AGENDA

Gainesville Planning and Appeals Board
Tuesday, August 8, 2017, 5:30 PM
Gainesville Justice Center

1. CALL TO ORDER

2. MINUTES

A. July 11, 2017 PAB Meeting Minutes

3. OLD BUSINESS

4. NEW BUSINESS

A. Rezoning Requests

(1) Request from **Lidl US Operations, LLC** to rezone a 6.854± acres tract located on the east side of Dawsonville Highway, southeast of Beechwood Boulevard (a/k/a **0 and 1010 Dawsonville Highway**) from Office and Institutional (O-I) and General Business (G-B) to General Business (G-B).
Ward Number: One
Tax Parcel Number(s): 01-115-001-002 and 061
Request: Grocery store

(2) Request from **JH Homes, Inc.** to rezone a 21.87± acres tract located on the east side of South Enota Drive, having frontage on Smokey Mountain Springs Lane and Pearce Way (a/k/a **1024, 1030 and 1037 Pearce Way NE; 0 South Enota Drive NE**) from Office and Institutional (O-I) to Residential-II (R-II).
Ward Number: Two
Tax Parcel Number(s): 01-083-001-005, 151, 152 and 153
Request: 65 residential townhomes

5. MISCELLANEOUS

6. ADJOURNMENT

CITY OF GAINESVILLE

AGENDAREQUEST

Date Submitted: 7/13/2017

Presenter: N/A

Item of Business: July 11, 2017 PAB Meeting Minutes

Meeting Date: 8/8/2017

Purpose of Request:
The purpose of this request is to allow the Planning and Appeals Board to approve the minutes from the referenced meeting.

History/Background:

Facts & Issues for Consideration:
The draft minutes were reviewed by the Planning Manager and Community Development Director.

Department Recommendation:
Approval of the minutes as presented.

Department Director:
Rusty Ligon

If funding is involved, are funds approved within the current budget?
N/A

Amount Requested:

Source of Funds:

Finance Comments:

Administrative Comments:

ATTACHMENTS:

Description	Type
Draft Minutes	Minutes

GAINESVILLE PLANNING AND APPEALS BOARD
DRAFT MINUTES OF MEETING
JULY 11, 2017

CALL TO ORDER Chairman Carter at 5:30 p.m.

Members Present: Chairman Doug Carter, Vice-Chair Jane Fleming, and Board Members Eddie Martin, Sr., Ryan Thompson and Rich White

Members Absent: Board Members Connie Rucker and Carmen Delgado

Staff Present: Community Development Director Rusty Ligon, Planning Manager Matt Tate and Recording Secretary Judy Foster

Others Present: Council Members George Wangemann and Ruth Bruner

MINUTES OF JUNE 13, 2017

There was a motion to approve the minutes as presented.

Motion made by Board Member Thompson
Motion seconded by Board Member White
Vote – 5 favor, 2 absent (Rucker, Delgado)

NEW BUSINESS

A. Annexation Request

1) Request from **Keel Property Management, LLC** to annex a 6.32± acres tract located on the northeast side of the intersection of Jesse Jewell Parkway and White Sulphur Road (a/k/a **0 White Sulphur Road**), and to establish zoning as General Business (G-B).
   Ward Number: Two
   Tax Parcel Number(s): 09-123-000-008
   Request: Restaurant and retail uses

Staff Presentation: Planning Manager Matt Tate gave the following staff presentation:

The applicant is proposing to annex the subject 6.32± acres property into the city limits of Gainesville with a zoning of General Business (G-B). The property is currently zoned Agricultural Residential-III (AR-III) and Highway Business (H-B) within unincorporated Hall County and is adjacent to the city limits to the south and west. The surrounding uses include New Haven Church, New Holland Market and single-family homes. The property is undeveloped, heavily wooded and abuts railroad right-of-way to the east. In addition, the property is located within the Limestone Parkway Overlay Zone and the Hall County Gateway District. The applicant intends to utilize water and sewer services for future restaurant and retail purposes. The conceptual plan proposes a 3,500 square foot Fazoli's restaurant, a 4,800 square foot restaurant and a 7,000 square foot retail building. Access is proposed from White Sulphur Road, directly across from the rear entrance to the New Holland Market Place. Public water and sewer will be utilized which will require a sanitary sewer extension of approximately 1,300 feet from Jesse Jewell Parkway.

The proposed development appears to be compatible with the Future Development Map of the Comprehensive Plan as the subject property is located within the *Retail/Commercial* land use category and both within the *Limestone Medical Corridor* Character Area and the *Historic Mill Villages* Character Area. Land uses allowed in the Historic Mill Villages include medium-density residential, mixed-use, commercial, public / institutional, and parks / recreation / conservation.

The Planning Division staff is recommending **conditional approval** of this annexation request with G-B zoning, based on the Comprehensive Plan and the adjacent mixture of land uses with five conditions.

Applicant Presentation: Ed Myers, Myers & Company, 752 Chattahoochee Place, stated he represented the applicant and was the project engineer. He stated the request was to annex the subject property, be consistent with General Business zoning standards, and to get water and sewer services from the City. He stated the developer would be the owner of the Fazoli's franchise on the corner and develop the rest of the property to market to help cover the costs. Mr. Myers stated the property has been on the market for a month and they have a proposed car wash and asked the restriction of a car wash in the conditions be removed. He stated they did not ask for that use to be restricted and noted it is a permitted use within the General Business zoning district. He stated they would also like the option for mini-warehouse units on Lot 3, on the north side, noting they would be screened and the front facades constructed in compliance with overlay standards. He felt there was a need for both of these uses in the area because of new residential developments.

FAVOR: None

OPPOSE: None

Planning and Appeals Board Comments: None

There was a motion to recommend approval of the request to annex the subject property and establish zoning as General Business (G-B) with the following conditions as proposed by staff:

Conditions

1. **Prohibited commercial uses shall include motels or hotels with rooms accessed from the exterior of the building, adult novelty stores, adult entertainment centers, pawn shops, gas stations, tire stores, massage parlors except for practitioners licensed by the State of Georgia, vaping stores, auto body shops, automobile sale establishments, marine sales or repair stores, automated or non-automated car wash, coin-laundry facilities, truck stop, non-climate controlled mini-warehouses or storage facilities, tattoo parlors, psychics, fortune tellers, clairvoyants and the like.**
2. **The exterior of the buildings shall be constructed with brick, stone or masonry finish on all sides visible from a public street and will comply with the Limestone Parkway Overlay Zone standards and Architectural Design Guidelines stated within the Gainesville Unified Land Development Code.**
3. **The proposed development shall be limited to one free standing sign per lot. Each sign shall be limited to a maximum height of 10-feet, maximum sign face area of 50 square feet, maximum sign structure area of 96 square feet with internal or indirect lighting. No electronic changeable copy signs shall be permitted. The purpose of**

these sign standards is to provide for consistency with the adjacent New Holland Market development.

4. **Prior to a permit being issued, the developer shall provide a traffic study and coordinate with the Georgia Department of Transportation (GDOT) Traffic Division to determine the traffic development impacts on the intersection of SR 369 / Jesse Jewell Parkway and White Sulphur Road and to determine whether the existing turn lanes will accommodate the future traffic generated by the development.**
5. **All access point design for the subject property shall require approval by the Georgia Department of Transportation in conjunction with the Gainesville Public Works Director. All required access / traffic / sidewalk improvements associated with the proposed development shall be at the full expense of the developer / property owner.**

Motion made by Board Member Martin
Motion seconded by Vice-Chair Fleming
Vote – 5 favor, 2 absent (Rucker, Delgado)

B. Rezoning Request

1) Request from **Will & McCay Crumley** to rezone a 0.308± acre tract located on the north side of Park Street and northeast of the intersection of Park Street and Boulevard (a/k/a **523 Park Street**) from Residential-II (R-II) to Residential-I (R-I).
Ward Number: Two
Tax Parcel Number(s): 01-038-003-015
Request: Single-family home

Staff Presentation: Planning Manager Matt Tate gave the following staff presentation:

The applicant is proposing to rezone the subject 0.308± acre property from Residential-II (R-II) to Residential-I (R-I) for the existing single-family use. The subject property contains a one-story, single-family home and a detached building and has road frontage along Park Street. The surrounding uses include single-family homes, multi-family apartments, professional offices and Brenau University. The applicant intends to keep the property as single-family which is currently occupied by the applicant. The request would effectively downzone the property so that any future non-single-family uses would be required to provide a buffer adjacent to the subject property.

The Future Development Map for the City of Gainesville places the subject property within the *Low-Medium Residential* land use category and within the *Traditional Neighborhoods* Character Area specifically within the *Northern Neighborhoods subarea*. Land uses allowed include low-density and medium-density residential, and mixed-use / commercial.

The Planning Division staff is recommending **approval** of this rezoning request with R-I zoning, based on the Comprehensive Plan and the surrounding residential and non-residential land uses.

Applicant Presentation: Will Crumley, 523 Park Street, stated that down-zoning is an odd thing and not seen very often. However, he and his wife felt it was the best way to protect their property value in a neighborhood that is changing. He stated that several businesses were moving into the area and the rezoning would be best for their interest.

FAVOR: None

OPPOSE: None

Planning and Appeals Board Comments: None

There was a motion to recommend approval of the request to rezone the subject property from Residential-II (R-II) to Residential-I (R-I).

Motion made by Vice-Chair Fleming
Motion seconded by Board Member Martin
Vote – 5 favor, 2 absent (Rucker, Delgado)

ADJOURNMENT

There was a motion to adjourn the meeting at 5:46 p.m.

Motion made by Board Member Martin
Motion seconded by Board Member Thompson
Vote – 5 favor, 2 absent (Rucker, Delgado)

Respectfully submitted,

Doug Carter, Chairman

Judy Foster, Recording Secretary

CITY OF GAINESVILLE

AGENDAREQUEST

Date Submitted: 7/18/2017

Presenter: Matt Tate

Item of Business: Request from **Lidl US Operations, LLC** to rezone a 6.854± acres tract located on the east side of Dawsonville Highway, southeast of Beechwood Boulevard (a/k/a **0 and 1010 Dawsonville Highway**) from Office and Institutional (O-I) and General Business (G-B) to General Business (G-B).
Ward Number: One
Tax Parcel Number(s): 01-115-001-002 and 061
Request: Grocery store

Meeting Date: 8/8/2017

Purpose of Request:
The applicant is proposing to rezone the subject 6.854± acres property for a grocery store. The property contains two lots consisting of 4.594± acres and 2.26± acres. The larger tract is zoned Office and Institutional (O-I) and General Business (G-B) and contains a grassed lot that was previously developed for a nursing home. The smaller tract is already zoned General Business (G-B) and contains a detention pond. The proposed grocery store is 35,962± square feet in size and the store plans to have approximately 25 to 50 employees. The anticipated hours of operation are from 8:00 A.M. to 10:00 P.M. The applicant intends to utilize City water and sewer services and access is proposed from an existing driveway on Dawsonville Highway. The property is located within the Gateway Corridor Overlay Zone and the adjacent uses include the Northlake Square shopping center, Jackson EMC office, various retail strip uses and single-family residential to the rear within the Lakeshore Heights neighborhood.

History/Background:

Facts & Issues for Consideration:

Department Recommendation:
Planning staff is recommending approval with six conditions.

See the Staff Recommendation Report for details.

Department Director:
Rusty Ligon

If funding is involved, are funds approved within the current budget?
N/A

Amount Requested: **Source of Funds**:

Finance Comments:

Administrative Comments:

ATTACHMENTS:

Description	Type
Staff Report	Report
Location Maps	Backup Material
Narrative	Backup Material

Survey	Backup Material
Site Plan	Backup Material
Architectural Renderings	Backup Material
Traffic Impact Study	Backup Material

GAINESVILLE PLANNING and APPEALS BOARD
STAFF RECOMMENDATION

Applicant ..... Lidl US Operations, LLC
Property Owner ..... Northeast Georgia Medical Center
Location ..... 0 and 1010 Dawsonville Highway
Request ..... Rezone from O-I and G-B to G-B
Total Acres ..... $6.854^{\pm}$ acres
Ward ..... One
Proposed Use ..... Grocery store
Planning Division Staff Recommendation ..... **Approval, with conditions**
Date ..... August 8, 2017

▪ ***Applicant's Proposal and Background Information***

The applicant is proposing to rezone the subject 6.854± acres property for a grocery store. The property contains two lots consisting of 4.594± acres and 2.26± acres which are located on the east side of Dawsonville Highway, southeast of Beechwood Boulevard. The larger tract is zoned Office and Institutional (O-I) and General Business (G-B) and contains a grassed lot that was previously developed for a nursing home. The smaller tract located to the rear is zoned General Business (G-B) and contains a detention pond.

The proposed grocery store is 35,962± square feet in size and exterior materials consist of a mixture of brick, EIFS (stucco), metal, PVC soft panel and glass windows. The store plans to have approximately 25 to 50 employees and the anticipated hours of operation are from 8:00 A.M. to 10:00 P.M. The applicant intends to utilize City water and sewer services and full access is proposed from an existing driveway on Dawsonville Highway. In addition, internal access currently exists from the existing driveway to the adjacent Jackson EMC employee parking lot which is gated.

▪ ***Adjacent Land Use and Zoning***

Location	Use	Zoning
North	Northlake Square shopping center	General Business (G-B)
South	Jackson EMC office; Undeveloped property	Light Industrial (L-I) Residential-I (R-I)
East	Lakeshore Heights Subdivision	Residential-I (R-I)
West	Trinity Baptist Church; McEver Corners shopping center; retail, and office	Residential-I (R-I) General Business (G-B)

- ***Other Departmental Comments***

According to the Georgia Department of Transportation (GDOT), any work within the right-of-way will require review and approval from GDOT.

- ***Traffic Impact Study Summary***

A Traffic Impact Study was completed for the proposed development on June 28, 2017 by Wolverton & Associates, Inc. Initial evaluations were made to assess the current conditions within the vicinity of the development. Both A.M. and P.M. peak period turning movement counts were conducted on Thursday, May 25, 2017, at the following two intersections:

- SR 53/Dawsonville Highway and Site Driveway
- SR 53/Dawsonville Highway and SR 53/McEver Road

The traffic growth rate was obtained from the below nearby GDOT traffic counter locations, which provide historical count data in the area:

- SR 53/Dawsonville Highway and Shallowford Road
- SR 53/Dawsonville Highway and Marina Road
- SR 53/McEver Road and SR 53/Dawsonville Highway
- Shallowford Road and Pearl Nix Parkway
- Pearl Nix Parkway and Shallowford Road

Using traffic count data since the year 2010, a 2.0% growth rate was developed using linear regression. The traffic growth rate was applied to the existing year 2017 volumes to estimate the traffic that will exist at the build-out year 2018 of the site if the proposed development is not developed.

According to the study, the following movements and intersections are currently operating inadequately and are expected to continue to operate inadequately for Future Background Year 2018 conditions:

- The eastbound shared left + through movement at SR 53/Dawsonville Highway and the site driveway during both peak hours;
- The westbound movement at SR 53/Dawsonville Highway and the site driveway during both peak hours; and
- The overall intersection of SR 53/Dawsonville Highway and SR 53/McEver Road during the PM peak hour.

The amount of traffic generated by the proposed development was estimated by using trip rates observed at other similar developments. The widely recognized publication from the Institute of Transportation Engineers (ITE), *Trip Generation 9th Edition* (1), contains trip rates summarized by type of development. The ITE data provide trip rates that can be applied to the size of a development to derive trip generation projections. The ITE Code 850 – Supermarket was used for the proposed LIDL.

The proposed grocery store will generate a total of 2,431 new weekday trips, 122 A.M. new peak hour trips and 240 P.M. new peak hour trips generated by the proposed grocery store. Of

these new trips, approximately 55% are expected to originate north of the site on Dawsonville Highway, 27% from the south on Dawsonville Highway and 18% from McEver Road.

As shown on the applicant's site plan, a full access driveway is proposed from the site. A 300-foot long right turn lane will be added northbound on SR 53/Dawsonville Highway at the proposed Site Driveway. In addition, a 150-foot long left turn lane will be added westbound on the proposed Site Driveway. Due to the expected heavy delay for left turning movements from the Site Driveway, users are unlikely to attempt this during the peak hours. With the proposed lane configurations and traffic control, users likely would perform a right turn movement from the Site Driveway and make a U-turn at the next available median opening to the north. However, it may be possible to explore options concerning inter-parcel connectivity with surrounding establishments to assist with the westbound left turn movement. There do not seem to be any further feasible improvements at this intersection that would significantly mitigate this condition.

- ***Zoning History***

The following zoning actions have taken place in the immediate area during the last ten years:

2017 – A request by Oak Hall Companies, LLC to rezone a 157.98± acres tract located at 0, 1264 and 1817 Ahaluna Drive; 1876 Dawsonville Highway; 2208 Karen Lane; 0 and 2029 Strickland Drive; 0 and 1489 West Lake Drive from Residential-I-A (R-I-A), Residential-I (R-I), Planned Unit Development (P-U-D) and Regional Business (R-B) to Planned Unit Development (P-U-D) and General Business (G-B) zoning for a mixed-use, age restricted community was approved with conditions.

2017 – A request by Oak Hall Companies, LLC to annex a 50.81± acres tract with a zoning of Planned Unit Development (P-U-D) and General Business (G-B) located at 0 and 1758 Ahaluna Drive; 1508, 1550, 1740, 1746, 1758, 1760, 1934 and 1982 Dawsonville Highway; 300 and 301 Skyview Drive; 0, 2008 and 2016 Strickland Drive was conditionally approved for a mixed-use, age restricted community.

2017 – A request by Oak Hall Companies, LLC to annex a 26.16 ± acres tract with a zoning of Planned Unit Development (P-U-D) located at 0 and 2209 Karen Lane; 2106, 2234 and 2242 Sportsman Club Road; 2049 Strickland Drive was conditionally approved for an age restricted, active adult community.

2015 – A request by West Ahaluna, LLC to annex an 8.74± acres tract with a zoning of Residential-I-A (R-I-A) located at 0 and 1264 Ahaluna Drive was conditionally approved for no proposed use.

2014 – A request by West Ahaluna, LLC to annex a 70.23± acres tract with a zoning of Planned Unit Development (P-U-D) located at 0 and 1817 Ahaluna Drive; 1982 Dawsonville Highway; 2208 Karen Lane; 2008, 2016 and 2029 Strickland Drive was approved with conditions. In addition, the same applicant requested to rezone a 31.93± acres tract located at 0 Ahaluna Drive NW and 1489 West Lake Drive NW from Residential-I (R-I) to Planned Unit Development (P-U-D) was also approved with conditions for a 199-lot single-family subdivision.

2013 – A request by America's Home Place, Inc. to rezone a 25.11± acres tract located at 0 and 1198 Dawsonville Highway; 1232 Ahaluna Drive and 1162 Lakeshore Circle from Residential-I (R-I), Residential-II (R-II) and Office and Institutional (O-I) to General Business (G-B) zoning for a commercial shopping center was approved with conditions.

2012 – A request by America's Home Place, Inc. to rezone a 4.711± acres tract located at 0, 1122, 1138, 1162 and 1198 Dawsonville Highway from Residential-II (R-II), Office and Institutional (O-I) and General Business (G-B) to General Business (G-B) zoning for retail, restaurant and vehicle service uses was approved with conditions.

2011 – A request by Kauffman Tire Inc. for a special use within Regional Business (R-B) zoning on a 1.19± acres tract located at 801 & 805 Dawsonville Highway was approved with conditions for an automotive tire and service store.

2010 – A request by Bill Dupree to annex a 7.11± acres tract with General Business (G-B) zoning and rezone a 2.44± acres tract from Residential-II (R-II) to General Business (G-B) located at 0, 1293, 1297 and 1139 Dawsonville Highway was approved with conditions for a business center with retail, office and restaurant uses.

- ***Staff Analysis***

(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?

The proposed grocery store is consistent with commercial development located along Dawsonville Highway. The subject property is located adjacent to both residential and commercial uses with zonings of Residential-I (R-I), General Business (G-B) and Light Industrial (L-I). Much of the development within the immediate area has included commercial growth with some limited new housing.

(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?

The Dawsonville Highway corridor will continue to experience increased traffic volumes which are currently strained during the holiday period and certain peak times. The proposed grocery store will add to existing traffic, but in itself should not adversely affect the adjacent or nearby property as the subject property is currently zoned for office and commercial purposes.

The subject property is close to Lake Lanier which will need to be protected through proper erosion control measures and the utilization of existing storm water infrastructure.

(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?

The subject property is located within two land use categories based on the Future Development Map for the City of Gainesville. The front portion of the subject property within the *Public/Institutional/Transportation/Communication/Utilities* land use category which includes areas containing or planned for institutional uses including governmental, educational, and medical facilities, houses of worship, and similar institutional facilities; or major transportation, utilities or communication facilities. This was due to the fact that the property was previously a nursing home. The rear portion of the property is located within the *Retail/Commercial* land use category which includes commercial service activities such as grocery stores, banks, restaurants, theatres, hotels, and automotive related businesses. Commercial uses may be located as a single use in one building or grouped together in a shopping center.

The subject property is also located within the *Suburban Commercial* Character Area. This area will continue to grow as a regional retail center for the City and Hall County, but should diversify over time to include multi-family housing and a higher-density mix of retail, office, services and high-quality employment. In addition, expanding premium retail could offer a variety of shopping options that are currently not available elsewhere in the City. As it grows, the area will become one of the most prominent commercial corridors and gateways into the City, and a thriving economic anchor for the northwest side. When development occurs, adequate buffers should be maintained around development to protect watersheds and sensitive environments. Land uses allowed within the *Suburban Commercial* area include commercial, public / institutional, multi-family residential and mixed use.

(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?

The subject property is zoned Office and Institutional (O-I) and General Business (G-B). The Office and Institutional (O-I) portion of property is larger and could be developed for office, medical and institutional purposes. The General Business (G-B) portion could be developed as a commercial outparcel fronting along Dawsonville Highway (S.R.53). As well, the General Business (G-B) rear portion of property contains an existing detention pond that was originally constructed for commercial purposes. Given the adjacent uses and commercial zoning, it appears the proposed rezoning request is reasonable.

(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?

The subject property and surrounding development currently utilizes City water and sewer services and there is sufficient capacity to serve the development.

Existing public safety services respond to the adjacent and nearby properties. Gainesville Fire Station #1 is located approximately 2.4 miles from the property. According to the Gainesville Police Department, increased traffic accidents from the additional cars on the Dawsonville Highway corridor are a primary concern.

No impacts to the school system are expected as the development is for non-residential purposes.

Additional traffic generated by the proposal or any new development will add to the existing peak hour delays experienced along Dawsonville Highway and nearby intersections. The applicant's traffic study proposes a full access driveway to include that a 300-foot long right turn lane be added northbound on Dawsonville Highway at the proposed site driveway, and a 150-foot long left turn lane be added westbound on the proposed site driveway. GDOT controls the existing driveway and intersection, and will review the applicant's access plan to determine what will be permissible given planned improvements to the corridor. Staff believes that inter-parcel access is necessary to help disperse traffic and to gain connection to the closest signalized intersections located at Academy Sports and Home Depot. In fact, the applicants own traffic study acknowledges that inter-parcel access would be beneficial.

(6) 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?

The anticipated use for the subject property is for non-residential purposes which is consistent with the Comprehensive Plan and the proposed grocery store.

The property is located between Dawsonville Highway and Lake Lanier, and is within one of Gainesville's most active regional commercial corridors. This area has experienced tremendous growth over the past 15 to 20 years, some of which include the Northlake Square shopping center, Carrington Park retail center, Village Shoppes of Gainesville, Home Depot, Best Buy, McEver Corners shopping center, Texas Roadhouse, Olive Garden, Cheddar's, Buffalo Wild Wings, child day care facility and a 94-room Holiday Inn Express currently under construction. In addition, a proposed 235± acres mixed-use development located to the north between Ahaluna Drive and to Sportsman Club Road was recently approved for a total of 860 age-restricted residential units, 56,000 square feet of commercial space and 24,000 square feet of retail/office/restaurant space. This development is anticipated to be built over the next 6 to 7 years.

(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?

Due to the subject property's proximity to existing residential and commercial land uses, the proposed grocery store, with the recommended zoning conditions appears to promote a reasonable balance between the interests of the City, the property owner, and neighboring residents and property owners.

- ***Staff Recommendation***

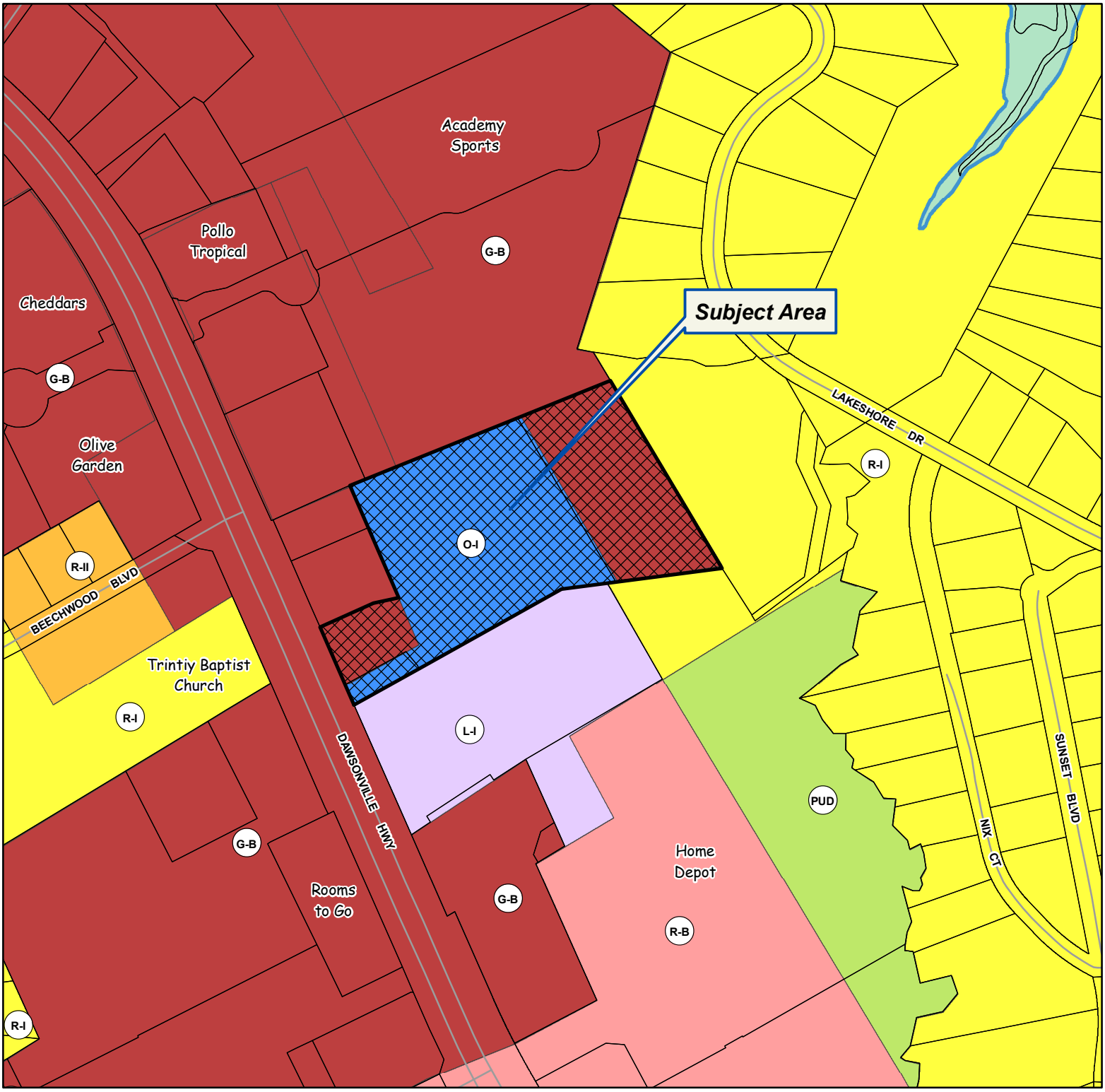
The Planning Division staff is recommending **conditional approval** of this rezoning request with **G-B zoning**, based on the Comprehensive Plan and the adjacent residential and non-residential land uses.

Conditions

1. **The proposed grocery store building shall be generally consistent with the standards depicted on the architectural elevation provided with this rezoning application including exterior materials, roof and wall signs.**
2. **Prohibited commercial uses shall include motels or hotels with rooms accessed from the exterior of the building, adult novelty stores, adult entertainment centers, pawn shops, gas stations, tire stores, massage parlors except for practitioners licensed by the State of Georgia, vaping stores, auto body shops, automobile sale establishments, marine sales or repair stores, automated or non-automated car wash, coin-laundry facilities, truck stop, non-climate controlled mini-warehouses or storage facilities, tattoo parlors, psychics, fortune tellers, clairvoyants and the like.**
3. **The existing vegetated buffer areas adjacent to the Lakeshore Heights Subdivision shall remain undisturbed. Additional evergreen buffer trees shall be planted between the proposed building/parking lot/service areas and the existing detention pond at the top of the slope where needed. The intent of the buffer is to supplement the existing vegetation with buffer trees to provide for an effective**

buffer. The location, spacing, size and type of trees planted shall be subject to Community Development Department Director approval.

4. **Prior to a permit being issued, the developer/property owner shall exhaust all measures to provide for inter-parcel vehicular access with the adjacent properties located to the north and south. Documentation shall be provided to the City of Gainesville in this regard.**
5. **All access point design for the subject property shall require approval by the Georgia Department of Transportation in conjunction with the Gainesville Public Works Director. All required access/traffic/sidewalk improvements associated with the proposed development shall be at the full expense of the developer/property owner.**
6. **An updated as-built boundary survey/plat of the subject property, indicating all improvements required for the proposed use, shall be recorded prior to obtaining a Certificate of Occupancy.**



Applicant:

LIDL US OPERATIONS, LLC

REZONING REQUEST

Request:
Rezone 6.854+/- acre tract from Office and Institutional (O-I) and General Business (G-B) to General Business (G-B) for a grocery store

Subject Area Address:
0 and 1010 Dawsonville Highway

Meeting: 8/8/2017

Prepared: 7/20/2017

Gainesville Community Development Department

Subject Area

N

0 180 360 540 720 Feet

1 " = 300 '

Tax Parcel: 01-115-001-002, 061

Applicant:

LIDL US OPERATIONS, LLC

REZONING REQUEST

Request:
Rezone 6.854+/- acres tract from Office and Institutional (O-I) and General Business (G-B) to General Business (G-B) for a grocery store

Subject Area Address:
0 and 1010 Dawsonville Highway

Meeting: 8/8/2017

Prepared: 7/20/2017

Gainesville Community Development Department

Subject Area

Aerial from 2015

N

0 180 360 540 720 Feet

1 " = 300 '

Tax Parcel: 01-115-001-002, 061

Gainesville Lidl – Project Narrative

The subject property was developed as a medical facility many years ago. The structures on the property have been demolished, and the property is currently vacant.

The property consists of 6.854 acres and is composed of two tax parcels, Tax Parcel 1115001002 being 4.594 acres, a portion of which is currently zoned O-I and a portion of which is currently zoned G-B, and Tax Parcel 1115001061 being 2.260 acres currently zoned G-B. The applicant requests the O-I zoned portion of Tax Parcel 1115001002 be rezoned to G-B which is compatible with its intended use as a Lidl Grocery Store. However, the rezoning request includes the entire 6.854 acres to consolidate the zoning classification of the entirety as G-B. The building is 35,926 square feet with 172 parking spaces and 2 loading spaces. Administrative variances will be needed to increase the allowable parking by 20% and to decrease the required number of loading spaces from 4 to 2. Public gravity sewer and water services are available at the site to serve the project. Stormwater detention and water quality treatment have already been provided within two existing detention ponds in the North Lake Square development to the north and east of the subject property.

The project driveway is an existing public stub street that intersects with Dawsonville Highway. It currently serves as the access point for Jackson EMC located to the south of the subject property. This driveway is full access non-signalized with an existing southbound left turn lane and a small north bound right turn lane. Preliminary discussions with Georgia Department of Transportation ("GDOT") have indicated that GDOT wants the existing right turn lane to be increased southwards to the next existing driveway.

The loading dock is located on the northeast end of the building. This dock area is recessed up to 4 feet below the finished grades. This site sits on top of a 40-foot high slope. The residential property behind the site is approximately 250 feet away. Evergreen vegetation will screen the truck well. If needed, a fence or screen wall may be used to further screen trucks.

Interparcel connectivity will exist with the Jackson EMC site to the south of the proposed Lidl site. However, Jackson EMC has its rear parking lot area gated and closed to the general public. Connectivity to the small outparcels in front of the site along Dawsonville Highway is not practical due to their site layout and the finished grade differences. Those parcels are approximately 10 feet higher that the proposed Lidl finished grades. Interparcel connectivity with the property to the north and west is also not practical due to the existing detention pond, large slopes, and retaining walls.

Lidl anticipates store hours will be from approximately 8:00 a.m. to 10:00 p.m. Lidl plans to employ approximately 25 to 50 employees for operation of the store.

A narrative about Lidl grocery stores from its website follows.

about us

High quality. Low prices. Hassle-free shopping that gets you in and out. A product assortment and store layout that's refreshingly simple, yet full of surprises to discover at every visit. Lidl is not your cookie-cutter grocery store. We're revolutionizing grocery shopping. We have a less complicated process that allows us to simply deliver low prices, high quality, and the best shopping experience for our customers. Here's how we do it:

- We're expert product curators. Instead of offering a myriad of brands in every category, our stores offer carefully curated selections that are top-quality and best-prices. So your precious time is not spent sifting through endless versions of products you don't want.
- You're busy. We get it. That's why we're masters of store efficiency. All our stores have the same intuitive layout, making it easier for you to find what you need quickly.
- We've partnered with local and regional farms and suppliers that meet our strict requirements. Every Lidl private label product you'll find in our stores is a result of a meticulous selection process, including quality testing. We're also continuing the Lidl tradition of offering new favorites from all over the world, keeping you looking forward to what you'll find next.
- You'll notice while shopping at Lidl that most of our assortment is our own private label - around 90% of our products, in fact. This means we've especially developed these products to match our high standards and allows us direct oversight of product integrity. Each product undergoes a rigorous testing regimen, which includes taste, quality and sensory testing.
- We're more than just food. We aim to surprise and delight our customers with a diversified product assortment that changes twice a week. You'll find anything from essentials for the home, such as small appliances or kitchen gadgets, to stylish gear for the whole family, to toys and power tools, to home décor and gardening supplies, and much more.
- We keep overhead to a minimum and eliminate any unnecessary costs. Take our "bring your own bag" policy. Not only does it mean we don't build the cost of bags into our prices, this policy also saves you time at the register and is a greener solution. Additionally, we display our products in custom boxes instead of replenishing and stocking item by item. Our associates simply replace the boxes as needed, saving hours every week on stocking shelves. These simple steps allow us to pass our savings on to you.

ours is a story eight decades in the making

Lidl is proud of our humble beginnings. In 1973, the first modern Lidl store opened in Ludwigshafen (25 miles south of Frankfurt). Employing 3 people and offering about 500 products, this small store was to become the foundation of Lidl's far-reaching expansion. During the 1990s we started branching outside of Germany and within a few years, we expanded all across Europe. Today, we operate over 10,000 stores in 27 countries. We have a history of cultivating relationships with local suppliers in each region to offer our customers high quality products at low prices. We've recently expanded to the United States and are striving to be a time-saving, life-enhancing grocery store where you love to shop. Here's a look at some of our milestones over the years:

1970s

Our first Lidl store opens in Germany 1973, employing three people and stocking around 500 product lines. By 1979 we open 6 more, taking our total to 30 stores.

1980s

We open 300 stores across Germany. On average each store employing seven people and stocking around 900 product lines.

1990s

We begin opening stores outside Germany, starting in France, and in 1994 we open our first UK store.

2000s

We firmly establish ourselves as a leading retailer in the UK.

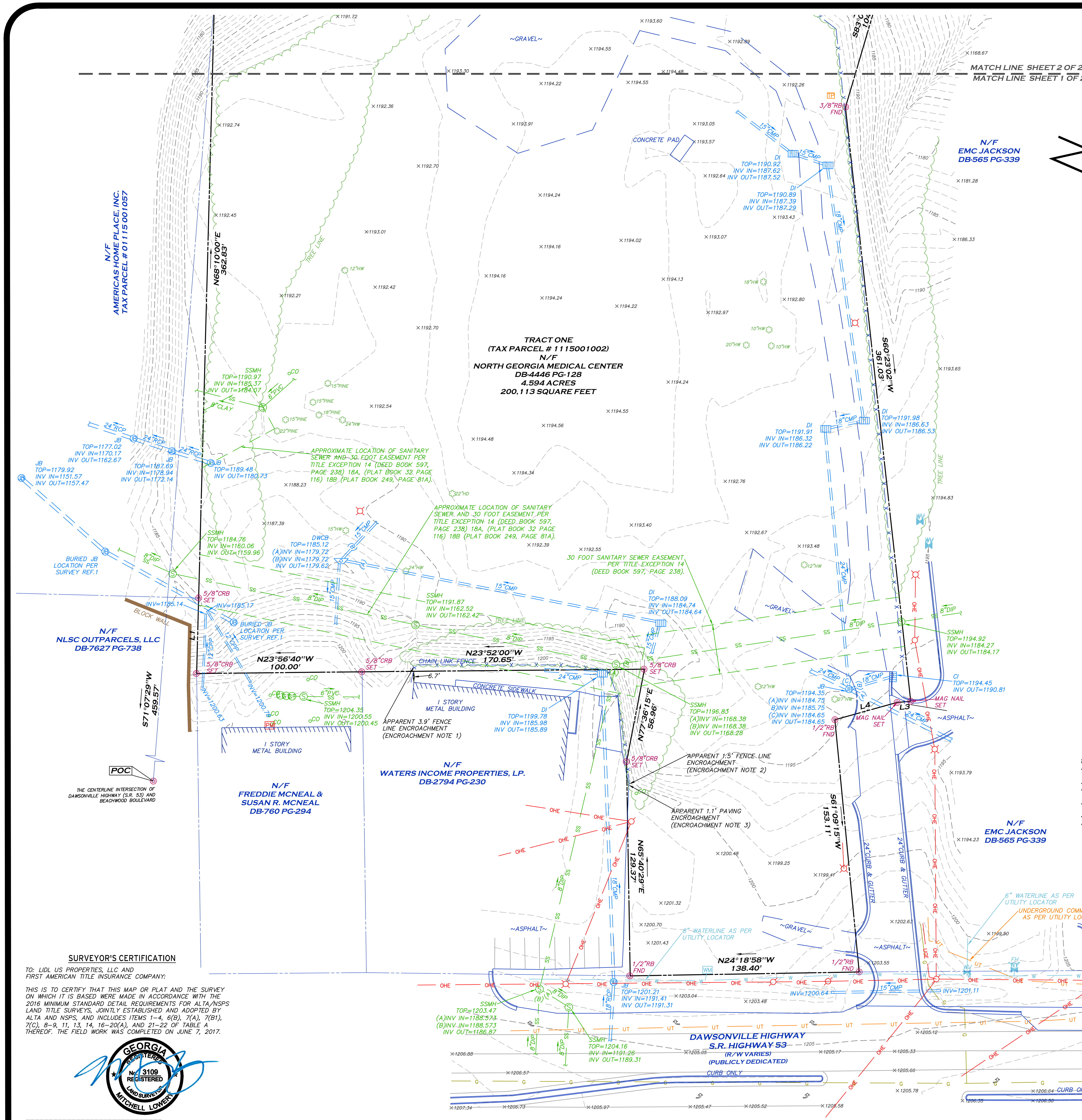
2017

Lidl opens in the U.S.

principles and values

As an international company, we are aware of our size and public visibility. We respect the variety of cultures and recognize the diversity of their values and traditions. Our work is characterized by the following company principles:

- Customer satisfaction is our highest priority.
- Superior quality for the lowest price possible determines our position in the market.
- Our continued growth is determined by expansion and constant improvement in our stores.
- As an efficient company, we work according to defined processes and procedures.
- Our success is ensured by short decision paths and simple work processes.
- We grow through development and continuous improvement in our stores – we believe success is never final.
- In our daily activities we make sure to abide by the law and internal policies.
- We are an economically, socially and environmentally responsible company.
- Fairness to all in the company is imperative.
- We respect and encourage each other.
- Agreements are upheld in an atmosphere of trust.
- Recognition, acknowledgment and constructive feedback determine the operating environment in our daily work.
- We foster an environment for leadership growth to ensure continuous success.


MATCH LINE SHEET 2 OF 2
MATCH LINE SHEET 1 OF 2
TRACT ONE
(TAX PARCEL # 1115001002)
N/F
NORTH GEORGIA MEDICAL CENTER
DB-4446 PG-128
4.594 ACRES
200,113 SQUARE FEET
N/F
AMERICAS HOME PLACE, INC.
TAX PARCEL # 01115 001057
N/F
EMC JACKSON
DB-565 PG-339
N/F
NLSC OUTPARCELS, LLC
DB-7627 PG-738
N/F
FREDDIE MCNEAL &
SUSAN R. MCNEAL
DB-760 PG-294
N/F
WATERS INCOME PROPERTIES, LP.
DB-2794 PG-230
N/F
EMC JACKSON
DB-565 PG-339
DAWSONVILLE HIGHWAY
S.R. HIGHWAY 53
(R/W VARIES)
(PUBLICLY DEDICATED)
N68°10'00"E
362.83'
S60°23'02"W
361.03'
N23°56'40"W
100.00'
N23°52'00"W
170.65'
N77°36'15"E
56.96'
N65°40'29"E
129.37'
S61°09'15"W
153.11'
N24°18'58"W
138.40'
S71°07'29"W
459.57'
POC
THE CENTERLINE INTERSECTION OF DAWSONVILLE HIGHWAY (S.R. 53) AND BEACHWOOD BOULEVARD
APPROXIMATE LOCATION OF SANITARY SEWER AND 30 FOOT EASEMENT PER TITLE EXCEPTION 14 (DEED BOOK 597, PAGE 238) 18A, (PLAT BOOK 32 PAGE 116) 18B (PLAT BOOK 249, PAGE 81A).
30 FOOT SANITARY SEWER EASEMENT PER TITLE EXCEPTION 14 (DEED BOOK 597, PAGE 238).
APPARENT 3.9' FENCE LINE ENCROACHMENT (ENCROACHMENT NOTE 1)
APPARENT 1.5' FENCE LINE ENCROACHMENT (ENCROACHMENT NOTE 2)
APPARENT 1.1' PAVING ENCROACHMENT (ENCROACHMENT NOTE 3)
1 STORY METAL BUILDING
1 STORY METAL BUILDING
CONCRETE SIDEWALK
CONCRETE PAD
BLOCK WALL
(SURVEY NOTE 6) GA. WEST GRID NORTH
GRAPHIC SCALE
1 Inch = 30 Feet

VICINITY MAP

SURVEY NOTES

1) PROPERTY SHOWN HEREON WAS SURVEYED JUNE 8, 2017.

2) THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS A CLOSURE OF 1' IN 53,695' WITH AN ANGULAR ERROR OF 03 SECONDS PER ANGLE POINT AND WAS ADJUSTED USING THE LEAST SQUARES METHOD.

3) AO TPCON GTP–3005 LW TOTAL STATION, SR GPS RECEIVER, AND CARLSON SURVEYOR+ DATA COLLECTOR WERE USED FOR FIELD SURVEY MEASUREMENTS.

4) THIS PLAT HAS A MAP CLOSURE OF 1' IN 1,564,910'.

5) SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X ON FLOOD INSURANCE RATE MAP NO. 13139C0186F, WITH A DATE OF IDENTIFICATION OF SEPTEMBER 29, 2006 FOR COMMUNITY NUMBER 130263, IN CITY OF GAINESVILLE, STATE OF GEORGIA, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.

6) CONTROL AND BEARING BASIS FOR THIS SURVEY WERE ESTABLISHED USING A TOPCON HIPER SR GPS RECEIVER UTILIZING NETWORK RTK CORRECTIONS PROVIDED BY THE REAL TIME NETWORK OPERATED BY EARL DUDLEY. THE RELATIVE POSITIONAL ACCURACY, AS CALCULATED ACCORDING TO THE FEDERAL GEOGRAPHIC DATA COMMITTEE PART 3: NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, IS .05 FEET HORIZONTAL AND .07 FEET VERTICAL AT THE 95% CONFIDENCE LEVEL.

7) UTILITIES SHOWN PER MARKINGS PLACED BY UTILITY–MARKING, L.L.C.. UTILITIES OTHER THAN THOSE SHOWN HEREON MAY EXIST. LOWERY & ASSOCIATES MAKES NO GUARANTEE AS TO THE EXISTENCE OR NON–EXISTENCE OF SAID UTILITIES.

8) NO OBSERVED EVIDENCE OF CEMETERIES, GRAVESITES, AND/OR BURIAL GROUNDS AT TIME OF SURVEY.

9) PROPERTY SHOWN HEREON LIES WITHIN THE RECORD DESCRIPTION AS STATED IN GENERAL WARRANTY DEED RECORDED IN DEED BOOK 4446, PAGE 128 AND DEED BOOK 7685, PAGE 367, HALL COUNTY RECORDS.

10) THIS DESCRIBES THE SAME PROPERTY AS DESCRIBED IN FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO:P001188/HB303.015, DATED APRIL 15, 2017.

11) NO ENCROACHMENTS OTHER THAN THOSE SHOWN HEREON WERE OBSERVABLE AT TIME OF SURVEY.

12) AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

13) AT THE TIME OF THE SURVEY THERE WERE NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES OR OBSERVABLE EVIDENCE OF STREET OR SIDEWALK REPAIRS.

14) AT THE TIME OF THE SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF THE SITE BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.

LEGEND

	PROPERTY LINE
	OVERHANG/AWNING
(BEARING/DISTANCE)	RECORD CALLS
	BUILDING SETBACK LINE
B.S.L.	BUILDING SETBACK LINE
	INDEX CONTOUR
	MINOR CONTOUR
×	SPOT ELEVATION
W	WATER LINE
OHE	OVERHEAD UTILITY LINE
G	GAS LINE
SS	SANITARY SEWER LINE
UGE	UNDERGROUND ELECTRIC LINE
X	FENCE LINE
	STORM DRAIN PIPE
WV	WATER VALVE
WM	WATER METER
FH	FIRE HYDRANT
GM	GAS METER
	GAS VALVE
PM	POWER METER
S	SANITARY SEWER MANHOLE
DI	DROP INLET
SWCB	SINGLE–WING CATCH BASIN
DWCB	DOUBLE–WING CATCH BASIN
	JUNCTION BOX
RB	REBAR
CRB	CAPPED REBAR
CRWM	CONCRETE R/W MONUMENT
OTP	OPEN TOP PIPE
FND	FOUND
M	MONITORING WELL
	LIGHT POLE
	SIGNAL POLE
	SIGN
	TREE

SURVEY REFERENCES

1) UTILITY ASBUILT SURVEY FOR: NORTH LAKE SQUARE
PREPARED BY: PATTON LAND SURVEY, LLC.
DATED: 09/11/2015

ENCROACHMENTS

1) CHAIN LINK FENCE LINE ENCROACHMENT 3.9' ACROSS THE PROPERTY LINE.

2) CHAIN LINK FENCE LINE ENCROACHMENT 1.5' ACROSS THE PROPERTY LINE.

3) PAVEMENT ENCROACHES 3.9' ACROSS THE PROPERTY LINE.

4) CHAIN LINK FENCE LINE ENCROACHMENT 9.2' ACROSS THE PROPERTY LINE.

ZONING

PER ITEMS 6(A) AND 6(B) OF THE 2016 ALTA/NSPS LAND TITLE SURVEY MINIMUM STANDARD DETAIL REQUIREMENTS, SETBACKS AND OTHER ZONING RESTRICTIONS/REQUIREMENTS CANNOT BE LISTED UNLESS A ZONING REPORT OR LETTER STATING SAID RESTRICTIONS/REQUIREMENTS IS PROVIDED.

LINE TABLE

LINE	BEARING	DISTANCE
L1	N68°10'01"E	45.62'
L2	S83°17'48"W	21.78'
L3	N28°01'03"W	8.26'
L4	N38°54'34"W	39.01'

SURVEYOR'S CERTIFICATION

TO: LIDL US PROPERTIES, LLC AND
FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1–4, 6(B), 7(A), 7(B1), 7(C), 8–9, 11, 13, 14, 16–20(A), AND 21–22 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JUNE 7, 2017.

GEORGIA REGISTERED No. 3109 REGISTERED LAND SURVEYOR MITCHELL LOWERY

MITCHELL LOWERY GEORGIA RLS# 3109
DATE OF PLAT OR MAP: JUNE 9, 2017

LOWERY & ASSOCIATES
LAND SURVEYING, LLC
317 GRASSDALE ROAD
CARTERSVILLE, GA 30121
770-334-8186
WWW.LOWERYLANDSURVEYS.COM
INFO@LOWERYLANDSURVEYS.COM
GEORGIA C.O.A.: LSF-001102

PREPARED FOR:
LIDL US PROPERTIES, LLC &
FIRST AMERICAN TITLE INSURANCE COMPANY

ALTA/NSPS LAND TITLE SURVEY OF:
TAX PARCEL # 1115001002
&
TAX PARCEL # 1115001061

STATE: GEORGIA
COUNTY: HALL
LAND LOT: 163
DISTRICT: 9TH
CITY OF GAINESVILLE

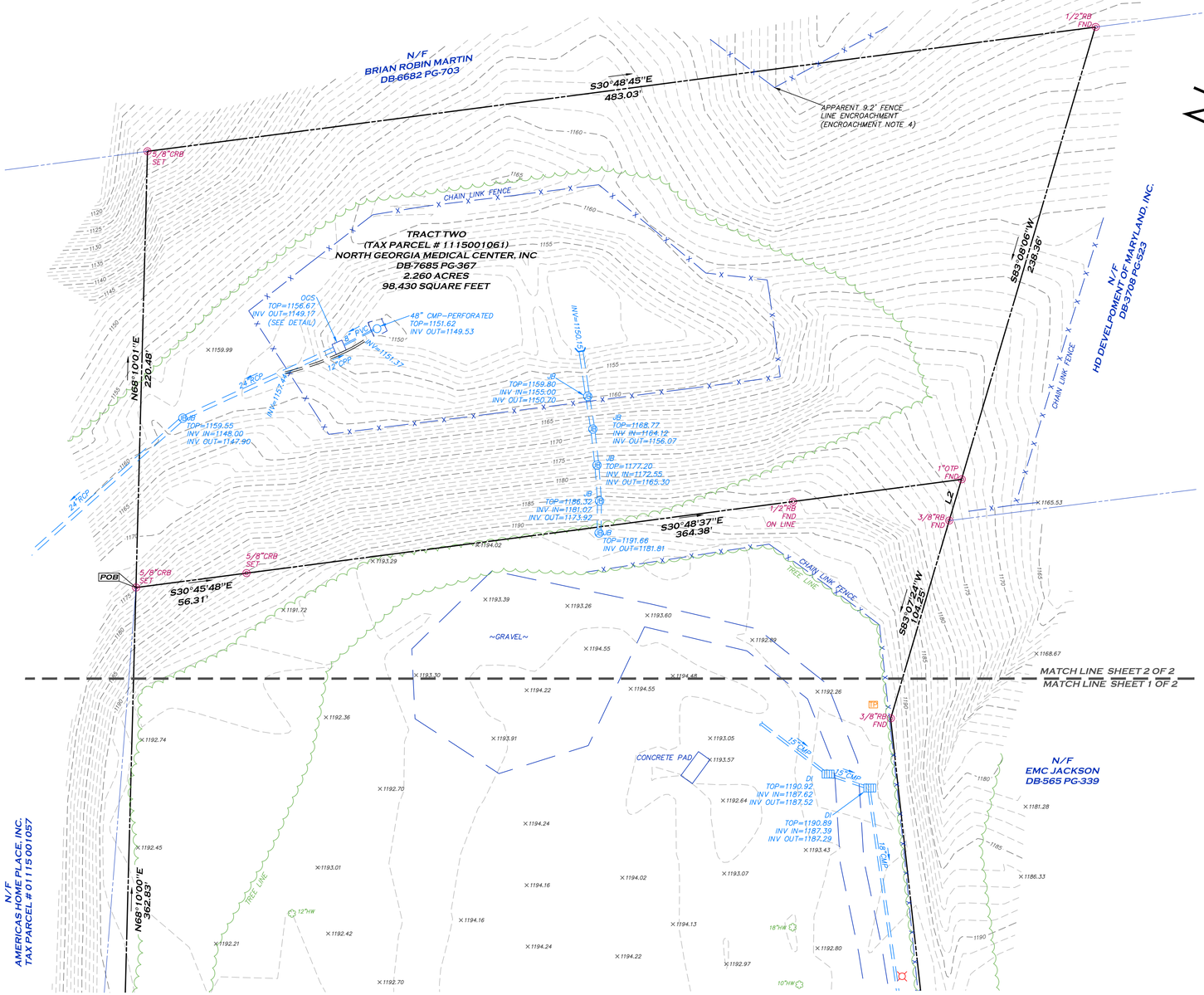
REVISIONS

DATE:	DESCRIPTION

Lowery & Associates
LAND SURVEYING, LLC

DATE: JUNE 9, 2017
JOB #: 171904
SCALE: 1"=30'
DRAWN BY: J.THREADGILL

SHEET 1 OF 2



GRAPHIC SCALE

30' 0 30' 60'

1 Inch = 30 Feet

(SURVEY NOTE 6) GA. WEST GRID NORTH

VICINITY MAP

LEGAL DESCRIPTIONS

TRACT 1

COMMENCING AT A CENTERLINE INTERSECTION OF DAWSONVILLE HIGHWAY (STATE ROUTE 53) (BEING A PUBLICLY DEDICATED VARIABLE WIDTH RIGHT OF WAY) AND BEACHWOOD BOULEVARD (BEING A PUBLICLY DEDICATED VARIABLE WIDTH RIGHT OF WAY)THENCE LEAVING SAID INTERSECTION NORTH 71 DEGREES 07 MINUTES 29 SECONDS EAST A DISTANCE OF 459.57 FEET TO A 5/8 INCH CAPPED REBAR SET; SAID REBAR BEING THE TRUE POINT OF BEGINNING,

THENCE SOUTH 30 DEGREES 45 MINUTES 48 SECONDS EAST A DISTANCE OF 56.31 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE SOUTH 30 DEGREES 48 MINUTES 37 SECONDS EAST A DISTANCE OF 364.38 FEET TO A 1 INCH OPEN TOP PIPE FOUND; THENCE SOUTH 83 DEGREES 17 MINUTES 48 SECONDS WEST A DISTANCE OF 21.78 FEET TO A 3/8 INCH REBAR FOUND; THENCE SOUTH 83 DEGREES 07 MINUTES 24 SECONDS WEST A DISTANCE OF 104.25 FEET TO A 3/8 INCH REBAR FOUND; THENCE SOUTH 60 DEGREES 23 MINUTES 02 SECONDS WEST A DISTANCE OF 361.03 FEET TO A MAG NAIL SET; THENCE NORTH 28 DEGREES 01 MINUTES 03 SECONDS WEST A DISTANCE OF 8.26 FEET TO A MAG NAIL SET; THENCE NORTH 38 DEGREES 54 MINUTES 34 SECONDS WEST A DISTANCE OF 39.01 FEET TO A 1/2 INCH REBAR FOUND; THENCE SOUTH 61 DEGREES 09 MINUTES 15 SECONDS WEST A DISTANCE OF 153.11 FEET TO A 1/2 INCH REBAR FOUND ON THE RIGHT OF WAT OF SAID STATE ROUTE 53; THENCE ALONG SAID RIGHT OF WAY NORTH 24 DEGREES 18 MINUTES 58 SECONDS WEST A DISTANCE OF 138.40 FEET TO A 1/2 INCH REBAR FOUND; THENCE LEAVING SAID RIGHT OF WAY NORTH 65 DEGREES 40 MINUTES 29 SECONDS EAST A DISTANCE OF 129.37 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 77 DEGREES 36 MINUTES 15 SECONDS EAST A DISTANCE OF 56.96 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 23 DEGREES 52 MINUTES 00 SECONDS WEST A DISTANCE OF 170.65 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 23 DEGREES 56 MINUTES 40 SECONDS WEST A DISTANCE OF 100.00 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 68 DEGREES 10 MINUTES 01 SECONDS EAST A DISTANCE OF 45.62 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 68 DEGREES 10 MINUTES 00 SECONDS EAST A DISTANCE OF 362.83 FEET TO A 5/8 INCH CAPPED REBAR SET; SAID REBAR BEING THE TRUE POINT OF BEGINNING.

SAID TRACT OF LAND CONTAINS 4.594 ACRES (200,113 SQUARE FEET).

TRACT 2

COMMENCING AT A CENTERLINE INTERSECTION OF DAWSONVILLE HIGHWAY (STATE ROUTE 53) (BEING A PUBLICLY DEDICATED VARIABLE WIDTH RIGHT OF WAY) AND BEACHWOOD BOULEVARD (BEING A PUBLICLY DEDICATED VARIABLE WIDTH RIGHT OF WAY)THENCE LEAVING SAID INTERSECTION NORTH 71 DEGREES 07 MINUTES 29 SECONDS EAST A DISTANCE OF 459.57 FEET TO A 5/8 INCH CAPPED REBAR SET; SAID REBAR BEING THE TRUE POINT OF BEGINNING;

THENCE NORTH 68 DEGREES 10 MINUTES 01 SECONDS EAST A DISTANCE OF 220.48 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE SOUTH 30 DEGREES 48 MINUTES 45 SECONDS EAST A DISTANCE OF 483.03 FEET TO A 1/2 INCH REBAR FOUND; THENCE SOUTH 83 DEGREES 08 MINUTES 06 SECONDS WEST A DISTANCE OF 238.36 FEET TO A 1 INCH OPEN TOP PIPE FOUND; THENCE NORTH 30 DEGREES 48 MINUTES 37 SECONDS WEST A DISTANCE OF 364.38 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 30 DEGREES 45 MINUTES 44 SECONDS WEST A DISTANCE OF 56.31 FEET TO A 5/8 INCH CAPPED REBAR SET; SAID REBAR BEING THE TRUE POINT OF BEGINNING.

SAID TRACT OF LAND CONTAINS 2.260 ACRES (98,430 SQUARE FEET).

OVERALL LEGAL

COMMENCING AT A CENTERLINE INTERSECTION OF DAWSONVILLE HIGHWAY (STATE ROUTE 53) (BEING A PUBLICLY DEDICATED VARIABLE WIDTH RIGHT OF WAY) AND BEACHWOOD BOULEVARD (BEING A PUBLICLY DEDICATED VARIABLE WIDTH RIGHT OF WAY)THENCE LEAVING SAID INTERSECTION NORTH 71 DEGREES 07 MINUTES 29 SECONDS EAST A DISTANCE OF 459.57 FEET TO A 5/8 INCH CAPPED REBAR SET; SAID REBAR BEING THE TRUE POINT OF BEGINNING;

THENCE NORTH 68 DEGREES 10 MINUTES 01 SECONDS EAST A DISTANCE OF 220.48 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE SOUTH 30 DEGREES 48 MINUTES 45 SECONDS EAST A DISTANCE OF 483.03 FEET TO A 1/2 INCH REBAR FOUND; THENCE SOUTH 83 DEGREES 08 MINUTES 06 SECONDS WEST A DISTANCE OF 238.36 FEET TO A 1 INCH OPEN TOP PIPE FOUND; THENCE SOUTH 83 DEGREES 17 MINUTES 48 SECONDS WEST A DISTANCE OF 21.78 FEET TO A 3/8 INCH REBAR FOUND; THENCE SOUTH 83 DEGREES 07 MINUTES 24 SECONDS WEST A DISTANCE OF 104.25 FEET TO A 3/8 INCH REBAR FOUND; THENCE SOUTH 60 DEGREES 23 MINUTES 02 SECONDS WEST A DISTANCE OF 361.03 FEET TO A MAG NAIL SET; THENCE NORTH 28 DEGREES 01 MINUTES 03 SECONDS WEST A DISTANCE OF 8.26 FEET TO A MAG NAIL SET; THENCE NORTH 38 DEGREES 54 MINUTES 34 SECONDS WEST A DISTANCE OF 39.01 FEET TO A 1/2 INCH REBAR FOUND; THENCE SOUTH 61 DEGREES 09 MINUTES 15 SECONDS WEST A DISTANCE OF 153.11 FEET TO A 1/2 INCH REBAR FOUND ON THE RIGHT OF WAT OF SAID STATE ROUTE 53; THENCE ALONG SAID RIGHT OF WAY NORTH 24 DEGREES 18 MINUTES 58 SECONDS WEST A DISTANCE OF 138.40 FEET TO A 1/2 INCH REBAR FOUND; THENCE LEAVING SAID RIGHT OF WAY NORTH 65 DEGREES 40 MINUTES 29 SECONDS EAST A DISTANCE OF 129.37 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 77 DEGREES 36 MINUTES 15 SECONDS EAST A DISTANCE OF 56.96 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 23 DEGREES 52 MINUTES 00 SECONDS WEST A DISTANCE OF 170.65 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 23 DEGREES 56 MINUTES 40 SECONDS WEST A DISTANCE OF 100.00 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 68 DEGREES 10 MINUTES 01 SECONDS EAST A DISTANCE OF 45.62 FEET TO A 5/8 INCH CAPPED REBAR SET; THENCE NORTH 68 DEGREES 10 MINUTES 00 SECONDS EAST A DISTANCE OF 362.83 FEET TO A 5/8 INCH CAPPED REBAR SET; SAID REBAR BEING THE TRUE POINT OF BEGINNING.

SAID TRACT OF LAND CONTAINS6.854 ACRES (298,543 SQUARE FEET).

TITLE REVIEW

FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NUMBER: P001188 / HBJ03.015 DATE EFFECTIVE: APRIL 15, 2017

12 – EASEMENT FROM GEORGE MARTIN, SR. AND MRS. GEORGE LILLIE MARTIN TO THE CITY OF GAINESVILLE, GEORGIA, DATED SEPTEMBER 21, 1964, FILED SEPTEMBER 25, 1964 AND RECORDED IN DEED BOOK 291, PAGE 257, RECORDS OF THE SUPERIOR COURT OF HALL COUNTY, GEORGIA.

SUBJECT DOCUMENT IS ILLEGIBLE, UNABLE TO DETERMINE RELATIONSHIP TO PROPERTY.

13 – EASEMENT FROM EDWARD O. REED TO THE CITY OF GAINESVILLE, GEORGIA, DATED APRIL 14, 1965, FILED APRIL 15, 1965 AND RECORDED IN DEED BOOK 303, PAGE 223, AFORESAID RECORDS.

SUBJECT DOCUMENT REFERS TO A RECORDED PLAT THAT IS NOT PROVIDED. SURVEYOR IS UNABLE TO DETERMINE RELATIONSHIP TO SUBJECT PROPERTY.

14 – EASEMENTS CONTAINED IN THAT CERTAIN WARRANTY DEED FROM MEDICAL INVESTMENTS CORPORATION TO GAINESVILLE HEALTH CARE CENTER, LTD., A GEORGIA LIMITED PARTNERSHIP, DATED MARCH 29, 1976, FILED APRIL 22, 1976 AND RECORDED IN DEED BOOK 597, PAGE 238, AFORESAID RECORDS.

SUBJECT DOCUMENT DESCRIBES TWO SANITARY SEWER EASEMENTS THAT AFFECT THE SUBJECT PROPERTY AS SHOWN.

15 – RIGHT-OF-WAY DEED FROM COLUMBUS MEDICAL NURSING HOME, INC. TO THE GEORGIA DEPARTMENT OF TRANSPORTATION, DATED FEBRUARY 9, 1991, FILED APRIL 9, 1993 AND RECORDED IN DEED BOOK 1934, PAGE 325, AFORESAID RECORDS.

SUBJECT DOCUMENT DESCRIBES THE ACQUISITION OF RIGHT OF WAY FOR DAWSONVILLE HIGHWAY. DOES NOT AFFECT THE SUBJECT PROPERTY.

16 – MUTUAL AND RECIPROCAL EASEMENT AGREEMENT FOR STORM WATER DETENTION FACILITY AND STORM WATER DRAINAGE PIPELINE BY AND BETWEEN NORTHEAST GEORGIA MEDICAL CENTER, INC. AND AMERICA'S HOME PLACE, INC., DATED MARCH 31, 2014, FILED APRIL 21, 2014 AND RECORDED IN DEED BOOK 7354, PAGE 402, AFORESAID RECORDS.

SUBJECT DOCUMENT DESCRIBES MUTUAL AND RECIPROCAL EASEMENTS FOR STORM WATER DETENTION AND STORM SEWER PIPING. EXHIBIT A AND EXHIBIT B FOR SUBJECT DOCUMENT IS ILLEGIBLE. SURVEYOR IS UNABLE TO DETERMINE RELATIONSHIP TO SUBJECT PROPERTY.

17 – TEMPORARY CONSTRUCTION EASEMENT AGREEMENT BETWEEN NORTHEAST GEORGIA MEDICAL CENTER, INC., A GEORGIA NOT-FOR-PROFIT CORPORATION; AMERICA'S HOME PLACE, INC. AND TLPERT-GAINESVILLE, LLC, A TEXAS LIMITED LIABILITY COMPANY, DATED AS OF DECEMBER 31, 2014, FILED JANUARY 7, 2015 AND RECORDED IN DEED BOOK 7463, PAGE 646, AFORESAID RECORDS; AS AFFECTED BY THAT CERTAIN AFFIDAVIT RELATING TO TITLE, DATED DECEMBER 15, 2015, FILED DECEMBER 17, 2015 AND RECORDED IN DEED BOOK 7627, PAGE 735, AFORESAID RECORDS.

SUBJECT DOCUMENT RECORDED AT DEED BOOK 7463, PAGE 646 DESCRIBES A TEMPORARY EASEMENT THAT HAS NOW EXPIRED AND NO LONGER AFFECTS THE SUBJECT PROPERTY. SUBJECT DOCUMENT RECORDED AT DEED BOOK 7627, PAGE 735 DESCRIBES TWO (ITEMS: B & D) TEMPORARY EASEMENT THAT IS NOW EXPIRED AND A PERMANENT EASEMENT AGREEMENT (ITEM C), SUPPORTING DOCUMENT NOT PROVIDED.

18 – ALL MATTERS AFFECTING SUBJECT PROPERTY AS SHOWN ON THE FOLLOWING PLATS:

- *(A)PLAT BOOK 32, PAGE 116;*
  SUBJECT PLAT DEPICTS A SANITARY SEWER LINE THAT AFFECTS THE SUBJECT PROPERTY AS SHOWN.
- *(B)PLAT BOOK 249, PAGE 82A;*
  SUBJECT PLAT DEPICTS A 30 FOOT SANITARY SEWER EASEMENT THAT AFFECTS THE SUBJECT PROPERTY AS SHOWN.
- *(C)PLAT BOOK 869, PAGE 241;*
  SUBJECT PLAT DEPICTS SEVERAL STORM AND DRAINAGE EASEMENTS THAT AFFECT THE SUBJECT PROPERTY; SAID EASEMENTS ON SUBJECT DOCUMENT ARE TOO VAGUE TO PLOT.

LINE TABLE

LINE	BEARING	DISTANCE
L1	N68°10'01"E	45.62'
L2	S83°17'48"W	21.78'
L3	N28°01'03"W	8.26'
L4	N38°54'34"W	39.01'

SURVEYOR'S CERTIFICATION

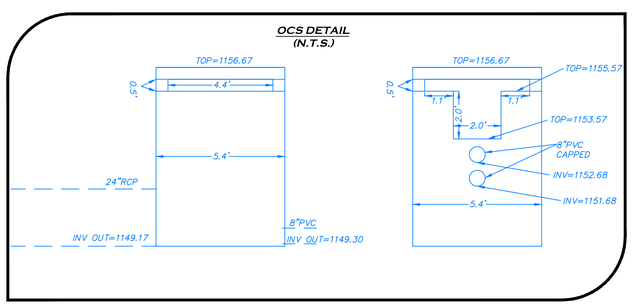
TO: LIDL US PROPERTIES, LLC AND FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 11-4, 6(B), 7(A), 7(B1), 7(C), 8-9, 11, 13, 14, 16-20(A), AND 21-22 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JUNE 7, 2017.

GEORGIA REGISTERED 3108 REGISTERED PROFESSIONAL SURVEYOR MITCHELL LOWERY

MITCHELL LOWERY GEORGIA RLS# 3109
DATE OF PLAT OR MAP: JUNE 9, 2017

OCS DETAIL (N.T.S.)



UTILITY CONTACTS

CITY OF GAINESVILLE PUBLIC UTILITIES
NICK SWAFFORD
757 QUEEN CITY PKWY
GAINESVILLE, GA 30501
PH: 770.538.2452
NSWAFFORD@GAINESVILLE.ORG

AT&T
ANGELO HINES
305-409-1542

GEORGIA POWER
GEORGIA POWER CABLE LOCATING
404-506-6539
LIBERTY UTILITIES
MARK REEVES
PROJECT SPECIALIST
P: 678-707-5220
C: 770-540-6997
F: 770-534-3183
E: MARK.REEVES@LIBERTYUTILITIES.COM
175 JOHN W. MORROW JR. PKWY,
GAINESVILLE, GA 30501

COMCAST CATV
BRAD SEARS
770-559-6052

LOWERY & ASSOCIATES
LAND SURVEYING, LLC
317 GRASSDALE ROAD
CARTERSVILLE, GA 30121
770-334-8186
WWW.LOWERYLANDSURVEYS.COM
INFO@LOWERYLANDSURVEYS.COM
GEORGIA C.O.A.: LSF-001102

PREPARED FOR:
LIDL US PROPERTIES, LLC &
FIRST AMERICAN TITLE INSURANCE COMPANY

ALTA/NSPS LAND TITLE SURVEY OF:
TAX PARCEL # 1115001002
&
TAX PARCEL # 1115001061

COUNTY: HALL
DISTRICT: 9TH CITY OF GAINESVILLE
STATE: GEORGIA
LAND LOT: 163

REVISIONS

DATE:	DESCRIPTION

Lowery & Associates LAND SURVEYING, LLC

DATE: JUNE 9, 2017
JOB #: 171904
SCALE: 1"=30'
DRAWN BY: J.THREADGILL

SITE ANALYSIS

	AREA	ZONING EXISTING	ZONING PROPOSED
TRACT 1	4.59 AC	O-I	G-B
TRACT 2	2.26 AC	G-B	G-B
TOTAL	6.85 AC		
BUILDING AREA	35,962 SF		
PARKING	166 SPACES 6 ADA SPACES 172 TOTAL SPACES		

EXISTING DETENTION POND
EG=1175±
ZONED: G-B
0' BUILDING SETBACK
EG=1190±
EG=1200±
SLOPE
19
46
41
12
5
17
NIC ZONED: G-B
ELECTRICAL VEHICLES PARKING
PROTO 267-B-2-R
35,962 SF.
172 TOTAL PARKING SPACES
FFE= 1195 ±
ZONING LINE
10' LANDSCAPE BUFFER
EXISTING DETENTION POND
ZONED: R-1
ZONED: G-B
EG=1173±
EXISTING ZONING O-I
PROPOSED ZONING G-B
DAWSONVILLE HIGHWAY
SR 9 / HIGHWAY 53
PUBLIC ROADWAY
40'
10' LANDSCAPE STRIP
4
14
7
1.5%
SIDEWALK
ADDITIONAL R/W
MONUMENT SIGN C
FULL ACCESS DRIVEWAY EG=1204±
EXISTING DRIVE EG=1196±
EXISTING DRIVE 3-10%
PROPOSED LEFT TURN LANE
PROPOSED RIGHT TURN LANE
ZONED: I-I

LEGEND

- ASPHALT
- HEAVY DUTY ASPHALT
- CROSS ACCESS DRIVE
- BUILDING
- LANDSCAPE
- STORMWATER MANAGEMENT AREA
- CONCRETE (HEAVY DUTY)
- CONCRETE (SIDEWALK)
- HEAVY DUTY ARCHITECTURAL CONCRETE
- MONUMENT SIGN

ZONING SITE PLAN

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

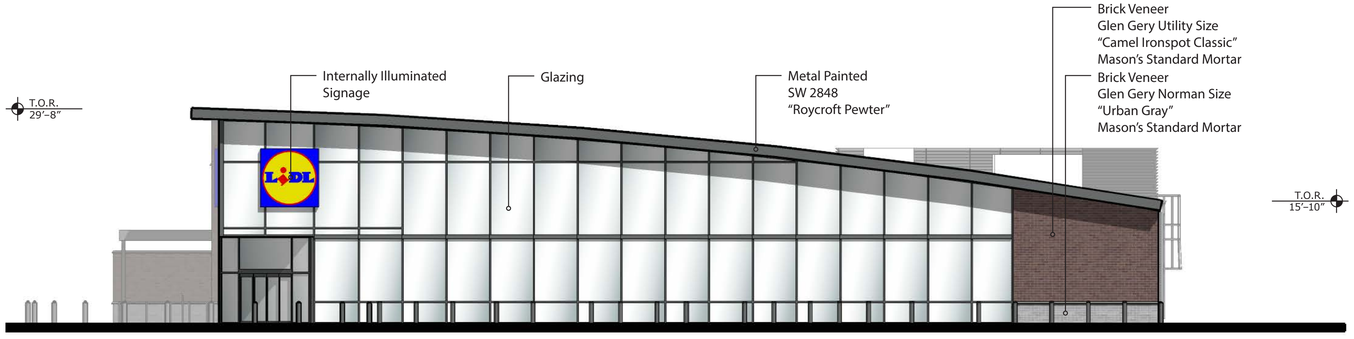
WOLVERTON
Engineering Solutions You Can Trust
6745 Sugarloaf Parkway • Suite 100 • Duluth, Georgia 30097
Phone: 770-447-9999
www.wolvertoninc.com

Project Title
PROPOSED GROCERY STORE
GAINESVILLE, GA

DRAWN BY	DMN
CHECKED BY	TLS
DATE:	06/27/2017
SCALE:	1"= 50'
JOB No.	16-CE-076
TEST FIT NUMBER	Z-1
OF	SHEETS

16-CE-076 MAIN.DWG

USER drawn - Jun 27, 2017 - 2:26pm
Z:\All Project Data\Projects\2016\16-CE-076 Gainesville, GA (Ltd)\CE\Production\Production Drawings\16-CE-076 Main.dwg



Front Elevation

0' 10' 20' 40'

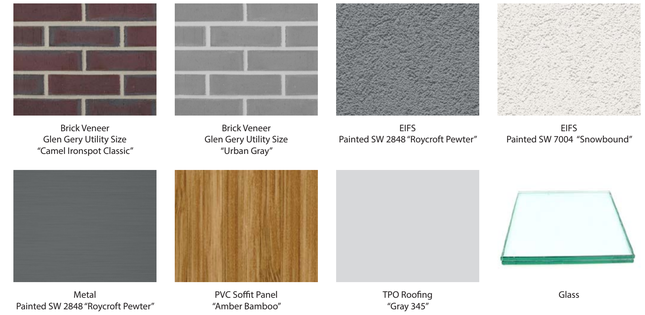
Materials Calculations

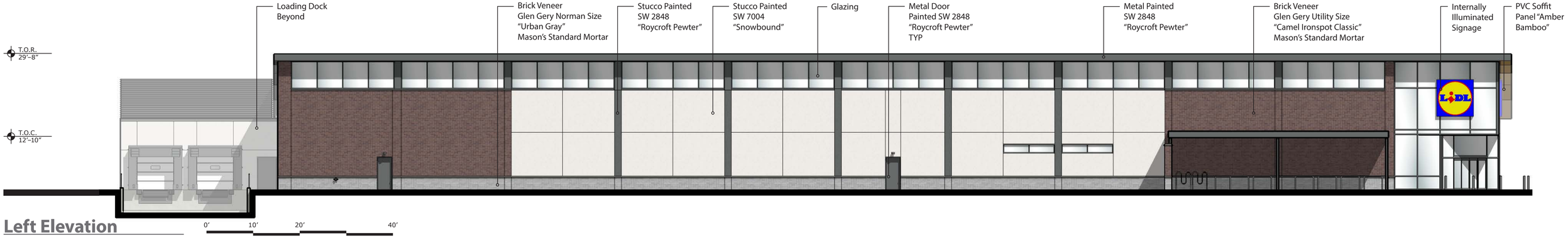
Location	Total Area	Masonry	Glass	Stucco
Front Elevation	3190 SF	339 SF (11%)	2651 SF (83%)	0 SF (0%)
Left Elevation	8709 SF	2563 SF (29%)	2061 SF (24%)	2906 SF (33%)
Rear Elevation	3383 SF	314 SF (9%)	0 SF (0%)	2533 SF (75%)
Right Elevation	5350 SF	310 SF (6%)	596 SF (11%)	3685 SF (69%)

Signage Calculations

Location	Sign	Size	Area
Front Elevation	Lidl Signage	8'-0" x 8'-0"	64 SF
Left Elevation	Lidl Signage	8'-0" x 8'-0"	64 SF
Rear Elevation	---	---	---
Right Elevation	---	---	---
		Total Area	128 SF

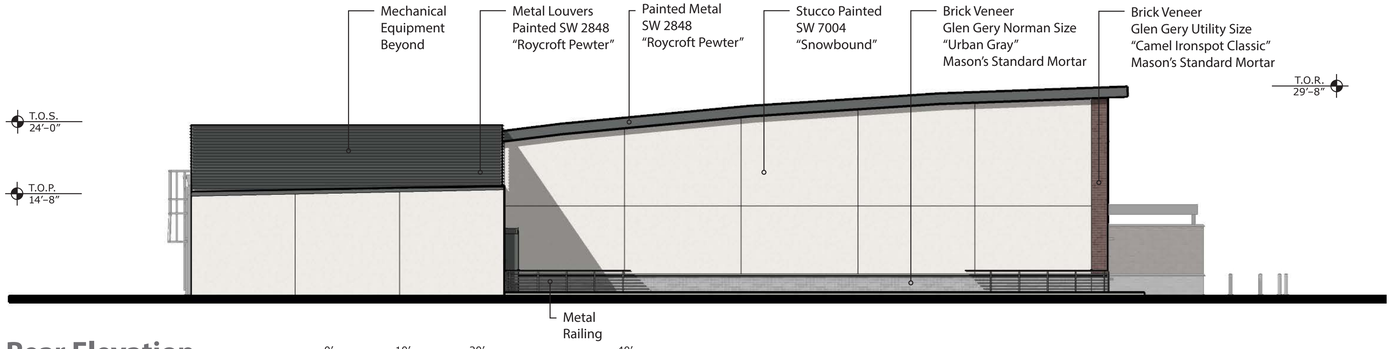
Materials Legend





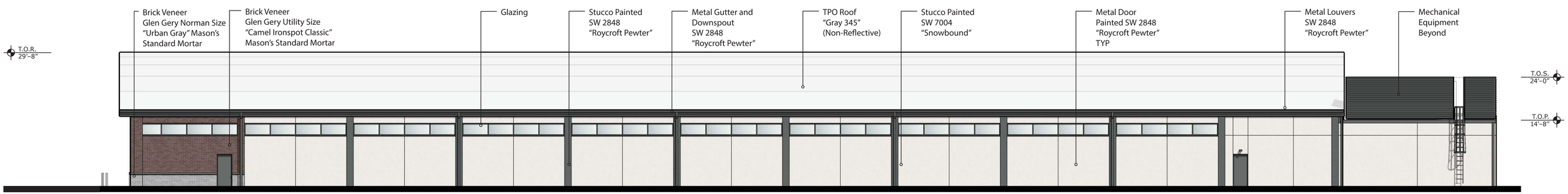
Left Elevation

0' 10' 20' 40'



Rear Elevation

0' 10' 20' 40'



Right Elevation

0' 10' 20' 40'

Traffic Impact Study

Proposed Retail Development
SR 53/Dawsonville Highway
Gainesville, GA

Prepared For:
Lidl, US

Wolverton Project No.
16-CE-076

June 28, 2017

WOLVERTON

770.447.8999 | 6745 Sugarloaf Parkway, Suite 100 | Duluth, Georgia 30097 | www.wolvertoninc.com

ENGINEERING SOLUTIONS YOU CAN TRUST

Table of Contents

List of Figures

List of Tables

1. INTRODUCTION

1.1. Study Area

This traffic study was conducted to evaluate the traffic impacts of a proposed development for a grocery store located in Gainesville, Georgia. The proposed site is located to the east of SR 53/Dawsonville Highway, just north of the intersection of SR 53/Dawsonville Highway and SR 53/McEver Road. The proposed lot for the site is currently undeveloped, but the proposed site driveway is existing and currently serves light traffic from Jackson Electric Membership Corporation (Jackson EMC). Figure 1 illustrates the location of the site and identifies the roadway network in the vicinity.

1.2. Proposed Development

The proposed development will consist of a 35.962 square foot grocery store. Figure 2 illustrates the proposed site plan. The grocery store is expected to be built out in 2018. The site will have one access point: a full access driveway onto SR 53/Dawsonville Highway just north of the intersection of SR 53/Dawsonville Highway and SR 53/McEver Road.

1.3. Methodology

Initial evaluations were made to assess the current conditions within the vicinity of the development. AM and PM peak period turning movement counts (TMC) were conducted on Thursday, May 25, 2017, at the following two intersections:

1. SR 53/Dawsonville Highway and Site Driveway
2. SR 53/Dawsonville Highway and SR 53/McEver Road

The traffic counts are contained in Appendix A.

The traffic growth rate was obtained from the following six nearby GDOT traffic counters, which provide historical count data in the area:

- 1390258, SR 53/Dawsonville Highway and Shallowford Road
- 1390269, SR 53/Dawsonville Highway and Marina Road
- 1390274, SR 53/McEver Road and SR 53/Dawsonville Highway
- 1390647, Shallowford Road and Pearl Nix Parkway
- 1390707, Pearl Nix Parkway and Shallowford Road

Using traffic count data since the year 2010, a growth rate was developed using linear regression. The traffic growth rate was applied to the existing volumes to estimate the traffic that will exist at the build-out year of the site if the proposed development is not developed.

Estimates were made of the traffic that will be generated by the proposed development. The generated trips were reduced to account for pass-by traffic. The adjusted new trips were then distributed and assigned to the road network.

The distribution of these new trips was based on the existing traffic patterns. The pass-by traffic was distributed and assigned to the site driveway based on the peak hour traffic patterns. After the generated traffic for the development was distributed and assigned, it was then superimposed with the future background traffic to provide an estimate of projected traffic that would be present during the year when the development is complete.

Capacity analysis was used to evaluate the Existing Year 2017, Future Background Year 2018, and Future with Project Year 2018 conditions for the intersections being studied.

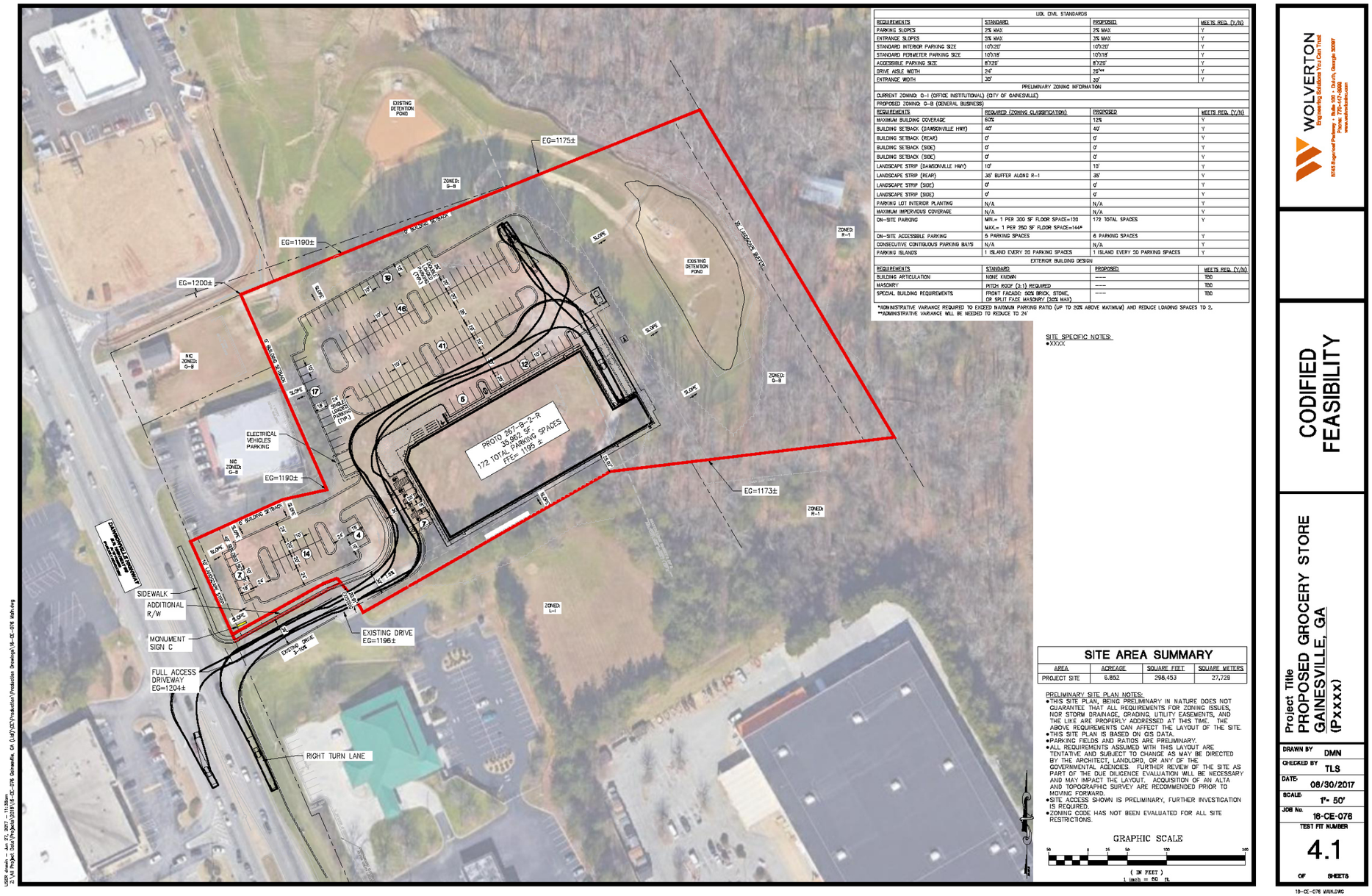
1.4. Planned Transportation Improvements

As part of the proposed development, as shown on the site plan, a 300-foot long right turn lane will be added northbound on SR 53/Dawsonville Highway at the proposed Site Driveway. In addition to the 300-foot long right turn lane on SR 53/Dawsonville Highway, a 150-foot long left turn lane will be added westbound on the proposed Site Driveway.

The site plan along with the planned transportation improvements are shown in Figure 2.

Figure 1 – Vicinity Map

Figure 2 – Proposed Site Plan



UDL CIVIL STANDARDS			
REQUIREMENTS	STANDARD	PROPOSED	MEETS REQ. (Y/N)
PARKING SLOPES	2% MAX	2% MAX	Y
ENTRANCE SLOPES	5% MAX	3% MAX	Y
STANDARD INTERIOR PARKING SIZE	10'X20'	10'X20'	Y
STANDARD PERIMETER PARKING SIZE	10'X18'	10'X18'	Y
ACCESSIBLE PARKING SIZE	8'X20'	8'X20'	Y
DRIVE AISLE WIDTH	24'	26'**	Y
ENTRANCE WIDTH	35'	39'	Y
PRELIMINARY ZONING INFORMATION			
CURRENT ZONING: O-I (OFFICE INSTITUTIONAL) (CITY OF GAINESVILLE)			
PROPOSED ZONING: G-B (GENERAL BUSINESS)			
REQUIREMENTS	REQUIRED (ZONING CLASSIFICATION)	PROPOSED	MEETS REQ. (Y/N)
MAXIMUM BUILDING COVERAGE	60%	12%	Y
BUILDING SETBACK (DAWSONVILLE HWY)	40'	40'	Y
BUILDING SETBACK (REAR)	0'	0'	Y
BUILDING SETBACK (SIDE)	0'	0'	Y
BUILDING SETBACK (SIDE)	0'	0'	Y
LANDSCAPE STRIP (DAWSONVILLE HWY)	10'	10'	Y
LANDSCAPE STRIP (REAR)	35' BUFFER ALONG R-1	35'	Y
LANDSCAPE STRIP (SIDE)	0'	0'	Y
LANDSCAPE STRIP (SIDE)	0'	0'	Y
PARKING LOT INTERIOR PLANTING	N/A	N/A	Y
MAXIMUM IMPERVIOUS COVERAGE	N/A	N/A	Y
ON-SITE PARKING	MIN.= 1 PER 300 SF FLOOR SPACE=120 MAX.= 1 PER 250 SF FLOOR SPACE=144*	172 TOTAL SPACES	Y
ON-SITE ACCESSIBLE PARKING	5 PARKING SPACES	6 PARKING SPACES	Y
CONSECUTIVE CONTIGUOUS PARKING BAYS	N/A	N/A	Y
PARKING ISLANDS	1 ISLAND EVERY 20 PARKING SPACES	1 ISLAND EVERY 20 PARKING SPACES	Y
EXTERIOR BUILDING DESIGN			
REQUIREMENTS	STANDARD	PROPOSED	MEETS REQ. (Y/N)
BUILDING ARTICULATION	NONE KNOWN	----	TBD
MASONRY	PITCH ROOF (3:1) REQUIRED	----	TBD
SPECIAL BUILDING REQUIREMENTS	FRONT FACADE: 50% BRICK, STONE, OR SPLIT FACE MASONRY (30% MAX)	----	TBD

*ADMINISTRATIVE VARIANCE REQUIRED TO EXCEED MAXIMUM PARKING RATIO (UP TO 20% ABOVE MAXIMUM) AND REDUCE LOADING SPACES TO 2.
**ADMINISTRATIVE VARIANCE WILL BE NEEDED TO REDUCE TO 24'

SITE AREA SUMMARY

AREA	ACREAGE	SQUARE FEET	SQUARE METERS
PROJECT SITE	6.852	298,453	27,729

PRELIMINARY SITE PLAN NOTES:
- THIS SITE PLAN, BEING PRELIMINARY IN NATURE DOES NOT GUARANTEE THAT ALL REQUIREMENTS FOR ZONING ISSUES, NOR STORM DRAINAGE, GRADING, UTILITY EASEMENTS, AND THE LIKE ARE PROPERLY ADDRESSED AT THIS TIME. THE ABOVE REQUIREMENTS CAN AFFECT THE LAYOUT OF THE SITE.
- THIS SITE PLAN IS BASED ON GIS DATA.
- PARKING FIELDS AND RATIOS ARE PRELIMINARY.
- ALL REQUIREMENTS ASSUMED WITH THIS LAYOUT ARE TENTATIVE AND SUBJECT TO CHANGE AS MAY BE DIRECTED BY THE ARCHITECT, LANDLORD, OR ANY OF THE GOVERNMENTAL AGENCIES. FURTHER REVIEW OF THE SITE AS PART OF THE DUE DILIGENCE EVALUATION WILL BE NECESSARY AND MAY IMPACT THE LAYOUT. ACQUISITION OF AN ALTA AND TOPOGRAPHIC SURVEY ARE RECOMMENDED PRIOR TO MOVING FORWARD.
- SITE ACCESS SHOWN IS PRELIMINARY, FURTHER INVESTIGATION IS REQUIRED.
- ZONING CODE HAS NOT BEEN EVALUATED FOR ALL SITE RESTRICTIONS.

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 60 ft.

WOLVERTON
Engineering Solutions You Can Trust
3240 Regional Parkway • Suite 100 • Duluth, Georgia 30097
Phone: 770-417-1886
www.wolvertonfirm.com

CODIFIED FEASIBILITY

Project Title
PROPOSED GROCERY STORE
GAINESVILLE, GA
(Pxxxx)

DRAWN BY	DMN
CHECKED BY	TLS
DATE	08/30/2017
SCALE	1" = 50'
JOB No.	18-CE-076
TEST FIT NUMBER	4.1
OF	SHEETS

18-CE-076 MAINLDWG

2. EXISTING CONDITIONS

2.1. Roadways

SR 53/Dawsonville Highway is a four-lane median divided highway that runs primarily north-south and serves heavy commercial development within the vicinity of the site. SR 53/Dawsonville Highway is classified as an Urban Principal Arterial and has a posted speed limit of 45 mph within the vicinity of the site. At the intersection of Dawsonville Highway and McEver Road, SR 53 turns southwest from Dawsonville Highway onto McEver Road. On Dawsonville Highway south of McEver Road, the highway is signed as SR 53 Connector.

SR 53/McEver Road is a four-lane median divided highway that runs primarily east-west and serves industrial and heavy commercial development within the vicinity of the site. McEver Road is classified as an Urban Principal Arterial and has a posted speed limit of 45 mph. McEver Road originates as Peachtree Industrial Boulevard in Gwinnett County at the intersection with Holcomb Bridge Road, and becomes McEver Road at the Hall County line.

SR 53 originates at the Alabama state line and travels primarily east through Georgia's rural and mountainous regions in the northwest and northern portions of the state. SR 53 intersects US 19/SR 400 in Dawsonville and continues east through Forsyth County, before finally entering Hall County via the Chestatee River and making the southwest turn onto McEver Road. SR 53 then proceeds in a southerly and southeasterly direction toward the Athens area, where it terminates at its intersection with SR 15 in downtown Watkinsville.

SR 53 Connector runs east from McEver Road into downtown Gainesville, running in common with SR 60 beginning at its intersection with Jesse Jewell Parkway. SR 53 Connector terminates at its interchange with Interstate 985.

2.2. Intersections

The following two intersections were identified to be studied:

1. SR 53/Dawsonville Highway and Site Driveway (unsignalized)
2. SR 53/Dawsonville Highway and SR 53/McEver Road (signalized)

Existing geometry and traffic operation control of the existing intersections were inventoried. Traffic signal timing data for the intersection of SR 53/Dawsonville Highway and SR 53/McEver Road are contained in Appendix B. Figure 3 illustrates the associated geometry and operation control of the study intersections. The proposed lanes at the site driveway represent exclusive lanes, and not disallowed movements in the existing condition.

2.3. Existing Traffic Flow Patterns

Existing TMC data were collected on Thursday, May 25, 2017, for the study intersections. Figure 4 illustrates the collected turning movement volumes for the AM and PM peak hours.

Figure 3 – Existing and Proposed Lane Configurations and Traffic Control

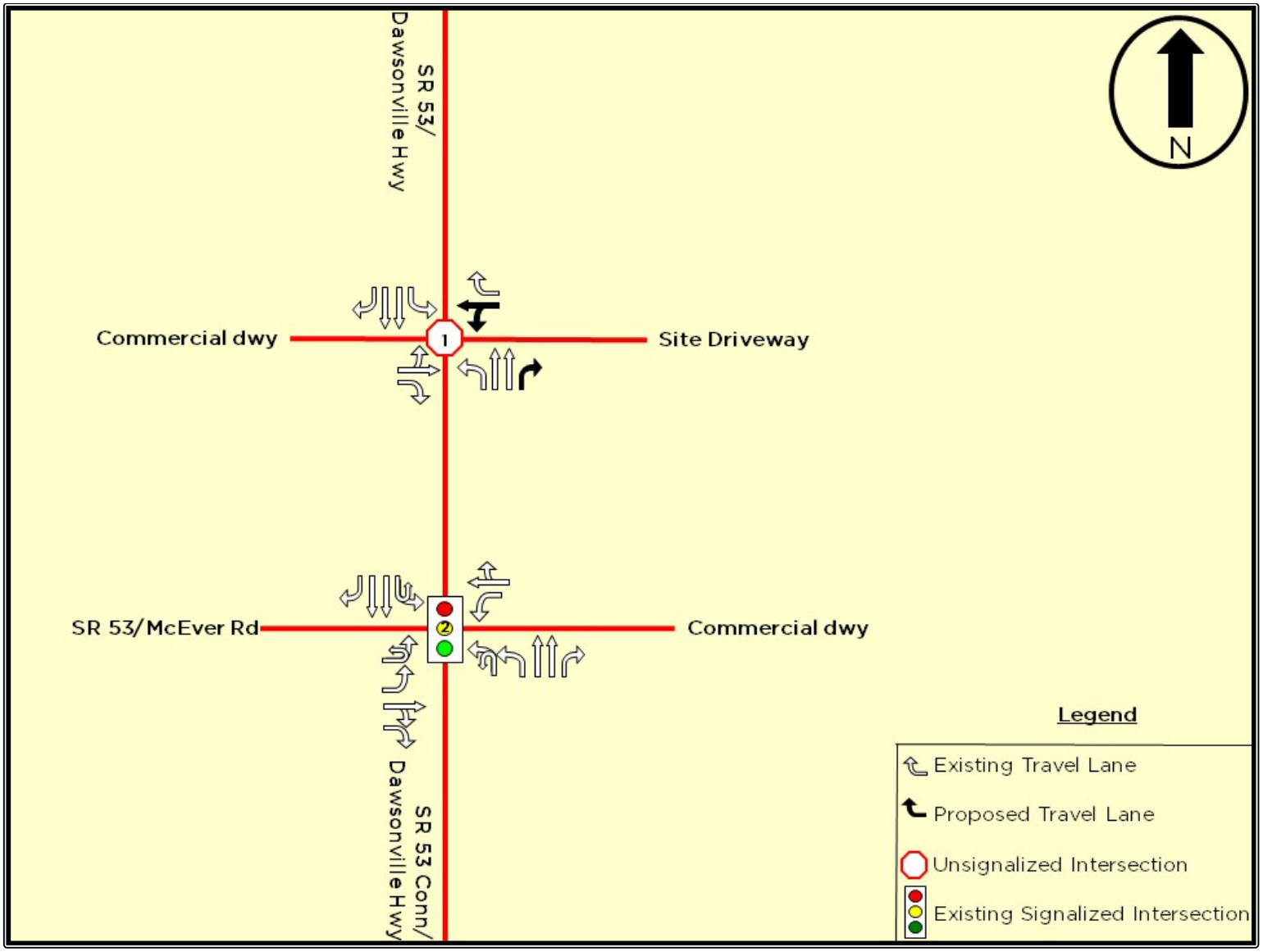
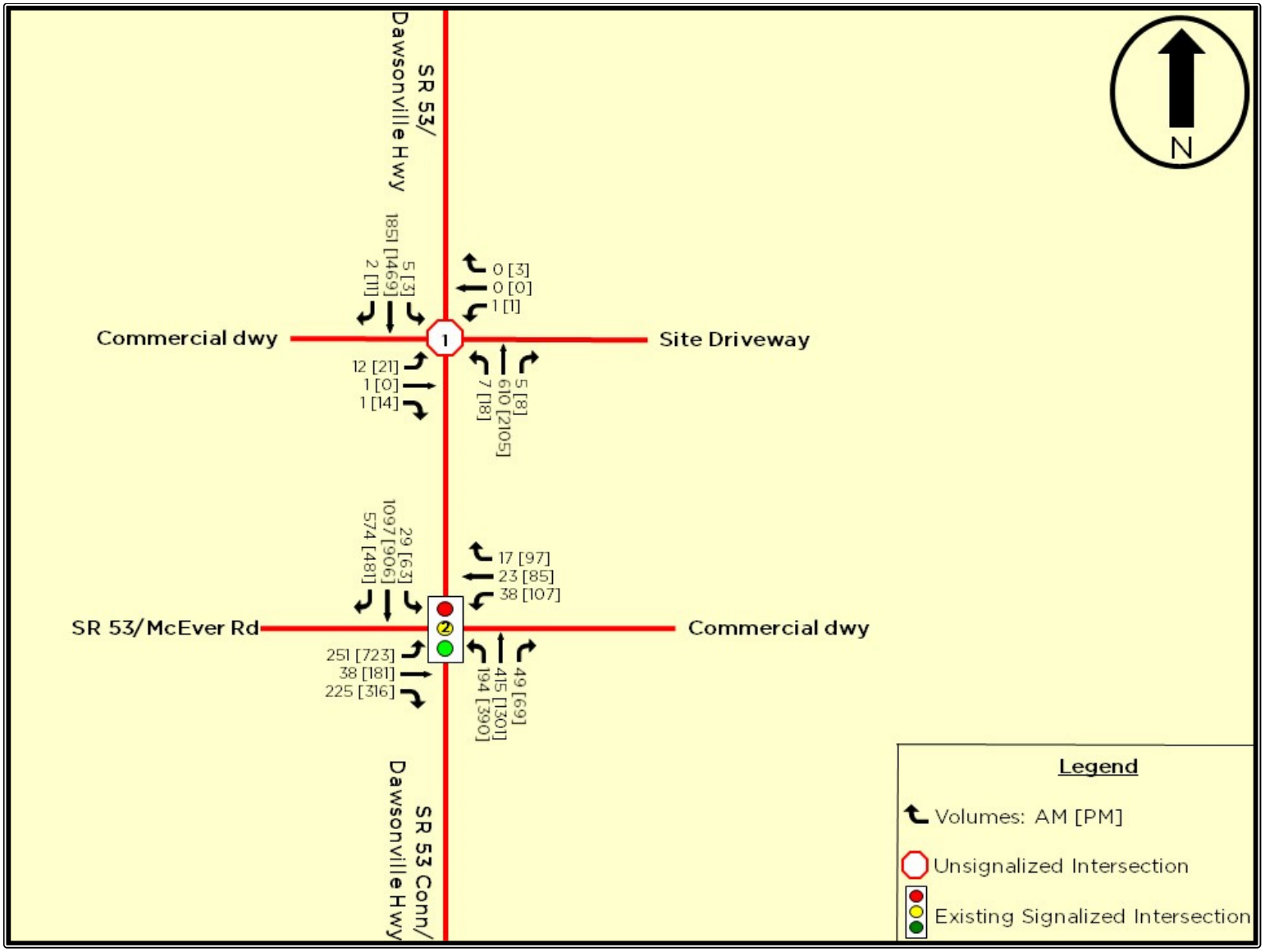


Figure 4 – Existing Peak Hour Volumes



3. TRAFFIC PROJECTIONS

3.1. Future Background Traffic

The grocery store anticipates opening in 2018. Using traffic count data since the year 2010, a growth rate of 2.0% was developed using linear regression. This traffic growth rate was applied to the Existing Year 2017 volumes to estimate the traffic that will exist at the build-out year 2018 of the site if the proposed development is not developed. Figure 5 shows the Future Background Year 2018 peak hour volumes.

3.2. Trip Generation

The amount of traffic to be generated by the proposed development was estimated by using trip rates observed at other similar developments. The widely recognized publication from the Institute of Transportation Engineers (ITE), *Trip Generation 9th Edition* (1), contains trip rates summarized by type of development. The ITE data provide trip rates that can be applied to the size of a development to derive trip generation projections. The ITE Code 850 – Supermarket was used for the proposed LIDL.

3.3. Trip Adjustment Strategies

Not all trips entering and exiting the development result in new traffic being added to the road system. A portion of the trips will be attracted into the site from the traffic streams that were already passing by on the adjacent streets. Pass-by trips can represent a significant portion of the trips entering and exiting a commercial site. There are data that can be used to quantify the magnitude of pass-by trips provided in ITE's *Trip Generation*.

The *Trip Generation* shows a weekday PM peak period pass-by rate for ITE Code 850 – Supermarket of 36%. The pass-by rates were checked to assure that the pass-by trips did not exceed 15% of the adjacent street volume. Pass-by trips are always included in the site driveway movements. Pass-by trips are subtracted from the through volumes passing a given site driveway.

Table 1 shows application of the trip generation and the trip adjustment strategies for Future with Project Year 2018. The resulting trip projections are provided in terms of both daily traffic and each of the peak hours.

*Table 1 – **Trip Generation***

ITE Category	ITE Code	Size	Unit	Daily			AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out	Total	In	Out
Supermarket	850	35.962	ksf	3,799	1,900	1,899	122	76	46	365	186	179
Pass-by Trips	36% PM			1,368	684	684				132	67	65
New Trips				2,431	1,216	1,215	122	76	46	233	119	114

3.4. Trip Distribution for New Trips

After the magnitude of generated trips has been established, it is then necessary to determine the routing of the new trips. The trip distribution for the new trips was based on the existing traffic patterns from the AM and PM peak period counts. There is substantial commercial development on SR 53/Dawsonville Highway and SR 53/McEver Road within the vicinity of the site; therefore, using the existing traffic patterns is appropriate. Table 2 summarizes the distribution percentages.

*Table 2 – **Summary of New Trip Distribution Percentages***

ROADWAY	PERCENT OF TOTAL NEW TRIPS
SR 53/Dawsonville Highway from the north	55%
SR 53 Connector/Dawsonville Highway from the south	27%
SR 53/McEver Road from the west	18%
TOTAL	100%

This distribution was then used for the assignment of new trips for the grocery store.

3.5. Assignment of Generated Traffic Volumes

The number of new and pass-by trips at the study intersections were determined using the trip generation and distribution already discussed.

The total volume adjustments at the study intersections from the new trips and the pass-by trips for Future with Project Year 2018 conditions are shown in Figure 6.

The total volume adjustments were superimposed with the Future Background Year 2018 volumes from Figure 5 to represent the projected Future with Project Year 2018 volumes after the development is complete. Figure 7 shows expected final volumes for Future with Project Year 2018 conditions.

Figure 5 – Future Background Year 2018 Peak Hour Volumes

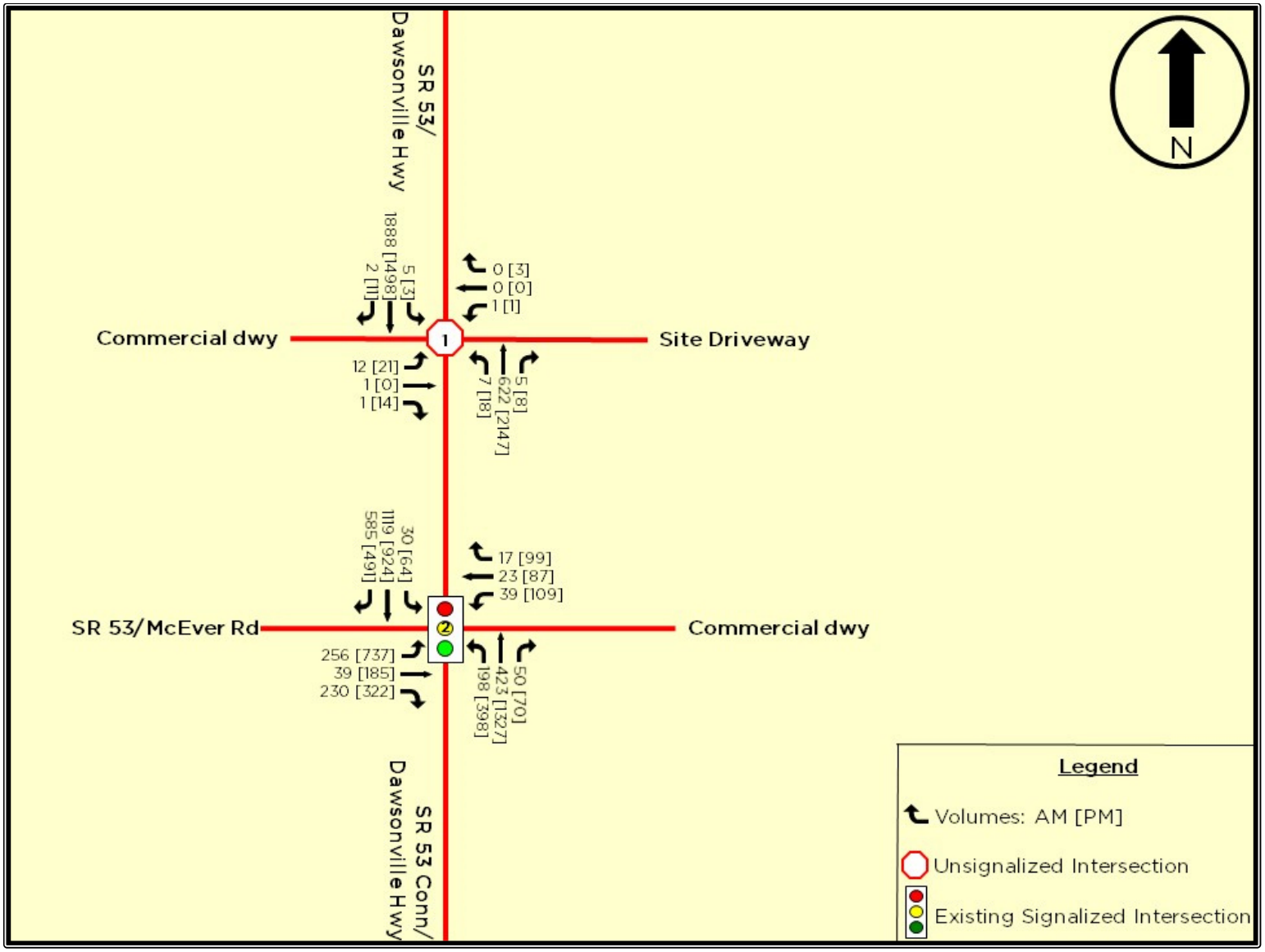


Figure 6 – Total Peak Hour Volume Adjustment for Future with Project Year 2018

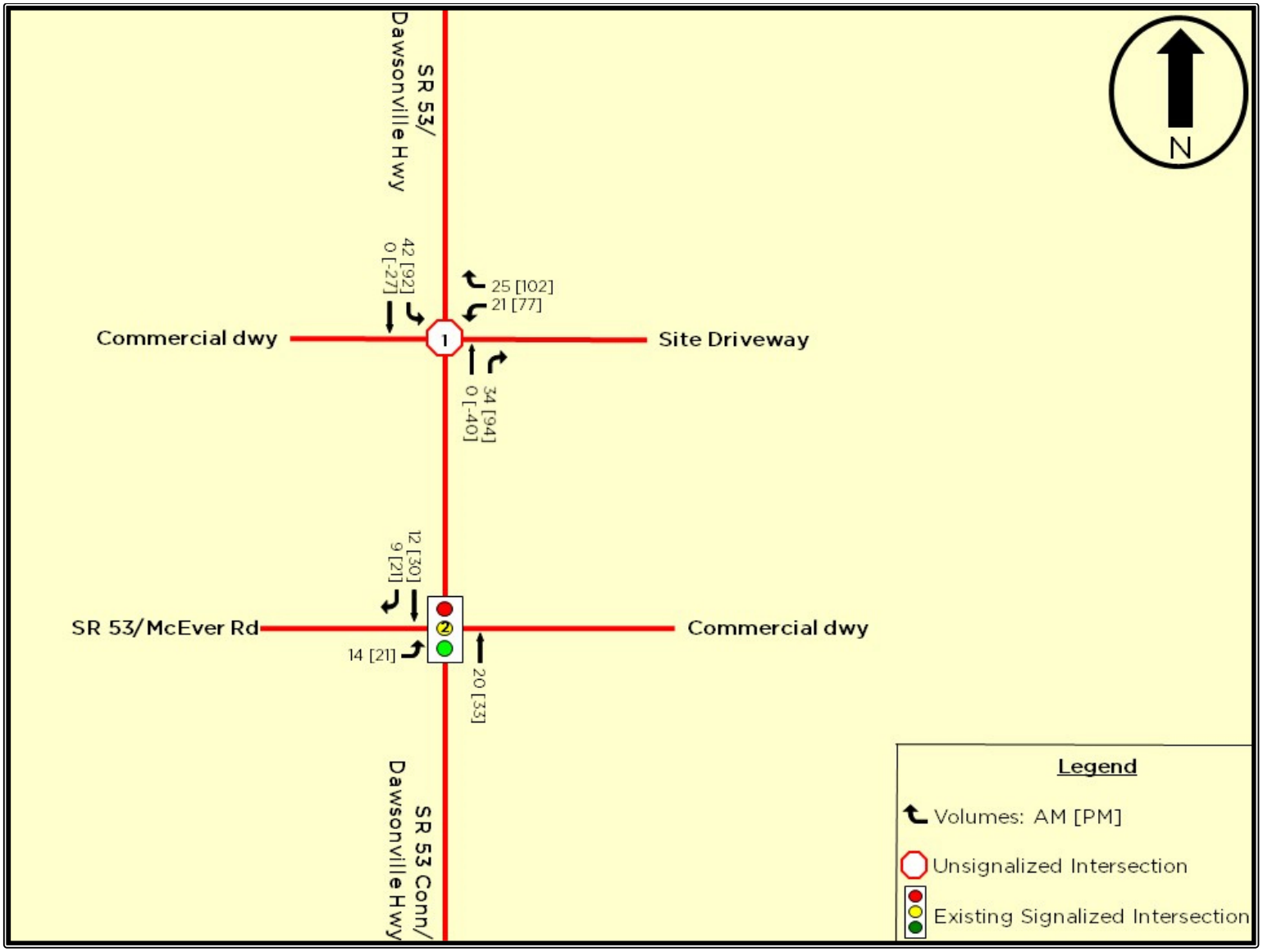
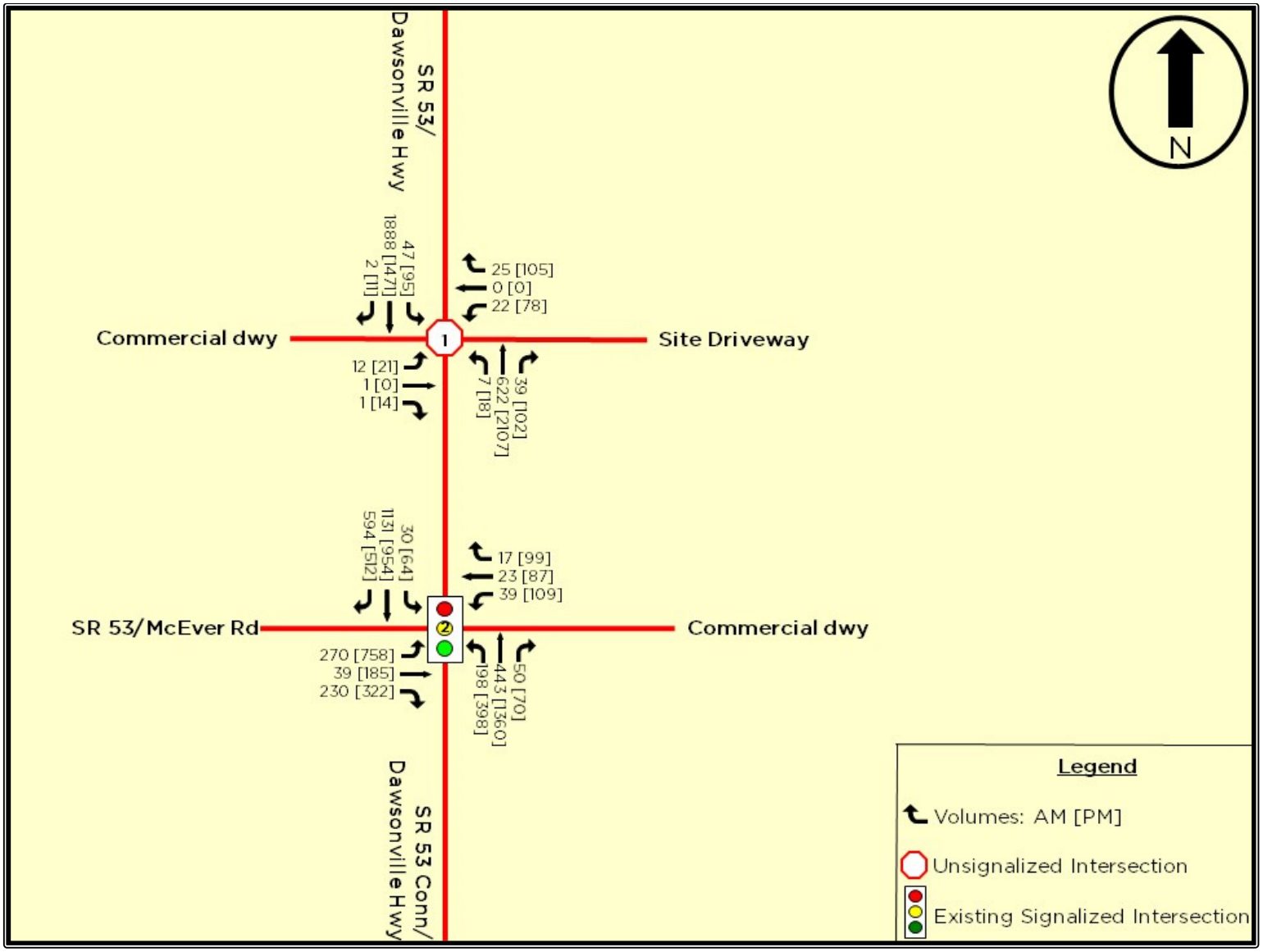


Figure 7 – Future with Project Year 2018 Peak Hour Volumes



4. DATA ANALYSIS

4.1. Level of Service Criteria

In order to quantify the impacts of the additional traffic and to determine any needed roadway and/or operational improvements, the existing and projected conditions were evaluated with traffic capacity analysis techniques. *Synchro* (1) was used to conduct capacity analysis. *Synchro* implements the capacity methods of the *Highway Capacity Manual* (HCM) (2) for performing the industry standard evaluation of intersection performance. Delays used in the reports follow the procedure as recommended by the HCM. The HCM defines Level of Service (LOS) in terms of the amount of control delay, including initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

The LOS definitions for both stop sign controlled intersections and traffic signal controlled intersections are provided in Table 1.

Table 3 – Level of Service Criteria

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)	
	WITH STOP SIGN	WITH TRAFFIC SIGNAL
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual*

GDOT has ranges of adequate LOS based on area classification. Rural, sparsely developed areas have a minimum LOS requirement of C. This is due to the expectancy of rural residents for relatively uncongested conditions and design flexibility related to lower right of way costs. The minimum LOS for urban areas is D. This reflects the greater acceptance of delay and congestion by urban residents. Additionally, the increased density of developments makes right of way costs much higher in urban areas. The Dawsonville Highway project corridor is in the Atlanta metro area and, therefore, has a minimum LOS requirement of D.

Capacity analysis was used to evaluate the Existing Year 2017, Future Background Year 2018, and Future with Project Year 2018 conditions for the intersections being studied. For Existing Year 2017 and Future Background Year 2018, the existing lane configurations and traffic control were used. For Future with Project Year 2018, the lane configurations shown on the site plan were used. Table 4 shows the resulting analysis during the AM and PM peak hours. *Synchro* printouts are contained in Appendix C.

*Table 4 – **Results of Capacity Analysis***

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
					Existing Year 2017	Future Background Year 2018	Future with Project Year 2018	Existing Year 2017	Future Background Year 2018	Future with Project Year 2018
1	SR 53/Dawsonville Hwy & Site Driveway	TWSC	None	NB L	C (19.0)	C (19.6)	C (19.6)	B (13.4)	B (13.7)	B (13.4)
				SB L	A (9.0)	A (9.0)	A (9.2)	C (19.7)	C (20.3)	D (28.5)
				EB L+T	F (519.0)	F (624.2)	F (860.8)	F (1130.9)	F (1274.7)	F (5023.1)
				EB R	C (21.0)	C (21.5)	C (21.5)	C (15.7)	C (15.9)	C (15.7)
				WB L+T+R	F (80.2)	F (85.2)	-	F (203.1)	F (240.9)	-
				WB L+T	-	-	F (216.2)	-	-	F (13,952.3)
				WB R	-	-	B (10.8)	-	-	E (37.6)
2	SR 53/Dawsonville Hwy & SR 53/McEver Road	Traffic Signal	None	Overall	C (29.9)	C (31.0)	C (32.8)	E (65.5)	E (68.5)	E (70.2)

4.2. Intersection Capacity Analysis Results

The following movements and intersections are currently operating inadequately and are expected to continue to operate inadequately for Future Background Year 2018 conditions:

- The eastbound shared left+through movement at SR 53/Dawsonville Highway and the Site Driveway during both peak hours,
- The westbound movement at SR 53/Dawsonville Highway and the Site Driveway during both peak hours, and
- The overall intersection of SR 53/Dawsonville Highway and SR 53/McEver Road during the PM peak hour.

For Future with Project 2018 conditions, both the eastbound shared left+through movement and the proposed westbound shared left+through movement at the intersection of SR 53/Dawsonville Highway and the Site Driveway are expected to operate inadequately during both peak hours. However, conditions at both approaches are currently operating inadequately, before the project traffic is taken into consideration. The proposed westbound right turn movement is expected to operate inadequately during the PM peak hour; however, it is merely LOS E instead of LOS F. A traffic signal could potentially mitigate this condition at this intersection, but based upon the data collected, a traffic signal installation at this location appears unlikely based upon the forecasted peak hour westbound left turn volumes from the Site Driveway and GDOT regulations concerning traffic signal spacing. Due to the expected heavy delay for the westbound left turn movement from the Site Driveway, users are unlikely to attempt this movement during the peak hours. With the proposed lane configurations and traffic control, users desiring to head south on SR 53/Dawsonville Highway likely would perform a westbound right turn movement from the Site Driveway and make a U-turn at the next available median opening to the north. However, it may be possible to explore options concerning inter-parcel connectivity with surrounding establishments to treat the westbound left turn movement and provide mitigated access to SR 53/Dawsonville Highway southbound.

For Future with Project 2018 conditions, the overall intersection of SR 53/Dawsonville Highway and SR 53/McEver Road is expected to operate inadequately during the PM peak hour. However, conditions at this intersection are currently inadequate, before the project traffic is taken into consideration. There do not seem to be any further feasible improvements at this intersection that would significantly mitigate this condition.

The 95th percentile queue lengths (the queue would be expected to be this length or shorter 95% of the time) for each intersection during both peak hours can be seen in Table 5. *Synchro* was used to obtain the queue lengths. At the Site Driveway, during the PM peak hour, the 95th percentile queue length of the westbound shared left+through movement is longer than the proposed westbound left turn lane length of 150 feet shown on the site plan. It does not seem feasible for this left turn to be lengthened any farther.

All turn bays must exceed the queue lengths or meet minimum deceleration criteria as stipulated by GDOT, whichever is longer, unless geometrically infeasible. See GDOT standards and details for bay taper and deceleration lengths.

Table 5 – Queue Lengths

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	EXISTING/ PROPOSED TURN LANE STORAGE LENGTHS (ft)	AM PEAK HOUR						PM PEAK HOUR					
						Existing Year 2017		Future Background Year 2018		Future with Project Year 2018		Existing Year 2017		Future Background Year 2018		Future with Project Year 2018	
						50th %	95th %	50th %	95th %	50th %	95th %	50th %	95th %	50th %	95th %	50th %	95th %
1	SR 53/Dawsonville Hwy & Site Driveway	TWSC	None	NB L	100	-	25	-	25	-	25	-	25	-	25	-	25
				NB R	-/300	-	-	-	-	-	-	-	-	-	-	-	-
				SB L	80	-	0	-	0	-	25	-	0	-	0	-	45
				SB R	360	-	-	-	-	-	-	-	-	-	-	-	-
				EB L+T	-	-	58	-	60	-	65	-	90	-	93	-	105
				EB R	-	-	0	-	0	-	0	-	25	-	25	-	25
				WB L+T+R	-	-	25	-	25	-	-	-	25	-	25	-	-
				WB L+T	-/150	-	-	-	-	-	60	-	-	-	-	-	305
				WB R	-	-	-	-	-	-	25	-	-	-	-	-	65
2	SR 53/Dawsonville Hwy & SR 53/McEver Road	Traffic Signal	None	NB L	400	82	125	84	128	84	128	266	402	276	411	276	411
				NB T	-	106	162	110	167	116	175	670	963	695	993	728	1031
				NB R	240	0	0	0	0	0	0	0	0	0	0	0	0
				SB L	250	25	55	25	57	25	57	62	115	63	117	63	117
				SB T	-	403	517	418	536	426	545	399	517	412	532	430	553
				SB R	575	0	45	0	46	0	46	0	82	0	82	0	83
				EB L	180	120	212	126	220	139	234	376	549	387	565	408	589
				EB T+R	-	57	123	61	126	61	126	234	352	242	362	242	362
				EB R	475	0	0	0	0	0	0	0	73	0	75	0	75
				WB L	-	26	52	26	53	26	53	70	114	71	116	71	116
				WB T+R	-	25	50	25	50	25	50	151	240	156	246	156	246

5. CONCLUSIONS

This traffic study was conducted to evaluate the traffic impacts of a proposed development for a grocery store located in Gainesville, Georgia. The proposed site is located to the east of SR 53/Dawsonville Highway, just north of the intersection of SR 53/Dawsonville Highway and SR 53/McEver Road. The proposed lot for the site is currently undeveloped, but the proposed site driveway is existing and currently serves light traffic from Jackson Electric Membership Corporation (Jackson EMC). The grocery store is expected to be built out in 2018. The site will have one access point: a full access driveway onto SR 53/Dawsonville Highway just north of the intersection of SR 53/Dawsonville Highway and SR 53/McEver Road.

As part of the proposed development, as shown on the site plan, a 300-foot long right turn lane will be added northbound on SR 53/Dawsonville Highway at the proposed Site Driveway. In addition to the 300-foot long right turn lane on SR 53/Dawsonville Highway, a 150-foot long left turn lane will be added westbound on the proposed Site Driveway.

The following movements and intersections are currently operating inadequately and are expected to continue to operate inadequately for Future Background Year 2018 conditions:

- The eastbound shared left+through movement at SR 53/Dawsonville Highway and the Site Driveway during both peak hours,
- The westbound movement at SR 53/Dawsonville Highway and the Site Driveway during both peak hours, and
- The overall intersection of SR 53/Dawsonville Highway and SR 53/McEver Road during the PM peak hour.

For Future with Project 2018 conditions, both the eastbound shared left+through movement and the proposed westbound shared left+through movement at the intersection of SR 53/Dawsonville Highway and the Site Driveway are expected to operate inadequately during both peak hours. However, conditions at both approaches are currently operating inadequately, before the project traffic is taken into consideration. The proposed westbound right turn movement is expected to operate inadequately during the PM peak hour; however, it is merely LOS E instead of LOS F. A traffic signal could potentially mitigate this condition at this intersection, but based upon the data collected, a traffic signal installation at this location appears unlikely based upon the forecasted peak hour westbound left turn volumes from the Site Driveway and GDOT regulations concerning traffic signal spacing. Due to the expected heavy delay for the westbound left turn movement from the Site Driveway, users are unlikely to attempt this movement during the peak hours. With the proposed lane configurations and traffic control, users desiring to head south on SR 53/Dawsonville Highway likely would perform a westbound right turn movement from the Site Driveway and make a U-turn at the next available median opening to the north. However, it may be possible to explore options concerning inter-parcel connectivity with surrounding establishments to treat the westbound left turn movement and provide mitigated access to SR 53/Dawsonville Highway southbound.

For Future with Project 2018 conditions, the overall intersection of SR 53/Dawsonville Highway and SR 53/McEver Road is expected to operate inadequately during the PM peak hour. However, conditions at this intersection are currently inadequate, before the project traffic is taken into consideration. There do not seem to be any further feasible improvements at this intersection that would significantly mitigate this condition.

6. REFERENCES

1. Synchro, Version 9, Trafficware Ltd., Sugar Land, TX, 2015.

2. Highway Capacity Manual, HCM 2000/2010, Transportation Research Board, Washington, DC, 2000/2010.

APPENDIX A – Traffic Counts

Greater Traffic Company

File Name : Driveway
Site Code : 00000002
Start Date : 5/25/2017
Page No : 1

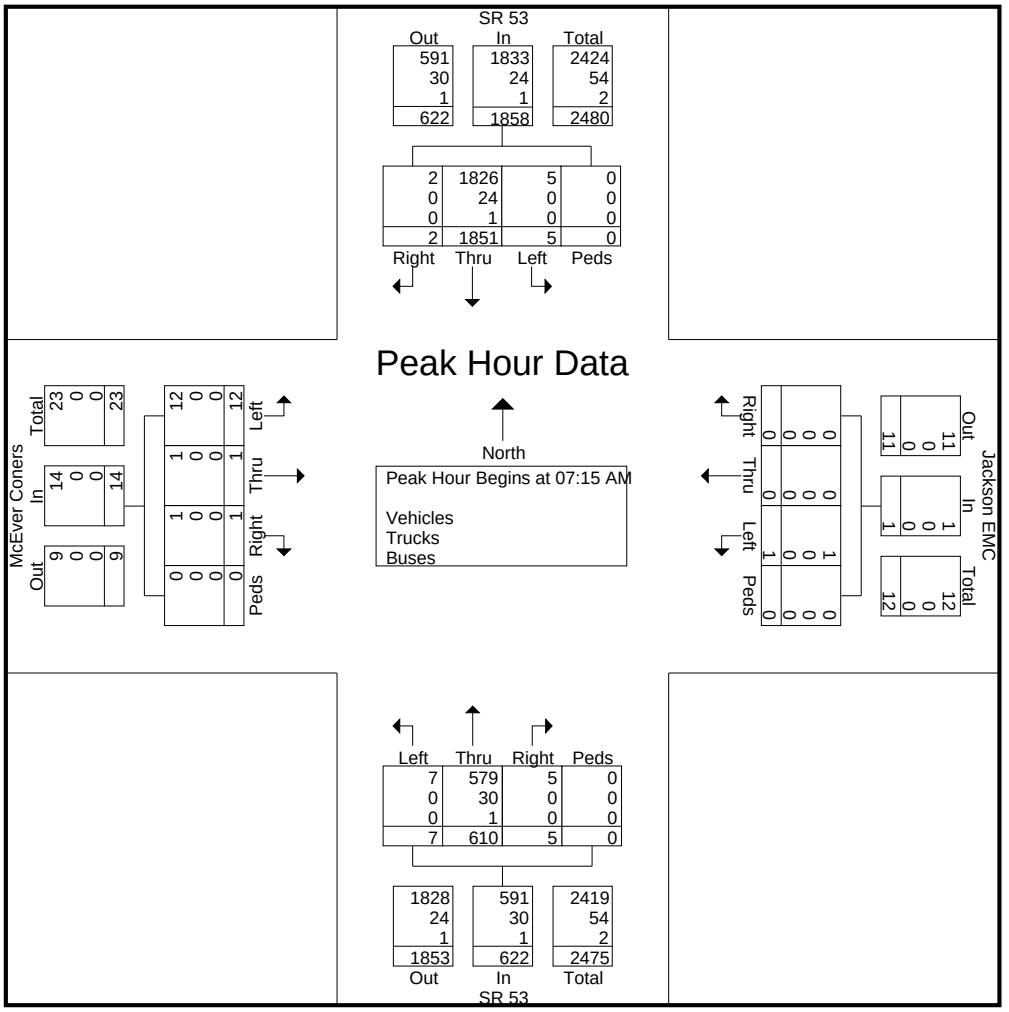
Groups Printed- Vehicles - Trucks - Buses

	SR 53 Northbound					SR 53 Southbound					McEver Coners Eastbound					Jackson EMC Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	152	1	0	155	0	332	1	0	333	7	0	0	0	7	0	0	0	0	0	495
07:15 AM	0	125	1	0	126	1	435	0	0	436	2	1	0	0	3	0	0	0	0	0	565
07:30 AM	1	164	1	0	166	2	540	0	0	542	1	0	0	0	1	0	0	0	0	0	709
07:45 AM	1	151	3	0	155	2	502	2	0	506	3	0	0	0	3	0	0	0	0	0	664
Total	4	592	6	0	602	5	1809	3	0	1817	13	1	0	0	14	0	0	0	0	0	2433
08:00 AM	5	170	0	0	175	0	374	0	0	374	6	0	1	0	7	1	0	0	0	1	557
08:15 AM	3	169	1	0	173	0	331	1	1	333	8	0	0	0	8	0	0	0	0	0	514
08:30 AM	4	186	0	0	190	0	341	0	0	341	2	0	1	0	3	0	0	0	0	0	534
08:45 AM	5	182	0	0	187	0	335	0	0	335	6	0	0	0	6	1	0	0	0	1	529
Total	17	707	1	0	725	0	1381	1	1	1383	22	0	2	0	24	2	0	0	0	2	2134
*** BREAK ***																					
04:00 PM	5	394	0	0	399	1	355	3	0	359	4	0	2	0	6	0	0	0	0	0	764
04:15 PM	7	436	0	0	443	0	339	2	0	341	5	0	0	0	5	0	0	0	0	0	789
04:30 PM	5	465	0	0	470	0	338	3	1	342	7	0	1	0	8	0	0	0	0	0	820
04:45 PM	6	448	1	0	455	0	356	4	0	360	10	0	0	0	10	0	0	0	0	0	825
Total	23	1743	1	0	1767	1	1388	12	1	1402	26	0	3	0	29	0	0	0	0	0	3198
05:00 PM	4	542	0	0	546	0	385	4	3	392	3	0	3	0	6	0	0	2	0	2	946
05:15 PM	6	528	3	1	538	0	376	0	0	376	7	0	4	0	11	1	0	0	0	1	926
05:30 PM	4	524	1	0	529	1	334	5	0	340	6	0	5	0	11	0	0	0	0	0	880
05:45 PM	4	511	4	0	519	2	374	2	0	378	5	0	2	0	7	0	0	1	0	1	905
Total	18	2105	8	1	2132	3	1469	11	3	1486	21	0	14	0	35	1	0	3	0	4	3657
Grand Total	62	5147	16	1	5226	9	6047	27	5	6088	82	1	19	0	102	3	0	3	0	6	11422
Apprch %	1.2	98.5	0.3	0		0.1	99.3	0.4	0.1		80.4	1	18.6	0		50	0	50	0		
Total %	0.5	45.1	0.1	0	45.8	0.1	52.9	0.2	0	53.3	0.7	0	0.2	0	0.9	0	0	0	0	0.1	
Vehicles	61	5031	16	1	5109	9	5918	27	5	5959	82	1	18	0	101	3	0	3	0	6	11175
% Vehicles	98.4	97.7	100	100	97.8	100	97.9	100	100	97.9	100	100	94.7	0	99	100	0	100	0	100	97.8
Trucks	1	110	0	0	111	0	123	0	0	123	0	0	1	0	1	0	0	0	0	0	235
% Trucks	1.6	2.1	0	0	2.1	0	2	0	0	2	0	0	5.3	0	1	0	0	0	0	0	2.1
Buses	0	6	0	0	6	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	12
% Buses	0	0.1	0	0	0.1	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1

Greater Traffic Company

File Name : Driveway
Site Code : 00000002
Start Date : 5/25/2017
Page No : 2

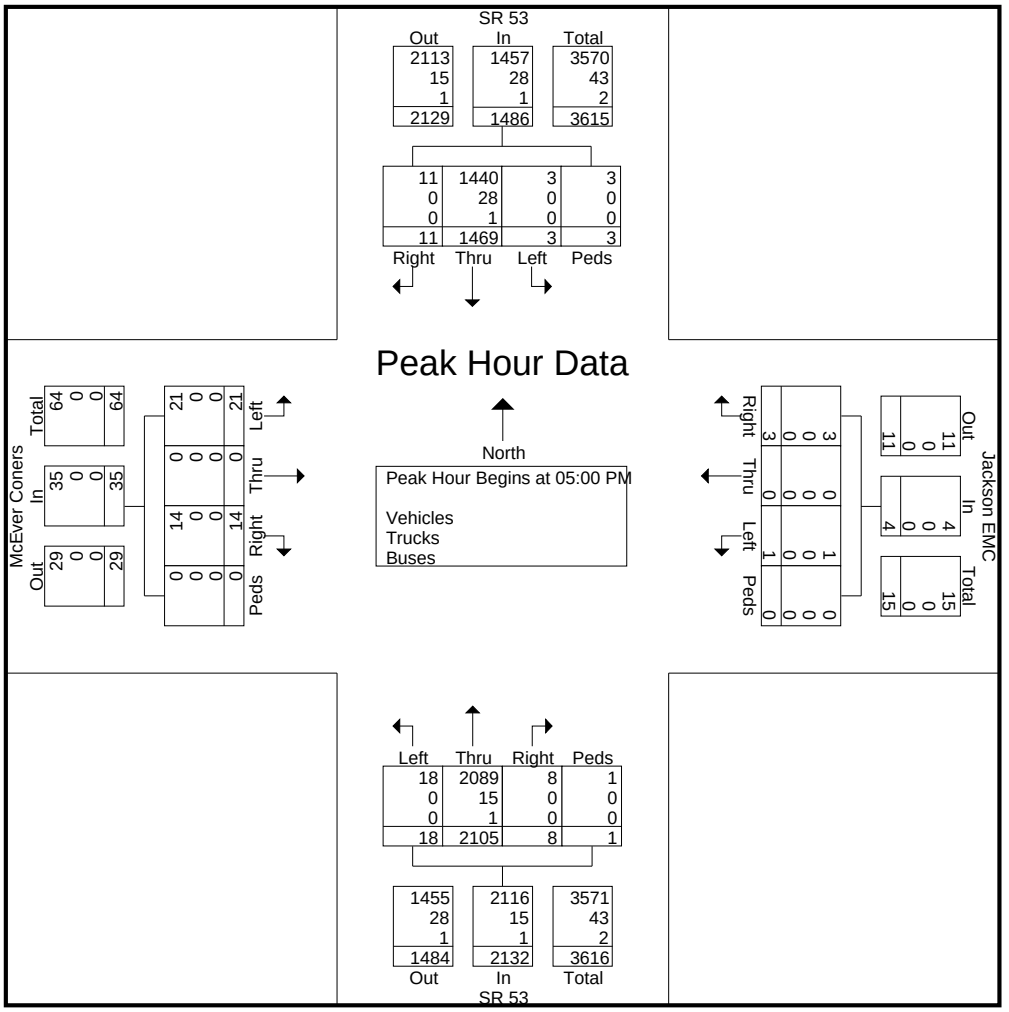
	SR 53 Northbound					SR 53 Southbound					McEver Coners Eastbound					Jackson EMC Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	125	1	0	126	1	435	0	0	436	2	**1**	0	0	3	0	0	0	0	0	565
07:30 AM	1	164	1	0	166	**2**	**540**	0	0	**542**	1	0	0	0	1	0	0	0	0	0	**709**
07:45 AM	1	151	**3**	0	155	2	502	**2**	0	506	3	0	0	0	3	0	0	0	0	0	664
08:00 AM	**5**	**170**	0	0	**175**	0	374	0	0	374	**6**	0	**1**	0	**7**	**1**	0	0	0	**1**	557
Total Volume	7	610	5	0	622	5	1851	2	0	1858	12	1	1	0	14	1	0	0	0	1	2495
% App. Total	1.1	98.1	0.8	0		0.3	99.6	0.1	0		85.7	7.1	7.1	0		100	0	0	0		
PHF	.350	.897	.417	.000	.889	.625	.857	.250	.000	.857	.500	.250	.250	.000	.500	.250	.000	.000	.000	.250	.880
Vehicles	7	579	5	0	591	5	1826														
% Vehicles	100	94.9	100	0	95.0	100	98.6	100	0	98.7	100	100	100	0	100	100	0	0	0	100	97.8
Trucks	0	30	0	0	30	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	54
% Trucks	0	4.9	0	0	4.8	0	1.3	0	0	1.3	0	0	0	0	0	0	0	0	0	0	2.2
Buses	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0.2	0	0	0.2	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1



Greater Traffic Company

File Name : Driveway
Site Code : 00000002
Start Date : 5/25/2017
Page No : 3

	SR 53 Northbound					SR 53 Southbound					McEver Coners Eastbound					Jackson EMC Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. 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	4	**542**	0	0	**546**	0	**385**	4	**3**	**392**	3	0	3	0	6	0	0	**2**	0	**2**	**946**
05:15 PM	**6**	528	3	**1**	538	0	376	0	0	376	**7**	0	4	0	**11**	**1**	0	0	0	1	926
05:30 PM	4	524	1	0	529	1	334	**5**	0	340	6	0	**5**	0	11	0	0	0	0	0	880
05:45 PM	4	511	**4**	0	519	**2**	374	2	0	378	5	0	2	0	7	0	0	1	0	1	905
Total Volume	18	2105	8	1	2132	3	1469	11	3	1486	21	0	14	0	35	1	0	3	0	4	3657
% App. Total	0.8	98.7	0.4	0		0.2	98.9	0.7	0.2		60	0	40	0		25	0	75	0		
PHF	.750	.971	.500	.250	.976	.375	.954	.550	.250	.948	.750	.000	.700	.000	.795	.250	.000	.375	.000	.500	.966
Vehicles	18	2089					1440														
% Vehicles	100	99.2	100	100	99.2	100	98.0	100	100	98.0	100	0	100	0	100	100	0	100	0	100	98.8
Trucks	0	15	0	0	15	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	43
% Trucks	0	0.7	0	0	0.7	0	1.9	0	0	1.9	0	0	0	0	0	0	0	0	0	0	1.2
Buses	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0.0	0	0	0.0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1



Greater Traffic Company

File Name : SR 53
Site Code : 00000001
Start Date : 5/25/2017
Page No : 1

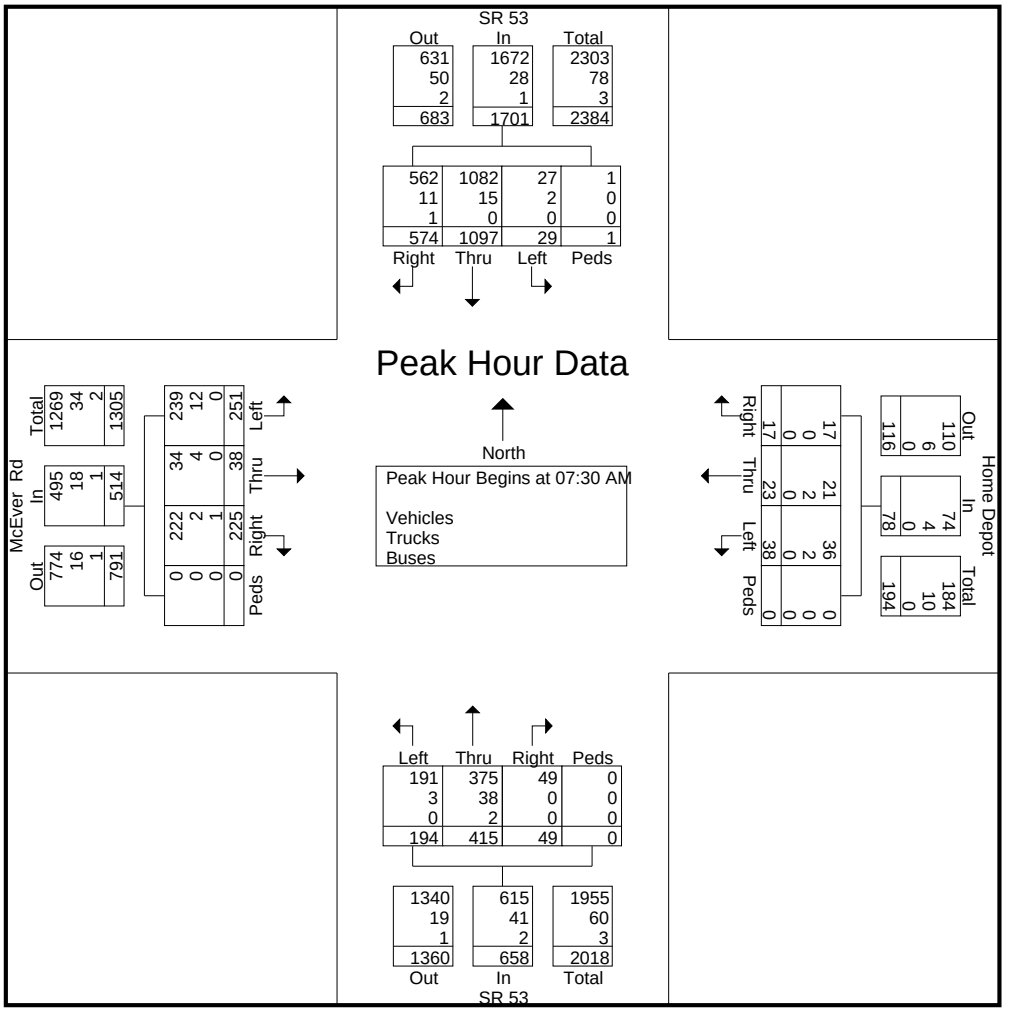
Groups Printed- Vehicles - Trucks - Buses

	SR 53 Northbound					SR 53 Southbound					McEver Rd Eastbound					Home Depot Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	38	100	6	0	144	3	204	102	1	310	51	1	42	0	94	10	3	2	0	15	563
07:15 AM	38	78	5	0	121	6	264	154	0	424	46	3	45	0	94	5	4	1	0	10	649
07:30 AM	56	104	7	0	167	5	352	192	1	550	66	6	63	0	135	4	10	2	0	16	868
07:45 AM	54	91	10	0	155	7	299	165	0	471	55	15	62	0	132	6	3	4	0	13	771
Total	186	373	28	0	587	21	1119	613	2	1755	218	25	212	0	455	25	20	9	0	54	2851
08:00 AM	43	104	14	0	161	8	231	121	0	360	62	11	46	0	119	14	4	4	0	22	662
08:15 AM	41	116	18	0	175	9	215	96	0	320	68	6	54	0	128	14	6	7	0	27	650
08:30 AM	42	118	29	0	189	8	212	95	0	315	71	10	67	0	148	15	7	5	1	28	680
08:45 AM	44	109	19	0	172	18	220	89	0	327	84	16	74	1	175	14	7	13	0	34	708
Total	170	447	80	0	697	43	878	401	0	1322	285	43	241	1	570	57	24	29	1	111	2700
*** BREAK ***																					
04:00 PM	90	238	26	0	354	26	207	117	0	350	170	23	106	0	299	42	26	22	0	90	1093
04:15 PM	103	272	20	0	395	16	205	102	0	323	166	28	111	0	305	29	23	18	0	70	1093
04:30 PM	82	314	29	0	425	13	220	122	0	355	139	22	103	0	264	38	29	25	0	92	1136
04:45 PM	98	259	18	2	377	18	200	96	0	314	190	35	82	0	307	36	22	20	0	78	1076
Total	373	1083	93	2	1551	73	832	437	0	1342	665	108	402	0	1175	145	100	85	0	330	4398
05:00 PM	107	344	18	0	469	15	228	134	0	377	178	44	79	1	302	28	15	21	0	64	1212
05:15 PM	84	311	17	4	416	20	225	119	0	364	190	62	75	0	327	33	21	24	0	78	1185
05:30 PM	103	317	21	0	441	10	210	101	0	321	198	42	88	0	328	27	23	28	0	78	1168
05:45 PM	96	329	13	0	438	18	243	127	0	388	157	33	74	0	264	19	26	24	1	70	1160
Total	390	1301	69	4	1764	63	906	481	0	1450	723	181	316	1	1221	107	85	97	1	290	4725
Grand Total	1119	3204	270	6	4599	200	3735	1932	2	5869	1891	357	1171	2	3421	334	229	220	2	785	14674
Apprch %	24.3	69.7	5.9	0.1		3.4	63.6	32.9	0		55.3	10.4	34.2	0.1		42.5	29.2	28	0.3		
Total %	7.6	21.8	1.8	0	31.3	1.4	25.5	13.2	0	40	12.9	2.4	8	0	23.3	2.3	1.6	1.5	0	5.3	
Vehicles	1109	3101	266	6	4482	196	3658	1882	2	5738	1857	351	1156	2	3366	328	224	217	2	771	14357
% Vehicles	99.1	96.8	98.5	100	97.5	98	97.9	97.4	100	97.8	98.2	98.3	98.7	100	98.4	98.2	97.8	98.6	100	98.2	97.8
Trucks	10	97	4	0	111	4	75	45	0	124	34	6	11	0	51	6	5	3	0	14	300
% Trucks	0.9	3	1.5	0	2.4	2	2	2.3	0	2.1	1.8	1.7	0.9	0	1.5	1.8	2.2	1.4	0	1.8	2
Buses	0	6	0	0	6	0	2	5	0	7	0	0	4	0	4	0	0	0	0	0	17
% Buses	0	0.2	0	0	0.1	0	0.1	0.3	0	0.1	0	0	0.3	0	0.1	0	0	0	0	0	0.1

Greater Traffic Company

File Name : SR 53
Site Code : 00000001
Start Date : 5/25/2017
Page No : 2

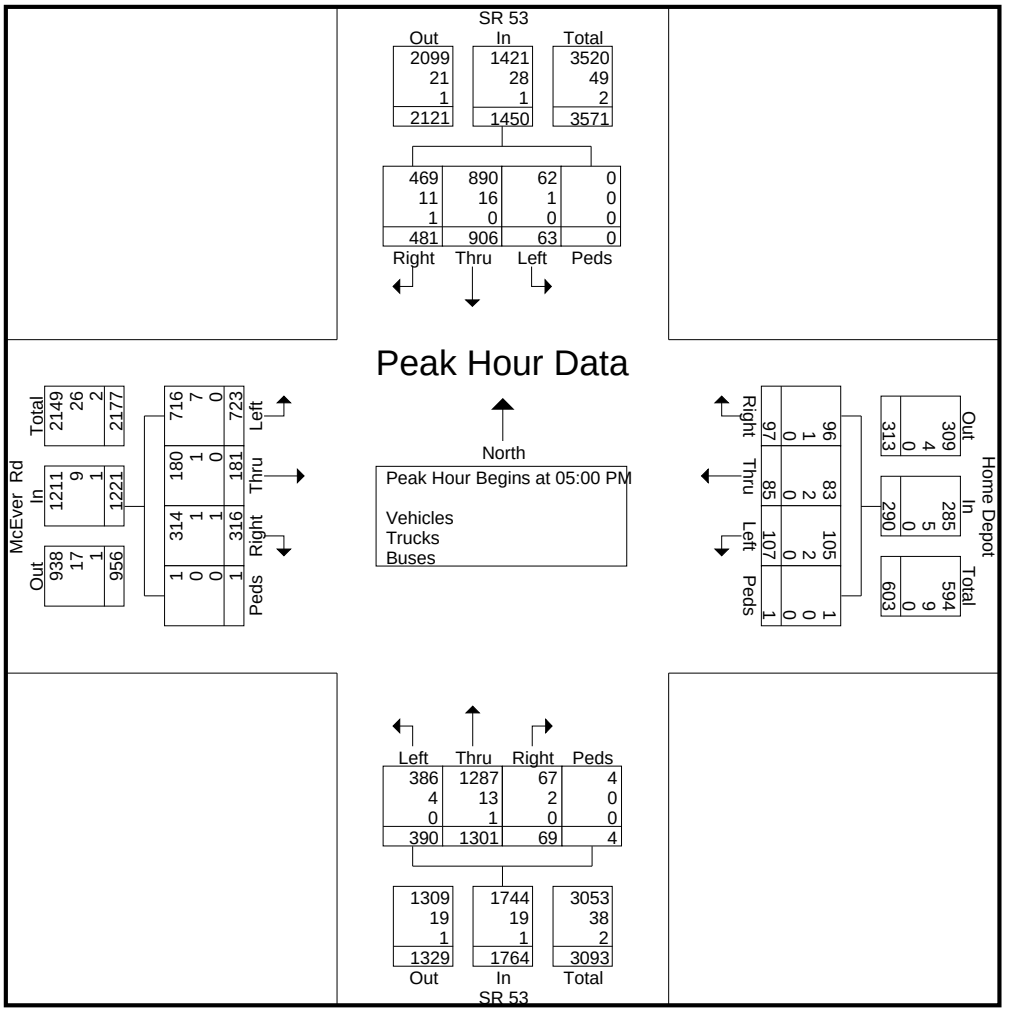
	SR 53 Northbound					SR 53 Southbound					McEver Rd Eastbound					Home Depot Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**56**	104	7	0	167	5	**352**	**192**	**1**	**550**	66	6	**63**	0	**135**	4	**10**	2	0	16	**868**
07:45 AM	54	91	10	0	155	7	299	165	0	471	55	**15**	62	0	132	6	3	4	0	13	771
08:00 AM	43	104	14	0	161	8	231	121	0	360	62	11	46	0	119	**14**	4	4	0	22	662
08:15 AM	41	**116**	**18**	0	**175**	**9**	215	96	0	320	**68**	6	54	0	128	14	6	**7**	0	**27**	650
Total Volume	194	415	49	0	658	29	1097	574	1	1701	251	38	225	0	514	38	23	17	0	78	2951
% App. Total	29.5	63.1	7.4	0		1.7	64.5	33.7	0.1		48.8	7.4	43.8	0		48.7	29.5	21.8	0		
PHF	.866	.894	.681	.000	.940	.806	.779	.747	.250	.773	.923	.633	.893	.000	.952	.679	.575	.607	.000	.722	.850
Vehicles	191	375	49	0	615	27	1082														
% Vehicles	98.5	90.4	100	0	93.5	93.1	98.6	97.9	100	98.3	95.2	89.5	98.7	0	96.3	94.7	91.3	100	0	94.9	96.8
Trucks	3	38	0	0	41	2	15	11	0	28	12	4	2	0	18	2	2	0	0	4	91
% Trucks	1.5	9.2	0	0	6.2	6.9	1.4	1.9	0	1.6	4.8	10.5	0.9	0	3.5	5.3	8.7	0	0	5.1	3.1
Buses	0	2	0	0	2	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	4
% Buses	0	0.5	0	0	0.3	0	0	0.2	0	0.1	0	0	0.4	0	0.2	0	0	0	0	0	0.1



Greater Traffic Company

File Name : SR 53
Site Code : 00000001
Start Date : 5/25/2017
Page No : 3

	SR 53 Northbound					SR 53 Southbound					McEver Rd Eastbound					Home Depot Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. 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	**107**	**344**	18	0	**469**	15	228	**134**	0	377	178	44	79	**1**	302	28	15	21	0	64	**1212**
05:15 PM	84	311	17	**4**	416	**20**	225	119	0	364	190	**62**	75	0	327	**33**	21	24	0	**78**	1185
05:30 PM	103	317	**21**	0	441	10	210	101	0	321	**198**	42	**88**	0	**328**	27	23	**28**	0	78	1168
05:45 PM	96	329	13	0	438	18	**243**	127	0	**388**	157	33	74	0	264	19	**26**	24	**1**	70	1160
Total Volume	390	1301	69	4	1764	63	906	481	0	1450	723	181	316	1	1221	107	85	97	1	290	4725
% App. Total	22.1	73.8	3.9	0.2		4.3	62.5	33.2	0		59.2	14.8	25.9	0.1		36.9	29.3	33.4	0.3		
PHF	.911	.945	.821	.250	.940	.788	.932	.897	.000	.934	.913	.730	.898	.250	.931	.811	.817	.866	.250	.929	.975
Vehicles	386	1287																			
% Vehicles	99.0	98.9	97.1	100	98.9	98.4	98.2	97.5	0	98.0	99.0	99.4	99.4	100	99.2	98.1	97.6	99.0	100	98.3	98.6
Trucks	4	13	2	0	19	1	16	11	0	28	7	1	1	0	9	2	2	1	0	5	61
% Trucks	1.0	1.0	2.9	0	1.1	1.6	1.8	2.3	0	1.9	1.0	0.6	0.3	0	0.7	1.9	2.4	1.0	0	1.7	1.3
Buses	0	1	0	0	1	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	3
% Buses	0	0.1	0	0	0.1	0	0	0.2	0	0.1	0	0	0.3	0	0.1	0	0	0	0	0	0.1



APPENDIX B – Traffic Signal Timing Data

SEPAC ECOM All Data

6/19/2017
4:31:00PM

Intersection Name: **G0307 Dawsonville @ McEver** Intersection Alias: **G0307**

Access Data

1 :**1200 Baud**
3 :**19200 Baud**

Access Code: **9999** Channel: Address: **1**

Revision: **3.34g** IP Address: **192.168.34.86**

Phase Initialization Data

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Initial	2-Red	1-Inact	1-Inact	1-Inact	2-Red	1-Inact	1-Inact	1-Inact	0-None	0-None	0-None	0-None	0-None	0-None	0-None	0-None

PHASE DATA

	Vehical Basic Timings						Misc Timings						Pedestrian Timings						
Phase	Min Green	Passage	Max1	Max2	Yellow	All Red	Green Delay	Yellow Delay	Walk Offset Time	Walk Offset Mode	Bike Green	Bike Psg	Walk	Ped Clr	Alt Walk	Alt Ped Clr	Flash Walk	Ext Ped Clr	Actuated Rest in Walk
1	5	4.1	20	45	4.5	3.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
2	16	5.1	50	90	4.4	2.2	0.0	0.0	0	0-Advance	0	0	4	34	0	0	No	0	No
3	5	3.1	25	45	4.3	3.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
4	5	3.1	25	35	4.3	3.0	0.0	0.0	0	0-Advance	0	0	4	36	0	0	No	0	No
5	5	3.1	20	35	4.2	3.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
6	12	5.1	50	90	4.4	2.2	0.0	0.0	0	0-Advance	0	0	4	25	0	0	No	0	No
7	5	3.1	25	45	3.5	3.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
8	5	3.1	15	20	4.3	3.0	0.0	0.0	0	0-Advance	0	0	4	38	0	0	No	0	No
9	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
10	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
11	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
12	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
13	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
14	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
15	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No
16	0	0.0	0	0	3.0	0.0	0.0	0.0	0	0-Advance	0	0	0	0	0	0	No	0	No

	Vehicle Density Timings						General Control				Miscellaneous					Special Sequence		
Ph.	Added Initial	Max Initial	Time B4 Redu	Car B4 Redu	Time To Redu	Min Gap	Non-Act Response	Veh Recall	Ped Recall	Recall Delay	Non Lock	Dual Entry	Last Car Pass	Condit Service	No Simu Gap Out	Omit	Minus Yel	Omit Call
1	0.0	0	0	0	0	0.0	None	None	None	0	Yes	No	No	No	Yes	0	0	0
2	2.0	30	15	0	15	3.0	NonActI	Min	None	0	No	Yes	No	No	No	0	0	0
3	0.0	0	0	0	0	0.0	None	None	None	0	Yes	No	No	No	Yes	0	0	0
4	0.0	0	0	0	0	0.0	None	None	None	0	Yes	Yes	No	No	No	0	0	0
5	0.0	0	0	0	0	0.0	None	None	None	0	Yes	No	No	No	Yes	0	0	0
6	2.0	30	15	0	15	3.0	NonActI	Min	None	0	No	Yes	No	No	No	0	0	0
7	0.0	0	0	0	0	0.0	None	None	None	0	Yes	No	No	No	Yes	8	0	0
8	0.0	0	0	0	0	0.0	None	None	None	0	Yes	Yes	No	No	No	0	0	0
9	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
10	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
11	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
12	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
13	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
14	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0
15	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0

16	0.0	0	0	0	0	0.0	None	None	None	0	No	No	No	No	No	0	0	0

Vehical Detector Phase Assignment

	Assign Phase	Mode	Switch Phase	Extend	Delay
Veh Det:3	2	Veh	0	0.0	0
Veh Det:4	2	Veh	0	0.0	0
Veh Det:5	2	Veh	0	0.0	0
Veh Det:6	2	Veh	0	0.0	0
Veh Det:7	2	Veh	0	0.0	0
Veh Det:9	3	Veh	0	0.0	0
Veh Det:11	4	Veh	0	0.0	0
Veh Det:12	4	Veh	0	0.0	0
Veh Det:13	4	Veh	0	0.0	0
Veh Det:14	4	Veh	0	0.0	0
Veh Det:15	4	Veh	0	0.0	0
Veh Det:17	1	Veh	0	0.0	0
Veh Det:18	3	Veh	0	0.0	0
Veh Det:19	5	Veh	0	0.0	0
Veh Det:21	6	Veh	0	0.0	0
Veh Det:22	6	Veh	0	0.0	0
Veh Det:23	6	Veh	0	0.0	0
Veh Det:24	6	Veh	0	0.0	0
Veh Det:25	6	Veh	0	0.0	0
Veh Det:29	7	Veh	0	0.0	0
Veh Det:31	8	Veh	0	0.0	0
Veh Det:32	8	Veh	0	0.0	0
Veh Det:33	8	Veh	0	0.0	0
Veh Det:34	8	Veh	0	0.0	0
Veh Det:35	8	Veh	0	0.0	0

Pedestrian Detector

Assign Phase	Mode	Switch Phase	Extend	Delay
Default Data				

Special Detector Phase Assignment

Assign Phase	Mode	Switch Phase	Extend	Delay
Default Data				

Unit Data

General Control

Startup Time:	4 sec
Startup State:	All Red
Red Revert:	50.0 sec
Auto Ped Clr:	No
Stop T Reset:	No
Alt Sequence:	0
Special Seq:	0-Standard

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

I/O Modes:

ABC Input(Entry) Modes: 0 **D Input(Entry) Modes:** 0

ABC Output(O/STS) Modes: 0 **D Output(O/STS) Modes:** 0

Remote Flash

Test A = Flash

Phase	Entry	Exit

Default Data
- No Flash

Default Data
- No Flash

Overlaps

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

Start Green

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

Minus PED

Overlaps

Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TG Preempt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stop Grn/Yel Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
3	1	4
4	1	1
5	2	6
6	2	7
7	2	8
8	2	5

Phase(s)

Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

	Ph. Pair 1	Ph. Pair 2	Ph. Pair 3	Ph. Pair 4
Alt. Seq. 1	**1/2**			
Alt. Seq. 2	**3/4**			
Alt. Seq. 3	**1/2**	**3/4**		
Alt. Seq. 4	**5/6**			
Alt. Seq. 5	**1/2**	**5/6**		
Alt. Seq. 6	**3/4**	**5/6**		
Alt. Seq. 7	**1/2**	**3/4**	**5/6**	
Alt. Seq. 8	**7/8**			
Alt. Seq. 9	**1/2**	**7/8**		
Alt. Seq. 10	**3/4**	**7/8**		
Alt. Seq. 11	**1/2**	**3/4**	**7/8**	
Alt. Seq. 12	**5/6**	**7/8**		
Alt. Seq. 13	**1/2**	**5/6**	**7/8**	
Alt. Seq. 14	**3/4**	**5/6**	**7/8**	
Alt. Seq. 15	**1/2**	**3/4**	**5/6**	**7/8**

Port 1 Data

BIU Addr	Port Status	Basic Det	Message 40

Default Data

Signal Driver Ouput

Channel	Control	Hardware Pins
1	1 - Veh Phase 1	1 - Phase 1 RYG
2	2 - Veh Phase 2	2 - Phase 2 RYG
3	3 - Veh Phase 3	3 - Phase 3 RYG
4	4 - Veh Phase 4	4 - Phase 4 RYG
5	5 - Veh Phase 5	5 - Phase 5 RYG
6	6 - Veh Phase 6	6 - Phase 6 RYG
7	7 - Veh Phase 7	7 - Phase 7 RYG
8	8 - Veh Phase 8	8 - Phase 8 RYG
9	18 - Ped Phase 2	10 - Phase 2 DPW
10	20 - Ped Phase 4	12 - Phase 4 DPW
11	22 - Ped Phase 6	14 - Phase 6 DPW
12	24 - Ped Phase 8	16 - Phase 8 DPW
13	33 - Overlap A	17 - Overlap A RYG
14	34 - Overlap B	18 - Overlap B RYG
15	35 - Overlap C	19 - Overlap C RYG
16	36 - Overlap D	20 - Overlap D RYG
17	17 - Ped Phase 1	9 - Phase 1 DPW
18	19 - Ped Phase 3	11 - Phase 3 DPW
19	21 - Ped Phase 5	13 - Phase 5 DPW
20	23 - Ped Phase 7	15 - Phase 7 DPW

Coordination Data

General Coordination Data

Operation Mode: 1=Auto
Coordination Mode: 0=Permissive
Maximun Mode: 2=Max 2
Correction Mode: 2=Short Way

Offset Mode: 1=End Grn
Force Mode: 0=Plan
Max Dwell Time: 30
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Dial/Split	Cycle
1/1	150
1/2	140
1/3	130
1/4	150
2/1	160
2/2	140
2/3	140
2/4	160
3/1	160
3/2	130
3/3	160
3/4	160
4/1	160
4/2	160
4/3	160
4/4	160

Split Times and Phase Modes

Dial 1 / **Split** 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	22	0=Actuated	2	57	1=Coordinate	3	28	0=Actuated	4	43	0=Actuated
5	20	0=Actuated	6	59	1=Coordinate	7	16	0=Actuated	8	55	0=Actuated

Dial 1 / **Split** 2

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	30	0=Actuated	4	25	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	30	0=Actuated	8	25	0=Actuated

Dial 1 / **Split** 3

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	30	0=Actuated	2	50	1=Coordinate	3	30	0=Actuated	4	20	0=Actuated
5	20	0=Actuated	6	60	1=Coordinate	7	25	0=Actuated	8	25	0=Actuated

Dial 1 / **Split** 4

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	22	0=Actuated	2	57	1=Coordinate	3	28	0=Actuated	4	43	0=Actuated
5	20	0=Actuated	6	59	1=Coordinate	7	16	0=Actuated	8	55	0=Actuated

Dial 2 / **Split** 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	40	0=Actuated	4	35	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Dial 2 / **Split** 2

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	30	0=Actuated	4	25	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	30	0=Actuated	8	25	0=Actuated

Dial 2 / **Split** 3

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	30	0=Actuated	4	25	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	30	0=Actuated	8	25	0=Actuated

Dial 2 / **Split** 4

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	33	0=Actuated	2	67	1=Coordinate	3	28	0=Actuated	4	32	0=Actuated
5	25	0=Actuated	6	75	1=Coordinate	7	33	0=Actuated	8	27	0=Actuated

Dial 3 / **Split** 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	45	0=Actuated	4	30	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Dial 3 / **Split** 2

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	30	0=Actuated	2	50	1=Coordinate	3	30	0=Actuated	4	20	0=Actuated
5	20	0=Actuated	6	60	1=Coordinate	7	25	0=Actuated	8	25	0=Actuated

Dial 3 / **Split** 3

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	45	0=Actuated	4	30	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Dial 3 / **Split** 4

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	33	0=Actuated	2	70	1=Coordinate	3	35	0=Actuated	4	22	0=Actuated
5	18	0=Actuated	6	85	1=Coordinate	7	35	0=Actuated	8	22	0=Actuated

Dial 4 / **Split** 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	40	0=Actuated	4	35	0=Actuated

5	20	0=Actuated	6	65	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Dial 4 / **Split** 2

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	40	0=Actuated	4	35	0=Actuated
5	25	0=Actuated	6	60	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Dial 4 / **Split** 3

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	45	0=Actuated	4	30	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Dial 4 / **Split** 4

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	35	0=Actuated	2	50	1=Coordinate	3	45	0=Actuated	4	30	0=Actuated
5	20	0=Actuated	6	65	1=Coordinate	7	40	0=Actuated	8	35	0=Actuated

Traffic Plan Data

Plan: 1/1/1	Offset Time: 19	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 1/2/1	Offset Time: 120	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 1/3/1	Offset Time: 110	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 1/4/1	Offset Time: 19	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 2/1/1	Offset Time: 80	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 2/2/1	Offset Time: 120	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 2/3/1	Offset Time: 120	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		

Plan: 2/4/1	Offset Time: 105	Alternat Sequence: 0	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 3/1/1	Offset Time: 40	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 3/2/1	Offset Time: 110	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 3/3/1	Offset Time: 52	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 3/4/1	Offset Time: 88	Alternat Sequence: 0	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 4/1/1	Offset Time: 80	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 4/2/1	Offset Time: 80	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		
Plan: 4/3/1	Offset Time: 52	Alternat Sequence: 1	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
	Mode: 0=Normal	Special Function: 0	Correction Mode: 0=No		

Plan: 4/4/1 Offset Time: 52 Alternat Sequence: 1 Rg 2 Lag Time: 0 Rg 3 Lag Time: 0 Rg 4 Lag Time: 0

Mode: 0=Normal Special Function: 0 Correction Mode: 0=No

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 4 Min: 30

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7
1	51	0	0	0	0	0	0
2	3	4	5	6	52	0	0
7	57	0	0	0	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4																	
2	1	8:0	1/2/1																	
3	1	11:0	2/1/1																	
4	1	14:0	2/2/1																	
5	1	20:0	0/0/4																	
6	2	0:1	0/0/4																	
7	2	6:0	1/1/1																	
8	2	9:30	1/2/1																	
9	2	11:0	2/1/1																	
10	2	15:0	3/1/1																	
11	2	19:0	3/2/1																	
12	2	21:0	0/0/4																	
13	7	0:1	0/0/4																	
14	7	8:0	1/2/1																	
15	7	10:0	2/1/1																	
16	7	21:0	2/2/1																	
17	7	22:0	0/0/4																	
18	71	0:1	0/0/4																	
19	71	8:0	2/2/1																	
20	71	10:0	2/4/1																	
21	71	21:0	2/2/1																	
22	71	22:0	0/0/4																	
23	72	0:1	0/0/4																	
24	72	6:0	1/1/1																	
25	72	9:30	2/1/1																	
26	72	11:0	2/4/1																	
27	72	15:0	3/4/1																	
28	72	19:0	2/2/1																	
29	72	21:0	0/0/4																	

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8

Event	Month	Day	Year	Special Day	Special Week
1	11	24	16	57	0
2	11	25	16	71	0
3	11	26	16	71	0
4	11	27	16	71	0
5	12	3	16	71	0
6	12	4	16	71	0
7	12	10	16	71	0
8	12	11	16	71	0
9	12	12	16	72	0
10	12	13	16	72	0
11	12	14	16	72	0
12	12	15	16	72	0
13	12	16	16	72	0
14	12	17	16	71	0
15	12	18	16	71	0
16	12	19	16	72	0
17	12	20	16	72	0
18	12	21	16	72	0
19	12	22	16	72	0
20	12	23	16	72	0
21	12	24	16	72	0
22	1	1	100	1	0
23	7	4	100	7	0
24	12	25	100	1	0

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8	SF9	SF10	SF11	SF12	SF13	SF14	SF15	SF16
Special Function 1	X															
Special Function 2		X														
Special Function 3			X													
Special Function 4				X												
Special Function 5					X											
Special Function 6						X										
Special Function 7							X									
Special Function 8								X								

Phase Function

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								

Phase Omit

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Ped Omit

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Veh Det Coord ReSvc

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Function Phase Recall

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max Recall									X							
Phase 2 Max Recall										X						
Phase 3 Max Recall											X					
Phase 4 Max Recall												X				
Phase 5 Max Recall													X			
Phase 6 Max Recall														X		
Phase 7 Max Recall															X	
Phase 8 Max Recall																X

Phase Min Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Veh Det Ped Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Veh Det Bike Recall

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Vehicle Function

Veh Det Switch Omit

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Veh Det Switch Now

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Veh Det Switch Also

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Overlap Function

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Dimming Data

Default Data - No Dimming Programmed

Lane Defination

Lanes	Name	Green Inbound	Yellow Inbound	Red Inbound	Green Outbound	Yellow Outbound

Default Data - Lane Defination

program_day	program_hour	program_minute	LanePhFun

Preemption Data

General Preemption Data

Preempt > Flash	Preempt 2 > Preempt 3	Preempt 4 > Preempt 5
Preempt 1 > Preempt 2	Preempt 3 > Preempt 4	Preempt 5 > Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Ext end	Duration	Max Call	Lock-Out	Min Green	Min Walk	Debounce	Gate ext end	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	0	0	0	0	8	40	20	10	8	40	20	10	8	40	20
2	No	0	0	0	0	0	0	0	0	0	0	8	40	20	10	8	40	20	10	8	40	20
3	No	0	0	0	0	0	0	0	0	0	0	8	40	20	10	8	40	20	10	8	40	20
4	No	0	0	0	0	0	0	0	0	0	0	8	40	20	10	8	40	20	10	8	40	20
5	No	0	0	0	0	0	0	0	0	0	0	8	40	20	10	8	40	20	10	8	40	20
6	No	0	0	0	0	0	0	0	0	0	0	8	40	20	10	8	40	20	10	8	40	20

Preempt 1			Preempt 2			Preempt 3			Preempt 4			Preempt 5			Preempt 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Priority Timers

Priority	Non-Locking	Delay	Ext end	Free Dial	Free Split	Min Green	No Lock out	Lock out A	Lock out B	Max Green	Pre-Green	Recall	Excl-co Phase Svc.	Transit Overlap: Signal Type	Transit Overlap: Blankout

Priority Detector Channels

Priority

Detector

Priority Fixed Phases

Priority

Legend: 0 1
CO-PHASE FALSE TRUE
QJ-PHASE

Priority

Priority Bank : Level

Partial Priority	**Full Priority**	**Recovery**
Alt Seq	Freq. Override	Method
Alt Seq Enabled	Ped skip	Return
Min Walk	Force full Priority	PedWait
	Frequency	PedOverride
	Freq. Level	

Codes:	0	X
	FALSE	TRUE

Priority :

Priority Bank :

Queue	Phase	Detector	Time

Default data

Priority :

Priority Bank :

Queue	Phase	Detector	Time

Default data

Priority :

Priority Bank :

Queue	Phase	Detector	Time

Default data

Priority :

Priority Bank :

Queue	Phase	Detector	Time

Default data

Priority :

Priority Bank :

Queue	Phase	Detector	Time

Default data

Priority :

Priority Bank :

Queue	Phase	Detector	Time

Default data

Priority :

Bank

Detector	PE	1A	2A	3A	4A	5A	6A	B

Default Data

Priority :

Bank

Detector	PE	1A	2A	3A	4A	5A	6A	B

Default Data

Priority :

Bank

Detector	PE	1A	2A	3A	4A	5A	6A	B

Default Data

Priority :

Bank

Detector	PE	1A	2A	3A	4A	5A	6A	B

Default Data

Priority :

Bank

Detector	PE	1A	2A	3A	4A	5A	6A	B

Default Data

Priority :

Bank

Detector	PE	1A	2A	3A	4A	5A	6A	B

Default Data

Preempt 1

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

Preempt 2

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

Preempt 3

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

Preempt 4

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

Preempt 5

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

Preempt 6

Vehical Phases				Pedestrian Phases				Overlaps				
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn

Default Data **Default Data** **Default Data**

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: Yes Coord Failure: Yes Conflict Flash: Yes Remote Flash: Yes 2nd Phone:

Local Fash: Yes Cycle Fault: Yes Coord Fault: Yes Premption: No Voltage Monitor: Yes

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Name	Veh/ Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %	Queue 1 Detectors	System Detectors	Weight Factor	Queue 2 Detectors	System Detectors	Weight Factor

Default Data **Default Data** **Default Data**

Sample Interval:

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Queue:

Level	Enter	Leave	Dial / Split / Offset
			/ /

Default Data

Vehical Detector Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - Diag 0 Values

Vehical Detector Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Valu

Pedestrian Detector

Diagnostic Value 0

Detector	Max Presence	No Activity	Erratic Count

Pedestrian Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Special Detector

Diagnostic Value 1

Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Values

Default Data - No Diag 1 Values

Default Data - No Diag 1 Values

Speed Trap Low Treshold	Speed Trap High Treshold

Speed Trap Data

Speed Trap:

Measurement:

Detector 1 Detector_2 Distance :

Dial/Split/Offset

//

Default Data

Default Data

Volume Detector Data

Report Interval 0

Volume Detector Number	Controller Detector Channel

Default Data

APPENDIX C – Synchro Printouts

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	1	1	1	0	0	7	610	5	5	1851	2
Future Vol, veh/h	12	1	1	1	0	0	7	610	5	5	1851	2
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	-	-	-	100	-	-	80	-	360
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	0	1	0
Mvmt Flow	14	1	1	1	0	0	8	693	6	6	2103	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2478	2830	1052	1776	2827	349	2103	0	0	699	0	0
Stage 1	2115	2115	-	712	712	-	-	-	-	-	-	-
Stage 2	363	715	-	1064	2115	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	16	18	226	53	18	653	265	-	-	907	-	-
Stage 1	53	92	-	394	439	-	-	-	-	-	-	-
Stage 2	634	438	-	242	92	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	16	17	226	49	17	653	265	-	-	907	-	-
Mov Cap-2 Maneuver	16	17	-	49	17	-	-	-	-	-	-	-
Stage 1	51	91	-	382	426	-	-	-	-	-	-	-
Stage 2	615	425	-	236	91	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 483.4	80.2	0.2	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	265	-	-	16	226	49	907	-	-
HCM Lane V/C Ratio	0.03	-	-	0.923	0.005	0.023	0.006	-	-
HCM Control Delay (s)	19	-	-	$ 519	21	80.2	9	-	-
HCM Lane LOS	C	-	-	F	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.3	0	0.1	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2: SR 53/Dawsonville Hwy & SR 53/McEver Rd/Lakeshore Marketplace dwy

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	295	159	151	45	47	228	488	58	34	1291	675
v/c Ratio	1.02	0.66	0.40	0.21	0.25	0.62	0.26	0.06	0.25	0.75	0.61
Control Delay	109.1	38.4	3.5	35.5	33.4	56.5	16.2	0.1	55.2	28.7	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	109.1	38.4	3.5	35.5	33.4	56.5	16.2	0.1	55.2	28.7	4.3
Queue Length 50th (ft)	~120	57	0	26	18	82	106	0	24	403	0
Queue Length 95th (ft)	#212	123	0	52	50	125	162	0	55	517	45
Internal Link Dist (ft)		546			135		841			829	
Turn Bay Length (ft)	180		475			400		240	250		575
Base Capacity (vph)	290	560	653	380	738	402	1849	988	223	1714	1100
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.28	0.23	0.12	0.06	0.57	0.26	0.06	0.15	0.75	0.61

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	38	225	38	23	17	194	415	49	29	1097	574
Future Volume (veh/h)	251	38	225	38	23	17	194	415	49	29	1097	574
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1810	1830	1881	1782	1779	1872	1863	1727	1900	1776	1881	1863
Adj Flow Rate, veh/h	295	0	295	45	27	20	228	488	58	34	1291	675
Adj No. of Lanes	2	0	2	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	11	1	5	9	9	2	10	0	7	1	2
Cap, veh/h	311	0	348	190	58	43	307	1799	881	51	1778	787
Arrive On Green	0.09	0.00	0.11	0.03	0.06	0.06	0.09	0.55	0.55	0.03	0.50	0.50
Sat Flow, veh/h	3447	0	3198	1698	951	704	3442	3282	1607	1691	3574	1582
Grp Volume(v), veh/h	295	0	295	45	0	47	228	488	58	34	1291	675
Grp Sat Flow(s),veh/h/ln	1723	0	1599	1698	0	1655	1721	1641	1607	1691	1787	1582
Q Serve(g_s), s	9.0	0.0	7.1	2.6	0.0	2.9	6.8	8.3	1.8	2.1	29.9	22.6
Cycle Q Clear(g_c), s	9.0	0.0	7.1	2.6	0.0	2.9	6.8	8.3	1.8	2.1	29.9	22.6
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	0	348	190	0	101	307	1799	881	51	1778	787
V/C Ratio(X)	0.95	0.00	0.85	0.24	0.00	0.46	0.74	0.27	0.07	0.67	0.73	0.86
Avail Cap(c_a), veh/h	311	0	1084	465	0	749	418	1799	881	233	1778	787
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	25.6	44.2	0.0	47.8	46.8	12.6	11.2	50.6	20.8	7.6
Incr Delay (d2), s/veh	37.6	0.0	5.9	0.7	0.0	3.4	4.8	0.4	0.1	20.4	2.6	11.7
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	5.9	0.0	4.1	1.2	0.0	1.4	3.4	3.8	0.8	1.3	15.4	12.2
LnGrp Delay(d),s/veh	85.3	0.0	31.5	44.9	0.0	51.2	51.6	13.0	11.3	71.0	23.5	19.3
LnGrp LOS	F		C	D		D	D	B	B	E	C	B
Approach Vol, veh/h		590			92			774			2000	
Approach Delay, s/veh		58.4			48.1			24.2			22.9	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	65.0	11.0	18.8	16.6	59.0	16.0	13.7
Change Period (Y+Rc), s	7.5	* 7.2	7.3	7.3	* 7.2	6.6	6.5	7.3
Max Green Setting (Gmax), s	14.5	* 50	20.7	35.7	* 13	52.4	9.5	47.7
Max Q Clear Time (g_c+I1), s	4.1	10.3	4.6	9.1	8.8	31.9	11.0	4.9
Green Ext Time (p_c), s	0.0	8.1	0.1	1.5	0.6	17.6	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	0	14	1	0	3	18	2105	8	3	1469	11
Future Vol, veh/h	21	0	14	1	0	3	18	2105	8	3	1469	11
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	100	-	-	80	-	360
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	22	0	14	1	0	3	19	2170	8	3	1514	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2646	3740	760	2975	3736	1090	1517	0	0	2179	0	0
Stage 1	1524	1524	-	2212	2212	-	-	-	-	-	-	-
Stage 2	1122	2216	-	763	1524	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 12	4	353	6	4	214	446	-	-	248	-	-
Stage 1	126	182	-	46	82	-	-	-	-	-	-	-
Stage 2	223	82	-	367	182	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 11	4	352	6	4	214	446	-	-	248	-	-
Mov Cap-2 Maneuver	~ 11	4	-	6	4	-	-	-	-	-	-	-
Stage 1	120	179	-	44	78	-	-	-	-	-	-	-
Stage 2	210	78	-	348	179	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 684.8	203.1	0.1	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	446	-	-	11	352	22	248	-	-
HCM Lane V/C Ratio	0.042	-	-	1.968	0.041	0.187	0.012	-	-
HCM Control Delay (s)	13.4	-	-	$-1130.9	15.7	203.1	19.7	-	-
HCM Lane LOS	B	-	-	F	C	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.6	0.1	0.6	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2: SR 53/Dawsonville Hwy & SR 53/McEver Rd/Lakeshore Marketplace dwy

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	738	269	238	109	186	398	1328	70	64	924	491
v/c Ratio	0.96	0.59	0.42	0.39	0.77	1.36	0.91	0.10	0.46	0.68	0.54
Control Delay	83.1	52.9	7.3	36.6	73.5	232.9	53.0	0.3	78.3	42.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.1	52.9	7.3	36.6	73.5	232.9	53.0	0.3	78.3	42.6	5.0
Queue Length 50th (ft)	376	234	0	70	151	~266	670	0	62	399	0
Queue Length 95th (ft)	#549	352	73	114	240	#402	#963	0	115	517	82
Internal Link Dist (ft)		546			135		841			829	
Turn Bay Length (ft)	180		475			400		240	250		575
Base Capacity (vph)	765	455	570	570	333	292	1465	696	320	1362	911
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.59	0.42	0.19	0.56	1.36	0.91	0.10	0.20	0.68	0.54

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	723	181	316	107	85	97	390	1301	69	63	906	481
Future Volume (veh/h)	723	181	316	107	85	97	390	1301	69	63	906	481
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1844	1872	1881	1881	1845	1863	1863	1863
Adj Flow Rate, veh/h	738	288	254	109	87	99	398	1328	70	64	924	491
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	3	2	2	2
Cap, veh/h	782	510	433	274	99	113	295	1500	652	83	1371	612
Arrive On Green	0.22	0.27	0.27	0.07	0.13	0.13	0.08	0.42	0.42	0.05	0.39	0.39
Sat Flow, veh/h	3583	1881	1597	1747	788	896	3476	3574	1554	1774	3539	1578
Grp Volume(v), veh/h	738	288	254	109	0	186	398	1328	70	64	924	491
Grp Sat Flow(s),veh/h/ln	1792	1881	1597	1747	0	1684	1738	1787	1554	1774	1770	1578
Q Serve(g_s), s	30.6	19.9	15.6	8.1	0.0	16.4	12.8	51.7	4.1	5.4	32.6	20.9
Cycle Q Clear(g_c), s	30.6	19.9	15.6	8.1	0.0	16.4	12.8	51.7	4.1	5.4	32.6	20.9
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	782	510	433	274	0	212	295	1500	652	83	1371	612
V/C Ratio(X)	0.94	0.56	0.59	0.40	0.00	0.88	1.35	0.89	0.11	0.77	0.67	0.80
Avail Cap(c_a), veh/h	796	510	433	592	0	309	295	1500	652	324	1371	612
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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	47.3	26.9	52.2	0.0	64.7	69.0	40.4	26.6	71.0	38.3	10.3
Incr Delay (d2), s/veh	19.3	1.5	2.1	1.0	0.0	17.4	177.6	8.0	0.3	19.6	2.7	10.7
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	17.3	10.5	7.9	3.9	0.0	8.7	13.4	27.1	1.8	3.1	16.4	14.2
LnGrp Delay(d),s/veh	77.3	48.8	29.0	53.1	0.0	82.0	246.6	48.4	26.9	90.6	40.9	21.0
LnGrp LOS	E	D	C	D		F	F	D	C	F	D	C
Approach Vol, veh/h		1280			295			1796			1479	
Approach Delay, s/veh		61.3			71.4			91.5			36.5	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	70.4	17.6	48.2	20.0	65.0	39.4	26.3
Change Period (Y+Rc), s	7.5	* 7.2	7.3	7.3	* 7.2	6.6	6.5	7.3
Max Green Setting (Gmax), s	27.5	* 43	37.7	22.7	* 13	58.4	33.5	27.7
Max Q Clear Time (g_c+I1), s	3.4	53.7	10.1	21.9	14.8	34.6	32.6	18.4
Green Ext Time (p_c), s	0.2	0.0	0.3	0.4	0.0	15.6	0.3	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	65.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection													
Int Delay, s/veh	3.3												
Movement	EBL	EBT	EBR		WBL	WBT	WBR		NBL	NBT	NBR		SBL	SBT	SBR
Lane Configurations															
Traffic Vol, veh/h	12	1	1		1	0	0		7	622	5		5	1888	2
Future Vol, veh/h	12	1	1		1	0	0		7	622	5		5	1888	2
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		-	-	-		100	-	-		80	-	360
Veh in Median Storage, #	-	0	-		-	0	-		-	0	-		-	0	-
Grade, %	-	0	-		-	0	-		-	0	-		-	0	-
Peak Hour Factor	88	88	88		88	88	88		88	88	88		88	88	88
Heavy Vehicles, %	0	0	0		0	0	0		0	5	0		0	1	0
Mvmt Flow	14	1	1		1	0	0		8	707	6		6	2145	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2526	2885	1073	1811	2883	356	2145	0	0	713	0	0
Stage 1	2157	2157	-	726	726	-	-	-	-	-	-	-
Stage 2	369	728	-	1085	2157	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	14	16	219	50	16	646	255	-	-	896	-	-
Stage 1	50	88	-	387	433	-	-	-	-	-	-	-
Stage 2	629	432	-	235	88	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	14	15	219	46	15	646	255	-	-	896	-	-
Mov Cap-2 Maneuver	14	15	-	46	15	-	-	-	-	-	-	-
Stage 1	48	87	-	375	419	-	-	-	-	-	-	-
Stage 2	609	418	-	229	87	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 581.2	85.2	0.2	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	255	-	-	14	219	46	896	-	-
HCM Lane V/C Ratio	0.031	-	-	1.055	0.005	0.025	0.006	-	-
HCM Control Delay (s)	19.6	-	-	$ 624.2	21.5	85.2	9	-	-
HCM Lane LOS	C	-	-	F	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.4	0	0.1	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	301	163	154	46	47	233	498	59	35	1316	688
v/c Ratio	1.05	0.67	0.41	0.22	0.25	0.63	0.27	0.06	0.26	0.77	0.62
Control Delay	115.2	39.2	3.7	35.5	33.1	57.0	16.5	0.1	55.6	29.6	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.2	39.2	3.7	35.5	33.1	57.0	16.5	0.1	55.6	29.6	4.4
Queue Length 50th (ft)	~126	61	0	26	18	84	110	0	24	418	0
Queue Length 95th (ft)	#220	126	0	53	50	128	167	0	57	536	46
Internal Link Dist (ft)		546			135		841			829	
Turn Bay Length (ft)	180		475			400		240	250		575
Base Capacity (vph)	288	558	651	379	736	400	1844	985	223	1707	1106
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.29	0.24	0.12	0.06	0.58	0.27	0.06	0.16	0.77	0.62

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	39	230	39	23	17	198	423	50	30	1119	585
Future Volume (veh/h)	256	39	230	39	23	17	198	423	50	30	1119	585
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1810	1830	1881	1782	1779	1872	1863	1727	1900	1776	1881	1863
Adj Flow Rate, veh/h	301	0	302	46	27	20	233	498	59	35	1316	688
Adj No. of Lanes	2	0	2	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	11	1	5	9	9	2	10	0	7	1	2
Cap, veh/h	310	0	348	191	58	43	312	1799	881	51	1775	786
Arrive On Green	0.09	0.00	0.11	0.04	0.06	0.06	0.09	0.55	0.55	0.03	0.50	0.50
Sat Flow, veh/h	3447	0	3198	1698	951	704	3442	3282	1607	1691	3574	1582
Grp Volume(v), veh/h	301	0	302	46	0	47	233	498	59	35	1316	688
Grp Sat Flow(s),veh/h/ln	1723	0	1599	1698	0	1655	1721	1641	1607	1691	1787	1582
Q Serve(g_s), s	9.2	0.0	7.3	2.7	0.0	2.9	7.0	8.5	1.8	2.2	31.0	23.5
Cycle Q Clear(g_c), s	9.2	0.0	7.3	2.7	0.0	2.9	7.0	8.5	1.8	2.2	31.0	23.5
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	0	348	191	0	102	312	1799	881	51	1775	786
V/C Ratio(X)	0.97	0.00	0.87	0.24	0.00	0.46	0.75	0.28	0.07	0.68	0.74	0.88
Avail Cap(c_a), veh/h	310	0	1082	464	0	748	417	1799	881	232	1775	786
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	0.0	25.6	44.3	0.0	47.8	46.8	12.7	11.2	50.7	21.2	7.8
Incr Delay (d2), s/veh	42.9	0.0	6.9	0.7	0.0	3.4	5.2	0.4	0.1	20.8	2.8	13.1
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	6.2	0.0	4.2	1.3	0.0	1.4	3.5	4.0	0.8	1.3	15.9	12.9
LnGrp Delay(d),s/veh	90.8	0.0	32.5	45.0	0.0	51.2	52.0	13.1	11.3	71.5	24.0	20.9
LnGrp LOS	F		C	D		D	D	B	B	E	C	C
Approach Vol, veh/h		603			93			790			2039	
Approach Delay, s/veh		61.6			48.1			24.4			23.8	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	65.1	11.0	18.8	16.8	59.0	16.0	13.8
Change Period (Y+Rc), s	7.5	* 7.2	7.3	7.3	* 7.2	6.6	6.5	7.3
Max Green Setting (Gmax), s	14.5	* 50	20.7	35.7	* 13	52.4	9.5	47.7
Max Q Clear Time (g_c+I1), s	4.2	10.5	4.7	9.3	9.0	33.0	11.2	4.9
Green Ext Time (p_c), s	0.0	8.3	0.1	1.5	0.6	17.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection													
Int Delay, s/veh	7.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	21	0	14	1	0	3	18	2147	8	3	1498	11	
Future Vol, veh/h	21	0	14	1	0	3	18	2147	8	3	1498	11	
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	0	-	-	-	100	-	-	80	-	360	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0	
Mvmt Flow	22	0	14	1	0	3	19	2213	8	3	1544	11	

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2698	3814	775	3034	3810	1112	1547	0	0	2223	0	0
Stage 1	1554	1554	-	2256	2256	-	-	-	-	-	-	-
Stage 2	1144	2260	-	778	1554	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 11	4	345	6	4	206	434	-	-	238	-	-
Stage 1	121	176	-	43	78	-	-	-	-	-	-	-
Stage 2	216	78	-	360	176	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 10	4	344	5	4	206	434	-	-	238	-	-
Mov Cap-2 Maneuver	~ 10	4	-	5	4	-	-	-	-	-	-	-
Stage 1	115	173	-	41	75	-	-	-	-	-	-	-
Stage 2	203	75	-	341	173	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 771.2	240.9	0.1	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	434	-	-	10	344	19	238	-	-
HCM Lane V/C Ratio	0.043	-	-	2.165	0.042	0.217	0.013	-	-
HCM Control Delay (s)	13.7	-	-	$-1274.7	15.9	240.9	20.3	-	-
HCM Lane LOS	B	-	-	F	C	F	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.7	0.1	0.6	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	752	275	243	111	190	406	1354	71	65	943	501
v/c Ratio	0.99	0.60	0.42	0.40	0.78	1.39	0.93	0.10	0.47	0.69	0.55
Control Delay	87.6	53.4	7.3	36.6	74.2	244.2	55.5	0.3	78.5	43.3	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.6	53.4	7.3	36.6	74.2	244.2	55.5	0.3	78.5	43.3	5.1
Queue Length 50th (ft)	387	242	0	71	156	~276	695	0	63	412	0
Queue Length 95th (ft)	#565	362	75	116	246	#411	#993	0	117	532	82
Internal Link Dist (ft)		546			135		841			829	
Turn Bay Length (ft)	180		475			400		240	250		575
Base Capacity (vph)	763	457	574	570	332	292	1460	694	320	1359	916
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.60	0.42	0.19	0.57	1.39	0.93	0.10	0.20	0.69	0.55

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	737	185	322	109	87	99	398	1327	70	64	924	491
Future Volume (veh/h)	737	185	322	109	87	99	398	1327	70	64	924	491
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1844	1872	1881	1881	1845	1863	1863	1863
Adj Flow Rate, veh/h	752	294	259	111	89	101	406	1354	71	65	943	501
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	3	2	2	2
Cap, veh/h	790	517	439	276	101	115	293	1486	646	84	1362	608
Arrive On Green	0.22	0.27	0.27	0.07	0.13	0.13	0.08	0.42	0.42	0.05	0.38	0.38
Sat Flow, veh/h	3583	1881	1597	1747	789	895	3476	3574	1554	1774	3539	1578
Grp Volume(v), veh/h	752	294	259	111	0	190	406	1354	71	65	943	501
Grp Sat Flow(s),veh/h/ln	1792	1881	1597	1747	0	1684	1738	1787	1554	1774	1770	1578
Q Serve(g_s), s	31.4	20.4	16.0	8.3	0.0	16.8	12.8	54.0	4.2	5.5	33.9	21.8
Cycle Q Clear(g_c), s	31.4	20.4	16.0	8.3	0.0	16.8	12.8	54.0	4.2	5.5	33.9	21.8
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	790	517	439	276	0	216	293	1486	646	84	1362	608
V/C Ratio(X)	0.95	0.57	0.59	0.40	0.00	0.88	1.38	0.91	0.11	0.77	0.69	0.82
Avail Cap(c_a), veh/h	791	517	439	589	0	307	293	1486	646	322	1362	608
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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	47.3	26.9	52.2	0.0	65.0	69.5	41.7	27.1	71.5	39.1	10.6
Incr Delay (d2), s/veh	21.1	1.5	2.1	1.0	0.0	18.4	192.9	9.9	0.3	19.4	2.9	12.1
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	17.9	10.8	8.1	4.1	0.0	8.9	14.0	28.8	1.9	3.2	17.1	14.8
LnGrp Delay(d),s/veh	79.5	48.8	29.1	53.2	0.0	83.4	262.4	51.6	27.5	90.9	42.0	22.6
LnGrp LOS	E	D	C	D		F	F	D	C	F	D	C
Approach Vol, veh/h		1305			301			1831			1509	
Approach Delay, s/veh		62.6			72.3			97.4			37.7	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	70.3	17.8	49.0	20.0	65.0	39.9	26.8
Change Period (Y+Rc), s	7.5	* 7.2	7.3	7.3	* 7.2	6.6	6.5	7.3
Max Green Setting (Gmax), s	7.5	* 43	37.7	22.7	* 13	58.4	33.5	27.7
Max Q Clear Time (g_c+I1), s	3.5	56.0	10.3	22.4	14.8	35.9	33.4	18.8
Green Ext Time (p_c), s	0.2	0.0	0.3	0.1	0.0	15.2	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	68.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	1	1	22	0	25	7	622	39	47	1888	2
Future Vol, veh/h	12	1	1	22	0	25	7	622	39	47	1888	2
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	-	-	150	100	-	300	80	-	360
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	5	0	0	1	0
Mvmt Flow	14	1	1	25	0	28	8	707	44	53	2145	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2621	2975	1073	1903	2975	353	2145	0	0	707	0	0
Stage 1	2252	2252	-	723	723	-	-	-	-	-	-	-
Stage 2	369	723	-	1180	2252	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 12	14	219	43	14	649	255	-	-	901	-	-
Stage 1	43	79	-	388	434	-	-	-	-	-	-	-
Stage 2	629	434	-	205	79	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 11	13	219	37	13	649	255	-	-	901	-	-
Mov Cap-2 Maneuver	~ 11	13	-	37	13	-	-	-	-	-	-	-
Stage 1	42	74	-	376	420	-	-	-	-	-	-	-
Stage 2	583	420	-	189	74	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 800.8	106.9	0.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	255	-	-	11	219	37	649	901	-	-
HCM Lane V/C Ratio	0.031	-	-	1.343	0.005	0.676	0.044	0.059	-	-
HCM Control Delay (s)	19.6	-	-	$ 860.8	21.5	216.2	10.8	9.2	-	-
HCM Lane LOS	C	-	-	F	C	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.6	0	2.4	0.1	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

2: SR 53/Dawsonville Hwy & SR 53/McEver Rd/Lakeshore Marketplace dwy

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	318	163	154	46	47	233	521	59	35	1331	699
v/c Ratio	1.10	0.67	0.41	0.22	0.25	0.63	0.28	0.06	0.26	0.78	0.63
Control Delay	131.2	39.2	3.7	35.5	33.1	57.0	16.7	0.1	55.6	29.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	131.2	39.2	3.7	35.5	33.1	57.0	16.7	0.1	55.6	29.9	4.5
Queue Length 50th (ft)	~139	61	0	26	18	84	116	0	24	426	0
Queue Length 95th (ft)	#234	126	0	53	50	128	175	0	57	545	46
Internal Link Dist (ft)		546			135		841			829	
Turn Bay Length (ft)	180		475			400		240	250		575
Base Capacity (vph)	288	558	651	379	736	400	1844	985	223	1707	1111
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	0.29	0.24	0.12	0.06	0.58	0.28	0.06	0.16	0.78	0.63

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	39	230	39	23	17	198	443	50	30	1131	594
Future Volume (veh/h)	270	39	230	39	23	17	198	443	50	30	1131	594
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1810	1830	1881	1782	1779	1872	1863	1727	1900	1776	1881	1863
Adj Flow Rate, veh/h	318	0	302	46	27	20	233	521	59	35	1331	699
Adj No. of Lanes	2	0	2	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	11	1	5	9	9	2	10	0	7	1	2
Cap, veh/h	310	0	348	191	58	43	312	1799	881	51	1775	786
Arrive On Green	0.09	0.00	0.11	0.04	0.06	0.06	0.09	0.55	0.55	0.03	0.50	0.50
Sat Flow, veh/h	3447	0	3198	1698	951	704	3442	3282	1607	1691	3574	1582
Grp Volume(v), veh/h	318	0	302	46	0	47	233	521	59	35	1331	699
Grp Sat Flow(s),veh/h/ln	1723	0	1599	1698	0	1655	1721	1641	1607	1691	1787	1582
Q Serve(g_s), s	9.5	0.0	7.3	2.7	0.0	2.9	7.0	9.0	1.8	2.2	31.5	24.2
Cycle Q Clear(g_c), s	9.5	0.0	7.3	2.7	0.0	2.9	7.0	9.0	1.8	2.2	31.5	24.2
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	0	348	191	0	102	312	1799	881	51	1775	786
V/C Ratio(X)	1.02	0.00	0.87	0.24	0.00	0.46	0.75	0.29	0.07	0.68	0.75	0.89
Avail Cap(c_a), veh/h	310	0	1082	464	0	748	417	1799	881	232	1775	786
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	0.0	25.6	44.3	0.0	47.8	46.8	12.8	11.2	50.7	21.3	7.9
Incr Delay (d2), s/veh	57.6	0.0	6.9	0.7	0.0	3.4	5.2	0.4	0.1	20.8	3.0	14.3
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	7.0	0.0	4.2	1.3	0.0	1.4	3.5	4.2	0.8	1.3	16.3	13.5
LnGrp Delay(d),s/veh	105.7	0.0	32.5	45.0	0.0	51.2	52.0	13.2	11.3	71.5	24.3	22.3
LnGrp LOS	F		C	D		D	D	B	B	E	C	C
Approach Vol, veh/h		620			93			813			2065	
Approach Delay, s/veh		70.1			48.1			24.2			24.4	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	65.1	11.0	18.8	16.8	59.0	16.0	13.8
Change Period (Y+Rc), s	7.5	* 7.2	7.3	7.3	* 7.2	6.6	6.5	7.3
Max Green Setting (Gmax), s	14.5	* 50	20.7	35.7	* 13	52.4	9.5	47.7
Max Q Clear Time (g_c+I1), s	4.2	11.0	4.7	9.3	9.0	33.5	11.5	4.9
Green Ext Time (p_c), s	0.0	8.6	0.1	1.5	0.6	16.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	298.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	0	14	78	0	105	18	2107	102	95	1471	11
Future Vol, veh/h	21	0	14	78	0	105	18	2107	102	95	1471	11
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	150	100	-	300	80	-	360
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	22	0	14	80	0	108	19	2172	105	98	1516	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2838	3925	761	3164	3925	1087	1519	0	0	2173	0	0
Stage 1	1715	1715	-	2210	2210	-	-	-	-	-	-	-
Stage 2	1123	2210	-	954	1715	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 8	3	352	~ 5	3	215	445	-	-	249	-	-
Stage 1	96	147	-	~ 46	83	-	-	-	-	-	-	-
Stage 2	223	83	-	282	147	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 3	2	351	~ 3	2	215	445	-	-	249	-	-
Mov Cap-2 Maneuver	~ 3	2	-	~ 3	2	-	-	-	-	-	-	-
Stage 1	92	89	-	~ 44	79	-	-	-	-	-	-	-
Stage 2	106	79	-	164	89	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 3020.1	$ 5968.5	0.1	1.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	445	-	-	3	351	3	215	249	-	-
HCM Lane V/C Ratio	0.042	-	-	7.216	0.042	26.804	0.503	0.393	-	-
HCM Control Delay (s)	13.4	-	-	$ 5023.1	15.7	$ 5952.3	37.6	28.5	-	-
HCM Lane LOS	B	-	-	F	C	F	E	D	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.2	0.1	12.2	2.6	1.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	773	275	243	111	190	406	1388	71	65	973	522
v/c Ratio	1.01	0.60	0.42	0.40	0.78	1.39	0.95	0.10	0.47	0.72	0.56
Control Delay	93.6	53.4	7.3	36.6	74.2	244.2	58.6	0.3	78.5	44.1	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.6	53.4	7.3	36.6	74.2	244.2	58.6	0.3	78.5	44.1	5.2
Queue Length 50th (ft)	~408	242	0	71	156	~276	~728	0	63	430	0
Queue Length 95th (ft)	#589	362	75	116	246	#411	#1031	0	117	553	83
Internal Link Dist (ft)		546			135		841			829	
Turn Bay Length (ft)	180		475			400		240	250		575
Base Capacity (vph)	763	457	574	570	332	292	1460	694	320	1359	929
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.60	0.42	0.19	0.57	1.39	0.95	0.10	0.20	0.72	0.56

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	758	185	322	109	87	99	398	1360	70	64	954	512
Future Volume (veh/h)	758	185	322	109	87	99	398	1360	70	64	954	512
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1844	1872	1881	1881	1845	1863	1863	1863
Adj Flow Rate, veh/h	773	294	259	111	89	101	406	1388	71	65	973	522
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	2	2	2	1	1	3	2	2	2
Cap, veh/h	791	517	439	276	101	115	293	1486	646	84	1362	607
Arrive On Green	0.22	0.27	0.27	0.07	0.13	0.13	0.08	0.42	0.42	0.05	0.38	0.38
Sat Flow, veh/h	3583	1881	1597	1747	789	895	3476	3574	1554	1774	3539	1578
Grp Volume(v), veh/h	773	294	259	111	0	190	406	1388	71	65	973	522
Grp Sat Flow(s),veh/h/ln	1792	1881	1597	1747	0	1684	1738	1787	1554	1774	1770	1578
Q Serve(g_s), s	32.5	20.4	16.0	8.3	0.0	16.8	12.8	56.3	4.2	5.5	35.4	23.1
Cycle Q Clear(g_c), s	32.5	20.4	16.0	8.3	0.0	16.8	12.8	56.3	4.2	5.5	35.4	23.1
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	791	517	439	276	0	216	293	1486	646	84	1362	607
V/C Ratio(X)	0.98	0.57	0.59	0.40	0.00	0.88	1.39	0.93	0.11	0.77	0.71	0.86
Avail Cap(c_a), veh/h	791	517	439	589	0	307	293	1486	646	321	1362	607
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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	47.3	26.9	52.2	0.0	65.0	69.5	42.4	27.1	71.5	39.6	10.8
Incr Delay (d2), s/veh	26.4	1.5	2.1	1.0	0.0	18.4	193.1	12.2	0.3	19.4	3.2	14.7
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	19.0	10.8	8.1	4.1	0.0	8.9	14.0	30.3	1.9	3.2	17.9	15.8
LnGrp Delay(d),s/veh	85.2	48.8	29.1	53.2	0.0	83.4	262.6	54.5	27.5	90.9	42.8	25.5
LnGrp LOS	F	D	C	D		F	F	D	C	F	D	C
Approach Vol, veh/h		1326			301			1865			1560	
Approach Delay, s/veh		66.2			72.3			98.8			39.0	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	70.3	17.8	49.0	20.0	65.0	40.0	26.8
Change Period (Y+Rc), s	7.5	* 7.2	7.3	7.3	* 7.2	6.6	6.5	7.3
Max Green Setting (Gmax), s	7.5	* 43	37.7	22.7	* 13	58.4	33.5	27.7
Max Q Clear Time (g_c+I1), s	3.5	58.3	10.3	22.4	14.8	37.4	34.5	18.8
Green Ext Time (p_c), s	0.2	0.0	0.3	0.1	0.0	14.9	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	70.2
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

CITY OF GAINESVILLE

AGENDAREQUEST

Date Submitted: 7/18/2017

Presenter: Matt Tate

Item of Business: Request from **JH Homes, Inc.** to rezone a 21.87± acres tract located on the east side of South Enota Drive, having frontage on Smokey Mountain Springs Lane and Pearce Way (a/k/a **1024, 1030 and 1037 Pearce Way NE; 0 South Enota Drive NE**) from Office and Institutional (O-I) to Residential-II (R-II).
Ward Number: Two
Tax Parcel Number(s): 01-083-001-005, 151, 152 and 153
Request: 65 residential townhomes

Meeting Date: 8/8/2017

Purpose of Request:
The applicant is proposing to rezone the subject property for 65 residential townhomes. The property was previously rezoned in 2003 for medical and professional offices. The proposed townhomes will contain two car garages and the exterior materials of the units will consist of brick, cement siding board and batten shake. The conceptual design of the townhome community provides access from Pearce Way and Smokey Mountain Springs Lane and includes as many as 14 buildings containing three to six townhome units per building. The property contains no structures but includes all of Pearce Way and a portion of Smokey Mountain Springs Lane which are intended to be dedicated to the City of Gainesville. The property is located within the Limestone Parkway Overlay Zone and the surrounding uses include medical offices, Smokey Springs Retirement apartment homes, CVS Pharmacy, First Presbyterian Church and single-family homes.

History/Background:

Facts & Issues for Consideration:

Department Recommendation:
Planning staff is recommending approval with eight conditions.

See the Staff Recommendation Report for details.

Department Director:
Rusty Ligon

If funding is involved, are funds approved within the current budget?
N/A

Amount Requested: **Source of Funds**:

Finance Comments:

Administrative Comments:

ATTACHMENTS:

Description	Type
Staff Report	Report
Location Maps	Backup Material
Narrative	Backup Material
Survey	Backup Material

Concept Plan	Backup Material
Architectural Rendering	Backup Material
Letter from Thomas Rasmussen	Backup Material

GAINESVILLE PLANNING and APPEALS BOARD
STAFF RECOMMENDATION

Applicant ..... JH Homes, Inc.

Property Owner..... Pearce Associates, LTD

Location..... 1024, 1030 and 1037 Pearce Way NE;
0 South Enota Drive NE

Request..... Rezone from O-I to R-II

Size ..... 21.87± acres

Ward..... Two

Proposed Use..... Residential townhomes

Planning Division Staff Recommendation ..... **Approval, with conditions**

Date..... August 8, 2017

- ***Applicant's Proposal and Background Information***

The applicant is proposing to rezone the subject property from Office and Institutional (O-I) to Residential-II (R-II) for 65 residential townhomes. In 2003, the subject tract was rezoned for medical and professional offices and has remained in its current condition since 2010. The property consists of four undeveloped parcels, all of Pearce Way and a portion of Smokey Mountain Springs Way, which are intended to be dedicated to the City of Gainesville.

The conceptual design of the townhome community includes as many as 14 buildings containing three to six townhome units per building. Each townhome will be a minimum of 24-feet wide with two car garages. The exterior materials of the townhomes will consist of brick fronts with the remaining portion to be made up of cement siding board and batten shake to meet the requirements of the Limestone Parkway Overlay Zone standards. According to the applicant, the anticipated price for each unit will start in the low $200K range. Access is proposed from Pearce Way and Smokey Mountain Springs Lane to South Enota Drive. The rear portion of the property is partially located within a flood plain area and within a Georgia Power easement which will remain as a natural buffer area adjacent to The Woodlands on Lake Brenau Subdivision.

- ***Adjacent Land Use and Zoning***

Location	Use	Zoning
North	CVS Pharmacy; Future O'Reilly Auto Parts; Georgia Power substation	Office and Institutional (O-I) Neighborhood Business (N-B) Residential-I (R-I)
South	Smokey Springs Retirement Community; First Presbyterian Church	Planned Unit Development (P-U-D) Residential-I (R-I)
East	The Woodlands on Lake Brenau Sub.; Single-family homes	Planned Unit Development (P-U-D)
West	Single-family homes; Dermatology Associates; Northeast Georgia Physicians Group; Arthritis Center of North Georgia	Residential-I (R-I) Office and Institutional (O-I)

- ***Other Departmental Comments***

According to the Public Works Department, solid waste pick up will be provided by the City of Gainesville.

- ***Zoning History***

The following zoning actions have taken place in the immediate area during the last ten years:

2017 – A request by Hanh My Thi Doan for a special use within Office and Institutional (O-I) on a $0.52^{\pm}$ acre tract located at 502 South Enota Drive for a nail salon was denied.

2016 – A request by O'Reilly Automotive Stores, Inc. to rezone a $1.29^{\pm}$ acre tract located at 1446 Park Hill Drive from Office and Institutional (O-I) to Neighborhood Business (N-B) for an auto parts store was approved with conditions.

2016 – A request by Andrew Hothem to rezone a $0.48^{\pm}$ acre tract located at 1490 Park Hill Drive from Residential-I (R-I) to Residential-II (R-II) for a two-family residence was approved with conditions.

2014 – A request by Beehive Homes of Gainesville to rezone a $2.0^{\pm}$ acre tract located at 1351 Park Hill Drive from Residential-I (R-I) to Residential-II (R-II) for an assisted living facility was approved with conditions.

2013 – A request by Ketan / Gopalji Patel to rezone a $1.26^{\pm}$ acre tract located at 1572, 1582 and 1586 Park Hill Drive from Residential-II (R-II) and Office and Institutional (O-I) to General Business (G-B) for a professional office and commercial use was approved with conditions.

2012 – A request by The Atlanta Botanical Garden, Inc. to amend existing Planned Unit Development (P-U-D) zoning located at 351 Lake Hill Drive for a Woodland / Botanical Garden was approved with conditions.

- ***Staff Analysis***

(1) Is the proposed use suitable in view of the zoning and development of adjacent and nearby property?

The subject property is surrounded by a mixture of residential, institutional, office and commercial uses which are zoned Residential-I (R-I), Planned Unit Development (P-U-D), Office and Institutional (O-I) and Neighborhood Business (N-B). The proposed townhome community would serve as a transitional use between the adjacent office and residential uses and will provide for a type of housing that is not currently available within the surrounding area.

(2) Will the proposed use adversely affect the existing use or usability of adjacent or nearby property?

The property is undeveloped except for existing road and utility infrastructure. There is a significant natural buffer area that will remain adjacent to The Woodlands on Lake Brenau subdivision. There should be limited adverse impacts created by the development; however, the adjacent medical office uses and senior retirement apartment community located off of Smokey Mountain Springs Way / Pearce Way would be impacted most by the proposal. The proposed townhomes will produce additional traffic and parking needs. The adjacent medical offices currently utilize Pearce Way during normal business hours for employee parking needs.

(3) Is the proposed use compatible with the purpose and intent of the Comprehensive Plan?

The proposal appears to be consistent with the Comprehensive Plan. The development is within density range (2.97 dwelling units per acre), and is conducive given its proximity to a mixture of residential and non-residential uses.

The Gainesville 2030 Future Development Map for the City of Gainesville places the subject property within the *Mixed Use General* land use category. This category includes areas containing or planned for a mixture of land uses including office, neighborhood retail, and residential. As well, the rear portion of the property that is shown to remain undeveloped is located within the *Parks / Recreation / Conservation* land use category. This category includes areas containing or planned for parks and recreation facilities, permanently designated open space, and conservation areas, including buffers along water ways and other environmental features.

According to the Character Area map for the City of Gainesville, the subject property is located within the Traditional Neighborhoods Character Area specifically within the Northern Neighborhoods subarea. The vision for this area anticipates minimal change, and primary issues within this subarea include incompatible infill development and the threat of encroaching urban sprawl. The traditional neighborhoods should have a range of housing that meets the needs of different household types, sizes and incomes. Land uses allowed in the Northern Neighborhoods subarea include low-density and medium-density residential, and mixed-use / commercial.

(4) Are there substantial reasons why the property cannot or should not be used as currently zoned?

The subject property is zoned for professional office purposes and has remained in its current state for over 7 years. The subject property is zoned Office and Institutional (O-I) which is primarily intended for a variety of professional offices, institutions, and public offices not involving the sale, wholesale, storage, or processing of merchandise. Multi-family residences or townhome uses require special use approval. The applicant is proposing to downzone the property to a zoning of Residential-II (R-II) for the proposed use.

(5) Will the proposed use cause an excessive or burdensome use of public facilities or services, including but not limited to streets, schools, water or sewer utilities, and police or fire protection?

The proposal should have minimal impacts to the existing public facilities. City water and public safety services are currently provided to the property. Gainesville Fire Station #2 is located off of Holly Drive and is approximately 1.6± miles from the subject property.

The 65-unit townhome community is not proposed as an age restricted community and therefore will have some minimal impacts to the school system depending on the final number of two and three bedroom units proposed.

As stated previously, the proposal will increase traffic along Smokey Mountain Springs Way / Pearce Way at its intersection with South Enota Drive. According to the “Trip Generation Manual” as published by the Institute of Transportation Engineers, the proposed use on average would generate 380± new trips per day, 29± A.M. peak hour trips and 35± P.M. peak hour trips.

(6) 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?

Property near the intersection of Park Hill Drive and South Enota Drive has experienced steady professional office, medical office and neighborhood retail growth within the last 20 years. The proposal would provide for in-town, housing that could serve nearby employment centers including Northeast Georgia Medical Center. While the adjacent property has functioned as small mixed use development, the subject property has remained stagnant for many years.

(7) Does the proposed use reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property?

Due to the Comprehensive Land Use Plan and the mixture of surrounding uses, the proposed rezoning request appears to reflect a reasonable balance between the promotion of the public health, safety, morality, or general welfare and the right to unrestricted use of property.

- ***Staff Recommendation***

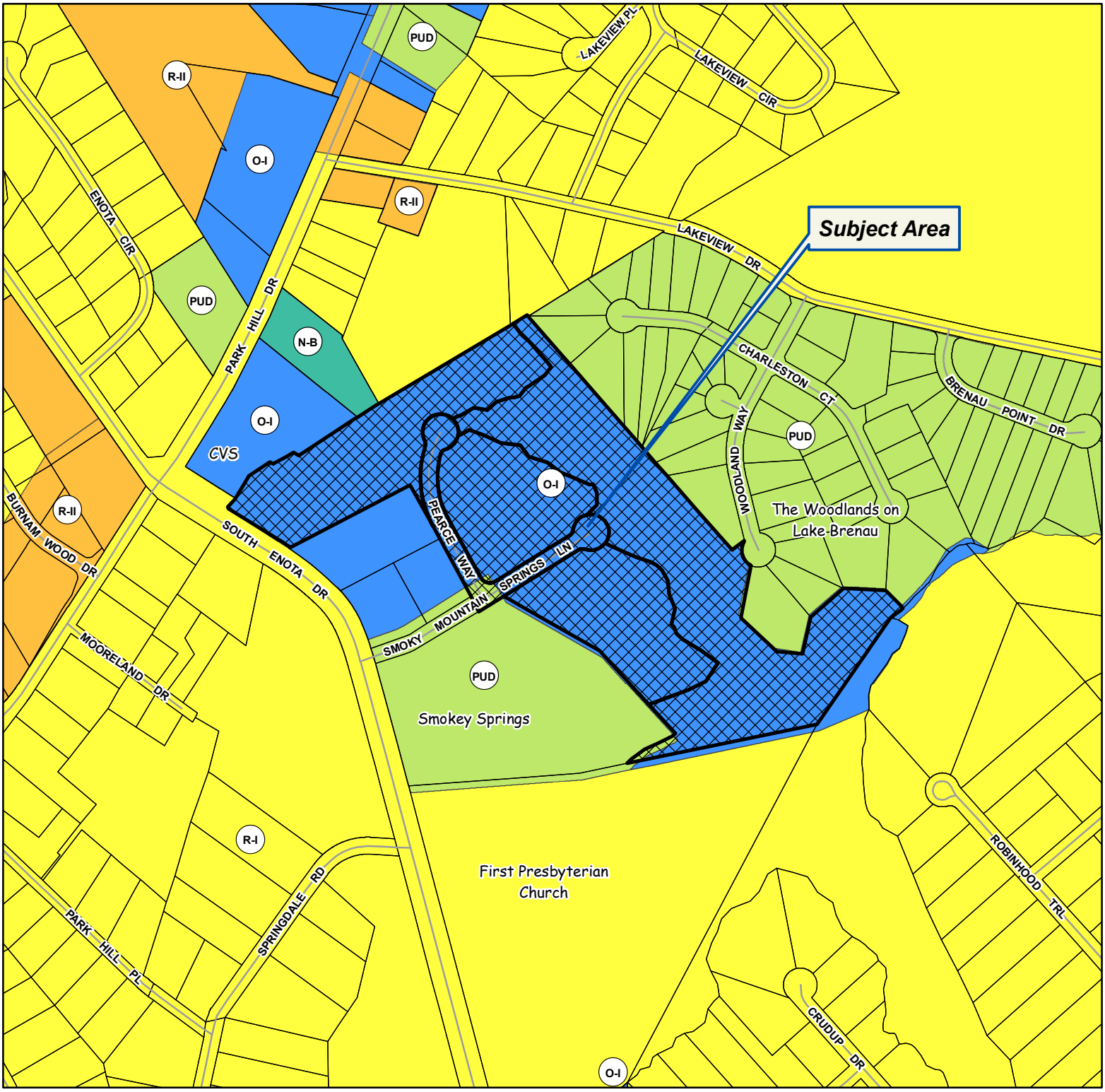
The Planning Division staff is recommending **conditional approval** of this rezoning request based on the Comprehensive Plan and the mixture of residential and non-residential uses.

Conditions

1. **The use of the property shall be limited to a maximum of 65 residential townhome or condominium units. Apartments are not an approved use for the property.**
2. **The proposed residential townhomes shall be generally consistent with the standards depicted on the architectural elevation provided with this rezoning application including exterior materials, pitched roofs and two car garages.**
3. **No direct access shall be allowed from South Enota Drive or Woodland Way.**
4. **All access point design and sidewalk installation along Pearce Way and Smokey Mountain Springs Way must be reviewed and approved by the Gainesville Public Works Director. All required access/traffic/sidewalk improvements associated with the proposed development shall be at the full expense of the developer / property owner.**
5. **In addition to the driveway and garage parking provided for each townhome unit, a minimum of 10 guest parking spaces shall be provided within the proposed development. The final location of the guest parking spaces shall be determined by the Gainesville Public Works Director.**
6. **The property frontage along South Enota Drive shall be landscaped and maintained according to the requirement of Article 9-16 of the Gainesville Unified Land Development Code.**
7. **The existing vegetated buffer areas adjacent to Smokey Springs Retirement Community, The Woodlands on Lake Brenau, CVS and the Georgia Power substation shall be retained where possible. Additional evergreen buffer trees shall be planted within the perimeter buffer areas and adjacent to detention pond areas where**

needed. The intent of the buffer is to supplement the existing vegetation with buffer trees to provide for an effective buffer. The number, location, spacing, size and type of trees planted shall be subject to Community Development Department Director approval.

8. **An updated as-built boundary survey/plat of the subject property, indicating all improvements required for the proposed use, shall be recorded prior to obtaining a Certificate of Occupancy.**



Applicant:

JH HOMES, INC.

REZONING REQUEST

Request:

Rezone 21.87+/- acres tract from Office and Institutional (O-I) to Residential-II (R-II) for 65 residential townhomes

Subject Area Address:
1024, 1030, 1037 Pearce Way NE
0 South Enota Drive NE

Meeting: 8/8/2017

Prepared: 7/20/2017

Gainesville Community Development Department

Subject Area

N

0 240 480 720 960 Feet

1 " = 400 '

Tax Parcel: 01-083-001-005, 151, 152, 153

Applicant:

JH HOMES, INC.

REZONING REQUEST

Request:

Rezone 21.87+/- acres tract from Office and Institutional (O-I) to Residential-II (R-II) for 65 residential townhomes

Subject Area Address:
1024, 1030, 1037 Pearce Way NE
0 South Enota Drive NE

Meeting: 8/8/2017

Prepared: 7/20/2017

Gainesville Community Development Department

Subject Area

Aerial from 2015

N

0 240 480 720 960 Feet

1 " = 400 '

Tax Parcel: 01-083-001-005, 151, 152, 153

NARRATIVE

The subject Property is currently zoned O&I. The purpose of this application is to rezone the reference property to Town Homes. This site consists of 21.87 +/-, which will be subdivided into 65 Town home lots

Site:

The site is located on South Enota Drive and South of State Route 129 within one mile of the Northeast Georgia Medical Center. This 21.87 acre site falls inside the Limestone Corridors and will be planned to follow all applicable requirements. The site adjoins Select Commercial (SC) and Georgia Power Company on the north, Office Professional (OP) lots and Gainesville Retirement Resources LLC (PRD) to the west, the old Brenau Lake and Residential (R1) to the South and the Woodland on Lake Brenau (PRD) to the East.

Buildings:

Townhomes to be constructed primarily of brick fronts with remaining portion to be made up of cement siding, board and batten and shake. 2 car garage with a minimum width of 24 ft.

Signage:

Proposed signed to be installed at the intersection of Pearce Way and Smoky Mountain Springs Ln. Sing to be constructed of Brick.

Lighting:

Proposed lighting to be city standards.

Water & Sewer:

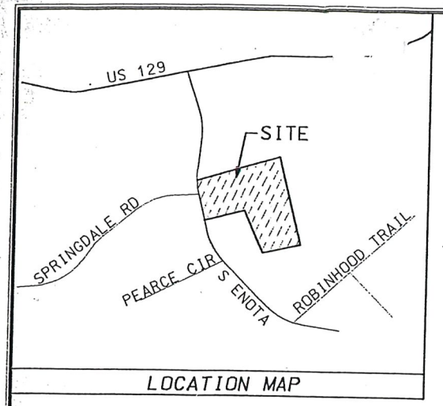
The City of Gainesville to service water and sewer.

Buffers and Landscaping:

The site consist of existing natural buffer to exist on the North, East and South property. Proposed buffer of 974 to be similar to 961.

Streets:

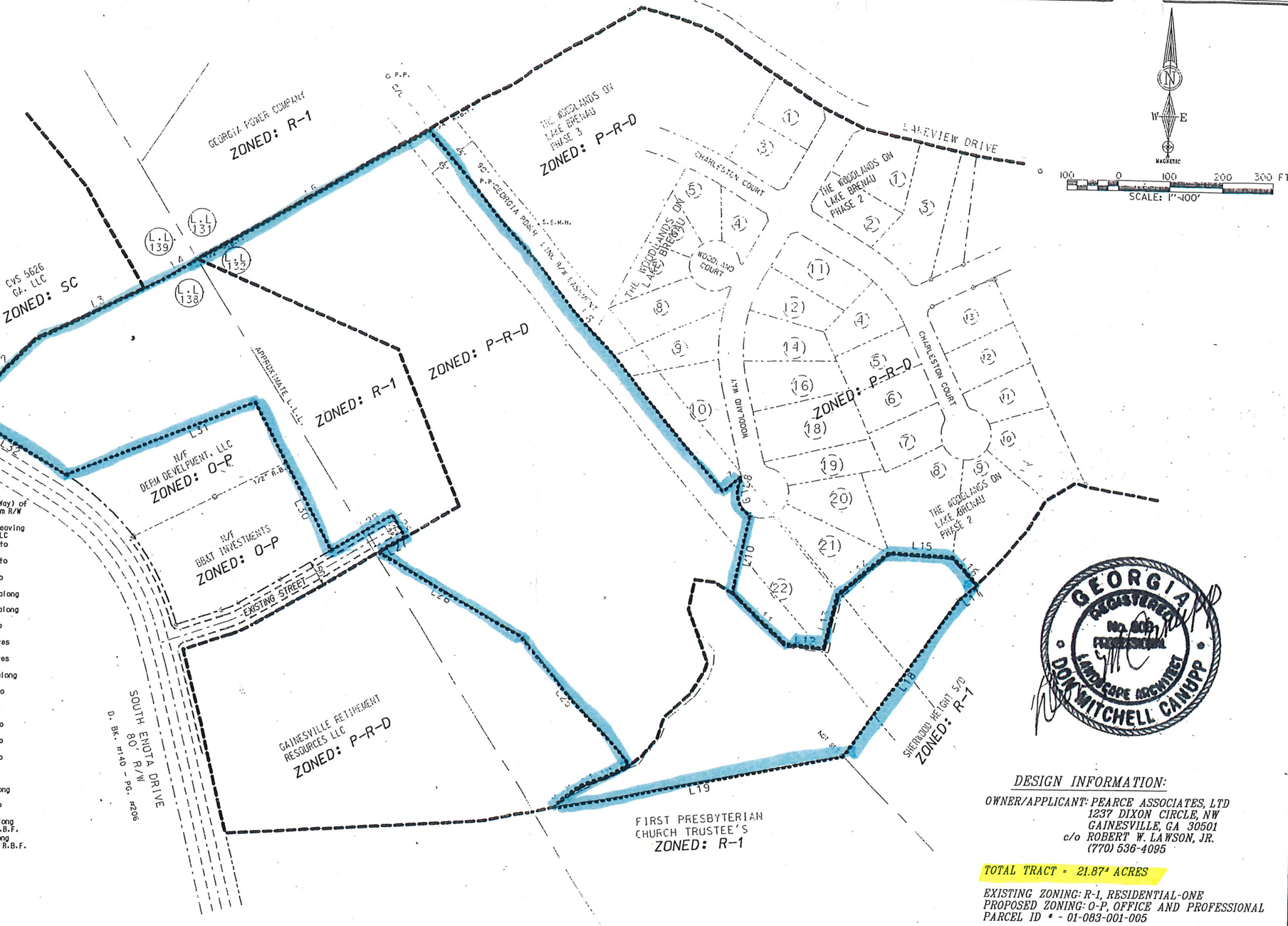
All proposed streets to be constructed to City of Gainesville standards.



LOCATION MAP

LEGAL DESCRIPTION

All that tract or parcel of land lying in or being in Land Lots 132 & 138, 9th District Hall County, Georgia being more particulary described as follows:
Beginning at a ¾" C.T.P.F. (Crimp Top Pin Found) on the Northerly R/W (Right-of-Way) of South Enota Drive being an 80' R/W said point being 322.91 feet plus or minus from R/W Monument of US Highway 129.
THENCE North 44 degrees 28 minutes 14 seconds East for a distance of 45.63 feet leaving the R/W of South Enota Drive along the Property line of now or formerly CVS GA, LLC
THENCE North 44 degrees 12 minutes 59 seconds East for a distance of 152.48 feet to a ½" R.B.F. (Rebar Found)
THENCE North 64 degrees 04 minutes 01 seconds East for a distance of 280.82 feet to a ½" R.B.F. (Rebar Found)
THENCE North 57 degrees 32 minutes 45 seconds East for a distance of 72.89 feet to a 2" C.T.P.F.
THENCE North 60 degrees 00 minutes 00 seconds East for a distance of 519.59 feet along the Property line of now or formerly Georgia Power Company to a ½" R.B.F.
THENCE South 40 degrees 23 minutes 53 seconds East for a distance of 918.43 feet along the Property line of now or formerly The Woodlands on Lake Brenau to a ½" R.B.F.
THENCE North 49 degrees 36 minutes 06 seconds East for a distance of 46.60 feet to a ½" R.B.F. (Rebar Found) at 50 R/W of Woodland Way.
THENCE 10.40 feet along an Arc having a Chord Bearing of South 06 degrees 25 minutes 38 seconds West with a Radius of 15 feet to a point at 50 R/W of Woodland Way.
THENCE 77.49 feet along an Arc having a Chord Bearing of South 18 degrees 06 minutes 59 seconds West with a Radius of 50 feet to a point at 50 R/W of Woodland Way.
THENCE South 11 degrees 40 minutes 26 seconds East for a distance of 157.95 feet along the Property line of now or formerly The Woodlands on Lake Brenau to a ½" R.B.F.
THENCE South 45 degrees 58 minutes 10 seconds East for a distance of 144.71 feet to a ½" R.B.F. (Rebar Found)
THENCE South 84 degrees 13 minutes 53 seconds East for a distance of 76.39 feet to a ½" R.B.F. (Rebar Found)
THENCE North 13 degrees 24 minutes 22 seconds East for a distance of 111.52 feet to a ½" R.B.F. (Rebar Found)
THENCE North 49 degrees 36 minutes 07 seconds East for a distance of 128.50 feet to a ½" R.B.F. (Rebar Found)
THENCE South 86 degrees 21 minutes 27 seconds East for a distance of 125.00 feet to a ½" R.B.F. (Rebar Found)
THENCE South 43 degrees 21 minutes 27 seconds East for a distance of 70.98 feet to a ½" R.B.F. (Rebar Found)
THENCE South 50 degrees 51 minutes 57 seconds East for a distance of 45.23 feet along the Property line of now or formerly Sherwood Heights S/D to a ½" R.B.F.
THENCE South 35 degrees 28 minutes 39 seconds West for a distance of 382.84 feet to a ½" R.B.F. (Rebar Found)
THENCE South 79 degrees 07 minutes 02 seconds West for a distance of 570.97 feet along the Property line of now or formerly First Presbyterian Church Trustee's to a ½" R.B.F.
THENCE North 44 degrees 53 minutes 23 seconds east for a distance of 16.65 feet along the Property line of now or formerly Gainesville Retirement Resources, LLC to a ½" R.B.F.
THENCE North 54 degrees 24 minutes 27 seconds East for a distance of 49.39 feet to a ½" R.B.F. (Rebar Found)
THENCE North 65 degrees 57 minutes 51 seconds East for a distance of 46.23 feet to a ½" R.B.F. (Rebar Found)
THENCE North 63 degrees 48 minutes 43 seconds East for a distance of 43.79 feet to a ½" R.B.F. (Rebar Found)
THENCE North 53 degrees 44 minutes 19 seconds East for a distance of 12.25 feet to a ½" R.B.F. (Rebar Found)
THENCE North 41 degrees 39 minutes 32 seconds West for a distance of 331.69 feet to a ½" R.B.F. (Rebar Found)
THENCE North 59 degrees 44 minutes 20 seconds West for a distance of 325.21 feet to a point on Southerly line of Proposed 50' Access Easement
THENCE North 59 degrees 01 minutes 13 seconds West for a distance of 58.00 feet to a point
THENCE North 30 degrees 56 minutes 08 seconds West for a distance of 50.00 feet to a point on Northerly line of Proposed 50' Access Easement
THENCE South 59 degrees 02 minutes 07 seconds West for a distance of 139.65 feet to a ½" R.B.F. (Rebar Found) of now or formerly BB&T Investments
THENCE North 28 degrees 06 minutes 25 seconds West for a distance of 326.37 feet to a ½" R.B.F. (Rebar Found) of now or formerly Derm Development, LLC
THENCE South 68 degrees 18 minutes 36 seconds West for a distance of 398.36 feet to a ½" R.B.F. (Rebar Found) of the 80' R/W of South Enota Drive
THENCE North 59 degrees 01 minutes 56 seconds West for a distance of 237.09 feet to a ½" R.B.F. (Rebar Found) along 80' R/W of South Enota Drive and Point Of Beginning
Together with and subject to Easements and Restrictions of record.
Said Property contains 21.87 Acres more or less



ZONING BOUNDARY LINE
PROPOSED REZONING LINE

GEORGIA REGISTERED NO. 2081 PROFESSIONAL LANDSCAPE ARCHITECT DON MITCHELL CANUPP

DESIGN INFORMATION:

OWNER/APPLICANT: PEARCE ASSOCIATES, LTD
1237 DIXON CIRCLE, NW
GAINESVILLE, GA 30501
c/o ROBERT W. LAWSON, JR.
(770) 536-4095

TOTAL TRACT = 21.87± ACRES

EXISTING ZONING: R-1, RESIDENTIAL-ONE
PROPOSED ZONING: O-P, OFFICE AND PROFESSIONAL
PARCEL ID # - 01-083-001-005

PROPOSED USE: MEDICAL AND PROFESSIONAL OFFICES

BUILDING SETBACK REQUIREMENTS:
LIMESTONE CORRIDOR -
50' FROM R/W ALONG SOUTH ENOTA
30' FROM R/W OF PROPOSED 60' ACCESS ESMT
10' SIDE YARD
25' REAR YARD (35' REQ'D BUFFER ABUTTING R-1)

WATER & SEWER: CITY OF GAINESVILLE

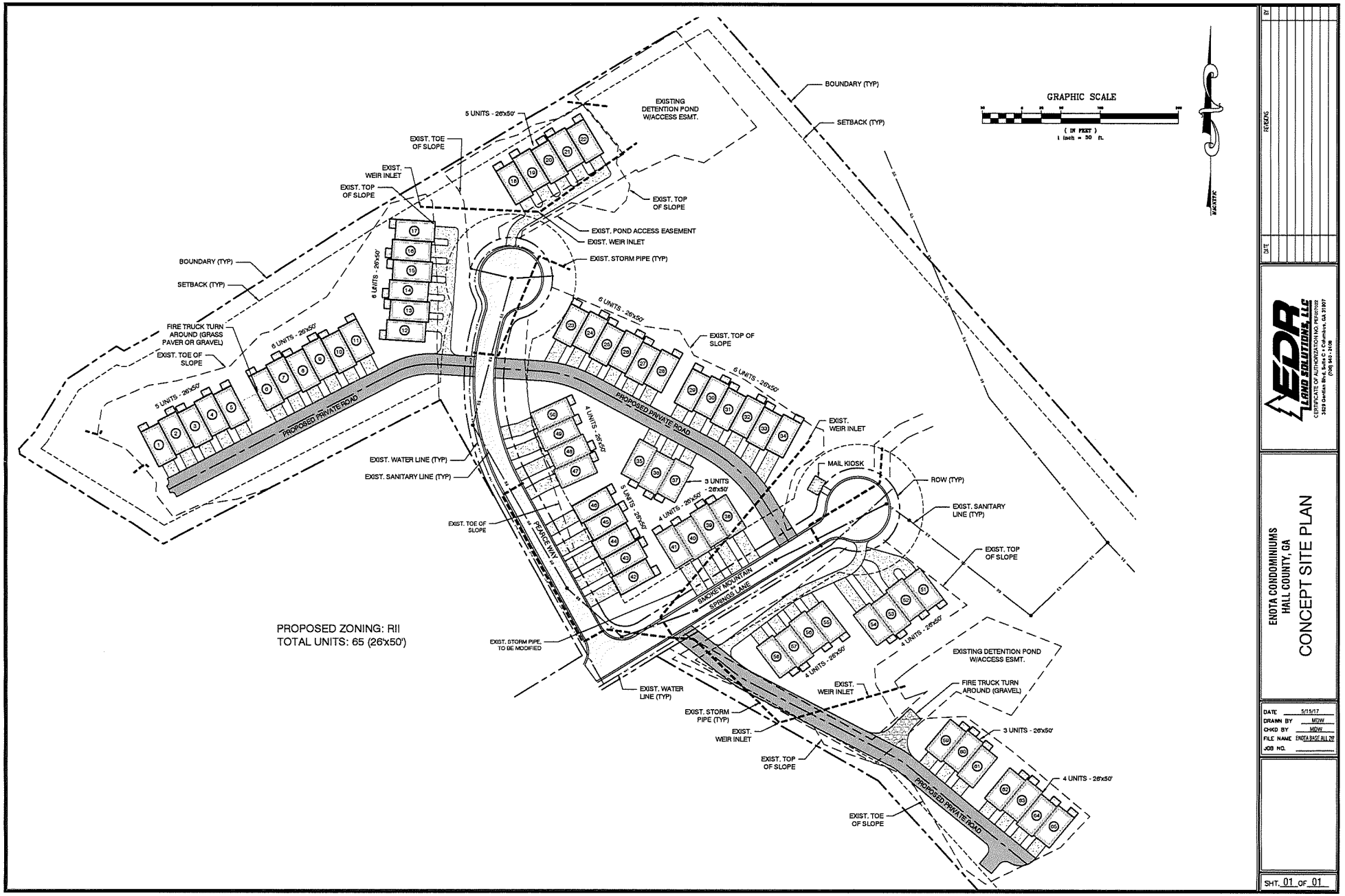
1. BOUNDARY SURVEY DATED 12/31/02 BY HENRY BAILEY, R.L.S.
2. DATUM BASED ON M.S.L.
3. SKETCH PLAN DATED: 9/23/03.

D.M. CANUPP AND ASSOCIATES
3767 OLD CORNELIA HIGHWAY
GAINESVILLE, GEORGIA 30507
(770) 534-7748

REVISIONS | BY | DATE

SKETCH PLAT FOR: PEARCE ASSOCIATES, LTD
LAND LOT 132 & 138, 9TH DISTRICT
CITY OF GAINESVILLE HALL COUNTY, GEORGIA

DESIGNED BY: D.M.C.
DRAWN BY: A.M.F.
CHECKED BY: D.M.C.
DATE: 9/23/03
PROJECT NO.
DRAWING NUMBER: C-1



ENOTA CONDOMINIUMS
HALL COUNTY, GA

CONCEPT SITE PLAN

EDR LAND SOLUTIONS, LLC
CERTIFICATE OF AUTHORIZATION NO. PEN001000
3629 Gordon Blvd, Suite C • Columbus, GA 31907
(706) 940-2498

DATE 5/15/17
DRAWN BY MDW
CHKD BY MDW
FILE NAME ENOTA BASE ALL 2P
JOB NO.

SHT. 01 OF 01

The Redbud Project A Model for Green Space Conservation

July 27, 2017

Department of Community Development

Planning and Appeal Board

Subject: Proposed 22 acre townhouse project on South Enota

How will rainfall be managed on the 22 acre South Enota development site? The first priority must be to keep most rainfall on site using various green infrastructure techniques. Can the site accommodate 65 housing units?

In the past, standard practice has been to install storm sewer systems to carry rainfall off site. Now the preferred alternative is to keep rainfall on site where it falls, using green infrastructure (natural drainage paths, rain gardens and permeable paving). You are no doubt working with JH Homes on ways to keep rainfall on site. For example,

1) Locate most of the 14 buildings along the narrow swath of forest around the site perimeter, with rooftop runoff oriented toward the forest;
2) Build rain gardens along driveways and parking areas. Rain gardens may be marginally more costly than other landscaping; that cost is offset by lower maintenance over time and greater visual appeal to home buyers. Permeable paving is another option.

Complying with tightening state environmental regulations, cleaning runoff into Lake Lanier, easing the burden of maintaining our aging storm sewer system, maintaining expected quality of life for a growing population, and ensuring that long run economic growth is sustainable all require that keeping rainfall on development sites is a first priority.

Thomas H. Rasmussen

rasmussent@bellsouth.net