0	0	9	0	18	27	109
10:30 AM	0	28	4	32	12	29	0	41	0	0	0	0	6	0	18	24	97
10:45 AM	0	22	12	34	22	33	0	55	0	0	0	0	7	0	10	17	106
Total	0	91	33	124	61	125	0	186	0	0	0	0	29	0	58	87	397
11:00 AM	0	18	7	25	16	22	0	38	0	0	0	0	4	0	18	22	85
11:15 AM	0	20	6	26	17	34	0	51	0	0	0	0	7	0	17	24	101
11:30 AM	0	34	12	46	16	40	0	56	0	0	1	1	7	0	14	21	124
11:45 AM	0	31	8	39	14	28	0	42	0	0	0	0	11	0	17	28	109
Total	0	103	33	136	63	124	0	187	0	0	1	1	29	0	66	95	419
12:00 PM	1	22	10	33	14	20	0	34	0	0	0	0	8	0	18	26	93
12:15 PM	0	27	4	31	12	31	0	43	0	0	0	0	7	0	17	24	98
12:30 PM	0	19	9	28	20	34	0	54	0	0	1	1	14	0	20	34	117
12:45 PM	0	27	5	32	14	37	0	51	0	0	0	0	14	0	18	32	115
Total	1	95	28	124	60	122	0	182	0	0	1	1	43	0	73	116	423
01:00 PM	0	33	8	41	18	28	0	46	0	0	0	0	15	0	11	26	113
01:15 PM	0	29	5	34	16	31	0	47	0	0	0	0	6	0	14	20	101
01:30 PM	0	35	6	41	12	33	0	45	0	0	0	0	10	0	17	27	113
01:45 PM	0	18	11	29	13	31	0	44	0	0	0	0	11	0	11	22	95
Total	0	115	30	145	59	123	0	182	0	0	0	0	42	0	53	95	422
02:00 PM	0	32	7	39	8	23	0	31	0	0	0	0	9	0	18	27	97
02:15 PM	0	30	4	34	14	44	0	58	0	0	0	0	11	0	11	22	114
02:30 PM	1	19	8	28	16	30	0	46	0	0	0	0	6	0	19	25	99
02:45 PM	0	46	8	54	12	38	0	50	0	0	0	0	10	0	21	31	135
Total	1	127	27	155	50	135	0	185	0	0	0	0	36	0	69	105	445
03:00 PM	0	42	12	54	19	44	0	63	0	0	0	0	11	0	10	21	138
03:15 PM	0	26	11	37	15	51	0	66	0	0	0	0	10	0	19	29	132
03:30 PM	0	26	7	33	22	36	0	58	0	0	0	0	11	0	25	36	127
03:45 PM	0	32	11	43	18	51	0	69	0	0	0	0	6	0	23	29	141
Total	0	126	41	167	74	182	0	256	0	0	0	0	38	0	77	115	538
04:00 PM	0	28	9	37	12	31	0	43	0	0	0	0	6	0	20	26	106
04:15 PM	0	30	9	39	12	31	0	43	0	0	0	0	6	0	20	26	108

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 2

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	37	8	45	21	31	0	52	0	0	0	0	15	0	19	34	131
04:45 PM	1	44	7	52	19	37	0	56	0	0	1	1	10	0	30	40	149
Total	1	139	33	173	64	130	0	194	0	0	1	1	37	0	89	126	494
05:00 PM	1	61	6	68	10	35	0	45	0	0	0	0	18	0	29	47	160
05:15 PM	0	53	12	65	18	40	0	58	0	0	0	0	12	0	46	58	181
05:30 PM	0	44	9	53	13	43	0	56	0	0	0	0	9	0	40	49	158
05:45 PM	0	27	10	37	8	44	0	52	0	0	0	0	8	0	23	31	120
Total	1	185	37	223	49	162	0	211	0	0	0	0	47	0	138	185	619
06:00 PM	1	32	8	41	11	31	0	42	0	0	0	0	6	0	11	17	100
06:15 PM	0	37	4	41	17	30	0	47	0	0	0	0	9	0	22	31	119
06:30 PM	2	27	5	34	23	27	0	50	1	0	0	1	6	0	20	26	111
06:45 PM	2	15	2	19	6	31	0	37	0	0	0	0	4	0	11	15	71
Total	5	111	19	135	57	119	0	176	1	0	0	1	25	0	64	89	401
Grand Total	10	1340	354	1704	782	1727	1	2510	2	1	9	12	433	1	793	1227	5453
Apprch %	0.6	78.6	20.8		31.2	68.8	0		16.7	8.3	75		35.3	0.1	64.6		
Total %	0.2	24.6	6.5	31.2	14.3	31.7	0	46	0	0	0.2	0.2	7.9	0	14.5	22.5	

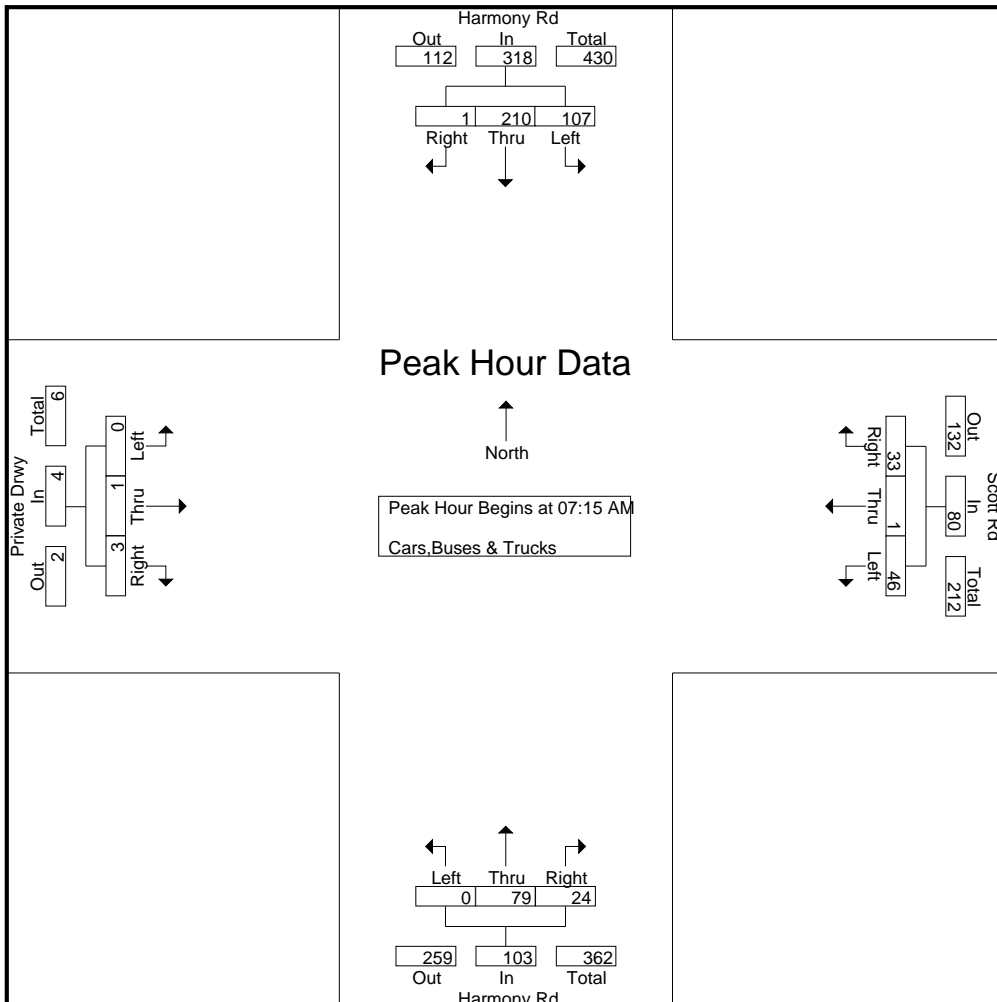
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	18	4	22	27	48	0	75	0	1	1	2	10	0	7	17	116
07:30 AM	0	23	5	28	23	59	0	82	0	0	2	2	10	1	4	15	127
07:45 AM	0	20	7	27	35	58	0	93	0	0	0	0	10	0	11	21	141
08:00 AM	0	18	8	26	22	45	1	68	0	0	0	0	16	0	11	27	121
Total Volume	0	79	24	103	107	210	1	318	0	1	3	4	46	1	33	80	505
% App. Total	0	76.7	23.3		33.6	66	0.3		0	25	75		57.5	1.2	41.2		
PHF	.000	.859	.750	.920	.764	.890	.250	.855	.000	.250	.375	.500	.719	.250	.750	.741	.895



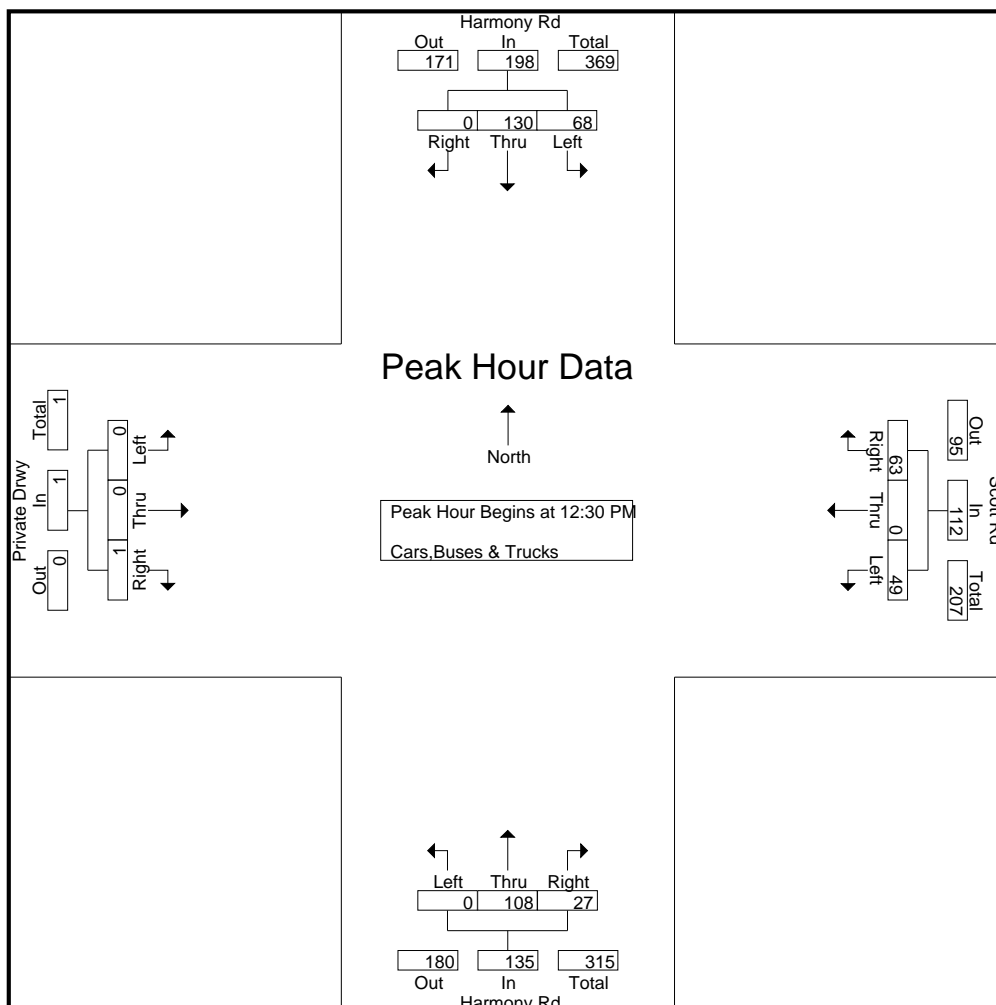
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 4

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:30 PM																	
12:30 PM	0	19	9	28	20	34	0	54	0	0	1	1	14	0	20	34	117
12:45 PM	0	27	5	32	14	37	0	51	0	0	0	0	14	0	18	32	115
01:00 PM	0	33	8	41	18	28	0	46	0	0	0	0	15	0	11	26	113
01:15 PM	0	29	5	34	16	31	0	47	0	0	0	0	6	0	14	20	101
Total Volume	0	108	27	135	68	130	0	198	0	0	1	1	49	0	63	112	446
% App. Total	0	80	20		34.3	65.7	0		0	0	100		43.8	0	56.2		
PHF	.000	.818	.750	.823	.850	.878	.000	.917	.000	.000	.250	.250	.817	.000	.788	.824	.953



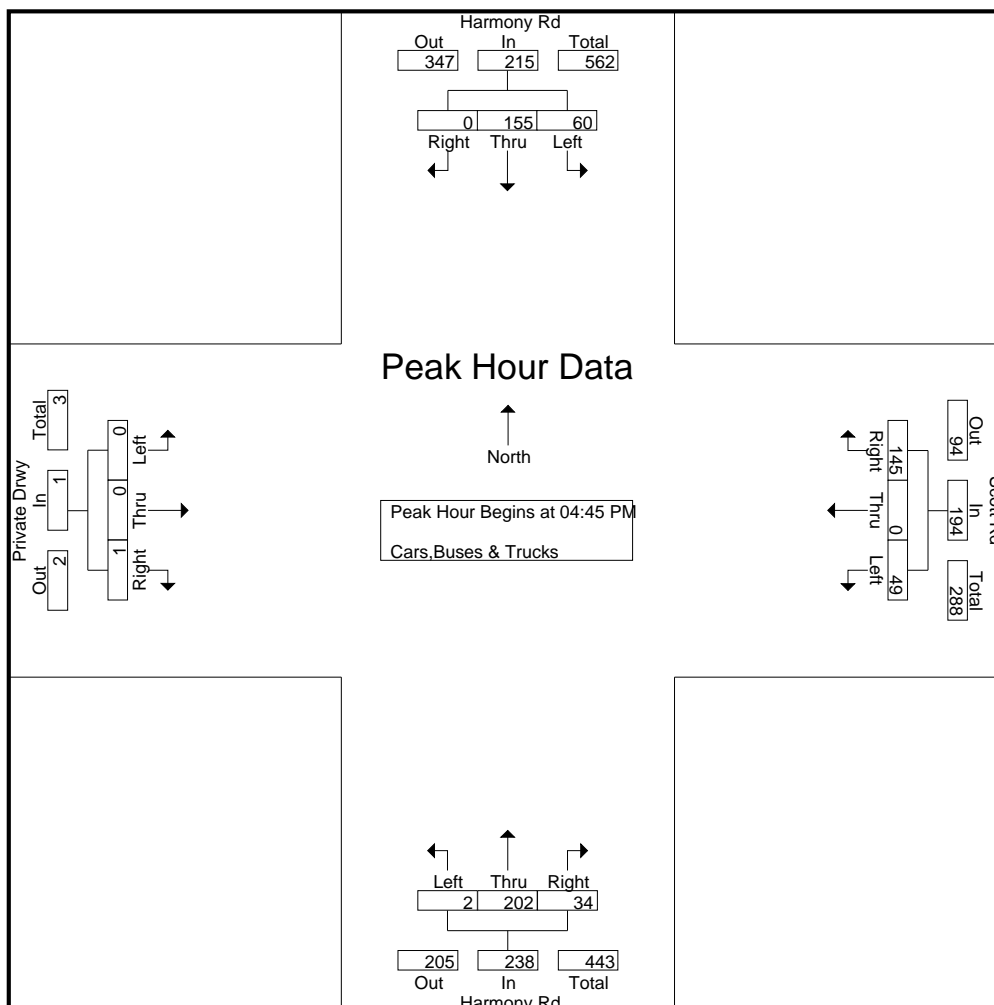
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 5

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	44	7	52	19	37	0	56	0	0	1	1	10	0	30	40	149
05:00 PM	1	61	6	68	10	35	0	45	0	0	0	0	18	0	29	47	160
05:15 PM	0	53	12	65	18	40	0	58	0	0	0	0	12	0	46	58	181
05:30 PM	0	44	9	53	13	43	0	56	0	0	0	0	9	0	40	49	158
Total Volume	2	202	34	238	60	155	0	215	0	0	1	1	49	0	145	194	648
% App. Total	0.8	84.9	14.3		27.9	72.1	0		0	0	100		25.3	0	74.7		
PHF	.500	.828	.708	.875	.789	.901	.000	.927	.000	.000	.250	.250	.681	.000	.788	.836	.895



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Harmony Lane
7-9 am | 4-6 pm

File Name : 20210172
Site Code : 20210172
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Harmony Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	44	0	47	0	35	2	37	2	0	3	5	0	0	0	0	89
07:15 AM	4	41	0	45	0	46	3	49	3	0	5	8	0	0	0	0	102
07:30 AM	4	42	0	46	0	49	4	53	4	0	5	9	0	0	0	0	108
07:45 AM	1	60	0	61	0	60	2	62	4	0	4	8	0	0	0	0	131
Total	12	187	0	199	0	190	11	201	13	0	17	30	0	0	0	0	430
08:00 AM	4	48	0	52	0	55	3	58	4	0	5	9	0	0	0	0	119
08:15 AM	4	44	0	48	0	59	5	64	3	0	4	7	0	0	0	0	119
08:30 AM	2	38	0	40	0	54	3	57	5	0	4	9	0	0	0	0	106
08:45 AM	2	43	0	45	0	57	4	61	2	0	3	5	0	0	0	0	111
Total	12	173	0	185	0	225	15	240	14	0	16	30	0	0	0	0	455
*** BREAK ***																	
04:00 PM	4	63	0	67	0	64	4	68	3	0	5	8	0	0	0	0	143
04:15 PM	3	45	0	48	0	52	5	57	4	0	4	8	0	0	0	0	113
04:30 PM	2	55	0	57	0	58	3	61	4	0	3	7	0	0	0	0	125
04:45 PM	3	52	0	55	0	57	3	60	5	0	2	7	0	0	0	0	122
Total	12	215	0	227	0	231	15	246	16	0	14	30	0	0	0	0	503
05:00 PM	4	69	0	73	0	77	4	81	2	0	5	7	0	0	0	0	161
05:15 PM	3	63	0	66	0	80	3	83	2	0	2	4	0	0	0	0	153
05:30 PM	4	47	0	51	0	60	4	64	3	0	4	7	0	0	0	0	122
05:45 PM	4	44	0	48	0	60	5	65	4	0	4	8	0	0	0	0	121
Total	15	223	0	238	0	277	16	293	11	0	15	26	0	0	0	0	557
Grand Total	51	798	0	849	0	923	57	980	54	0	62	116	0	0	0	0	1945
Apprch %	6	94	0		0	94.2	5.8		46.6	0	53.4		0	0	0		
Total %	2.6	41	0	43.7	0	47.5	2.9	50.4	2.8	0	3.2	6	0	0	0	0	

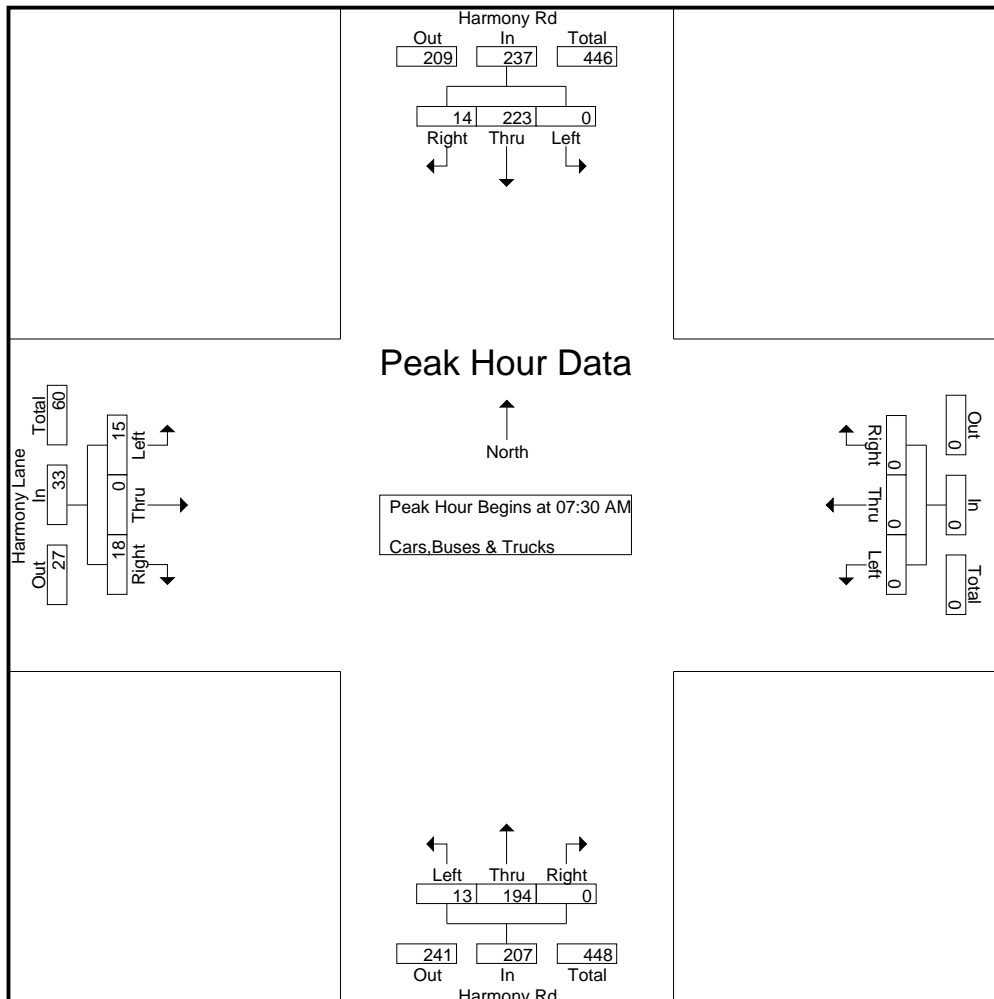
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Harmony Lane
7-9 am | 4-6 pm

File Name : 20210172
Site Code : 20210172
Start Date : 5/27/2021
Page No : 2

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Harmony Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	42	0	46	0	49	4	53	4	0	5	9	0	0	0	0	108
07:45 AM	1	60	0	61	0	60	2	62	4	0	4	8	0	0	0	0	131
08:00 AM	4	48	0	52	0	55	3	58	4	0	5	9	0	0	0	0	119
08:15 AM	4	44	0	48	0	59	5	64	3	0	4	7	0	0	0	0	119
Total Volume	13	194	0	207	0	223	14	237	15	0	18	33	0	0	0	0	477
% App. Total	6.3	93.7	0		0	94.1	5.9		45.5	0	54.5		0	0	0		
PHF	.813	.808	.000	.848	.000	.929	.700	.926	.938	.000	.900	.917	.000	.000	.000	.000	.910



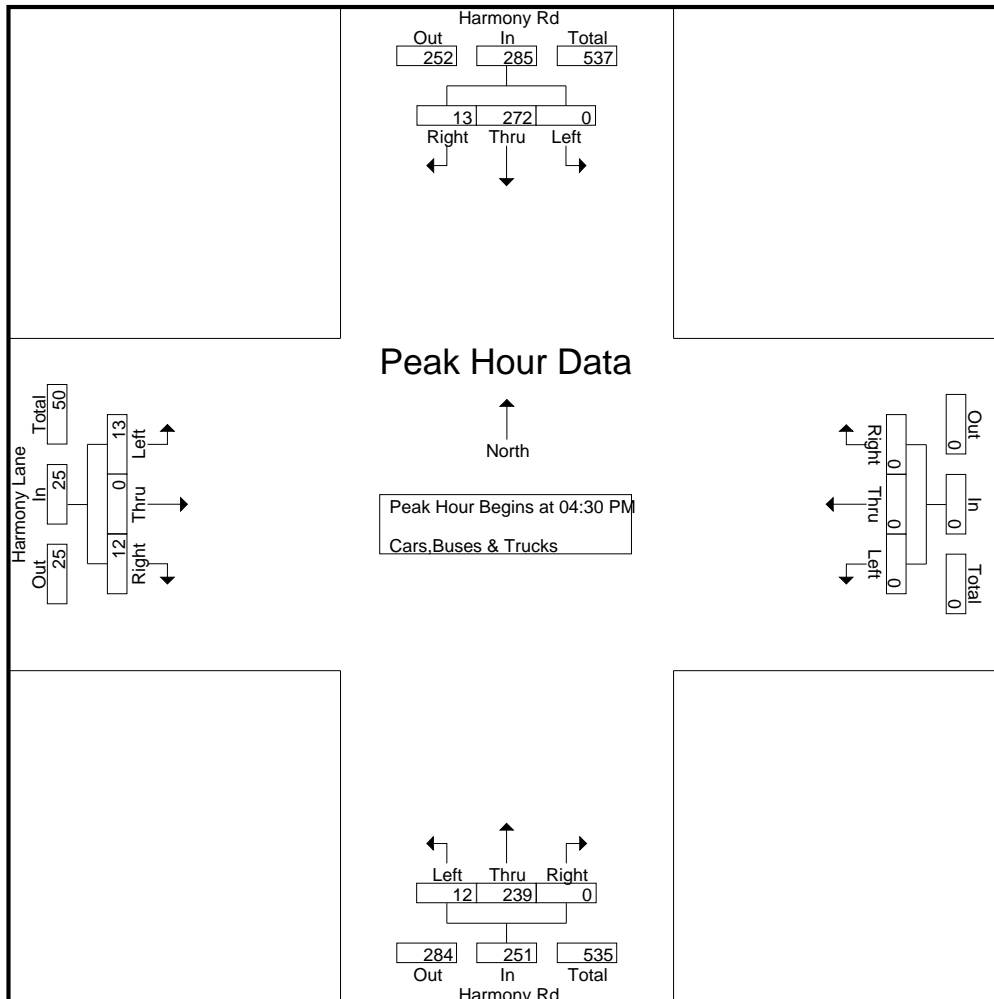
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Harmony Lane
7-9 am | 4-6 pm

File Name : 20210172
Site Code : 20210172
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Harmony Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	55	0	57	0	58	3	61	4	0	3	7	0	0	0	0	125
04:45 PM	3	52	0	55	0	57	3	60	5	0	2	7	0	0	0	0	122
05:00 PM	4	69	0	73	0	77	4	81	2	0	5	7	0	0	0	0	161
05:15 PM	3	63	0	66	0	80	3	83	2	0	2	4	0	0	0	0	153
Total Volume	12	239	0	251	0	272	13	285	13	0	12	25	0	0	0	0	561
% App. Total	4.8	95.2	0		0	95.4	4.6		52	0	48		0	0	0		
PHF	.750	.866	.000	.860	.000	.850	.813	.858	.650	.000	.600	.893	.000	.000	.000	.000	.871



A&R Engineering, Inc.

2160 Kingston Court, Suite O
Marietta, GA 30067

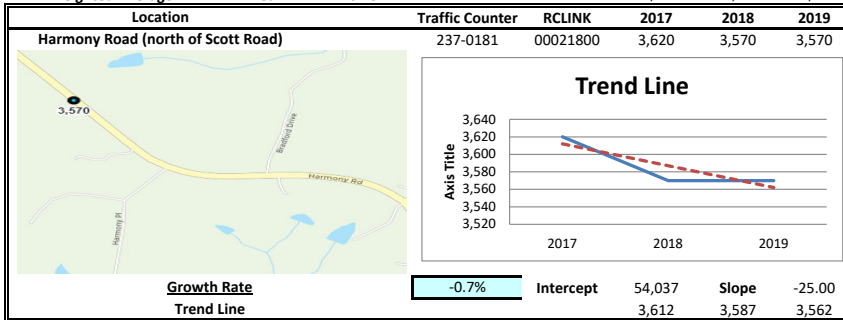
24-Hour Bi-Directional Counts on Harmony
Rd North of Scott Road
Site Code: 20210173
Date Start: 27-May-21
Date End: 27-May-21

Start Time	27-May-2 Thu	Northbou	Southbou							Total
12:00 AM		3	2							5
01:00		5	5							10
02:00		4	4							8
03:00		3	3							6
04:00		11	15							26
05:00		21	33							54
06:00		81	91							172
07:00		106	222							328
08:00		121	211							332
09:00		127	179							306
10:00		149	154							303
11:00		169	153							322
12:00 PM		168	165							333
01:00		168	175							343
02:00		196	171							367
03:00		203	220							423
04:00		228	167							395
05:00		323	209							532
06:00		175	144							319
07:00		125	95							220
08:00		79	68							147
09:00		51	35							86
10:00		36	28							64
11:00		15	17							32
Total		2567	2566							5133
Percent		50.0%	50.0%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	08:00
Vol.	-	169	222	-	-	-	-	-	-	332
PM Peak	-	17:00	15:00	-	-	-	-	-	-	17:00
Vol.	-	323	220	-	-	-	-	-	-	532
Grand Total		2567	2566							5133
Percent		50.0%	50.0%							
ADT		ADT 5,133	AADT 5,133							

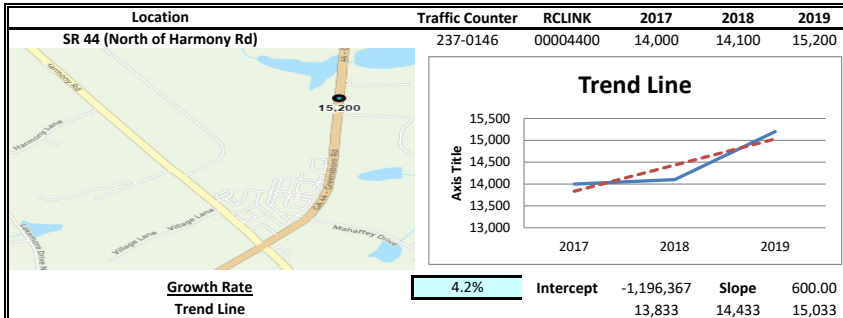
LINEAR REGRESSION OF DAILY TRAFFIC

Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019	
Harmony Road (north of Scott f	-0.7%	0.75	237-0181	00021800	3,620	3,570	3,570	Major Collector (Rural)
SR 44 (North of Harmony Rd)	4.2%	0.81	237-0146	00004400	14,000	14,100	15,200	Minor Arterial (Rural)
SR 44 (North of Loch Way)	1.3%	0.65	237-0145	00004400	5,760	5,740	5,910	Minor Arterial (Rural)
Harmony Road (Northeast of H.	0.4%	0.75	237-0183	00021800	2,430	2,450	2,450	Major Collector (Rural)

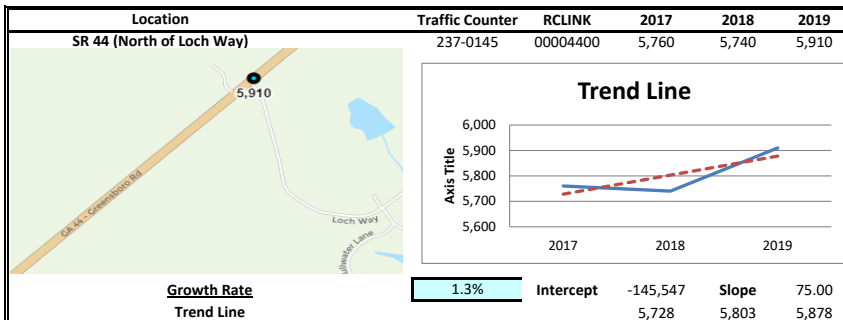
Weighted Average 2.5% 0.78 Sum of Count Stations = 25,810 25,860 27,130



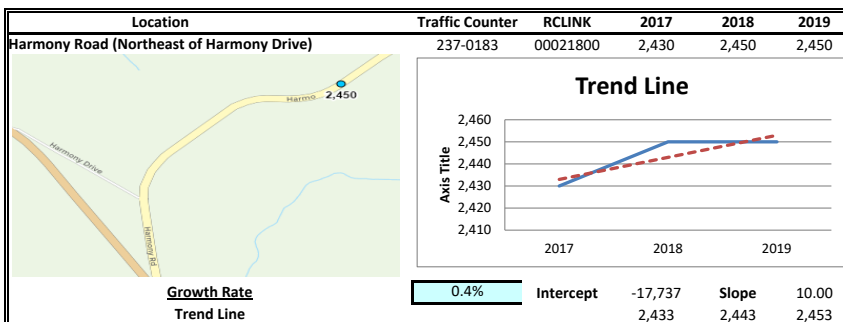
Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²



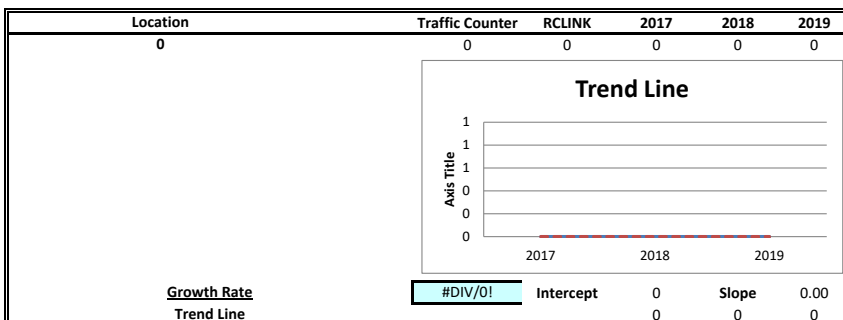
Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²



Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²



Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²

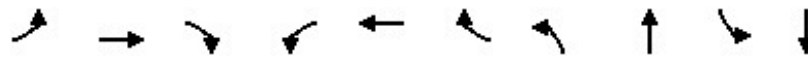


Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²

EXISTING INTERSECTION ANALYSIS

Timings
1: Harmony Rd & SR 44

Existing AM
06/10/2021

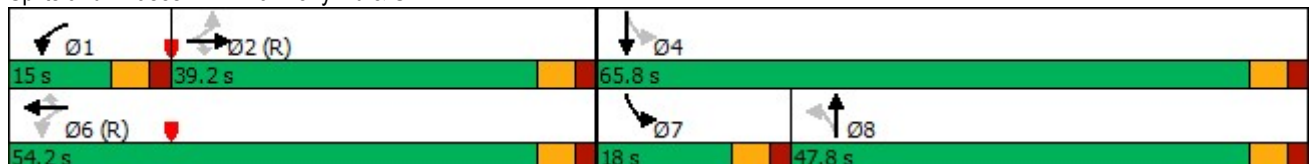


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↘
Traffic Volume (vph)	130	389	76	194	185	89	69	157	172	113
Future Volume (vph)	130	389	76	194	185	89	69	157	172	113
Lane Group Flow (vph)	134	401	78	200	191	92	71	565	177	189
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	39.2	39.2	39.2	15.0	54.2	54.2	47.8	47.8	18.0	65.8
Total Split (%)	32.7%	32.7%	32.7%	12.5%	45.2%	45.2%	39.8%	39.8%	15.0%	54.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.37	0.74	0.14	0.70	0.25	0.14	0.19	0.94	0.80	0.24
Control Delay	37.5	47.6	1.9	38.8	23.7	5.0	29.2	55.0	52.7	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	47.6	1.9	38.8	23.7	5.0	29.2	55.0	52.7	14.8
Queue Length 50th (ft)	84	289	0	103	97	0	38	336	84	62
Queue Length 95th (ft)	146	#445	11	#182	154	32	74	#547	#199	108
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	364	545	557	284	765	679	415	647	222	846
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.74	0.14	0.70	0.25	0.14	0.17	0.87	0.80	0.22

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 75 (63%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Existing AM
06/10/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	389	76	194	185	89	69	157	391	172	113	71
Future Volume (veh/h)	130	389	76	194	185	89	69	157	391	172	113	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1811	1811	1781	1722	1856	1826	1841	1707	1737	1826
Adj Flow Rate, veh/h	134	401	0	200	191	0	71	162	403	177	116	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	8	6	6	8	12	3	5	4	13	11	5
Cap, veh/h	415	534		289	757		478	164	407	202	482	303
Arrive On Green	0.30	0.30	0.00	0.08	0.42	0.00	0.35	0.35	0.35	0.09	0.48	0.48
Sat Flow, veh/h	1183	1781	1535	1725	1781	1459	1185	464	1154	1626	997	627
Grp Volume(v), veh/h	134	401	0	200	191	0	71	0	565	177	0	189
Grp Sat Flow(s),veh/h/ln	1183	1781	1535	1725	1781	1459	1185	0	1618	1626	0	1624
Q Serve(g_s), s	10.7	24.4	0.0	9.5	8.3	0.0	5.0	0.0	41.7	8.1	0.0	8.2
Cycle Q Clear(g_c), s	10.7	24.4	0.0	9.5	8.3	0.0	5.0	0.0	41.7	8.1	0.0	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		0.39
Lane Grp Cap(c), veh/h	415	534		289	757		478	0	570	202	0	785
V/C Ratio(X)	0.32	0.75		0.69	0.25		0.15	0.00	0.99	0.88	0.00	0.24
Avail Cap(c_a), veh/h	415	534		289	757		478	0	570	233	0	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.2	37.9	0.0	28.5	22.2	0.0	26.8	0.0	38.7	28.8	0.0	18.1
Incr Delay (d2), s/veh	2.1	9.4	0.0	7.0	0.8	0.0	0.1	0.0	35.2	26.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	11.6	0.0	4.3	3.5	0.0	1.4	0.0	21.2	4.4	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	47.3	0.0	35.4	23.0	0.0	26.9	0.0	73.8	55.2	0.0	18.3
LnGrp LOS	D	D		D	C		C	A	E	E	A	B
Approach Vol, veh/h		535	A		391	A		636			366	
Approach Delay, s/veh		44.3			29.4			68.6			36.1	
Approach LOS		D			C			E			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0	41.5		63.5		56.5	15.7	47.8				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	33.7		60.3		48.7	12.5	42.3				
Max Q Clear Time (g_c+l1), s	11.5	26.4		10.2		10.3	10.1	43.7				
Green Ext Time (p_c), s	0.0	4.2		0.7		4.9	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	5	8	9	254	257	5
Future Vol, veh/h	5	8	9	254	257	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	9	10	289	292	6

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	604	295	298	0	0
Stage 1	295	-	-	-	-
Stage 2	309	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	461	744	1263	-	-
Stage 1	755	-	-	-	-
Stage 2	745	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	457	744	1263	-	-
Mov Cap-2 Maneuver	457	-	-	-	-
Stage 1	748	-	-	-	-
Stage 2	745	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR
Capacity (veh/h)	1263	-	599	-
HCM Lane V/C Ratio	0.008	-	0.025	-
HCM Control Delay (s)	7.9	0	11.2	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection

Int Delay, s/veh 0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	28	2	223	56	1	267
Future Vol, veh/h	28	2	223	56	1	267
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	50	2	5	24	2	9
Mvmt Flow	31	2	245	62	1	293

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	571	276	0
Stage 1	276	-	-
Stage 2	295	-	-
Critical Hdwy	6.9	6.22	-
Critical Hdwy Stg 1	5.9	-	-
Critical Hdwy Stg 2	5.9	-	-
Follow-up Hdwy	3.95	3.318	-
Pot Cap-1 Maneuver	411	763	-
Stage 1	672	-	-
Stage 2	658	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	411	763	-
Mov Cap-2 Maneuver	411	-	-
Stage 1	672	-	-
Stage 2	657	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1254
HCM Lane V/C Ratio	-	-	0.078	0.001
HCM Control Delay (s)	-	-	14.2	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	16	20	14	211	243	15
Future Vol, veh/h	16	20	14	211	243	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	22	15	232	267	16
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	537	275	283	0	0	
Stage 1	275	-	-	-	-	
Stage 2	262	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	505	764	1279	-	-	
Stage 1	771	-	-	-	-	
Stage 2	782	-	-	-	-	
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	498	764	1279	-	-	
Mov Cap-2 Maneuver	498	-	-	-	-	
Stage 1	761	-	-	-	-	
Stage 2	782	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	11.2	0.5	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR		
Capacity (veh/h)	1279	-	617	-		
HCM Lane V/C Ratio	0.012	-	0.064	-		
HCM Control Delay (s)	7.8	0	11.2	-		
HCM Lane LOS	A	A	B	-		
HCM 95th %tile Q(veh)	0	-	0.2	-		

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	1	3	50	1	36	0	86	26	117	229	1
Future Vol, veh/h	0	1	3	50	1	36	0	86	26	117	229	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	3	56	1	40	0	96	29	127	249	1

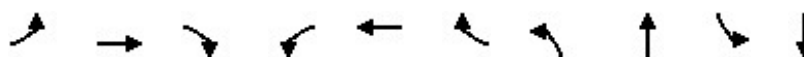
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	635	629	250	617	615	111	250	0	0	125	0	0
Stage 1	504	504	-	111	111	-	-	-	-	-	-	-
Stage 2	131	125	-	506	504	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	391	399	789	402	407	942	1316	-	-	1462	-	-
Stage 1	550	541	-	894	804	-	-	-	-	-	-	-
Stage 2	873	792	-	549	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	344	359	789	369	366	942	1316	-	-	1462	-	-
Mov Cap-2 Maneuver	344	359	-	369	366	-	-	-	-	-	-	-
Stage 1	550	486	-	894	804	-	-	-	-	-	-	-
Stage 2	835	792	-	490	486	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	14.1	0	2.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBREBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1316	-	-	607	493	1462	-
HCM Lane V/C Ratio	-	-	-	0.007	0.196	0.087	-
HCM Control Delay (s)	0	-	-	11	14.1	7.7	0
HCM Lane LOS	A	-	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.7	0.3	-

Timings
1: Harmony Rd & SR 44

Existing PM
06/10/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↗	↖	↘	↗	↖	↘	↗	↖	↗
Traffic Volume (vph)	73	246	73	409	388	68	56	81	113	172
Future Volume (vph)	73	246	73	409	388	68	56	81	113	172
Lane Group Flow (vph)	77	259	77	431	408	72	59	403	119	292
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	33.0	33.0	33.0	34.0	67.0	67.0	38.0	38.0	15.0	53.0
Total Split (%)	27.5%	27.5%	27.5%	28.3%	55.8%	55.8%	31.7%	31.7%	12.5%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.22	0.39	0.12	0.65	0.37	0.08	0.48	0.88	0.66	0.51
Control Delay	34.9	34.8	1.9	19.9	15.5	3.4	52.8	48.6	62.2	31.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	34.8	1.9	19.9	15.5	3.4	52.8	48.6	62.2	31.8
Queue Length 50th (ft)	42	151	0	173	159	0	40	195	67	163
Queue Length 95th (ft)	98	272	10	296	271	23	80	300	101	220
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	350	669	647	712	1105	917	165	557	204	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.39	0.12	0.61	0.37	0.08	0.36	0.72	0.58	0.41

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Existing PM
06/10/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	246	73	409	388	68	56	81	302	113	172	105
Future Volume (veh/h)	73	246	73	409	388	68	56	81	302	113	172	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1781	1841	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	259	0	431	408	0	59	85	318	119	181	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	8	4	2	2	2	2	2
Cap, veh/h	385	621		627	1038		200	90	337	147	384	235
Arrive On Green	0.33	0.33	0.00	0.18	0.55	0.00	0.26	0.26	0.26	0.05	0.35	0.35
Sat Flow, veh/h	978	1870	1585	1781	1870	1510	1070	345	1292	1781	1085	665
Grp Volume(v), veh/h	77	259	0	431	408	0	59	0	403	119	0	292
Grp Sat Flow(s),veh/h/ln	978	1870	1585	1781	1870	1510	1070	0	1638	1781	0	1751
Q Serve(g_s), s	6.9	12.9	0.0	18.2	14.9	0.0	6.1	0.0	29.0	3.7	0.0	15.5
Cycle Q Clear(g_c), s	6.9	12.9	0.0	18.2	14.9	0.0	21.6	0.0	29.0	3.7	0.0	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.79	1.00		0.38
Lane Grp Cap(c), veh/h	385	621		627	1038		200	0	427	147	0	619
V/C Ratio(X)	0.20	0.42		0.69	0.39		0.29	0.00	0.94	0.81	0.00	0.47
Avail Cap(c_a), veh/h	385	621		735	1038		211	0	444	204	0	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	31.1	0.0	19.3	15.2	0.0	47.9	0.0	43.5	55.3	0.0	30.1
Incr Delay (d2), s/veh	1.2	2.1	0.0	2.2	1.1	0.0	0.8	0.0	28.5	15.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.0	0.0	7.3	6.2	0.0	1.6	0.0	14.7	4.1	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	33.1	0.0	21.5	16.3	0.0	48.7	0.0	72.0	70.9	0.0	30.6
LnGrp LOS	C	C		C	B		D	A	E	E	A	C
Approach Vol, veh/h		336	A		839	A		462			411	
Approach Delay, s/veh		32.5			19.0			69.0			42.3	
Approach LOS		C			B			E			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	26.7	45.4		47.9		72.1	11.1	36.8				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	28.5	27.5		47.5		61.5	9.5	32.5				
Max Q Clear Time (g_c+l1), s	20.2	14.9		17.5		16.9	5.7	31.0				
Green Ext Time (p_c), s	1.0	4.3		1.0		12.7	0.1	0.3				

Intersection Summary

HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	6	7	7	237	337	8
Future Vol, veh/h	6	7	7	237	337	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	8	8	282	401	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	704	406	411	0	-	0
Stage 1	406	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	403	645	1148	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	400	645	1148	-	-	-
Mov Cap-2 Maneuver	400	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR
Capacity (veh/h)	1148	-	503	-
HCM Lane V/C Ratio	0.007	-	0.031	-
HCM Control Delay (s)	8.2	0	12.4	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection

Int Delay, s/veh 1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	62	2	248	9	0	282
Future Vol, veh/h	62	2	248	9	0	282
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	50	6	56	2	2
Mvmt Flow	74	2	295	11	0	336

Major/Minor

	Minor1	Major1	Major2		
Conflicting Flow All	637	301	0	0	306
Stage 1	301	-	-	-	-
Stage 2	336	-	-	-	-
Critical Hdwy	6.42	6.7	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.75	-	-	2.218
Pot Cap-1 Maneuver	441	639	-	-	1255
Stage 1	751	-	-	-	-
Stage 2	724	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	441	639	-	-	1255
Mov Cap-2 Maneuver	441	-	-	-	-
Stage 1	751	-	-	-	-
Stage 2	724	-	-	-	-

Approach

	WB	NB	SB
HCM Control Delay, s	14.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt

	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	445	1255
HCM Lane V/C Ratio	-	-	0.171	-
HCM Control Delay (s)	-	-	14.8	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	13	12	12	241	275	13
Future Vol, veh/h	13	12	12	241	275	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	14	14	277	316	15

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	629	324	331	0	-	0
Stage 1	324	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	446	717	1228	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	440	717	1228	-	-	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	748	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR
Capacity (veh/h)	1228	-	540	-
HCM Lane V/C Ratio	0.011	-	0.053	-
HCM Control Delay (s)	8	0	12	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	0.2	-

Intersection

Int Delay, s/veh 4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	0	1	49	0	146	2	204	34	61	157	0
Future Vol, veh/h	0	0	1	49	0	146	2	204	34	61	157	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	54	0	162	2	227	38	66	171	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	634	572	171	554	553	246	171	0	0	265	0	0
Stage 1	303	303	-	250	250	-	-	-	-	-	-	-
Stage 2	331	269	-	304	303	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	392	430	873	443	441	793	1406	-	-	1299	-	-
Stage 1	706	664	-	754	700	-	-	-	-	-	-	-
Stage 2	682	687	-	705	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	298	405	873	423	415	793	1406	-	-	1299	-	-
Mov Cap-2 Maneuver	298	405	-	423	415	-	-	-	-	-	-	-
Stage 1	705	627	-	752	699	-	-	-	-	-	-	-
Stage 2	541	686	-	665	627	-	-	-	-	-	-	-

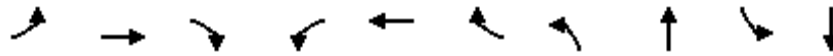
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	13.3	0.1	2.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBREBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1406	-	-	873	650	1299	-
HCM Lane V/C Ratio	0.002	-	-	0.001	0.333	0.051	-
HCM Control Delay (s)	7.6	0	-	9.1	13.3	7.9	0
HCM Lane LOS	A	A	-	A	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	1.5	0.2	-

**FUTURE “NO-BUILD” INTERSECTION
ANALYSIS**

Timings
1: Harmony Rd & SR 44

No-Build AM
06/14/2021

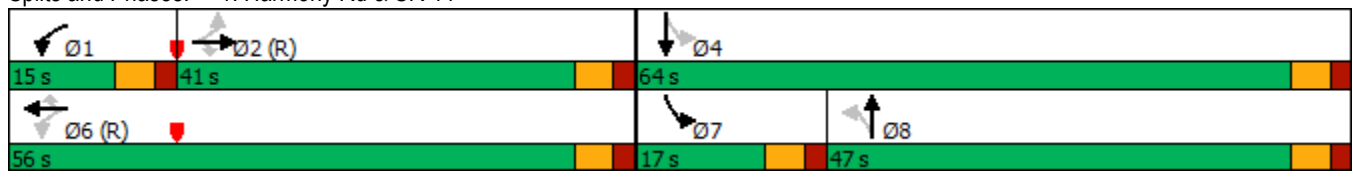


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↘
Traffic Volume (vph)	143	429	84	214	204	98	76	173	190	125
Future Volume (vph)	143	429	84	214	204	98	76	173	190	125
Lane Group Flow (vph)	147	442	87	221	210	101	78	623	196	209
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	41.0	41.0	41.0	15.0	56.0	56.0	47.0	47.0	17.0	64.0
Total Split (%)	34.2%	34.2%	34.2%	12.5%	46.7%	46.7%	39.2%	39.2%	14.2%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.42	0.82	0.16	0.90	0.27	0.15	0.20	0.98	0.94	0.26
Control Delay	38.3	53.1	2.6	63.5	23.9	4.6	29.3	63.5	78.3	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.3	53.1	2.6	63.5	23.9	4.6	29.3	63.5	78.3	15.7
Queue Length 50th (ft)	91	319	0	112	105	0	42	407	106	75
Queue Length 95th (ft)	155	#482	17	#231	163	33	82	#656	#255	126
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	353	539	554	245	767	687	400	637	209	821
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.82	0.16	0.90	0.27	0.15	0.20	0.98	0.94	0.25

Intersection Summary























Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 90 (75%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

No-Build AM
06/14/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	429	84	214	204	98	76	173	432	190	125	78
Future Volume (veh/h)	143	429	84	214	204	98	76	173	432	190	125	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1930	1853	1884	1884	1853	1791	1856	1826	1841	1707	1737	1826
Adj Flow Rate, veh/h	147	442	0	221	210	0	78	178	445	196	129	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	8	6	6	8	12	3	5	4	13	11	5
Cap, veh/h	418	548		274	780		462	160	400	216	489	303
Arrive On Green	0.30	0.30	0.00	0.08	0.42	0.00	0.35	0.35	0.35	0.10	0.49	0.49
Sat Flow, veh/h	1209	1853	1596	1794	1853	1518	1163	462	1156	1626	1003	622
Grp Volume(v), veh/h	147	442	0	221	210	0	78	0	623	196	0	209
Grp Sat Flow(s),veh/h/ln	1209	1853	1596	1794	1853	1518	1163	0	1618	1626	0	1625
Q Serve(g_s), s	11.7	26.5	0.0	9.5	8.9	0.0	5.6	0.0	41.5	9.8	0.0	9.1
Cycle Q Clear(g_c), s	11.7	26.5	0.0	9.5	8.9	0.0	5.6	0.0	41.5	9.8	0.0	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		0.38
Lane Grp Cap(c), veh/h	418	548		274	780		462	0	560	216	0	792
V/C Ratio(X)	0.35	0.81		0.81	0.27		0.17	0.00	1.11	0.91	0.00	0.26
Avail Cap(c_a), veh/h	418	548		274	780		462	0	560	216	0	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.9	39.1	0.0	31.4	22.7	0.0	27.5	0.0	39.3	32.1	0.0	18.1
Incr Delay (d2), s/veh	2.3	12.0	0.0	16.2	0.8	0.0	0.2	0.0	73.1	37.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	13.4	0.0	5.4	3.9	0.0	1.5	0.0	27.0	5.4	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	51.1	0.0	47.6	23.5	0.0	27.7	0.0	112.4	69.3	0.0	18.3
LnGrp LOS	D	D		D	C		C	A	F	E	A	B
Approach Vol, veh/h		589	A		431	A		701			405	
Approach Delay, s/veh		47.4			35.9			102.9			42.9	
Approach LOS		D			D			F			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0	41.0		64.0		56.0	17.0	47.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	35.5		58.5		50.5	11.5	41.5				
Max Q Clear Time (g_c+I1), s	11.5	28.5		11.1		10.9	11.8	43.5				
Green Ext Time (p_c), s	0.0	4.4		0.7		5.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	62.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	6	9	10	280	284	6
Future Vol, veh/h	6	9	10	280	284	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	10	11	318	323	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	667	327	330	0	-	0
Stage 1	327	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	424	714	1229	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	419	714	1229	-	-	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	721	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1229	-	557	-	-
HCM Lane V/C Ratio	0.009	-	0.031	-	-
HCM Control Delay (s)	8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	2	246	62	1	295
Future Vol, veh/h	31	2	246	62	1	295
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	50	2	5	24	2	9
Mvmt Flow	34	2	270	68	1	324

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	630	304	0	0	338
Stage 1	304	-	-	-	-
Stage 2	326	-	-	-	-
Critical Hdwy	6.9	6.22	-	-	4.12
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.95	3.318	-	-	2.218
Pot Cap-1 Maneuver	377	736	-	-	1221
Stage 1	651	-	-	-	-
Stage 2	635	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	377	736	-	-	1221
Mov Cap-2 Maneuver	377	-	-	-	-
Stage 1	651	-	-	-	-
Stage 2	634	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	388	1221
HCM Lane V/C Ratio	-	-	0.093	0.001
HCM Control Delay (s)	-	-	15.2	8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	18	22	15	233	268	17
Future Vol, veh/h	18	22	15	233	268	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	24	16	256	295	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	593	305	314	0	-	0
Stage 1	305	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	468	735	1246	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	461	735	1246	-	-	-
Mov Cap-2 Maneuver	461	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	761	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1246	-	580	-	-
HCM Lane V/C Ratio	0.013	-	0.076	-	-
HCM Control Delay (s)	7.9	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	3	55	1	40	0	95	29	129	253	1
Future Vol, veh/h	0	1	3	55	1	40	0	95	29	129	253	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	3	61	1	44	0	106	32	140	275	1

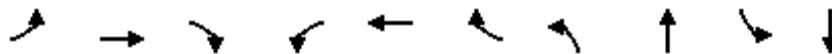
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	701	694	276	680	678	122	276	0	0	138	0	0
Stage 1	556	556	-	122	122	-	-	-	-	-	-	-
Stage 2	145	138	-	558	556	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	353	366	763	365	374	929	1287	-	-	1446	-	-
Stage 1	515	513	-	882	795	-	-	-	-	-	-	-
Stage 2	858	782	-	514	513	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	306	324	763	331	331	929	1287	-	-	1446	-	-
Mov Cap-2 Maneuver	306	324	-	331	331	-	-	-	-	-	-	-
Stage 1	515	455	-	882	795	-	-	-	-	-	-	-
Stage 2	816	782	-	452	455	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.4		15.4		0		2.6	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1287	-	-	570	452	1446	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.236	0.097	-	-
HCM Control Delay (s)	0	-	-	11.4	15.4	7.8	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.9	0.3	-	-

Timings
1: Harmony Rd & SR 44

No-Build PM
06/14/2021

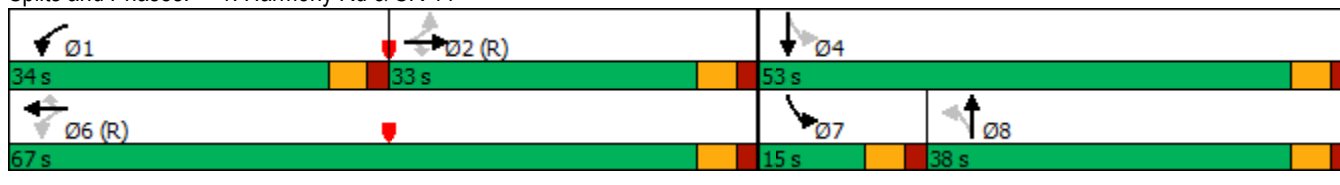


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↖	↖	↖
Traffic Volume (vph)	81	272	81	451	428	75	62	89	125	190
Future Volume (vph)	81	272	81	451	428	75	62	89	125	190
Lane Group Flow (vph)	85	286	85	475	451	79	65	445	132	322
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	33.0	33.0	33.0	34.0	67.0	67.0	38.0	38.0	15.0	53.0
Total Split (%)	27.5%	27.5%	27.5%	28.3%	55.8%	55.8%	31.7%	31.7%	12.5%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.29	0.49	0.15	0.76	0.42	0.09	0.28	0.90	0.66	0.51
Control Delay	39.6	40.5	2.8	26.0	18.0	3.5	39.4	51.4	42.4	29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.6	40.5	2.8	26.0	18.0	3.5	39.4	51.4	42.4	29.8
Queue Length 50th (ft)	52	189	0	220	202	0	41	226	69	172
Queue Length 95th (ft)	108	298	17	329	302	24	80	#380	111	248
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	293	584	582	659	1073	896	280	557	201	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.49	0.15	0.72	0.42	0.09	0.23	0.80	0.66	0.45

Intersection Summary























Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

No-Build PM
06/14/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	272	81	451	428	75	62	89	333	125	190	116
Future Volume (veh/h)	81	272	81	451	428	75	62	89	333	125	190	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1945	1945	1945	1945	1853	1841	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	286	0	475	451	0	65	94	351	132	200	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	8	4	2	2	2	2	2
Cap, veh/h	333	544		604	1019		316	94	350	181	418	255
Arrive On Green	0.28	0.28	0.00	0.20	0.52	0.00	0.27	0.27	0.27	0.07	0.38	0.38
Sat Flow, veh/h	977	1945	1648	1853	1945	1570	1041	346	1292	1781	1088	663
Grp Volume(v), veh/h	85	286	0	475	451	0	65	0	445	132	0	322
Grp Sat Flow(s),veh/h/ln	977	1945	1648	1853	1945	1570	1041	0	1638	1781	0	1751
Q Serve(g_s), s	8.2	14.9	0.0	20.9	17.2	0.0	6.0	0.0	32.5	6.2	0.0	16.6
Cycle Q Clear(g_c), s	8.2	14.9	0.0	20.9	17.2	0.0	9.0	0.0	32.5	6.2	0.0	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.79	1.00		0.38
Lane Grp Cap(c), veh/h	333	544		604	1019		316	0	444	181	0	673
V/C Ratio(X)	0.26	0.53		0.79	0.44		0.21	0.00	1.00	0.73	0.00	0.48
Avail Cap(c_a), veh/h	333	544		677	1019		316	0	444	201	0	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.1	36.5	0.0	22.6	17.7	0.0	36.4	0.0	43.8	31.9	0.0	27.9
Incr Delay (d2), s/veh	1.8	3.6	0.0	5.5	1.4	0.0	0.3	0.0	43.5	11.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	7.4	0.0	9.4	7.6	0.0	1.5	0.0	18.0	3.1	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	40.1	0.0	28.2	19.1	0.0	36.7	0.0	87.3	43.3	0.0	28.4
LnGrp LOS	D	D		C	B		D	A	F	D	A	C
Approach Vol, veh/h		371	A		926	A		510			454	
Approach Delay, s/veh		39.2			23.7			80.8			32.7	
Approach LOS		D			C			F			C	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	29.3	39.0		51.6		68.4	13.6	38.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	28.5	27.5		47.5		61.5	9.5	32.5				
Max Q Clear Time (g_c+I1), s	22.9	16.9		18.6		19.2	8.2	34.5				
Green Ext Time (p_c), s	0.9	4.2		1.1		14.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	7	8	8	262	372	9
Future Vol, veh/h	7	8	8	262	372	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	10	312	443	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	781	449	454	0	-	0
Stage 1	449	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	363	610	1107	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	359	610	1107	-	-	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1107	-	460	-	-
HCM Lane V/C Ratio	0.009	-	0.039	-	-
HCM Control Delay (s)	8.3	0	13.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	68	2	274	10	0	311
Future Vol, veh/h	68	2	274	10	0	311
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	50	6	56	2	2
Mvmt Flow	81	2	326	12	0	370

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	702	332	0	0	338
Stage 1	332	-	-	-	-
Stage 2	370	-	-	-	-
Critical Hdwy	6.42	6.7	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.75	-	-	2.218
Pot Cap-1 Maneuver	404	612	-	-	1221
Stage 1	727	-	-	-	-
Stage 2	699	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	404	612	-	-	1221
Mov Cap-2 Maneuver	404	-	-	-	-
Stage 1	727	-	-	-	-
Stage 2	699	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	1221
HCM Lane V/C Ratio	-	-	0.204	-
HCM Control Delay (s)	-	-	16.1	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.8	0

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	14	13	13	266	304	14
Future Vol, veh/h	14	13	13	266	304	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	15	15	306	349	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	693	357	365	0	-	0
Stage 1	357	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	409	687	1194	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	403	687	1194	-	-	-
Mov Cap-2 Maneuver	403	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	724	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1194	-	503	-	-
HCM Lane V/C Ratio	0.013	-	0.062	-	-
HCM Control Delay (s)	8.1	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	54	0	161	2	225	38	67	173	0
Future Vol, veh/h	0	0	1	54	0	161	2	225	38	67	173	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	60	0	179	2	250	42	73	188	0

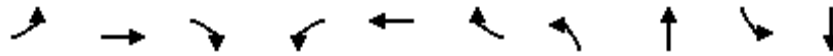
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	699	630	188	610	609	271	188	0	0	292	0	0
Stage 1	334	334	-	275	275	-	-	-	-	-	-	-
Stage 2	365	296	-	335	334	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	354	399	854	407	410	768	1386	-	-	1270	-	-
Stage 1	680	643	-	731	683	-	-	-	-	-	-	-
Stage 2	654	668	-	679	643	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	258	373	854	386	383	768	1386	-	-	1270	-	-
Mov Cap-2 Maneuver	258	373	-	386	383	-	-	-	-	-	-	-
Stage 1	679	602	-	730	682	-	-	-	-	-	-	-
Stage 2	501	667	-	635	602	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.2		14.5		0.1		2.2	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1386	-	-	854	615	1270	-	-
HCM Lane V/C Ratio	0.002	-	-	0.001	0.388	0.057	-	-
HCM Control Delay (s)	7.6	0	-	9.2	14.5	8	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.8	0.2	-	-

FUTURE "BUILD" INTERSECTION ANALYSIS

Timings
1: Harmony Rd & SR 44

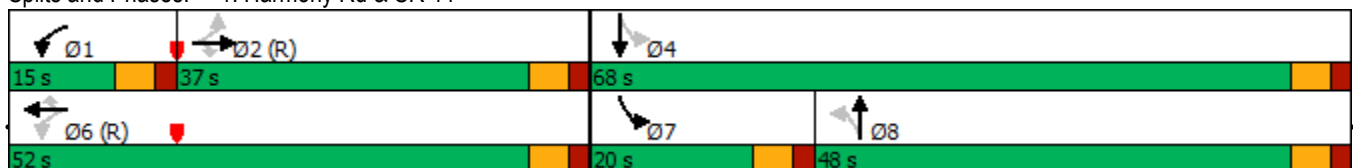


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↘
Traffic Volume (vph)	207	429	84	214	204	162	76	205	239	149
Future Volume (vph)	207	429	84	214	204	162	76	205	239	149
Lane Group Flow (vph)	213	442	87	221	210	167	78	656	246	285
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	37.0	37.0	37.0	15.0	52.0	52.0	48.0	48.0	20.0	68.0
Total Split (%)	30.8%	30.8%	30.8%	12.5%	43.3%	43.3%	40.0%	40.0%	16.7%	56.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.70	0.96	0.18	1.13	0.31	0.25	0.20	1.02	0.99	0.33
Control Delay	54.0	77.0	3.0	131.3	27.2	4.6	28.8	74.3	88.2	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	77.0	3.0	131.3	27.2	4.6	28.8	74.3	88.2	14.5
Queue Length 50th (ft)	150	338	0	~147	112	0	42	~487	146	98
Queue Length 95th (ft)	#255	#543	18	#309	175	44	81	#720	#316	157
Internal Link Dist (ft)		1249			234			550		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	303	461	490	196	681	661	382	642	248	876
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.96	0.18	1.13	0.31	0.25	0.20	1.02	0.99	0.33

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Build PM
08/03/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	429	84	214	204	162	76	205	432	239	149	127
Future Volume (veh/h)	207	429	84	214	204	162	76	205	432	239	149	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1811	1811	1781	1722	1856	1826	1841	1707	1737	1826
Adj Flow Rate, veh/h	213	442	0	221	210	0	78	211	445	246	154	131
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	8	6	6	8	12	3	5	4	13	11	5
Cap, veh/h	365	468		214	690		444	185	391	256	451	384
Arrive On Green	0.26	0.26	0.00	0.08	0.39	0.00	0.35	0.35	0.35	0.12	0.52	0.52
Sat Flow, veh/h	1162	1781	1535	1725	1781	1459	1086	523	1104	1626	867	737
Grp Volume(v), veh/h	213	442	0	221	210	0	78	0	656	246	0	285
Grp Sat Flow(s),veh/h/ln	1162	1781	1535	1725	1781	1459	1086	0	1627	1626	0	1604
Q Serve(g_s), s	19.9	29.2	0.0	9.5	9.8	0.0	6.0	0.0	42.5	13.6	0.0	12.4
Cycle Q Clear(g_c), s	19.9	29.2	0.0	9.5	9.8	0.0	6.0	0.0	42.5	13.6	0.0	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		0.46
Lane Grp Cap(c), veh/h	365	468		214	690		444	0	576	256	0	836
V/C Ratio(X)	0.58	0.95		1.03	0.30		0.18	0.00	1.14	0.96	0.00	0.34
Avail Cap(c_a), veh/h	365	468		214	690		444	0	576	256	0	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	43.4	0.0	35.5	25.5	0.0	27.0	0.0	38.8	35.8	0.0	16.8
Incr Delay (d2), s/veh	6.7	30.0	0.0	70.2	1.1	0.0	0.2	0.0	81.8	44.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	16.2	0.0	8.5	4.2	0.0	1.5	0.0	29.1	7.1	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	73.4	0.0	105.7	26.7	0.0	27.1	0.0	120.5	80.7	0.0	17.0
LnGrp LOS	D	E		F	C		C	A	F	F	A	B
Approach Vol, veh/h		655	A		431	A		734				531
Approach Delay, s/veh		64.7			67.2			110.6				46.5
Approach LOS		E			E			F				D
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0	37.0		68.0		52.0	20.0	48.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	31.5		62.5		46.5	14.5	42.5				
Max Q Clear Time (g_c+I1), s	11.5	31.2		14.4		11.8	15.6	44.5				
Green Ext Time (p_c), s	0.0	0.2		1.0		5.3	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	75.4
HCM 6th LOS	E

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	6	9	10	440	406	6
Future Vol, veh/h	6	9	10	440	406	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	10	11	500	461	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	987	465	468	0	-	0
Stage 1	465	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	274	597	1094	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	270	597	1094	-	-	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	595	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1094	-	402	-	-
HCM Lane V/C Ratio	0.01	-	0.042	-	-
HCM Control Delay (s)	8.3	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	2	406	62	1	417
Future Vol, veh/h	31	2	406	62	1	417
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	50	2	5	24	2	9
Mvmt Flow	34	2	446	68	1	458

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	940	480	0	0	514
Stage 1	480	-	-	-	-
Stage 2	460	-	-	-	-
Critical Hdwy	6.9	6.22	-	-	4.12
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.95	3.318	-	-	2.218
Pot Cap-1 Maneuver	241	586	-	-	1052
Stage 1	534	-	-	-	-
Stage 2	546	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	241	586	-	-	1052
Mov Cap-2 Maneuver	241	-	-	-	-
Stage 1	534	-	-	-	-
Stage 2	545	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	250	1052
HCM Lane V/C Ratio	-	-	0.145	0.001
HCM Control Delay (s)	-	-	21.8	8.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	18	22	15	274	321	17
Future Vol, veh/h	18	22	15	274	321	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	24	16	301	353	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	696	363	372	0	-	0
Stage 1	363	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	408	682	1186	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	401	682	1186	-	-	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	726	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1186	-	518	-	-
HCM Lane V/C Ratio	0.014	-	0.085	-	-
HCM Control Delay (s)	8.1	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	3	66	1	40	0	127	37	129	296	1
Future Vol, veh/h	0	1	3	66	1	40	0	127	37	129	296	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	3	73	1	44	0	141	41	140	322	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	787	785	323	767	765	162	323	0	0	182	0	0
Stage 1	603	603	-	162	162	-	-	-	-	-	-	-
Stage 2	184	182	-	605	603	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	309	325	718	319	333	883	1237	-	-	1393	-	-
Stage 1	486	488	-	840	764	-	-	-	-	-	-	-
Stage 2	818	749	-	485	488	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	265	285	718	287	292	883	1237	-	-	1393	-	-
Mov Cap-2 Maneuver	265	285	-	287	292	-	-	-	-	-	-	-
Stage 1	486	428	-	840	764	-	-	-	-	-	-	-
Stage 2	776	749	-	423	428	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12		18.5		0		2.4	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1237	-	-	520	384	1393	-	-
HCM Lane V/C Ratio	-	-	-	0.009	0.31	0.101	-	-
HCM Control Delay (s)	0	-	-	12	18.5	7.9	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.3	0.3	-	-

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↗	↗	↗
Traffic Vol, veh/h	20	97	129	280	319	28
Future Vol, veh/h	20	97	129	280	319	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	0	-	-	175
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	105	140	304	347	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	931	347	377	0	-	0
Stage 1	347	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	296	696	1181	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	261	696	1181	-	-	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	2.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1181	-	261	696	-	-
HCM Lane V/C Ratio	0.119	-	0.083	0.151	-	-
HCM Control Delay (s)	8.5	-	20	11.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.3	0.5	-	-

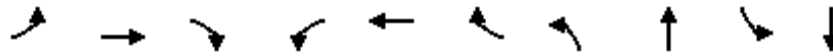
Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↕	↗			↕	↗
Traffic Vol, veh/h	20	0	24	0	0	0	33	268	0	0	322	28
Future Vol, veh/h	20	0	24	0	0	0	33	268	0	0	322	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	235	-	-	-	-	175
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	26	0	0	0	36	291	0	0	350	30

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	713	713	350	741	743	291	380	0	0	291	0	0
Stage 1	350	350	-	363	363	-	-	-	-	-	-	-
Stage 2	363	363	-	378	380	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	347	357	693	332	343	748	1178	-	-	1271	-	-
Stage 1	666	633	-	656	625	-	-	-	-	-	-	-
Stage 2	656	625	-	644	614	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	339	346	693	312	332	748	1178	-	-	1271	-	-
Mov Cap-2 Maneuver	339	346	-	312	332	-	-	-	-	-	-	-
Stage 1	645	633	-	636	606	-	-	-	-	-	-	-
Stage 2	636	606	-	620	614	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	0	0.9	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1178	-	-	339	693	-	1271	-	-
HCM Lane V/C Ratio	0.03	-	-	0.064	0.038	-	-	-	-
HCM Control Delay (s)	8.2	-	-	16.3	10.4	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	-	0	-	-

Timings
1: Harmony Rd & SR 44

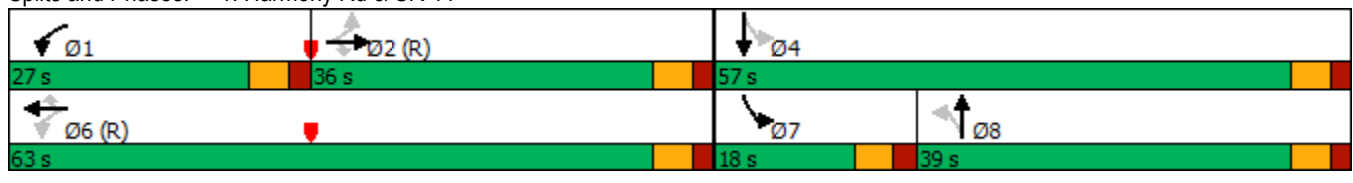


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑	↗	↘	↑	↗	↘	↗	↘	↗
Traffic Volume (vph)	156	272	81	451	428	150	62	127	195	225
Future Volume (vph)	156	272	81	451	428	150	62	127	195	225
Lane Group Flow (vph)	164	286	85	475	451	158	65	485	205	433
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	36.0	36.0	36.0	27.0	63.0	63.0	39.0	39.0	18.0	57.0
Total Split (%)	30.0%	30.0%	30.0%	22.5%	52.5%	52.5%	32.5%	32.5%	15.0%	47.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.65	0.57	0.16	0.93	0.49	0.19	0.27	0.94	0.83	0.58
Control Delay	53.3	43.7	2.8	49.8	22.9	3.2	37.4	61.0	55.1	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	43.7	2.8	49.8	22.9	3.2	37.4	61.0	55.1	27.7
Queue Length 50th (ft)	115	196	0	255	233	0	39	291	102	223
Queue Length 95th (ft)	#213	290	17	#414	329	36	80	#491	#231	327
Internal Link Dist (ft)		1249			234			550		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	253	504	518	511	923	820	260	541	246	769
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.57	0.16	0.93	0.49	0.19	0.25	0.90	0.83	0.56

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Build PM
08/03/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	272	81	451	428	150	62	127	333	195	225	186
Future Volume (veh/h)	156	272	81	451	428	150	62	127	333	195	225	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1781	1841	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	286	0	475	451	0	65	134	351	205	237	196
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	8	4	2	2	2	2	2
Cap, veh/h	306	490		520	911		275	128	334	232	399	330
Arrive On Green	0.26	0.26	0.00	0.18	0.49	0.00	0.28	0.28	0.28	0.10	0.42	0.42
Sat Flow, veh/h	940	1870	1585	1781	1870	1510	940	457	1198	1781	947	783
Grp Volume(v), veh/h	164	286	0	475	451	0	65	0	485	205	0	433
Grp Sat Flow(s),veh/h/ln	940	1870	1585	1781	1870	1510	940	0	1655	1781	0	1729
Q Serve(g_s), s	18.7	16.0	0.0	21.5	19.6	0.0	6.9	0.0	33.5	9.5	0.0	23.2
Cycle Q Clear(g_c), s	18.7	16.0	0.0	21.5	19.6	0.0	13.0	0.0	33.5	9.5	0.0	23.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.72	1.00		0.45
Lane Grp Cap(c), veh/h	306	490		520	911		275	0	462	232	0	729
V/C Ratio(X)	0.54	0.58		0.91	0.50		0.24	0.00	1.05	0.88	0.00	0.59
Avail Cap(c_a), veh/h	306	490		520	911		275	0	462	246	0	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.6	38.6	0.0	28.0	20.8	0.0	38.4	0.0	43.3	30.5	0.0	26.8
Incr Delay (d2), s/veh	6.6	5.0	0.0	20.7	1.9	0.0	0.4	0.0	55.6	28.4	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	7.8	0.0	12.4	8.5	0.0	1.6	0.0	20.2	5.7	0.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	43.6	0.0	48.8	22.7	0.0	38.8	0.0	98.8	58.9	0.0	28.0
LnGrp LOS	D	D		D	C		D	A	F	E	A	C
Approach Vol, veh/h		450	A		926	A		550			638	
Approach Delay, s/veh		44.6			36.1			91.7			38.0	
Approach LOS		D			D			F			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	27.0	36.9		56.1		63.9	17.1	39.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	30.5		51.5		57.5	12.5	33.5				
Max Q Clear Time (g_c+I1), s	23.5	20.7		25.2		21.6	11.5	35.5				
Green Ext Time (p_c), s	0.0	4.4		1.6		13.0	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay	50.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	7	8	8	450	548	9
Future Vol, veh/h	7	8	8	450	548	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	10	536	652	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1214	658	663	0	-	0
Stage 1	658	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	201	464	926	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	464	926	-	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	926	-	285	-	-
HCM Lane V/C Ratio	0.01	-	0.063	-	-
HCM Control Delay (s)	8.9	0	18.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	68	2	462	10	0	487
Future Vol, veh/h	68	2	462	10	0	487
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	50	6	56	2	2
Mvmt Flow	81	2	550	12	0	580

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1136	556	0	0	562
Stage 1	556	-	-	-	-
Stage 2	580	-	-	-	-
Critical Hdwy	6.42	6.7	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.75	-	-	2.218
Pot Cap-1 Maneuver	223	449	-	-	1009
Stage 1	574	-	-	-	-
Stage 2	560	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	223	449	-	-	1009
Mov Cap-2 Maneuver	223	-	-	-	-
Stage 1	574	-	-	-	-
Stage 2	560	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	226	1009
HCM Lane V/C Ratio	-	-	0.369	-
HCM Control Delay (s)	-	-	29.9	0
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	1.6	0

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	14	13	13	325	367	14
Future Vol, veh/h	14	13	13	325	367	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	15	15	374	422	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	834	430	438	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	404	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	338	625	1122	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	625	1122	-	-	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	674	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1122	-	429	-	-
HCM Lane V/C Ratio	0.013	-	0.072	-	-
HCM Control Delay (s)	8.3	0	14	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	67	0	161	2	272	50	67	223	0
Future Vol, veh/h	0	0	1	67	0	161	2	272	50	67	223	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	74	0	179	2	302	56	73	242	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	812	750	242	723	722	330	242	0	0	358	0	0
Stage 1	388	388	-	334	334	-	-	-	-	-	-	-
Stage 2	424	362	-	389	388	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	298	340	797	342	353	712	1324	-	-	1201	-	-
Stage 1	636	609	-	680	643	-	-	-	-	-	-	-
Stage 2	608	625	-	635	609	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	211	316	797	323	328	712	1324	-	-	1201	-	-
Mov Cap-2 Maneuver	211	316	-	323	328	-	-	-	-	-	-	-
Stage 1	635	566	-	679	642	-	-	-	-	-	-	-
Stage 2	454	624	-	590	566	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	18	0	1.9
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1324	-	-	797	526	1201	-	-
HCM Lane V/C Ratio	0.002	-	-	0.001	0.482	0.061	-	-
HCM Control Delay (s)	7.7	0	-	9.5	18	8.2	0	-
HCM Lane LOS	A	A	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	2.6	0.2	-	-

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↗	↗	↗
Traffic Vol, veh/h	52	165	179	286	315	62
Future Vol, veh/h	52	165	179	286	315	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	0	-	-	175
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	179	195	311	342	67

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1043	342	409	0	-	0
Stage 1	342	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	254	701	1150	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	211	701	1150	-	-	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	3.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1150	-	211	701	-	-
HCM Lane V/C Ratio	0.169	-	0.268	0.256	-	-
HCM Control Delay (s)	8.8	-	28.2	11.9	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1	1	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↔			↕	↗
Traffic Vol, veh/h	44	0	52	0	0	0	56	287	0	0	321	52
Future Vol, veh/h	44	0	52	0	0	0	56	287	0	0	321	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	235	-	-	-	-	175
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	0	57	0	0	0	61	312	0	0	349	57

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	783	783	349	840	840	312	406	0	0	312	0	0
Stage 1	349	349	-	434	434	-	-	-	-	-	-	-
Stage 2	434	434	-	406	406	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	311	325	694	285	302	728	1153	-	-	1248	-	-
Stage 1	667	633	-	600	581	-	-	-	-	-	-	-
Stage 2	600	581	-	622	598	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	299	308	694	251	286	728	1153	-	-	1248	-	-
Mov Cap-2 Maneuver	299	308	-	251	286	-	-	-	-	-	-	-
Stage 1	632	633	-	568	550	-	-	-	-	-	-	-
Stage 2	568	550	-	571	598	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.6	0	1.4	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1153	-	-	299	694	-	1248	-	-
HCM Lane V/C Ratio	0.053	-	-	0.16	0.081	-	-	-	-
HCM Control Delay (s)	8.3	-	-	19.3	10.6	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0.3	-	0	-	-

TRAFFIC VOLUME WORKSHEETS

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

1.Harmony Rd @ SR 44
A.M. Peak Hour

Condition	Old Phoenix Road Northbound			Harmony Road Southbound			SR 44 (Greensboro Road) Eastbound			SR 44 (Greensboro Road) Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	63	144	359	566	158	104	65	327	119	357	70	546	178	170	82	430
Adjusted Existing 2021 Volumes:	69	157	391	617	172	113	71	356	130	389	76	595	194	185	89	468
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	76	173	432	681	190	125	78	393	143	429	84	656	214	204	98	516
Total New Trips:	0	32	0	32	49	24	49	122	64	0	0	64	0	0	64	64
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	76	205	432	713	239	149	127	515	207	429	84	720	214	204	162	580

P.M. Peak Hour

Condition	Old Phoenix Road Northbound			Harmony Road Southbound			SR 44 (Greensboro Road) Eastbound			SR 44 (Greensboro Road) Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	55	80	299	434	112	170	104	386	72	244	72	388	405	384	67	856
Adjusted Existing 2021 Volumes:	56	81	302	439	113	172	105	390	73	246	73	392	409	388	68	865
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	62	89	333	484	125	190	116	431	81	272	81	434	451	428	75	954
Total New Trips:	0	38	0	38	70	35	70	175	75	0	0	75	0	0	75	75
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	62	127	333	522	195	225	186	606	156	272	81	509	451	428	150	1029

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

2. Harmony Rd @ Village Ln
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Village Lane Eastbound			Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	8	233	0	241	0	236	5	241	5	0	7	12	0	0	0	0
Adjusted Existing 2021 Volumes:	9	254	0	263	0	257	5	262	5	0	8	13	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	10	280	0	290	0	284	6	290	6	0	9	15	0	0	0	0
Total New Trips:	0	160	0	160	0	122	0	122	0	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	10	440	0	450	0	406	6	412	6	0	9	15	0	0	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Village Lane Eastbound			Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	7	235	0	242	0	334	8	342	6	0	7	13	0	0	0	0
Adjusted Existing 2021 Volumes:	7	237	0	244	0	337	8	345	6	0	7	13	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	8	262	0	270	0	372	9	381	7	0	8	15	0	0	0	0
Total New Trips:	0	188	0	188	0	176	0	176	0	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	8	450	0	458	0	548	9	557	7	0	8	15	0	0	0	0

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

3. Harmony Rd @ Sammons I Pkwy

A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			- Eastbound			Sammons Industrial Parkway (South) Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Existing 2021 Counts during Covid-19:	0	205	51	256	1	245	0	246	0	0	0	0	28
Adjusted Existing 2021 Volumes:	0	223	56	279	1	267	0	268	0	0	0	0	30
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	246	62	308	1	295	0	296	0	0	0	0	33
Total New Trips:	0	160	0	160	0	122	0	122	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	0	406	62	468	1	417	0	418	0	0	0	0	33

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			- Eastbound			Sammons Industrial Parkway (South) Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Existing 2021 Counts during Covid-19:	0	246	9	255	0	279	0	279	0	0	0	0	63
Adjusted Existing 2021 Volumes:	0	248	9	257	0	282	0	282	0	0	0	0	64
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	274	10	284	0	311	0	311	0	0	0	0	70
Total New Trips:	0	188	0	188	0	176	0	176	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	0	462	10	472	0	487	0	487	0	0	0	0	70

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

4. Harmony Rd @ Harmony Ln
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Harmony Lane Eastbound			Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	13	194	0	207	0	223	14	237	15	0	18	33	0	0	0
Adjusted Existing 2021 Volumes:	14	211	0	225	0	243	15	258	16	0	20	36	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	15	233	0	248	0	268	17	285	18	0	22	40	0	0	0
Total New Trips:	0	41	0	41	0	53	0	53	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	15	274	0	289	0	321	17	338	18	0	22	40	0	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Harmony Lane Eastbound			Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	12	239	0	251	0	272	13	285	13	0	12	25	0	0	0
Adjusted Existing 2021 Volumes:	12	241	0	253	0	275	13	288	13	0	12	25	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	13	266	0	279	0	304	14	318	14	0	13	27	0	0	0
Total New Trips:	0	59	0	59	0	63	0	63	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	13	325	0	338	0	367	14	381	14	0	13	27	0	0	0

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

5. Harmony Rd @ Scott Rd
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Private Drwy Eastbound			Scott Rd Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	0	79	24	107	210	1	318	0	1	3	4	46	1	33	80
Adjusted Existing 2021 Volumes:	0	86	26	112	229	1	347	0	1	3	4	50	1	36	87
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	95	29	124	253	1	383	0	1	3	4	55	1	40	96
Total New Trips:	0	32	8	40	43	0	43	0	0	0	0	11	0	0	11
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	0	127	37	164	296	1	426	0	1	3	4	66	1	40	107

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Private Drwy Eastbound			Scott Rd Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	2	202	34	238	60	155	0	215	0	0	1	1	49	0	145	194
Adjusted Existing 2021 Volumes:	2	204	34	240	61	157	0	218	0	0	1	1	49	0	146	195
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	2	225	38	265	67	173	0	240	0	0	1	1	54	0	161	215
Total New Trips:	0	47	12	59	0	50	0	50	0	0	0	0	13	0	0	13
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	2	272	50	324	67	223	0	290	0	0	1	1	67	0	161	228

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

6. Harmony Rd @ Site Drwy 1(S)
A.M. Peak Hour

Condition	Harmony Road Northbound				Harmony Road Southbound				Site Driveway 1 (Southern) Eastbound				- Westbound				
	L		R		L		R		L		R		L		R		
	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	
Existing 2021 Counts during Covid-19:	0	207	0	207	0	246	0	246	0	0	0	0	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	226	0	226	0	268	0	268	0	0	0	0	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	249	0	249	0	296	0	296	0	0	0	0	0	0	0	0	0
Total New Trips:	128	32	0	160	0	24	27	51	20	0	97	117	0	0	0	0	0
Pass-by's Trips:	1	-1	0	0	0	-1	1	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	129	280	0	409	0	319	28	347	20	0	97	117	0	0	0	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound				Harmony Road Southbound				Site Driveway 1 (Southern) Eastbound				- Westbound				
	L		R		L		R		L		R		L		R		
	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	T	Tot	
Existing 2021 Counts during Covid-19:	0	248	0	248	0	279	0	279	0	0	0	0	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	250	0	250	0	282	0	282	0	0	0	0	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	276	0	276	0	311	0	311	0	0	0	0	0	0	0	0	0
Total New Trips:	151	38	0	189	0	35	31	66	29	0	140	169	0	0	0	0	0
Pass-by's Trips:	28	-28	0	0	0	-31	31	0	23	0	25	48	0	0	0	0	0
Future 2025 Traffic Volumes:	179	286	0	465	0	315	62	377	52	0	165	217	0	0	0	0	0

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

7. Harmony Rd @ Site Drwy 2(N)
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Site Driveway 2(Northern) Eastbound			Private Driveway Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Existing 2021 Counts during Covid-19:	0	207	0	0	246	0	246	0	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	226	0	0	268	0	268	0	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	249	0	0	296	0	296	0	0	0	0	0	0
Total New Trips:	32	20	0	52	27	27	54	20	0	24	44	0	0
Pass-by's Trips:	1	-1	0	0	-1	1	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	33	268	0	301	322	28	350	20	0	24	44	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Site Driveway 2(Northern) Eastbound			Private Driveway Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Existing 2021 Counts during Covid-19:	0	248	0	0	279	0	279	0	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	250	0	0	282	0	282	0	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	276	0	0	311	0	311	0	0	0	0	0	0
Total New Trips:	38	29	0	67	31	31	62	29	0	35	64	0	0
Pass-by's Trips:	18	-18	0	0	-21	21	0	15	0	17	32	0	0
Future 2025 Traffic Volumes:	56	287	0	343	321	52	373	44	0	52	96	0	0

July 23, 2021

Ms. Lisa Jackson
Deputy County Manager
117 Putnam Drive
Eatonton, GA 31024

Re: DRI #3377, Lake Oconee Helms College

Dear Ms. Jackson:

The Middle Georgia Regional Commission (MGRC) has completed its review of the Development of Regional Impact (DRI) for the Lake Oconee Helms College Development in Putnam County. MGRC conducted a careful review of the information submitted by the local government and comments received from potentially affected agencies. Two positive comments were received from the Putnam County Board of Commissioners and from the City of Eatonton. These comments are provided below:

- *Putnam County:*

The BOC feels the project will generate sufficient revenue to offset any additional requirements for services that the project may require. The project will provide the potential for both county employment opportunities and additional sales tax revenue.

- *City of Eatonton:*

This project will have significant positive impact on our community in several different ways. The increase in property tax revenue along with the educational opportunities as well as the housing and retail components are all welcomed additions to our community and region.

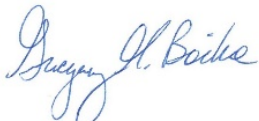
MGRC also reviewed the proposed project's potential regional and interjurisdictional impact and consistency with the Department of Community Affairs Quality Community Objectives, Middle Georgia Regional Plan, and Middle Georgia Regionally Important Resources Plan. After reviewing the information, MGRC staff notes that the proposed development site lies within an area of projected rapid growth as identified in the 2016 Regional Plan. It is recommended that local governments "take action early to ensure that growth occurs in a manner which makes it possible to provide necessary public services," (2016-2036 Plan for a Thriving Middle Georgia, pg. 17-18).

Ms. Lisa Jackson
Re: DRI 3377
July 23, 2021
Page Two

This project will also help the region take advantage of the identified opportunity for “coordination with technical colleges and universities ... to provide job skills training to low-skill employees,” (2016-2036 Plan for a Thriving Middle Georgia, pg. 45).

Please be advised that this concludes the DRI Review Process and Putnam County may proceed with the final official action it deems appropriate regarding the proposed project. It is encouraged that Putnam County takes the materials presented in the DRI report into consideration when rendering its decision. The enclosed information is advisory in nature and under no circumstances should be considered as binding or infringing upon the host jurisdiction’s right to determine for itself the appropriateness of development within its boundaries.

Sincerely,



Greg Boike
Director of Public Administration

Enclosure

cc: Affected Local Governments and Other Interested Parties (via email)
Georgia Department of Community Affairs (via email)

**Development of Regional Impact
Comments from Affected Parties**

Project ID: DRI #3377 – Lake Oconee Helms College (Putnam County)

PUTNAM COUNTY BOARD OF COMMISSIONERS

Commenting Organization: _____

Street Address: 117 PUTNAM DR
EATONTON, GA 31024

City: EATONTON State: GA Zip Code: 31024

Contact Person: BILLY WEBSTER Phone: 478-288-2188 Email: bwebster@putnamcountyga.us

Do you believe your jurisdiction will be affected by the proposed development? YES NO

Please describe the effects (positive or negative) that the proposed project could have on your jurisdiction:

The BOC feels the project will generate sufficient revenue to offset any additional requirements for services that the project may require, The project will provide the potential for both county employment opportunities and additional sales tax revenue.

Form Completed by: Billy Webster Title: Chairman
Signature: Billy Webster Date: July 19, 2021

Mail, Fax, or Email this form to: Greg Boike
Middle Georgia Regional Commission
175 Emery Highway, Suite C
Macon, GA 31217
P: 478-751-6160
F: 478-751-6517
E: gboike@mg-rc.org

**Comments on DRI #3377 will be accepted beginning on Wednesday, July 7, 2021.
All comments are due by Thursday, July 22, 2021.**

This request for comments has been sent to the following potentially affected parties: MGRC Council; City/county chief elected officials and key staff in the following counties: Putnam, Baldwin, Greene, Hancock, Jasper, Jones, and Morgan; School superintendents in the preceding counties; Development authorities of the preceding counties; GA Department of Natural Resources; GA Department of Transportation; Georgia Environmental Finance Authority; GA Department of Public Health; U.S. Fish & Wildlife Service; Northeast Georgia Regional Commission, and Central Savannah River Area Regional Commission.

Development of Regional Impact
Comments from Affected Parties

Project ID: DRI #3377 – Lake Oconee Helms College (Putnam County)

Commenting Organization: City of Eatonton

Street Address: 201 North Jefferson Ave.

City: Eatonton State: GA Zip Code: 31024

Contact Person: Gary Sanders Phone: (706) 485-3311 Email: gsanders@eatontonga.us

Do you believe your jurisdiction will be affected by the proposed development? YES NO

Please describe the effects (positive or negative) that the proposed project could have on your jurisdiction:

This project will have significant positive impact on our community in several different ways. The increase in property tax revenue along with the educational opportunities as well as the housing and retail components are all welcomed additions to our community and region.

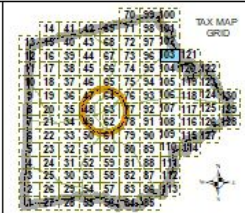
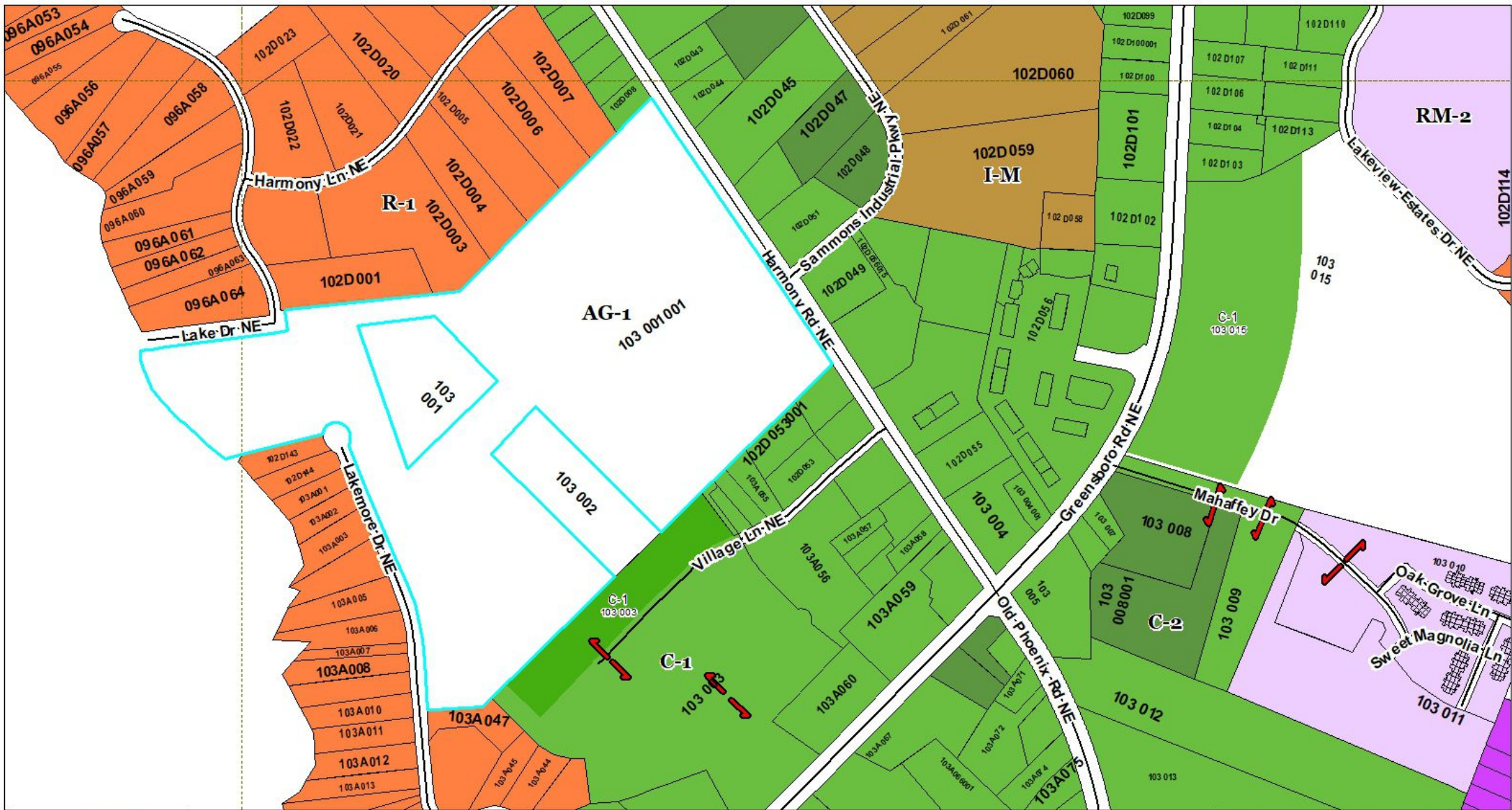
Form Completed by: John Reid Title: Mayer

Signature: [Handwritten Signature] Date: 07/22/2021

Mail, Fax, or Email this form to: Greg Boike
Middle Georgia Regional Commission
175 Emery Highway, Suite C
Macon, GA 31217
P: 478-751-6160
F: 478-751-6517
E: gboike@mg-rc.org

Comments on DRI #3377 will be accepted beginning on Wednesday, July 7, 2021.
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- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel Hooks

GEOGRAPHIC FEATURE LEGEND

Overlay District	AG-2	C-2 CITY	IND-2 CITY	R - 1 CITY	RM-2
No Code	C-1	I-M	MHP	R - 2 CITY	R-1R
AG-1	C-1 CITY	IND-1 CITY	PUBLIC	R - 3 CITY	R-2
AG-1 CITY	C-2	IND-2	PUBLIC CITY	R - 4 CITY	RM-1



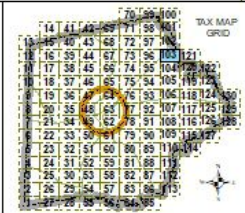
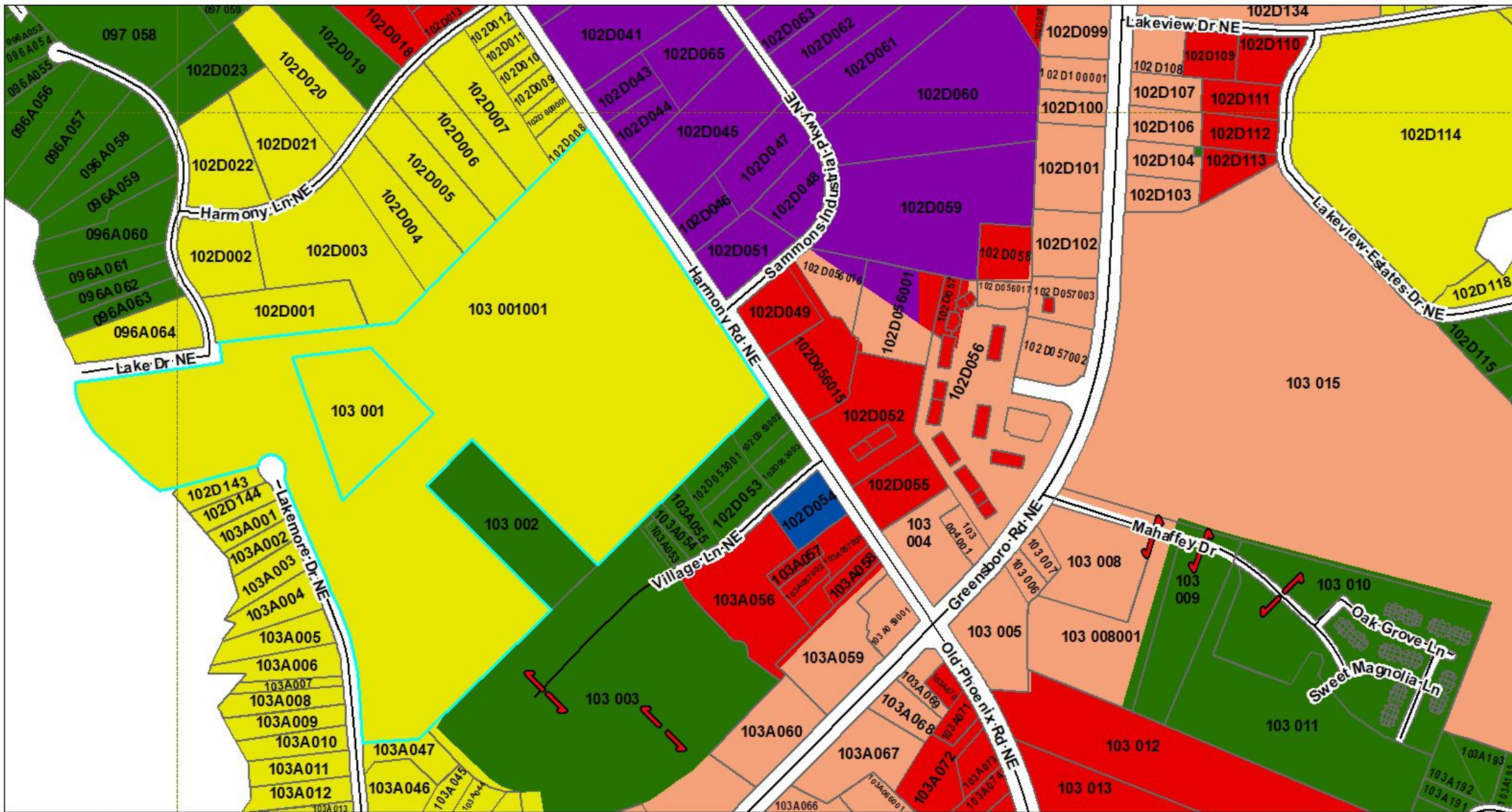
Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
 ZONING MAPS

MAP 103

363

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



GEOGRAPHIC FEATURE LEGEND

Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel Hooks			

LMGR
 Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
 FUTURE LAND USE MAPS

MAP 102

364

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox**, to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].* The applicant is requesting to rezone 66.56 acres from AG to C-PUD. If approved, the subject property will be combined with the interior property (Map 103, Parcel 001). The purpose of rezoning this property is to develop a new, mixed-use development to support the non-profit mission and vision of Goodwill Industries of Middle Georgia's Helms College expansion. Helms Career Institute was established in 2007 as a private, independent, post-secondary school that provides experiential learning and education for workforce development. The proposed development is a part of a strategic plan for expansion that supports the college's future growth to meet local talent needs in high-demand occupations. It will include retail and hotel components supporting and complimenting degrees sponsored by Helms College, residential units for students, recreation amenities such as tennis courts, jogging trails, agritourism, and a conference retreat center with a restaurant. The agritourism aspect will include gardens and farms that will provide hands-on experience for students and community members to learn about the farm-to-table philosophies and offerings.

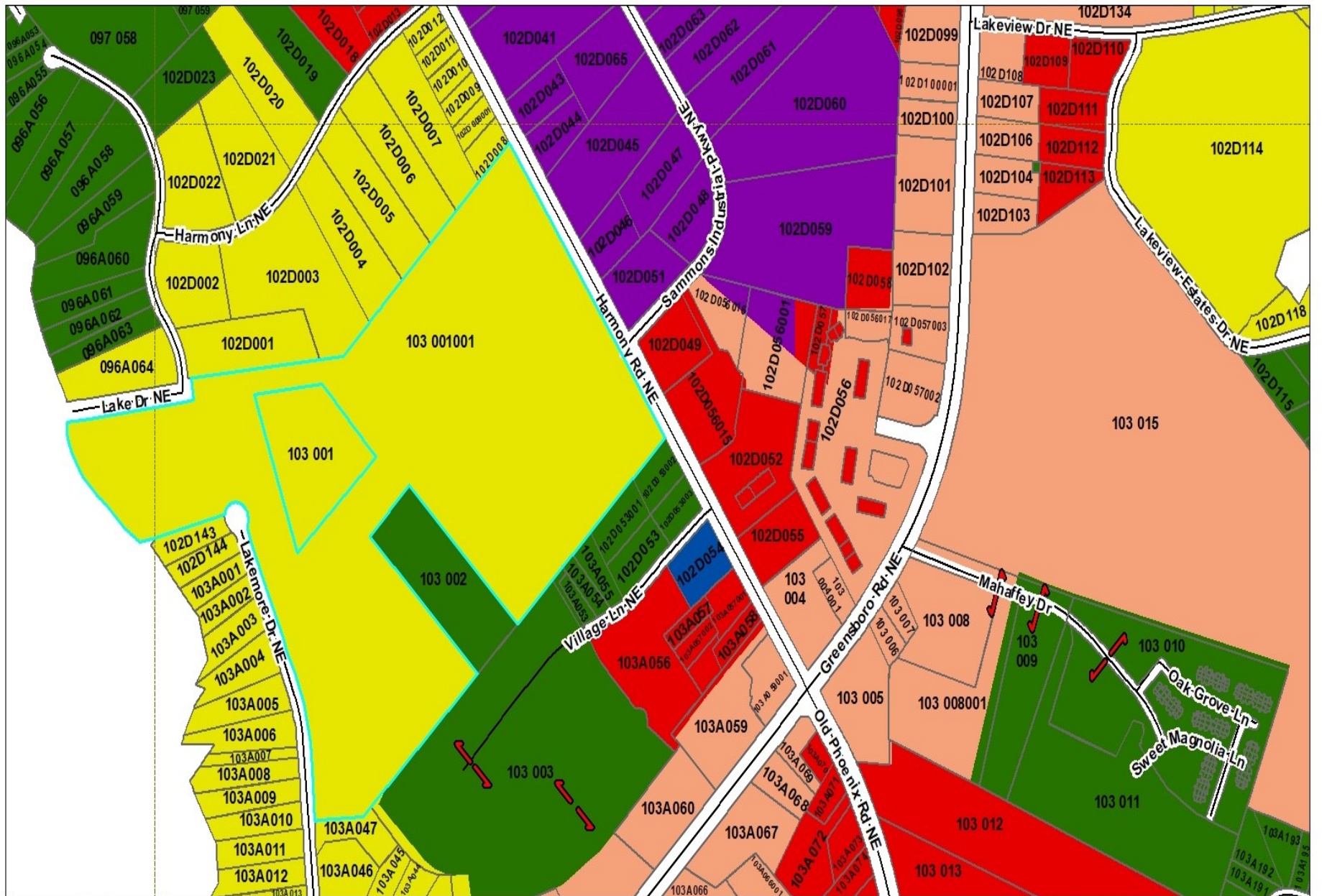
According to the traffic study, the proposed development will consist of the following: a Goodwill store; Helms College for 50 students; Edgar's Bakery; retailing including a spa; a high-turn-over sit-down restaurant; a supermarket; 127 multi-family residential units; 18 student housing units; 41 vacation villas; an event/banquet hall, and a 175-room hotel. Piedmont Water will provide water and sewer. As proposed, the development will be completed in four phases as determined by the market conditions and demand. Phase one will consist of the Goodwill store, Helms College for 25 students, Edgar's Bakery, and 3,400 square feet of retail is to be completed by 2023. The second phase will include an additional 25 students to the college, 11,200 square feet of retail, 42 multi-family units, and 6 student housing units to be finished in 2024. Phases three and four will consist of 12,320 square feet of retail, 10,600 square feet of a sit-down restaurant, a supermarket, 85 Multi-family residential units, 12 student housing units, 41 vacation villas, an event/banquet hall, and a 175-room hotel.

The traffic analysis projects that the total site-generated trips will be 10,975, and the mixed-use reduction is 1,814. Thus the 24-hour total volume of two-way traffic will be 9,161. However, it concludes that the most significant impact from the proposed development will be during the am and pm peak hours. There will be a maximum of 29 vehicles turning left at either driveway, 35 vehicles turning right at the northern driveway, and 140 at the southern driveway. The turning movement will average approximately 1 to 2 vehicles per minute, according to the study. It further adds that the intersection of Harmony Rd., SR 44, and Old Phoenix Rd. currently has a large volume of right-turn movement during peak hours. There are long delays at this intersection, given that there is no dedicated right-turn lane. Although delays are in occurrence, the study states that there will be no significant impact on the traffic if the developer will construct left-turn lanes and deceleration lanes. In addition, the current delays will improve once GDOT completes the proposed SR 44 widening project.

There will be two full-access entrances on Harmony Road identified as Driveway One (southern) and Driveway Two (northern). The study further recommends that the first driveway has two entering and two exit lanes while the second driveway has one entering and two exit lanes. The following is recommended for each driveway: the eastbound lane approach should have a separate left and right-turn lane for exiting traffic; a northbound left-turn lane to be constructed on Harmony Road for entering traffic; a southbound deceleration lane to be installed on Harmony Road for entering traffic. The subject property is adjacent to a combination of residential, commercial, and agriculture zoned properties. It fronts Harmony Road, which is a main arterial road. The property also has frontage on Lake Drive and Lakemore Drive.

As stated in Sec. 66-115(b) of the Putnam County Code of Ordinances, the C-PUD zoning allows more than one type of use in a building or set of buildings, including some combination of residential and selective nonresidential uses such as commercial, office and institutional uses. Furthermore, the proposed development is consistent with the existing residential, multi-family, and commercial developments in this area. The comprehensive plan matches the proposed use for future residential and mixed-use development. In the final DRI report, the Middle Georgia Regional Commission noted that the proposed development site lies within an area of projected rapid growth as identified in the 2016 Regional Plan. The report recommends that the local government take action early to ensure that growth occurs in a manner that makes it possible to provide necessary public services.

By implementing the required conditions, the proposed project should have minimal impact on the adjacent properties, roads, and nearby intersections. There is no evidence that the proposed development would cause excessive or burdensome use of public services, nor should it adversely affect police, fire protection, or sewer services. If approved, the staff recommends that the developer should install a deceleration lane and left-turn lane at the main entrances of the development. There shall be no entrance on Lakemore Drive and only an emergency gated entrance on Lake Drive.



GEOGRAPHIC FEATURE LEGEND

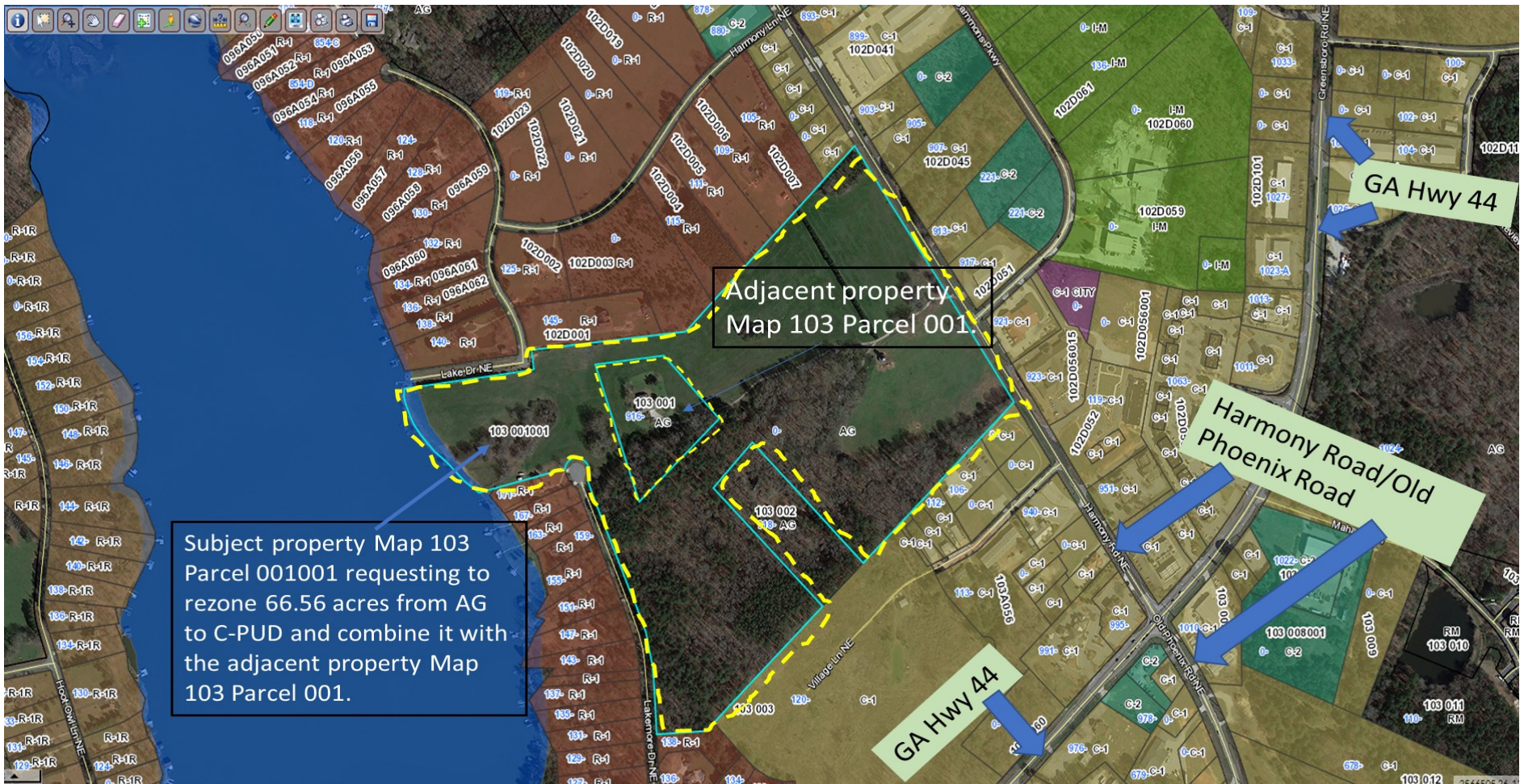
Estonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
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Parcels			
Parcel Hooks			

MGRC
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PUTNAM COUNTY, GEORGIA
 FUTURE LAND USE MAPS

MAP 103

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



Staff recommendation is for approval to rezone 66.56 acres from AG to C-PUD at 916 Harmony Road [Map 103, Parcel 001001, District 3] with the following conditions:

- (1) The developer shall construct a deceleration lane and turn lane in accordance with the Georgia Department of Transportation Regulations for Driveway & Encroachment Control to service the two main entrances on Harmony Road. Additional right-of-way to accommodate the deceleration lane and a ten-foot shoulder shall be dedicated by the developer to the county. It shall be completed by the developer prior to the completion of phase one.
- (2) The developer shall direct construction traffic through the second main entrance located the farthest away from the intersection of Harmony Road and Hwy 44.
- (3) There shall be no entrance/exit located on Lakemore Road
- (4) Only a gated and locked Emergency Exit shall be located on Lake Drive.

New Business
Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

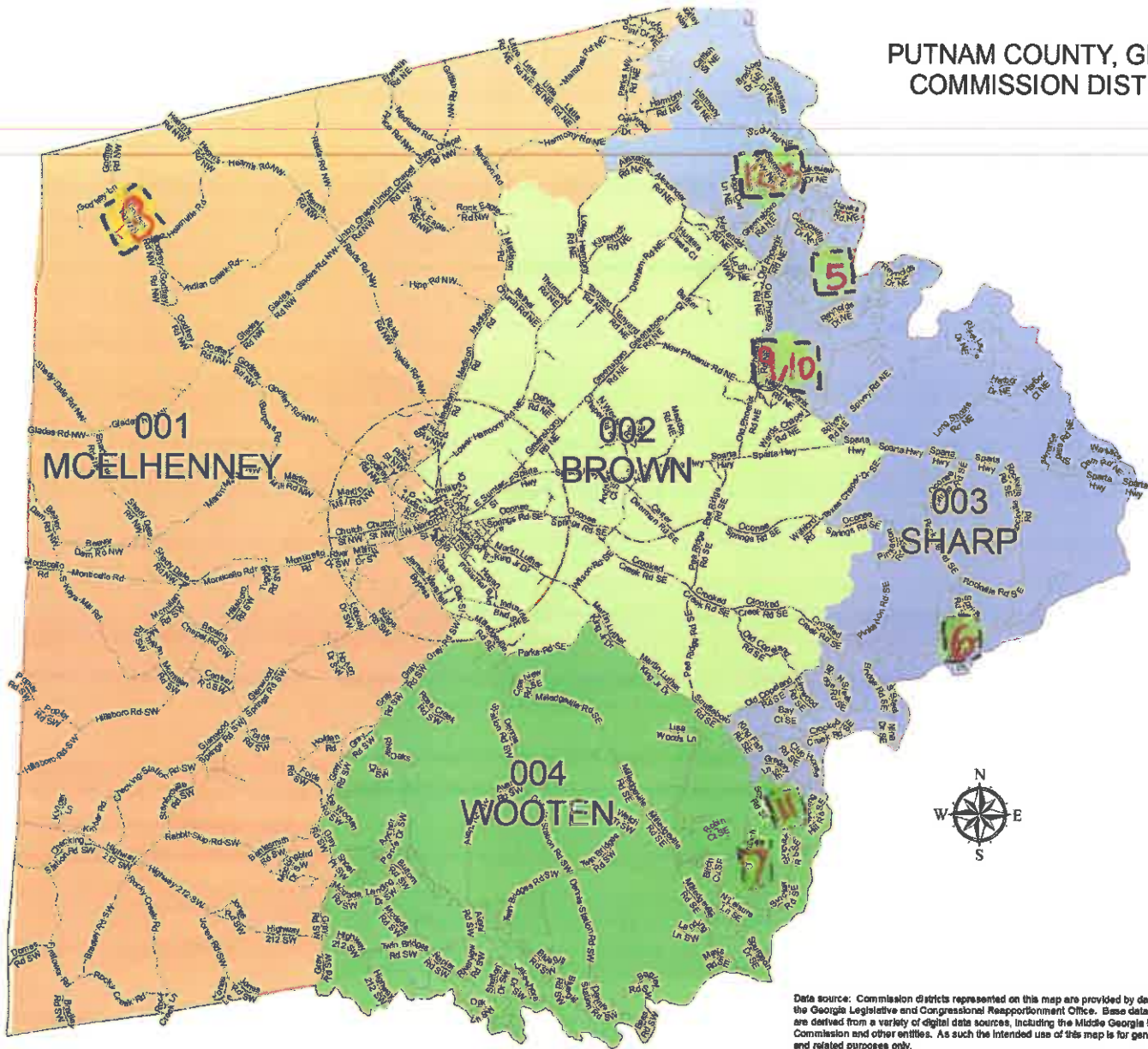
The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.

File Attachments for Item:

13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. **[Map 103, Parcel 001, District 3].***

PUTNAM COUNTY, GEORGIA
COMMISSION DISTRICTS



5. Request by **Wallace Gerald Wright** for a side yard setback variance at 149 Collis Marina Road. Presently zoned R-1 [Map 104B, Parcel 013, District 3].
6. Request by **Thomas & Gwen Ralston** for a rear yard setback variance at 189 S. Spring Road. Presently zoned R-2 [Map 115C, Parcel 019, District 3].
7. Request by **Thomas W Gardner** for a side and rear yard setback variance at 348A Cold Branch Road. Presently zoned R-2 [Map 112C, Parcel 009, District 4].
8. Request by **Mt. Pleasant Baptist Church** for a side yard setback variance at 1628 Godfrey Road NW. Presently zoned AG. [Map 016, Parcel 015, District 1].
9. Request by **SDH Atlanta LLC, Agent for Maddox Family Partnership LLLP** for a side yard setback variance on Old Phoenix Road. Presently zoned AG. [Map 106, Parcel 002, District 2].
10. Request by **SDH Atlanta LLC, agent for Maddox Family Partnership LLLP** to rezone 29.54 on Old Phoenix Road from AG to R-PUD. [Map 106, Parcel 002, District 2].*
11. Request by **Duane Gentes** to rezone 5.40 acres on Emory Drive from R-1 to R-2. [Map 111, Parcel 001044, District 4].*
12. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 66.56 acres at 916 Harmony Road from AG to C-PUD. [Map 103, Parcel 001001, District 3].*
13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].*

APPLICATION FOR REZONING

REZONING

PERMIT# PLAN 2021-01329

APPLICATION NO. _____

DATE: June 24, 2021

MAP _____ PARCEL 103 001

ZONING DISTRICT A5 - Agricultural AG-AC

1. Owner Name: Peggy Allen, Susan Fox

2. Applicant Name (If different from above): James Stiff, Goodwill Industries of Middle Georgia, Inc.

3. Mailing Address: 3145 Washington Road, Augusta GA 30907

4. Email Address: jstiff@goodwillworks.org

5. Phone: (home) _____ (office) 706.854.4769 (cell) 478.471.4888

6. The location of the subject property, including street number, if any: 916 Harmony Road, Eatonton, GA 31024
Parcel A

7. The area of land proposed to be rezoned (stated in square feet if less than one acre):
5.000 Acres

8. The proposed zoning district desired: C-PUD

9. The purpose of this rezoning is (Attach Letter of Intent)
Please see enclosed Letter of Intent, Purpose and Impact Statement.

REC'D 2021 JUN 24

10. Present use of property: Agricultural & Residential Desired use of property: Mixed Use

11. Existing zoning district classification of the property and adjacent properties:
Existing: Agricultural & Residential
North: Residential South: Agricultural East: Commercial West: Residential

12. Copy of warranty deed for proof of ownership and if not owned by applicant, please attach a signed and notarized letter of agency from each property owner for all property sought to be rezoned.

13. Legal description and recorded plat of the property to be rezoned.

14. The Comprehensive Plan Future Land Use Map category in which the property is located. (If more than one category applies, the areas in each category are to be illustrated on the concept plan. See concept plan insert.): _____

15. A detailed description of existing land uses: _____
Existing zoning is agricultural with a residential unit on-site. There is a single family home on the property and a horse barn and pasture.

16. Source of domestic water supply: well _____, community water _____, or private provider x.
If source is not an existing system, please provide a letter from provider.



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ◊ Eatonton, GA 31024

Tel: 706-485-2776 ◊ 706-485-0552 fax ◊ www.putnamcountyga.us

- 17. Provision for sanitary sewage disposal: septic system _____, or sewer . If sewer, please provide name of company providing same, or, if new development, provide a letter from sewer provider.
- 18. Complete attachment of Disclosure of Campaign Contributions Form by the applicant and/or the applicant's attorney as required by the Georgia Conflict of Interest in Zoning Act (O.C.G.A. 36-67A).
- 19. The application designation, date of application and action taken on all prior applications filed for rezoning for all or part of the subject property. (Please attach on separate sheet.)
- 20. Proof that property taxes for the parcel(s) in question have been paid.
- 21. Concept plan.
 - If the application is for less than 25 single-family residential lots, a concept plan need not be submitted. (See attachment.)
 - A concept plan may be required for commercial development at director's discretion
- 22. Impact analysis.
 - If the application is for less than 25 single-family residential lots, an impact analysis need not be submitted. (See attachment.)
 - An Impact analysis (including a traffic study) is required when rezoning from residential zoned or used property to commercial or industrial districts.

THE ABOVE STATEMENTS AND ACCOMPANYING MATERIALS ARE COMPLETE AND ACCURATE. APPLICANT HEREBY GRANTS PERMISSION FOR PLANNING AND DEVELOPMENT PERSONNEL OR ANY LEGAL REPRESENTATIVE OF PUTNAM COUNTY TO ENTER UPON AND INSPECT THE PROPERTY FOR ALL PURPOSES ALLOWED AND REQUIRED BY THE PUTNAM COUNTY CODE OF ORDINANCES.

[Signature] 6/23/21
Signature (Property Owner)

James I. Stitt 6/22/21
Signature (Applicant) (Date)

[Signature]
Notary Public



[Signature]
Notary Public

ELLEN H. HARPER
NOTARY PUBLIC
Columbia County
State of Georgia
My Comm. Expires February 18, 2025

Office Use	
Paid: \$ <u>275⁰⁰</u> (cash) _____ (check) x _____ (credit card) <input checked="" type="checkbox"/>	
Receipt No. _____	Date Paid: <u>06/24/21</u>
Date Application Received: _____	
Reviewed for completeness by: _____	
Date of BOC hearing: _____	Date submitted to newspaper: _____
Date sign posted on property: _____	Picture attached: yes _____ no _____



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

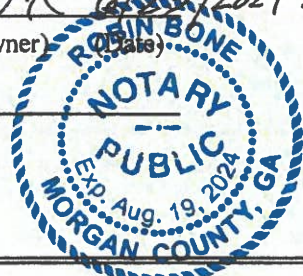
Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

- 17. Provision for sanitary sewage disposal: septic system _____, or sewer . If sewer, please provide name of company providing same, or, if new development, provide a letter from sewer provider.
- 18. Complete attachment of Disclosure of Campaign Contributions Form by the applicant and/or the applicant's attorney as required by the Georgia Conflict of Interest in Zoning Act (O.C.G.A. 36-67A).
- 19. The application designation, date of application and action taken on all prior applications filed for rezoning for all or part of the subject property. (Please attach on separate sheet.)
- 20. Proof that property taxes for the parcel(s) in question have been paid.
- 21. Concept plan.
 - If the application is for less than 25 single-family residential lots, a concept plan need not be submitted. (See attachment.)
 - A concept plan may be required for commercial development at director's discretion
- 22. Impact analysis.
 - If the application is for less than 25 single-family residential lots, an impact analysis need not be submitted. (See attachment.)
 - An Impact analysis (including a traffic study) is required when rezoning from residential zoned or used property to commercial or industrial districts.

THE ABOVE STATEMENTS AND ACCOMPANYING MATERIALS ARE COMPLETE AND ACCURATE. APPLICANT HEREBY GRANTS PERMISSION FOR PLANNING AND DEVELOPMENT PERSONNEL OR ANY LEGAL REPRESENTATIVE OF PUTNAM COUNTY TO ENTER UPON AND INSPECT THE PROPERTY FOR ALL PURPOSES ALLOWED AND REQUIRED BY THE PUTNAM COUNTY CODE OF ORDINANCES.

Susan A. [Signature] 6/22/21 James H. [Signature] 6/22/21
 Signature (Property Owner) Signature (Applicant) (Date)

[Signature]
 Notary Public



[Signature]
 Notary Public

ELLEN H. HARPER
 NOTARY PUBLIC
 Columbia County
 State of Georgia
 My Comm. Expires February 18, 2025

Office Use	
Paid: \$ _____ (cash) _____ (check) <input checked="" type="checkbox"/> _____ (credit card) _____	
Receipt No. _____	Date Paid: _____
Date Application Received: _____	
Reviewed for completeness by: _____	
Date of BOC hearing: _____	Date submitted to newspaper: _____
Date sign posted on property: _____	Picture attached: yes _____ no _____

Item 9: Letter of Intent

LETTER OF INTENT – PURPOSE OF REZONING APPLICATION

Updated: June 22, 2021

This letter and its enclosed components detail the intent to rezone two (2) parcels in Eatonton, Georgia, along Harmony Road.

The purpose of this rezoning application is to support a new, mixed-use development to support the non-profit mission and vision of [Goodwill Industries](#) of Middle Georgia’s Helms College expansion. Since its creation as the Helms Career Institute in 2007, the modern-day [Helms College](#) is a private, independent, postsecondary career school that provides experiential learning and career education for workforce development.

As a part of its strategic plan, Goodwill wishes to expand Helms College with a new, mixed-use development on Harmony Road in Eatonton, Georgia, to support the College’s future growth to meet local talent needs in high demand occupation areas. Hereby referenced as the Lake Oconee Helms College campus, the proposed development will include:

- Educational buildings and classrooms.
- Retail and hotel components that support and complement degrees sponsored by Helms College.
- Residential units for students and others.
- Recreation amenities for guests and possibly nearby residents via a private club membership, such as tennis courts, jogging trails, and agritourism offerings.
- A conference retreat center with restaurant venues.

Intertwined throughout the campus is an agritourism theme, including gardens and farms, to provide hands-on experience for students and members of the community to learn about farm-to-table philosophies and offerings.

Item 12: Recorded Deeds & Letter of Agency

After Recording Return to:
Blasingame, Burch, Carrard & Ashley, P.C.
1040 Founders Row, Suite B
Greensboro, Georgia 30642
15668-0004jvd

DOCS 004341
FILED IN OFFICE
08/21/2008 02:26 PM
BK=647 PG=198-198
SHEILA H. PERRY
CLERK OF SUPERIOR
COURT
Putnam Co Clerk of Court
Sheila H. Perry
REAL ESTATE TRANSFER TAX
PAID= \$0.00
PT-117-2008-001193

QUITCLAIM DEED

STATE OF GEORGIA, GREENE COUNTY

THIS INDENTURE, made the 30th day of July, 2008, by and between Nancy J. Allen, as party of the first part, hereinafter called Grantor, and Allen Investment Partners, L.L.P., its heirs, successors and assigns, as party of the second part, hereinafter called Grantee, (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH:

That Grantor, for and in consideration of the sum of One Dollar (\$1.00) and other valuable consideration in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents does hereby remise, convey and forever QUITCLAIM unto the said Grantee, all of its entire right, title and interest passing hereunder, whatever the same be, in and to that certain property described as follows, to wit:

All that tract or parcel of land situate, lying, and being in 389th GM District, 3rd Land District, and Land Lots 341 and 352 of Putnam County, Georgia more particularly described as Parcel "B", containing 66.557 acres, more or less, as shown on that certain plat of survey prepared for Nancy Johnson Allen by James E. Smith, Jr., RLSN 1895, dated June 16, 2008 and recorded at Plat Book 32, Page 76, Putnam County, Georgia real estate records. Said plat of survey and the recorded copy thereof are incorporated herein by reference for all purposes.


This Conveyance is SUBJECT TO a reservation of 20' Ingress & Egress Easement as shown on the plat of survey referenced in the paragraph immediately above to Grantor, her heirs, successors and assigns that shall be appurtenant to and run with the title to Parcel "A", containing 5.000 acres, more or less, as shown on said plat of survey. Said 20' Ingress & Egress Easement shall be for the purpose of vehicular and pedestrian access to and from Parcel "A" and Harmony-Davis Road, being a public road with a 80' right-of-way.

TO HAVE AND TO HOLD the said described premises to Grantee, so that neither Grantor nor any person or persons claiming under Grantor shall at any time, by any means or ways, have, claim or demand any right or title to said premises or appurtenances, or any rights thereof.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered
in the presence of:

Sandra W. Page

Notary Public
My Commission Expires: _____
(AFFIX NOTARY SEAL)


Nancy J. Allen (SEAL)

Nancy J. Allen

E:\DATA\WPDOCS\15668\4\QCD Allen Investment Partners.doc

045046

275
457

GEORGIA, PUTNAM COUNTY
CLERK OF SUPERIOR COURT
FILED 12-14-98
TIME 11:10 AM
RECORDED 12-14-98
BOOK 157 PAGE 157-457
ALLEN J. WILKINSON
DEPUTY CLERK

When recorded, please return to:
Bussart & Liu, LLC
2500 Windy Ridge Parkway, Ste 320
Atlanta, GA 30339
B&L File #98-0312

Putnam County Clerk
Real Estate Transfer Tax
Paid \$ 0
Date 12-14-98
Allyn H. Bell
Deputy Clerk of Superior Court

ASSENT OF EXECUTOR TO DEVISE

State of Georgia
County of Fulton

WHEREAS, CHARLES MITCHELL ALLEN ("Decedent") died a resident of Fulton County, Georgia, leaving a will which was probated in solemn form in said County on August 30, 1995; and

WHEREAS, the undersigned, NANCY JOHNSON ALLEN, was qualified as Executrix of said Estate and was issued Letters Testamentary, which are recorded at LT Book 151, Page 157, Fulton County Records; and

WHEREAS, under the terms of said will the following described property was devised to NANCY J. ALLEN:

SEE EXHIBIT "A" ATTACHED HERETO AND INCORPORATED HEREIN BY REFERENCE.

WHEREAS, the undersigned duly qualified as Executor of the estate of the Decedent and is now administering the estate under the terms of said will; and it has been determined that all debts and claims against the estate have been fully paid.

NOW, THEREFORE, the undersigned, as Executor of the Will of the Decedent, hereby assents to the devise of said property under the terms of said will, so that full fee simple title thereto is vested in NANCY J. ALLEN, as provided in said will.

WITNESS my hand and seal, this 21st day of July, 1998.

Signed, sealed and delivered
in the presence of:

Lois Alexander
Witness
Paul E. Frank
Notary Public

Nancy Johnson Allen (seal)
NANCY JOHNSON ALLEN, as Executrix
under the Last Will and Testament of
Charles M. Allen, deceased

(Affix Notarial Seal)



EXHIBIT "A"

ALL THAT TRACT or parcel of land lying and being in Land Lot 341 of the 3rd Land District, 389th G.M. District, Putnam County, Georgia, and being more particularly described as follows:

TO FIND THE TRUE POINT OF BEGINNING, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence south 45 degrees 22 minutes 07 seconds west a distance of 1,049.91 feet to an iron pin set and the TRUE POINT OF BEGINNING; thence south 45 degrees 22 minutes 07 seconds west a distance of 286.87 feet to an iron pin set; thence north 43 degrees 37 minutes 02 seconds west a distance of 782.18 feet to an iron pin set; thence north 48 degrees 22 minutes 58 seconds east a distance of 286.82 feet to an iron pin set; thence south 43 degrees 37 minutes 02 seconds east a distance of 787.10 feet to an iron pin set and the point of beginning; containing approximately 5.20 acres and being more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.

Being a portion of the property conveyed from John E. Singleton to Charles M. Allen and Nancy J. Allen by warranty deed dated October 4, 1984 and recorded at Deed Book 84, Page 156, Putnam County, Georgia Records.

TOGETHER WITH A 20-FOOT WIDE EASEMENT FOR INGRESS AND EGRESS TO AND FROM HARMONY-DAVIS ROAD, and being more particularly described as follows:

TO FIND THE CENTERLINE OF THE EASEMENT, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence north 32 degrees 57 minutes 18 seconds west along the westerly right of way of Harmony-Davis Road a distance of 556.70 to the centerline of a 10-foot drive and the CENTERLINE OF THE EASEMENT; thence the following calls along the centerline of said easement: south 80 degrees 34 minutes 20 seconds west 64.20 feet to a point; south 69 degrees 50 minutes 05 seconds west 22.18 feet to a point; south 54 degrees 03 minutes 54 seconds west 63.70 feet to a point; south 57 degrees 25 minutes 44 seconds west 97.12 feet to a point; south 57 degrees 07 minutes 39 seconds west 57.23 feet to a point; south 81 degrees 19 minutes 59 seconds west 92.08 feet to a point; south 70 degrees 27 minutes 06 seconds west 46.04 feet to a point; south 74 degrees 46 minutes 22 seconds west 19.00 feet to a point; south 16 degrees 31 minutes 51 seconds east 88.64 feet to a point; south 22 degrees 52 minutes 57 seconds west 143.24 feet to a point; south 33 degrees 34 minutes 26 seconds west 77.61 feet to a point; south 35 degrees 23 minutes 28 seconds west 193.38 feet to a point; south 50 degrees 29 minutes 35 seconds east 80.97 feet to a point; south 35 degrees 43 minutes 13 seconds west 71.40 feet to a point; south 44 degrees 47 minutes 48 seconds west 108.76 feet to a point; and south 26 degrees 33 minutes 55 seconds west 93.40 feet to a point located at the edge of the 5.20 property described above; all as more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.

DOC# 000177
FILED IN OFFICE
01/17/2012 01:50 PM
BK:740 PG:112-114
SHEILA H. PERRY
CLERK OF COURT
PUTNAM COUNTY

After Recording Return to:

Lantz & Reeves, P.C.
3735 Cherokee Street
Kennesaw, Georgia 30144
770 424-8131

Sheila H. Perry SRM

REAL ESTATE TRANSFER T
AX
PAID: \$0.00

—Above This Line Reserved For Official Use Only—

DEED PREPARED ONLY.
NO TITLE EXAMINATION PERFORMED.

PT61-117-2012-000053

EXECUTOR'S DEED

STATE OF GEORGIA
COUNTY OF PUTNAM

THIS INDENTURE, made this the 13th day of December, 2011, between JANET ALLEN CRITTENDEN, as Executor of the Last Will and Testament of NANCY JOHNSON ALLEN, late of the State of Georgia and County of Putnam, deceased, as party of the first part (the "Grantor"), and ALLEN INVESTMENT PARTNERS, LLLP, a Georgia limited liability limited partnership, as party of the second part (the "Grantee"); the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits.

WITNESSETH: That the said Grantor (acting under and by virtue of the power and authority contained in the said Will, the same having been duly probated and recorded in the Probate Court of Putnam County, Georgia (estate no. 11ES0074), said Will having been proven in solemn form), for and in consideration of the sum of TEN AND 00/100 DOLLARS (\$10.00) and other good and valuable consideration, in hand paid at and before the sealing and delivery of the presents (the receipt of which is hereby acknowledged), has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell and convey unto the said Grantee, all that tract or parcel of land lying and being in Putnam County, Georgia and more particularly described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

See copy of Death Certificate (Exhibit "B") attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said Grantee, forever, IN FEE SIMPLE; in as full and ample a manner as the same was held, possessed and enjoyed, or might have been held, possessed and enjoyed, by the said decedent.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Janet Allen Crittenden (Seal)
JANET ALLEN CRITTENDEN, as Executor as aforesaid

Signed, sealed and delivered
in the presence of:

Notary Public

My commission expires: _____

(Notary seal here.)

*please see attached California
Notary Acknowledgement*

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

State of California
County of *Siskiyou*

} SS:

on December 13 2011, before me,
Kellie A. Sanders
a Notary Public, personally appeared,
Tanet Allen Crittenden

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

K Sanders
SIGNATURE OF NOTARY

MY COMMISSION EXPIRES ON: Aug. 27, 2014



(SEAL)

748.113

ackwiv

EXHIBIT "A"

ALL THAT TRACT OR PARCEL OF LAND SITUATE, LYING AND BEING IN 389TH GM DISTRICT, 3RD LAND DISTRICT, AND LAND LOT 341 OF PUTNAM COUNTY, GEORGIA MORE PARTICULARLY DESCRIBED AS PARCEL "A" CONTAINING 5.00 ACRES, MORE OR LESS, AS SHOWN ON THAT CERTAIN PLAT OF SURVEY PREPARED FOR NANCY JOHNSON ALLEN BY JAMES E. SMITH, JR., RLSN 1895, DATED JUNE 16, 2008 AND RECORDED AT PLAT BOOK 32, PAGE 76, PUTNAM COUNTY, GEORGIA REAL ESTATE RECORDS. SAID PLAT OF SURVEY AND THE RECORDED COPY THEREOF ARE INCORPORATED HEREIN BY REFERENCE FOR ALL PURPOSES.

INCLUDING A 20' INGRESS & EGRESS EASEMENT AS SHOWN ON THE PLAT OF SURVEY REFERENCED IN THE PARAGRAPH IMMEDIATELY ABOVE THAT IS APPURTENANT TO AND RUNS WITH THE TITLE TO PARCEL "A". SAID 20' INGRESS & EGRESS EASEMENT SHALL BE FOR THE PURPOSE OF VEHICULAR AND PEDESTRIAN ACCESS ACROSS PARCEL "B" TO AND FROM PARCEL "A" AND HARMONY-DAVIS ROAD, BEING A PUBLIC ROAD WITH AN 80' RIGHT-OF-WAY.

740.114

044597

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652

GEORGIA, PUTNAM COUNTY
CLERK OF SUPERIOR COURT
FILED 11-16-98
TIME 11:50am
RECORDED 11-16-98
BOOK 203 PAGE 652-653
Allyn G. Ballew
(DEPUTY) CLERK

When recorded, please return to:
Bussard & Lht, LLC
2500 Windy Ridge Parkway, Suite 320
Atlanta, GA 30339
B&L File No. 98-0312

Putnam County, Georgia
Real Estate Transfer Tax
Paid \$ 10.40
Date 11-16-98
Allyn G. Ballew
(Deputy) Clerk of Superior

QUITCLAIM DEED

STATE OF GEORGIA
COUNTY OF Putnam

THIS INDENTURE made this 21st day of July, 1998, between

NANCY J. ALLEN,

of the State of Georgia, as party or parties of the first part, hereinafter called Grantor, and

PEGGY ALLEN,

as party or parties of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that; Grantor, for Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby remise, convey and forever QUITCLAIM unto the said grantee:

ALL THAT TRACT or parcel of land lying and being in Land 341 of the 3rd Land District, 385th G.M. District, Putnam County, Georgia and being more particularly described in Exhibit "A" attached hereto and incorporated herein by reference.

TO HAVE AND TO HOLD the said described premises to Grantee, so that neither Grantor nor any person or persons claiming under Grantor shall at any time, by any means or ways, have, claim or demand any right of title to said premises or appurtenances, or any rights thereof.

IN WITNESS WHEREOF, the Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed and delivered in the presence of:

Jai Alexander
Unofficial Witness

Nancy J. Allen (SEAL)
NANCY J. ALLEN

Paul G. Franks
Notary Public

(Affix Notarial Seal)



less Excepted
w/ easement
TMP 103-002
PB 26-135

273
653

EXHIBIT "A"

ALL THAT TRACT or parcel of land lying and being in Land Lot 341 of the 3rd Land District, 389th G.M. District, Pulnam County, Georgia, and being more particularly described as follows:

TO FIND THE TRUE POINT OF BEGINNING, commence at a point located at the intersection of the westerly right of way of Harmony-Davis Road (80 foot right of way) and the northerly right of way of Georgia State Road 44; thence in a northerly direction along the westerly right of way of Harmony-Davis Road a distance of 1,188.8 feet to an iron pin found; thence south 45 degrees 22 minutes 07 seconds west a distance of 1,049.91 feet to an iron pin set and the TRUE POINT OF BEGINNING; thence south 45 degrees 22 minutes 07 seconds west a distance of 286.87 feet to an iron pin set; thence north 43 degrees 37 minutes 02 seconds west a distance of 792.16 feet to an iron pin set; thence north 48 degrees 22 minutes 58 seconds east a distance of 286.82 feet to an iron pin set; thence south 43 degrees 37 minutes 02 seconds east a distance of 787.10 feet to an iron pin set and the point of beginning; containing approximately 5.20 acres and being more particularly shown on a survey prepared for Peggy Allen by James E. Smith, Jr., Georgia Registered Land Surveyor No. 1895, dated November 7, 1997.

Being a portion of the property conveyed from John E. Singleton to Charles M. Allen and Nancy J. Allen by warranty deed dated October 4, 1984 and recorded at Deed Book 84, Page 156, Pulnam County, Georgia Records.

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PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B 0 Eatonton, GA 31024

Tel: 706-485-2776 0 706-485-0552 fax www.putnamcountyga.us

LETTER OF AGENCY-_____

WE, THE UNDERSIGNED OWNERS OF REAL PROPERTY LOCATED IN THE CITY OF EATONTON/PUTNAM COUNTY, GEORGIA, HEREBY APPOINT James Stiff TO BY MY AGENT FOR THE PURPOSE OF APPLYING FOR rezoning OF PROPERTY DESCRIBED AS MAP 103 PARCELS 001001 and 001, CONSISTING OF 71.554 ACRES, WHICH HAS THE FOLLOWING ADDRESS: 916 Harmony Road EATONTON, GEORGIA 31024. ATTACHED IS A COPY OF A DEED AND OR LAT OF SURVEY DESCRIBING THE PROPERTY OWNED BY THE PROPERTY OWNER(S) TO WHICH THIS LETTER OF AGENCY APPLIES.

THE ABOVE-NAMED AGENT HEREBY IS AUTHORIZED TO COMPLETE AND SIGN THE CITY OF EATONTON/PUTNAM COUNTY APPLICATION FOR rezoning ON OUR BEHALF. WE UNDERSTAND THAT THIS LETTER OF AGENCY WILL BE ATTACHED TO AND MADE PART OF SAID FORM AND WILL BE RELIED UPON BY THE CITY OF EATONTON/PUTNAM COUNTY. FOR AND IN CONSIDERATION OF THE CITY OF EATONTON/PUTNAM COUNTY ACCEPTING THIS LETTER OF AGENCY, WE HEREBY INDEMNIFY AND HOLD HARMLESS THE CITY OF EATONTON/PUTNAM COUNTY AND ITS AGENTS AND/OR EMPLOYEES IN THE EVEN THAT THE ABOVE NAMED AGENT SHOULD MISUSE THIS LETTER OF AGENCY AND WE SUFFER DAMAGES AS A RESULT.

THIS 22nd DAY OF June, 2021.

PROPERTY OWNER(S): Peggy Allen

Peggy Allen
NAME (PRINTED)

[Signature]
SIGNATURE

ADDRESS: 918 Harmony Road, Eatonton, GA 31024

PHONE: _____

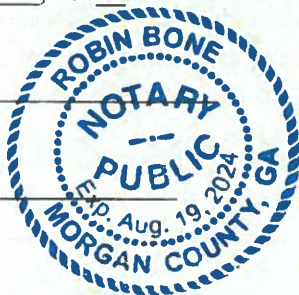
ALL SIGNATURES WERE HEREBY SWORN TO AND SUBSCRIBED BEFORE ME THIS

23 DAY OF June, 2021.

[Signature]

NOTARY

MY COMMISSION EXPIRES: _____





PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B 0 Eatonton, GA 31024

Tel: 706-485-2776 0 706-485-0552 fax www.putnamcountyga.us

LETTER OF AGENCY-_____

WE, THE UNDERSIGNED OWNERS OF REAL PROPERTY LOCATED IN THE CITY OF EATONTON/PUTNAM COUNTY, GEORGIA, HEREBY APPOINT James Stiff TO BY MY AGENT FOR THE PURPOSE OF APPLYING FOR rezoning OF PROPERTY DESCRIBED AS MAP 103 PARCELS 001001 and 001, CONSISTING OF 71.554 ACRES, WHICH HAS THE FOLLOWING ADDRESS: 916 Harmony Road EATONTON, GEORGIA 31024. ATTACHED IS A COPY OF A DEED AND OR LAT OF SURVEY DESCRIBING THE PROPERTY OWNED BY THE PROPERTY OWNER(S) TO WHICH THIS LETTER OF AGENCY APPLIES.

THE ABOVE-NAMED AGENT HEREBY IS AUTHORIZED TO COMPLETE AND SIGN THE CITY OF EATONTON/PUTNAM COUNTY APPLICATION FOR rezoning ON OUR BEHALF. WE UNDERSTAND THAT THIS LETTER OF AGENCY WILL BE ATTACHED TO AND MADE PART OF SAID FORM AND WILL BE RELIED UPON BY THE CITY OF EATONTON/PUTNAM COUNTY. FOR AND IN CONSIDERATION OF THE CITY OF EATONTON/PUTNAM COUNTY ACCEPTING THIS LETTER OF AGENCY, WE HEREBY INDEMNIFY AND HOLD HARMLESS THE CITY OF EATONTON/PUTNAM COUNTY AND ITS AGENTS AND/OR EMPLOYEES IN THE EVEN THAT THE ABOVE NAMED AGENT SHOULD MISUSE THIS LETTER OF AGENCY AND WE SUFFER DAMAGES AS A RESULT.
THIS 22nd DAY OF June, 2021.

PROPERTY OWNER(S): Sue Fox

Susan Fox

NAME (PRINTED)

Susan Fox

SIGNATURE

ADDRESS: 108 Walking Horse Lane, Eatonton, GA 31024

PHONE: _____

ALL SIGNATURES WERE HEREBY SWORN TO AND SUBSCRIBED BEFORE ME THIS 23 DAY OF June, 2021.

[Signature]

NOTARY

MY COMMISSION EXPIRES: _____



Item 13: Legal Description & Recorded Plat

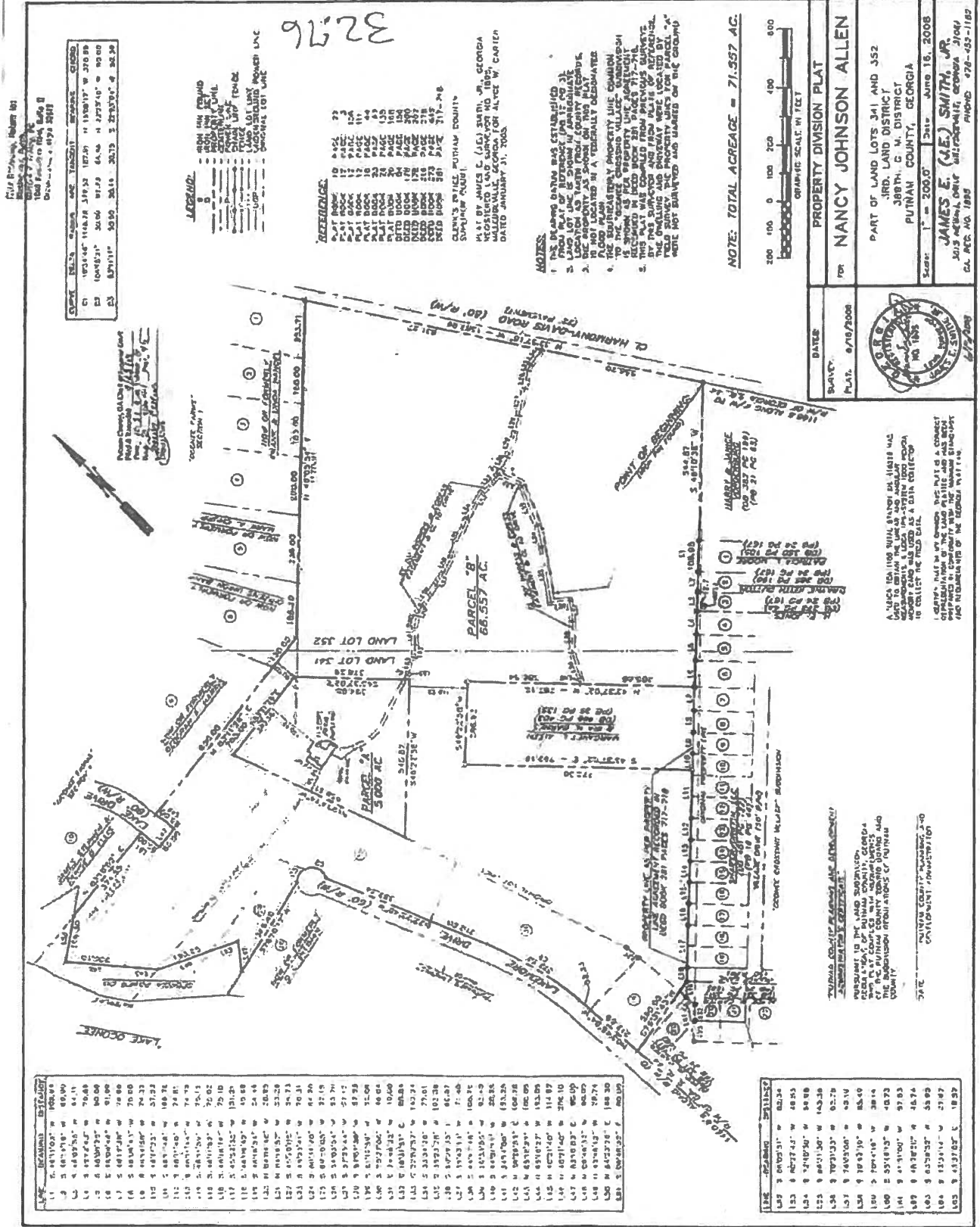
LEGAL DESCRIPTION
PARCEL "A"

All that Tract or Parcel of land, lying and being located in Land Lot 341 of the 3rd District, in the 389th G.M. District, Putnam County, Georgia, containing 5.000 Acres (217,801 SQ.FT.), more or less and being more particularly described as follows:

To find the **TRUE POINT OF BEGINNING**, commence from a 1/2" rebar set on the southwestern most 80 foot Right of Way of Harmony Road, said 1/2" rebar set being located 1188.80 feet northwest from the right of way intersection of Georgia State Route No. 44; thence from said 1/2" rebar set, proceed along the southwestern most 80 foot Right of Way of Harmony Road the following: North 34 degrees 03 minutes 08 seconds West a distance of 556.70 feet to a point; thence North 34 degrees 03 minutes 08 seconds West a distance of 831.27 feet to a point; thence departing said right of way, proceed the following: thence South 44 degrees 59 minutes 20 seconds West a distance of 204.00 feet to a 3/4" rebar found; thence South 44 degrees 59 minutes 20 seconds West a distance of 159.93 feet to a nail found; thence South 44 degrees 59 minutes 20 seconds West a distance of 384.74 feet to a 3/4" rebar found; thence South 44 degrees 59 minutes 20 seconds West a distance of 236.20 feet to a 5/8" rebar found; thence South 44 degrees 59 minutes 20 seconds West a distance of 186.04 feet to a 5/8" rebar found; thence South 82 degrees 06 minutes 16 seconds West a distance of 130.06 feet to a 1/2" rebar found; thence South 22 degrees 14 minutes 14 seconds East a distance of 82.52 feet to the **TRUE POINT OF BEGINNING**.

Thence, from said **TRUE POINT OF BEGINNING**, proceed the following: South 44 degrees 42 minutes 55 seconds East for a distance of 378.29 feet to a point; thence South 44 degrees 42 minutes 55 seconds East for a distance of 16.59 feet to a point; thence South 45 degrees 17 minutes 08 seconds West for a distance of 545.82 feet to a point; thence North 20 degrees 20 minutes 04 seconds West for a distance of 658.61 feet to a point; thence North 82 degrees 05 minutes 38 seconds East for a distance of 342.16 feet, back to the **TRUE POINT OF BEGINNING**.

Together with and subject to covenants, easements, and restrictions of record. Said property contains 5.000 Acres (217,801 Square feet), more or less.



Items 16 & 17: Source of Domestic Water & Sewer Supply Provider Letter



georgia civil

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING

June 23, 2021

Lisa Jackson, MPA
Planning Director
Putnam County Planning & Development
117 Putnam Drive, Suite B
Eatonton, GA 31024

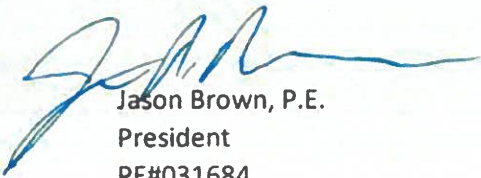
Re: Helms Farm Campus at Harmony Rd – Proposed Provider for Domestic Water Service & Sanitary Sewage Disposal

Dear Lisa,

As you are aware, Goodwill Industries of Middle Georgia is currently submitting an application to rezone two parcels in Eatonton, Georgia, along Harmony Road. The application requests information about the source of domestic water supply as well as sanitary sewer disposal. It is our understanding that Piedmont Water is the local provider in this area, and we have confirmed this with Brent Hurst, the Chief Operating Officer with Piedmont Water Company. Piedmont will provide both the domestic water as well as service sanitary sewage disposal. We are currently consulting with Piedmont Water to determine the anticipated demand so they can determine if the proposed development will have to pump sewage to an existing lift station with no upgrades, one with upgrades, or directly to the plant.

Please let us know if we can assist further in this matter or if you have any questions.

Sincerely,



Jason Brown, P.E.
President
PE#031684

Item 18: Disclosure of Campaign Contributions Forms



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

DISCLOSURE OF APPLICANT'S CAMPAIGN CONTRIBUTION

The *Putnam County Code of Ordinances*, Section 66-167(c) states as follows:

“When any applicant or his attorney for a rezoning action has made, within two years immediately preceding the filing of that applicant’s application for the rezoning action, campaign contributions aggregating \$250.00 or more to a local government official who will consider the application, it shall be the duty of the applicant to file a disclosure report with the governing authority of the respective local government showing:

a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Peggy Allen

2. Address: 918 Harmon Rd
Eatonton 31024

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant:
Date: 10/19/21



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

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a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: Susan Fox

2. Address: 108 Walking Horse Lane
Eatonton, Georgia 31024

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? :

Signature of Applicant: _____

Susan Fox
dotloop verified
06/18/21 4:16 PM EDT
Q3YS-ZVRN-LNXV-OVMZ

Date: 06/18/2021 / _____



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

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a. The name and official position of the local government official to whom the campaign contribution was made; and

b. The dollar amount and description of each campaign contribution made by the applicant to the local government official during the two years immediately preceding the filing of the application for the rezoning action and the date of each such contribution. The disclosures required by this section shall be filed within ten days after an application for the rezoning action is first filed.”

1. Name: James K. Stiff

2. Address: 3 Shadowbrooks Circle
Augusta, GA. 30909

3. Have you given contributions that aggregated \$250.00 or more within two years immediately preceding the filing of the attached application to a candidate that will hear the proposed application? Yes No If yes, who did you make the contributions to? : _____

Signature of Applicant: James K. Stiff

Date: 6 / 18 / 21
CEO
Goodwill Industries Middle Georgia, Inc.

Item 20: Property Taxes

Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1061
(706) 485-5441

Certain persons are eligible for certain homestead exemptions from ad valorem taxation. In addition to the regular homestead exemption authorized for all homeowners, certain elderly persons are entitled to additional exemptions. The full law relating to each exemption must be referred to in order to determine eligibility for the exemption. If you are eligible for one of these exemptions and are not now receiving the benefit of the exemption, you must apply for the exemption not later than April 1, 2021 in order to receive the exemption in future years. For more information on eligibility for exemptions or on the proper method of applying for an exemption, you may contact:



Scan this code with your mobile phone to view or pay this bill



Putnam County Tax Assessor
100 South Jefferson Ave Suite 109
Eatonton, GA 31024-1087
(706) 485-6376

ALLEN INVESTMENT PARTNERS LLLP
108 WALKING HORSE LANE
EATONTON, GA 31024

INTERNET TAX BILL

2020 State, County & School Ad Valorem Tax Notice

Bill No.	Property Description	Map Number	Fair Mkt Value	Assessed Value	Exempt Value	Taxable Value	Millage Rate	Tax Amount
000314	01 PARCEL A HARMONY RD	103 001	326364	130546	0	130546	24.228	3,162.87

Important Messages - Please Read

This gradual reduction and elimination of the state property tax and the reduction in your tax bill this year is the result of property tax relief passed by the Governor and the House of Representatives and the Georgia State Senate.

Local Option Sales Tax Information	
Mills required to produce county budget	
Mills reduction due to sales tax rollback	
Actual mill rate set by county officials	
Tax savings due to sales tax rollback	24.66

Total of Bills by Tax Type	
COUNTY	1,054.55
SCHOOL	2,058.97
SPEC SERV	49.35
PAYMENTS RECEIVED	3,162.87-
TOTAL DUE	0.00
DATE DUE	12/1/2020

Please detach here and return this portion in the envelope provided with your payment in full.

ALLEN INVESTMENT PARTNERS LLLP
108 WALKING HORSE LANE
EATONTON, GA 31024

PAYMENT INSTRUCTIONS

- Please Make Check or Money Order Payable to: Putnam County Tax Commissioner
- If a receipt is desired, please include a stamped, self-addressed envelope.
- If taxes are to be paid by a mortgage company, send them this portion only.
- If you are paying after the due date, please call our office for the full amount due.
- Interest on unpaid tax bills is applied in compliance with GA Code 48-2-40
- Penalty on unpaid tax bills is applied in compliance with GA Code 48-2-44

Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1061
(706) 485-5441

Bill Number	Map Number	Tax Amount
2020 000314	103 001	3,162.87
DATE DUE		TOTAL DUE
12/1/2020		0.00

INTERNET TAX BILL

3/10/2021

Taxes

INTERNET TAX RECEIPT

2020 000314
ALLEN INVESTMENT PARTNERS LLLP

PARCEL A HARMONY RD
103 001

DESCRIPTION	TAX AMOUNT	EXEMPTION	MILLAGE
FAIR MARKET VALUE	\$326,384		
COUNTY	\$1,054.55	\$0.00	8.078
SCHOOL	\$2,058.97	\$0.00	15.772
SPEC SERV	\$49.35	\$0.00	0.378

ORIGINAL TAX DUE
\$3,162.87
INTEREST
COLLECTION COST
FIFA CHARGE
PENALTY
TOTAL PAID
\$3,162.87
TOTAL DUE
\$0.00

TO ALLEN INVESTMENT PARTNERS LLLP
108 WALKING HORSE LANE
EATONTON, GA 31024

FROM Putnam County Tax Commissioner
100 South Jefferson Ave Suite 207
Eatonton, GA 31024-1061
(706) 485-5441



Date Paid: 12/3/2020



Scan this code with
your mobile phone
to view this bill

INTERNET TAX RECEIPT

Search: 103 001 001



12 records returned

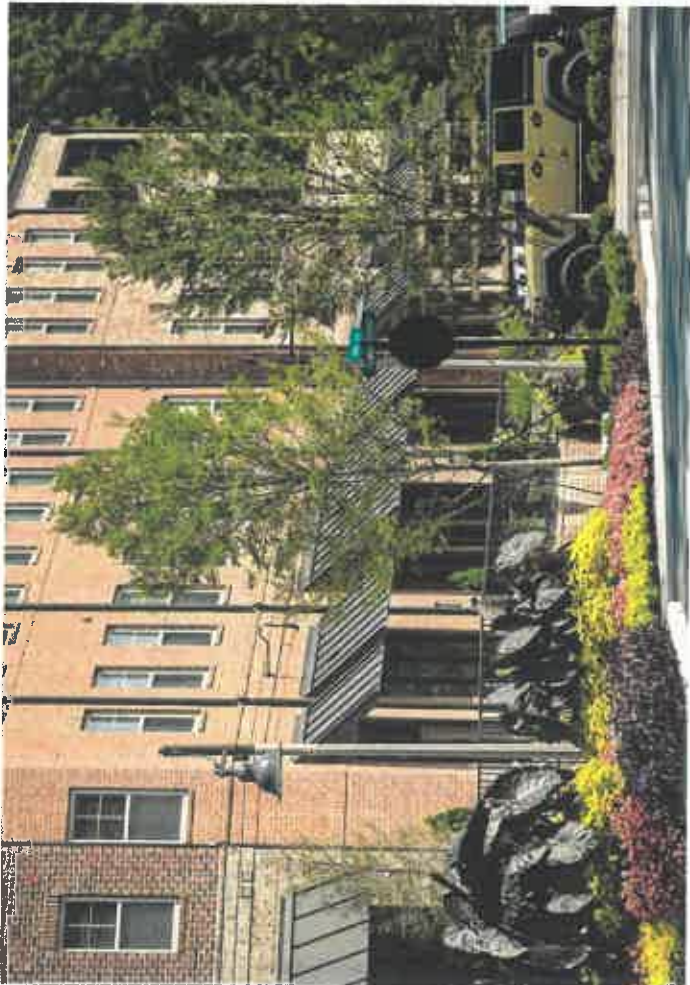
Page 1 of 1

Owner Name	Bill #	Paid
ALLEN INVESTMENT PARTNERS LLLP	000315	
ALLEN INVESTMENT PARTNERS LLLP	000311	
ALLEN INVESTMENT PARTNERS LLLP	000309	
ALLEN INVESTMENT PARTNERS LLLP	000307	
ALLEN INVESTMENT PARTNERS LLLP	000303	
ALLEN INVESTMENT PARTNERS LLLP	000312	
ALLEN INVESTMENT PARTNERS LLLP	000316	
ALLEN INVESTMENT PARTNERS LLLP	000311	
ALLEN INVESTMENT PARTNERS LLLP	000311	
ALLEN INVESTMENT PARTNERS LLLP	000315	
ALLEN INVESTMENT PARTNERS LLLP	000302	
ALLEN INVESTMENT PARTNERS LLLP	000385	

Item 21: Concept Plan & Project Inspiration







Item 22: Impact Analysis

IMPACT ANALYSIS

Impact analysis. An impact analysis is required for all applications unless the application will result in fewer than 25 single-family residential lots. The impact analysis shall be prepared by a professional engineer, a registered land surveyor, a landscape architect, a land planner or any other person professionally involved in and familiar with land development activities.

1. The application must be accompanied by a written, documented analysis of the proposed zoning change with regard to each of the standards governing consideration, (which are enumerated under Putnam County Code of Ordinances, Chapter 66-Zoning, Sec. 66-165(d)) and are as follows:
 - a. Is the proposed use consistent with the stated purpose of the zoning district that is being requested?
 - b. Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?
 - c. Will the proposed use adversely affect the existing use, value or usability of adjacent or nearby property?
 - d. Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?
 - e. Are there substantial reasons why the property cannot or should not be used as currently zoned?
 - f. Will the proposed use cause an excessive or burdensome use of public facilities or services or exceed the present or funded capabilities, included but not limited to streets, water or sewer utilities, and police or fire protection?
 - g. Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?
 - h. Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, and a reasonable private use of the subject property?
2. A traffic impact analysis is to include the existing average daily traffic on road/streets leading to the nearest intersection and the projected average daily traffic. Additional requirements for the analysis may be provided by the Planning and Development Department and included with the application.
3. The estimated number of dwelling units and total floor area of non-residential uses (if applicable) of the proposed development.
4. Effect on the environment surrounding the area to be rezoned including the effect on all natural and historic resources. (State source of the information)
5. Impact on fire protection with respect to the need for additional firefighting equipment or personnel. (State source of the information)
6. What are the physical characteristics of the site with respect to topography and drainage courses?
7. Adjacent and nearby zoning and land use.

IMPACT ANALYSIS

1. The application must be accompanied by a written, documented analysis of the proposed zoning change with regard to each of the standards governing consideration, (which are enumerated under Putnam County Code of Ordinances, Chapter 66-Zoning, Sec. 66-165(d)) and are as follows:
 - a. Is the proposed use consistent with the stated purpose of the zoning district that is being requested?
Yes. The purpose of the planned unit development zoning is "to encourage the development of large tracts of land to produce logically organized development with compatible land uses." The proposed development meets this purpose.
 - b. Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?
Yes. Adjacent and nearby uses include commercial, residential, and agricultural, all components that will be incorporated into the planned unit development to serve as a bridge and connection to adjacent parcels.
 - c. Will the proposed use adversely affect the existing use, value or usability of adjacent or nearby property?
No.
 - d. Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?
Yes.
 - e. Are there substantial reasons why the property cannot or should not be used as currently zoned?
The current zoning does not allow for the proposed mixed-use program.
 - f. Will the proposed use cause an excessive or burdensome use of public facilities or services or exceed the present or funded capabilities, included but not limited to streets, water or sewer utilities, and police or fire protection?
No.
 - g. Is the proposed use supported by new or changing conditions not anticipated by the Comprehensive Plan or reflected in the existing zoning on the property or surrounding properties?
Yes.
 - h. Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, and a reasonable private use of the subject property?
Yes.
2. A traffic impact analysis is to include the existing average daily traffic on road/streets leading to the nearest intersection and the projected average daily traffic. Additional requirements for the analysis may be provided by the Planning and Development Department and included with the application.
The traffic impact analysis is attached as Item 22a: Traffic Impact Analysis.
3. The estimated number of dwelling units and total floor area of non-residential uses (if applicable) of the proposed development.
The development program may include up to approximately 150 dwelling units. The total floor area for the non-residential uses may include up to 250,550 square feet.

- Effect on the environment surrounding the area to be rezoned including the effect on all natural and historic resources. (State source of the information)

Studies for a Phase I Environmental Assessment and delineation of Waters of the State and wetlands disclosed no issues.

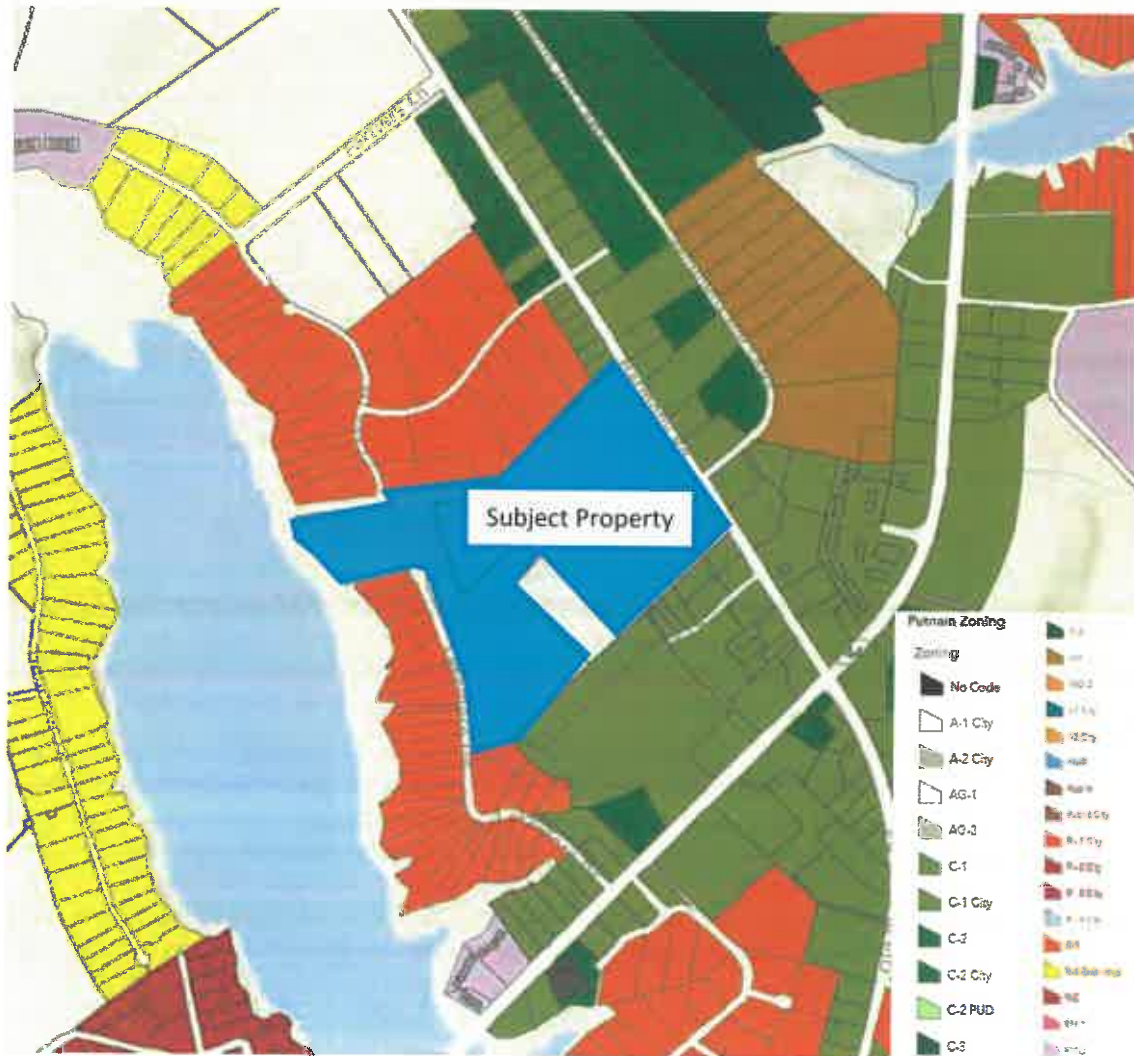
- Impact on fire protection with respect to the need for additional firefighting equipment or personnel. (State source of the information)

Per Georgia Civil, the site infrastructure being provided as part of this development will have adequate fire water service and protection with fire suppression systems to meet all life safety codes and provide access for all fire vehicle apparatus.

- What are the physical characteristics of the site with respect to topography and drainage courses?

An ALTA Survey is enclosed, the site generally slopes from Harmony Road to the lake.

- Adjacent and nearby zoning and land use:



Item 22a: Traffic Impact Analysis

**TRAFFIC STUDY
FOR
HELMS FARM CAMPUS AT HARMONY ROAD
PUTNAM COUNTY, GEORGIA**



Prepared for:

***Goodwill of Middle Georgia & The CSRA
5171 Eisenhower Parkway
Macon, GA 31206***

Prepared By:



A&R Engineering Inc.

2160 Kingston Court, Suite O
Marietta, GA 30067
Tel: (770) 690-9255 Fax: (770) 690-9210
www.areng.com

June 14, 2021
Revised August 03, 2021
A & R Project # 21-082

TABLE OF CONTENTS

Item	Page
1.0 Introduction	1
2.0 Existing Facilities / Conditions	4
2.1.1 SR 44 (Greensboro Road).....	4
2.1.2 Harmony Road	4
2.1.3 Village Lane	4
2.1.4 Sammons Industrial Parkway.....	4
2.1.5 Harmony Lane	4
2.1.6 Scott Road	4
3.0 Study Methodology	5
3.1 Unsignalized Intersections	5
3.2 Signalized Intersections	5
4.0 Existing 2021 Traffic Analysis.....	7
4.1 Existing Traffic Volumes	7
4.2 Adjusted 2021 Traffic Volumes.....	7
4.3 Existing Traffic Operations	10
5.0 Proposed Development.....	12
5.1 Trip Generation	14
5.2 Trip Distribution	15
6.0 Future 2022 Traffic Analysis	18
6.1 Future “No-Build” Conditions	18
6.1.1 Annual Traffic Growth.....	18
Future “Build” Conditions	18
6.1.2 Auxiliary Lane Analysis	21
6.1.3 Left Turn Lane Analysis	21
6.1.4 Deceleration Turn Lane Analysis.....	22
6.2 Future Traffic Conditions	23
7.0 Conclusions and Recommendations.....	27
Appendix	

LIST OF TABLES

Item	Page
Table 1 – Level-of-service Criteria for Unsignalized Intersections.....	5
Table 2 – Level-of-service Criteria for Signalized Intersections	6
Table 3 – Existing Intersection Operations	10
Table 4 – Trip Generation	14
Table 5 - GDOT Requirements for Left Turn Lanes	21
Table 6 - GDOT Requirements for Deceleration Lanes	22
Table 7 – Future Intersection Operations.....	23

LIST OF FIGURES

Item	Page
Figure 1 – Location Map.....	3
Figure 2 – Existing Weekday Peak Hour Volumes during Covid-19	8
Figure 3 – Adjusted Existing Weekday Peak Hour Volumes	9
Figure 4 – Existing Traffic Control and Lane Geometry	11
Figure 5 – Site Plan.....	13
Figure 6 – Outer Leg Trip Distribution and Site Generated Peak Hour Volumes.....	16
Figure 7 – Site Peak Hour Pass-by Volumes.....	17
Figure 8 – Future (No-Build) Peak Hour Volumes	19
Figure 9 – Future (Build) Peak Hour Volumes.....	20
Figure 10 – GDOT’s PI 0006253 – Intersection Design	25
Figure 11 – Future Traffic Control and Lane Geometry	26

1.0 INTRODUCTION

The purpose of this study is to determine the traffic impact that will result from the proposed Helms Farm Campus development that will be located on Harmony Road across from Sammons Industrial Parkway (South), north of Village Lane in Putnam County, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. The development will consist of:

- Goodwill Store: 16,800 sf
- Helms College: 50 Students
- Edgar’s Bakery: 7,000 sf
- Retail including Spa: 26,920 sf
- High-Turn-over Sit-Down Restaurant: 13,100 sf
- Super Market: 14,500 sf
- Multi-family (mid-rise) Residential: 127 Units
- Student Housing: 18 Units
- Vacation Villas (Resorts): 41 Units
- Event Hall or Banquet Hall: 22,000 sf
- Hotel: 175 Rooms



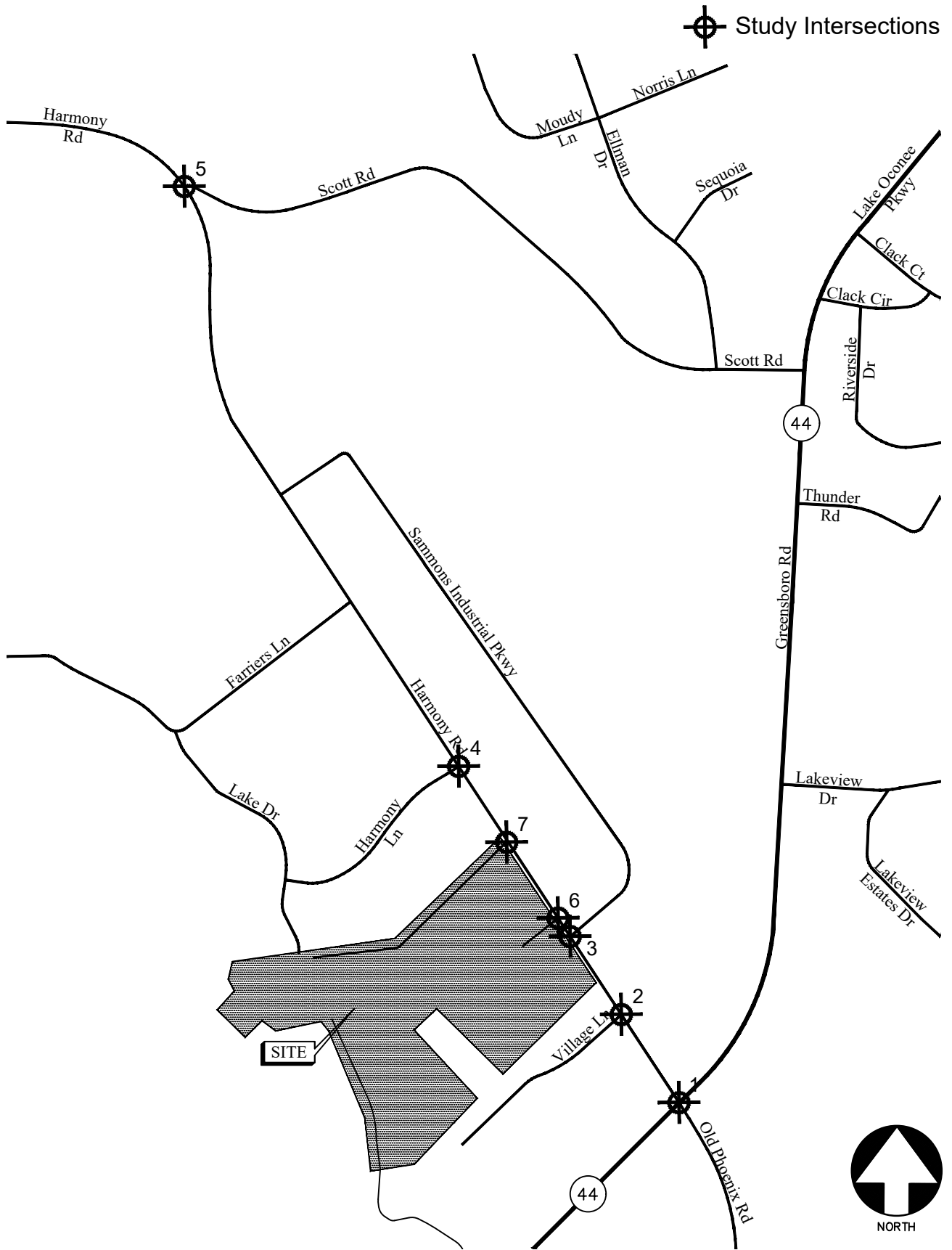
The development proposes two site driveways at the following locations:

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
- Site Driveway 2: Full-access (Northern) driveway on Harmony Road

Existing and future operations after completion of the project were analyzed at the intersections of:

- Harmony Road at SR 44 (Greensboro Road) / Old Phoenix Road
- Harmony Road at Village Lane
- Harmony Road at Sammons Industrial Parkway (South)
- Harmony Road at Harmony Lane
- Harmony Road at Scott Road / Private Driveway
- Harmony Road at Site Driveway 1 (Southern)
- Harmony Road at Site Driveway 2 (Northern) / Private Driveway

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding study network is shown in Figure 1.



LOCATION MAP

FIGURE 1

A&R Engineering Inc.

2.0 EXISTING FACILITIES / CONDITIONS

The following is a brief description of each of the roadway facilities located in proximity to the site:

2.1.1 SR 44 (Greensboro Road)

SR 44 (Greensboro Road) is an east-west, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID 237-0146) indicate that the daily traffic volume on SR 44 (Greensboro Road) in 2019 was 15,200 vehicles per day north of Harmony Road. GDOT classifies SR 44 (Greensboro Road) as a Rural Minor Arterial roadway.

2.1.2 Harmony Road

Harmony Road is a north-south, two-lane, undivided roadway with a posted speed limit of 45 mph in the vicinity of the site. GDOT traffic counts (Station ID 237-0181) indicate that the daily traffic volume on Harmony Road in 2019 was 3,570 vehicles per day north of Scott Road. GDOT classifies Harmony Road as a Rural Minor Collector roadway.

2.1.3 Village Lane

Village Lane is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.4 Sammons Industrial Parkway

Sammons Industrial Parkway is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.5 Harmony Lane

Harmony Lane is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.6 Scott Road

Scott Road is a northwest-southeast, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the site.

3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections. At specific intersections in which HCM 6 is unable to report results due to limitations of the software version, HCM 2000 will be used instead. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

3.1 Unsignalized Intersections

For unsignalized intersections at which the side street or minor street is controlled by a stop sign, the criteria for evaluating traffic operations are the level-of-service (LOS) for the turning movements at the intersection and the level-of-service for the overall intersection. Level-of-service is based on the average controlled delay incurred at the intersection. Controlled delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the controlled delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross safely, resulting in extremely long total delays and long queues. The level-of-service criteria for two-way stop-controlled and all-way stop-controlled (unsignalized) intersections are given in Table 1.

Level-of-service	Average Delay (sec)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Source: Highway Capacity Manual

3.2 Signalized Intersections

For signalized intersections, it is necessary to evaluate both capacity and level-of-service in order to evaluate the overall operation of the intersection. The capacity analysis of an intersection is performed by comparing the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This results in a volume/capacity (v/c) ratio for each lane group. A v/c ratio greater

than 1.0 indicates that the volume of traffic has exceeded the capacity available, resulting in a temporary excess of demand. Although the capacity of the entire intersection is not defined, a composite v/c ratio for the sum of the critical lane groups within the intersection is computed. This composite v/c ratio is an indication of the overall intersection sufficiency.

Level-of-service for a signalized intersection is defined in terms of average controlled delay per vehicle, which is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The level-of-service criteria for signalized intersections, based on average controlled delay, are shown in Table 2. Level-of-service “A” indicates operations with very low controlled delay, while level-of-service “F” describes operations with extremely high average-controlled delay. Level-of-service “E” is typically considered to be the limit of acceptable delay, and level-of-service “F” is considered unacceptable by most drivers.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS	
Level-of-service	Average Control Delay (sec)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Source: Highway Capacity Manual

4.0 EXISTING 2021 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

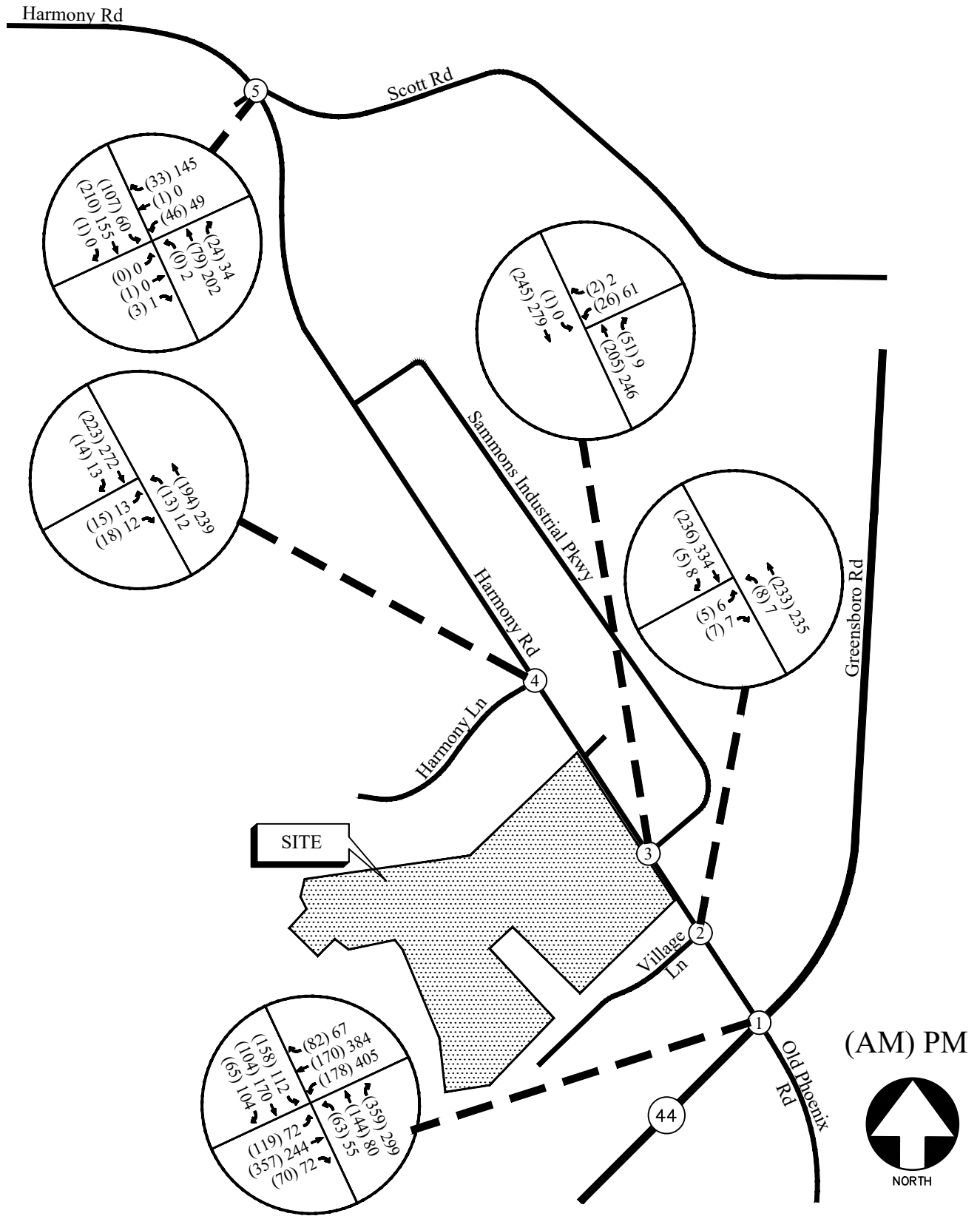
Traffic counts were obtained at the following study intersections:

- Harmony Road at SR 44 (Greensboro Road) / Old Phoenix Road
- Harmony Road at Village Lane
- Harmony Road at Sammons Industrial Parkway (South)
- Harmony Road at Harmony Lane
- Harmony Road at Scott Road / Private Driveway

Turning movement counts were collected on Thursday, May 27, 2021, at all the study intersections. A 24-hour bi-directional volume count was also collected on Harmony Road north of Scott Road at the same location where GDOT had collected historic ADT in the past. All turning movement counts were recorded during the AM and PM peak hours between 7:00am to 9:00am and 4:00pm to 6:00pm, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2.

4.2 Adjusted 2021 Traffic Volumes

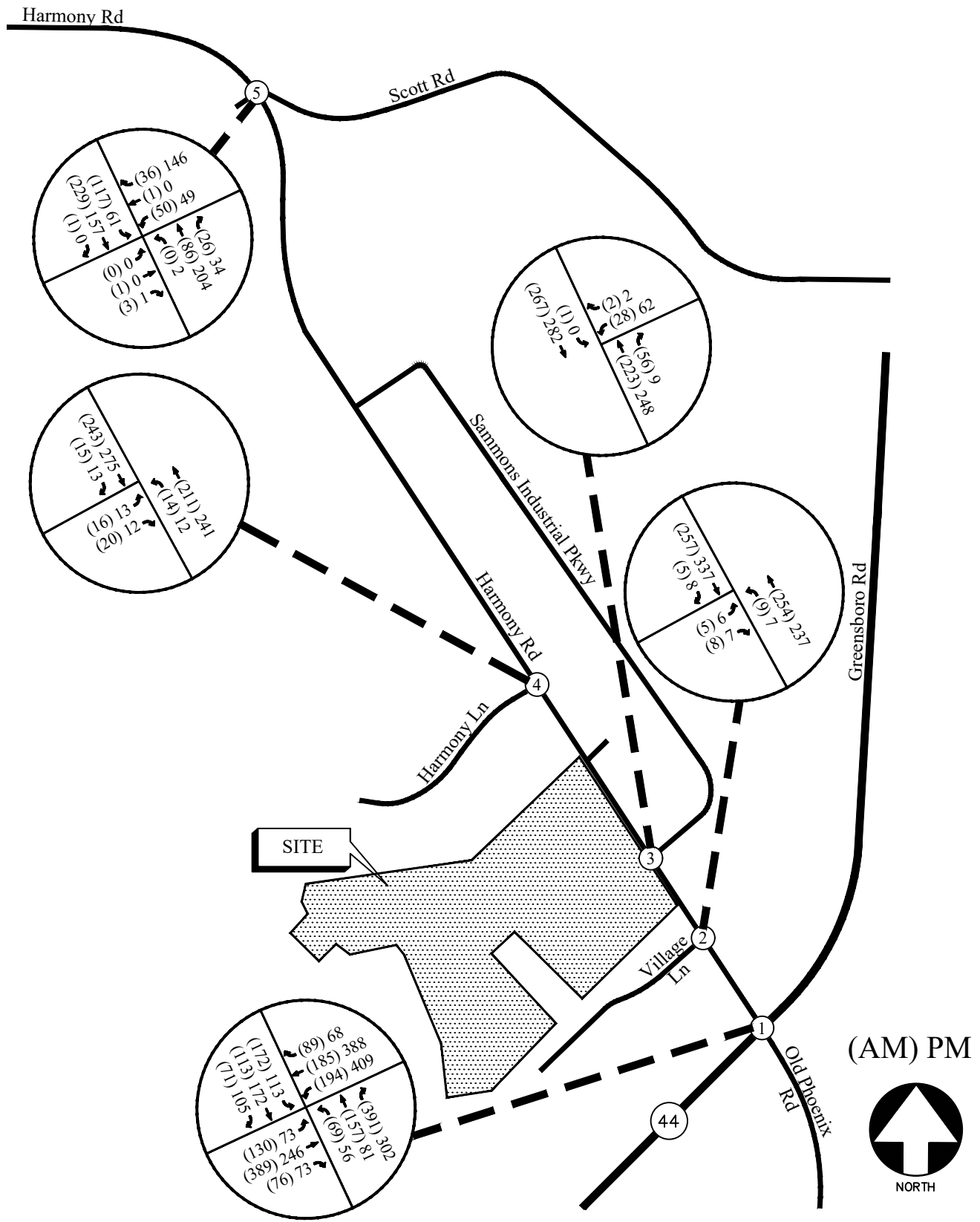
To account for the abnormal traffic pattern due to COVID-19, an adjustment factor was determined by calculating the difference between GDOT historical turning movements counts and current bi-directional counts at Harmony Road north of Scott Road. The historic 2017 turning movement counts from GDOT's (Station ID 237-0181) were increased by an annual growth rate of 2.5% for four years and compared to the existing bi-directional counts collected on Thursday, May 27, 2021, at the same location. The comparison of the two counts revealed that the adjusted historic traffic counts are 9% higher in the AM peak hour and 1% higher in the PM peak hour. Therefore, the 2021 AM and PM peak hour counts shown in Figure 2 were increased by 9% and 1%, respectively. The projected and/or adjusted existing peak hour volumes are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES
(DURING COVID-19)

FIGURE 2

A&R Engineering Inc.



ADJUSTED EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 3

A&R Engineering Inc.




4.3 Existing Traffic Operations

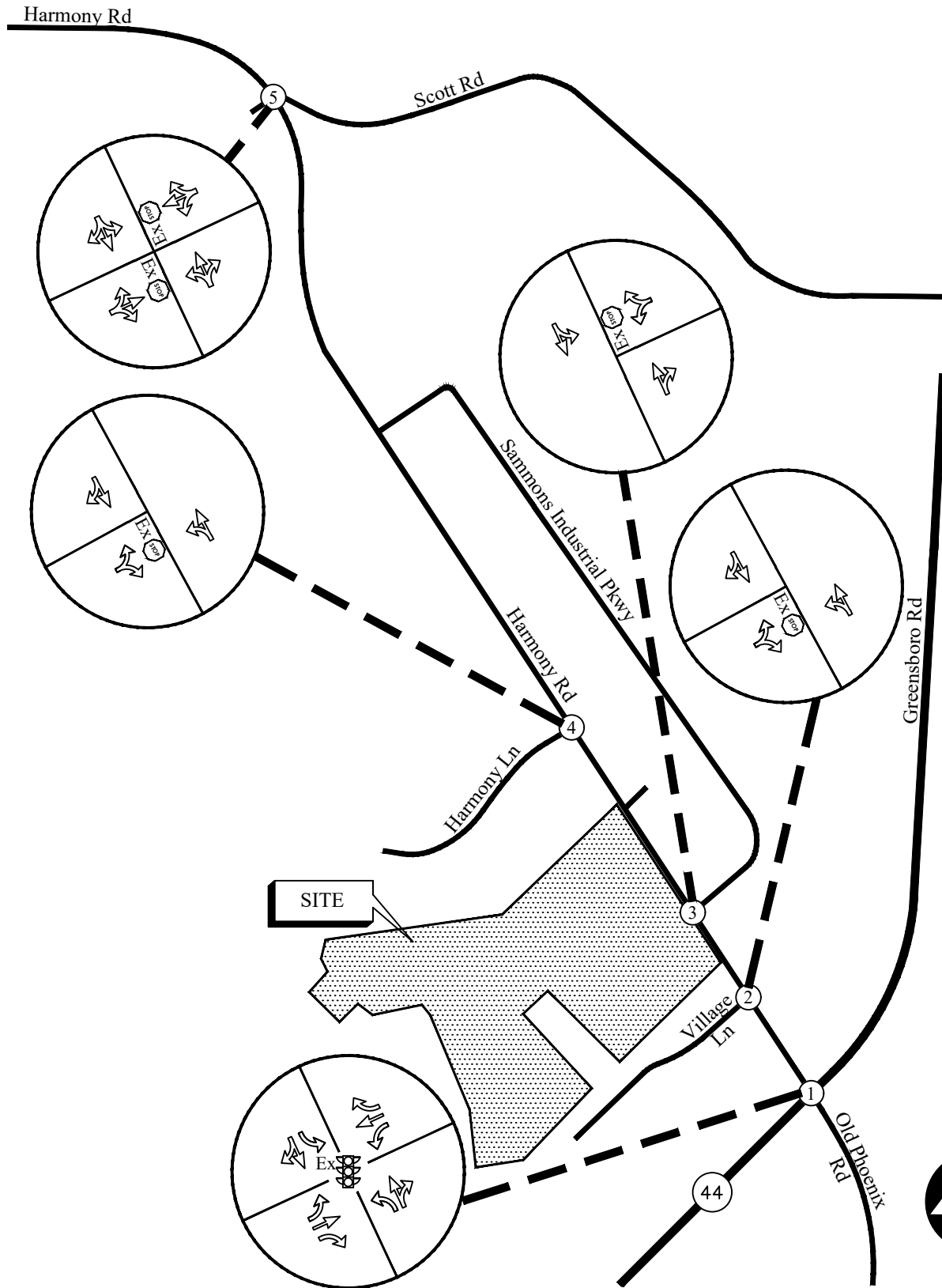
Existing 2021 traffic operations were analyzed at the study intersections in accordance with the HCM methodology using the volumes in Figure 3. The results of the analyses are shown in Table 3. The existing traffic control and lane geometry for the intersections are shown in Figure 4.

TABLE 3 – EXISTING INTERSECTION OPERATIONS				
Intersection		Traffic Control	LOS (Delay)	
			AM Peak Hour	PM Peak Hour
1	<u>SR 44 (Greensboro Road) @ Harmony Road / Old Phoenix Road</u>	Signalized	<u>D (47.7)</u>	<u>D (37.2)</u>
	-Eastbound Approach		D (44.3)	C (32.5)
	-Westbound Approach		C (29.4)	B (19.0)
	-Northbound Approach		E (68.6)	E (69.0)
	-Southbound Approach		D (36.1)	D (42.3)
2	<u>Harmony Road @ Village Lane</u>	Stop Controlled on Eastbound Approach	B (11.2)	B (12.4)
	-Eastbound Approach		A (7.9)	A (8.2)
3	<u>Harmony Road @ Sammons Industrial Parkway (S)</u>	Stop Controlled on Westbound Approach	B (14.2)	B (14.8)
	-Westbound Approach		A (7.9)	A (0.0)
4	<u>Harmony Road @ Harmony Lane</u>	Stop Controlled on Eastbound Approach	B (11.2)	B (12.0)
	-Eastbound Approach		A (7.8)	A (8.0)
5	<u>Harmony Road @ Scott Road / Private Driveway</u>	Stop Controlled on Eastbound and Westbound Approaches	B (11.0)	A (9.1)
	-Eastbound Approach		B (14.1)	B (13.3)
	-Westbound Approach		A (0.0)	A (7.6)
	-Northbound Left		A (7.7)	A (7.9)
	-Southbound Left			

The results of existing traffic operations analysis indicate that all the study intersections are operating at an level-of-service “D” or better in both AM and PM peak hours.

LEGEND

- Ex  Existing Signed Approach
-  Existing Lane Geometry
- Ex  Existing Traffic Signal



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 4

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5.0 PROPOSED DEVELOPMENT

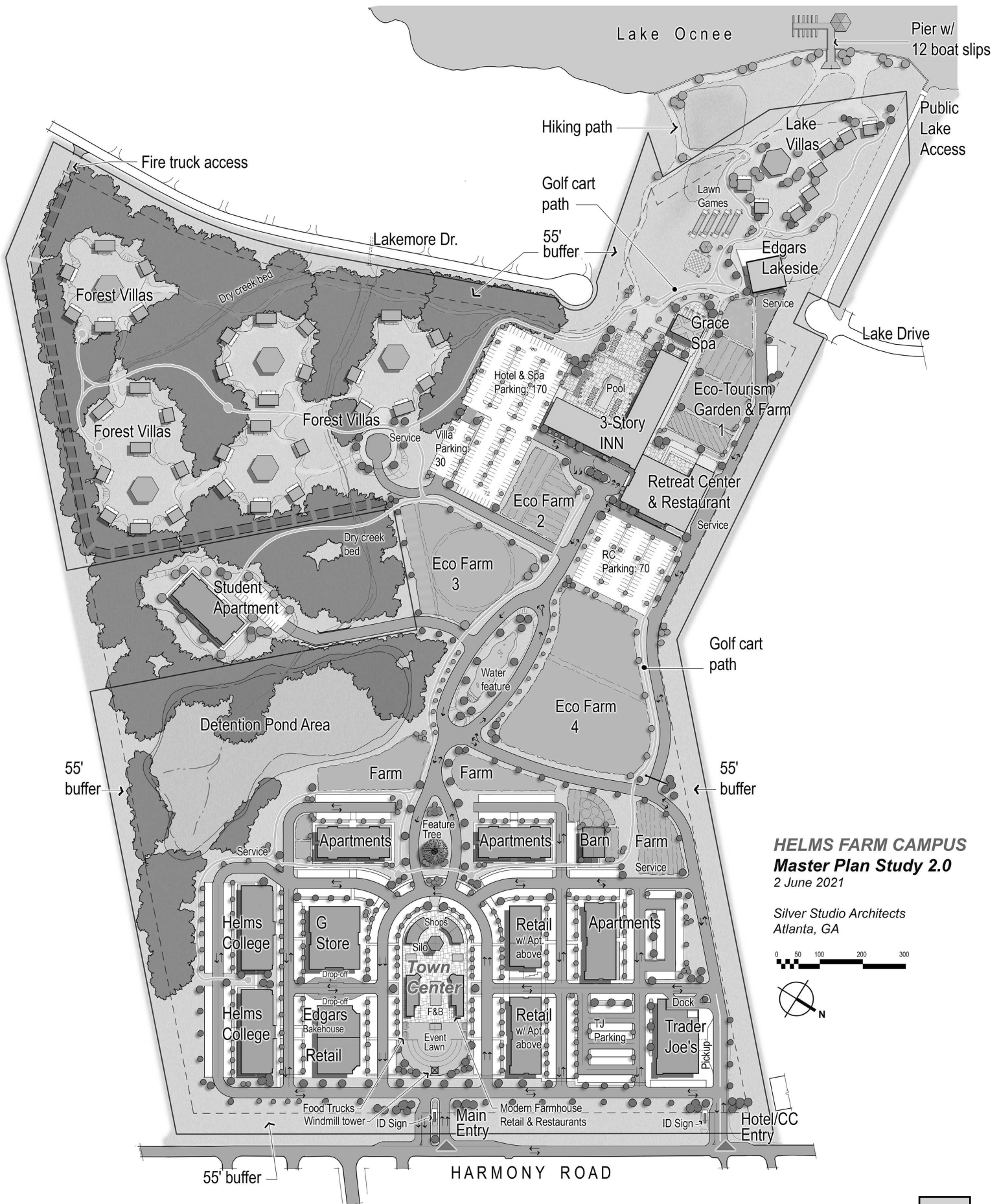
The proposed Helms Farm Campus that will be located on Harmony Road at Sammons Industrial Parkway (South), northeast of Harmony Road at Village Lane and southwest of Harmony Road at Harmony Lane in City of Eatonton, Putnam County, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. A site plan is shown in Figure 5. The development will consist of:

- Goodwill Store: 16,800 sf
- Helms College: 50 Students
- Edgar’s Bakery: 7,000 sf
- Retail including Spa: 26,920 sf
- High-Turn-over Sit-Down Restaurant: 13,100 sf
- Super Market: 14,500 sf
- Multi-family (mid-rise) Residential: 127 Units
- Student Housing: 18 Units
- Vacation Villas (Resorts): 41 Units
- Event Hall or Banquet Hall: 22,000 sf
- Hotel: 175 Rooms

The development proposes two site driveways at the following locations:

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
- Site Driveway 2: Full-access (Northern) driveway on Harmony Road

A site plan is included in Figure 5.



HELMS FARM CAMPUS
Master Plan Study 2.0
 2 June 2021

Silver Studio Architects
 Atlanta, GA



5.1 Trip Generation

Trip generation estimates for the project were based on the rates and equations published in the 10th edition of the Institute of Transportation Engineers (ITE) Trip Generation report for the daily, AM and PM peak hours. This reference contains traffic volume count data collected at similar facilities nationwide. The calculated total trip generation for the proposed developments are shown in Table 4.

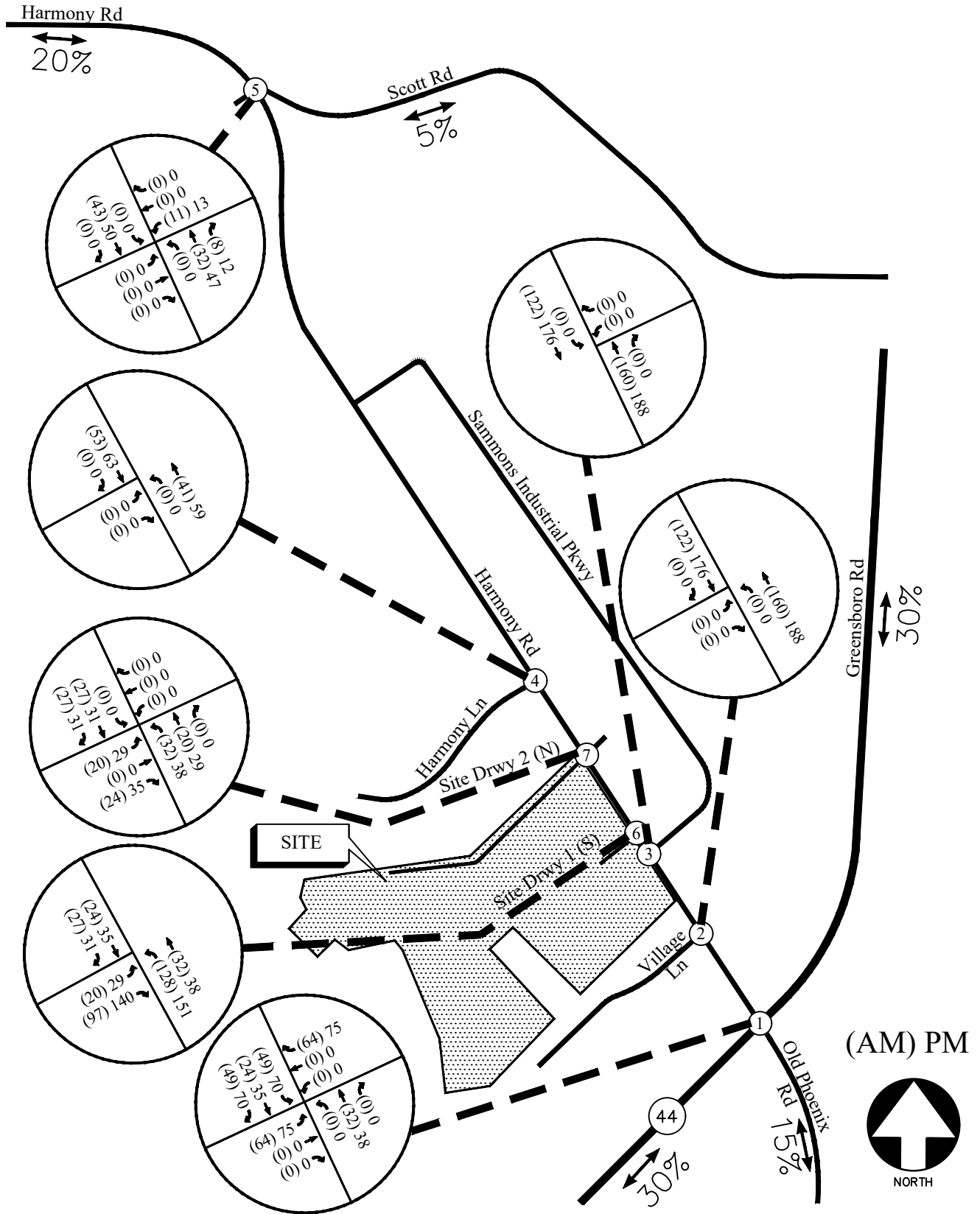
TABLE 4 – TRIP GENERATION								
Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	Two-way
815 – Free-Standing Discount Store	16,800 sf	14	6	20	40	41	81	892
	Mixed-Use Reduction	-3	-1	-2	-3	-3	-4	-7
	Pass-by Trips (0%) 17%	0	0	0	0	-6	-6	-12
930 – Fast Casual Restaurant	7,000 sf	10	4	14	54	45	99	2,206
	Mixed-Use Reduction	-9	-4	-4	-8	-8	-9	-17
	Pass-by Trips (49%) 50%	-66	-3	0	-3	-23	-18	-41
820 – Shopping Center	26,920 sf	15	10	25	49	54	103	1,016
	Mixed-Use Reduction	-3	-2	-2	-4	-4	-4	-8
	Pass-by Trips (0%) 34%	0	0	0	0	-15	-17	-32
932 -High-Turnover (Sit-Down) Rest.	13,100 sf	71	59	130	79	49	128	1,470
	Mixed-Use Reduction	-4	-2	-3	-5	-5	-6	-11
	Pass-by Trips (0%) 43%	0	0	0	0	-32	-18	-50
850 – Supermarket	14,500 sf	33	22	55	68	66	134	2,241
	Mixed-Use Reduction	-6	-4	-4	-8	-8	-9	-17
	Pass-by Trips (0%) 36%	0	0	0	0	-22	-21	-43
550 - University/Colleges	50 Students	6	2	8	2	6	8	78
	Mixed-Use Reduction	-2	-2	0	-2	-1	-1	-2
221- Multifamily Housing (Mid-Rise)	127 Units	11	32	43	34	22	56	690
	Mixed-Use Reduction	-6	-3	-3	-6	-7	-6	-13
225 - Off-Campus Student Apartment	18 Beds	3	4	7	3	4	7	57
	Mixed-Use Reduction	-1	0	0	0	-1	-1	-2
260 - Recreational Homes	41 Rooms	6	3	9	4	7	11	142
	Mixed-Use Reduction	-1	-1	-1	-2	-2	-1	-3
495 - Recreational Community Center	22,000 sf	26	13	39	24	27	51	634
	Mixed-Use Reduction	-6	-2	-2	-4	-6	-5	-11
310 –Hotel	175 Rooms	48	34	82	53	52	105	1,549
	Mixed-Use Reduction	-14	-6	-7	-13	-16	-13	-29
	Total Trips (without Reductions)	243	190	433	410	373	783	10,975
	New External Trips (with Reductions)	213	162	375	251	234	485	7,382

Daily pass-by reduction estimated to be ten times the PM pass-by volume.

The trip generation was based on the following ITE Land Uses: 221 – Multifamily Housing (Mid-Rise), 225 – Off-Campus Student Apartment, 260 – Recreational Homes, 310 – Hotel, 495 - Recreational Community Center, 550 - University/Colleges, 815 - Free-Standing Discount Store, 820 – Shopping center, 850 – Supermarket, 932 - High-Turnover (Sit-Down) Restaurant and 930 – Fast Casual Restaurant. Due to the nature of the development, pass-by and mixed-use reductions have been applied per ITE standards.

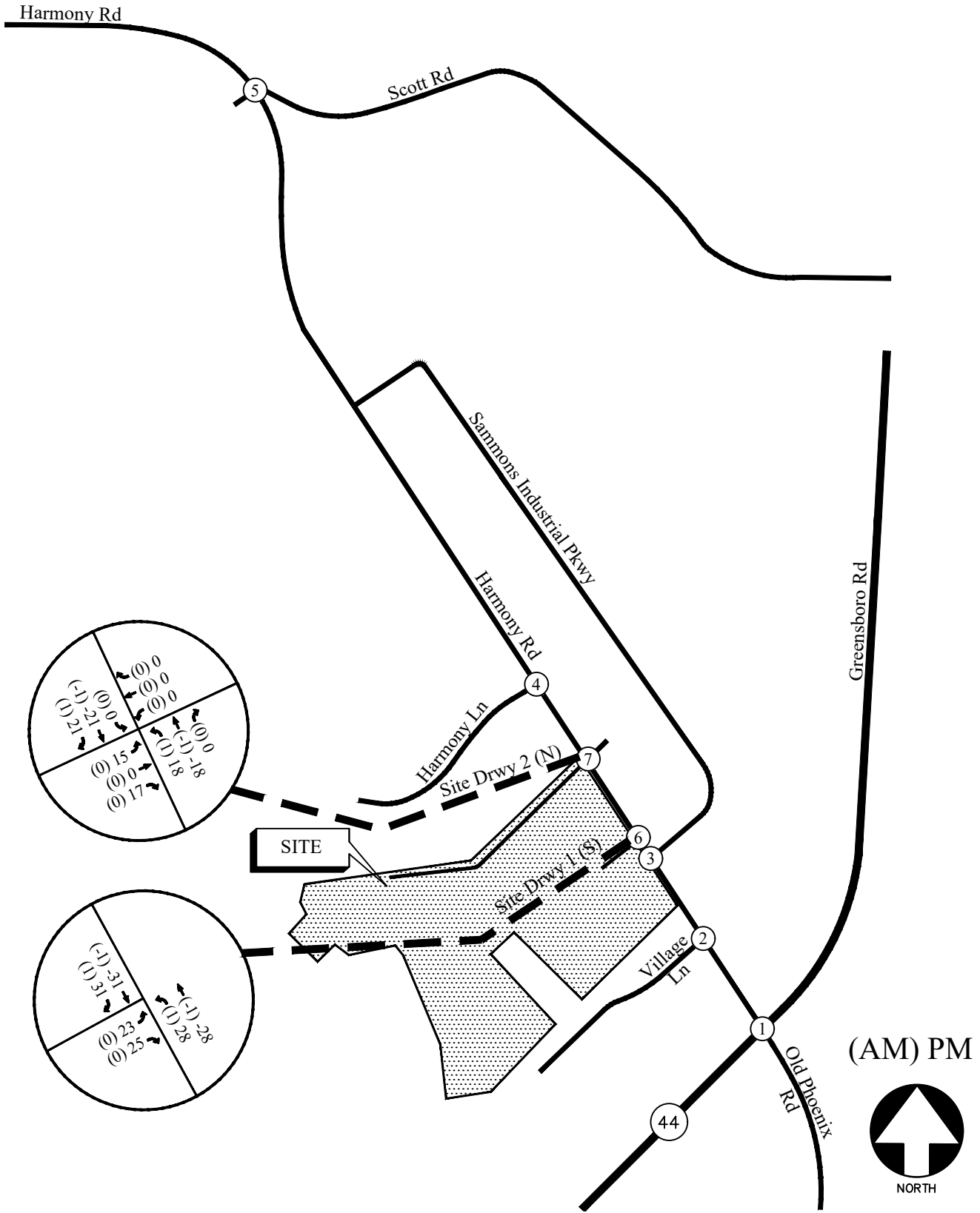
5.2 Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of GDOT ADT volumes and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 6. Pass-by volumes have also been distributed based on existing travel patterns and are shown in Figure 7.



TRIP DISTRIBUTION AND SITE-GENERATED
WEEKDAY PEAK HOUR VOLUMES

FIGURE 6
A&R Engineering Inc.



SITE PEAK HOUR PASS-BY VOLUMES

FIGURE 7
A&R Engineering Inc.

6.0 FUTURE 2022 TRAFFIC ANALYSIS

The future 2025 traffic operations are analyzed for the “Build” and “No-Build” conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic. Note that survey and construction drawings would be needed to verify the feasibility and extent of additional right-of-way required for any recommended improvements.

Improvements that are identified as “System Improvements” address deficiencies that are found within the existing road network prior to any impacts from the proposed development’s added traffic. Improvements that are identified as “Site Mitigation Improvements” address further impacts that are a result of the proposed development’s added traffic.

6.1 Future “No-Build” Conditions

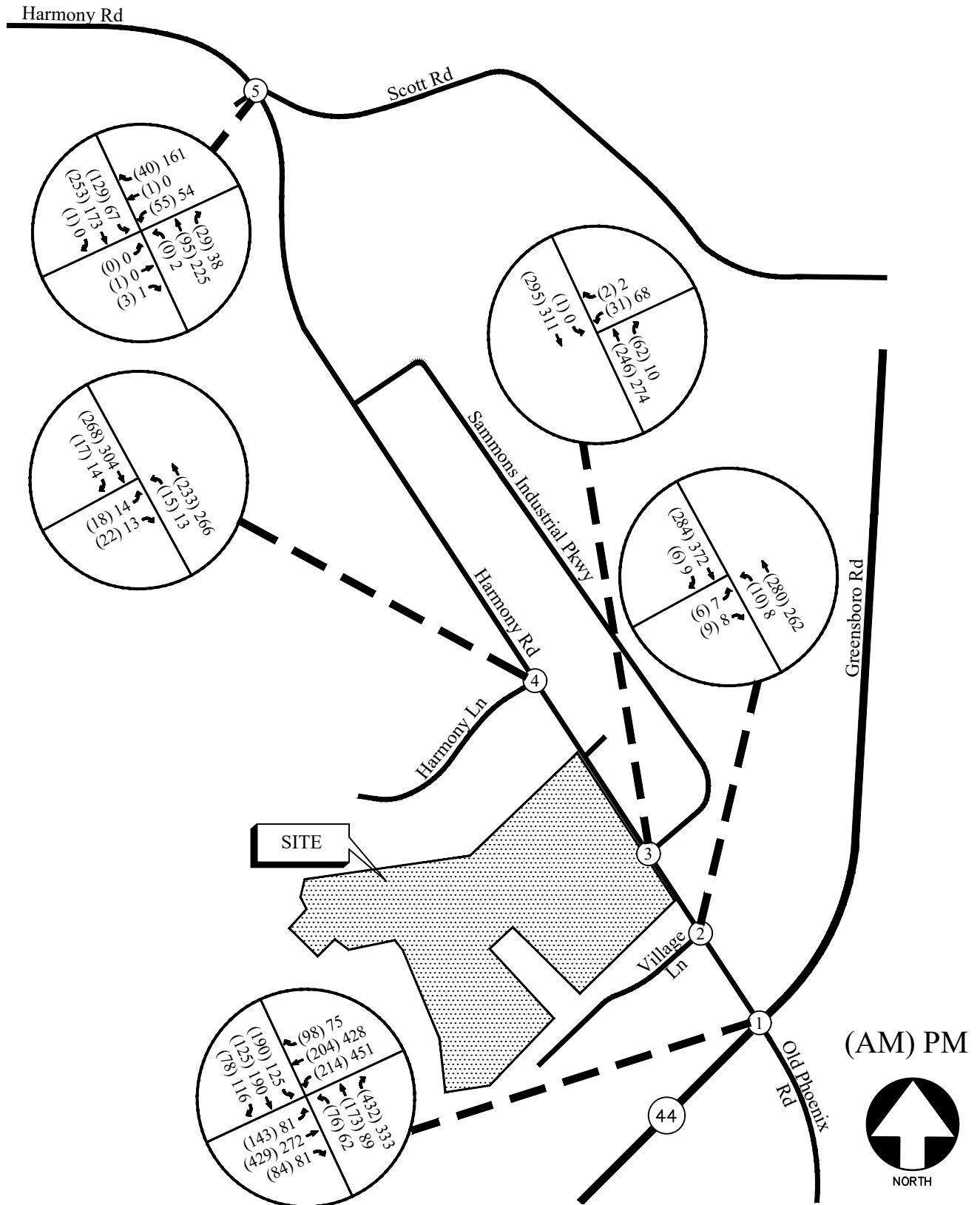
The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future “No-Build” volumes consist of the adjusted existing traffic volumes (Figure 3) plus increases for annual growth of through traffic.

6.1.1 Annual Traffic Growth

In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last three years revealed growth of approximately 2.5% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways in order to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future “No-Build” volumes on the roadway are shown in Figure 8.

Future “Build” Conditions

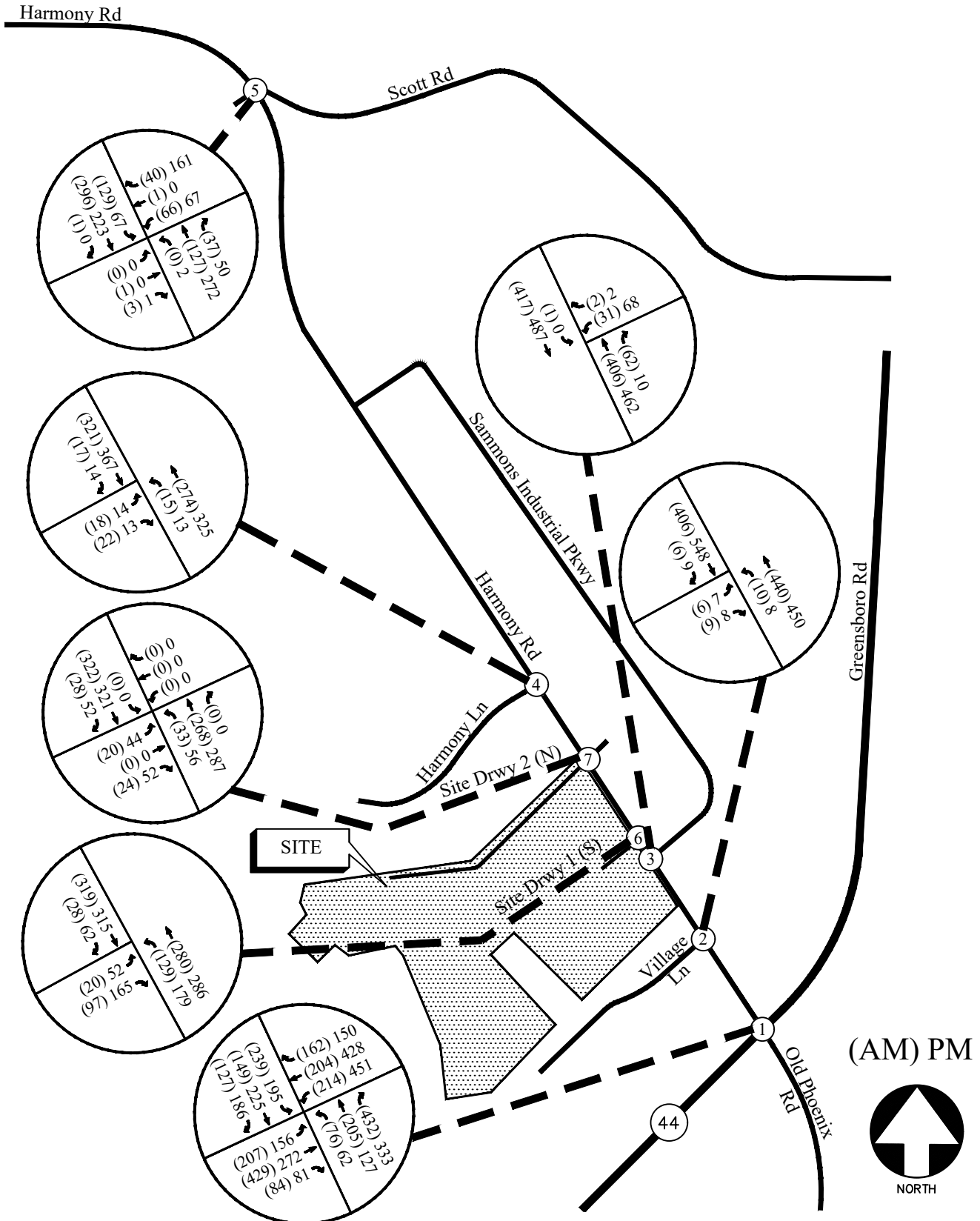
The “Build” or development conditions include the estimated background traffic from the “No-Build” conditions plus the added traffic from the proposed development. In order to evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 6) and pass-by volumes (Figure 7) were added to base traffic volumes (Figure 8) to calculate the future traffic volumes after the construction of the development. These total future traffic volumes are shown in Figure 9.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 8

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FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 9
A&R Engineering Inc.

6.1.2 Auxiliary Lane Analysis

Included below are analyses for left-turn lanes and deceleration lanes for all site driveways per GDOT standards. The analyses below are based off the “trip distribution”. According to the trip distribution, the total site generated trips is 10,975 and the mixed-use reduction is 1,814. Therefore, the 24-hour two-way volume the site is 9,161 vehicles.

6.1.3 Left Turn Lane Analysis

For two lane roadways with AADT’s less than 6,000 vehicles and a posted speed limit of 45 mph, the daily site generated left-turn threshold to warrant a left-turn lane is 250 left-turning vehicles. The projected left-turn volumes per day for each driveway is included below.

TABLE 5 - GDOT REQUIREMENTS FOR LEFT TURN LANES				
Intersection	Left- turn traffic (% entering)	Left-turn Volume (vehicle/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicle/day)
Harmony Road @ Site Driveway 1 (S)	60%	2,748 (Total trips – mixed use) ÷ 2 × 0.60 = (10,975 – 1,814) ÷ 2 × 0.60 = 2,748	45 mph / 2-lane/ <6,000	250
Harmony Road @ Site Driveway 2 (N)	15%	687 (Total trips – mixed use) ÷ 2 × 0.15 = (10,975 – 1,814) ÷ 2 × 0.15 = 687	45 mph / 2-lane/ <6,000	250

Since the projected number of left-turning vehicles at Site Driveway 1 and Site Driveway 2 exceed the threshold of 250 left turning vehicles, a left-turn lane is warranted at both site driveways per GDOT standards.

6.1.4 Deceleration Turn Lane Analysis

For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 45 mph, the daily site generated right-turn threshold to warrant a deceleration lane is 150 right turning vehicles. The projected right-turn volumes per day for each driveway is included in Table 6.

TABLE 6 - GDOT REQUIREMENTS FOR DECELERATION LANES				
Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicle/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicle/day)
Harmony Road @ Site Driveway 1 (S)	12.5%	573 (Total trips – mixed use) ÷ 2 × 0.125 = (10,975 – 1,814) ÷ 2 × 0.125 = 573	45 mph / 2-lane/ <6,000	150
Harmony Road @ Site Driveway 2 (N)	12.5%	573 (Total trips – mixed use) ÷ 2 × 0.125 = (10,975 – 1,814) ÷ 2 × 0.125 = 573	45 mph / 2-lane/ <6,000	150

Since the projected number of right turning vehicles at Site Driveway 1 and Site Driveway 2 exceed the threshold of 150 right turning vehicles, a deceleration lane is warranted at both site driveways per GDOT standards.

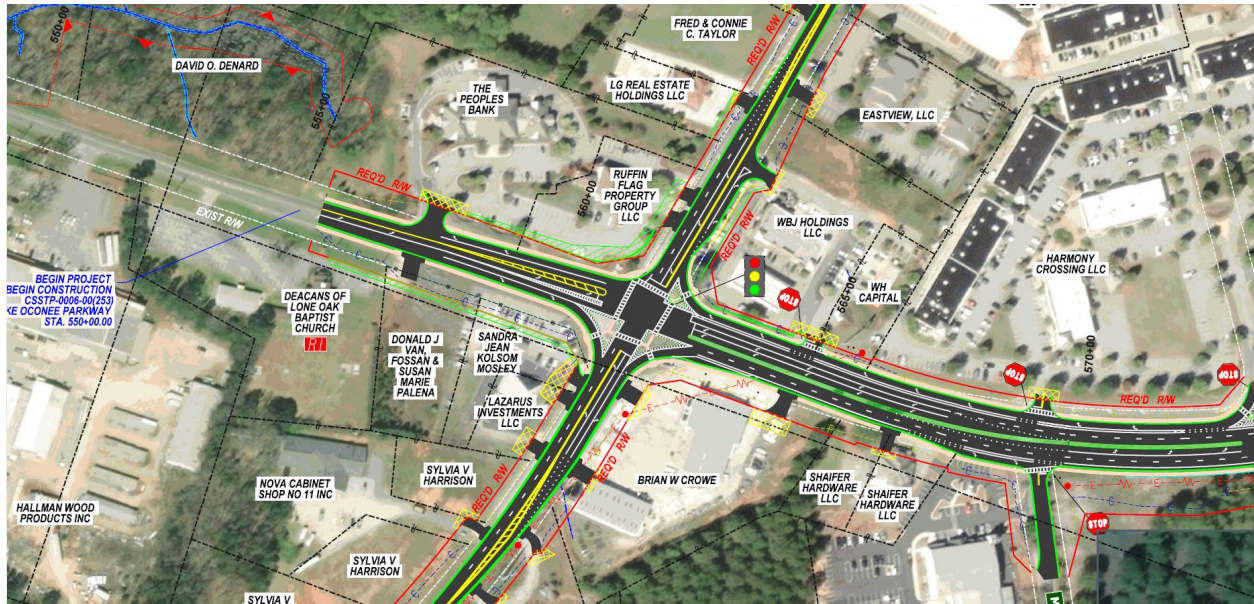
6.2 Future Traffic Conditions

The future 2025 “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 8 and Figure 9, respectively, and the results are shown in Table 7.

TABLE 7 – FUTURE INTERSECTION OPERATIONS					
Intersection		Future Condition: LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	<u>SR 44 (Greensboro Road) @ Harmony Road</u>	<u>E (62.5)</u>	<u>D (41.0)</u>	<u>E (75.4)</u>	<u>D (50.0)</u>
	-Eastbound Approach	D (47.4)	D (39.2)	E (64.7)	D (44.6)
	-Westbound Approach	D (35.9)	C (23.7)	E (67.2)	D (36.1)
	-Northbound Approach	F (102.9)	F (80.8)	F (110.6)	F (91.7)
	-Southbound Approach	D (42.9)	D (32.7)	D (46.5)	D (38.0)
2	<u>Harmony Road @ Village Lane</u>				
	-Eastbound Approach	B (11.7)	B (13.1)	B (14.4)	C (18.5)
	-Northbound Left	A (8.0)	A (8.3)	A (8.3)	A (8.9)
3	<u>Harmony Road @ Sammons Industrial Parkway (South)</u>				
	-Westbound Approach	C (15.2)	C (16.1)	C (21.8)	D (29.9)
	-Southbound Left	A (8.0)	A (0.0)	A (8.4)	A (0.0)
4	<u>Harmony Road @ Harmony Lane</u>				
	-Eastbound Approach	B (11.7)	B (12.6)	B (12.6)	B (14.0)
	-Northbound Left	A (7.9)	A (8.1)	A (8.1)	A (8.3)
5	<u>Harmony Road @ Scott Road / Private Driveway</u>				
	-Eastbound Approach	B (11.4)	A (9.2)	B (12.0)	A (9.5)
	-Westbound Approach	C (15.4)	B (14.5)	C (18.5)	C (18.0)
	-Northbound Left	A (0.0)	A (7.6)	A (0.0)	A (7.7)
	-Southbound Left	A (7.8)	A (8.0)	A (7.9)	A (8.2)
6	<u>Harmony Road @ Site Driveway 1 (S)</u>				
	-Eastbound Approach	-	-	B (12.6)	C (15.8)
	-Northbound Left			A (8.5)	A (8.8)
7	<u>Harmony Road @ Site Driveway 2 (N) / Private Driveway</u>				
	-Eastbound Approach			B (13.1)	C (14.6)
	-Westbound Approach	-	-	A (0.0)	A (0.0)
	-Northbound Left			A (8.2)	A (8.3)
	-Southbound Left			A (0.0)	A (0.0)

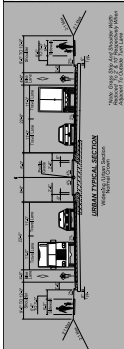
The results of future ‘No-Build’ traffic operations analysis indicate that the intersection of SR 44 (Greensboro Road) and Harmony Road will operate at level-of-service “E” in AM peak hour and the northbound approach of Old Phoenix Road will operate at level-of-service “F”. This approach has a large volume of right-turn movement but does not have a dedicated right-turn lane causing this approach experience longer delays. As part of GDOT’s SR 44 Widening project PI 0006253 this intersection will be improved by constructing a northbound right-turn lane on Old Phoenix Road and dual westbound left-turn lanes on SR 44 and an additional southbound through lane on Harmony Road. With these improvements, the intersection should operate at satisfactory levels-of service. Since the project

completion dates are not available, we did not include these 'System Improvements' in our analysis. All other intersections will be operating at satisfactory levels-of-service in both peak hours. GDOT's intersection improvement plan is shown below and in Figure 10. In future "Build" conditions all intersections will be operating at similar levels-of-service as in "No-Build" conditions. Recommendations for future traffic control and lane geometry is shown in Figure 11.









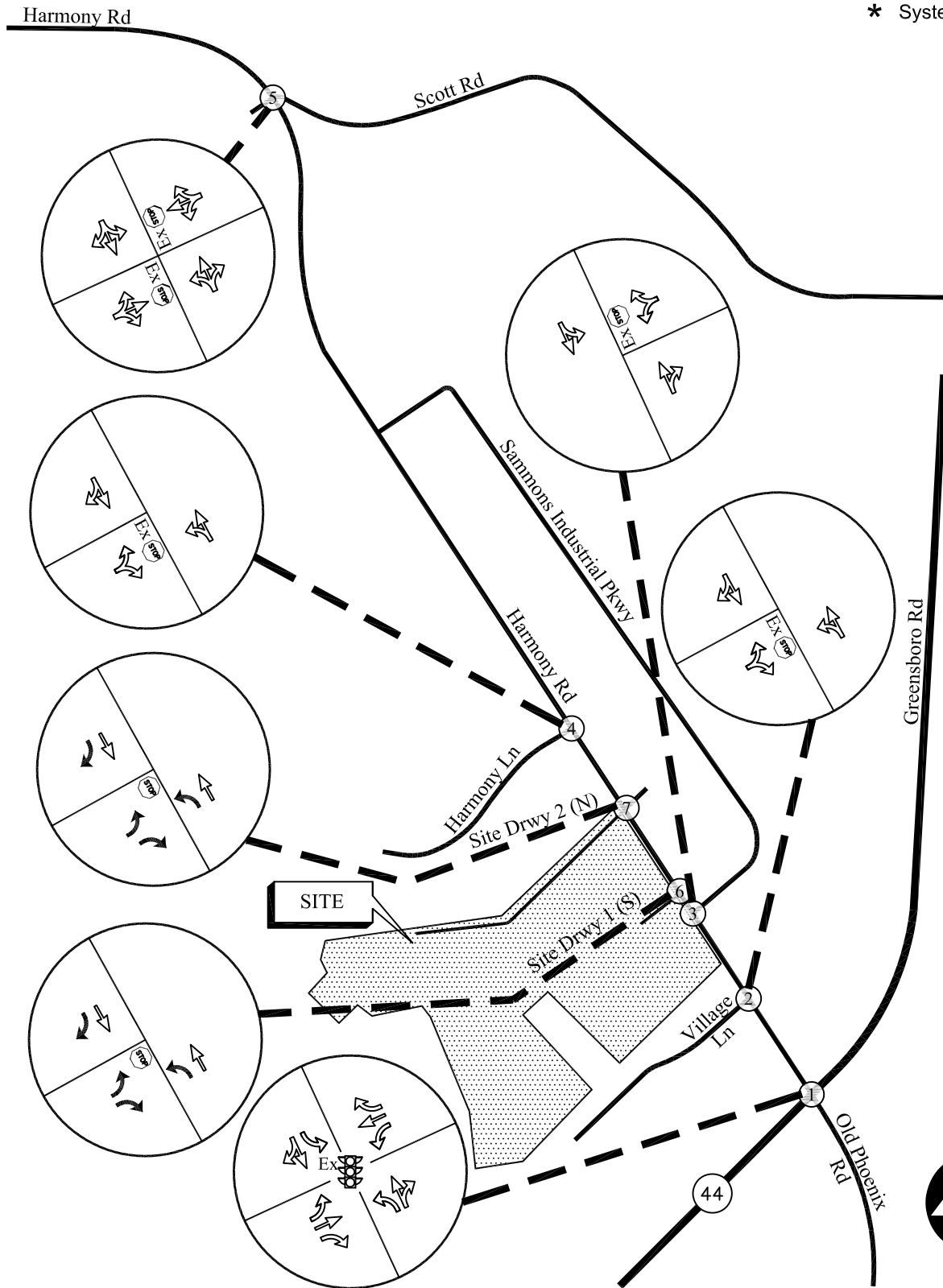


PRELIMINARY PLAN
P.I.O.H
SR 44 GREENE COUNTY
RECONSTRUCTION OF SR 44
FROM OLD PHOENIX ROAD
TO NORTH OF I-20
PT # 0006253
SHEET 1 OF 6
DATE : TBD



LEGEND

- Ex  Existing Signed Approach  Proposed Signed Approach
-  Existing Lane Geometry  Proposed Lane Geometry
- Ex  Existing Traffic Signal  Proposed Traffic Signal
- * System Improvement



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 11

A&R Engineering Inc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study is to determine the traffic impact that will result from the proposed Helms Farm Campus development that will be located on Harmony Road across from Sammons Industrial Parkway (South), north of Village Lane in City of Eatonton, Putnam County, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. The development will consist of:

- Goodwill Store: 16,800 sf
- Helms College: 50 Students
- Edgar’s Bakery: 7,000 sf
- Retail including Spa: 26,920 sf
- High-Turn-over Sit-Down Restaurant: 13,100 sf
- Super Market: 14,500 sf
- Multi-family (mid-rise) Residential: 127 Units
- Student Housing: 18 Units
- Vacation Villas (Resorts): 41 Units
- Event Hall or Banquet Hall: 22,000 sf
- Hotel: 175 Rooms

The development proposes three site accesses at the following locations:

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
- Site Driveway 2: Full-access (Northern) driveway on Harmony Road

Both AM and PM peak hours have been analyzed in this study. This study includes the evaluation of traffic operations at the intersections of:

- Harmony Road at SR 44 (Greensboro Road) / Old Phoenix Road
- Harmony Road at Village Lane
- Harmony Road at Sammons Industrial Parkway (South)
- Harmony Road at Harmony Lane
- Harmony Road at Scott Road / Private Driveway
- Harmony Road at Site Driveway 1 (Southern)
- Harmony Road at Site Driveway 2 (Northern) / Private Driveway

The analysis included the evaluation of “Existing” operations and future operations for “No-Build” and “Build” conditions, both of which account for increases in annual growth of through traffic. The results of the analysis are listed below:

Recommendations for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

- Site Driveway 1: Full-access (Southern) driveway on Harmony Road
 - The driveway to have two entering and two exiting lanes. The eastbound (driveway) approach to have separate left and right-turn lane for exiting traffic.
 - The intersection to be unsignalized with a STOP sign on the eastbound approach.
 - A northbound left-turn lane to be constructed on Harmony Road for entering traffic.
 - A southbound deceleration lane to be constructed on Harmony Road for entering traffic.

- Site Driveway 2: Full-access (Northern) driveway on Harmony Road
 - The driveway to have one entering and two exiting lanes. The eastbound (driveway) approach to have separate left and right-turn lane for exiting traffic.
 - The intersection to be unsignalized with a STOP sign on the eastbound approach.
 - A northbound left-turn lane to be constructed on Harmony Road for entering traffic.
 - A southbound deceleration lane is recommended to be constructed on Harmony Road for entering traffic.

The proposed Helms Farm Campus development will be completed in different phases as determined by the market conditions and demand. The projected phasing of the entire development is given below. This study was evaluated to determine improvements for the full build out in year 2025.

LAND USE	UNITS	PHASE 1 2023	PHASE 2 2024	PHASE 3 Early 2025	PHASE 4 Late 2025
Goodwill Store	16,800 sf	16,800 sf	-	-	-
Helms College	50 Students	25 Students	25 Students	-	-
Edgar’s Bakery	7,000 sf	7,000 sf	-	-	-
Retail	26,920 sf	3400	11,200 sf	12,320 sf	-
Sit-Down Restaurant	13,100 sf	-	2,500 sf	2,500 sf	8,100 sf
Super Market	14,500 sf	-	-	14,500 sf	-
Multi-family Apartments	127 Units	-	42	64	21
Student Housing	18 Units	-	6	9	3
Vacation Villas	41 Units	-	-	20 Units	21 Units
Event Hall/Banquet	22,000 sf	-	-	-	22,000 sf
Hotel	175 Rooms	-	-	175 Rooms	-

The most traffic impact from the project occurs during the AM and PM peak hours. The traffic volumes generated by the project during these peak hours in different directions is shown graphically in figure 6 on page 16. As shown on this figure, a maximum of 29 vehicles are projected to turn left at any of the two driveways. The northern driveway has only 35 vehicles turning right while the southern driveway will have 140 vehicles turning right. These turning movements amount to 1 or 2 vehicles per minute. This magnitude of traffic volumes will not create any significant impact on traffic on Harmony Road especially the development will construct left-turn lanes and deceleration lanes per our recommendations.

The results of future traffic operations analysis indicate that after addition of the new traffic generated by the proposed Helms Farm Campus development, all study intersections will continue to operate at similar levels-of-service as before. The existing delays at Old Phoenix Road at SR 44 (Greensboro Road) intersection will improve after the proposed SR 44 Widening project (PI 0006253) 10 is completed by GDOT.

Appendix

Existing Intersection Traffic Counts	
Linear Regression of Daily Traffic.....	
Existing Intersection Analysis.....	
Future “No-Build” Intersection Analysis	
Future “Build” Intersection Analysis.....	
Traffic Volume Worksheets	

EXISTING INTERSECTION TRAFFIC COUNTS

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Village Lane
7-9 am | 4-6 pm

File Name : 20210171
Site Code : 20210171
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Village Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	52	0	53	0	38	1	39	2	0	1	3	0	0	0	0	95
07:15 AM	2	48	0	50	0	50	2	52	1	0	1	2	0	0	0	0	104
07:30 AM	2	58	0	60	0	53	1	54	1	0	2	3	0	0	0	0	117
07:45 AM	1	75	0	76	0	61	1	62	1	0	2	3	0	0	0	0	141
Total	6	233	0	239	0	202	5	207	5	0	6	11	0	0	0	0	457
08:00 AM	2	54	0	56	0	59	2	61	2	0	1	3	0	0	0	0	120
08:15 AM	3	46	0	49	0	63	1	64	1	0	2	3	0	0	0	0	116
08:30 AM	1	42	0	43	0	56	0	56	2	0	1	3	0	0	0	0	102
08:45 AM	1	47	0	48	0	59	2	61	1	0	3	4	0	0	0	0	113
Total	7	189	0	196	0	237	5	242	6	0	7	13	0	0	0	0	451
*** BREAK ***																	
04:00 PM	1	66	0	67	0	68	1	69	2	0	2	4	0	0	0	0	140
04:15 PM	1	46	0	47	0	55	2	57	1	0	2	3	0	0	0	0	107
04:30 PM	2	57	0	59	0	60	1	61	3	0	1	4	0	0	0	0	124
04:45 PM	1	55	0	56	0	64	1	65	1	0	1	2	0	0	0	0	123
Total	5	224	0	229	0	247	5	252	7	0	6	13	0	0	0	0	494
05:00 PM	3	69	0	72	0	100	2	102	2	0	2	4	0	0	0	0	178
05:15 PM	2	63	0	65	0	91	3	94	1	0	1	2	0	0	0	0	161
05:30 PM	1	48	0	49	0	79	2	81	2	0	3	5	0	0	0	0	135
05:45 PM	1	47	0	48	0	64	1	65	3	0	2	5	0	0	0	0	118
Total	7	227	0	234	0	334	8	342	8	0	8	16	0	0	0	0	592
Grand Total	25	873	0	898	0	1020	23	1043	26	0	27	53	0	0	0	0	1994
Apprch %	2.8	97.2	0		0	97.8	2.2		49.1	0	50.9		0	0	0		
Total %	1.3	43.8	0	45	0	51.2	1.2	52.3	1.3	0	1.4	2.7	0	0	0	0	

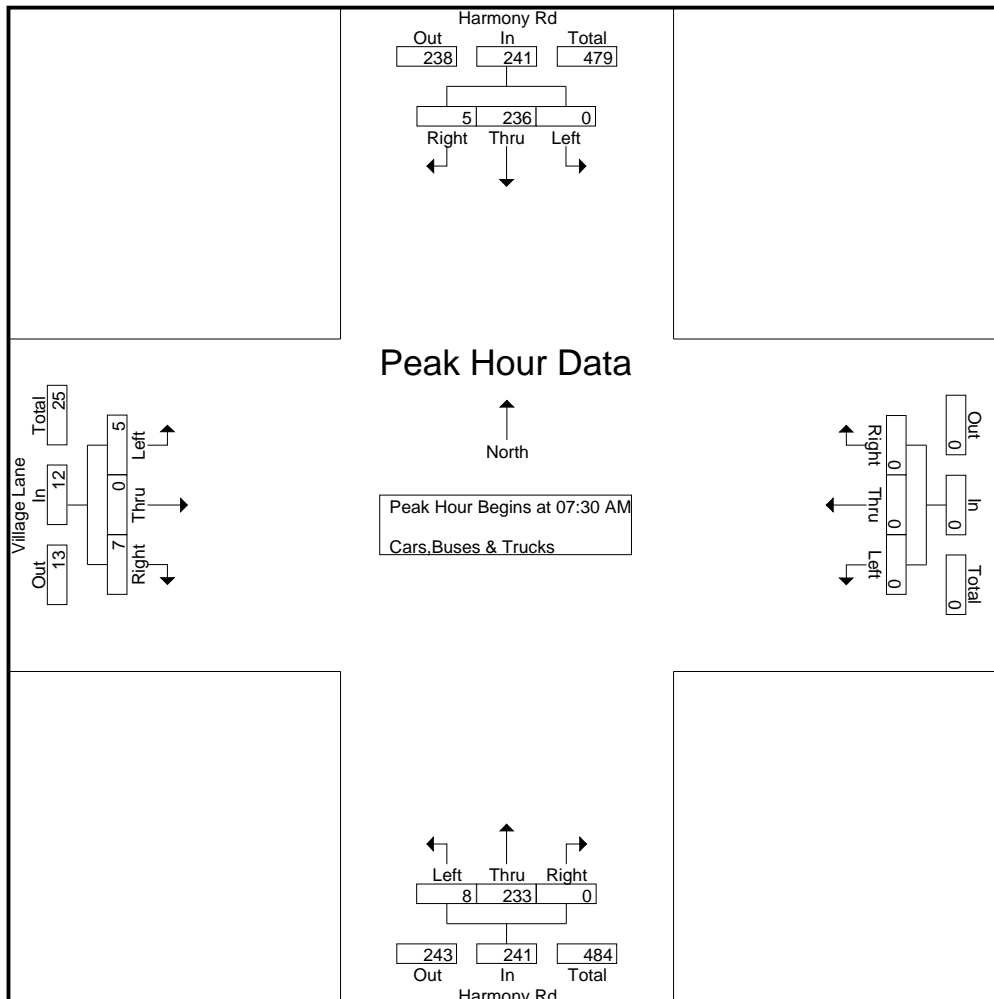
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Village Lane
7-9 am | 4-6 pm

File Name : 20210171
Site Code : 20210171
Start Date : 5/27/2021
Page No : 2

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Village Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	58	0	60	0	53	1	54	1	0	2	3	0	0	0	0	117
07:45 AM	1	75	0	76	0	61	1	62	1	0	2	3	0	0	0	0	141
08:00 AM	2	54	0	56	0	59	2	61	2	0	1	3	0	0	0	0	120
08:15 AM	3	46	0	49	0	63	1	64	1	0	2	3	0	0	0	0	116
Total Volume	8	233	0	241	0	236	5	241	5	0	7	12	0	0	0	0	494
% App. Total	3.3	96.7	0		0	97.9	2.1		41.7	0	58.3		0	0	0		
PHF	.667	.777	.000	.793	.000	.937	.625	.941	.625	.000	.875	1.00	.000	.000	.000	.000	.876



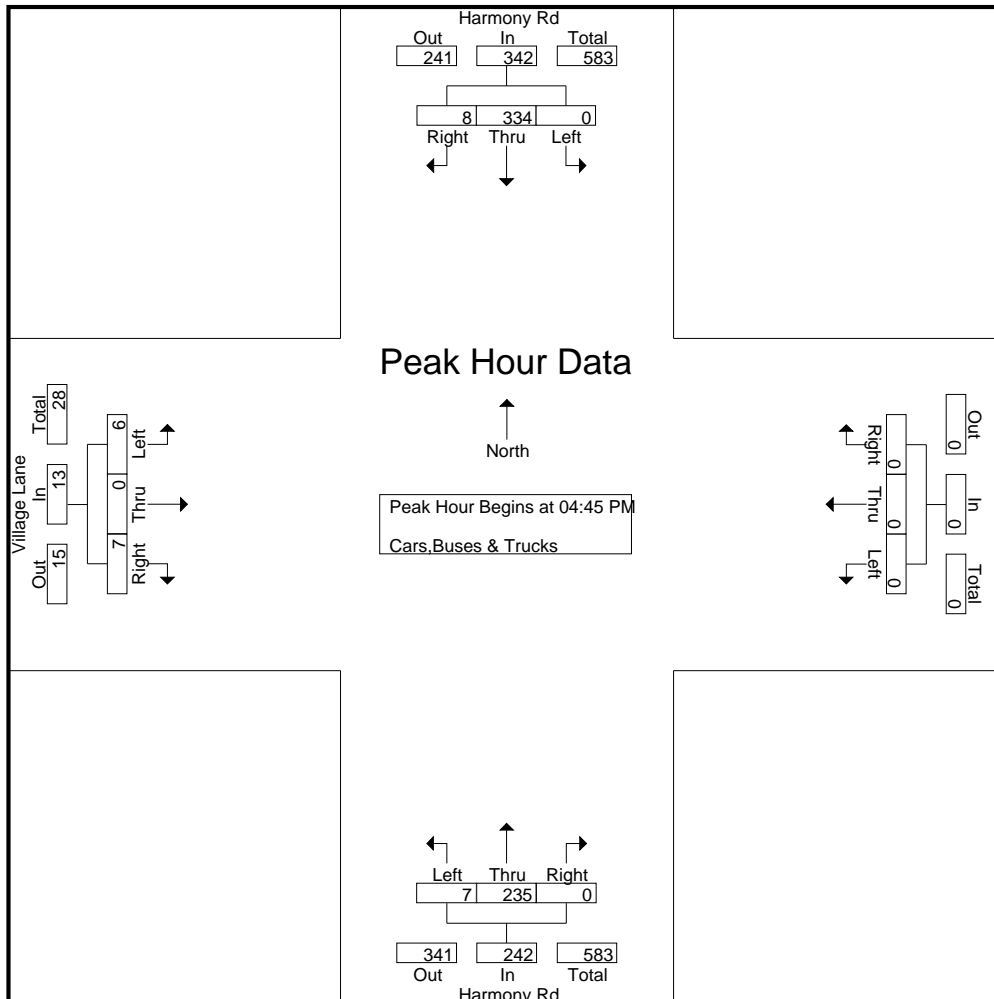
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Village Lane
7-9 am | 4-6 pm

File Name : 20210171
Site Code : 20210171
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Village Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	55	0	56	0	64	1	65	1	0	1	2	0	0	0	0	123
05:00 PM	3	69	0	72	0	100	2	102	2	0	2	4	0	0	0	0	178
05:15 PM	2	63	0	65	0	91	3	94	1	0	1	2	0	0	0	0	161
05:30 PM	1	48	0	49	0	79	2	81	2	0	3	5	0	0	0	0	135
Total Volume	7	235	0	242	0	334	8	342	6	0	7	13	0	0	0	0	597
% App. Total	2.9	97.1	0		0	97.7	2.3		46.2	0	53.8		0	0	0		
PHF	.583	.851	.000	.840	.000	.835	.667	.838	.750	.000	.583	.650	.000	.000	.000	.000	.838



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ SR 44 Greens boro Rd
7-9 am | 4-6 pm

File Name : 20210170
Site Code : 20210170
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars, Buses - Trucks

Start Time	Old Phonix Rd Northbound				Harmony Rd Southbound				Eastbound				SR 44 (Greensboro Rd) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	36	40	81	19	14	10	43	29	51	9	89	30	36	12	78	291
07:15 AM	18	32	69	119	27	15	16	58	25	68	13	106	37	42	10	89	372
07:30 AM	12	37	68	117	44	22	15	81	28	81	20	129	42	45	10	97	424
07:45 AM	16	43	99	158	34	21	16	71	47	95	12	154	35	41	20	96	479
Total	51	148	276	475	124	72	57	253	129	295	54	478	144	164	52	360	1566
08:00 AM	12	33	85	130	34	16	15	65	28	108	28	164	37	52	19	108	467
08:15 AM	13	30	97	140	54	36	17	107	28	76	16	120	53	36	27	116	483
08:30 AM	22	38	78	138	36	31	17	84	16	78	14	108	53	41	16	110	440
08:45 AM	6	33	85	124	45	28	16	89	15	70	15	100	64	42	19	125	438
Total	53	134	345	532	169	111	65	345	87	332	73	492	207	171	81	459	1828
*** BREAK ***																	
04:00 PM	10	36	69	115	40	45	17	102	14	51	12	77	90	77	20	187	481
04:15 PM	7	26	65	98	33	35	19	87	21	57	17	95	91	71	18	180	460
04:30 PM	14	20	64	98	31	27	22	80	18	46	17	81	95	77	25	197	456
04:45 PM	18	17	67	102	32	27	24	83	0	0	0	0	82	84	29	195	380
Total	49	99	265	413	136	134	82	352	53	154	46	253	358	309	92	759	1777
05:00 PM	23	15	78	116	40	53	29	122	22	56	17	95	95	87	26	208	541
05:15 PM	0	19	77	96	32	47	26	105	19	57	18	94	99	91	17	207	502
05:30 PM	16	24	76	116	21	38	25	84	17	68	22	107	112	105	13	230	537
05:45 PM	16	22	68	106	19	32	24	75	14	63	15	92	99	101	11	211	484
Total	55	80	299	434	112	170	104	386	72	244	72	388	405	384	67	856	2064
Grand Total	208	461	1185	1854	541	487	308	1336	341	1025	245	1611	1114	1028	292	2434	7235
Apprch %	11.2	24.9	63.9		40.5	36.5	23.1		21.2	63.6	15.2		45.8	42.2	12		
Total %	2.9	6.4	16.4	25.6	7.5	6.7	4.3	18.5	4.7	14.2	3.4	22.3	15.4	14.2	4	33.6	
Cars, Buses	200	444	1159	1803	496	459	297	1252	331	948	237	1516	1087	986	261	2334	6905
% Cars, Buses	96.2	96.3	97.8	97.2	91.7	94.3	96.4	93.7	97.1	92.5	96.7	94.1	97.6	95.9	89.4	95.9	95.4
Trucks	8	17	26	51	45	28	11	84	10	77	8	95	27	42	31	100	330
% Trucks	3.8	3.7	2.2	2.8	8.3	5.7	3.6	6.3	2.9	7.5	3.3	5.9	2.4	4.1	10.6	4.1	4.6

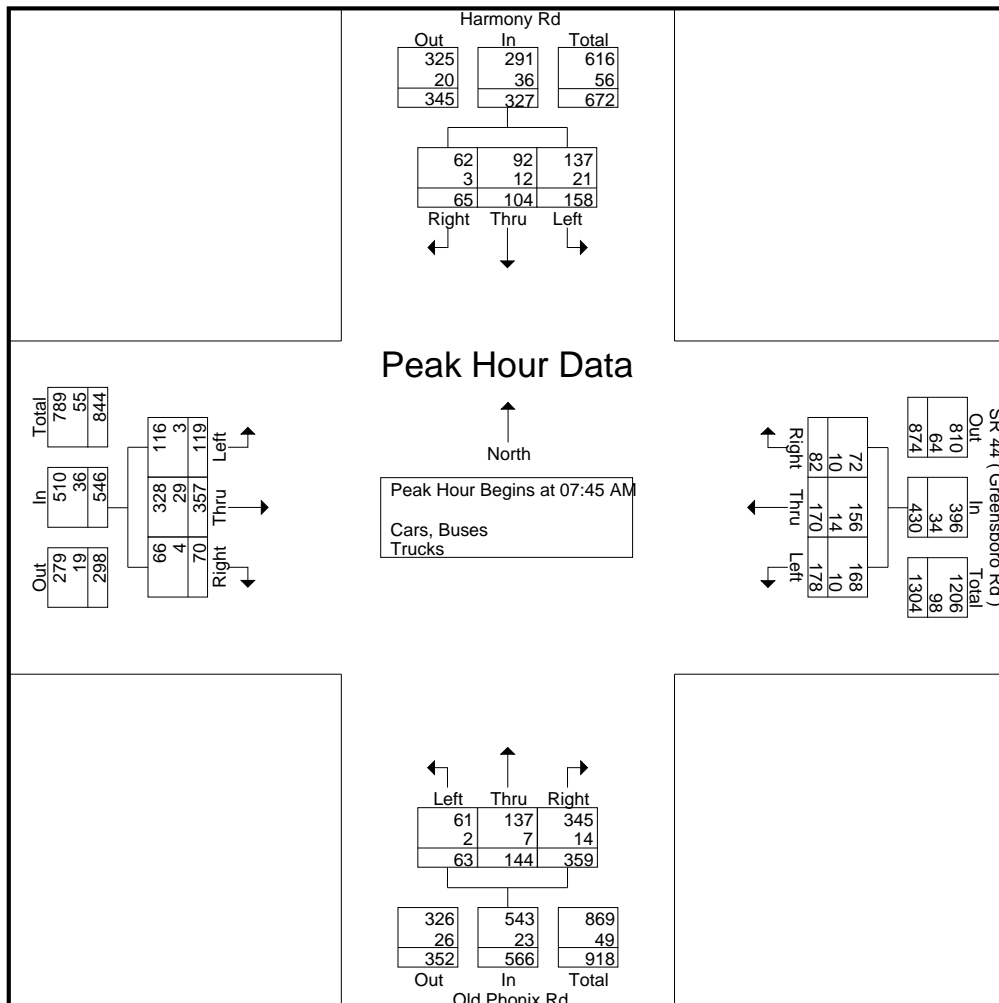
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ SR 44 Greens boro Rd
7-9 am | 4-6 pm

File Name : 20210170
Site Code : 20210170
Start Date : 5/27/2021
Page No : 2

Start Time	Old Phonix Rd Northbound				Harmony Rd Southbound				Eastbound				SR 44 (Greensboro Rd) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	16	43	99	158	34	21	16	71	47	95	12	154	35	41	20	96	479
08:00 AM	12	33	85	130	34	16	15	65	28	108	28	164	37	52	19	108	467
08:15 AM	13	30	97	140	54	36	17	107	28	76	16	120	53	36	27	116	483
08:30 AM	22	38	78	138	36	31	17	84	16	78	14	108	53	41	16	110	440
Total Volume	63	144	359	566	158	104	65	327	119	357	70	546	178	170	82	430	1869
% App. Total	11.1	25.4	63.4		48.3	31.8	19.9		21.8	65.4	12.8		41.4	39.5	19.1		
PHF	.716	.837	.907	.896	.731	.722	.956	.764	.633	.826	.625	.832	.840	.817	.759	.927	.967
Cars, Buses	61	137	345	543	137	92	62	291	116	328	66	510	168	156	72	396	1740
% Cars, Buses	96.8	95.1	96.1	95.9	86.7	88.5	95.4	89.0	97.5	91.9	94.3	93.4	94.4	91.8	87.8	92.1	93.1
Trucks	2	7	14	23	21	12	3	36	3	29	4	36	10	14	10	34	129
% Trucks	3.2	4.9	3.9	4.1	13.3	11.5	4.6	11.0	2.5	8.1	5.7	6.6	5.6	8.2	12.2	7.9	6.9



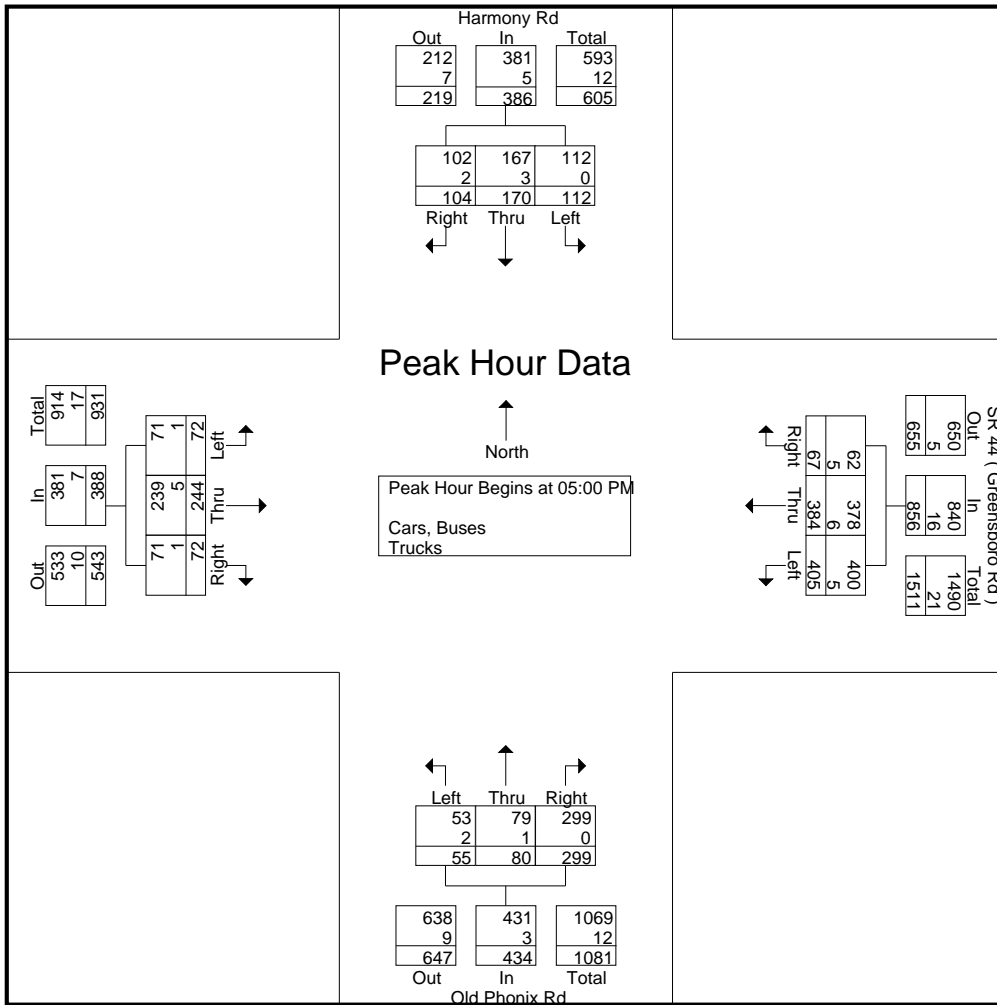
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ SR 44 Greens boro Rd
7-9 am | 4-6 pm

File Name : 20210170
Site Code : 20210170
Start Date : 5/27/2021
Page No : 3

Start Time	Old Phonix Rd Northbound				Harmony Rd Southbound				Eastbound				SR 44 (Greensboro Rd) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	23	15	78	116	40	53	29	122	22	56	17	95	95	87	26	208	541
05:15 PM	0	19	77	96	32	47	26	105	19	57	18	94	99	91	17	207	502
05:30 PM	16	24	76	116	21	38	25	84	17	68	22	107	112	105	13	230	537
05:45 PM	16	22	68	106	19	32	24	75	14	63	15	92	99	101	11	211	484
Total Volume	55	80	299	434	112	170	104	386	72	244	72	388	405	384	67	856	2064
% App. Total	12.7	18.4	68.9		29	44	26.9		18.6	62.9	18.6		47.3	44.9	7.8		
PHF	.598	.833	.958	.935	.700	.802	.897	.791	.818	.897	.818	.907	.904	.914	.644	.930	.954
Cars, Buses	53	79	299	431	112	167	102	381	71	239	71	381	400	378	62	840	2033
% Cars, Buses	96.4	98.8	100	99.3	100	98.2	98.1	98.7	98.6	98.0	98.6	98.2	98.8	98.4	92.5	98.1	98.5
Trucks	2	1	0	3	0	3	2	5	1	5	1	7	5	6	5	16	31
% Trucks	3.6	1.3	0	0.7	0	1.8	1.9	1.3	1.4	2.0	1.4	1.8	1.2	1.6	7.5	1.9	1.5



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Sammons Ind Pkwy (South)
7-9 am | 4-6 pm

File Name : 20210169
Site Code : 20210169
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars, Buses - Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Eastbound				Sammons Ind Pkwy (South) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	44	10	54	1	38	0	39	0	0	0	0	5	0	0	5	98
07:15 AM	0	42	8	50	4	51	0	55	0	0	0	0	7	0	1	8	113
07:30 AM	0	45	18	63	0	52	0	52	0	0	0	0	6	0	0	6	121
07:45 AM	0	61	17	78	0	62	0	62	0	0	0	0	5	0	0	5	145
Total	0	192	53	245	5	203	0	208	0	0	0	0	23	0	1	24	477
08:00 AM	0	51	8	59	0	62	0	62	0	0	0	0	7	0	2	9	130
08:15 AM	0	48	8	56	1	69	0	70	0	0	0	0	8	0	0	8	134
08:30 AM	0	38	10	48	0	55	0	55	0	0	0	0	9	0	0	9	112
08:45 AM	0	47	6	53	1	59	0	60	0	0	0	0	7	0	0	7	120
Total	0	184	32	216	2	245	0	247	0	0	0	0	31	0	2	33	496
*** BREAK ***																	
04:00 PM	0	67	5	72	0	64	0	64	0	0	0	0	7	0	1	8	144
04:15 PM	0	50	3	53	0	55	0	55	0	0	0	0	3	0	1	4	112
04:30 PM	0	59	3	62	0	61	0	61	0	0	0	0	2	0	0	2	125
04:45 PM	0	57	7	64	0	59	0	59	0	0	0	0	8	0	1	9	132
Total	0	233	18	251	0	239	0	239	0	0	0	0	20	0	3	23	513
05:00 PM	0	76	0	76	0	78	0	78	0	0	0	0	23	0	0	23	177
05:15 PM	0	66	1	67	0	81	0	81	0	0	0	0	11	0	1	12	160
05:30 PM	0	47	1	48	0	61	0	61	0	0	0	0	19	0	0	19	128
05:45 PM	0	46	4	50	0	62	0	62	0	0	0	0	4	0	0	4	116
Total	0	235	6	241	0	282	0	282	0	0	0	0	57	0	1	58	581
Grand Total	0	844	109	953	7	969	0	976	0	0	0	0	131	0	7	138	2067
Apprch %	0	88.6	11.4		0.7	99.3	0		0	0	0		94.9	0	5.1		
Total %	0	40.8	5.3	46.1	0.3	46.9	0	47.2	0	0	0	0	6.3	0	0.3	6.7	
Cars, Buses	0	798	75	873	6	923	0	929	0	0	0	0	97	0	5	102	1904
% Cars, Buses	0	94.5	68.8	91.6	85.7	95.3	0	95.2	0	0	0	0	74	0	71.4	73.9	92.1
Trucks	0	46	34	80	1	46	0	47	0	0	0	0	34	0	2	36	163
% Trucks	0	5.5	31.2	8.4	14.3	4.7	0	4.8	0	0	0	0	26	0	28.6	26.1	7.9

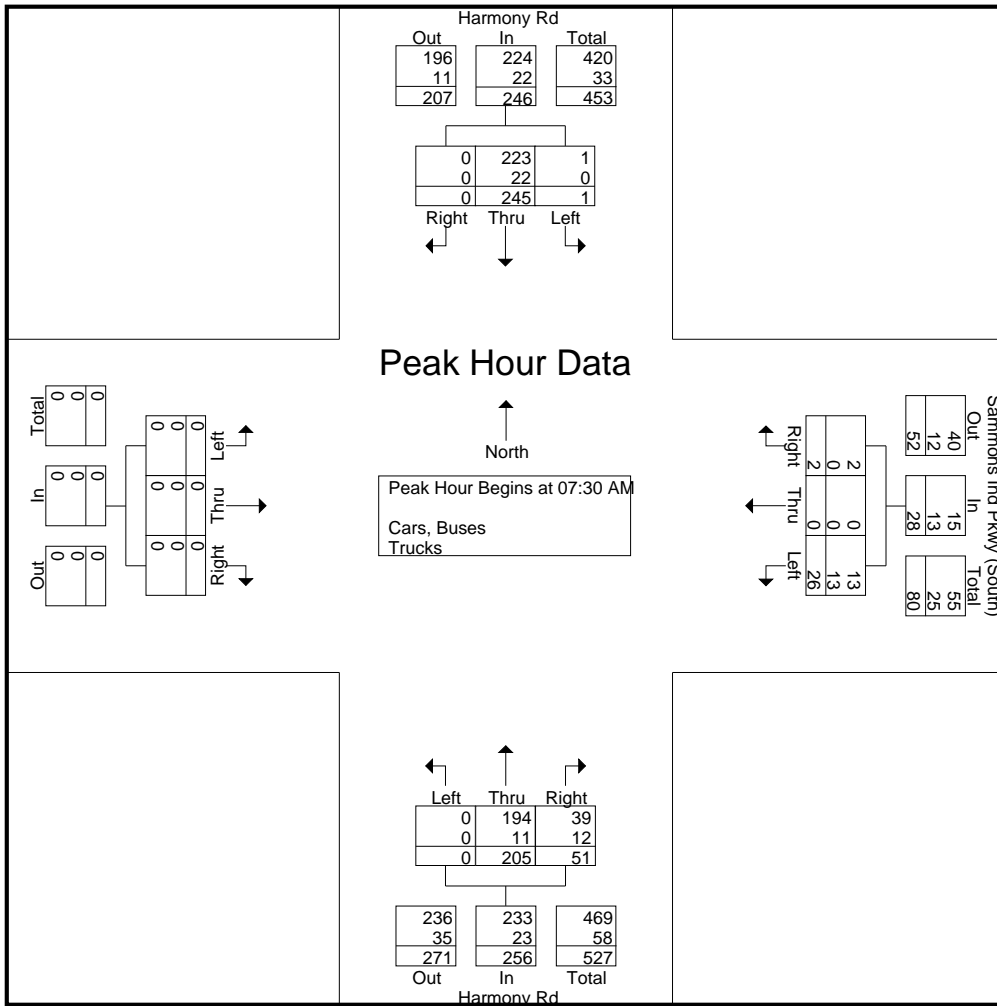
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Sammons Ind Pkwy (South)
7-9 am | 4-6 pm

File Name : 20210169
Site Code : 20210169
Start Date : 5/27/2021
Page No : 2

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Eastbound				Sammons Ind Pkwy (South) Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	45	18	63	0	52	0	52	0	0	0	0	6	0	0	6	121
07:45 AM	0	61	17	78	0	62	0	62	0	0	0	0	5	0	0	5	145
08:00 AM	0	51	8	59	0	62	0	62	0	0	0	0	7	0	2	9	130
08:15 AM	0	48	8	56	1	69	0	70	0	0	0	0	8	0	0	8	134
Total Volume	0	205	51	256	1	245	0	246	0	0	0	0	26	0	2	28	530
% App. Total	0	80.1	19.9		0.4	99.6	0		0	0	0		92.9	0	7.1		
PHF	.000	.840	.708	.821	.250	.888	.000	.879	.000	.000	.000	.000	.813	.000	.250	.778	.914
Cars, Buses	0	194	39	233	1	223	0	224	0	0	0	0	13	0	2	15	472
% Cars, Buses	0	94.6	76.5	91.0	100	91.0	0	91.1	0	0	0	0	50.0	0	100	53.6	89.1
Trucks	0	11	12	23	0	22	0	22	0	0	0	0	13	0	0	13	58
% Trucks	0	5.4	23.5	9.0	0	9.0	0	8.9	0	0	0	0	50.0	0	0	46.4	10.9



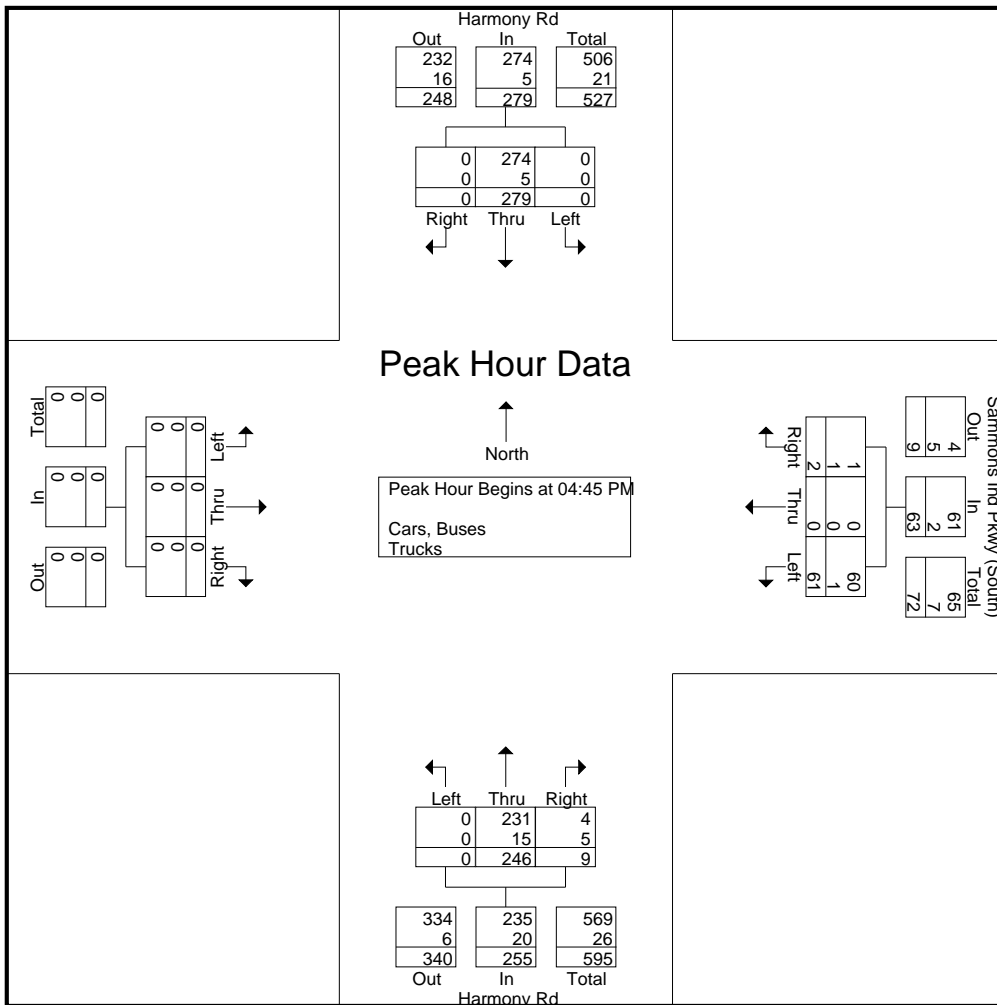
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Sammons Ind Pkwy (South)
7-9 am | 4-6 pm

File Name : 20210169
Site Code : 20210169
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Eastbound				Sammons Ind Pkwy (South) Westbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:45 PM																		
04:45 PM	0	57	7	64	0	59	0	59	0	0	0	0	8	0	1	9		132
05:00 PM	0	76	0	76	0	78	0	78	0	0	0	0	23	0	0	23		177
05:15 PM	0	66	1	67	0	81	0	81	0	0	0	0	11	0	1	12		160
05:30 PM	0	47	1	48	0	61	0	61	0	0	0	0	19	0	0	19		128
Total Volume	0	246	9	255	0	279	0	279	0	0	0	0	61	0	2	63		597
% App. Total	0	96.5	3.5		0	100	0		0	0	0		96.8	0	3.2			
PHF	.000	.809	.321	.839	.000	.861	.000	.861	.000	.000	.000	.000	.663	.000	.500	.685		.843
Cars, Buses	0	231	4	235	0	274	0	274	0	0	0	0	60	0	1	61		570
% Cars, Buses	0	93.9	44.4	92.2	0	98.2	0	98.2	0	0	0	0	98.4	0	50.0	96.8		95.5
Trucks	0	15	5	20	0	5	0	5	0	0	0	0	1	0	1	2		27
% Trucks	0	6.1	55.6	7.8	0	1.8	0	1.8	0	0	0	0	1.6	0	50.0	3.2		4.5



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	17	3	20	9	24	0	33	0	0	1	1	3	0	6	9	63
07:15 AM	0	18	4	22	27	48	0	75	0	1	1	2	10	0	7	17	116
07:30 AM	0	23	5	28	23	59	0	82	0	0	2	2	10	1	4	15	127
07:45 AM	0	20	7	27	35	58	0	93	0	0	0	0	10	0	11	21	141
Total	0	78	19	97	94	189	0	283	0	1	4	5	33	1	28	62	447
08:00 AM	0	18	8	26	22	45	1	68	0	0	0	0	16	0	11	27	121
08:15 AM	0	25	5	30	17	48	0	65	0	0	1	1	7	0	9	16	112
08:30 AM	0	14	4	18	16	30	0	46	0	0	0	0	6	0	11	17	81
08:45 AM	0	19	9	28	18	53	0	71	0	0	0	0	6	0	14	20	119
Total	0	76	26	102	73	176	1	250	0	0	1	1	35	0	45	80	433
09:00 AM	1	27	4	32	27	44	0	71	1	0	1	2	14	0	5	19	124
09:15 AM	0	19	9	28	21	30	0	51	0	0	0	0	5	0	10	15	94
09:30 AM	0	24	7	31	14	26	0	40	0	0	0	0	8	0	6	14	85
09:45 AM	0	24	8	32	16	40	0	56	0	0	0	0	12	0	12	24	112
Total	1	94	28	123	78	140	0	218	1	0	1	2	39	0	33	72	415
10:00 AM	0	19	9	28	13	25	0	38	0	0	0	0	7	0	12	19	85
10:15 AM	0	22	8	30	14	38	0	52	0	0	0	0	9	0	18	27	109
10:30 AM	0	28	4	32	12	29	0	41	0	0	0	0	6	0	18	24	97
10:45 AM	0	22	12	34	22	33	0	55	0	0	0	0	7	0	10	17	106
Total	0	91	33	124	61	125	0	186	0	0	0	0	29	0	58	87	397
11:00 AM	0	18	7	25	16	22	0	38	0	0	0	0	4	0	18	22	85
11:15 AM	0	20	6	26	17	34	0	51	0	0	0	0	7	0	17	24	101
11:30 AM	0	34	12	46	16	40	0	56	0	0	1	1	7	0	14	21	124
11:45 AM	0	31	8	39	14	28	0	42	0	0	0	0	11	0	17	28	109
Total	0	103	33	136	63	124	0	187	0	0	1	1	29	0	66	95	419
12:00 PM	1	22	10	33	14	20	0	34	0	0	0	0	8	0	18	26	93
12:15 PM	0	27	4	31	12	31	0	43	0	0	0	0	7	0	17	24	98
12:30 PM	0	19	9	28	20	34	0	54	0	0	1	1	14	0	20	34	117
12:45 PM	0	27	5	32	14	37	0	51	0	0	0	0	14	0	18	32	115
Total	1	95	28	124	60	122	0	182	0	0	1	1	43	0	73	116	423
01:00 PM	0	33	8	41	18	28	0	46	0	0	0	0	15	0	11	26	113
01:15 PM	0	29	5	34	16	31	0	47	0	0	0	0	6	0	14	20	101
01:30 PM	0	35	6	41	12	33	0	45	0	0	0	0	10	0	17	27	113
01:45 PM	0	18	11	29	13	31	0	44	0	0	0	0	11	0	11	22	95
Total	0	115	30	145	59	123	0	182	0	0	0	0	42	0	53	95	422
02:00 PM	0	32	7	39	8	23	0	31	0	0	0	0	9	0	18	27	97
02:15 PM	0	30	4	34	14	44	0	58	0	0	0	0	11	0	11	22	114
02:30 PM	1	19	8	28	16	30	0	46	0	0	0	0	6	0	19	25	99
02:45 PM	0	46	8	54	12	38	0	50	0	0	0	0	10	0	21	31	135
Total	1	127	27	155	50	135	0	185	0	0	0	0	36	0	69	105	445
03:00 PM	0	42	12	54	19	44	0	63	0	0	0	0	11	0	10	21	138
03:15 PM	0	26	11	37	15	51	0	66	0	0	0	0	10	0	19	29	132
03:30 PM	0	26	7	33	22	36	0	58	0	0	0	0	11	0	25	36	127
03:45 PM	0	32	11	43	18	51	0	69	0	0	0	0	6	0	23	29	141
Total	0	126	41	167	74	182	0	256	0	0	0	0	38	0	77	115	538
04:00 PM	0	28	9	37	12	31	0	43	0	0	0	0	6	0	20	26	106
04:15 PM	0	30	9	39	12	31	0	43	0	0	0	0	6	0	20	26	108

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 2

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	37	8	45	21	31	0	52	0	0	0	0	15	0	19	34	131
04:45 PM	1	44	7	52	19	37	0	56	0	0	1	1	10	0	30	40	149
Total	1	139	33	173	64	130	0	194	0	0	1	1	37	0	89	126	494
05:00 PM	1	61	6	68	10	35	0	45	0	0	0	0	18	0	29	47	160
05:15 PM	0	53	12	65	18	40	0	58	0	0	0	0	12	0	46	58	181
05:30 PM	0	44	9	53	13	43	0	56	0	0	0	0	9	0	40	49	158
05:45 PM	0	27	10	37	8	44	0	52	0	0	0	0	8	0	23	31	120
Total	1	185	37	223	49	162	0	211	0	0	0	0	47	0	138	185	619
06:00 PM	1	32	8	41	11	31	0	42	0	0	0	0	6	0	11	17	100
06:15 PM	0	37	4	41	17	30	0	47	0	0	0	0	9	0	22	31	119
06:30 PM	2	27	5	34	23	27	0	50	1	0	0	1	6	0	20	26	111
06:45 PM	2	15	2	19	6	31	0	37	0	0	0	0	4	0	11	15	71
Total	5	111	19	135	57	119	0	176	1	0	0	1	25	0	64	89	401
Grand Total	10	1340	354	1704	782	1727	1	2510	2	1	9	12	433	1	793	1227	5453
Apprch %	0.6	78.6	20.8		31.2	68.8	0		16.7	8.3	75		35.3	0.1	64.6		
Total %	0.2	24.6	6.5	31.2	14.3	31.7	0	46	0	0	0.2	0.2	7.9	0	14.5	22.5	

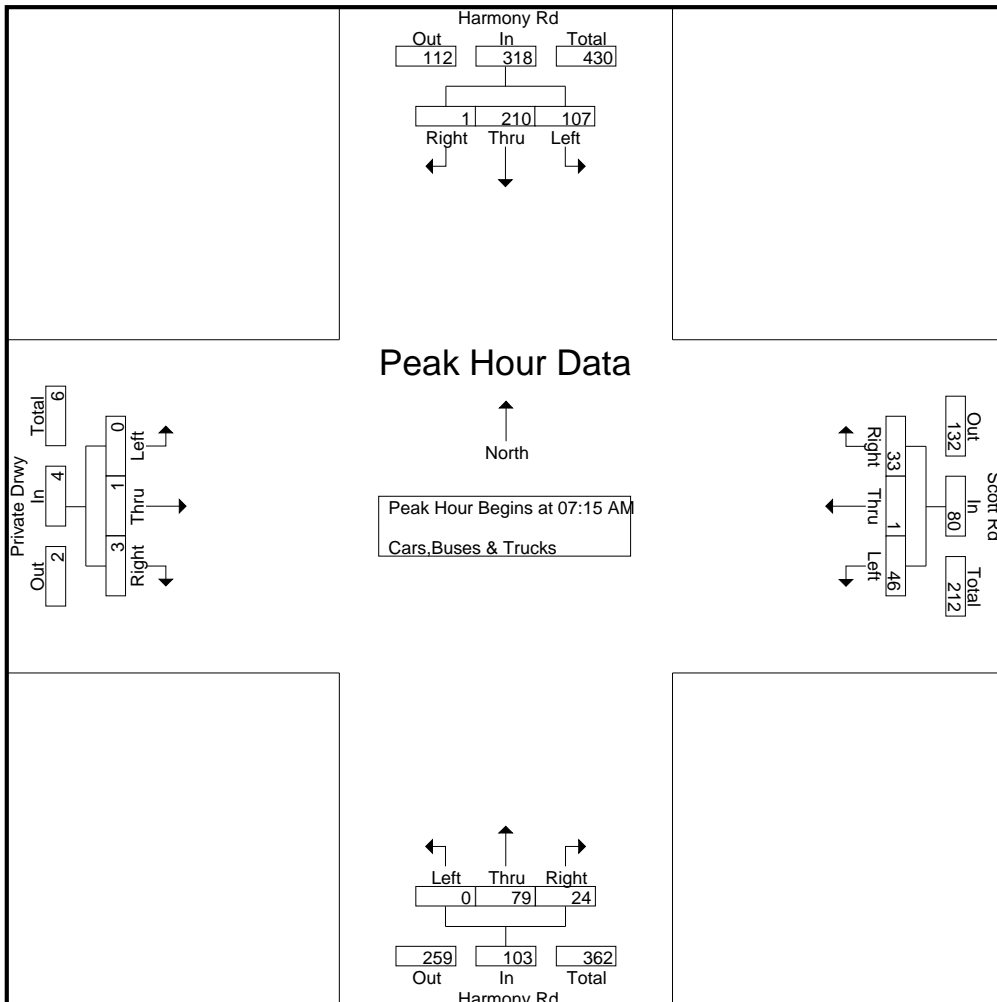
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	18	4	22	27	48	0	75	0	1	1	2	10	0	7	17	116
07:30 AM	0	23	5	28	23	59	0	82	0	0	2	2	10	1	4	15	127
07:45 AM	0	20	7	27	35	58	0	93	0	0	0	0	10	0	11	21	141
08:00 AM	0	18	8	26	22	45	1	68	0	0	0	0	16	0	11	27	121
Total Volume	0	79	24	103	107	210	1	318	0	1	3	4	46	1	33	80	505
% App. Total	0	76.7	23.3		33.6	66	0.3		0	25	75		57.5	1.2	41.2		
PHF	.000	.859	.750	.920	.764	.890	.250	.855	.000	.250	.375	.500	.719	.250	.750	.741	.895



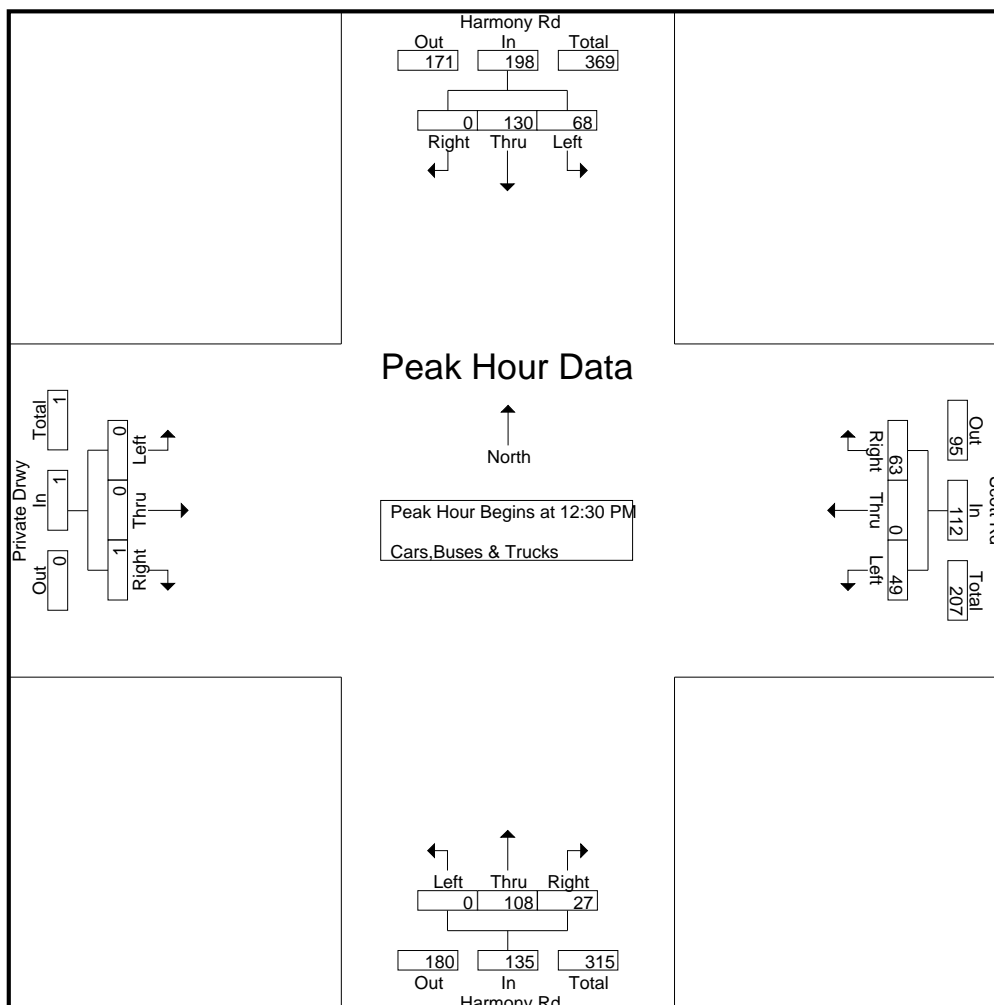
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 4

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:30 PM																	
12:30 PM	0	19	9	28	20	34	0	54	0	0	1	1	14	0	20	34	117
12:45 PM	0	27	5	32	14	37	0	51	0	0	0	0	14	0	18	32	115
01:00 PM	0	33	8	41	18	28	0	46	0	0	0	0	15	0	11	26	113
01:15 PM	0	29	5	34	16	31	0	47	0	0	0	0	6	0	14	20	101
Total Volume	0	108	27	135	68	130	0	198	0	0	1	1	49	0	63	112	446
% App. Total	0	80	20		34.3	65.7	0		0	0	100		43.8	0	56.2		
PHF	.000	.818	.750	.823	.850	.878	.000	.917	.000	.000	.250	.250	.817	.000	.788	.824	.953



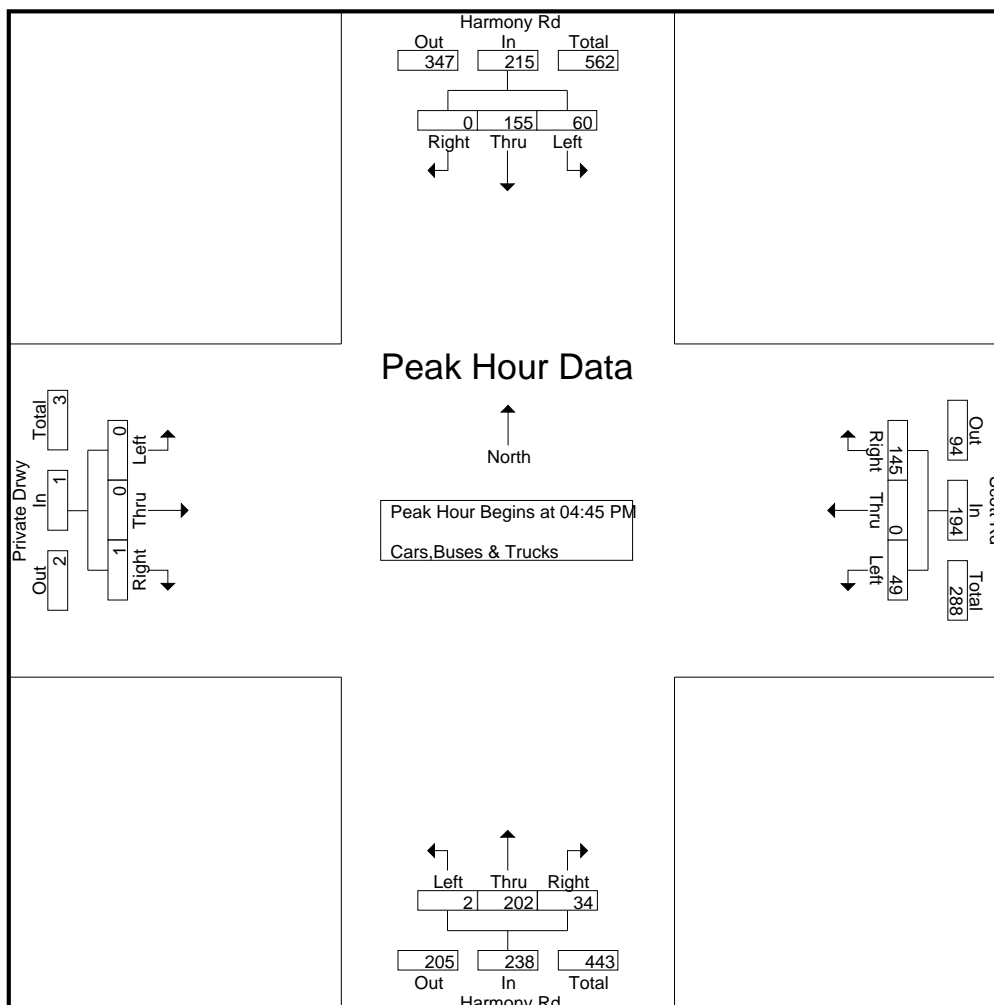
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Harmony Rd @ Scott Rd
7 am - 7 pm

File Name : 20210168
Site Code : 20210168
Start Date : 5/27/2021
Page No : 5

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Private Drwy Eastbound				Scott Rd Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	44	7	52	19	37	0	56	0	0	1	1	10	0	30	40	149
05:00 PM	1	61	6	68	10	35	0	45	0	0	0	0	18	0	29	47	160
05:15 PM	0	53	12	65	18	40	0	58	0	0	0	0	12	0	46	58	181
05:30 PM	0	44	9	53	13	43	0	56	0	0	0	0	9	0	40	49	158
Total Volume	2	202	34	238	60	155	0	215	0	0	1	1	49	0	145	194	648
% App. Total	0.8	84.9	14.3		27.9	72.1	0		0	0	100		25.3	0	74.7		
PHF	.500	.828	.708	.875	.789	.901	.000	.927	.000	.000	.250	.250	.681	.000	.788	.836	.895



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Harmony Lane
7-9 am | 4-6 pm

File Name : 20210172
Site Code : 20210172
Start Date : 5/27/2021
Page No : 1

Groups Printed- Cars,Buses & Trucks

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Harmony Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	44	0	47	0	35	2	37	2	0	3	5	0	0	0	0	89
07:15 AM	4	41	0	45	0	46	3	49	3	0	5	8	0	0	0	0	102
07:30 AM	4	42	0	46	0	49	4	53	4	0	5	9	0	0	0	0	108
07:45 AM	1	60	0	61	0	60	2	62	4	0	4	8	0	0	0	0	131
Total	12	187	0	199	0	190	11	201	13	0	17	30	0	0	0	0	430
08:00 AM	4	48	0	52	0	55	3	58	4	0	5	9	0	0	0	0	119
08:15 AM	4	44	0	48	0	59	5	64	3	0	4	7	0	0	0	0	119
08:30 AM	2	38	0	40	0	54	3	57	5	0	4	9	0	0	0	0	106
08:45 AM	2	43	0	45	0	57	4	61	2	0	3	5	0	0	0	0	111
Total	12	173	0	185	0	225	15	240	14	0	16	30	0	0	0	0	455
*** BREAK ***																	
04:00 PM	4	63	0	67	0	64	4	68	3	0	5	8	0	0	0	0	143
04:15 PM	3	45	0	48	0	52	5	57	4	0	4	8	0	0	0	0	113
04:30 PM	2	55	0	57	0	58	3	61	4	0	3	7	0	0	0	0	125
04:45 PM	3	52	0	55	0	57	3	60	5	0	2	7	0	0	0	0	122
Total	12	215	0	227	0	231	15	246	16	0	14	30	0	0	0	0	503
05:00 PM	4	69	0	73	0	77	4	81	2	0	5	7	0	0	0	0	161
05:15 PM	3	63	0	66	0	80	3	83	2	0	2	4	0	0	0	0	153
05:30 PM	4	47	0	51	0	60	4	64	3	0	4	7	0	0	0	0	122
05:45 PM	4	44	0	48	0	60	5	65	4	0	4	8	0	0	0	0	121
Total	15	223	0	238	0	277	16	293	11	0	15	26	0	0	0	0	557
Grand Total	51	798	0	849	0	923	57	980	54	0	62	116	0	0	0	0	1945
Apprch %	6	94	0		0	94.2	5.8		46.6	0	53.4		0	0	0		
Total %	2.6	41	0	43.7	0	47.5	2.9	50.4	2.8	0	3.2	6	0	0	0	0	

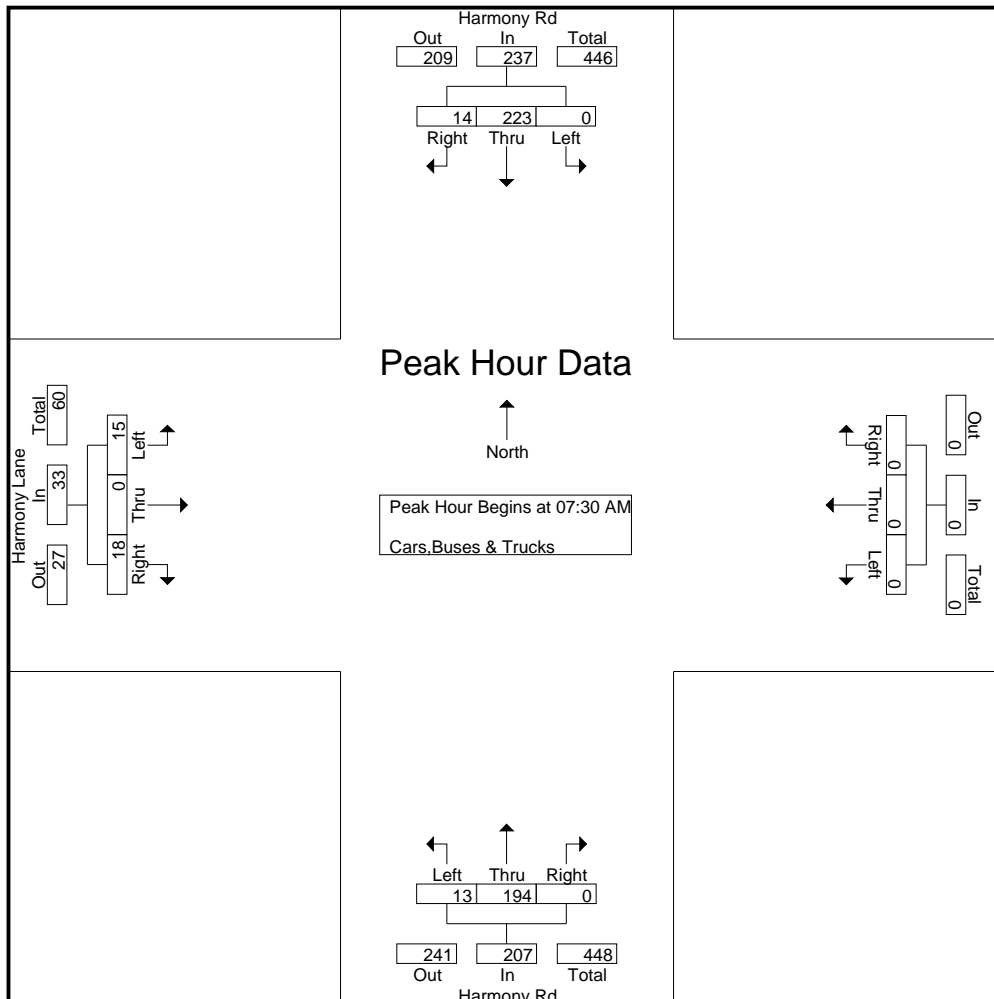
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Harmony Lane
7-9 am | 4-6 pm

File Name : 20210172
Site Code : 20210172
Start Date : 5/27/2021
Page No : 2

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Harmony Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	42	0	46	0	49	4	53	4	0	5	9	0	0	0	0	108
07:45 AM	1	60	0	61	0	60	2	62	4	0	4	8	0	0	0	0	131
08:00 AM	4	48	0	52	0	55	3	58	4	0	5	9	0	0	0	0	119
08:15 AM	4	44	0	48	0	59	5	64	3	0	4	7	0	0	0	0	119
Total Volume	13	194	0	207	0	223	14	237	15	0	18	33	0	0	0	0	477
% App. Total	6.3	93.7	0		0	94.1	5.9		45.5	0	54.5		0	0	0		
PHF	.813	.808	.000	.848	.000	.929	.700	.926	.938	.000	.900	.917	.000	.000	.000	.000	.910



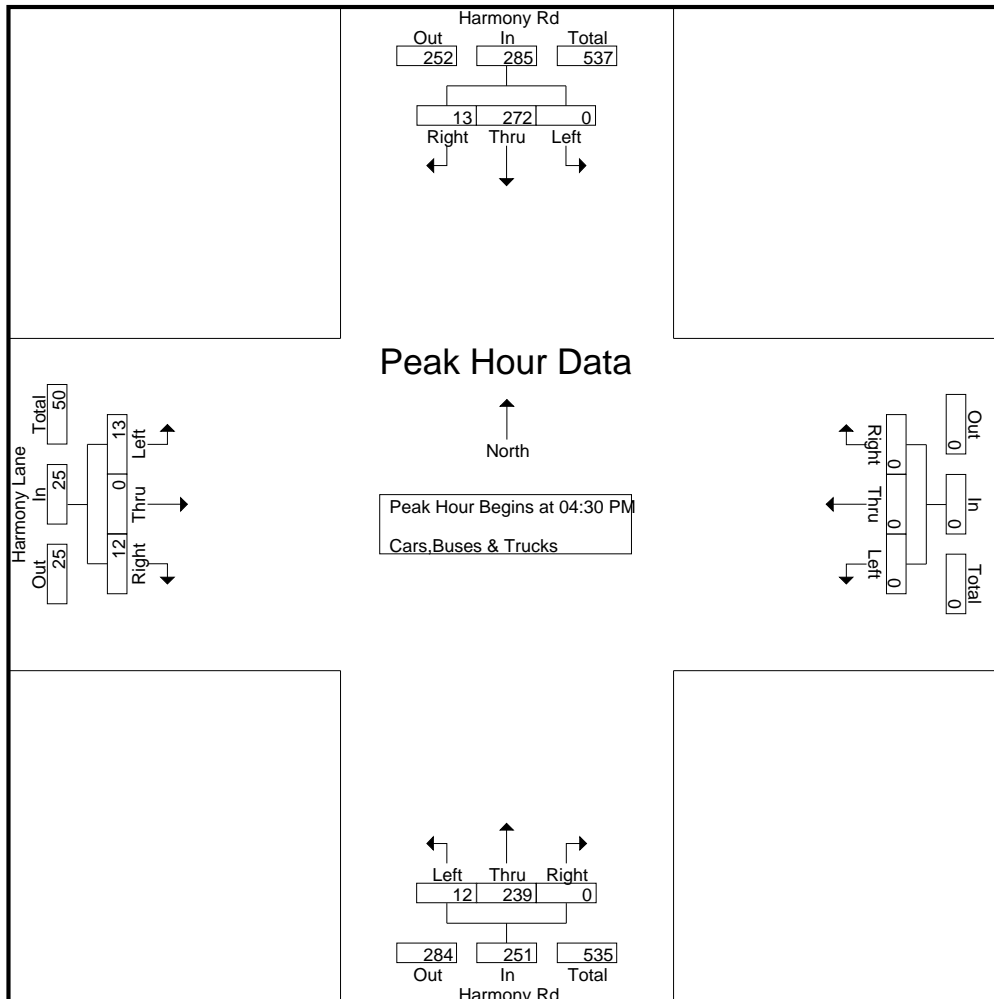
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC Data
Harmony Rd @ Harmony Lane
7-9 am | 4-6 pm

File Name : 20210172
Site Code : 20210172
Start Date : 5/27/2021
Page No : 3

Start Time	Harmony Rd Northbound				Harmony Rd Southbound				Harmony Lane Eastbound				Westbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	55	0	57	0	58	3	61	4	0	3	7	0	0	0	0	125
04:45 PM	3	52	0	55	0	57	3	60	5	0	2	7	0	0	0	0	122
05:00 PM	4	69	0	73	0	77	4	81	2	0	5	7	0	0	0	0	161
05:15 PM	3	63	0	66	0	80	3	83	2	0	2	4	0	0	0	0	153
Total Volume	12	239	0	251	0	272	13	285	13	0	12	25	0	0	0	0	561
% App. Total	4.8	95.2	0		0	95.4	4.6		52	0	48		0	0	0		
PHF	.750	.866	.000	.860	.000	.850	.813	.858	.650	.000	.600	.893	.000	.000	.000	.000	.871



A&R Engineering, Inc.

2160 Kingston Court, Suite O
Marietta, GA 30067

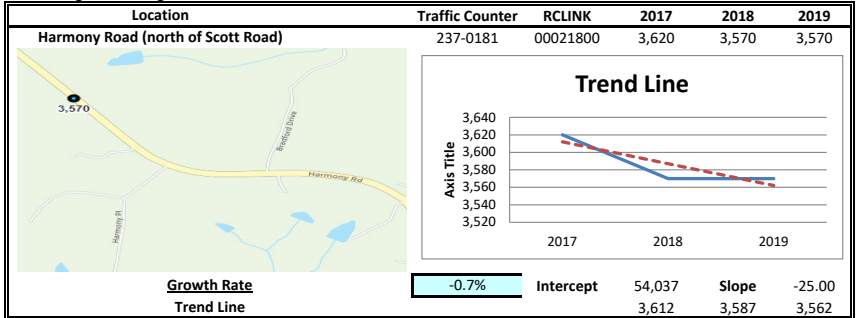
24-Hour Bi-Directional Counts on Harmony
Rd North of Scott Road
Site Code: 20210173
Date Start: 27-May-21
Date End: 27-May-21

Start Time	27-May-2 Thu	Northbou	Southbou							Total
12:00 AM		3	2							5
01:00		5	5							10
02:00		4	4							8
03:00		3	3							6
04:00		11	15							26
05:00		21	33							54
06:00		81	91							172
07:00		106	222							328
08:00		121	211							332
09:00		127	179							306
10:00		149	154							303
11:00		169	153							322
12:00 PM		168	165							333
01:00		168	175							343
02:00		196	171							367
03:00		203	220							423
04:00		228	167							395
05:00		323	209							532
06:00		175	144							319
07:00		125	95							220
08:00		79	68							147
09:00		51	35							86
10:00		36	28							64
11:00		15	17							32
Total		2567	2566							5133
Percent		50.0%	50.0%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	08:00
Vol.	-	169	222	-	-	-	-	-	-	332
PM Peak	-	17:00	15:00	-	-	-	-	-	-	17:00
Vol.	-	323	220	-	-	-	-	-	-	532
Grand Total		2567	2566							5133
Percent		50.0%	50.0%							
ADT		ADT 5,133	AADT 5,133							

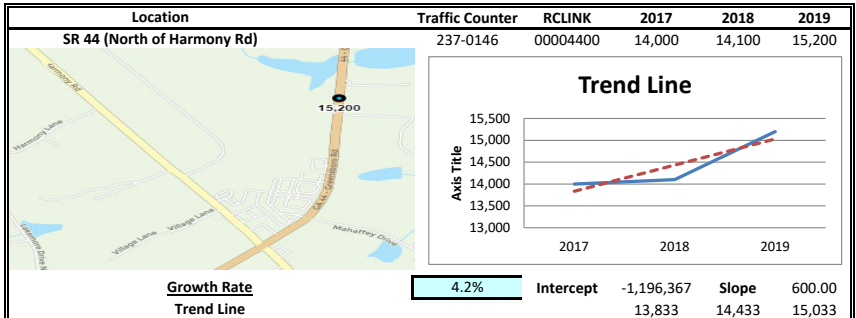
LINEAR REGRESSION OF DAILY TRAFFIC

Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019	
Harmony Road (north of Scott f	-0.7%	0.75	237-0181	00021800	3,620	3,570	3,570	Major Collector (Rural)
SR 44 (North of Harmony Rd)	4.2%	0.81	237-0146	00004400	14,000	14,100	15,200	Minor Arterial (Rural)
SR 44 (North of Loch Way)	1.3%	0.65	237-0145	00004400	5,760	5,740	5,910	Minor Arterial (Rural)
Harmony Road (Northeast of H.	0.4%	0.75	237-0183	00021800	2,430	2,450	2,450	Major Collector (Rural)

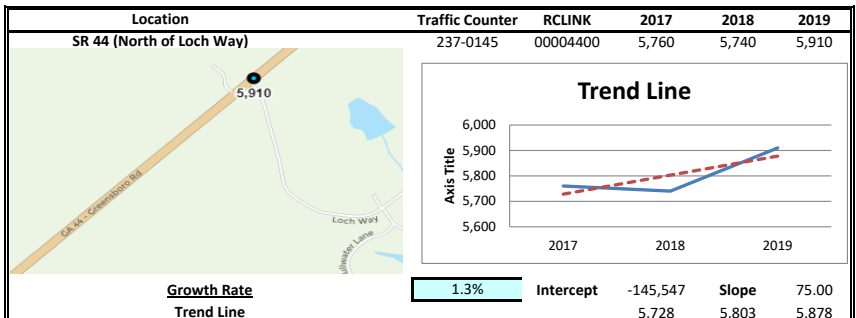
Weighted Average 2.5% 0.78 Sum of Count Stations = 25,810 25,860 27,130



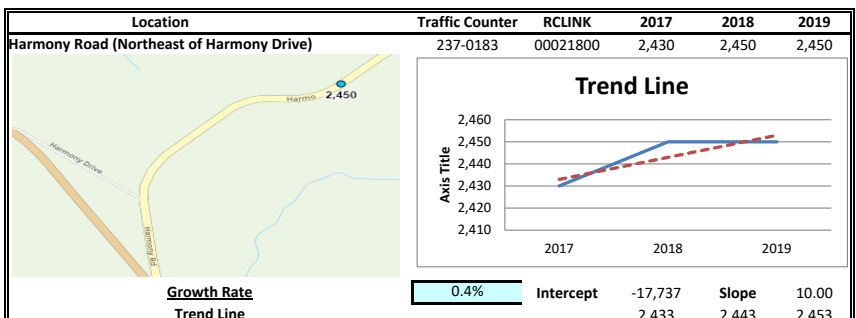
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Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²



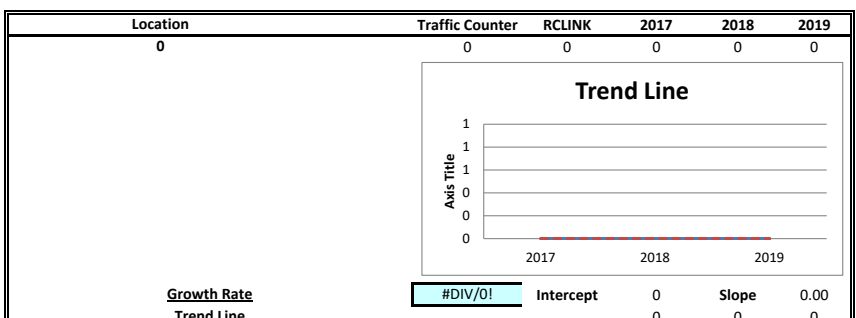
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Sum XY
Sum X²
Count
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b
Mean Y
SS_{tot}
SS_{res}
R²



Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²



Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²



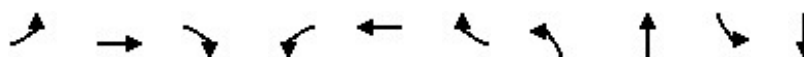
Sum X
Sum Y
Sum XY
Sum X²
Count
a
b
Mean Y
SS_{tot}
SS_{res}
R²

EXISTING INTERSECTION ANALYSIS

Timings

1: Harmony Rd & SR 44

Existing AM
06/10/2021

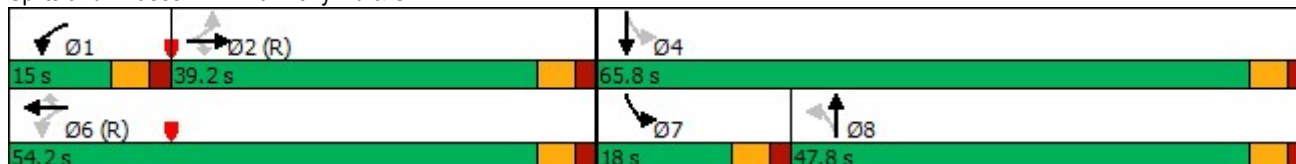


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↗	↖	↘	↗	↖	↘	↗	↖	↗
Traffic Volume (vph)	130	389	76	194	185	89	69	157	172	113
Future Volume (vph)	130	389	76	194	185	89	69	157	172	113
Lane Group Flow (vph)	134	401	78	200	191	92	71	565	177	189
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	39.2	39.2	39.2	15.0	54.2	54.2	47.8	47.8	18.0	65.8
Total Split (%)	32.7%	32.7%	32.7%	12.5%	45.2%	45.2%	39.8%	39.8%	15.0%	54.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.37	0.74	0.14	0.70	0.25	0.14	0.19	0.94	0.80	0.24
Control Delay	37.5	47.6	1.9	38.8	23.7	5.0	29.2	55.0	52.7	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	47.6	1.9	38.8	23.7	5.0	29.2	55.0	52.7	14.8
Queue Length 50th (ft)	84	289	0	103	97	0	38	336	84	62
Queue Length 95th (ft)	146	#445	11	#182	154	32	74	#547	#199	108
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	364	545	557	284	765	679	415	647	222	846
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.74	0.14	0.70	0.25	0.14	0.17	0.87	0.80	0.22

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 75 (63%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Existing AM
06/10/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	389	76	194	185	89	69	157	391	172	113	71
Future Volume (veh/h)	130	389	76	194	185	89	69	157	391	172	113	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1811	1811	1781	1722	1856	1826	1841	1707	1737	1826
Adj Flow Rate, veh/h	134	401	0	200	191	0	71	162	403	177	116	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	8	6	6	8	12	3	5	4	13	11	5
Cap, veh/h	415	534		289	757		478	164	407	202	482	303
Arrive On Green	0.30	0.30	0.00	0.08	0.42	0.00	0.35	0.35	0.35	0.09	0.48	0.48
Sat Flow, veh/h	1183	1781	1535	1725	1781	1459	1185	464	1154	1626	997	627
Grp Volume(v), veh/h	134	401	0	200	191	0	71	0	565	177	0	189
Grp Sat Flow(s),veh/h/ln	1183	1781	1535	1725	1781	1459	1185	0	1618	1626	0	1624
Q Serve(g_s), s	10.7	24.4	0.0	9.5	8.3	0.0	5.0	0.0	41.7	8.1	0.0	8.2
Cycle Q Clear(g_c), s	10.7	24.4	0.0	9.5	8.3	0.0	5.0	0.0	41.7	8.1	0.0	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		0.39
Lane Grp Cap(c), veh/h	415	534		289	757		478	0	570	202	0	785
V/C Ratio(X)	0.32	0.75		0.69	0.25		0.15	0.00	0.99	0.88	0.00	0.24
Avail Cap(c_a), veh/h	415	534		289	757		478	0	570	233	0	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.2	37.9	0.0	28.5	22.2	0.0	26.8	0.0	38.7	28.8	0.0	18.1
Incr Delay (d2), s/veh	2.1	9.4	0.0	7.0	0.8	0.0	0.1	0.0	35.2	26.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	11.6	0.0	4.3	3.5	0.0	1.4	0.0	21.2	4.4	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	47.3	0.0	35.4	23.0	0.0	26.9	0.0	73.8	55.2	0.0	18.3
LnGrp LOS	D	D		D	C		C	A	E	E	A	B
Approach Vol, veh/h		535	A		391	A		636			366	
Approach Delay, s/veh		44.3			29.4			68.6			36.1	
Approach LOS		D			C			E			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0	41.5		63.5		56.5	15.7	47.8				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	33.7		60.3		48.7	12.5	42.3				
Max Q Clear Time (g_c+l1), s	11.5	26.4		10.2		10.3	10.1	43.7				
Green Ext Time (p_c), s	0.0	4.2		0.7		4.9	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Int Delay, s/veh 0.4

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations 

Traffic Vol, veh/h 5 8 9 254 257 5

Future Vol, veh/h 5 8 9 254 257 5

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 88 88 88 88 88 88

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 6 9 10 289 292 6

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 604 295 298 0 - 0

Stage 1 295 - - - - -

Stage 2 309 - - - - -

Critical Hdwy 6.42 6.22 4.12 - - -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 2.218 - - -

Pot Cap-1 Maneuver 461 744 1263 - - -

Stage 1 755 - - - - -

Stage 2 745 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 457 744 1263 - - -

Mov Cap-2 Maneuver 457 - - - - -

Stage 1 748 - - - - -

Stage 2 745 - - - - -

Approach EB NB SB

HCM Control Delay, s 11.2 0.3 0

HCM LOS B

Minor Lane/Major Mvmt NBL NBTEBLn1 SBT SBR

Capacity (veh/h) 1263 - 599 - -

HCM Lane V/C Ratio 0.008 - 0.025 - -

HCM Control Delay (s) 7.9 0 11.2 - -

HCM Lane LOS A A B - -

HCM 95th %tile Q(veh) 0 - 0.1 - -

Intersection

Int Delay, s/veh 0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	28	2	223	56	1	267
Future Vol, veh/h	28	2	223	56	1	267
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	50	2	5	24	2	9
Mvmt Flow	31	2	245	62	1	293

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	571	276	0
Stage 1	276	-	-
Stage 2	295	-	-
Critical Hdwy	6.9	6.22	-
Critical Hdwy Stg 1	5.9	-	-
Critical Hdwy Stg 2	5.9	-	-
Follow-up Hdwy	3.95	3.318	-
Pot Cap-1 Maneuver	411	763	-
Stage 1	672	-	-
Stage 2	658	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	411	763	-
Mov Cap-2 Maneuver	411	-	-
Stage 1	672	-	-
Stage 2	657	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1254
HCM Lane V/C Ratio	-	-	0.078	0.001
HCM Control Delay (s)	-	-	14.2	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	16	20	14	211	243	15
Future Vol, veh/h	16	20	14	211	243	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	22	15	232	267	16
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	537	275	283	0	0	
Stage 1	275	-	-	-	-	
Stage 2	262	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	505	764	1279	-	-	
Stage 1	771	-	-	-	-	
Stage 2	782	-	-	-	-	
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	498	764	1279	-	-	
Mov Cap-2 Maneuver	498	-	-	-	-	
Stage 1	761	-	-	-	-	
Stage 2	782	-	-	-	-	
Approach	EB	NB		SB		
HCM Control Delay, s	11.2	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR		
Capacity (veh/h)	1279	-	617	-		
HCM Lane V/C Ratio	0.012	-	0.064	-		
HCM Control Delay (s)	7.8	0	11.2	-		
HCM Lane LOS	A	A	B	-		
HCM 95th %tile Q(veh)	0	-	0.2	-		

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	1	3	50	1	36	0	86	26	117	229	1
Future Vol, veh/h	0	1	3	50	1	36	0	86	26	117	229	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	3	56	1	40	0	96	29	127	249	1

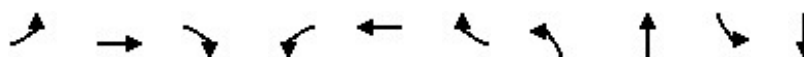
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	635	629	250	617	615	111	250	0	0	125	0	0
Stage 1	504	504	-	111	111	-	-	-	-	-	-	-
Stage 2	131	125	-	506	504	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	391	399	789	402	407	942	1316	-	-	1462	-	-
Stage 1	550	541	-	894	804	-	-	-	-	-	-	-
Stage 2	873	792	-	549	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	344	359	789	369	366	942	1316	-	-	1462	-	-
Mov Cap-2 Maneuver	344	359	-	369	366	-	-	-	-	-	-	-
Stage 1	550	486	-	894	804	-	-	-	-	-	-	-
Stage 2	835	792	-	490	486	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	14.1	0	2.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBREBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1316	-	-	607	493	1462	-
HCM Lane V/C Ratio	-	-	-	0.007	0.196	0.087	-
HCM Control Delay (s)	0	-	-	11	14.1	7.7	0
HCM Lane LOS	A	-	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.7	0.3	-

Timings
1: Harmony Rd & SR 44

Existing PM
06/10/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↗	↖	↘	↗	↖	↘	↗	↖	↗
Traffic Volume (vph)	73	246	73	409	388	68	56	81	113	172
Future Volume (vph)	73	246	73	409	388	68	56	81	113	172
Lane Group Flow (vph)	77	259	77	431	408	72	59	403	119	292
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	33.0	33.0	33.0	34.0	67.0	67.0	38.0	38.0	15.0	53.0
Total Split (%)	27.5%	27.5%	27.5%	28.3%	55.8%	55.8%	31.7%	31.7%	12.5%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.22	0.39	0.12	0.65	0.37	0.08	0.48	0.88	0.66	0.51
Control Delay	34.9	34.8	1.9	19.9	15.5	3.4	52.8	48.6	62.2	31.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	34.8	1.9	19.9	15.5	3.4	52.8	48.6	62.2	31.8
Queue Length 50th (ft)	42	151	0	173	159	0	40	195	67	163
Queue Length 95th (ft)	98	272	10	296	271	23	80	300	101	220
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	350	669	647	712	1105	917	165	557	204	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.39	0.12	0.61	0.37	0.08	0.36	0.72	0.58	0.41

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Existing PM
06/10/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	246	73	409	388	68	56	81	302	113	172	105
Future Volume (veh/h)	73	246	73	409	388	68	56	81	302	113	172	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1781	1841	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	259	0	431	408	0	59	85	318	119	181	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	8	4	2	2	2	2	2
Cap, veh/h	385	621		627	1038		200	90	337	147	384	235
Arrive On Green	0.33	0.33	0.00	0.18	0.55	0.00	0.26	0.26	0.26	0.05	0.35	0.35
Sat Flow, veh/h	978	1870	1585	1781	1870	1510	1070	345	1292	1781	1085	665
Grp Volume(v), veh/h	77	259	0	431	408	0	59	0	403	119	0	292
Grp Sat Flow(s),veh/h/ln	978	1870	1585	1781	1870	1510	1070	0	1638	1781	0	1751
Q Serve(g_s), s	6.9	12.9	0.0	18.2	14.9	0.0	6.1	0.0	29.0	3.7	0.0	15.5
Cycle Q Clear(g_c), s	6.9	12.9	0.0	18.2	14.9	0.0	21.6	0.0	29.0	3.7	0.0	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.79	1.00		0.38
Lane Grp Cap(c), veh/h	385	621		627	1038		200	0	427	147	0	619
V/C Ratio(X)	0.20	0.42		0.69	0.39		0.29	0.00	0.94	0.81	0.00	0.47
Avail Cap(c_a), veh/h	385	621		735	1038		211	0	444	204	0	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	31.1	0.0	19.3	15.2	0.0	47.9	0.0	43.5	55.3	0.0	30.1
Incr Delay (d2), s/veh	1.2	2.1	0.0	2.2	1.1	0.0	0.8	0.0	28.5	15.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.0	0.0	7.3	6.2	0.0	1.6	0.0	14.7	4.1	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	33.1	0.0	21.5	16.3	0.0	48.7	0.0	72.0	70.9	0.0	30.6
LnGrp LOS	C	C		C	B		D	A	E	E	A	C
Approach Vol, veh/h		336	A		839	A		462			411	
Approach Delay, s/veh		32.5			19.0			69.0			42.3	
Approach LOS		C			B			E			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	26.7	45.4		47.9		72.1	11.1	36.8				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	28.5	27.5		47.5		61.5	9.5	32.5				
Max Q Clear Time (g_c+l1), s	20.2	14.9		17.5		16.9	5.7	31.0				
Green Ext Time (p_c), s	1.0	4.3		1.0		12.7	0.1	0.3				

Intersection Summary

HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	6	7	7	237	337	8
Future Vol, veh/h	6	7	7	237	337	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	8	8	282	401	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	704	406	411	0	-	0
Stage 1	406	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	403	645	1148	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	400	645	1148	-	-	-
Mov Cap-2 Maneuver	400	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR
Capacity (veh/h)	1148	-	503	-
HCM Lane V/C Ratio	0.007	-	0.031	-
HCM Control Delay (s)	8.2	0	12.4	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	0.1	-

Intersection

Int Delay, s/veh 1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	62	2	248	9	0	282
Future Vol, veh/h	62	2	248	9	0	282
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	50	6	56	2	2
Mvmt Flow	74	2	295	11	0	336

Major/Minor

	Minor1	Major1	Major2		
Conflicting Flow All	637	301	0	0	306
Stage 1	301	-	-	-	-
Stage 2	336	-	-	-	-
Critical Hdwy	6.42	6.7	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.75	-	-	2.218
Pot Cap-1 Maneuver	441	639	-	-	1255
Stage 1	751	-	-	-	-
Stage 2	724	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	441	639	-	-	1255
Mov Cap-2 Maneuver	441	-	-	-	-
Stage 1	751	-	-	-	-
Stage 2	724	-	-	-	-

Approach

	WB	NB	SB
HCM Control Delay, s	14.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt

	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	445	1255
HCM Lane V/C Ratio	-	-	0.171	-
HCM Control Delay (s)	-	-	14.8	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	1	
Traffic Vol, veh/h	13	12	12	241	275	13
Future Vol, veh/h	13	12	12	241	275	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	14	14	277	316	15

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	629	324	331	0	-	0
Stage 1	324	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	446	717	1228	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	440	717	1228	-	-	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	748	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTEBLn1	SBT	SBR
Capacity (veh/h)	1228	-	540	-
HCM Lane V/C Ratio	0.011	-	0.053	-
HCM Control Delay (s)	8	0	12	-
HCM Lane LOS	A	A	B	-
HCM 95th %tile Q(veh)	0	-	0.2	-

Intersection

Int Delay, s/veh 4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	0	1	49	0	146	2	204	34	61	157	0
Future Vol, veh/h	0	0	1	49	0	146	2	204	34	61	157	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	54	0	162	2	227	38	66	171	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	634	572	171	554	553	246	171	0	0	265	0	0
Stage 1	303	303	-	250	250	-	-	-	-	-	-	-
Stage 2	331	269	-	304	303	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	392	430	873	443	441	793	1406	-	-	1299	-	-
Stage 1	706	664	-	754	700	-	-	-	-	-	-	-
Stage 2	682	687	-	705	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	298	405	873	423	415	793	1406	-	-	1299	-	-
Mov Cap-2 Maneuver	298	405	-	423	415	-	-	-	-	-	-	-
Stage 1	705	627	-	752	699	-	-	-	-	-	-	-
Stage 2	541	686	-	665	627	-	-	-	-	-	-	-

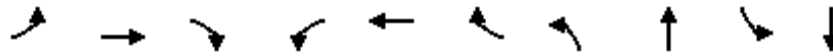
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	13.3	0.1	2.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBREBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1406	-	-	873	650	1299	-
HCM Lane V/C Ratio	0.002	-	-	0.001	0.333	0.051	-
HCM Control Delay (s)	7.6	0	-	9.1	13.3	7.9	0
HCM Lane LOS	A	A	-	A	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	1.5	0.2	-

**FUTURE “NO-BUILD” INTERSECTION
ANALYSIS**

Timings
1: Harmony Rd & SR 44

No-Build AM
06/14/2021

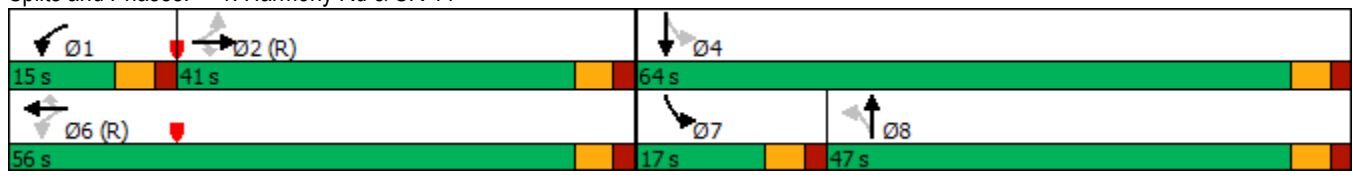


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↘
Traffic Volume (vph)	143	429	84	214	204	98	76	173	190	125
Future Volume (vph)	143	429	84	214	204	98	76	173	190	125
Lane Group Flow (vph)	147	442	87	221	210	101	78	623	196	209
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	41.0	41.0	41.0	15.0	56.0	56.0	47.0	47.0	17.0	64.0
Total Split (%)	34.2%	34.2%	34.2%	12.5%	46.7%	46.7%	39.2%	39.2%	14.2%	53.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.42	0.82	0.16	0.90	0.27	0.15	0.20	0.98	0.94	0.26
Control Delay	38.3	53.1	2.6	63.5	23.9	4.6	29.3	63.5	78.3	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.3	53.1	2.6	63.5	23.9	4.6	29.3	63.5	78.3	15.7
Queue Length 50th (ft)	91	319	0	112	105	0	42	407	106	75
Queue Length 95th (ft)	155	#482	17	#231	163	33	82	#656	#255	126
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	353	539	554	245	767	687	400	637	209	821
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.82	0.16	0.90	0.27	0.15	0.20	0.98	0.94	0.25

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 90 (75%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

No-Build AM
06/14/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	429	84	214	204	98	76	173	432	190	125	78
Future Volume (veh/h)	143	429	84	214	204	98	76	173	432	190	125	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1930	1853	1884	1884	1853	1791	1856	1826	1841	1707	1737	1826
Adj Flow Rate, veh/h	147	442	0	221	210	0	78	178	445	196	129	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	8	6	6	8	12	3	5	4	13	11	5
Cap, veh/h	418	548		274	780		462	160	400	216	489	303
Arrive On Green	0.30	0.30	0.00	0.08	0.42	0.00	0.35	0.35	0.35	0.10	0.49	0.49
Sat Flow, veh/h	1209	1853	1596	1794	1853	1518	1163	462	1156	1626	1003	622
Grp Volume(v), veh/h	147	442	0	221	210	0	78	0	623	196	0	209
Grp Sat Flow(s),veh/h/ln	1209	1853	1596	1794	1853	1518	1163	0	1618	1626	0	1625
Q Serve(g_s), s	11.7	26.5	0.0	9.5	8.9	0.0	5.6	0.0	41.5	9.8	0.0	9.1
Cycle Q Clear(g_c), s	11.7	26.5	0.0	9.5	8.9	0.0	5.6	0.0	41.5	9.8	0.0	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		0.38
Lane Grp Cap(c), veh/h	418	548		274	780		462	0	560	216	0	792
V/C Ratio(X)	0.35	0.81		0.81	0.27		0.17	0.00	1.11	0.91	0.00	0.26
Avail Cap(c_a), veh/h	418	548		274	780		462	0	560	216	0	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.9	39.1	0.0	31.4	22.7	0.0	27.5	0.0	39.3	32.1	0.0	18.1
Incr Delay (d2), s/veh	2.3	12.0	0.0	16.2	0.8	0.0	0.2	0.0	73.1	37.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	13.4	0.0	5.4	3.9	0.0	1.5	0.0	27.0	5.4	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	51.1	0.0	47.6	23.5	0.0	27.7	0.0	112.4	69.3	0.0	18.3
LnGrp LOS	D	D		D	C		C	A	F	E	A	B
Approach Vol, veh/h		589	A		431	A		701			405	
Approach Delay, s/veh		47.4			35.9			102.9			42.9	
Approach LOS		D			D			F			D	
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0	41.0		64.0		56.0	17.0	47.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	35.5		58.5		50.5	11.5	41.5				
Max Q Clear Time (g_c+I1), s	11.5	28.5		11.1		10.9	11.8	43.5				
Green Ext Time (p_c), s	0.0	4.4		0.7		5.6	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	62.5
HCM 6th LOS	E

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	6	9	10	280	284	6
Future Vol, veh/h	6	9	10	280	284	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	10	11	318	323	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	667	327	330	0	-	0
Stage 1	327	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	424	714	1229	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	419	714	1229	-	-	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	721	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1229	-	557	-	-
HCM Lane V/C Ratio	0.009	-	0.031	-	-
HCM Control Delay (s)	8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	2	246	62	1	295
Future Vol, veh/h	31	2	246	62	1	295
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	50	2	5	24	2	9
Mvmt Flow	34	2	270	68	1	324

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	630	304	0	0	338
Stage 1	304	-	-	-	-
Stage 2	326	-	-	-	-
Critical Hdwy	6.9	6.22	-	-	4.12
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.95	3.318	-	-	2.218
Pot Cap-1 Maneuver	377	736	-	-	1221
Stage 1	651	-	-	-	-
Stage 2	635	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	377	736	-	-	1221
Mov Cap-2 Maneuver	377	-	-	-	-
Stage 1	651	-	-	-	-
Stage 2	634	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	388	1221
HCM Lane V/C Ratio	-	-	0.093	0.001
HCM Control Delay (s)	-	-	15.2	8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	18	22	15	233	268	17
Future Vol, veh/h	18	22	15	233	268	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	24	16	256	295	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	593	305	314	0	-	0
Stage 1	305	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	468	735	1246	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	461	735	1246	-	-	-
Mov Cap-2 Maneuver	461	-	-	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	761	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1246	-	580	-	-
HCM Lane V/C Ratio	0.013	-	0.076	-	-
HCM Control Delay (s)	7.9	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	3	55	1	40	0	95	29	129	253	1
Future Vol, veh/h	0	1	3	55	1	40	0	95	29	129	253	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	3	61	1	44	0	106	32	140	275	1

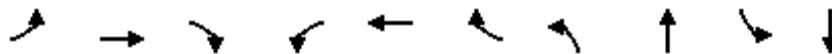
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	701	694	276	680	678	122	276	0	0	138	0	0
Stage 1	556	556	-	122	122	-	-	-	-	-	-	-
Stage 2	145	138	-	558	556	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	353	366	763	365	374	929	1287	-	-	1446	-	-
Stage 1	515	513	-	882	795	-	-	-	-	-	-	-
Stage 2	858	782	-	514	513	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	306	324	763	331	331	929	1287	-	-	1446	-	-
Mov Cap-2 Maneuver	306	324	-	331	331	-	-	-	-	-	-	-
Stage 1	515	455	-	882	795	-	-	-	-	-	-	-
Stage 2	816	782	-	452	455	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.4		15.4		0		2.6	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1287	-	-	570	452	1446	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.236	0.097	-	-
HCM Control Delay (s)	0	-	-	11.4	15.4	7.8	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.9	0.3	-	-

Timings
1: Harmony Rd & SR 44

No-Build PM
06/14/2021

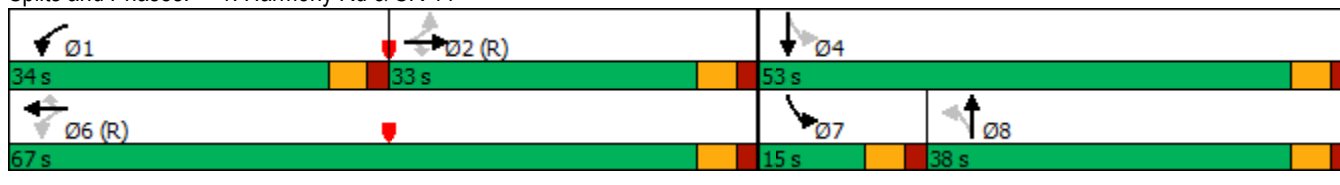


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↖	↖	↖
Traffic Volume (vph)	81	272	81	451	428	75	62	89	125	190
Future Volume (vph)	81	272	81	451	428	75	62	89	125	190
Lane Group Flow (vph)	85	286	85	475	451	79	65	445	132	322
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	33.0	33.0	33.0	34.0	67.0	67.0	38.0	38.0	15.0	53.0
Total Split (%)	27.5%	27.5%	27.5%	28.3%	55.8%	55.8%	31.7%	31.7%	12.5%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.29	0.49	0.15	0.76	0.42	0.09	0.28	0.90	0.66	0.51
Control Delay	39.6	40.5	2.8	26.0	18.0	3.5	39.4	51.4	42.4	29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.6	40.5	2.8	26.0	18.0	3.5	39.4	51.4	42.4	29.8
Queue Length 50th (ft)	52	189	0	220	202	0	41	226	69	172
Queue Length 95th (ft)	108	298	17	329	302	24	80	#380	111	248
Internal Link Dist (ft)		1244			234			548		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	293	584	582	659	1073	896	280	557	201	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.49	0.15	0.72	0.42	0.09	0.23	0.80	0.66	0.45

Intersection Summary























Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

No-Build PM
06/14/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	272	81	451	428	75	62	89	333	125	190	116
Future Volume (veh/h)	81	272	81	451	428	75	62	89	333	125	190	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1945	1945	1945	1945	1945	1853	1841	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	286	0	475	451	0	65	94	351	132	200	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	8	4	2	2	2	2	2
Cap, veh/h	333	544		604	1019		316	94	350	181	418	255
Arrive On Green	0.28	0.28	0.00	0.20	0.52	0.00	0.27	0.27	0.27	0.07	0.38	0.38
Sat Flow, veh/h	977	1945	1648	1853	1945	1570	1041	346	1292	1781	1088	663
Grp Volume(v), veh/h	85	286	0	475	451	0	65	0	445	132	0	322
Grp Sat Flow(s),veh/h/ln	977	1945	1648	1853	1945	1570	1041	0	1638	1781	0	1751
Q Serve(g_s), s	8.2	14.9	0.0	20.9	17.2	0.0	6.0	0.0	32.5	6.2	0.0	16.6
Cycle Q Clear(g_c), s	8.2	14.9	0.0	20.9	17.2	0.0	9.0	0.0	32.5	6.2	0.0	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.79	1.00		0.38
Lane Grp Cap(c), veh/h	333	544		604	1019		316	0	444	181	0	673
V/C Ratio(X)	0.26	0.53		0.79	0.44		0.21	0.00	1.00	0.73	0.00	0.48
Avail Cap(c_a), veh/h	333	544		677	1019		316	0	444	201	0	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.1	36.5	0.0	22.6	17.7	0.0	36.4	0.0	43.8	31.9	0.0	27.9
Incr Delay (d2), s/veh	1.8	3.6	0.0	5.5	1.4	0.0	0.3	0.0	43.5	11.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	7.4	0.0	9.4	7.6	0.0	1.5	0.0	18.0	3.1	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	40.1	0.0	28.2	19.1	0.0	36.7	0.0	87.3	43.3	0.0	28.4
LnGrp LOS	D	D		C	B		D	A	F	D	A	C
Approach Vol, veh/h		371	A		926	A		510				454
Approach Delay, s/veh		39.2			23.7			80.8				32.7
Approach LOS		D			C			F				C
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	29.3	39.0		51.6		68.4	13.6	38.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	28.5	27.5		47.5		61.5	9.5	32.5				
Max Q Clear Time (g_c+I1), s	22.9	16.9		18.6		19.2	8.2	34.5				
Green Ext Time (p_c), s	0.9	4.2		1.1		14.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	7	8	8	262	372	9
Future Vol, veh/h	7	8	8	262	372	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	10	312	443	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	781	449	454	0	-	0
Stage 1	449	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	363	610	1107	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	359	610	1107	-	-	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1107	-	460	-	-
HCM Lane V/C Ratio	0.009	-	0.039	-	-
HCM Control Delay (s)	8.3	0	13.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	68	2	274	10	0	311
Future Vol, veh/h	68	2	274	10	0	311
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	50	6	56	2	2
Mvmt Flow	81	2	326	12	0	370

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	702	332	0	0	338
Stage 1	332	-	-	-	-
Stage 2	370	-	-	-	-
Critical Hdwy	6.42	6.7	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.75	-	-	2.218
Pot Cap-1 Maneuver	404	612	-	-	1221
Stage 1	727	-	-	-	-
Stage 2	699	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	404	612	-	-	1221
Mov Cap-2 Maneuver	404	-	-	-	-
Stage 1	727	-	-	-	-
Stage 2	699	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	1221
HCM Lane V/C Ratio	-	-	0.204	-
HCM Control Delay (s)	-	-	16.1	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.8	0

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	14	13	13	266	304	14
Future Vol, veh/h	14	13	13	266	304	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	15	15	306	349	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	693	357	365	0	-	0
Stage 1	357	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	409	687	1194	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	403	687	1194	-	-	-
Mov Cap-2 Maneuver	403	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	724	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1194	-	503	-	-
HCM Lane V/C Ratio	0.013	-	0.062	-	-
HCM Control Delay (s)	8.1	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	54	0	161	2	225	38	67	173	0
Future Vol, veh/h	0	0	1	54	0	161	2	225	38	67	173	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	60	0	179	2	250	42	73	188	0

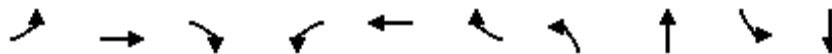
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	699	630	188	610	609	271	188	0	0	292	0	0
Stage 1	334	334	-	275	275	-	-	-	-	-	-	-
Stage 2	365	296	-	335	334	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	354	399	854	407	410	768	1386	-	-	1270	-	-
Stage 1	680	643	-	731	683	-	-	-	-	-	-	-
Stage 2	654	668	-	679	643	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	258	373	854	386	383	768	1386	-	-	1270	-	-
Mov Cap-2 Maneuver	258	373	-	386	383	-	-	-	-	-	-	-
Stage 1	679	602	-	730	682	-	-	-	-	-	-	-
Stage 2	501	667	-	635	602	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.2		14.5		0.1		2.2	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1386	-	-	854	615	1270	-	-
HCM Lane V/C Ratio	0.002	-	-	0.001	0.388	0.057	-	-
HCM Control Delay (s)	7.6	0	-	9.2	14.5	8	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.8	0.2	-	-

FUTURE "BUILD" INTERSECTION ANALYSIS

Timings
1: Harmony Rd & SR 44

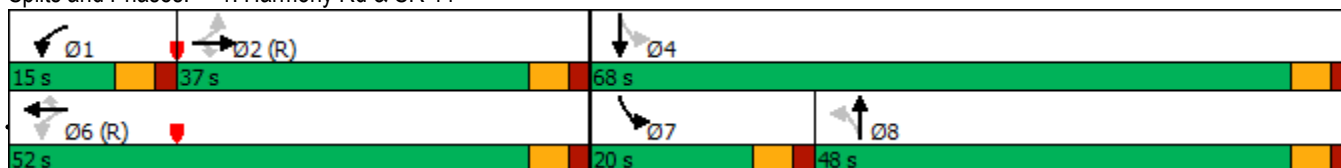


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↘
Traffic Volume (vph)	207	429	84	214	204	162	76	205	239	149
Future Volume (vph)	207	429	84	214	204	162	76	205	239	149
Lane Group Flow (vph)	213	442	87	221	210	167	78	656	246	285
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	37.0	37.0	37.0	15.0	52.0	52.0	48.0	48.0	20.0	68.0
Total Split (%)	30.8%	30.8%	30.8%	12.5%	43.3%	43.3%	40.0%	40.0%	16.7%	56.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.70	0.96	0.18	1.13	0.31	0.25	0.20	1.02	0.99	0.33
Control Delay	54.0	77.0	3.0	131.3	27.2	4.6	28.8	74.3	88.2	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	77.0	3.0	131.3	27.2	4.6	28.8	74.3	88.2	14.5
Queue Length 50th (ft)	150	338	0	~147	112	0	42	~487	146	98
Queue Length 95th (ft)	#255	#543	18	#309	175	44	81	#720	#316	157
Internal Link Dist (ft)		1249			234			550		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	303	461	490	196	681	661	382	642	248	876
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.96	0.18	1.13	0.31	0.25	0.20	1.02	0.99	0.33

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Build PM
08/03/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	429	84	214	204	162	76	205	432	239	149	127
Future Volume (veh/h)	207	429	84	214	204	162	76	205	432	239	149	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1781	1811	1811	1781	1722	1856	1826	1841	1707	1737	1826
Adj Flow Rate, veh/h	213	442	0	221	210	0	78	211	445	246	154	131
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	8	6	6	8	12	3	5	4	13	11	5
Cap, veh/h	365	468		214	690		444	185	391	256	451	384
Arrive On Green	0.26	0.26	0.00	0.08	0.39	0.00	0.35	0.35	0.35	0.12	0.52	0.52
Sat Flow, veh/h	1162	1781	1535	1725	1781	1459	1086	523	1104	1626	867	737
Grp Volume(v), veh/h	213	442	0	221	210	0	78	0	656	246	0	285
Grp Sat Flow(s),veh/h/ln	1162	1781	1535	1725	1781	1459	1086	0	1627	1626	0	1604
Q Serve(g_s), s	19.9	29.2	0.0	9.5	9.8	0.0	6.0	0.0	42.5	13.6	0.0	12.4
Cycle Q Clear(g_c), s	19.9	29.2	0.0	9.5	9.8	0.0	6.0	0.0	42.5	13.6	0.0	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.68	1.00		0.46
Lane Grp Cap(c), veh/h	365	468		214	690		444	0	576	256	0	836
V/C Ratio(X)	0.58	0.95		1.03	0.30		0.18	0.00	1.14	0.96	0.00	0.34
Avail Cap(c_a), veh/h	365	468		214	690		444	0	576	256	0	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	43.4	0.0	35.5	25.5	0.0	27.0	0.0	38.8	35.8	0.0	16.8
Incr Delay (d2), s/veh	6.7	30.0	0.0	70.2	1.1	0.0	0.2	0.0	81.8	44.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	16.2	0.0	8.5	4.2	0.0	1.5	0.0	29.1	7.1	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	73.4	0.0	105.7	26.7	0.0	27.1	0.0	120.5	80.7	0.0	17.0
LnGrp LOS	D	E		F	C		C	A	F	F	A	B
Approach Vol, veh/h		655	A		431	A		734				531
Approach Delay, s/veh		64.7			67.2			110.6				46.5
Approach LOS		E			E			F				D
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0	37.0		68.0		52.0	20.0	48.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	9.5	31.5		62.5		46.5	14.5	42.5				
Max Q Clear Time (g_c+I1), s	11.5	31.2		14.4		11.8	15.6	44.5				
Green Ext Time (p_c), s	0.0	0.2		1.0		5.3	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	75.4
HCM 6th LOS	E

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	6	9	10	440	406	6
Future Vol, veh/h	6	9	10	440	406	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	10	11	500	461	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	987	465	468	0	-	0
Stage 1	465	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	274	597	1094	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	270	597	1094	-	-	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	595	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1094	-	402	-	-
HCM Lane V/C Ratio	0.01	-	0.042	-	-
HCM Control Delay (s)	8.3	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	31	2	406	62	1	417
Future Vol, veh/h	31	2	406	62	1	417
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	50	2	5	24	2	9
Mvmt Flow	34	2	446	68	1	458

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	940	480	0	0	514
Stage 1	480	-	-	-	-
Stage 2	460	-	-	-	-
Critical Hdwy	6.9	6.22	-	-	4.12
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.95	3.318	-	-	2.218
Pot Cap-1 Maneuver	241	586	-	-	1052
Stage 1	534	-	-	-	-
Stage 2	546	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	241	586	-	-	1052
Mov Cap-2 Maneuver	241	-	-	-	-
Stage 1	534	-	-	-	-
Stage 2	545	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	250	1052
HCM Lane V/C Ratio	-	-	0.145	0.001
HCM Control Delay (s)	-	-	21.8	8.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	18	22	15	274	321	17
Future Vol, veh/h	18	22	15	274	321	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	24	16	301	353	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	696	363	372	0	-	0
Stage 1	363	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	408	682	1186	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	401	682	1186	-	-	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	726	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1186	-	518	-	-
HCM Lane V/C Ratio	0.014	-	0.085	-	-
HCM Control Delay (s)	8.1	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	3	66	1	40	0	127	37	129	296	1
Future Vol, veh/h	0	1	3	66	1	40	0	127	37	129	296	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	3	73	1	44	0	141	41	140	322	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	787	785	323	767	765	162	323	0	0	182	0	0
Stage 1	603	603	-	162	162	-	-	-	-	-	-	-
Stage 2	184	182	-	605	603	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	309	325	718	319	333	883	1237	-	-	1393	-	-
Stage 1	486	488	-	840	764	-	-	-	-	-	-	-
Stage 2	818	749	-	485	488	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	265	285	718	287	292	883	1237	-	-	1393	-	-
Mov Cap-2 Maneuver	265	285	-	287	292	-	-	-	-	-	-	-
Stage 1	486	428	-	840	764	-	-	-	-	-	-	-
Stage 2	776	749	-	423	428	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12		18.5		0		2.4	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1237	-	-	520	384	1393	-	-
HCM Lane V/C Ratio	-	-	-	0.009	0.31	0.101	-	-
HCM Control Delay (s)	0	-	-	12	18.5	7.9	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	1.3	0.3	-	-

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↗	↗	↙
Traffic Vol, veh/h	20	97	129	280	319	28
Future Vol, veh/h	20	97	129	280	319	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	0	-	-	175
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	105	140	304	347	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	931	347	377	0	-	0
Stage 1	347	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	296	696	1181	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	261	696	1181	-	-	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	2.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1181	-	261	696	-	-
HCM Lane V/C Ratio	0.119	-	0.083	0.151	-	-
HCM Control Delay (s)	8.5	-	20	11.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.3	0.5	-	-

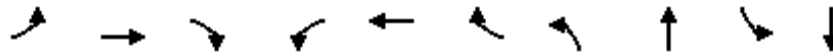
Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↗			↕	↗
Traffic Vol, veh/h	20	0	24	0	0	0	33	268	0	0	322	28
Future Vol, veh/h	20	0	24	0	0	0	33	268	0	0	322	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	235	-	-	-	-	175
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	26	0	0	0	36	291	0	0	350	30

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	713	713	350	741	743	291	380	0	0	291	0	0
Stage 1	350	350	-	363	363	-	-	-	-	-	-	-
Stage 2	363	363	-	378	380	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	347	357	693	332	343	748	1178	-	-	1271	-	-
Stage 1	666	633	-	656	625	-	-	-	-	-	-	-
Stage 2	656	625	-	644	614	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	339	346	693	312	332	748	1178	-	-	1271	-	-
Mov Cap-2 Maneuver	339	346	-	312	332	-	-	-	-	-	-	-
Stage 1	645	633	-	636	606	-	-	-	-	-	-	-
Stage 2	636	606	-	620	614	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	0	0.9	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1178	-	-	339	693	-	1271	-	-
HCM Lane V/C Ratio	0.03	-	-	0.064	0.038	-	-	-	-
HCM Control Delay (s)	8.2	-	-	16.3	10.4	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	-	0	-	-

Timings
1: Harmony Rd & SR 44

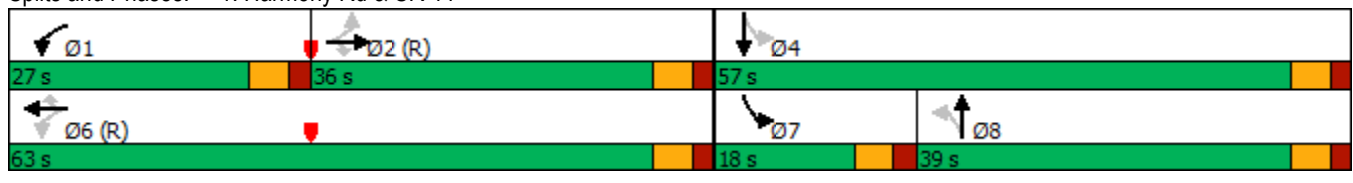


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↗
Traffic Volume (vph)	156	272	81	451	428	150	62	127	195	225
Future Volume (vph)	156	272	81	451	428	150	62	127	195	225
Lane Group Flow (vph)	164	286	85	475	451	158	65	485	205	433
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	pm+pt	NA
Protected Phases		2		1	6			8	7	4
Permitted Phases	2		2	6		6	8		4	
Detector Phase	2	2	2	1	6	6	8	8	7	4
Switch Phase										
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	5.0	6.0
Minimum Split (s)	23.5	23.5	23.5	15.0	23.5	23.5	23.5	23.5	15.0	23.5
Total Split (s)	36.0	36.0	36.0	27.0	63.0	63.0	39.0	39.0	18.0	57.0
Total Split (%)	30.0%	30.0%	30.0%	22.5%	52.5%	52.5%	32.5%	32.5%	15.0%	47.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.65	0.57	0.16	0.93	0.49	0.19	0.27	0.94	0.83	0.58
Control Delay	53.3	43.7	2.8	49.8	22.9	3.2	37.4	61.0	55.1	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	43.7	2.8	49.8	22.9	3.2	37.4	61.0	55.1	27.7
Queue Length 50th (ft)	115	196	0	255	233	0	39	291	102	223
Queue Length 95th (ft)	#213	290	17	#414	329	36	80	#491	#231	327
Internal Link Dist (ft)		1249			234			550		408
Turn Bay Length (ft)	580		250	265		225	255		300	
Base Capacity (vph)	253	504	518	511	923	820	260	541	246	769
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.57	0.16	0.93	0.49	0.19	0.25	0.90	0.83	0.56

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Harmony Rd & SR 44



HCM 6th Signalized Intersection Summary
1: Harmony Rd & SR 44

Build PM
08/03/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	272	81	451	428	150	62	127	333	195	225	186
Future Volume (veh/h)	156	272	81	451	428	150	62	127	333	195	225	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1781	1841	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	286	0	475	451	0	65	134	351	205	237	196
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	8	4	2	2	2	2	2
Cap, veh/h	306	490		520	911		275	128	334	232	399	330
Arrive On Green	0.26	0.26	0.00	0.18	0.49	0.00	0.28	0.28	0.28	0.10	0.42	0.42
Sat Flow, veh/h	940	1870	1585	1781	1870	1510	940	457	1198	1781	947	783
Grp Volume(v), veh/h	164	286	0	475	451	0	65	0	485	205	0	433
Grp Sat Flow(s),veh/h/ln	940	1870	1585	1781	1870	1510	940	0	1655	1781	0	1729
Q Serve(g_s), s	18.7	16.0	0.0	21.5	19.6	0.0	6.9	0.0	33.5	9.5	0.0	23.2
Cycle Q Clear(g_c), s	18.7	16.0	0.0	21.5	19.6	0.0	13.0	0.0	33.5	9.5	0.0	23.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.72	1.00		0.45
Lane Grp Cap(c), veh/h	306	490		520	911		275	0	462	232	0	729
V/C Ratio(X)	0.54	0.58		0.91	0.50		0.24	0.00	1.05	0.88	0.00	0.59
Avail Cap(c_a), veh/h	306	490		520	911		275	0	462	246	0	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.6	38.6	0.0	28.0	20.8	0.0	38.4	0.0	43.3	30.5	0.0	26.8
Incr Delay (d2), s/veh	6.6	5.0	0.0	20.7	1.9	0.0	0.4	0.0	55.6	28.4	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	7.8	0.0	12.4	8.5	0.0	1.6	0.0	20.2	5.7	0.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	43.6	0.0	48.8	22.7	0.0	38.8	0.0	98.8	58.9	0.0	28.0
LnGrp LOS	D	D		D	C		D	A	F	E	A	C
Approach Vol, veh/h		450	A		926	A		550				638
Approach Delay, s/veh		44.6			36.1			91.7				38.0
Approach LOS		D			D			F				D
Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	27.0	36.9		56.1		63.9	17.1	39.0				
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	30.5		51.5		57.5	12.5	33.5				
Max Q Clear Time (g_c+I1), s	23.5	20.7		25.2		21.6	11.5	35.5				
Green Ext Time (p_c), s	0.0	4.4		1.6		13.0	0.1	0.0				

Intersection Summary

HCM 6th Ctrl Delay	50.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	7	8	8	450	548	9
Future Vol, veh/h	7	8	8	450	548	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	10	10	536	652	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1214	658	663	0	-	0
Stage 1	658	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	201	464	926	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	464	926	-	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-
Stage 1	507	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	926	-	285	-	-
HCM Lane V/C Ratio	0.01	-	0.063	-	-
HCM Control Delay (s)	8.9	0	18.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	68	2	462	10	0	487
Future Vol, veh/h	68	2	462	10	0	487
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	50	6	56	2	2
Mvmt Flow	81	2	550	12	0	580

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1136	556	0	0	562
Stage 1	556	-	-	-	-
Stage 2	580	-	-	-	-
Critical Hdwy	6.42	6.7	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.75	-	-	2.218
Pot Cap-1 Maneuver	223	449	-	-	1009
Stage 1	574	-	-	-	-
Stage 2	560	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	223	449	-	-	1009
Mov Cap-2 Maneuver	223	-	-	-	-
Stage 1	574	-	-	-	-
Stage 2	560	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	226	1009
HCM Lane V/C Ratio	-	-	0.369	-
HCM Control Delay (s)	-	-	29.9	0
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	1.6	0

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	14	13	13	325	367	14
Future Vol, veh/h	14	13	13	325	367	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	15	15	374	422	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	834	430	438	0	-	0
Stage 1	430	-	-	-	-	-
Stage 2	404	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	338	625	1122	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	332	625	1122	-	-	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	674	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1122	-	429	-	-
HCM Lane V/C Ratio	0.013	-	0.072	-	-
HCM Control Delay (s)	8.3	0	14	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	67	0	161	2	272	50	67	223	0
Future Vol, veh/h	0	0	1	67	0	161	2	272	50	67	223	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	92	90	90	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	74	0	179	2	302	56	73	242	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	812	750	242	723	722	330	242	0	0	358	0	0
Stage 1	388	388	-	334	334	-	-	-	-	-	-	-
Stage 2	424	362	-	389	388	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	298	340	797	342	353	712	1324	-	-	1201	-	-
Stage 1	636	609	-	680	643	-	-	-	-	-	-	-
Stage 2	608	625	-	635	609	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	211	316	797	323	328	712	1324	-	-	1201	-	-
Mov Cap-2 Maneuver	211	316	-	323	328	-	-	-	-	-	-	-
Stage 1	635	566	-	679	642	-	-	-	-	-	-	-
Stage 2	454	624	-	590	566	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	18	0	1.9
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1324	-	-	797	526	1201	-	-
HCM Lane V/C Ratio	0.002	-	-	0.001	0.482	0.061	-	-
HCM Control Delay (s)	7.7	0	-	9.5	18	8.2	0	-
HCM Lane LOS	A	A	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	2.6	0.2	-	-

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↗	↗	↗
Traffic Vol, veh/h	52	165	179	286	315	62
Future Vol, veh/h	52	165	179	286	315	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	0	-	-	175
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	179	195	311	342	67

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1043	342	409	0	-	0
Stage 1	342	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	254	701	1150	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	211	701	1150	-	-	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	3.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1150	-	211	701	-	-
HCM Lane V/C Ratio	0.169	-	0.268	0.256	-	-
HCM Control Delay (s)	8.8	-	28.2	11.9	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1	1	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↗			↕	↗
Traffic Vol, veh/h	44	0	52	0	0	0	56	287	0	0	321	52
Future Vol, veh/h	44	0	52	0	0	0	56	287	0	0	321	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	235	-	-	-	-	175
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	0	57	0	0	0	61	312	0	0	349	57

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	783	783	349	840	840	312	406	0	0	312	0	0
Stage 1	349	349	-	434	434	-	-	-	-	-	-	-
Stage 2	434	434	-	406	406	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	311	325	694	285	302	728	1153	-	-	1248	-	-
Stage 1	667	633	-	600	581	-	-	-	-	-	-	-
Stage 2	600	581	-	622	598	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	299	308	694	251	286	728	1153	-	-	1248	-	-
Mov Cap-2 Maneuver	299	308	-	251	286	-	-	-	-	-	-	-
Stage 1	632	633	-	568	550	-	-	-	-	-	-	-
Stage 2	568	550	-	571	598	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.6	0	1.4	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1153	-	-	299	694	-	1248	-	-
HCM Lane V/C Ratio	0.053	-	-	0.16	0.081	-	-	-	-
HCM Control Delay (s)	8.3	-	-	19.3	10.6	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0.3	-	0	-	-

TRAFFIC VOLUME WORKSHEETS

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

1.Harmony Rd @ SR 44
A.M. Peak Hour

Condition	Old Phoenix Road Northbound			Harmony Road Southbound			SR 44 (Greensboro Road) Eastbound			SR 44 (Greensboro Road) Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	63	144	359	158	104	65	327	119	357	70	546	178	170	82	430
Adjusted Existing 2021 Volumes:	69	157	391	172	113	71	356	130	389	76	595	194	185	89	468
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	76	173	432	190	125	78	393	143	429	84	656	214	204	98	516
Total New Trips:	0	32	0	49	24	49	122	64	0	0	64	0	0	64	64
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	76	205	432	239	149	127	515	207	429	84	720	214	204	162	580

P.M. Peak Hour

Condition	Old Phoenix Road Northbound			Harmony Road Southbound			SR 44 (Greensboro Road) Eastbound			SR 44 (Greensboro Road) Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	55	80	299	112	170	104	386	72	244	72	388	405	384	67	856
Adjusted Existing 2021 Volumes:	56	81	302	113	172	105	390	73	246	73	392	409	388	68	865
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	62	89	333	125	190	116	431	81	272	81	434	451	428	75	954
Total New Trips:	0	38	0	70	35	70	175	75	0	0	75	0	0	75	75
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	62	127	333	195	225	186	606	156	272	81	509	451	428	150	1029

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

2. Harmony Rd @ Village Ln
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Village Lane Eastbound			Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	8	233	0	241	0	236	5	241	5	0	7	12	0	0	0	0
Adjusted Existing 2021 Volumes:	9	254	0	263	0	257	5	262	5	0	8	13	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	10	280	0	290	0	284	6	290	6	0	9	15	0	0	0	0
Total New Trips:	0	160	0	160	0	122	0	122	0	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	10	440	0	450	0	406	6	412	6	0	9	15	0	0	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Village Lane Eastbound			Westbound						
	L	T	R	L	T	R	L	T	R	L	T	R	Tot			
Existing 2021 Counts during Covid-19:	7	235	0	242	0	334	8	342	6	0	7	13	0	0	0	0
Adjusted Existing 2021 Volumes:	7	237	0	244	0	337	8	345	6	0	7	13	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	8	262	0	270	0	372	9	381	7	0	8	15	0	0	0	0
Total New Trips:	0	188	0	188	0	176	0	176	0	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	8	450	0	458	0	548	9	557	7	0	8	15	0	0	0	0

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

3. Harmony Rd @ Sammons I Pkwy

A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			-			Sammons Industrial Parkway (South) Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Existing 2021 Counts during Covid-19:	0	205	51	256	1	245	0	246	0	0	0	0	28
Adjusted Existing 2021 Volumes:	0	223	56	279	1	267	0	268	0	0	0	0	30
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	246	62	308	1	295	0	296	0	0	0	0	33
Total New Trips:	0	160	0	160	0	122	0	122	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	0	406	62	468	1	417	0	418	0	0	0	0	33

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			-			Sammons Industrial Parkway (South) Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	Tot
Existing 2021 Counts during Covid-19:	0	246	9	255	0	279	0	279	0	0	0	0	63
Adjusted Existing 2021 Volumes:	0	248	9	257	0	282	0	282	0	0	0	0	64
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	274	10	284	0	311	0	311	0	0	0	0	70
Total New Trips:	0	188	0	188	0	176	0	176	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	0	462	10	472	0	487	0	487	0	0	0	0	70

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

4. Harmony Rd @ Harmony Ln
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Harmony Lane Eastbound			Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	13	194	0	207	0	223	14	237	15	0	18	33	0	0	0
Adjusted Existing 2021 Volumes:	14	211	0	225	0	243	15	258	16	0	20	36	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	15	233	0	248	0	268	17	285	18	0	22	40	0	0	0
Total New Trips:	0	41	0	41	0	53	0	53	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	15	274	0	289	0	321	17	338	18	0	22	40	0	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Harmony Lane Eastbound			Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	12	239	0	251	0	272	13	285	13	0	12	25	0	0	0
Adjusted Existing 2021 Volumes:	12	241	0	253	0	275	13	288	13	0	12	25	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	13	266	0	279	0	304	14	318	14	0	13	27	0	0	0
Total New Trips:	0	59	0	59	0	63	0	63	0	0	0	0	0	0	0
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	13	325	0	338	0	367	14	381	14	0	13	27	0	0	0

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

5. Harmony Rd @ Scott Rd
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Private Drwy Eastbound			Scott Rd Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	0	79	24	107	210	1	318	0	1	3	4	46	1	33	80
Adjusted Existing 2021 Volumes:	0	86	26	112	229	1	347	0	1	3	4	50	1	36	87
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	95	29	124	253	1	383	0	1	3	4	55	1	40	96
Total New Trips:	0	32	8	40	43	0	43	0	0	0	0	11	0	0	11
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	0	127	37	164	296	1	426	0	1	3	4	66	1	40	107

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Private Drwy Eastbound			Scott Rd Westbound					
	L	T	R	L	T	R	L	T	R	L	T	R	Tot		
Existing 2021 Counts during Covid-19:	2	202	34	238	60	155	0	215	0	0	1	49	0	145	194
Adjusted Existing 2021 Volumes:	2	204	34	240	61	157	0	218	0	0	1	49	0	146	195
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	2	225	38	265	67	173	0	240	0	0	1	54	0	161	215
Total New Trips:	0	47	12	59	0	50	0	50	0	0	0	13	0	0	13
Pass-by's Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	2	272	50	324	67	223	0	290	0	0	1	67	0	161	228

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

6. Harmony Rd @ Site Drwy 1(S)
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Site Driveway 1 (Southern) Eastbound			Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	
	Tot			Tot			Tot			Tot			
Existing 2021 Counts during Covid-19:	0	207	0	0	246	0	246	0	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	226	0	0	268	0	268	0	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	249	0	0	296	0	296	0	0	0	0	0	0
Total New Trips:	128	32	0	0	24	27	51	20	0	97	117	0	0
Pass-by's Trips:	1	-1	0	0	-1	1	0	0	0	0	0	0	0
Future 2025 Traffic Volumes:	129	280	0	0	319	28	347	20	0	97	117	0	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Site Driveway 1 (Southern) Eastbound			Westbound			
	L	T	R	L	T	R	L	T	R	L	T	R	
	Tot			Tot			Tot			Tot			
Existing 2021 Counts during Covid-19:	0	248	0	0	279	0	279	0	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	250	0	0	282	0	282	0	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	276	0	0	311	0	311	0	0	0	0	0	0
Total New Trips:	151	38	0	0	35	31	66	29	0	140	169	0	0
Pass-by's Trips:	28	-28	0	0	-31	31	0	23	0	25	48	0	0
Future 2025 Traffic Volumes:	179	286	0	0	315	62	377	52	0	165	217	0	0

21-082 - Helms Farm Campus - Harmony Road
Traffic Volumes

A&R Engineering
August 2021

7. Harmony Rd @ Site Drwy 2(N)
A.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Site Driveway 2(Northern) Eastbound			Private Driveway Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing 2021 Counts during Covid-19:	0	207	0	0	246	0	246	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	226	0	0	268	0	268	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	249	0	0	296	0	296	0	0	0	0	0
Total New Trips:	32	20	0	52	27	27	54	20	0	24	44	0
Pass-by's Trips:	1	-1	0	0	-1	1	0	0	0	0	0	0
Future 2025 Traffic Volumes:	33	268	0	301	322	28	350	20	0	24	44	0

P.M. Peak Hour

Condition	Harmony Road Northbound			Harmony Road Southbound			Site Driveway 2(Northern) Eastbound			Private Driveway Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing 2021 Counts during Covid-19:	0	248	0	0	279	0	279	0	0	0	0	0
Adjusted Existing 2021 Volumes:	0	250	0	0	282	0	282	0	0	0	0	0
Growth Factor (%):	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
No-Build 2025 Volumes:	0	276	0	0	311	0	311	0	0	0	0	0
Total New Trips:	38	29	0	67	31	31	62	29	0	35	64	0
Pass-by's Trips:	18	-18	0	0	-21	21	0	15	0	17	32	0
Future 2025 Traffic Volumes:	56	287	0	343	321	52	373	44	0	52	96	0

July 23, 2021

Ms. Lisa Jackson
Deputy County Manager
117 Putnam Drive
Eatonton, GA 31024

Re: DRI #3377, Lake Oconee Helms College

Dear Ms. Jackson:

The Middle Georgia Regional Commission (MGRC) has completed its review of the Development of Regional Impact (DRI) for the Lake Oconee Helms College Development in Putnam County. MGRC conducted a careful review of the information submitted by the local government and comments received from potentially affected agencies. Two positive comments were received from the Putnam County Board of Commissioners and from the City of Eatonton. These comments are provided below:

- *Putnam County:*

The BOC feels the project will generate sufficient revenue to offset any additional requirements for services that the project may require. The project will provide the potential for both county employment opportunities and additional sales tax revenue.

- *City of Eatonton:*

This project will have significant positive impact on our community in several different ways. The increase in property tax revenue along with the educational opportunities as well as the housing and retail components are all welcomed additions to our community and region.

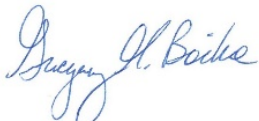
MGRC also reviewed the proposed project's potential regional and interjurisdictional impact and consistency with the Department of Community Affairs Quality Community Objectives, Middle Georgia Regional Plan, and Middle Georgia Regionally Important Resources Plan. After reviewing the information, MGRC staff notes that the proposed development site lies within an area of projected rapid growth as identified in the 2016 Regional Plan. It is recommended that local governments "take action early to ensure that growth occurs in a manner which makes it possible to provide necessary public services," (2016-2036 Plan for a Thriving Middle Georgia, pg. 17-18).

Ms. Lisa Jackson
Re: DRI 3377
July 23, 2021
Page Two

This project will also help the region take advantage of the identified opportunity for “coordination with technical colleges and universities ... to provide job skills training to low-skill employees,” (2016-2036 Plan for a Thriving Middle Georgia, pg. 45).

Please be advised that this concludes the DRI Review Process and Putnam County may proceed with the final official action it deems appropriate regarding the proposed project. It is encouraged that Putnam County takes the materials presented in the DRI report into consideration when rendering its decision. The enclosed information is advisory in nature and under no circumstances should be considered as binding or infringing upon the host jurisdiction’s right to determine for itself the appropriateness of development within its boundaries.

Sincerely,



Greg Boike
Director of Public Administration

Enclosure

cc: Affected Local Governments and Other Interested Parties (via email)
Georgia Department of Community Affairs (via email)

**Development of Regional Impact
Comments from Affected Parties**

Project ID: DRI #3377 – Lake Oconee Helms College (Putnam County)

PUTNAM COUNTY BOARD OF COMMISSIONERS

Commenting Organization: _____

Street Address: 117 PUTNAM DR
EATONTON, GA 31024

EATONTON GA 31024

City: _____ State: _____ Zip Code: _____

BILLY WEBSTER 478-288-2188 bwebster@putnamcountyga.us

Contact Person: _____ Phone: _____ Email: _____

Do you believe your jurisdiction will be affected by the proposed development? YES NO

Please describe the effects (positive or negative) that the proposed project could have on your jurisdiction:
The BOC feels the project will generate sufficient revenue to offset any additional requirements for services that the project may require, The project will provide the potential for both county employment opportunities and additional sales tax revenue.

Form Completed by: Billy Webster Title: Chairman
Signature: Billy Webster Date: July 19, 2021

Mail, Fax, or Email this form to: Greg Boike
Middle Georgia Regional Commission
175 Emery Highway, Suite C
Macon, GA 31217
P: 478-751-6160
F: 478-751-6517
E: gboike@mg-rc.org

**Comments on DRI #3377 will be accepted beginning on Wednesday, July 7, 2021.
All comments are due by Thursday, July 22, 2021.**

This request for comments has been sent to the following potentially affected parties: MGRC Council; City/county chief elected officials and key staff in the following counties: Putnam, Baldwin, Greene, Hancock, Jasper, Jones, and Morgan; School superintendents in the preceding counties; Development authorities of the preceding counties; GA Department of Natural Resources; GA Department of Transportation; Georgia Environmental Finance Authority; GA Department of Public Health; U.S. Fish & Wildlife Service; Northeast Georgia Regional Commission, and Central Savannah River Area Regional Commission.

Development of Regional Impact
Comments from Affected Parties

Project ID: DRI #3377 – Lake Oconee Helms College (Putnam County)

Commenting Organization: City of Eatonton

Street Address: 201 North Jefferson Ave.

City: Eatonton State: GA Zip Code: 31024

Contact Person: Gary Sanders Phone: (706) 485-3311 Email: gsanders@eatontonga.us

Do you believe your jurisdiction will be affected by the proposed development? YES NO

Please describe the effects (positive or negative) that the proposed project could have on your jurisdiction:

This project will have significant positive impact on our community in several different ways. The increase in property tax revenue along with the educational opportunities as well as the housing and retail components are all welcomed additions to our community and region.

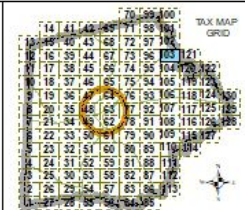
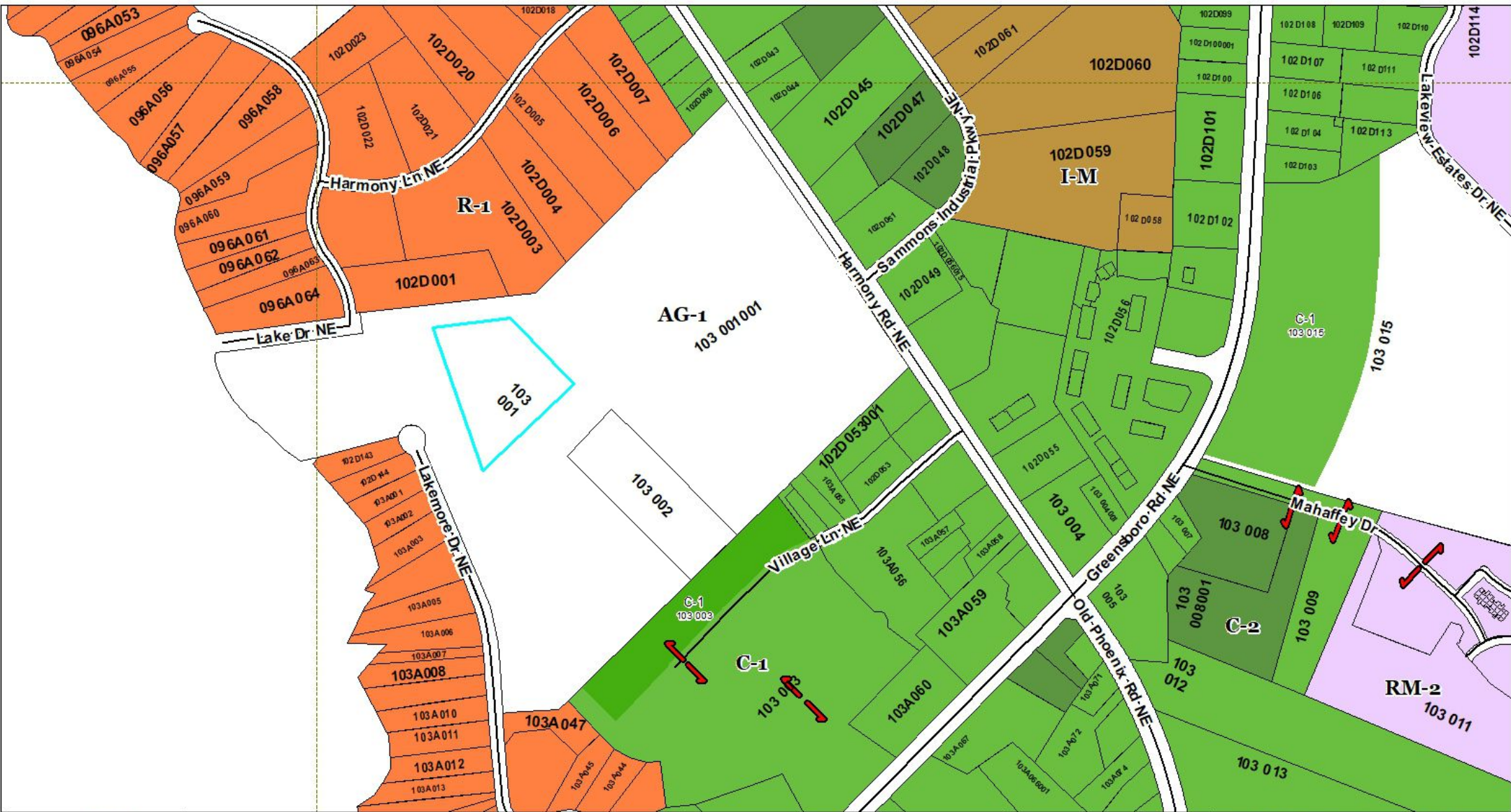
Form Completed by: John Reid Title: Mayer

Signature: [Signature] Date: 07/22/2021

Mail, Fax, or Email this form to: Greg Boike
Middle Georgia Regional Commission
175 Emery Highway, Suite C
Macon, GA 31217
P: 478-751-6160
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- Eatonton Limits
- County Boundary
- Roads
- Parcels
- Parcel Hooks

GEOGRAPHIC FEATURE LEGEND

Zoning	
Overlay District	AG-2
No Code	C-1
AG-1	C-1 CITY
AG-1 CITY	C-2
IND-2 CITY	I-M
MHP	IND-1 CITY
IND-2	PUBLIC
PUBLIC CITY	R-4 CITY
R-1 CITY	R-1
R-2 CITY	R-2
R-3 CITY	R-2
R-4 CITY	RM-1
RM-2	RM-2
RM-3	RM-3
VILLAGE	VILLAGE



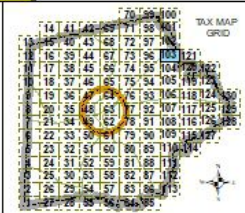
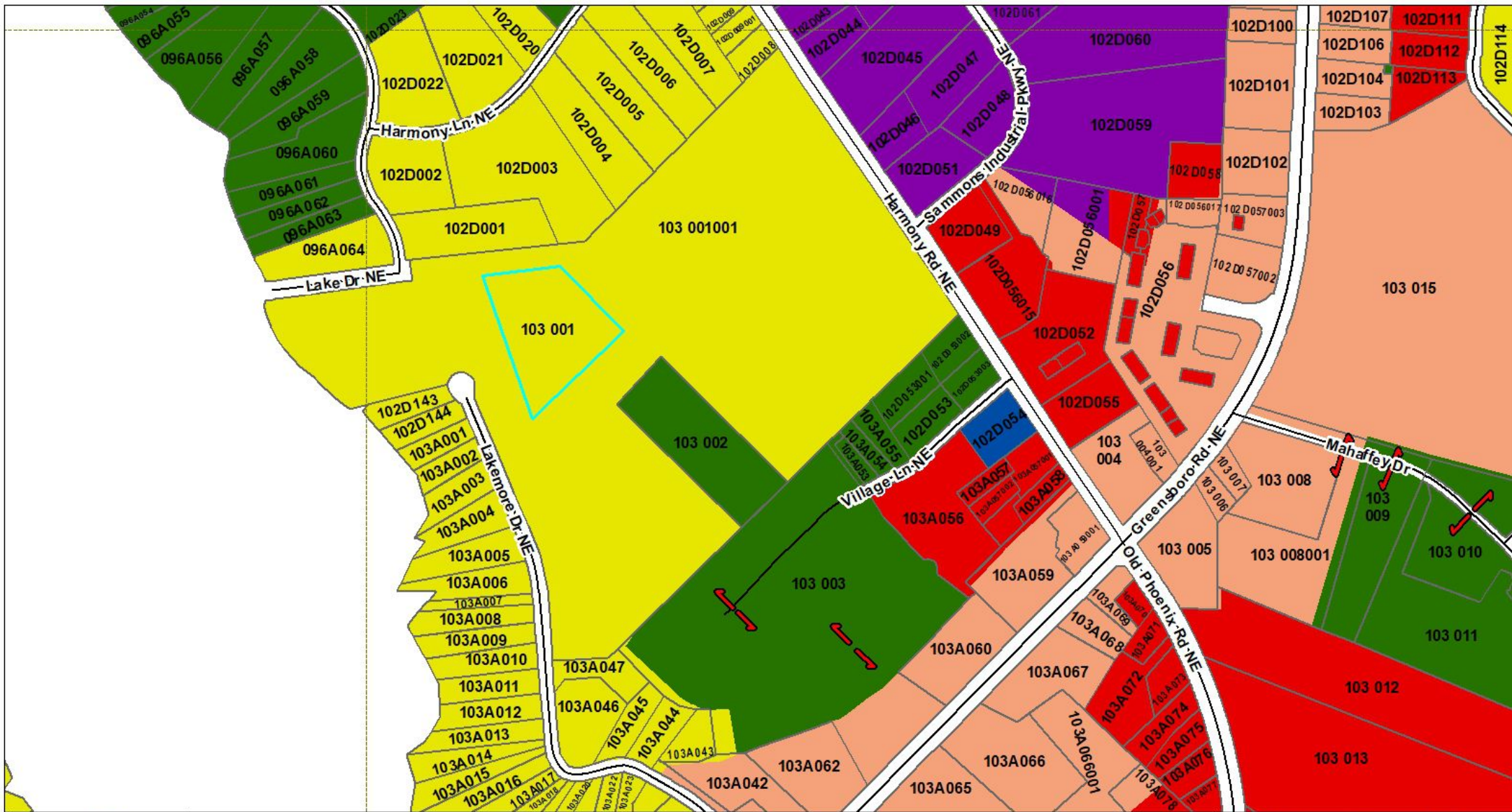
Middle Georgia Regional Commission
 175 Emery Hwy
 Suite C
 Macon, Georgia 31217
 (478) 751-6160
 Web:
www.middlegeorgia.org

PUTNAM COUNTY, GEORGIA
 ZONING MAPS

MAP 103

522

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



GEOGRAPHIC FEATURE LEGEND			
Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Parcels	Industrial	Public/Institutional	Undeveloped/Vacant
Parcel_Hooks			

MGRCS
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PUTNAM COUNTY, GEORGIA
 FUTURE LAND USE MAPS

MAP 103

523

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



PUTNAM COUNTY PLANNING & DEVELOPMENT

117 Putnam Drive, Suite B ♦ Eatonton, GA 31024

Tel: 706-485-2776 ♦ 706-485-0552 fax ♦ www.putnamcountyga.us

Staff Recommendations

Thursday, August 05, 2021 ♦ 6:30 PM

Putnam County Administration Building – Room 203

TO: Planning & Zoning Commission

FROM: Lisa Jackson

RE: Staff Recommendation for Public Hearing Agenda on 8/5/2021

Requests

13. Request by **James Stiff, Goodwill Industries of Middle Georgia, Inc., Agent for Peggy Allen & Susan Fox** to rezone 5 acres at 916 Harmony Road Parcel A from AG to C-PUD. [Map 103, Parcel 001, District 3].* The applicant is requesting to rezone 5 acres from AG to C-PUD. If approved, the subject property will be combined with the exterior property (Map 103, Parcel 001001). The purpose of rezoning this property is to develop a new, mixed-use development to support the non-profit mission and vision of Goodwill Industries of Middle Georgia's Helms College expansion. Helms Career Institute was established in 2007 as a private, independent, post-secondary career school that provides experiential learning and career education for workforce development. The proposed development is a part of a strategic plan for expansion that supports the college's future growth to meet local talent needs in high-demand occupations. The proposed development will include retail and hotel components supporting and complimenting degrees sponsored by Helms College, residential units for students, recreation amenities such as tennis courts, jogging trails, agritourism, a conference retreat center with restaurants. The agritourism aspect will include gardens and farms that will provide hands-on experience for students and community members to learn about the farm-to-table philosophies and offerings.

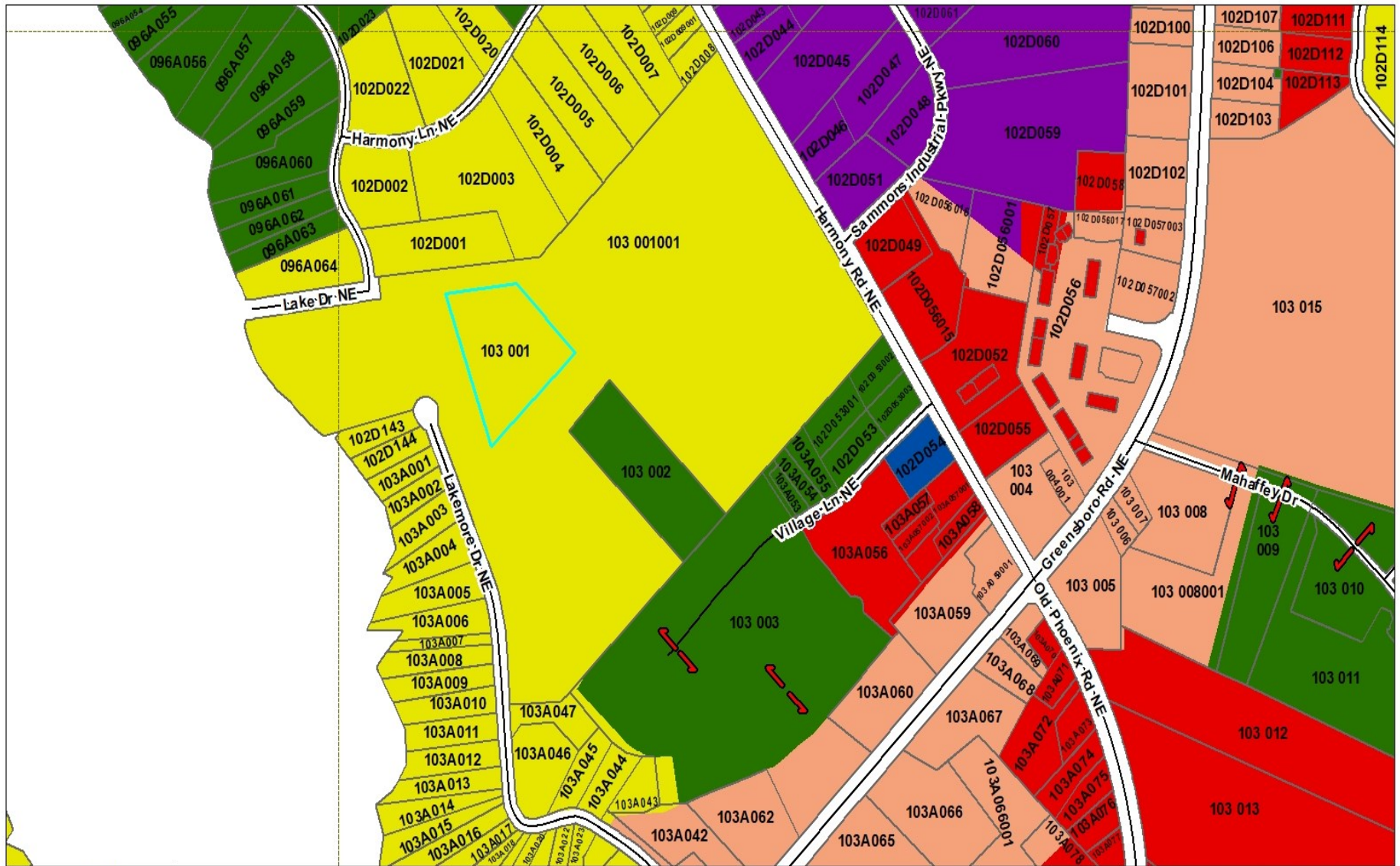
According to the traffic study, the proposed development will consist of the following: a Goodwill store; Helms College for 50 students; Edgar's Bakery; retailing including a spa; a high-turn-over sit-down restaurant; a supermarket; 127 multi-family residential units; 18 student housing units; 41 vacation villas; an event/banquet hall, and a 175-room hotel. Piedmont Water will provide water and sewer. As proposed, the development will be completed in four phases as determined by the market conditions and demand. Phase one will consist of the Goodwill store, Helms College for 25 students, Edgar's Bakery, and 3,400 square feet of retail is to be completed by 2023. The second phase will include an additional 25 students to the college, 11,200 square feet of retail, 42 multi-family units, and 6 student housing units to be finished in 2024. Phases three and four will consist of 12,320 square feet of retail, 10,600 square feet of a sit-down restaurant, a supermarket, 85 Multi-family residential units, 12 student housing units, 41 vacation villas, an event/banquet hall, and a 175-room hotel.

The traffic analysis projects that the total site-generated trips will be 10,975, and the mixed-use reduction is 1,814. Thus the 24-hour total volume of two-way traffic will be 9,161. However, it concludes that the most significant impact from the proposed development will be during the am and pm peak hours. There will be a maximum of 29 vehicles turning left at either driveway, 35 vehicles turning right at the northern driveway, and 140 at the southern driveway. The turning movement will average approximately 1 to 2 vehicles per minute, according to the study. It further adds that the intersection of Harmony Rd., SR 44, and Old Phoenix Rd. currently has a large volume of right-turn movement during peak hours. There are long delays at this intersection, given that there is no dedicated right-turn lane. Although delays are in occurrence, the study states that there will be no significant impact on the traffic if the developer will construct left-turn lanes and deceleration lanes. In addition, the current delays will improve once GDOT completes the proposed SR 44 widening project.

There will be two full-access entrances on Harmony Road identified as Driveway One (southern) and Driveway Two (northern). The study further recommends that the first driveway has two entering and two exit lanes while the second driveway has one entering and two exit lanes. The following is recommended for each driveway: the eastbound lane approach should have a separate left and right-turn lane for exiting traffic; a northbound left-turn lane to be constructed on Harmony Road for entering traffic; a southbound deceleration lane to be installed on Harmony Road for entering traffic. The subject property is adjacent to a combination of residential, commercial, and agriculture zoned properties. It fronts Harmony Road, which is a main arterial road. The property also has frontage on Lake Drive and Lakemore Drive.

As stated in Sec. 66-115(b) of the Putnam County Code of Ordinances, the C-PUD zoning allows more than one type of use in a building or set of buildings, including some combination of residential and selective nonresidential uses such as commercial, office and institutional uses. Furthermore, the proposed development is consistent with the existing residential, multi-family, and commercial developments in this area. The comprehensive plan matches the proposed use for future residential and mixed-use development. In the final DRI report, the Middle Georgia Regional Commission noted that the proposed development site lies within an area of projected rapid growth as identified in the 2016 Regional Plan. The report recommends that the local government take action early to ensure that growth occurs in a manner that makes it possible to provide necessary public services.

By implementing the required conditions, the proposed project should have minimal impact on the adjacent properties, roads, and nearby intersections. There is no evidence that the proposed development would cause excessive or burdensome use of public services, nor should it adversely affect police, fire protection, or sewer services. If approved, the staff recommends that the developer should install a deceleration lane and left-turn lane at the main entrances of the development. There shall be no entrance on Lakemore Drive and only an emergency gated entrance on Lake Drive.



74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

TALK MAP GRID

GEOGRAPHIC FEATURE LEGEND

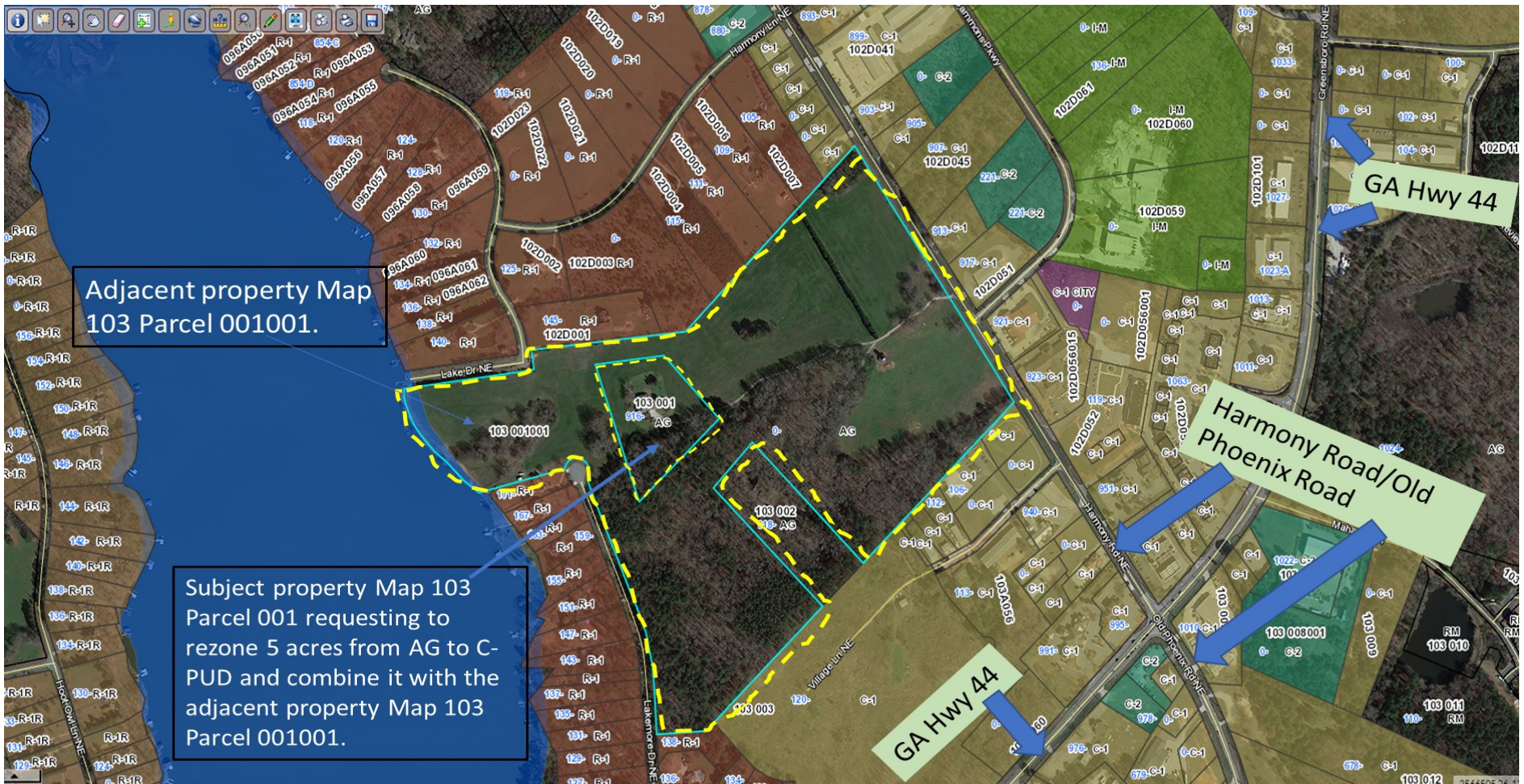
Eatonton Limits	Agriculture/Forestry	Mixed Use	Residential
County Boundary	Commercial	Park/Recreation/Conservation	Transportation/Communication/Utilities
Roads	Industrial	Public/Institutional	Undeveloped/Vacant
Parcels			
Parcel Hooks			

MGRC
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PUTNAM COUNTY, GEORGIA
FUTURE LAND USE MAPS

MAP 103

MAP SCALE: 1" = 400' SCALE RATIO: 1:4,800 DATE: JULY 2021



Staff recommendation is for approval to rezone 5 acres from AG to C-PUD at 916 Harmony Road [Map 103, Parcel 001, District 3] with the following conditions:

- (1) The developer shall construct a deceleration lane and turn lane in accordance with the Georgia Department of Transportation Regulations for Driveway & Encroachment Control to service the two main entrances on Harmony Road. Additional right-of-way to accommodate the deceleration lane and a ten-foot shoulder shall be dedicated by the developer to the county. It shall be completed by the developer prior to the completion of phase one.
- (2) The developer shall direct construction traffic through the second main entrance located the farthest away from the intersection of Harmony Road and Hwy 44.
- (3) There shall be no entrance/exit located on Lakemore Road
- (4) Only a gated and locked Emergency Exit shall be located on Lake Drive.

New Business Adjournment

The Planning & Zoning Commission meeting will be conducted pursuant and in accordance with O.C.G.A. Chapter 36-66.

Notice: All opponents to any rezoning request on the Planning & Zoning Commission and the Board of Commissioners agendas must file a disclosure of campaign contributions with the Planning & Development Department within five calendar days prior to public hearings if you have contributed \$250.00 or more to an elected official in Putnam County within the last five years.

*The Putnam County Board of Commissioners will hear these agenda items on August 17, 2021 at 6:30 P.M., in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, GA 31024.

The full meeting package can be reviewed in the Planning & Development office upon request.

The Board of Commissioners reserves the right to continue the meeting to another time and place in the event the number of people in attendance at the meeting, including the Board of Commissioners, staff, and members of the public exceeds the legal limits.

The Board of Commissioners' hearing will be conducted pursuant to O.C.G.A. 50-14-1 and Section 66-152 of the Putnam County Code of Ordinances and meets the requirements of the Zoning Procedures Laws established in O.C.G.A 36-66.

Individuals with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities are required to contact the ADA Compliance Officer, at least three business days in advance of the meeting at 706-485-2776 to allow the County to make reasonable accommodations for those persons.