BOARD MEMBERS

Jim Graw, Chairman
Arnold L. Martin, III, Vice-Chairman
John H. Culbreth, Sr.
Al Gilbert
Brian Haren

STAFF

Peter A. Frisina, Director of Community Services
Dennis Dutton, Zoning Administrator
Chanelle Blaine, Planning and Zoning Coordinator

AGENDA
FAYETTE COUNTY PLANNING COMMISSION MEETING
140 STONEWALL AVENUE WEST
May 19, 2016
7:00 pm

***Please turn off or turn to mute all electronic devices during the Planning Commission Meetings**

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1. Consideration of the Minutes of the Meeting held on May 5, 2016.

NEW BUSINESS

2. Consideration of a Preliminary Plat for Longboat Subdivision Phase - 2. The property is located in Land Lot 70 of the 7th District.

OLD BUSINESS

3. Discussion of the Planned Unit Development-Planned Residential Development consisting of 212.1 acres located in Land lots 5, 28, 29 & 30 of the 7th District fronting on Ebenezer Church Road and Davis Road concerning the Traffic Study, Contiguous Area requirements, minimum lot width, and 100 foot buffer.

4. Discussion of Hens in Conjunction with Residential Use.

5. Discussion of A-R Deer Processing, Wedding/Event Facility and Development Regulations.

THE FAYETTE COUNTY PLANNING COMMISSION met on May 5, 2016 at 7:00 P.M. in the Fayette County Administrative Complex, 140 Stonewall Avenue West, Fayetteville, Georgia.

MEMBERS PRESENT: Jim Graw, Chairman
Arnold L. Martin, III, Vice-Chairman
Al Gilbert
Brian Haren
John H. Culbreth Sr.

STAFF PRESENT: Pete Frisina, Director Community Services
Dennis Dutton, Zoning Administrator
Chanelle Blaine, Planning and Zoning Coordinator
Patrick Stough, County Attorney

Welcome and Call to Order:

Chairman Jim Graw called the Planning Commission Meeting to order. Chairman Graw introduced the Commission Members and Staff.

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1. Consideration of the Minutes of the Meeting held on April 21, 2016.

Al Gilbert made a motion to approve the minutes. John Culbreth seconded the motion. The motion passed 5-0.

2. Consideration of amendments to the Land Use Element Text And Future Land Use Plan Map of the Fayette County Comprehensive Plan for the Starr's Mill Historic Overlay District in the area of the Intersection of State Route 74, State Route 85 And Padgett Road

Chairman Graw stated that we have spent three (3) years on this project. He said that staff has done a great job and that we have created a darn good plan.

Pete Frisina stated that we actually started in July 2015 in preparing these documents. He said that what we have done is look at the intersection in close proximity to Starrs Mill (S.R. 85, S.R. 74, and Padgett Road) and come up with basic land use changes. He stated the two (2) prominent changes are the Limited Commercial One (1) and a Limited Commercial Two (2) land use districts and they are also tied back to two (2) zoning districts of the same names. He added the only major difference is the convenience store with gasoline sales; L-C-1 does not allow it and L-C-2 does allow it. He stated the land use is identified as corner one (1), two (2), three (3), and four (4). He said that corner one (1) is the northwest corner, corner two (2) is the northeast corner, corner three (3) is the southwest corner and corner four (4) is the southeast corner. He added that they're recommending Limited Commercial Two (2) for corners one (1) and three (3), corner two (2) Limited Commercial One (1), and corner four (4) is the portion of the property that is still owned by the DOT. He stated that corner four (4) is bounded by the old road bed of

Padgett Road which has been realigned, and has a gas line running through it; it has been land used as Transportation, Communication, and Utilities. He said that the property west of corner one (1) has been land used Office Institution, and will act as a buffer for the residents to the north and south of it. He added that areas north on corner two (2) and south of corner three (3) will be land used for Low Density Residential as they border areas currently zoned for one (1) acre residential. He stated that there is a small portion of property where Starrs Mill is that will be land used as Transportation Communication and Utilities as it is owned by the Fayette County Water System. He said that there is verbiage in the text that supports everything we talked about.

Chairman Graw asked if anyone from the public would like to speak to the land use plan that they are proposing for that intersection.

Hearing none Chairman Graw asked if we were going to be considering the Office section in this land use also.

Pete Frisina replied yes.

Chairman Graw said that we have not talked about the zoning of that parcel like we have the others.

Pete Frisina replied that it will be straight Office Institutional. He said that it would follow under this Historic District.

Chairman Graw asked if it was going to have the same architectural standards as the L-C.

Pete Frisina replied yes. He added that the architectural standards are not contained within the zoning districts but within the overlay.

Brian Haren asked for clarification that the dashed line represented the overlay district.

Pete Frisina replied yes.

Arnold Martin asked if there was a general district area for the mill and church.

Pete Frisina said that only district that we are talking about controlling is the area within that dotted line. He added that the historic overlay will only control those properties.

Arnold Martin asked will there be any overflow from the Starrs Mill area and will there be any challenge from archeological groups based upon the history of the area.

Pete Frisina replied not that I am aware of. He said that we are not creating a district for preservation purposes; we are creating a historic district for development purposes and we are saying that the mill has that historic character we are trying to maintain.

Chairman Graw stated that this was just a title that we used for land use and zoning purposes.

Pete Frisina said the whole idea of this is to preserve that area, because of the influence of that structure. He added that it is a very important icon for the County. He stated that this is also the gateway into the southern portion of the County, and we want to make sure that the front door looks good.

Al Gilbert stated that Starrs Mill is the most photographic spot in the County. He said that it is the last pristine entry way into our County. He added that we have to protect it. He stated that we could leave it be and end up with things we wouldn't like to see. He said by being proactive we will be able to control what goes into that area and preserve the beauty of Starrs Mill. He added that the plan isn't perfect and they will be tweaking it over the years. He stated that staff and the Planning Commission have done a great job of putting this together.

Chairman Graw stated that he is somewhat concerned about Limited Commercial on lot one (1) and three (3). He said that he personally feels we don't need two (2) gas stations on opposite corners, because there are gas stations in Senoia about four (4) miles west, Peachtree City's gas station is four (4) miles north, and there is a gas station east on McBride. He stated that his second concern is safety because SR 74 has been widened and SR 85 will be widened soon. He stated that the gas stations will cause a lot of traffic especially on lot one (1). He added that the gas station on lot three (3) will be easier to get in and out of because it can enter and exit on Padgett Road. He stated that he doesn't feel that it is severe enough right now for him to vote no. He said that he thinks we have a fantastic development and he reiterated that he doesn't want to vote no because of his personal opinion about a gas station on one (1) lot.

Arnold Martin stated the he understood his concern, but doesn't feel the same way. He said that the gas stations on opposite sides of the street will help ease the traffic with one gas station getting customers in the morning and the other getting customers at night. He added that he finds it safer on the driver for them to pull into a gas station on their side of the road as oppose to using a turning lane for a gas station on the opposite side of the road.

Brian Haren made a motion to recommend approval of the proposed amendments. Al Gilbert seconded the motion. The motion passed 5-0.

3. **Consideration of amendments to the Fayette County Code of Ordinances, Chapter 110., Article I – In General. Sec. 110-3. –Definitions, Article IV. - District Use Requirements, Sec. 110-145. and Sec. 110-146., Article V. - Conditional Uses, Nonconformances, Transportation Corridor Overlay Zone, and Commercial Development Standards, Sec. 110-169. Conditional Use Approval., Sec. 110-173. - Transportation Corridor Overlay Zone. (3) General State Route Overlay Zone, and Sec. 110-174. – Commercial Development Standards., concerning the proposed Starr's Mill Historic Overlay District and Overlay Zone.**

Pete Frisina stated that this is the follow up to the land use changes we just looked at. He said that this is all of the backing ordinances we created with the zoning ordinance. He added that we

have beefed up the definitions that we had to create for these new zoning districts. He stated that we have created a new L-C-1 (Limited Commercial 1) and have taken the L-C district and amended it to now be Limited Commercial Two (2). He said that under the conditional use we went to the convenience commercial establishment and amended it to match what we're doing in the L-C-2. He added that under the Transportation Corridor Overlay State Route areas we have put it in as a new overlay so it was pulled out of the General State Route Overlay. He stated that we have created the new Historic District Overlay with architectural standards. He said that there is a section under the Corridor Non-Conformance chapter which was called Commercial Development Standards that was written some time ago that was specific to the area north of State Route 54, west of Sandy Creek Road, and East of Tyrone that was a hospital overlay area. He added that this particular area is no longer in the County, and is in the City of Fayetteville. He said that section will be taken out and using the section number to create the new Historic District.

Chairman Graw asked the public if they had any comments or suggestions regarding the zoning of the 74/85 intersection. Hearing none he brought it back before the Planning Commission.

Brian Haren asked if the visual representation of the standards will be provided.

Pete Frisina replied yes and that we don't want to put them in the ordinance, because the County Attorney has advised us not to. He stated that we have representations and they are well known. He said that we have set the standards within there even though we say it's a one (1) part commercial block or a two (2) part commercial block. He added that the visual representation shows people the general look of it.

Arnold Martin asked if there were any policies and or procedures that relate to potential developers that want to come forth with a rendering.

Pete Frisina replied that we already review architectural standards because we have them on all the highways. He said that it would follow that same procedure. He added that when someone comes in to develop a piece of property and submits a site plan to us we would then review those renderings based on these standards. He said we did set up something in here that allows them if they don't want to follow the standards to present something and go through a public hearing process. He added that it would come to us, to you, and then the board. He stated that it would be called the architectural option. He said they can go administratively and submit it through the site plan option (normal procedure) or they can go the other route.

Dennis Dutton stated that we are just recommending the amendments and not changing the zoning of any property.

Chairman Graw asked if there were any questions or comments.

Arnold Martin made a motion to recommend approval of the proposed amendments. Brian Haren seconded the motion. The motion passed 5-0.

4. Consideration of the proposed Color Palette for the Starr's Mill Historic Overlay District and Overlay Zone.

Chairman Graw stated that we have a book with specific colors that will be allowed in the Historic Overlay District.

Arnold Martin stated that in the original discussions of the palates we had a few renditions of the palate based on the copier that was used. He asked if we are using a standard and therefor being consistent with what we're showing people and what they may print off at home.

Pete Frisina replied that the color palate in the book is the only one and the pages were printed out on the same copier and then laminated. He said that this is what we will be using when everybody comes in. He added that the colors being used will be matched up to those in the book.

Marcus Pollard stated that he was a new resident of Fayette County and went over his background. He suggested using a color code for the color palate book, because light changes color over time.

Chairman Graw stated that we have addressed that particular issue already. He said that the book does not have color codes because they didn't want to show favor towards a particular company (i.e. Sherwin Williams, Glidden, and Benjamin Moore). He added that if anyone wants to develop in that area they will have to bring in their particular color and match it up against those colors in the book. He stated that staff will then make that determination on whether or not the color they submitted matches those in the book.

Brian Haren stated that we had that very same argument in past meetings; we have come to find out that there is no standard industry code number for particular colors. He said hot pink in Home Depot's computer may be 1234 but hot pink in Lowe's computer may be 6724. He added that we even tried embedding the CMYK values or the RGB values and that doesn't work either.

Mark Pollard stated that he and his girlfriend see colors differently and asked who would be the deciding authority on the colors.

Al Gilbert said if you look at the wood around the television set and desk; if someone were to come in and that color was in the book, they would more than likely get approved. He added that we are not trying to get an exact identical match, but we certainly don't want someone to come in with yellow when it's supposed to be orange.

Mark Pollard said that it just came to mind when he saw the different variations of the blue and brown colors.

Chairman Graw stated that the same has been done for the brick palate.

Arnold Martin recommended printing the color palates on acid free paper, because it helps to preserve the paper over time.

Brian Haren made a motion to recommend approval of the proposed Color Palette. John Culbreth seconded the motion. The motion passed 5-0.

5. Consideration of the proposed Brick Palette for the Starr's Mill Historic Overlay District and Overlay Zone.

Chairman Graw asked if there were any comments from the public. Hearing none he brought it back before the Planning Commission.

Al Gilbert made a motion to recommend approval of the proposed Brick Palette. Arnold Martin seconded the motion. The motion passed 5-0.

6. Consideration of amendments to the Fayette County Code of Ordinances, Chapter 110. Article IV.-District Use Requirements Sec. 110-149 – Planned Unit Development- Planned Retreat and Lodge concerning Solar Farms.

Pete Frisina stated that we did meet with the representative from the solar company that will supply the solar panels to Camp Southern Ground at the last meeting. He said that this is a change to allow a solar farm in a PUD-PRL district. He mentioned that we did add the verbiage that said it will be a net meter facility only, which was the term that she used for a system that will supply power to that site. He added that the net meter means that some of the excess power can go into the grid, and when they pull power off the grid they will receive a credit. He stated that its purpose is not to produce power as a utility.

Chairman Graw asked if the public had any comments. Hearing none he brought it back before the Planning Commission. He stated that this is a solar farm for Camp Southern Ground and they will be totally independent of any other power source with the solar farm.

Pete Frisina stated that it will supplement their power; they will still be hooked up to a utility company pulling power.

Chairman Graw said that he asked her if they were going to be energy independent and she said yes.

Pete Frisina replied theoretically yes, but on days when it is not sunny they will still pull on power from the utility company.

Chairman Graw said when available they will still be energy independent. He stated that there was only one (1) item added and that was section (f) solar farm (limited to a net meter facility only). He asked if anyone had any questions or comments.

Arnold Martin asked if a solar farm was define as any entity that had more than three (3) panels.

Pete Frisina replied yes that it is the definition and it is still there.

John Culbreth made a motion to recommend approval of the proposed amendments. Al Gilbert seconded the motion. The motion passed 5-0.

7. Discussion of A-R Deer Processing, Wedding /Event Facility and Development Regulations

Pete Frisina stated that everything is staying the same; except for number eight's (8) exemption being put in for these two (2) agricultural uses. He said that when we passed the A-R Wedding/Event Facility we made amendments to the Zoning Ordinance to allow it, but fail to clarify certain things in the Development Regulations. He added that Environmental Management felt that they still needed to apply certain landscaping requirements, site plan requirements, and all these other things we didn't want to apply to an agricultural use but we think that the Deer Processing and the Wedding/Event Facility are fairly similar use. He said what we tried to under number eight (8) is to do these exemptions from a site planning requirements and some of the landscaping parking requirements; under i, ii, and iii we've come up with some different standards for parking in terms of limited landscaping. He added that he is still working with Environmental Management to make sure this is what they want. He stated that they made similar changes to the A-R Wedding/Event Facility. He said that he started to go through the Development Regulations making the acknowledgement of the exceptions saying, as otherwise accepted in the Zoning Ordinance. He added that while he was making changes in the Development Regulations he thought it would be good to make other housekeeping changes too. He stated in the packet under the section Recreational vehicles and boats (red is development regulations and black is the zoning ordinance) he would like to remove the red section and put it in the Zoning Ordinance. He said that it makes more sense to put everything under the zoning ordinance rather than having similar regulations in two (2) documents because you may miss something. He added that the verbiage, as otherwise exempted in the Zoning Ordinance that is for everything to match up in the Deer Processing and the A-R Wedding. He stated that we are also making a change on page eight Sec. 104-29. He said that the batter board and footing inspection is a practice has been in place since the early 80's. He added that we haven't had any problems with it but it is something that he felt uncomfortable with. He stated that what they are going to do now is go to a straight foundation survey. He said a developer brings in a site plan, we approved the site plan, and the developer sets the buildings on where they need to be based on that site plan. He added that it is the developer's responsibility to lay that foundation based on the site plan that has been approved. He stated that the site plan would have been approved with that foundation meeting all setbacks and buffers whatever else is required. He said that a developer can pour that foundation, but once it's poured a surveyor needs to verify that foundation meets all the requirements of the setbacks and buffers. He added that it is very good practice for that developer to have that surveyor lay that out before he pours the foundation. He stated that their batter boards are set by the surveyors, and gets us out of the position of pulling a tape.

Al Gilbert stated that it was a real problem many years ago and that he never felt comfortable putting a burden on the County.

Pete Frisina stated that many years ago a former Zoning Administrator went out to do a batter board inspection and everything met, but when the concrete guy got out there he said that I need to kick this out a foot or so. He added that buy kicking it out the foundation was over the setback. He said that we are now putting the burden on them and when developers want to build a house in this County they bring to us a site plan and it says here is where I'm building the house. He added that we look at that for the building permit process and we approve the building permit based on the location they have represented to us. He reiterated that once they pour the foundation they must get a surveyor to verify that the foundation meets all setbacks and buffers.

Chairman Graw asked if it's only been one (1) foundation survey that has been done incorrectly.

Pete Frisina replied only one (1) that he is aware of.

Chairman Graw asked what kind of problem did that one (1) cause and how far off was it.

Pete Frisina replied that back then the Zoning Administrator had administrative variance approval. He said the developer dug out a foot more than what was there so he could get the footings a little wider.

Pete Frisina stated another housekeeping change we're making is replacing all Stormwater Management with Environmental Management.

Al Gilbert stated that he would be ready to get this to a public hearing.

Pete Frisina replied that he still needs to get with Environmental Management and Public Works/Engineering to go over the changes. He stated that the sections highlighted in yellow he still needs to get input with the other departments.

Al Gilbert asked if he was just waiting on the items highlighted in yellow.

Pete Frisina replied yes and few house cleaning items.

Chairman Graw asked when the changes to the Wedding/Event Facility and Deer Processing will be coming before them.

Pete Frisina replied that he has to change both ordinances at the same time. He said he would be happy to get it to Public Hearing by July.

Chairman Graw stated that it seems to be a lot of minor changes to the ordinance. He said that the changing of the name to Environmental really doesn't change anything.

Pete Frisina said once he gets input from the other departments he will then bring it back before you and have the Public Hearing meeting in July.

Arnold Martin asked if those comments encompassed number eight (8) as well.

Pete Frisina replied no.

8. Discussion of Hens in Conjunction with Residential Use.

Pete Frisina stated that we have discussed this at one (1) of our meetings so far. He said we're basically looking to do the urban chicken zoning ordinance amendments. He read from the Keeping of hens in conjunction with residential use ordinance:

> The number of hens allowed per principal dwelling unit is limited to three (3) and one (1) additional hen for each additional acre to a maximum of five (5) hens shall be allowed in the following zoning districts: EST, C-S, R-85, R-80, R-78, R-75, R-72, R-70, R-55, R-50, R-45, R-40, R-20, DR-15, RMF, MHP, PUD-PRD, PUD-PRL, PUD-PEF, O-I, C-C, C-H, L-C, M-1, M-2, and BTP. No roosters are allowed. No on-site slaughter is allowed. Hen houses/coops are allowed in side and rear yards only and shall be set back from all property lines a minimum of 50 feet. Hens shall be contained on the lot. The containment area shall be in side and rear yards only and shall be limited to no more than 40 percent of the lot.

He said by statue residents will not be able to claim a conservation use for their property. He said if anyone claims that they have more than 50 percent of their property containing hens we can say by ordinance you cannot do it.

Chairman Graw stated that he talked to Pete about the hen ordinance. He told the Planning Commission that the hens will be allowed in the residential districts. He said that his concern is for predators coming on to the property and hunting the hens. He added that he doesn't know the answer to that. He stated that his daughter lost some her chicks by large cats and a hawk. He said you can build a fence, but how big of a fence do you build, and do you even want to put a fence up.

Marcus Pollard stated that you can build a fence a couple of feet underground. He said that any predator that is land based will try and climb over the fence or try and go up under it. He added that the predators will give up trying to get to the chickens when the fence is buried underground. He stated that you can put a top on the fence or a tarp over it to prevent airbase predators from getting into it. He said that if you set up your pin or your 40 percent enclosure for the chickens like the ordinance requiring predators shouldn't be a problem.

Chairman Graw asked do we want to even approach the subject or do you want to consider something like this gentleman mentioned.

Arnold Martin stated that what Marcus Pollard mentioned definitely protects the chickens. He said that his issue is with attracting predators to the general public. He added that we are considering the life of hens but we should also think about children.

Marcus Pollard asked what kind of predators you are concerned about in our area. He stated that coyotes are usually not a danger to humans. He said they are only danger to small house animals. He added that he lived in Iowa for five (5) years and they had a large population of coyotes. He stated that when they saw coyotes on the property no one was afraid. He said the only time you should be fearful of coyotes is when they are roaming in packs or it's a deranged animal. He added that it will not change the risk if we brought chickens into the area.

Chairman Graw asked if foxes go after chickens.

Marcus Pollard replied yes.

Chairman Graw stated that we have a lot of coyotes in the area. He said that we have two (2) options do nothing right now or do something with the fencing.

Brian Haren asked if we can say in the code that the chickens must be housed in a predator resistant enclosure and not worry about defining what that is.

Pete Frisina replied that would be okay until someone asked what a predator resistant enclosure is.

Brian Haren stated that he sees predators as being a casualty of raising chickens.

Marcus Pollard asked why the number three (3) for chickens.

Pete Frisina stated that he saw three (3) in a lot of urban chicken ordinances some of them allow more but he wanted to start slow. He said that if a chicken lays an egg a day then three (3) chickens will lay seventy to eighty eggs a month. He added that it was a lot of eggs and if you're primary purpose is to lay eggs than that will do it. He said that you're not raising eggs for meat specifically; people really want the egg that's what they're raising them for.

Brian Haren asked if there were industry standards that say a chicken requires X amount of space.

Pete Frisina replied yes and it's about three (3) square feet or so, if you wanted to pin them in a tight space.

Marcus Pollard said according to some of the research he has done the bare minimum of space is one (1) square feet He added that it is better to have two (2) to three (3) square feet if you would like for them to roam around. He said that yes three (3) is an adequate number if you're doing egg production but there are other factors involved with owning chickens. He stated that his house is on a downward grade that slopes into a creek and with the water come bugs. He said that he does a lot of gardening and that chicken's help control the bug population. He added that without the chickens his only alternative is to spray chemicals on the grass and trees to decrease the bugs. He said he doesn't want to use the chemicals because they get into the water but it is his only option. He stated that he did a quick cursory overview of four ordinances the City of Atlanta, Clayton County, DeKalb County, and the City of Decatur. He said that the City of Atlanta allows up to 25 turkeys, chickens, bantams, or similar fowl; Clayton County has no limit designated in their County ordinances; DeKalb County allows for one (1) hen per 2,000 square

feet of property (22 chickens per acre of land); City of Decatur doesn't specify the amount of chickens you can have but you must have a minimum of four (4) square feet per animal. He added that three (3) seems like an arbitrary number.

Arnold Martin asked if the first two (2) were Atlanta and Clayton County.

Marcus Pollard replied yes. He said that in Atlanta's Ordinance Section 18-7 and 18-8 you can see the maximum number allowed.

Arnold Martin asked if there was any reference to the size of the lot. He said that he would assume it would be related to the size of the lot.

Marcus Pollard replied that it doesn't specify the acreage of the lot but it does say that you must be 50 feet from your neighbor's residence. He said for DeKalb County their minimum lot size is 10,000 square feet.

Chairman Graw asked what the minimum lot size is to have chickens.

Marcus Pollard replied yes and they're the ones that allow you to have one (1) hen per 2,000 square feet. He said the maximum you can have is one (5) hens on 10,000 square feet (the smallest allowable lot size).

Chairman Graw stated that here in Fayette County we have a zoning district called A-R (minimum five (5) acres) and in the A-R zoning the numbers of chickens are unlimited. He said that what they are mentioning tonight is the residential lots (1, 2, 3, and 4 acre lots). He added that this is new to them and what they are trying to do feel their way on this. He said that yes the number is a little arbitrary but we're always open to amending things in the future. He added that we start off usually on a conservative note to see how things work and then if we need to adjust we adjust. He stated that they have done this on numerous occasions and for many different things.

Marcus Pollard stated that he already sees a mistake happening because most people that acquire these chickens are going to go to Tractors, and the minimum number you have to buy is six (6). He asked how you will be able to buy the chickens if the ordinance says that only three (3) are allowed. He added that six (6) should at least be the minimum.

Brian Haren stated that we don't write zoning ordinances based on a commercial establishment package. He said that we have your neighbors to think about and reiterated that A-R lots have an unlimited number on the amount of chickens.

Marcus Pollard stated that out of the four (4) ordinances he has found they have all taken neighbors into consideration by making them a certain distance away from their neighbor's property line or the dwelling. He added that we could adopt some of the jurisdictions language into our ordinance to make sure that the residents are protected.

Chairman Graw asked if anyone else had any questions.

Arnold Martin asked Marcus how many chickens would you like.

Marcus Pollard replied his intent was to just get six (6) he doesn't want to have a farm. He said that he wants the manure for his garden, to kill some of the bugs, egg production, and to not have to use chemicals in his yard. He said 10 would help wipe out the bug population.

Chairman Graw asked if there was anything else. He thanked Marcus for coming in and said that we would be discussing it further in the future.

Chairman Graw asked Pete if we should consider the size of the lot for the number of chickens.

Pete Frisina replied saying we do that with horses. He stated for horses in a residential district you have to have three (3) acres for one (1) horse; and then you have to have an additional acre for every horse after that. He said that Mr. Pollard's question is would we be amenable to more than three (3) and if you wanted to go to something more than that you could go to a graduated schedule. He asked what the ultimate number of chickens we would like to see in a residential neighborhood. He added that this is where he always comes from, and when looking at some of the ordinance three (3) is the lowest range for most of the urban chicken ordinance. He said that he has seen urban ordinances that allow for four (4) and five (5).

Arnold Martin stated that it's about how many chickens are in a neighborhood. He said what if this becomes a trend. He added that this could become a nuisance based upon the amount of chickens in that neighborhood. He stated that we don't have a neighborhood like Serenbe where everything is natural and borderline farm. He said that to him is the bigger picture. He added that he doesn't know if there will be an entity that goes around and counts the number of chickens per neighborhood.

Pete Frisina stated that the Code Enforcement Officers are really excited about this ordinance. He said that in the City of Norcross they have a problem with roosters running all over the town and nobody is claiming whose they are. He added that the cops said that they don't have time to chase roosters all over the town. He said that when he lived in the City of Atlanta his neighbor who owned a five (5) acre parcel had chickens and goats. He added that the chickens for the most part stayed on his property. He stated that the chickens and rooster began to procreate rapidly and roost in neighbors shrubs. He said that the City came out and rounded up all the chickens due neighbor complaints. He added that we are starting slow and can look at using a graduated schedule if they want to; similar to how we do horses.

Al Gilbert said last week on the news a man was wondering a subdivision and was shot by a police officer because he tried to attack him using a rooster and a knife.

Pete Frisina said that is why we're not allowing roosters.

Brian Haren asked if the minimum lot size we're talking about for this is one (1) acre.

Pete Frisina replied the minimum lot size for Fayette County is one (1) acre. He added that within a one (1) acre subdivision you can have lots that are two (2) and three (3) acres because of the floodplain. He said that was number I saw that was the lowest and that is what I suggested as the start.

Chairman Graw stated that he liked the idea of a graduated schedule. He said they could start off with three (3) on one (1) acre; and I don't know what number you would put on two (2), three (3) and four (4) acres. He said that it is fair and we have the same concept with horses.

Marcus Pollard stated that the infestation of chickens in a neighborhood is a nice story, but we are not allowing for any roosters; so there won't be any reproducing. He said that whether or not roosters are playing a big part in the problem is nonexistent. He added that he doesn't want to hear roosters crowing at five (5) in the morning. He said that he is just here for the backyard chickens and there won't be any problems with reproduction from roosters because they are not allowed. He reiterated that three (3) was a very arbitrary number when City's like Atlanta let you have as many as you want. He stated that we are way more rural than the City of Atlanta where there is a lot less one (1) acre lots. He said he doesn't see the connection on how the neighboring counties differ from Fayette County and why three (3) is the maximum when every other counties allow so much more.

Arnold Martin stated that one (1) of thing you will hear so often with being a resident of Fayette County is, "preserving the way of life". He said that the Planning Commission is charge with the commission of figuring out ways to preserve what is very special here in Fayette County. He added that he moved here for a specific reason and it has separated Fayette County (good or bad) from some of the other areas that you mentioned. He stated that his background is in real estate and one of the biggest thing people are very much focused on is property values. He said that he is concerned about the needs of the citizens and want's to create ordinances that do not hinder but protect the people of Fayette County. He added that Mr. Pollard will be hearing more of what he said in various ways from other people as he continues to live in the County.

Chairman Graw stated that we will have more opportunities to discuss this some more. He welcomed Mr. Pollard to join in on those discussions. He asked Pete when they were going to have their next meeting.

Pete Frisina said the next meeting will be on the 18th. He added that he will not attend but Dennis and Chanelle will be there.

Chairman Graw asked will we be discussing the chickens at the next meeting.

Pete Frisina replied yes and maybe the A-R Wedding/Event Facility and Deer Processing will be on there too if he gets some more clarification from the other departments.

Chairman Graw asked him to bring us your recommendation about graduated schedules, lot sizes, and fencing at the next meeting.

Pete Frisina replied I think we should leave the fencing as is. He said the chickens will attract predators no matter what type of fencing you put out there. He added that the fence will prevent the chickens from being eaten but he doesn't have a good idea on that.

Dennis Dutton said the next meeting will be May 19th .

****

Al Gilbert made a motion to adjourn the meeting. Chairman Graw said the meeting was adjourned at 8:29 pm.

PLANNING COMMISSION OF FAYETTE COUNTY

ATTEST: **JIM GRAW, CHAIRMAN**

To: Fayette County Planning Commission

From: Dennis. Dutton, Zoning Administrator

Date: May 13, 2016

Subject: Preliminary Plat to be considered on May 19, 2016

PRELIMINARY PLAT

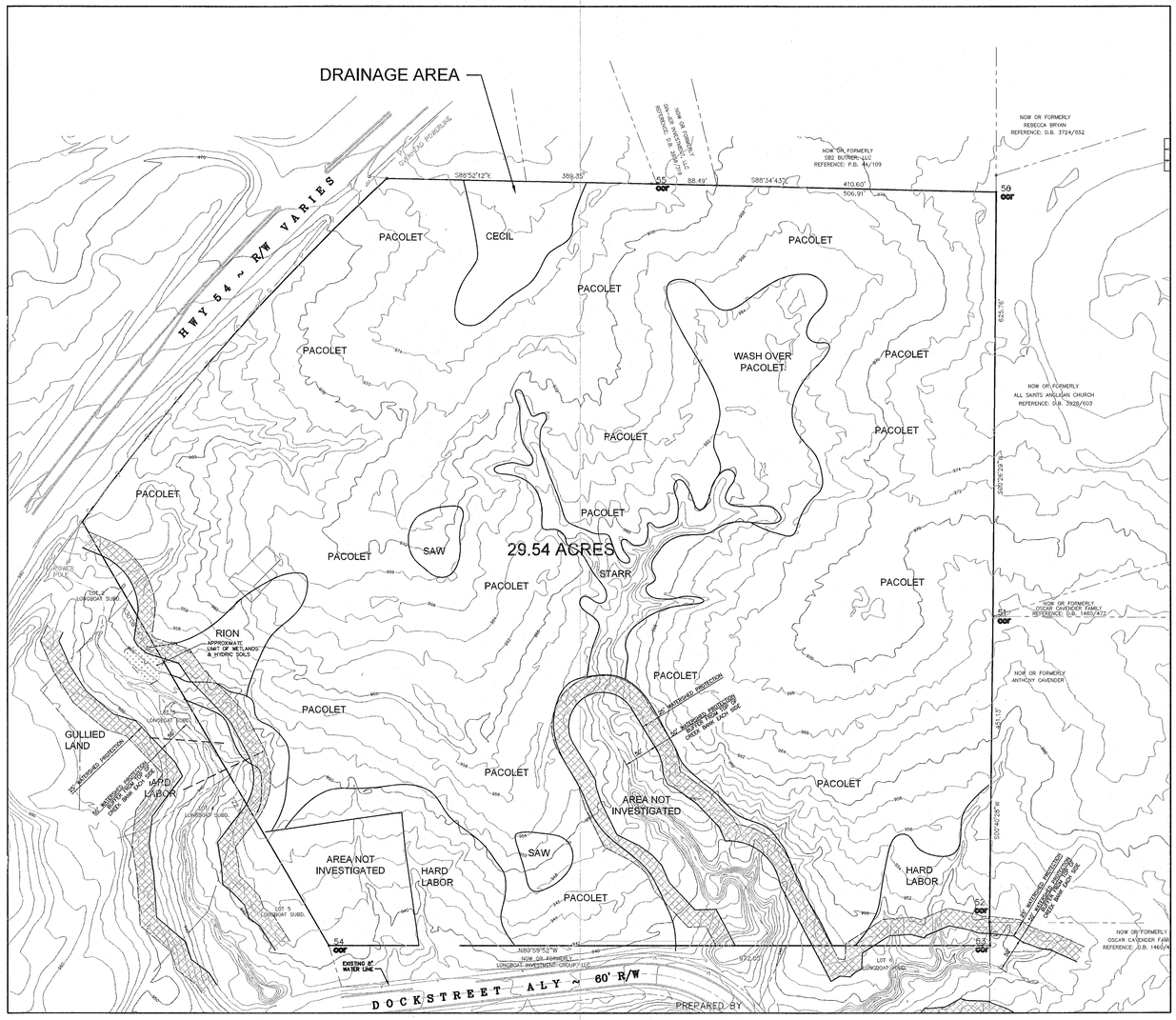
Preliminary Plat of Longboat Phase 2

OWNER/APPLICANT

Lindsey Shaw Holdings, LLC
Hovey & Associates, Inc.

Recommend **APPROVAL**

On the Longboat Subdivision Phase 2 Preliminary Plat stamped 05/13/2016.



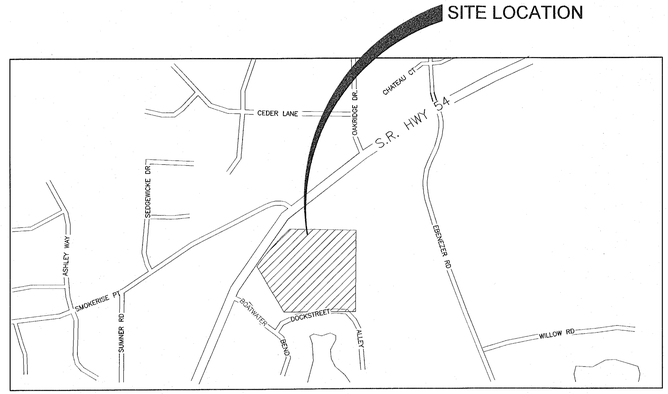
LOCATED IN LAND LOT 70 – 7TH DISTRICT

FAYETTE COUNTY GEORGIA

SCALE: 1"=100' DATE: NOVEMBER 11, 2015

REFERENCE: DEED BOOK 4004, PAGE 318

AMERICAN NORTH DATUM NAD 1983 STATE PLANE GEORGIA WEST FOOT



VICINITY MAP

N.T.S.

SOIL INTERPRETIVE DATA

Soil Units	Depth to Bedrock (in)	Depth to Seasonal High Water Table (in)	Slope Gradient (percent)	Recommended Trench Depth (in)	Estimated Perc Rate (min/in)	Recommended Hydraulic Loading Rate (gal/day/sq.ft.)	Soil Suit. Code
Cecil	>72	>72	2-10	36-48	60	----	A1
Hard Labor	>72	36-48	2-10	8-24	70	0.12	C2
Pacolet	>72	>72	2-10	30-48	45	----	A1
Rion	>72	>72	2-10	30-48	45	----	A1
Saw	36-42	>42	2-6	8-24	60	0.15	I1
Starr	>72	48-72	2-8	----	----	----	F4
Wash Over Pacolet	>72	>72	2-8	40-48	60	----	A2

SOIL SUITABILITY CODE LEGEND

A1	Soils are typically suitable for conventional absorption field with proper design, installation and maintenance.
A2	Soils are unsuitable for conventional absorption fields due to seasonal-high water table conditions. Soils are generally suitable for alternative absorption fields with treatment system producing Class 1 effluent.
C2	Soils consist of over wash over natural soils. Residual soil is suitable for conventional absorption field installation at recommended trench depth. Storm water runoff must be diverted from this area if it is used for absorption field.
F4	Soils are unsuitable for on-site wastewater disposal due to flooding and/or storm water drainage patterns.
I1	Soils are unsuitable for conventional absorption fields due to shallow bedrock. Excavation of observation pits with a backhoe may allow these soils to be reclassified in a different suitability category. These soils are generally suitable for alternative absorption fields with treatment system producing Class I effluent.

NOTES:

Gullied Land – This area severely limited for absorption field construction due to gullies,concave landscape position and storm water drainage pattern.

Surface drainage should be diverted away from absorption field lines installed on concave slopes.
Estimated percolation rates are based on full–sized system performance. However, no guarantee is given or implied as to the performance of any particular system installed.

"Approval of this Preliminary Plat shall expire 24 months from the date of approval by the Planning Commission unless a Final Plat for at least one (1) phase has been approved; or street base construction for at least 50 percent of the total linear footage of all street(s) approved on the Preliminary Plat ."

b. "This Preliminary Plat has been reviewed and approved by the Planning Commission on _____/_____/_____."

c. "Each residential building lot has a minimum contiguous area that is free and clear of zoning setbacks, watershed protection buffers and setbacks, jurisdictional wetlands, and easements of any kind." Indicate the contiguous area (in acres) on each individual lot or in a legend."

PRELIMINARY PLAT CHECKLIST
PLANNING AND ZONING DEPARTMENT

Page# Y/N/NA

_____ _____ 25. **SOIL CLASSIFICATION DELINEATION**

I, _____ do hereby certify that the Level III soil
name
survey information provided on this plat was performed by _____ in
company name
accordance with the procedures specified in the Georgia Department of Human Resources' current *Manual for On-Site Sewage Management Systems*.

_____ _____
Signature of Soil Classifier Georgia DHR Soil Classifier, Professional Geologist, or Professional Engineer
Registration No.
Registration Numbers/License Numbers

_____
Company Address & Telephone

PRELIMINARY PLAT CHECKLIST
ENVIRONMENTAL MANAGEMENT DEPARTMENT

Page# Y/N/NA

_____ _____ 39.Include the following statement:

WETLAND DELINEATION

I, _____ of _____
name organization
do hereby certify that I have field inspected the property known as
_____ on _____ and determined that the property
subdivision name date
☐ contains does not contain jurisdictional wetlands as defined by the U.S. Army Corps of Engineers.

_____
Signature of Wetland Delineator

_____
Company Address & Telephone

LEGEND / SYMBOLOGY

PROPOSED DESCRIPTION

HARD LABOR / SAW / PACOLET — SOIL DELINEATION

DRAINAGE AREA LINE OUTLINING DRAINAGE AREA

NOTE:

THERE IS NO GROUNDWATER RECHARGE AREAS ON THE PROPERTY.

RECEIVED
MAY 13 2016
FAYETTE COUNTY
Environmental Management

McLAIN SURVEYING, INC.

LAND SURVEYING LAND PLANNING ENGINEERING SERVICES

6 MADISON STREET NEWNAN, GEORGIA 30263

PHONE: 770–251–8523 – FAX: 770–254–8905 – EMAIL: tmclain@numail.org

CIVIL ENGINEERING
LAND PLANNING
HYDROLOGY

PREPARED BY:

HOVEY & ASSOC., INC.

130 HOWARD LANE, SUITE B
FAYETTEVILLE, GEORGIA 30214
PHONE: 770–460–2200

PREPARED FOR:

OWNER/DEVELOPER & 24 HR. CONTACT

LINDSEY SHAW HOLDINGS, LLC

140 VILLAGE CIRCLE
SENOIA, GA 30276
CONTACT: DUSTIN SHAW
PH NO. 770–599–0706

PRELIMINARY PLAT Of LONGBOAT SUBDIVISION PHASE–2

LOCATED IN: LAND LOT 70 ~ 7TH DISTRICT ~ FAYETTE COUNTY, GEORGIA

GRAPHIC SCALE: 1" = 100'

0 100' 200'

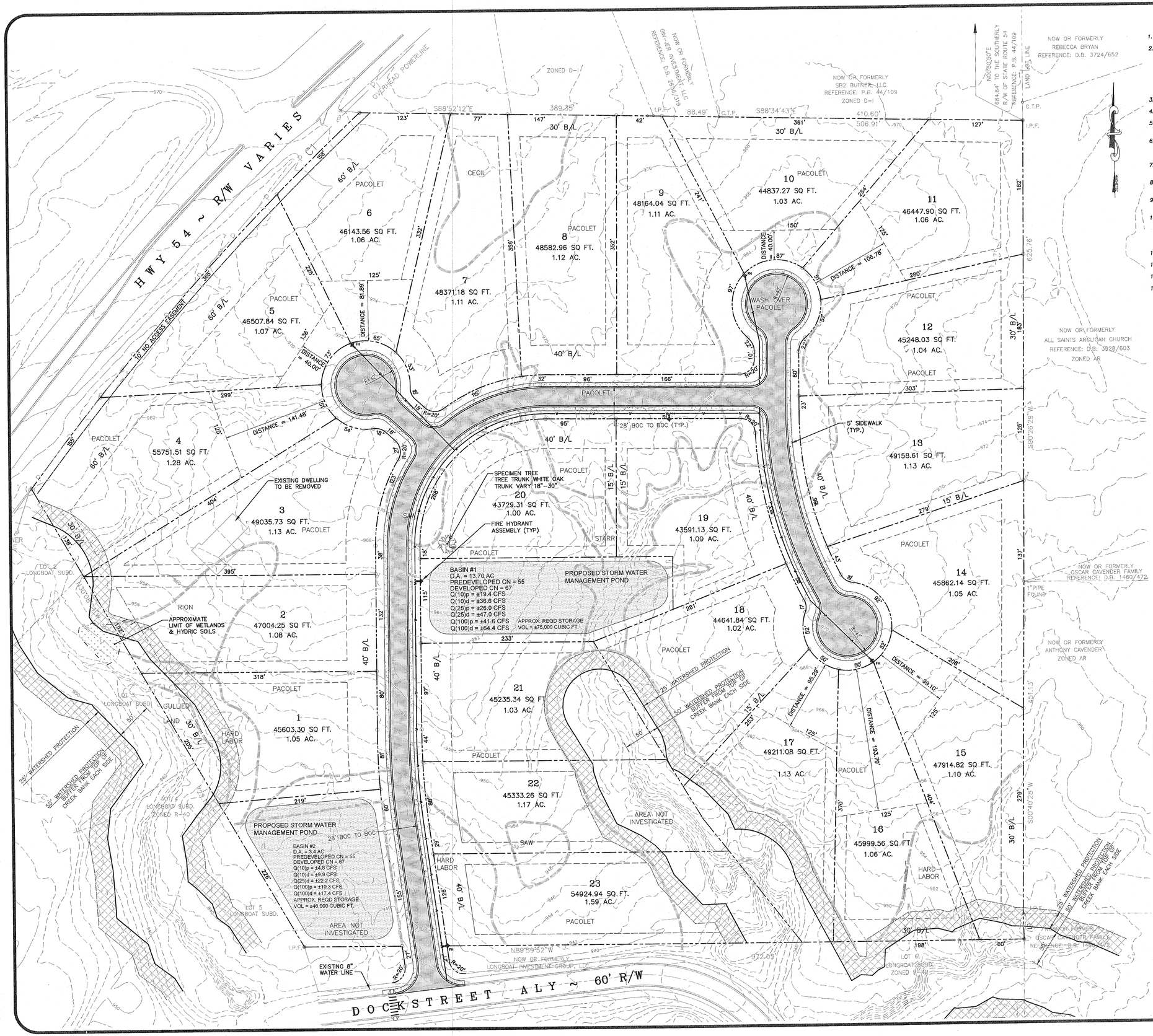
GRAPHIC SCALE

DATE: NOVEMBER 24, 2015

REV.	DATE	DESCRIPTION

GEORGIA REGISTERED No. 18090 PROFESSIONAL ENGINEER DAVID C. HOVEY

SHEET 1 OF 3 SHEETS



GENERAL SITE DATA:

1. TOTAL AREA OF SITE: 29.54 ACRES.
2. PROPERTY IS CURRENTLY ZONED: R-40
   MIN. FRONT SETBACK: 40'(LOCAL)
   60' MIN. ARTERIAL AND COLLECTOR RD. SETBACK
   MIN. SIDE SETBACK: 15'
   MIN. REAR SETBACK: 30'
   MIN. LOT WIDTH: 125' @ B/L
   MIN. LOT FRONTAGE: 100' EXCEPT 50' ON CUL-DE-SAC
3. ALL STRUCTURES ON THIS SITE ARE TO BE REMOVED.
4. THERE ARE NO EASEMENTS ASSOCIATED WITH THIS PROPERTY.
5. THIS PROJECT IS TO BE SERVED BY FAYETTE COUNTY WATER DEPARTMENT.
6. ACCORDING TO FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 13113C0091E 9/26/2008, THIS PROPERTY DO NOT LIE WITHIN A 100 YR. FLOOD ZONE.
7. BOUNDARY INFORMATION WAS TAKEN FROM PLAT PREPARED BY McCLAIN SURVEYING INC.. DATE NOVEMBER 11, 2015.
8. TOPOGRAPHIC INFORMATION WAS PROVIDED BY FAYETTE COUNTY G.I.S. DEPARTMENT.
9. STATE WATERS ARE FIELD LOCATED BY APPLIED ENVIRONMENTAL SCIENCES, INC.
10. THE MAJORITY OF THIS SITE WILL BE DETAINED FOR IN SEPARATE DETENTION BASINS. WATER QUALITY WILL BE ADDRESSED IN SEPARATE BASINS. MICRO-POOL TYPE BASINS WILL BE USED. CHANNEL PROTECTION STORAGE VOLUME WILL ALSO BE PROVIDED FOR IN THE BASINS.
11. THE OVERALL PRE-DEVELOPED Cn FOR THIS SITE IS 55.
12. NO CEMETERIES OR BURIAL GROUNDS FOUND ON THIS SITE.
13. ALL LOTS WILL BE SERVED BY SEPTIC AND DRAIN FILL SYSTEM.
14. PROPERTY REZONED UNDER RESOLUTION NUMBER 1249-15 DATED SEPT. 24, 2015

ABBREVIATION LEGEND

R/W	RIGHT OF WAY
I.P.F.	IRON PIN FOUND
I.P.P.	IRON PIN PLACED
C.T.	CRIMPED TOP PIPE
R.B.	REINFORCING BAR
O.T.	OPEN TOP PIPE
N/F	NOW OR FORMERLY
B.L.	BUILDING LINE
P.P.	POWER POLE
L.L.L.	LAND LOT LINE
B.L.	BUILDING LINE
D.B.	DEED BOOK
P.B.	PLAT BOOK

LEGEND / SYMBOLOGY

PROPOSED	DESCRIPTION
106' 98'	PROPOSED PROPERTY LINE WITH LINE/CURVE SEGMENT AT THE TANGENT
W	EXISTING WATERLINE
W	PROPOSED WATERLINE
	PROPOSED SETBACK LINE
	PROPOSED FIRE HYDRANT ASSEMBLY
	SPECIMEN TREE

LOT DATA

LOT NUMBER	SQUARE FEET	ACREAGE	CONTIGUOUS AREA	CONTIGUOUS AREA %
1.00	45603.30	1.05	27183.87	0.6
2.00	47004.25	1.08	28702.26	0.7
3.00	49035.73	1.13	28272.46	0.6
4.00	55751.51	1.28	31274.60	0.7
5.00	46507.84	1.07	18225.65	0.4
6.00	46143.56	1.06	24016.50	0.6
7.00	48371.18	1.11	29233.36	0.7
8.00	48582.96	1.12	30510.46	0.7
9.00	48164.04	1.11	26845.80	0.6
10.00	44837.27	1.03	25123.53	0.6
11.00	46447.90	1.07	29018.56	0.7
12.00	45248.03	1.04	27516.11	0.6
13.00	49158.61	1.13	30493.08	0.7
14.00	45862.14	1.05	25570.28	0.6
15.00	47914.82	1.10	27658.61	0.6
16.00	45999.56	1.06	27544.42	0.6
17.00	49211.08	1.13	15202.07	0.3
18.00	44641.84	1.02	21254.94	0.5
19.00	43591.13	1.00	23529.45	0.5
20.00	43729.31	1.00	19453.42	0.4
21.00	45075.58	1.03	20801.71	0.5
22.00	50804.87	1.17	20611.79	0.5
23.00	69098.25	1.59	30388.80	0.7

LINE TABLE

LINE	LENGTH	BEARING
L1	34.32	S01°34'10"E

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD	BEARING
C1	677.26	3633.73	676.28	S41°27'26"W

CIVIL ENGINEERING
LAND PLANNING
HYDROLOGY

PREPARED BY:

HOVEY & ASSOC., INC.

130 HOWARD LANE, SUITE B
FAYETTEVILLE, GEORGIA 30214
PHONE: 770-460-2200

PREPARED FOR:

OWNER/DEVELOPER & 24 HR. CONTACT

LINDSEY SHAW HOLDINGS, LLC

140 VILLAGE CIRCLE
SENOIA, GA 30276
CONTACT: DUSTIN SHAW
PH NO. 770-599-0706

PRELIMINARY PLAT Of LONGBOAT SUBDIVISION PHASE-2

LOCATED IN: LAND LOT 70 ~ 7TH DISTRICT ~ FAYETTE COUNTY, GEORGIA

GRAPHIC SCALE: 1" = 60'

0 60' 120'

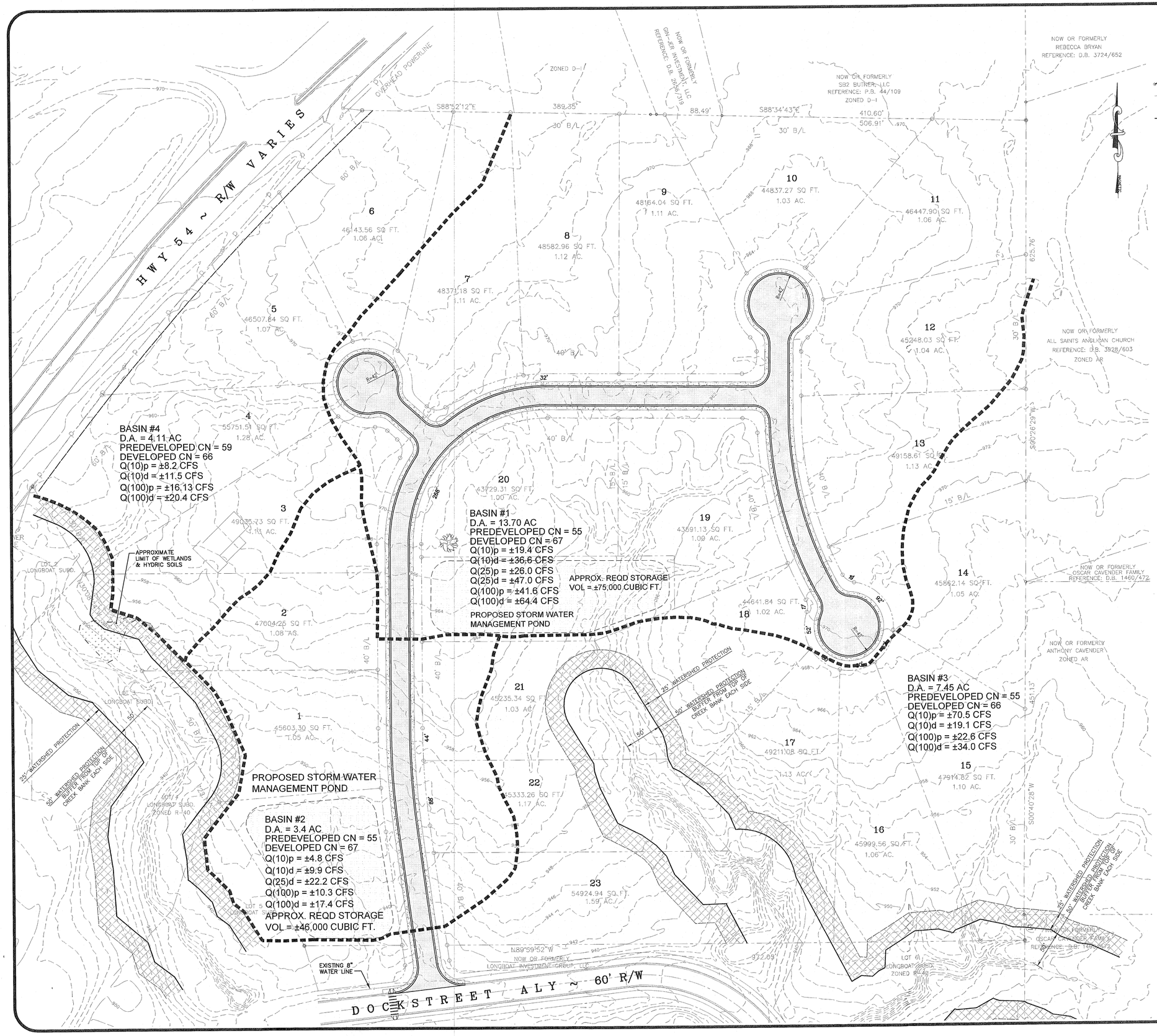
GRAPHIC SCALE

DATE: NOVEMBER 24, 2015

REV.	DATE	DESCRIPTION
1	03/29/16	PER COUNTY REVIEW COMMENTS

GEORGIA REGISTERED No. 18090 PROFESSIONAL ENGINEER DAVID G. HOVEY

SHEET 2 OF 3 SHEETS



LEGEND / SYMBOLOGY

PROPOSED	DESCRIPTION
106' 98'	PROPOSED PROPERTY LINE WITH LINE/CURVE SEGMENT AT THE TANGENT
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W	PROPOSED WATERLINE
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	PROPOSED FIRE HYDRANT ASSEMBLY
	SPECIMEN TREE

CIVIL ENGINEERING
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PRELIMINARY PLAT
Of
LONGBOAT SUBDIVISION PHASE-2

LOCATED IN: LAND LOT 70
~ 7TH DISTRICT ~
FAYETTE COUNTY, GEORGIA

GRAPHIC SCALE: 1" = 60'

0 60' 120'

GRAPHIC SCALE

DATE: NOVEMBER 24, 2015

REV.	DATE	DESCRIPTION

GEORGIA REGISTERED No. 18090 PROFESSIONAL ENGINEER DAVID G. HOVEY

SHEET 3 OF 3 SHEETS

Traffic Impact Study

Ebenezer Church Road Single Family Residential Development
Fayette County, Georgia

May 10, 2016

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

Traffic Impact Study

Ebenezer Church Road Single Family Residential Development
Fayette County, Georgia

study prepared for:

Brent Holdings, LLC
270 North Jeff Davis Drive
Fayetteville, Georgia 30214

May 10, 2016

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

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

e-mail: acamporatraffic@comcast.net
web: www.acamporatraffic.com

Contents

Tables

Figures

Photographs

Introduction

This study assesses the traffic impact of a proposed single family residential subdivision in Fayette County, Georgia. The site is located along the north side of Ebenezer Church Road and the south side of Davis Road, as shown in the location map in Figure 1. The project will consist of 91 single family homes. Vehicular access will be provided to Ebenezer Church Road, aligning with Hillred Drive, and to Davis Road.

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

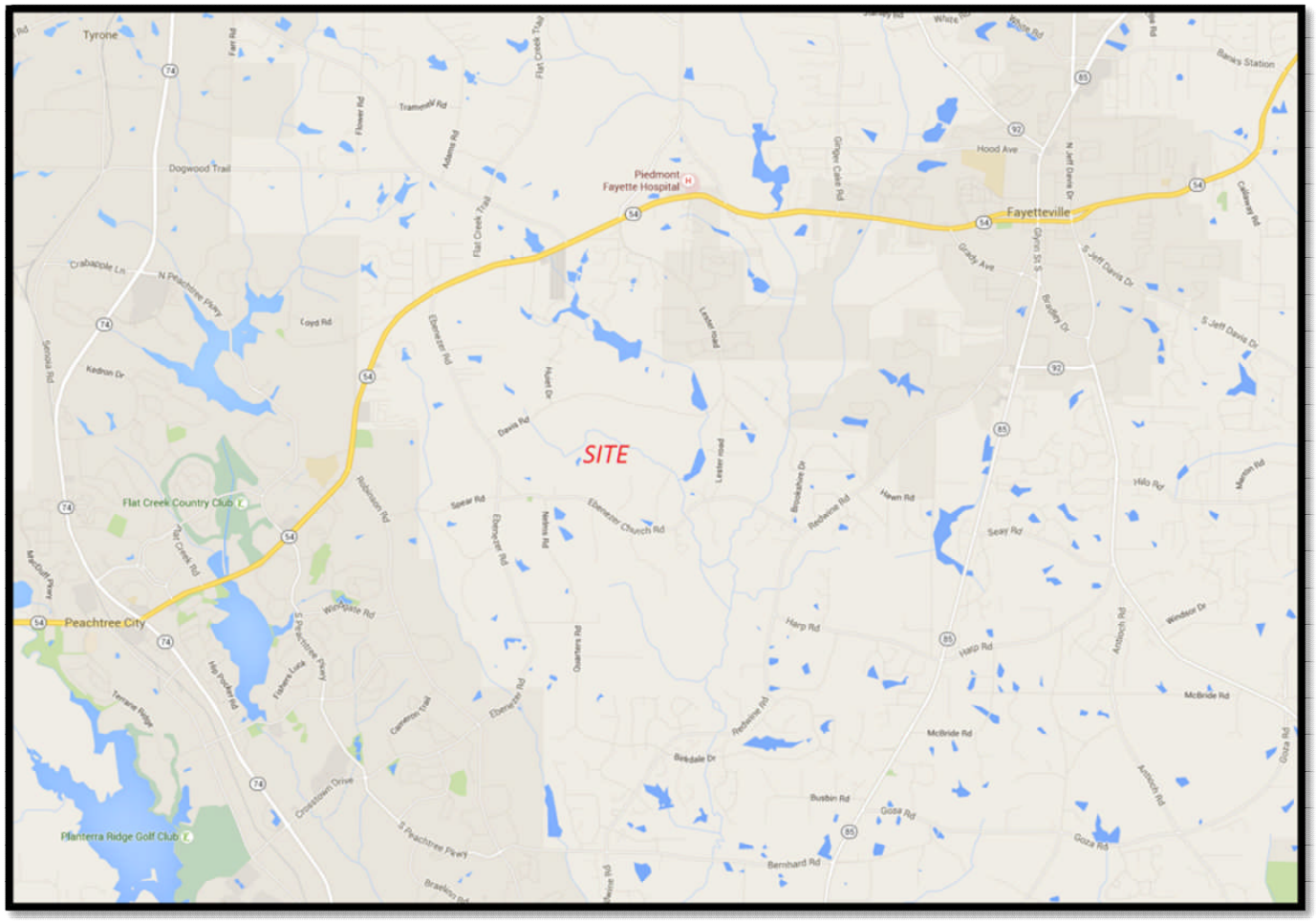

Figure 1 – Ebenezer Church Subdivision Site Location Map

Existing Traffic Conditions

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

Description of Existing Transportation Facilities

Ebenezer Church Road is an east/west two lane rural highway, classified by the Fayette County Thoroughfare Plan as a collector, that extends from Ebenezer Road to Redwine Road. The terrain is gently winding and gently rolling and the posted speed limit is 45 mph. Ebenezer Church Road is stop sign controlled at Ebenezer Road. There is a slight offset to the north, to Spear Road, which then continues to the west. Spear Road is a two lane rural highway with a posted speed limit of 35 mph, and is stop sign controlled on its eastbound approach at Ebenezer Road. The development along Ebenezer Church Road and Spear Road is primarily low-density single family residential and undeveloped land.

Ebenezer Road is a north/south two lane rural highway, classified by the Fayette County Thoroughfare Plan as a minor arterial, that extends from Georgia State Route 54 (SR 54) to Robinson Road, where it changes names to Crosstown Drive and continues to the southwest. The road is gently rolling and winding and has a posted speed limit of 45 mph. Development in the area is primarily low-density single family residential and undeveloped land.

Lester Road is a two lane rural highway, classified by the Fayette County Thoroughfare Plan as a minor arterial, that begins at SR 54 (north of which is becomes Veterans Parkway) and continues to the south to Ebenezer Church Road. Lester Road is side street stop sign controlled at Ebenezer Church Road. Lester Road is gently winding and curving and the posted speed limit is 35 mph. Near Ebenezer Church Road, there is a steep grade on Lester Road downhill toward Ebenezer Church Road. As with the other roads in the area, development is primarily low density residential or undeveloped land.

Davis Road is a narrow two lane road, classified by the Fayette County Thoroughfare Plan as a collector, that connects Ebenezer Road to Lester Road. Davis Road is unpaved (gravel) and is side street stop sign controlled at Ebenezer Road and at Lester Road. There are no stop bars at either stop sign. The road is very gently winding and rolling and most of the land along Davis Road is undeveloped / wooded. The proposed subdivision will have an access onto Davis Road roughly mid-way between Ebenezer Road and Lester Road.

Hillred Drive is a two lane dead end residential road with a posted speed limit of 25 mph. Hillred Drive is stop sign controlled at Ebenezer Church Road, but there is no stop bar present. A future fourth leg at this intersection will provide access to the proposed subdivision.

Photographs 1 through 6 show locations at the intersections evaluated in this traffic study.

Photograph 1 – Davis Road Facing West at Ebenezer Road

Photograph 2 – Davis Road at Lester Road

Photograph 3 – Ebenezer Road Facing South Toward Spear Road and Ebenezer Church Road

Photograph 4 – Lester Road at Ebenezer Church Road

Photograph 5 – Hillred Drive at Ebenezer Church Road

Photograph 6 – Davis Road in the Vicinity of the Proposed Site Access

Pedestrian, Bicycle, and Transit Accessibility

The area around the proposed subdivision is suburban to rural in character. There are no sidewalks or bicycle lanes along any of the roadways near the project. There is no mass transit service in the vicinity (walking distance) of the project. Therefore, aside from recreational / exercise purposes, essentially all trips to and from the proposed subdivision are anticipated to be made by automobile.

Existing Traffic Volumes

Existing full turning movement traffic volume counts were collected at the following intersections in the vicinity of the proposed development:

1. Ebenezer Road and Davis Road
2. Lester Road and Davis Road

3a. Ebenezer Road and Spear Road

3b. Ebenezer Road and Ebenezer Church Road

4. Ebenezer Church Road at Lester Road
5. Ebenezer Church Road at Hillred Drive

The counts were collected on Tuesday May 3, 2016, from 7:00 a.m. to 9:00 a.m. and from 4:30 p.m. to 6:30 p.m. Fayette County public schools were in standard session on the day on which the counts were recorded. From the count data, the highest four consecutive 15-minute interval volumes at each intersection, during each time period, were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 2. The intersection raw count data is found in Appendix A.

In addition to the intersection turning movement counts, Georgia Department of Transportation (Georgia DOT) annual average daily traffic (AADT) volume counts were obtained on nearby roadways for 2014 (the latest year for which volumes are available). Table 3, presented later in this report, shows the historic Georgia DOT counts and the annual growth rates between the counts. The Georgia DOT counts are as follows:

Ebenezer Church Road at Hillred Drive: 2,210 vehicles per day (vpd)
Ebenezer Church Road east of Lester Road: 3,710 vpd
Ebenezer Road between SR 54 and Davis Road: 3,280 vpd

Finally, Fayette County provided a 24-hour two-way volume count for Ebenezer Church Road and for Davis Road. These counts were both collected on Thursday, April 28, 2016 and are summarized as follows:

Ebenezer Church Road: 2,825 vpd
Davis Road: 30 vpd

The County's count on Ebenezer Church Road is comparable to, and slightly higher than, the 2014 Georgia DOT count near Hillred Drive. The count on Davis Road reveals extremely low volumes.

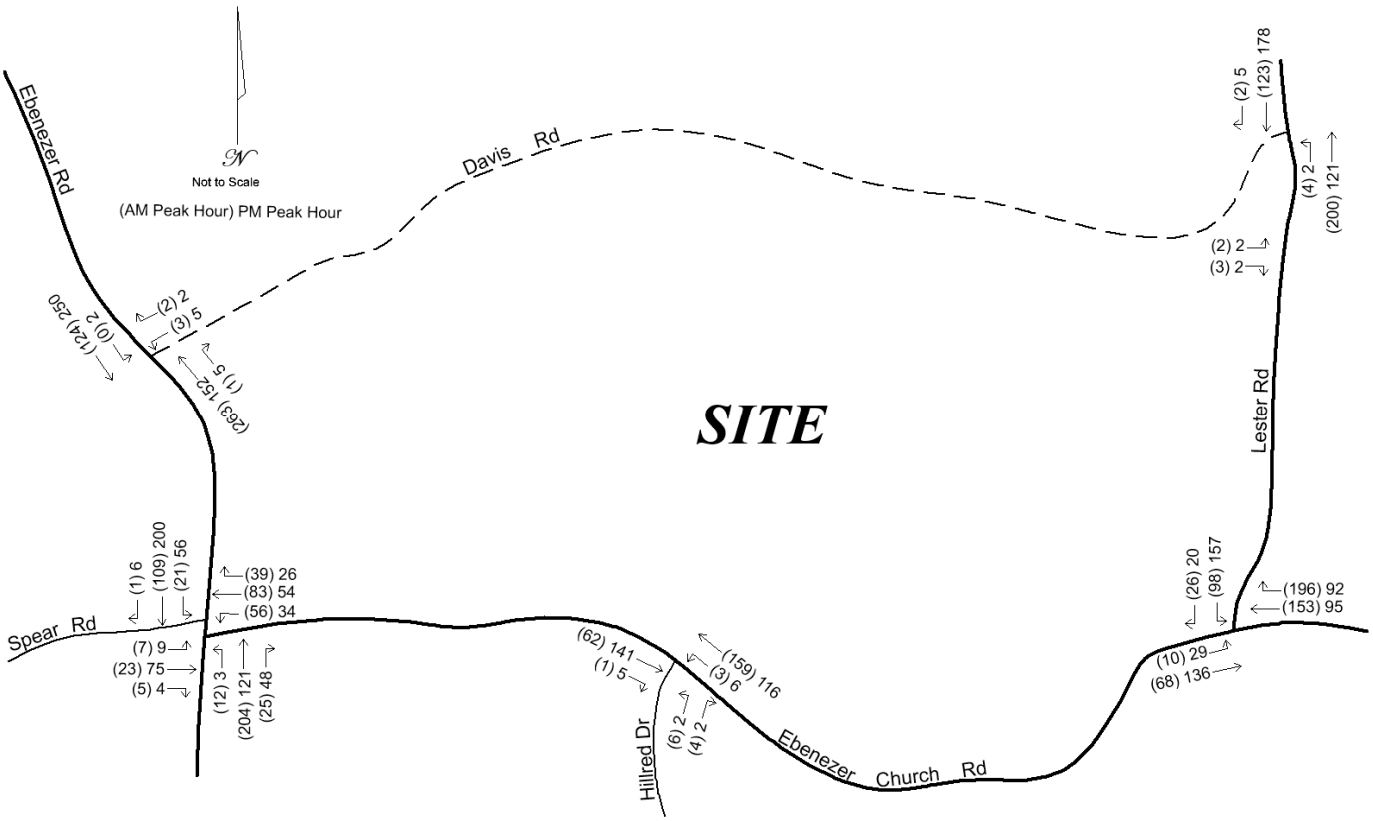

Figure 2 – Existing Weekday A.M. and P.M. Peak Hour Traffic Volumes

Existing Intersection Operations

Existing traffic operations were analyzed at the counted intersections using Synchro software, version 8, in accordance with the methodology presented in the Transportation Research Board's 2010 *Highway Capacity Manual* (*HCM 2010*). The *HCM 2010* methodology is presented in Appendix B. The results of the analysis are shown in Table 1. Computer printouts containing detailed results of the analysis are located in Appendix C. Levels of service and delays are provided for the overall intersection and for each approach.

Table 1 – Existing Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Ebenezer Road and Davis Road	A	0.3	A	0.3
southbound left turn	A	7.9	A	7.6
westbound approach	B	10.9	B	11.0
2. Lester Road and Davis Road	A	0.3	A	0.4
northbound left turn	A	7.5	A	7.6
eastbound approach	A	9.8	B	10.1
3a. Ebenezer Road and Spear Road	A	1.1	A	2.0
northbound left turn	A	7.5	A	8.0
eastbound approach	A	9.7	B	11.6
3b. Ebenezer Road and Ebenezer Church Road	A	4.6	A	3.1
southbound left turn	A	7.8	A	7.8
westbound approach	B	12.4	B	11.8
4. Ebenezer Church Road and Lester Road	A	3.4	A	4.7
southbound approach	B	12.7	B	13.4
eastbound left turn	A	8.1	A	7.7
5. Ebenezer Church Road and Hillred Drive	A	0.6	A	0.6
northbound approach	A	9.7	A	9.7
westbound left turn	A	7.4	A	7.5

The analysis of existing conditions, coupled with field observations, reveals excellent existing traffic operations, with all movements at all intersections operating at level of service (LOS) A or B.

It is noted that the westbound right turn from Ebenezer Church Road to Lester Road is relatively high in the morning, with 196 right turners in the a.m. peak hour sharing one lane with 153 through vehicles. Because all competing volumes at the intersection are moderate and this approach is uncontrolled, the delays are not high. While not critical, the County might give consideration to adding an exclusive right turn lane at this location to reduce impedance from the right turners on westbound through traffic. The County should also add a stop bar at the stop sign on Hillred Drive. The west end of Davis Road is unimproved which precludes the ability to provide a stop bars at that stop sign. There is a small section of crumbling pavement on Davis Road at Lester Road. The County may consider repairing this asphalt and then adding a stop bar to accompany the stop sign at this location. No other mitigation is necessary for the existing condition.

Project Traffic Characteristics

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

Project Description

The proposed subdivision will consist of 91 single family homes. Full movement access will be provided onto Ebenezer Church Road at Hillred Drive and onto Davis Road roughly mid-way between Ebenezer Church Road and Lester Road. The site plan is presented in Figure 3.

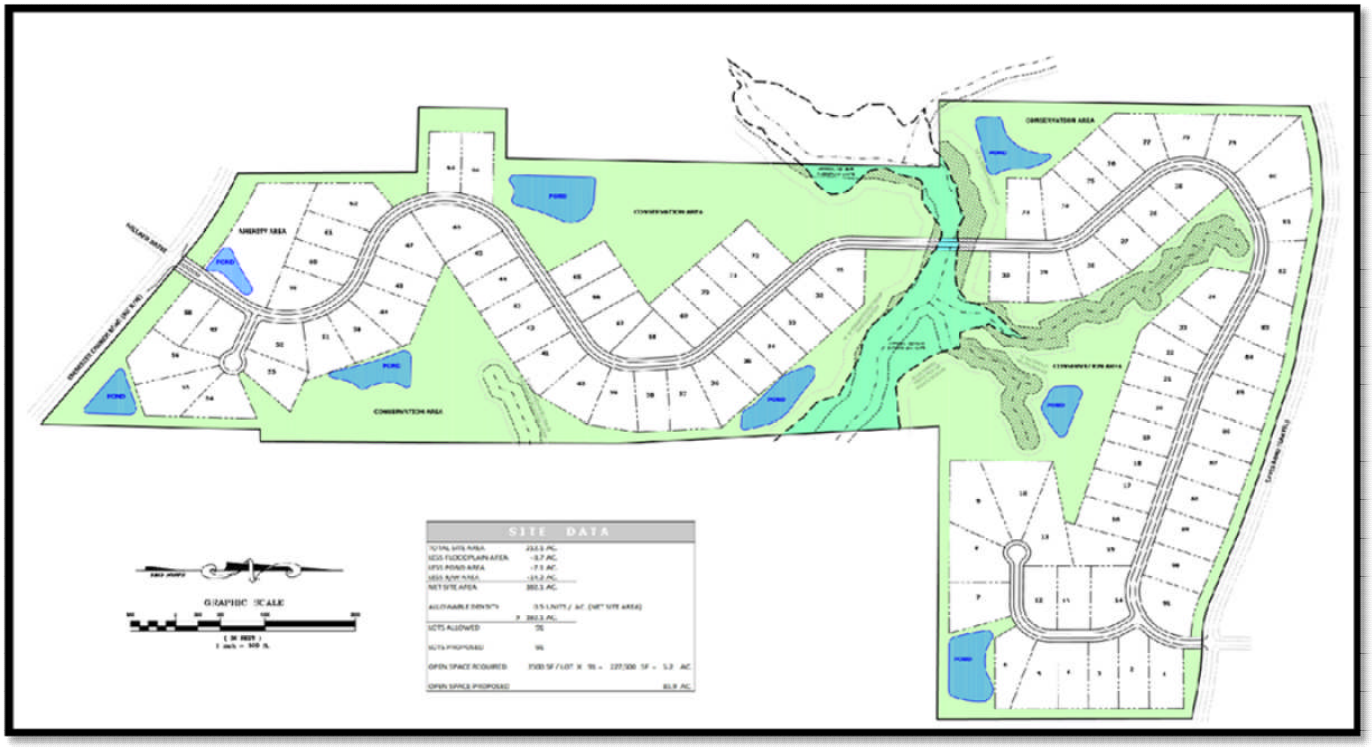

Figure 3 – Ebenezer Church Road Subdivision Site Plan

Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed Ebenezer Church subdivision. Trip generation was calculated using the standard equations from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th edition. ITE Land Use 210 – Single-Family Detached Housing was used. Table 2 presents the trip generation calculations for the project.

Table 2 – Ebenezer Church Subdivision Trip Generation

Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour			24-Hour
			Enter	Exit	2-Way	Enter	Exit	2-Way	2-Way
Single-Family Detached Housing	210	91 homes	18	55	73	61	36	97	962

Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. The trip distribution percentages were developed based on the locations and proximity of likely trip origins and destinations, such as retail and offices in the area, other regional trip attractors and employment centers such as Peachtree City, Fayetteville, Hartsfield Jackson Airport, and the City of Atlanta, and the major routes of travel to those attractors, including State Routes 54, 85, and 74, and Interstate 85. The project trips, shown in Table 2, were assigned to the roadway network based on the trip distribution percentages. The project trip distribution percentages and the a.m. and p.m. peak hour trips expected to be generated by the project, are shown in Figure 4.

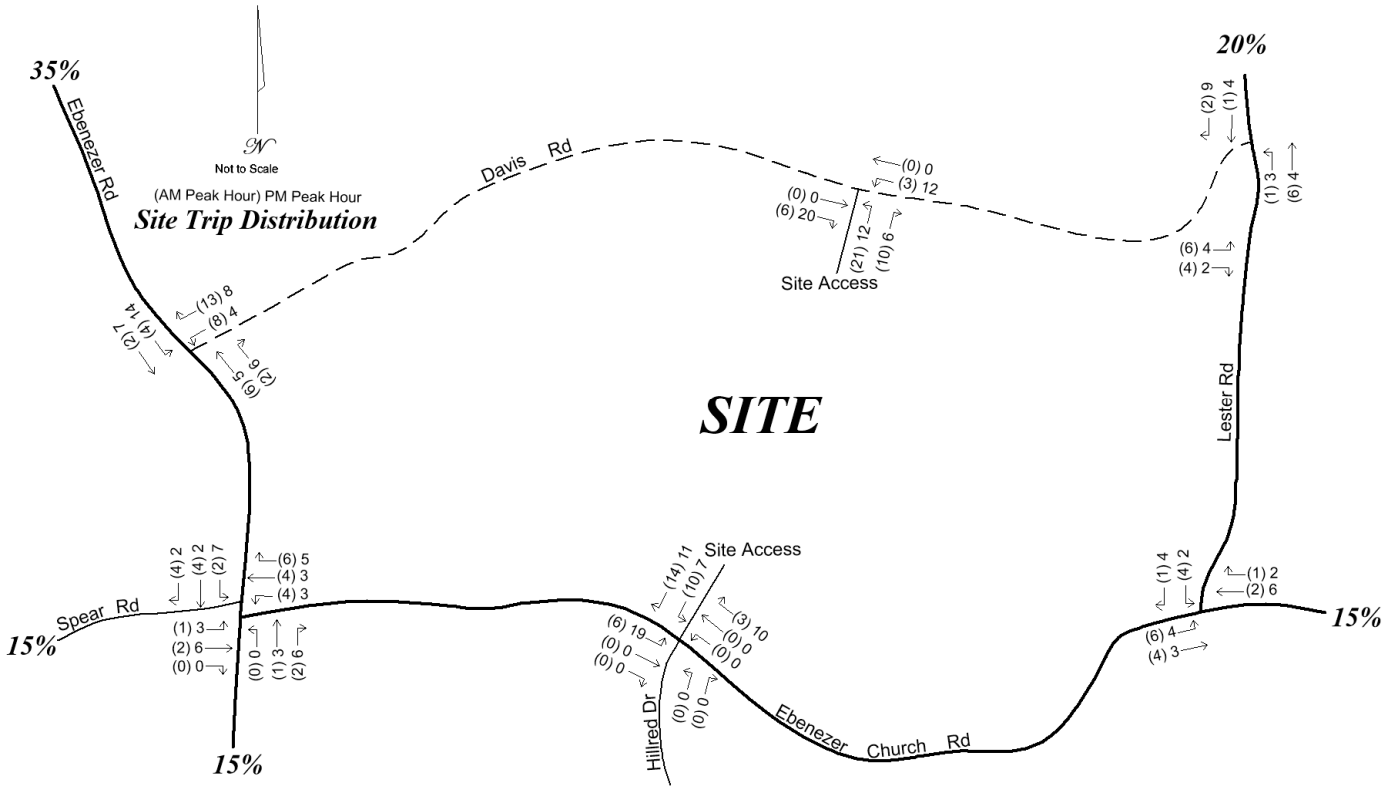

Figure 4 – Project Trip Distribution Percentages and Weekday A.M. and P.M. Peak Hour Trips

Future Traffic Conditions

The proposed subdivision was assumed to take three years to construct, to be completed and operational in 2019. Therefore, 2019 was selected as the future analysis year in this traffic study. Georgia DOT historic traffic volume count data was collected at three GDOT count stations closest to the subject development. The data was obtained for the years 2010 through 2014 (the last year for which data was available at the time this study was performed). This data was used to develop annual growth rates for each year, and an overall growth percentage from 2010 to 2014. Table 3 presents this historic GDOT data and the growth rates.

Table 3 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	Ebenezer Church at Hillred	Annual Growth	Ebenezer Church east of Lester	Annual Growth	Ebenezer bet SR 54 and Davis	Annual Growth
Station ID	1130357		1130355		1130172	
2010	2,100		3,670		3,760	
2011	2,070	-1.4%	3,620	-1.4%	3,670	-2.4%
2012	2,070	0.0%	3,610	-0.3%	3,300	-10.1%
2013	2,120	2.4%	3,690	2.2%	3,280	-0.6%
2014	2,120	0.0%	3,710	0.5%	3,280	0.0%
overall annual growth rate		0.2%		0.3%		-3.4%

The data presented in Table 3 reveals very modest growth in traffic volumes in the study area, with the volumes on Ebenezer Road actually experiencing a decrease over the past five years. To be conservative, it was decided to apply a modest 1% annual growth factor to the counted volumes, for each of the three years until anticipated project build-out in 2019. Therefore, the intersection volumes counted for this study were increased by a total of 3% to account for general growth and development that may occur in this area while the proposed subdivision is under construction. The resulting volumes are those that will be at each study intersection in 2019, not including the project traffic.

Then, the trips that will be generated by the proposed subdivision, shown previously in Figure 4, were added to these increased volumes. This produces the future volumes that will be at each study intersection after the proposed subdivision is built and operational. These future volumes are shown in Figure 5. Projections are also included for the new fourth leg at the Ebenezer Church Road / Hillred Drive intersection, which will become a project access, and the project access on Davis Road.

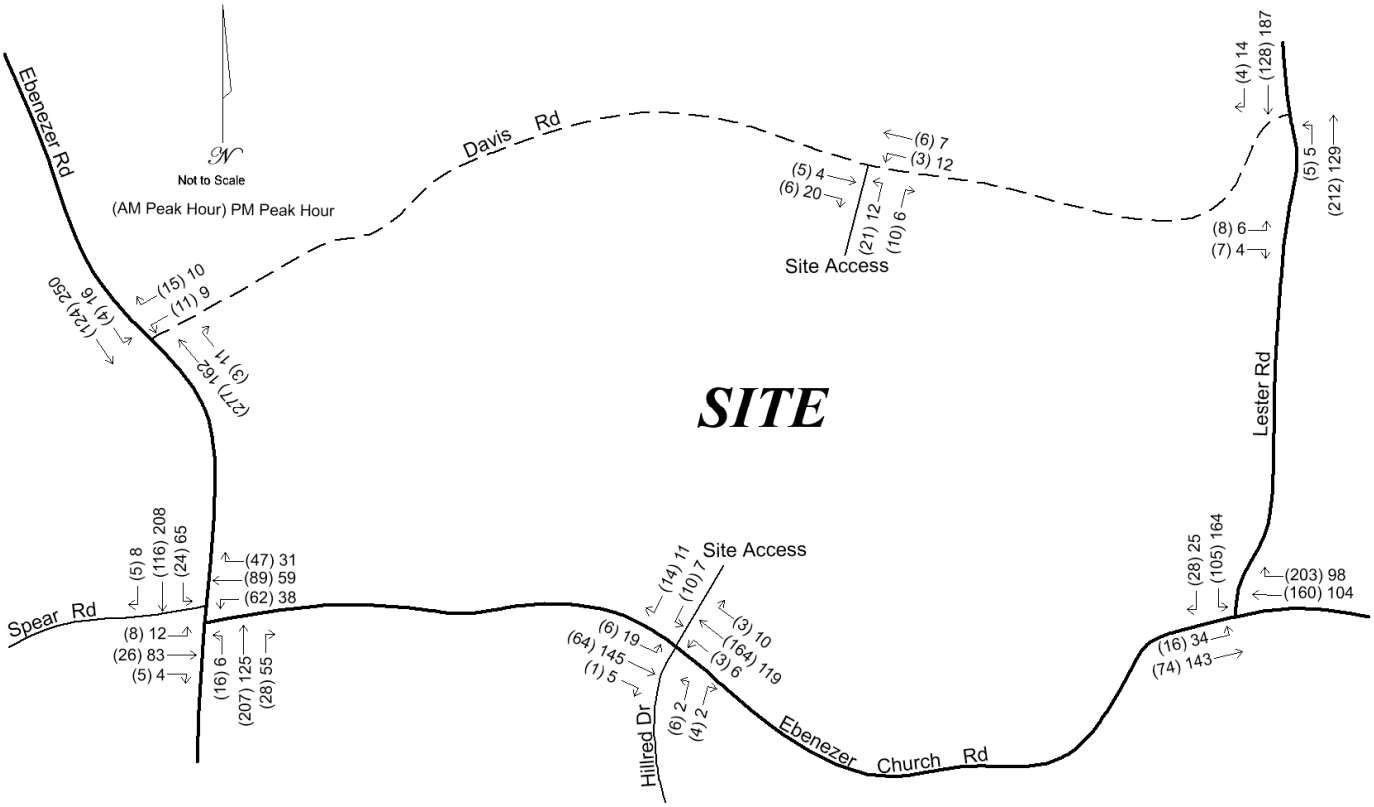

Figure 5 – Future Weekday A.M and P.M. Peak Hour Traffic Volume Projections

Programmed Improvements

Programmed transportation infrastructure projects in the vicinity of the proposed Ebenezer Church Road subdivision were researched. Project data was obtained from the latest Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP), adopted in March 2016. Two projects were identified in the vicinity. These projects are listed in Table 4 with the detailed project sheets located in Appendix F.

Table 4 – Programmed Transportation Infrastructure Projects

Project	Description	Construction
FA-349	Ebenezer Church Road Bridge Replacement at Whitewater Creek	2019
FA-351	SR 85 Connector, Brooks Woolsey Road and Ebenezer Road Resurfacing	2016

FA-349 will replace the weight-restricted narrow bridge carrying Ebenezer Church Road over Whitewater Creek, east of Lester Road.

FA-351 includes resurfacing Ebenezer Road from Ebenezer Church Road to Robinson Road.

These projects will improve conditions near the proposed development, but will not add capacity at the study intersections. Therefore, no modifications were made in the Synchro model to the study intersections for the future analysis.

Future Intersection Operations

An operational analysis was performed for the 2019 future condition at each study intersection. Table 5 presents the results of this analysis. Computer printouts containing detailed results of the analysis are located in Appendix D.

Table 5 – Future Intersection Operations

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. Ebenezer Road and Davis Road	A	1.4	A	0.(
southbound left turn	A	7.9	A	7.7
westbound approach	B	11.3	B	11.0
2. Lester Road and Davis Road	A	0.7	A	0.9
northbound left turn	A	7.5	A	7.7
eastbound approach	B	10.3	B	10.6
3a. Ebenezer Road and Spear Road	A	1.2	A	2.2
northbound left turn	A	7.6	A	8.1
eastbound approach	A	9.9	B	12.1
3b. Ebenezer Road and Ebenezer Church Road	A	5.0	A	3.4
southbound left turn	A	7.9	A	7.8
westbound approach	B	13.1	B	12.4
4. Ebenezer Church Road and Lester Road	A	3.7	A	5.0
southbound approach	B	13.5	B	14.2
eastbound left turn	A	8.2	A	7.8
5. Ebenezer Church Road and Hillred Drive / Site Access	A	1.5	A	1.6
northbound approach	B	10.2	B	10.2
southbound approach (exiting site)	B	10.2	B	10.0
eastbound left turn (entering site)	A	7.7	A	7.6
westbound left turn	A	7.4	A	7.5
6. Davis Road and Site Access	A	5.5	A	4.0
northbound approach (exiting site)	A	8.7	A	8.8
westbound left turn (entering site)	A	7.3	A	7.3

As with the existing condition, all intersections and movements will operate at either LOS A or LOS B. Both project accesses will operate well, with minimal delays for entering and exiting vehicles. No mitigation is proposed for the future condition. The next section of this report provides a summary of the findings and recommendations of this study.

Summary of Study Findings and Recommendations

The following is a summary of the findings and recommendations of this traffic impact study:

1. Existing operations at all study intersections are excellent, with every intersection and movement operating at level of service (LOS) A or B.

2. While not critical, it is suggested that the County consider adding an exclusive right turn lane on westbound Ebenezer Church Road at Lester Road to reduce impedance from the relatively high a.m. right turn volume.

3. The County should add a stop bar at the stop sign on Hillred Drive at Ebenezer Church Road.

4. The County should add a stop bar to accompany the stop sign on Davis Road at Lester Road. The gravel section on Davis Road at Ebenezer Road precludes the ability to add a stop bar at that stop sign.

5. The proposed Ebenezer Church Road subdivision will generate a moderate volume of new trips to the area, with 73 new trips in the morning peak hour and 97 new trips in the evening peak hour.

6. With the addition of a modest 3% background growth factor and the site trips, the future intersection operations will continue to be excellent, with every intersection and movement operating at LOS A or B.

7. Both site accesses, on Ebenezer Church Road and on Davis Road, will operate well, with minimal delays for entering and exiting vehicles.

8. It is recommended that each site access be constructed with one entering and one exiting lane. The exiting approach at each access should be controlled by stop sign and accompanying stop bar.

9. Lines of sight are clear in each direction at the location of each proposed site access. It is recommended that each access be constructed so as to ensure that sufficient intersection sight distance is provided in each direction at each location. No vegetation or signage should be installed at either access that may impede motorists' lines of sight.

10. The project site engineer is advised to ensure that the design of the site driveways and all site internal streets comply with all applicable design standards.

Appendix A

Traffic Count Data and Volume Worksheets

Ebenezer Church Road Subdivision Traffic Impact Study

Fayette County, Georgia

May 2016

Intersection: 1. Ebenezer Road at Davis Road

Weekday A.M. Peak Hour	**Northbound Ebenezer Road**			**Southbound Ebenezer Road**				**Westbound Davis Road**		
	T	**R**	**Tot**	**L**	**T**	**Tot**		**L**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)	263	1	264	0	124	124		3	2	5
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%			3.0%	3.0%	
No-Build Volumes	**271**	**1**	**264**	**0**	**128**	**124**		**3**	**2**	**5**
Ebenezer Church Road Subdivision	6	2	8	4	2	6		8	13	21
Build Volumes	**277**	**3**	**280**	**4**	**130**	**134**		**11**	**15**	**26**

Weekday P.M. Peak Hour	**Northbound Ebenezer Road**			**Southbound Ebenezer Road**				**Westbound Davis Road**		
	T	**R**	**Tot**	**L**	**T**	**Tot**		**L**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)	152	5	157	2	250	252		5	2	7
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%			3.0%	3.0%	
No-Build Volumes	**157**	**5**	**157**	**2**	**258**	**252**		**5**	**2**	**7**
Ebenezer Church Road Subdivision	5	6	11	14	7	21		4	8	12
Build Volumes	**162**	**11**	**173**	**16**	**265**	**281**		**9**	**10**	**19**

Ebenezer Church Road Subdivision Traffic Impact Study

Fayette County, Georgia

May 2016

Intersection: 2. Lester Road at Davis Road

Weekday A.M. Peak Hour	**Northbound Lester Road**			**Southbound Lester Road**			**Eastbound Davis Road**			
	L	**T**	**Tot**	**T**	**R**	**Tot**	**L**	**R**	**Tot**	
Counted Volumes (Tuesday, May 3, 2016)	4	200	204	123	2	125	2	3	5	
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%		3.0%	3.0%		
No-Build Volumes	**4**	**206**	**204**	**127**	**2**	**125**	**2**	**3**	**5**	
Ebenezer Church Road Subdivision	1	6	7	1	2	3	6	4	10	
Build Volumes	**5**	**212**	**217**	**128**	**4**	**132**	**8**	**7**	**15**	

Weekday P.M. Peak Hour	**Northbound Lester Road**			**Southbound Lester Road**			**Eastbound Davis Road**			
	L	**T**	**Tot**	**T**	**R**	**Tot**	**L**	**R**	**Tot**	
Counted Volumes (Tuesday, May 3, 2016)	2	121	123	178	5	183	2	2	4	
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%		3.0%	3.0%		
No-Build Volumes	**2**	**125**	**123**	**183**	**5**	**183**	**2**	**2**	**4**	
Ebenezer Church Road Subdivision	3	4	7	4	9	13	4	2	6	
Build Volumes	**5**	**129**	**134**	**187**	**14**	**201**	**6**	**4**	**10**	

Ebenezer Church Road Subdivision Traffic Impact Study

Fayette County, Georgia

May 2016

Intersection: 3a. Ebenezer Road at Ebenezer Church Road / Spear Road

Weekday A.M. Peak Hour	**Northbound Ebenezer Road**			**Southbound Ebenezer Road**			**Eastbound Spear Road**			
	L	**T**	**Tot**	**T**	**R**	**Tot**	**L**	**R**	**Tot**	
Counted Volumes (Tuesday, May 3, 2016)	12	243	255	130	1	131	7	28	35	
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%		3.0%	3.0%		
No-Build Volumes	**12**	**250**	**255**	**134**	**1**	**131**	**7**	**29**	**35**	
Ebenezer Church Road Subdivision	4	6	10	6	4	10	1	2	3	
Build Volumes	**16**	**256**	**273**	**140**	**5**	**145**	**8**	**31**	**39**	

Weekday P.M. Peak Hour	**Northbound Ebenezer Road**			**Southbound Ebenezer Road**			**Eastbound Spear Road**			
	L	**T**	**Tot**	**T**	**R**	**Tot**	**L**	**R**	**Tot**	
Counted Volumes (Tuesday, May 3, 2016)	3	147	150	256	6	262	9	79	88	
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%		3.0%	3.0%		
No-Build Volumes	**3**	**151**	**150**	**264**	**6**	**262**	**9**	**81**	**88**	
Ebenezer Church Road Subdivision	3	5	8	9	2	11	3	6	9	
Build Volumes	**6**	**156**	**163**	**273**	**8**	**281**	**12**	**87**	**100**	

Ebenezer Church Road Subdivision Traffic Impact Study

Fayette County, Georgia

May 2016

Intersection: 3b. Ebenezer Road at Ebenezer Church Road / Spear Road

Weekday A.M. Peak Hour	**Northbound Ebenezer Road**			**Southbound Ebenezer Road**				**Westbound Ebenezer Church Road**		
	T	**R**	**Tot**	**L**	**T**	**Tot**		**L**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)	216	25	241	21	114	135		56	122	178
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%			3.0%	3.0%	
No-Build Volumes	**222**	**26**	**241**	**22**	**117**	**135**		**58**	**126**	**178**
Ebenezer Church Road Subdivision	1	2	3	2	4	6		4	10	14
Build Volumes	**223**	**28**	**251**	**24**	**121**	**145**		**62**	**136**	**197**

Weekday P.M. Peak Hour	**Northbound Ebenezer Road**			**Southbound Ebenezer Road**				**Westbound Ebenezer Church Road**		
	T	**R**	**Tot**	**L**	**T**	**Tot**		**L**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)	124	48	172	56	204	260		34	80	114
Total Annual Background Growth	3.0%	3.0%		3.0%	3.0%			3.0%	3.0%	
No-Build Volumes	**128**	**49**	**172**	**58**	**210**	**260**		**35**	**82**	**114**
Ebenezer Church Road Subdivision	3	6	9	7	2	9		3	8	11
Build Volumes	**131**	**55**	**186**	**65**	**212**	**277**		**38**	**90**	**128**

Ebenezer Church Road Subdivision Traffic Impact Study
Fayette County, Georgia

May 2016

Intersection: 4. Ebenezer Church Road at Lester Road

Weekday A.M. Peak Hour		**Southbound Lester Road**			**Eastbound Ebenezer Church Road**			**Westbound Ebenezer Church Road**		
		L	**R**	**Tot**	**L**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)		98	26	124	10	68	78	153	196	349
Total Annual Background Growth		3.0%	3.0%		3.0%	3.0%		3.0%	3.0%	
No-Build Volumes		**101**	**27**	**124**	**10**	**70**	**78**	**158**	**202**	**349**
Ebenezer Church Road Subdivision		4	1	5	6	4	10	2	1	3
Build Volumes		**105**	**28**	**133**	**16**	**74**	**90**	**160**	**203**	**362**

Weekday P.M. Peak Hour		**Southbound Lester Road**			**Eastbound Ebenezer Church Road**			**Westbound Ebenezer Church Road**		
		L	**R**	**Tot**	**L**	**T**	**Tot**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)		157	20	177	29	136	165	95	92	187
Total Annual Background Growth		3.0%	3.0%		3.0%	3.0%		3.0%	3.0%	
No-Build Volumes		**162**	**21**	**177**	**30**	**140**	**165**	**98**	**95**	**187**
Ebenezer Church Road Subdivision		2	4	6	4	3	7	6	3	9
Build Volumes		**164**	**25**	**188**	**34**	**143**	**177**	**104**	**98**	**202**

Ebenezer Church Road Subdivision Traffic Impact Study

Fayette County, Georgia

May 2016

Intersection: 5. Ebenezer Church Road at Hillred Drive

Weekday A.M. Peak Hour	**Northbound Hillred Drive**				**Southbound Site Access**				**Eastbound Ebenezer Church Road**				**Westbound Ebenezer Church Road**			
	L	**T**	**R**	**Tot**	**L**	**T**	**R**	**Tot**	**L**	**T**	**R**	**Tot**	**L**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)	6		4	10						62	1	63	3	159		162
Total Annual Background Growth	3.0%		3.0%							3.0%	3.0%		3.0%	3.0%		
No-Build Volumes	**6**		**4**	**10**						**64**	**1**	**63**	**3**	**164**		**162**
Ebenezer Church Road Subdivision	0	0	0	0	10	0	14	24	6	0	0	6	0	0	3	3
Build Volumes	**6**	**0**	**4**	**10**	**10**	**0**	**14**	**24**	**6**	**64**	**1**	**71**	**3**	**164**	**3**	**170**

Weekday P.M. Peak Hour	**Northbound Hillred Drive**				**Southbound Site Access**				**Eastbound Ebenezer Church Road**				**Westbound Ebenezer Church Road**			
	L	**T**	**R**	**Tot**	**L**	**T**	**R**	**Tot**	**L**	**T**	**R**	**Tot**	**L**	**T**	**R**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)	2		2	4						141	5	146	6	116		122
Total Annual Background Growth	3.0%		3.0%							3.0%	3.0%		3.0%	3.0%		
No-Build Volumes	**2**		**2**	**4**						**145**	**5**	**146**	**6**	**119**		**122**
Ebenezer Church Road Subdivision	0	0	0	0	7	0	11	18	19	0	0	19	0	0	10	10
Build Volumes	**2**	**0**	**2**	**4**	**7**	**0**	**11**	**18**	**19**	**145**	**5**	**169**	**6**	**119**	**10**	**136**

Ebenezer Church Road Subdivision Traffic Impact Study

Fayette County, Georgia

May 2016

Intersection: 6. Davis Road at Site Access

Weekday A.M. Peak Hour	**Northbound Site Access**				**Eastbound Davis Road**			**Westbound Davis Road**		
	L	**R**	**Tot**		**T**	**R**	**Tot**	**L**	**T**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)					5		5		6	6
Total Annual Background Growth					3.0%				3.0%	
No-Build Volumes					**5**		**5**		**6**	**6**
Ebenezer Church Road Subdivision	21	10	31		0	6	6	3	0	3
Build Volumes	**21**	**10**	**31**		**5**	**6**	**11**	**3**	**6**	**9**

Weekday P.M. Peak Hour	**Northbound Site Access**				**Eastbound Davis Road**			**Westbound Davis Road**		
	L	**R**	**Tot**		**T**	**R**	**Tot**	**L**	**T**	**Tot**
Counted Volumes (Tuesday, May 3, 2016)					4		4		7	7
Total Annual Background Growth					3.0%				3.0%	
No-Build Volumes					**4**		**4**		**7**	**7**
Ebenezer Church Road Subdivision	12	6	18		0	20	20	12	0	12
Build Volumes	**12**	**6**	**18**		**4**	**20**	**24**	**12**	**7**	**19**

Reliable Traffic Data Services, LLC

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TMC Data
Ebenezer Rd @ Davis Rd

7-9am I 4.30-6.30pm

File Name : 38360001
Site Code : 38360001
Start Date : 5/3/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Ebenezer Rd Northbound					Ebenezer Rd Southbound					Residential Drwy Eastbound					Davis Rd 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	0	44	0	0	44	0	19	0	0	19	0	0	0	0	0	0	0	2	0	2	65
07:15 AM	0	76	1	0	77	0	25	0	0	25	0	0	0	0	0	1	0	2	0	3	105
07:30 AM	0	72	0	0	72	0	35	0	0	35	0	0	0	0	0	0	0	0	0	0	107
07:45 AM	0	51	0	0	51	0	33	0	0	33	0	0	0	0	0	1	0	0	0	1	85
Total	0	243	1	0	244	0	112	0	0	112	0	0	0	0	0	2	0	4	0	6	362
08:00 AM	0	64	0	0	64	0	31	0	0	31	0	0	1	0	1	1	0	0	0	1	97
08:15 AM	0	46	3	0	49	0	25	0	0	25	0	0	0	0	0	0	0	2	0	2	76
08:30 AM	0	34	0	0	34	1	37	0	0	38	0	0	0	0	0	0	0	1	0	1	73
08:45 AM	0	47	1	0	48	0	29	0	0	29	0	0	0	0	0	0	0	1	0	1	78
Total	0	191	4	0	195	1	122	0	0	123	0	0	1	0	1	1	0	4	0	5	324
*** BREAK ***																					
04:30 PM	0	31	1	0	32	1	56	0	0	57	0	0	0	0	0	0	0	1	0	1	90
04:45 PM	0	30	1	0	31	1	49	1	0	51	0	0	0	0	0	0	0	0	0	0	82
Total	0	61	2	0	63	2	105	1	0	108	0	0	0	0	0	0	0	1	0	1	172
05:00 PM	0	40	1	0	41	0	63	0	0	63	0	0	0	0	0	0	0	0	0	0	104
05:15 PM	0	44	3	0	47	1	72	0	0	73	0	0	0	0	0	2	0	0	0	2	122
05:30 PM	0	29	1	0	30	0	58	0	0	58	0	0	0	0	0	2	0	0	0	2	90
05:45 PM	0	39	0	0	39	1	57	0	0	58	0	0	0	0	0	1	0	2	0	3	100
Total	0	152	5	0	157	2	250	0	0	252	0	0	0	0	0	5	0	2	0	7	416
06:00 PM	0	26	1	0	27	0	56	0	0	56	0	0	0	0	0	1	0	1	0	2	85
06:15 PM	0	35	2	0	37	3	40	0	0	43	0	0	1	0	1	4	0	0	0	4	85
Grand Total	0	708	15	0	723	8	685	1	0	694	0	0	2	0	2	13	0	12	0	25	1444
Apprch %	0	97.9	2.1	0		1.2	98.7	0.1	0		0	0	100	0		52	0	48	0		
Total %	0	49	1	0	50.1	0.6	47.4	0.1	0	48.1	0	0	0.1	0	0.1	0.9	0	0.8	0	1.7	

Reliable Traffic Data Services, LLC

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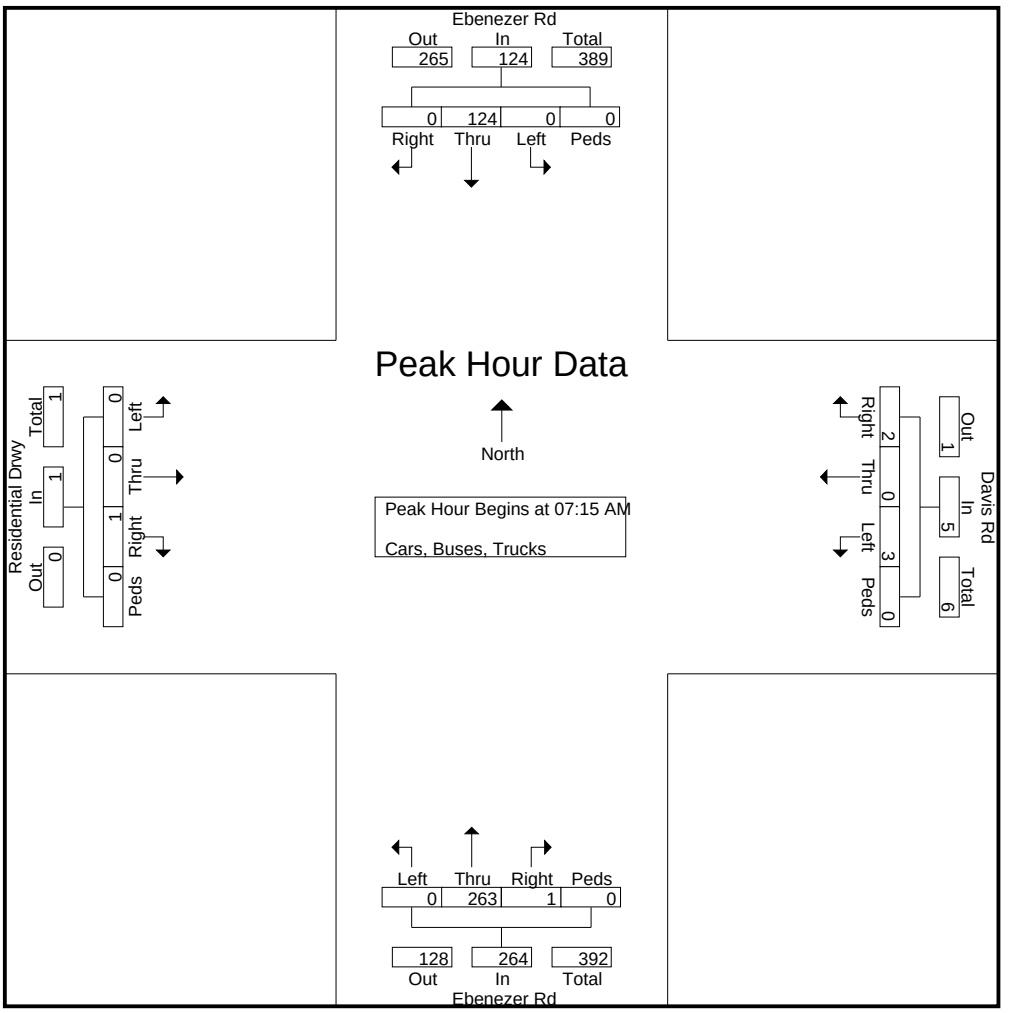
TMC Data
Ebenezer Rd @ Davis Rd

7-9am I 4.30-6.30pm

File Name : 38360001
Site Code : 38360001
Start Date : 5/3/2016
Page No : 2

	Ebenezer Rd Northbound					Ebenezer Rd Southbound					Residential Drwy Eastbound					Davis Rd 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	**76**	**1**	0	**77**	0	25	0	0	25	0	0	0	0	0	**1**	0	**2**	0	**3**	105
07:30 AM	0	72	0	0	72	0	**35**	0	0	**35**	0	0	0	0	0	0	0	0	0	0	**107**
07:45 AM	0	51	0	0	51	0	33	0	0	33	0	0	0	0	0	1	0	0	0	1	85
08:00 AM	0	64	0	0	64	0	31	0	0	31	0	0	**1**	0	**1**	1	0	0	0	1	97
Total Volume	0	263	1	0	264	0	124	0	0	124	0	0	1	0	1	3	0	2	0	5	394
% App. Total	0	99.6	0.4	0		0	100	0	0		0	0	100	0		60	0	40	0		
PHF	.000	.865	.250	.000	.857	.000	.886	.000	.000	.886	.000	.000	.250	.000	.250	.750	.000	.250	.000	.417	.921



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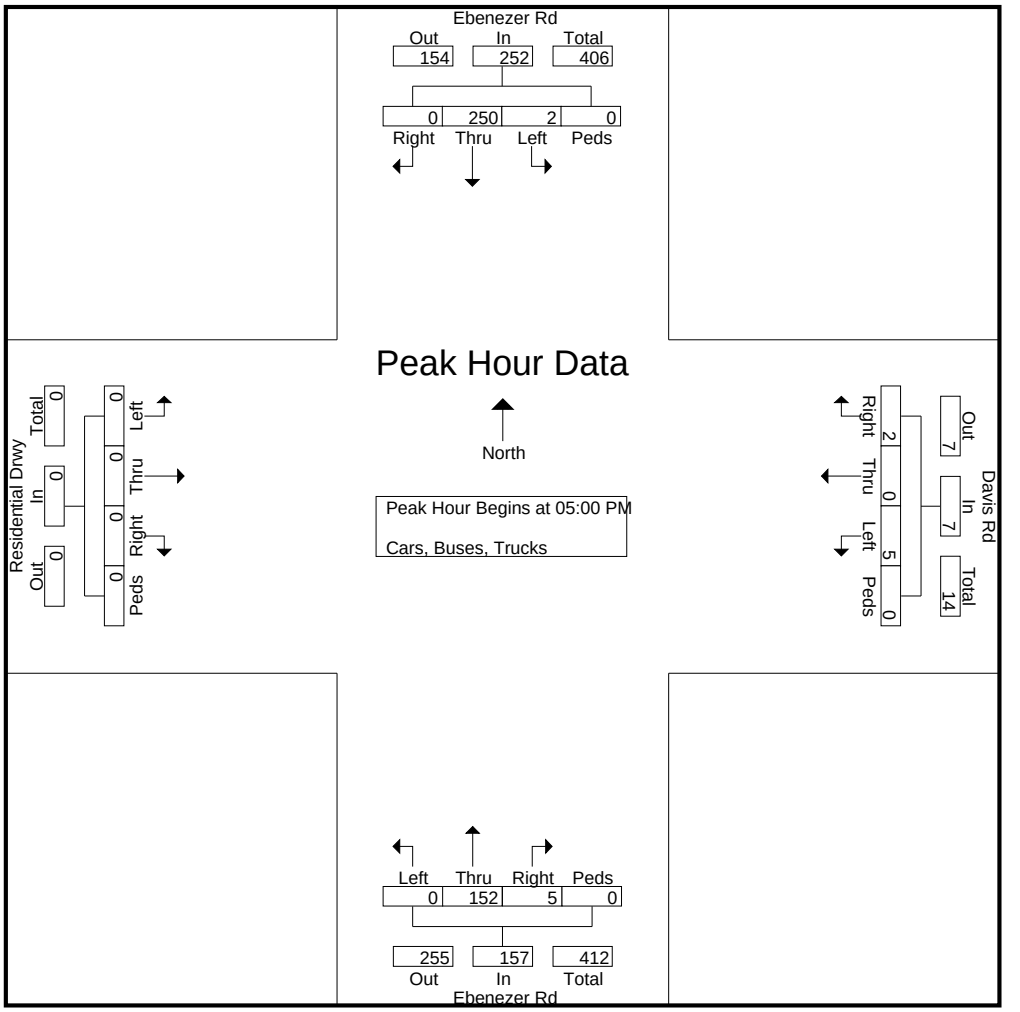
TMC Data
Ebenezer Rd @ Davis Rd

7-9am I 4.30-6.30pm

File Name : 38360001
Site Code : 38360001
Start Date : 5/3/2016
Page No : 3

	Ebenezer Rd Northbound					Ebenezer Rd Southbound					Residential Drwy Eastbound					Davis Rd 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 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	40	1	0	41	0	63	0	0	63	0	0	0	0	0	0	0	0	0	0	104
05:15 PM	0	**44**	**3**	0	**47**	**1**	**72**	0	0	**73**	0	0	0	0	0	**2**	0	0	0	2	**122**
05:30 PM	0	29	1	0	30	0	58	0	0	58	0	0	0	0	0	2	0	0	0	2	90
05:45 PM	0	39	0	0	39	1	57	0	0	58	0	0	0	0	0	1	0	**2**	0	**3**	100
Total Volume	0	152	5	0	157	2	250	0	0	252	0	0	0	0	0	5	0	2	0	7	416
% App. Total	0	96.8	3.2	0		0.8	99.2	0	0		0	0	0	0		71.4	0	28.6	0		
PHF	.000	.864	.417	.000	.835	.500	.868	.000	.000	.863	.000	.000	.000	.000	.000	.625	.000	.250	.000	.583	.852



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TMC Data
Ebenezer Church Rd @ Hillred Dr

7-9am I 4.30-6.30pm

File Name : 38360003
Site Code : 38360003
Start Date : 5/3/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Hillred Dr Northbound					Southbound					Ebenezer Church Rd Eastbound					Ebenezer Church Rd 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	0	0	0	2	0	0	0	0	0	0	13	0	0	13	0	30	0	0	30	45
07:15 AM	1	0	1	0	2	0	0	0	0	0	0	13	0	0	13	0	42	0	0	42	57
07:30 AM	2	0	1	0	3	0	0	0	0	0	0	21	1	0	22	1	50	0	0	51	76
07:45 AM	2	0	2	0	4	0	0	0	0	0	0	13	0	0	13	0	39	0	0	39	56
Total	7	0	4	0	11	0	0	0	0	0	0	60	1	0	61	1	161	0	0	162	234
08:00 AM	1	0	0	0	1	0	0	0	0	0	0	15	0	0	15	2	28	0	0	30	46
08:15 AM	0	0	2	0	2	0	0	0	0	0	0	17	0	0	17	3	22	0	0	25	44
08:30 AM	1	0	1	0	2	0	0	0	0	0	0	13	0	0	13	1	21	0	0	22	37
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	26	0	0	26	36
Total	2	0	3	0	5	0	0	0	0	0	0	55	0	0	55	6	97	0	0	103	163
*** BREAK ***																					
04:30 PM	4	0	2	0	6	0	0	0	0	0	0	18	0	0	18	2	20	0	0	22	46
04:45 PM	0	0	1	0	1	0	0	0	0	0	0	29	1	0	30	2	21	0	0	23	54
Total	4	0	3	0	7	0	0	0	0	0	0	47	1	0	48	4	41	0	0	45	100
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	34	3	0	37	3	27	0	0	30	67
05:15 PM	2	0	1	0	3	0	0	0	0	0	0	36	0	0	36	2	25	0	0	27	66
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	37	0	0	37	0	37	0	0	37	74
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	34	2	0	36	1	27	0	0	28	65
Total	2	0	2	0	4	0	0	0	0	0	0	141	5	0	146	6	116	0	0	122	272
06:00 PM	1	0	0	0	1	0	0	0	0	0	0	24	2	0	26	1	29	0	0	30	57
06:15 PM	1	0	3	0	4	0	0	0	0	0	0	20	3	0	23	2	24	0	0	26	53
Grand Total	17	0	15	0	32	0	0	0	0	0	0	347	12	0	359	20	468	0	0	488	879
Apprch %	53.1	0	46.9	0		0	0	0	0		0	96.7	3.3	0		4.1	95.9	0	0		
Total %	1.9	0	1.7	0	3.6	0	0	0	0	0	0	39.5	1.4	0	40.8	2.3	53.2	0	0	55.5	

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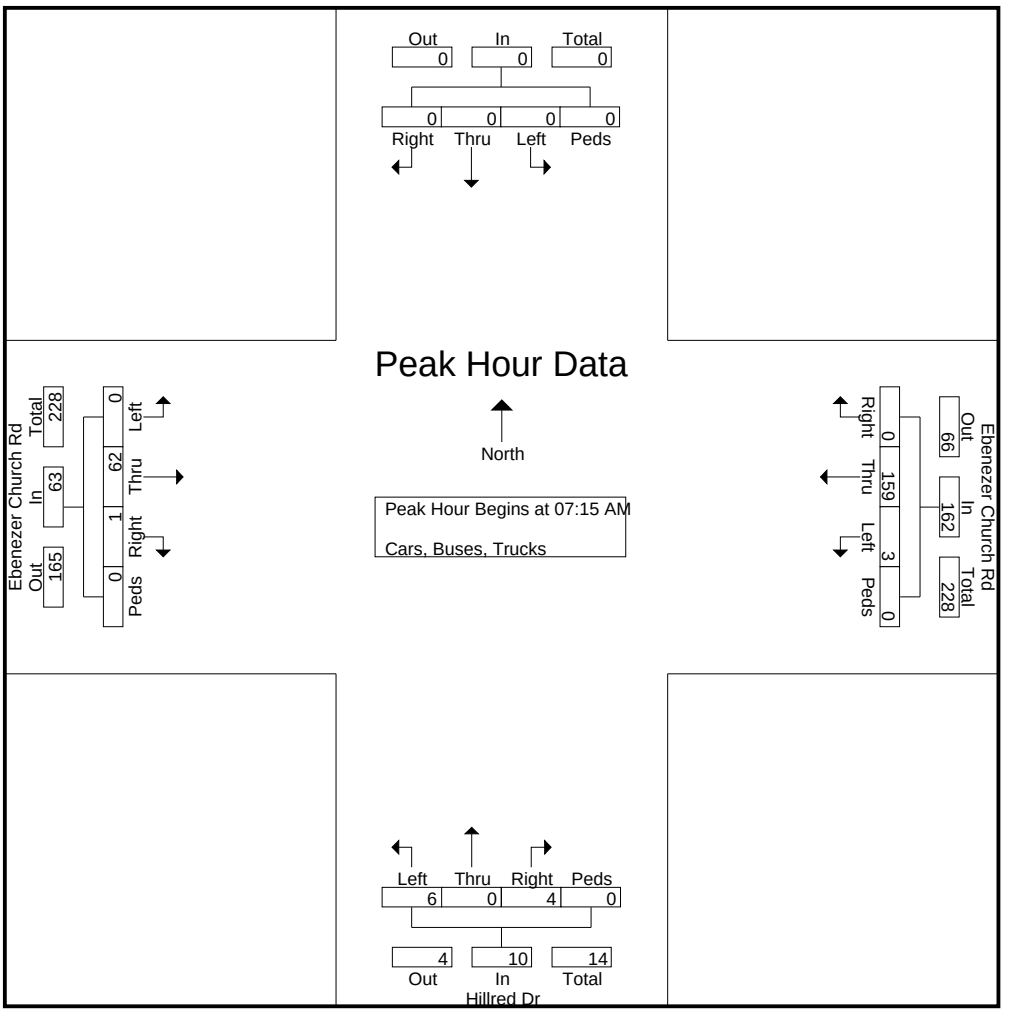
TMC Data
Ebenezer Church Rd @ Hillred Dr

7-9am I 4.30-6.30pm

File Name : 38360003
Site Code : 38360003
Start Date : 5/3/2016
Page No : 2

	Hillred Dr Northbound					Southbound					Ebenezer Church Rd Eastbound					Ebenezer Church Rd 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	1	0	1	0	2	0	0	0	0	0	0	13	0	0	13	0	42	0	0	42	57
07:30 AM	**2**	0	1	0	3	0	0	0	0	0	0	**21**	**1**	0	**22**	1	**50**	0	0	**51**	**76**
07:45 AM	2	0	**2**	0	**4**	0	0	0	0	0	0	13	0	0	13	0	39	0	0	39	56
08:00 AM	1	0	0	0	1	0	0	0	0	0	0	15	0	0	15	**2**	28	0	0	30	46
Total Volume	6	0	4	0	10	0	0	0	0	0	0	62	1	0	63	3	159	0	0	162	235
% App. Total	60	0	40	0		0	0	0	0		0	98.4	1.6	0		1.9	98.1	0	0		
PHF	.750	.000	.500	.000	.625	.000	.000	.000	.000	.000	.000	.738	.250	.000	.716	.375	.795	.000	.000	.794	.773



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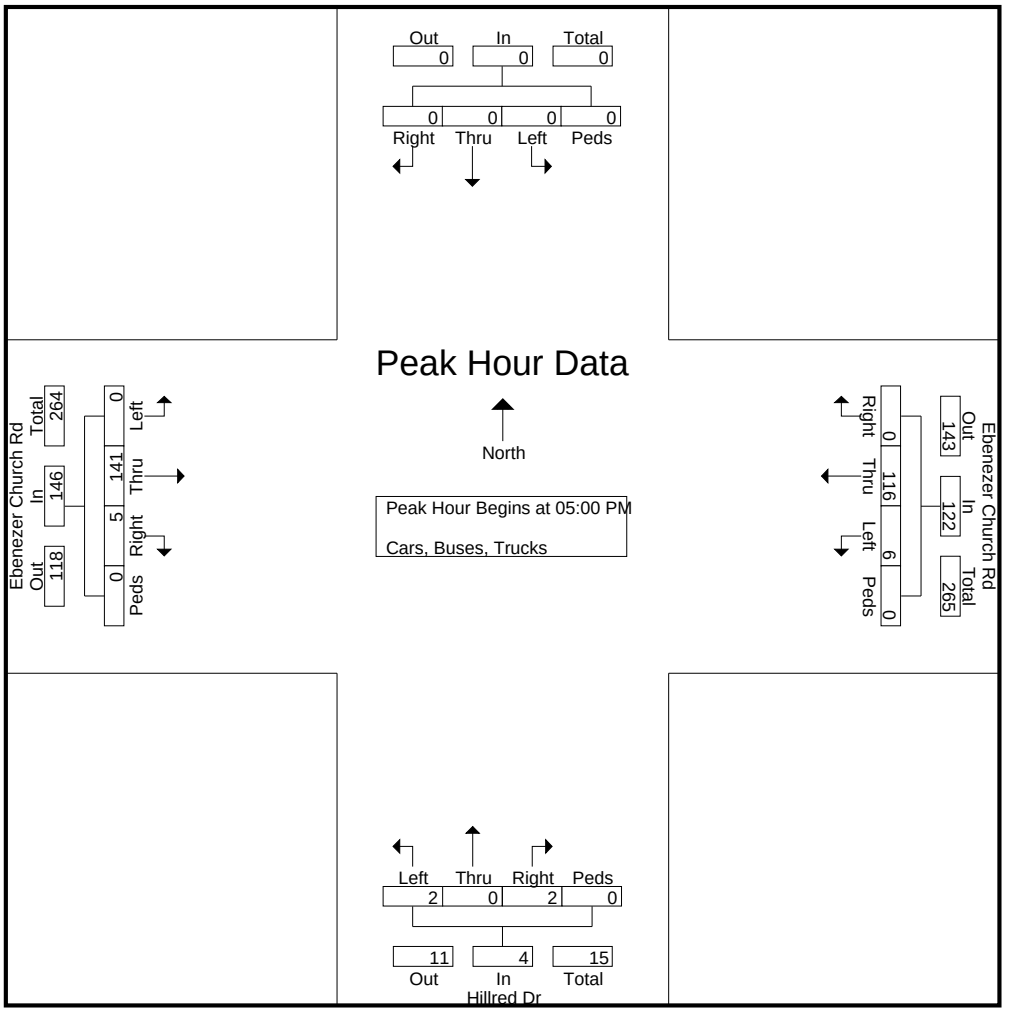
TMC Data
Ebenezer Church Rd @ Hillred Dr

7-9am I 4.30-6.30pm

File Name : 38360003
Site Code : 38360003
Start Date : 5/3/2016
Page No : 3

	Hillred Dr Northbound					Southbound					Ebenezer Church Rd Eastbound					Ebenezer Church Rd 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 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	34	**3**	0	**37**	**3**	27	0	0	30	67
05:15 PM	**2**	0	**1**	0	**3**	0	0	0	0	0	0	36	0	0	36	2	25	0	0	27	66
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	**37**	0	0	37	0	**37**	0	0	**37**	**74**
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	34	2	0	36	1	27	0	0	28	65
Total Volume	2	0	2	0	4	0	0	0	0	0	0	141	5	0	146	6	116	0	0	122	272
% App. Total	50	0	50	0		0	0	0	0		0	96.6	3.4	0		4.9	95.1	0	0		
PHF	.250	.000	.500	.000	.333	.000	.000	.000	.000	.000	.000	.953	.417	.000	.986	.500	.784	.000	.000	.824	.919



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TMC Data
Ebenezer Church Rd @ Lester Rd

7-9am I 4.30-6.30pm

File Name : 38360004
Site Code : 38360004
Start Date : 5/3/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Northbound					Lester Rd Southbound					Ebenezer Church Rd Eastbound					Ebenezer Church Rd 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	0	0	0	0	0	14	0	9	0	23	4	9	0	0	13	0	33	32	0	65	101
07:15 AM	0	0	0	0	0	15	0	9	0	24	3	14	0	0	17	0	32	54	0	86	127
07:30 AM	0	0	0	0	0	23	0	7	0	30	3	22	0	0	25	0	44	53	0	97	152
07:45 AM	0	0	0	0	0	36	0	6	0	42	3	13	0	0	16	0	42	53	0	95	153
Total	0	0	0	0	0	88	0	31	0	119	13	58	0	0	71	0	151	192	0	343	533
08:00 AM	0	0	0	0	0	24	0	4	0	28	1	19	0	0	20	0	35	36	0	71	119
08:15 AM	0	0	0	0	0	24	0	4	0	28	6	17	0	0	23	0	24	43	0	67	118
08:30 AM	0	0	0	0	0	16	0	2	0	18	2	12	0	0	14	0	20	34	0	54	86
08:45 AM	0	0	0	0	0	14	0	8	0	22	0	12	0	0	12	0	21	29	0	50	84
Total	0	0	0	0	0	78	0	18	0	96	9	60	0	0	69	0	100	142	0	242	407
*** BREAK ***																					
04:30 PM	0	0	0	0	0	33	0	5	0	38	2	24	0	0	26	0	22	23	0	45	109
04:45 PM	0	0	0	0	0	43	0	0	0	43	5	31	0	0	36	0	20	14	0	34	113
Total	0	0	0	0	0	76	0	5	0	81	7	55	0	0	62	0	42	37	0	79	222
05:00 PM	0	0	0	0	0	36	0	7	0	43	8	34	0	0	42	0	22	19	0	41	126
05:15 PM	0	0	0	0	0	45	0	2	0	47	4	34	0	0	38	0	25	19	0	44	129
05:30 PM	0	0	0	0	0	37	0	2	0	39	12	37	0	0	49	0	21	28	0	49	137
05:45 PM	0	0	0	0	0	39	0	9	0	48	5	31	0	0	36	0	27	26	0	53	137
Total	0	0	0	0	0	157	0	20	0	177	29	136	0	0	165	0	95	92	0	187	529
06:00 PM	0	0	0	0	0	20	0	2	0	22	4	23	0	0	27	0	31	13	0	44	93
06:15 PM	0	0	0	0	0	33	0	3	0	36	5	24	0	0	29	0	18	26	0	44	109
Grand Total	0	0	0	0	0	452	0	79	0	531	67	356	0	0	423	0	437	502	0	939	1893
Apprch %	0	0	0	0		85.1	0	14.9	0		15.8	84.2	0	0		0	46.5	53.5	0		
Total %	0	0	0	0	0	23.9	0	4.2	0	28.1	3.5	18.8	0	0	22.3	0	23.1	26.5	0	49.6	

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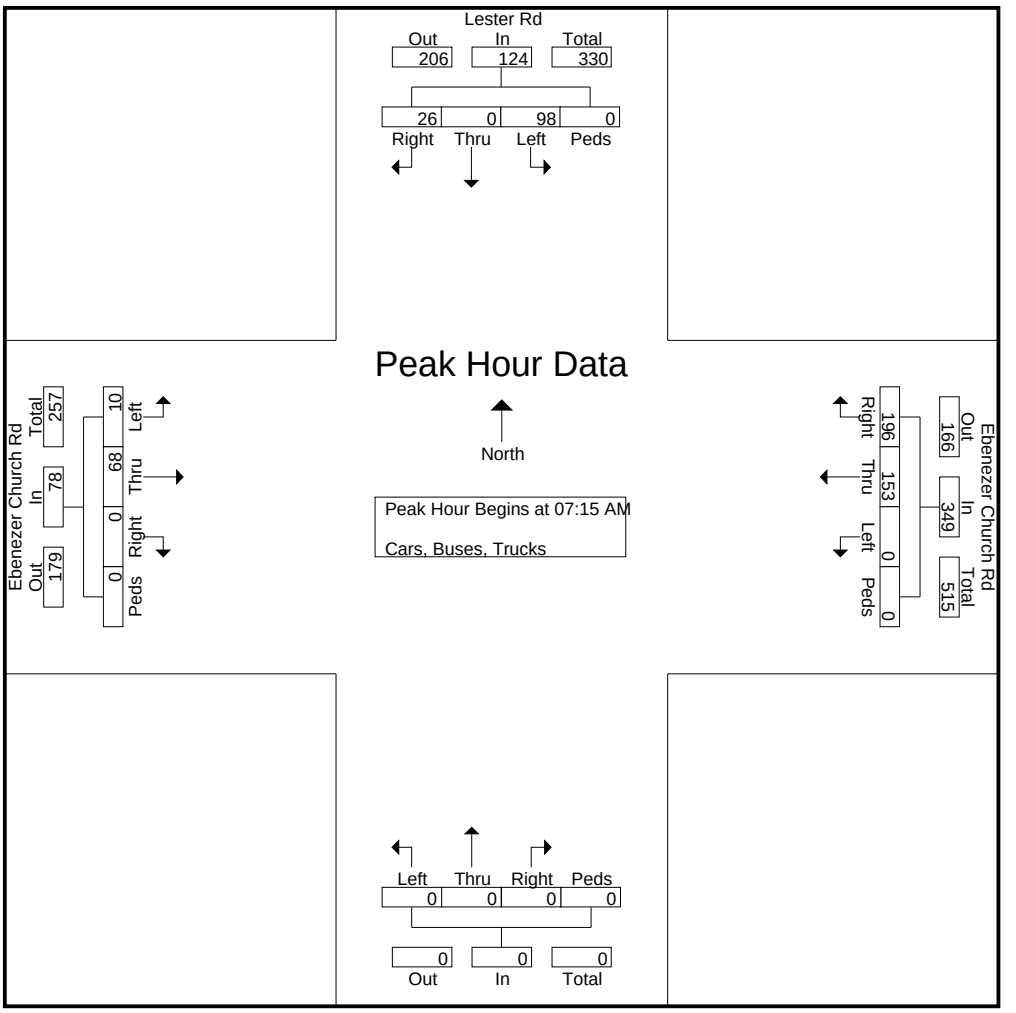
TMC Data
Ebenezer Church Rd @ Lester Rd

7-9am I 4.30-6.30pm

File Name : 38360004
Site Code : 38360004
Start Date : 5/3/2016
Page No : 2

	Northbound					Lester Rd Southbound					Ebenezer Church Rd Eastbound					Ebenezer Church Rd 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	0	0	0	0	15	0	**9**	0	24	**3**	14	0	0	17	0	32	**54**	0	86	127
07:30 AM	0	0	0	0	0	23	0	7	0	30	3	**22**	0	0	**25**	0	**44**	53	0	**97**	152
07:45 AM	0	0	0	0	0	**36**	0	6	0	**42**	3	13	0	0	16	0	42	53	0	95	**153**
08:00 AM	0	0	0	0	0	24	0	4	0	28	1	19	0	0	20	0	35	36	0	71	119
Total Volume	0	0	0	0	0	98	0	26	0	124	10	68	0	0	78	0	153	196	0	349	551
% App. Total	0	0	0	0		79	0	21	0		12.8	87.2	0	0		0	43.8	56.2	0		
PHF	.000	.000	.000	.000	.000	.681	.000	.722	.000	.738	.833	.773	.000	.000	.780	.000	.869	.907	.000	.899	.900



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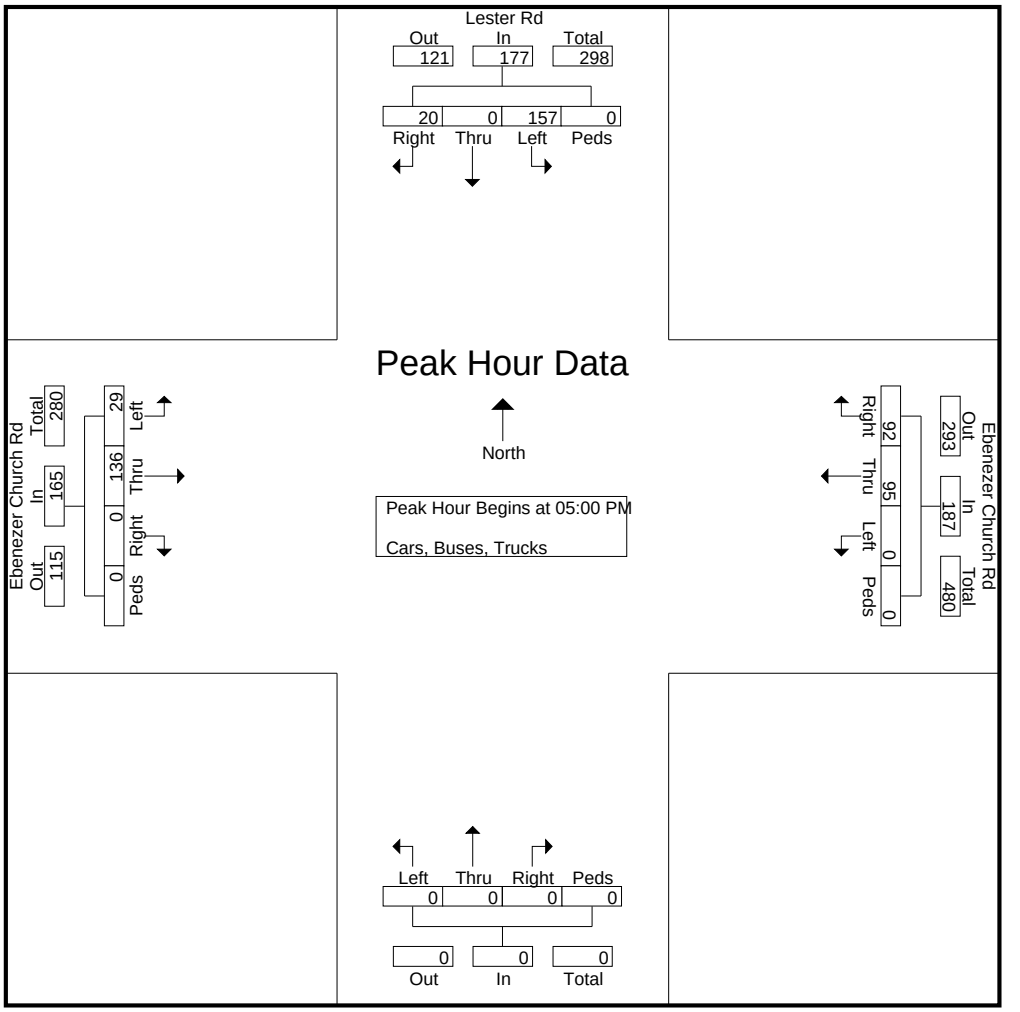
TMC Data
Ebenezer Church Rd @ Lester Rd

7-9am I 4.30-6.30pm

File Name : 38360004
Site Code : 38360004
Start Date : 5/3/2016
Page No : 3

	Northbound					Lester Rd Southbound					Ebenezer Church Rd Eastbound					Ebenezer Church Rd 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 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	36	0	7	0	43	8	34	0	0	42	0	22	19	0	41	126
05:15 PM	0	0	0	0	0	**45**	0	2	0	47	4	34	0	0	38	0	25	19	0	44	129
05:30 PM	0	0	0	0	0	37	0	2	0	39	**12**	**37**	0	0	**49**	0	21	**28**	0	49	**137**
05:45 PM	0	0	0	0	0	39	0	**9**	0	**48**	5	31	0	0	36	0	**27**	26	0	**53**	137
Total Volume	0	0	0	0	0	157	0	20	0	177	29	136	0	0	165	0	95	92	0	187	529
% App. Total	0	0	0	0		88.7	0	11.3	0		17.6	82.4	0	0		0	50.8	49.2	0		
PHF	.000	.000	.000	.000	.000	.872	.000	.556	.000	.922	.604	.919	.000	.000	.842	.000	.880	.821	.000	.882	.965



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TMC Data
Lester Rd @ Davis Rd

7-9am I 4.30-6.30pm

File Name : 38360005
Site Code : 38360005
Start Date : 5/3/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Lester Rd Northbound					Lester Rd Southbound					Davis Red Eastbound					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	1	35	0	0	36	0	18	0	0	18	1	0	1	0	2	0	0	0	0	0	56
07:15 AM	0	55	0	0	55	0	25	1	0	26	1	0	1	0	2	0	0	0	0	0	83
07:30 AM	1	58	0	0	59	0	29	0	0	29	0	0	0	0	0	0	0	0	0	0	88
07:45 AM	1	55	0	0	56	0	35	1	0	36	1	0	1	0	2	0	0	0	0	0	94
Total	3	203	0	0	206	0	107	2	0	109	3	0	3	0	6	0	0	0	0	0	321
08:00 AM	2	32	0	0	34	0	34	0	0	34	0	0	1	0	1	0	0	0	0	0	69
08:15 AM	0	44	0	0	44	0	20	0	0	20	1	0	0	0	1	0	0	0	0	0	65
08:30 AM	2	33	0	0	35	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	45
08:45 AM	4	33	0	0	37	0	30	0	0	30	0	0	0	0	0	0	0	0	0	0	67
Total	8	142	0	0	150	0	94	0	0	94	1	0	1	0	2	0	0	0	0	0	246
*** BREAK ***																					
04:30 PM	1	28	0	0	29	0	32	1	0	33	0	0	1	0	1	0	0	0	0	0	63
04:45 PM	0	25	0	0	25	0	47	1	0	48	1	0	0	0	1	0	0	0	0	0	74
Total	1	53	0	0	54	0	79	2	0	81	1	0	1	0	2	0	0	0	0	0	137
05:00 PM	0	27	0	0	27	0	47	1	0	48	0	0	0	0	0	0	0	0	0	0	75
05:15 PM	0	21	0	0	21	0	49	2	0	51	1	0	0	0	1	0	0	0	0	0	73
05:30 PM	2	40	0	0	42	0	40	1	0	41	1	0	2	0	3	0	0	0	0	0	86
05:45 PM	0	33	0	0	33	0	42	1	0	43	0	0	0	0	0	0	0	0	0	0	76
Total	2	121	0	0	123	0	178	5	0	183	2	0	2	0	4	0	0	0	0	0	310
06:00 PM	1	16	0	0	17	0	22	0	0	22	0	0	1	0	1	0	0	0	0	0	40
06:15 PM	2	30	0	0	32	0	36	0	0	36	1	0	0	0	1	0	0	0	0	0	69
Grand Total	17	565	0	0	582	0	516	9	0	525	8	0	8	0	16	0	0	0	0	0	1123
Apprch %	2.9	97.1	0	0		0	98.3	1.7	0		50	0	50	0		0	0	0	0		
Total %	1.5	50.3	0	0	51.8	0	45.9	0.8	0	46.7	0.7	0	0.7	0	1.4	0	0	0	0	0	

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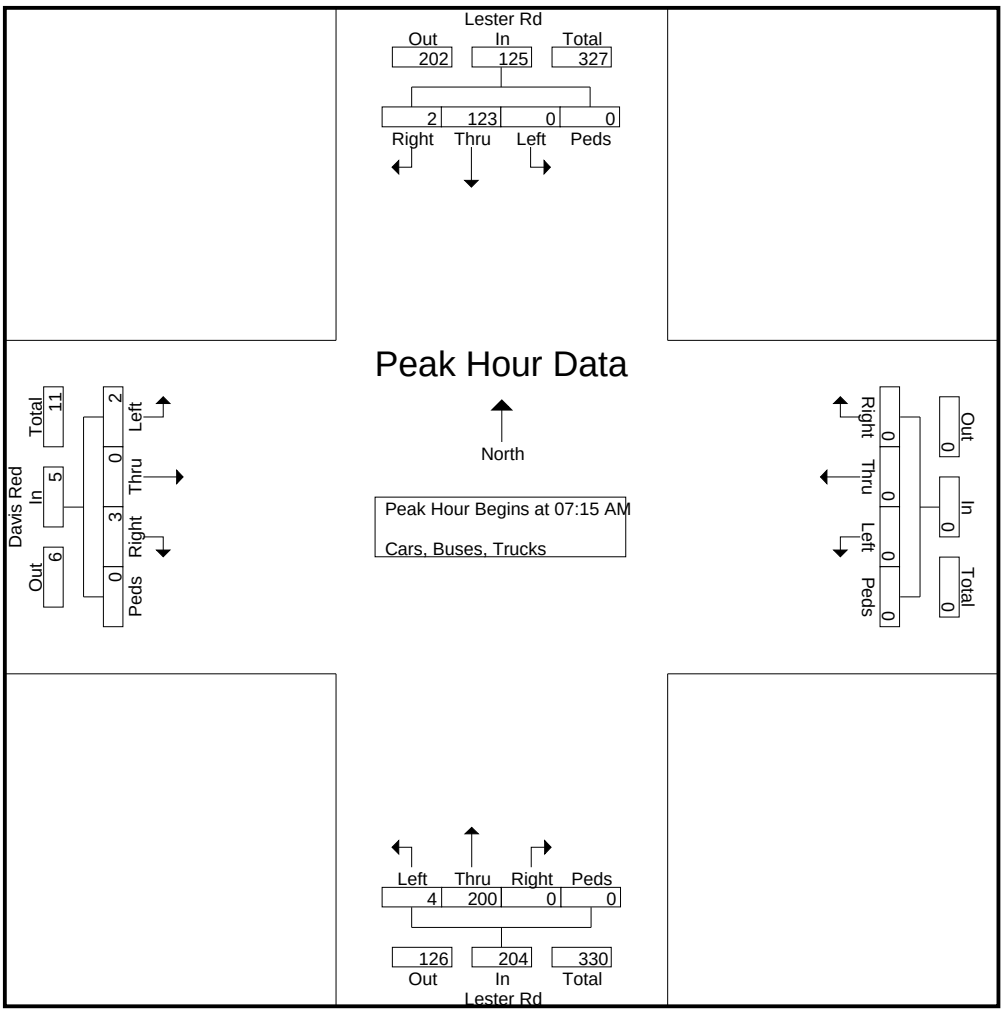
TMC Data
Lester Rd @ Davis Rd

7-9am I 4.30-6.30pm

File Name : 38360005
Site Code : 38360005
Start Date : 5/3/2016
Page No : 2

	Lester Rd Northbound					Lester Rd Southbound					Davis Red Eastbound					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	55	0	0	55	0	25	**1**	0	26	**1**	0	**1**	0	**2**	0	0	0	0	0	83
07:30 AM	1	**58**	0	0	**59**	0	29	0	0	29	0	0	0	0	0	0	0	0	0	0	88
07:45 AM	1	55	0	0	56	0	**35**	1	0	**36**	1	0	1	0	2	0	0	0	0	0	**94**
08:00 AM	**2**	32	0	0	34	0	34	0	0	34	0	0	1	0	1	0	0	0	0	0	69
Total Volume	4	200	0	0	204	0	123	2	0	125	2	0	3	0	5	0	0	0	0	0	334
% App. Total	2	98	0	0		0	98.4	1.6	0		40	0	60	0		0	0	0	0		
PHF	.500	.862	.000	.000	.864	.000	.879	.500	.000	.868	.500	.000	.750	.000	.625	.000	.000	.000	.000	.000	.888



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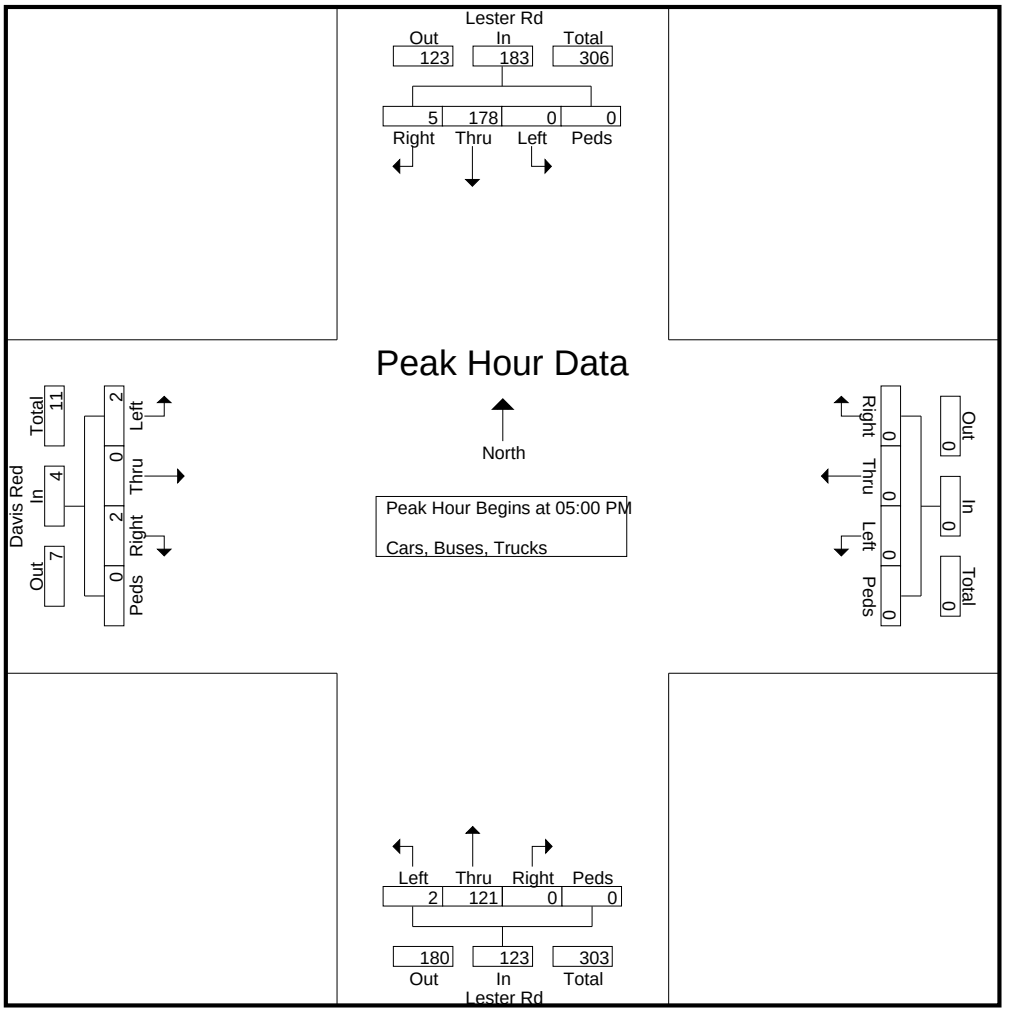
TMC Data
Lester Rd @ Davis Rd

7-9am I 4.30-6.30pm

File Name : 38360005
Site Code : 38360005
Start Date : 5/3/2016
Page No : 3

	Lester Rd Northbound					Lester Rd Southbound					Davis Red Eastbound					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 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	27	0	0	27	0	47	1	0	48	0	0	0	0	0	0	0	0	0	0	75
05:15 PM	0	21	0	0	21	0	**49**	**2**	0	**51**	**1**	0	0	0	1	0	0	0	0	0	73
05:30 PM	**2**	**40**	0	0	**42**	0	40	1	0	41	1	0	**2**	0	**3**	0	0	0	0	0	**86**
05:45 PM	0	33	0	0	33	0	42	1	0	43	0	0	0	0	0	0	0	0	0	0	76
Total Volume	2	121	0	0	123	0	178	5	0	183	2	0	2	0	4	0	0	0	0	0	310
% App. Total	1.6	98.4	0	0		0	97.3	2.7	0		50	0	50	0		0	0	0	0		
PHF	.250	.756	.000	.000	.732	.000	.908	.625	.000	.897	.500	.000	.250	.000	.333	.000	.000	.000	.000	.000	.901



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TMC Data
Ebenezer Rd @ Ebenezer Church Rd/
Spear Rd
7-9am I 4.30-6.30pm

File Name : 38360002
Site Code : 38360002
Start Date : 5/3/2016
Page No : 1

Groups Printed- Cars, Buses, Trucks

	Ebenezer Rd Northbound					Ebenezer Rd Southbound					Spear Rd Eastbound					Ebenezer Church Rd 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	35	9	0	46	2	14	0	0	16	1	3	0	0	4	16	17	10	0	43	109
07:15 AM	2	57	6	0	65	4	23	1	0	28	3	4	3	0	10	10	18	8	0	36	139
07:30 AM	7	48	13	0	68	5	30	0	0	35	3	7	1	0	11	17	23	15	0	55	169
07:45 AM	1	46	3	0	50	6	29	0	0	35	1	5	0	0	6	18	26	9	0	53	144
Total	12	186	31	0	229	17	96	1	0	114	8	19	4	0	31	61	84	42	0	187	561
08:00 AM	2	53	3	0	58	6	27	0	0	33	0	7	1	0	8	11	16	7	0	34	133
08:15 AM	1	35	11	0	47	5	17	2	0	24	2	6	0	0	8	8	16	10	0	34	113
08:30 AM	2	28	6	0	36	3	32	0	0	35	2	7	0	0	9	7	13	5	0	25	105
08:45 AM	1	34	4	0	39	2	23	3	0	28	6	8	1	0	15	9	11	6	0	26	108
Total	6	150	24	0	180	16	99	5	0	120	10	28	2	0	40	35	56	28	0	119	459
*** BREAK ***																					
04:30 PM	2	23	8	0	33	7	38	1	0	46	2	12	3	0	17	9	15	6	0	30	126
04:45 PM	1	22	10	0	33	9	36	0	0	45	1	16	1	0	18	6	6	13	0	25	121
Total	3	45	18	0	66	16	74	1	0	91	3	28	4	0	35	15	21	19	0	55	247
05:00 PM	0	31	12	0	43	10	45	0	0	55	4	14	2	0	20	6	11	8	0	25	143
05:15 PM	0	37	13	0	50	25	62	4	0	91	3	25	0	0	28	8	14	6	0	28	197
05:30 PM	1	22	17	0	40	11	48	0	0	59	1	18	2	0	21	10	19	4	0	33	153
05:45 PM	2	31	6	0	39	10	45	2	0	57	1	18	0	0	19	10	10	8	0	28	143
Total	3	121	48	0	172	56	200	6	0	262	9	75	4	0	88	34	54	26	0	114	636
06:00 PM	0	22	7	0	29	8	42	3	0	53	2	10	1	0	13	12	14	8	0	34	129
06:15 PM	1	30	8	0	39	5	41	0	0	46	2	12	1	0	15	9	14	6	0	29	129
Grand Total	25	554	136	0	715	118	552	16	0	686	34	172	16	0	222	166	243	129	0	538	2161
Apprch %	3.5	77.5	19	0		17.2	80.5	2.3	0		15.3	77.5	7.2	0		30.9	45.2	24	0		
Total %	1.2	25.6	6.3	0	33.1	5.5	25.5	0.7	0	31.7	1.6	8	0.7	0	10.3	7.7	11.2	6	0	24.9	

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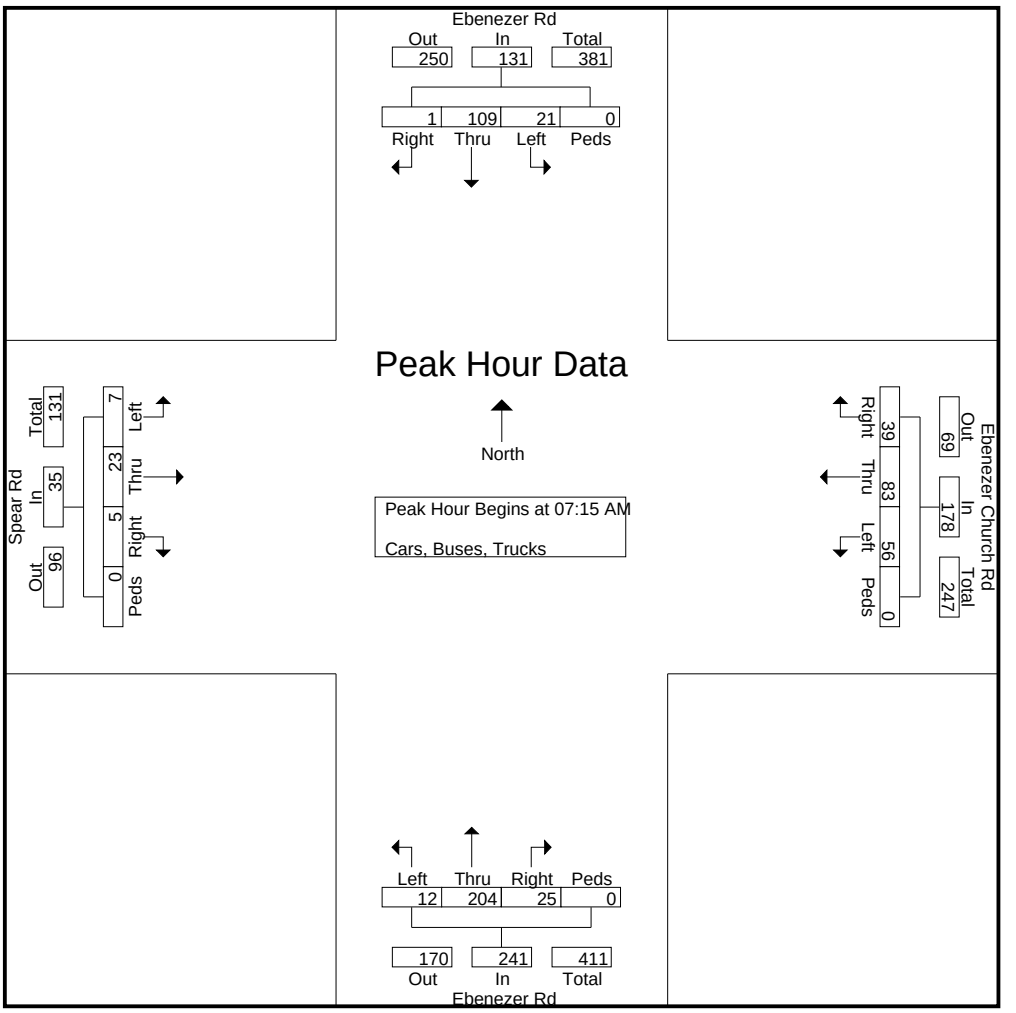
TMC Data
Ebenezer Rd @ Ebenezer Church Rd/
Spear Rd
7-9am I 4.30-6.30pm

File Name : 38360002
Site Code : 38360002
Start Date : 5/3/2016
Page No : 2

	Ebenezer Rd Northbound					Ebenezer Rd Southbound					Spear Rd Eastbound					Ebenezer Church Rd 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	2	**57**	6	0	65	4	23	**1**	0	28	**3**	4	**3**	0	10	10	18	8	0	36	139
07:30 AM	**7**	48	**13**	0	**68**	5	**30**	0	0	**35**	3	**7**	1	0	**11**	17	23	**15**	0	**55**	**169**
07:45 AM	1	46	3	0	50	**6**	29	0	0	35	1	5	0	0	6	**18**	**26**	9	0	53	144
08:00 AM	2	53	3	0	58	6	27	0	0	33	0	7	1	0	8	11	16	7	0	34	133
Total Volume	12	204	25	0	241	21	109	1	0	131	7	23	5	0	35	56	83	39	0	178	585
% App. Total	5	84.6	10.4	0		16	83.2	0.8	0		20	65.7	14.3	0		31.5	46.6	21.9	0		
PHF	.429	.895	.481	.000	.886	.875	.908	.250	.000	.936	.583	.821	.417	.000	.795	.778	.798	.650	.000	.809	.865



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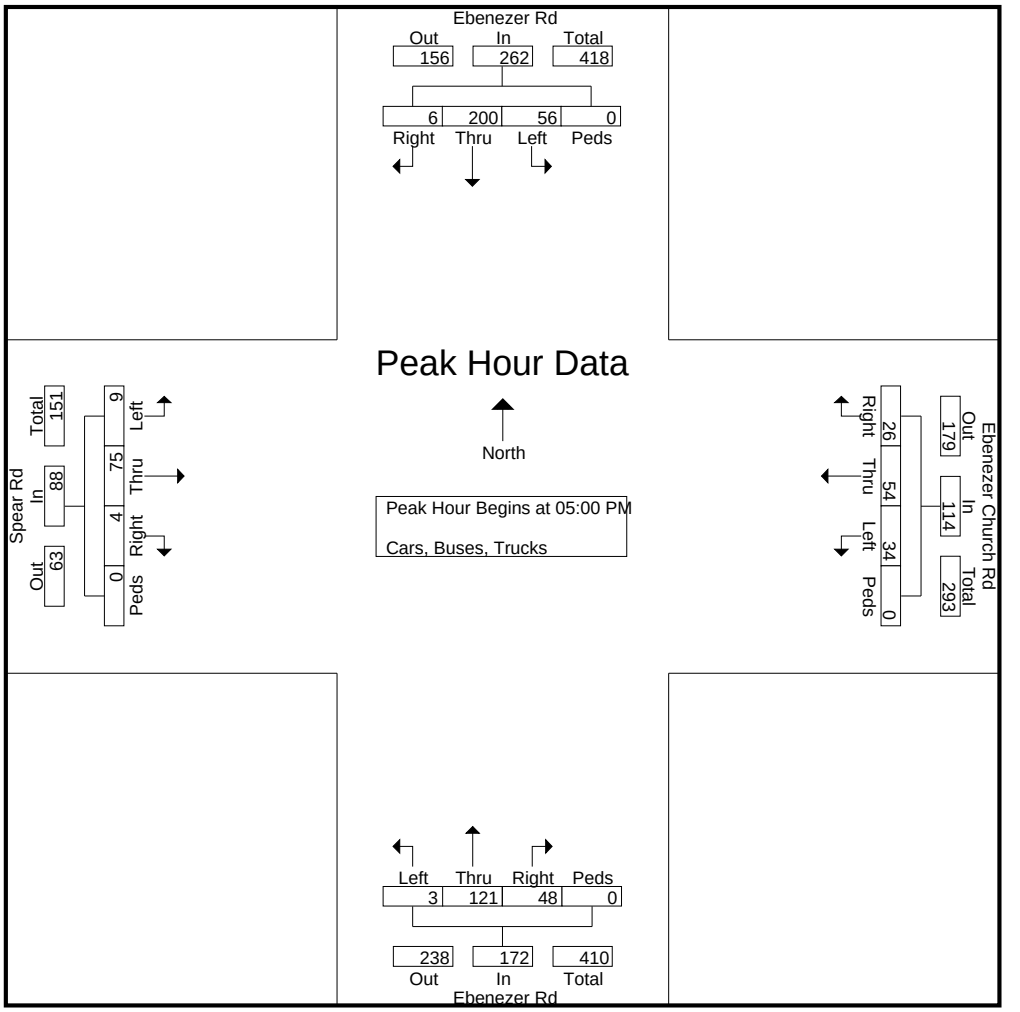
TMC Data
Ebenezer Rd @ Ebenezer Church Rd/
Spear Rd
7-9am I 4.30-6.30pm

File Name : 38360002
Site Code : 38360002
Start Date : 5/3/2016
Page No : 3

	Ebenezer Rd Northbound					Ebenezer Rd Southbound					Spear Rd Eastbound					Ebenezer Church Rd 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 04:30 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	31	12	0	43	10	45	0	0	55	**4**	14	**2**	0	20	6	11	**8**	0	25	143
05:15 PM	0	**37**	13	0	**50**	**25**	**62**	**4**	0	**91**	3	**25**	0	0	**28**	8	14	6	0	28	**197**
05:30 PM	1	22	**17**	0	40	11	48	0	0	59	1	18	2	0	21	**10**	**19**	4	0	**33**	153
05:45 PM	**2**	31	6	0	39	10	45	2	0	57	1	18	0	0	19	10	10	8	0	28	143
Total Volume	3	121	48	0	172	56	200	6	0	262	9	75	4	0	88	34	54	26	0	114	636
% App. Total	1.7	70.3	27.9	0		21.4	76.3	2.3	0		10.2	85.2	4.5	0		29.8	47.4	22.8	0		
PHF	.375	.818	.706	.000	.860	.560	.806	.375	.000	.720	.563	.750	.500	.000	.786	.850	.711	.813	.000	.864	.807



MetroCount Traffic Executive
Vehicle Counts

VehicleCount-110 -- English (ENU)

Datasets:

Site:	**[0000002] Ebenezer Church at Hillred**
Attribute:	Ebenezer Church Rd
Direction:	8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration:	12:49 Wednesday, April 27, 2016 => 15:45 Friday, April 29, 2016,
Zone:	
File:	Ebenezer Church Rd.EC0 (Plus)
Identifier:	JE88NK7K MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**12:50 Wednesday, April 27, 2016 => 15:45 Friday, April 29, 2016 (2.12186)**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	5 - 100 mph.
Direction:	North, East, South, West (bound), P = East
Separation:	GapX > 0 sec, Span 0 - 300 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 5049 / 5051 (99.96%)

* Wednesday, April 27, 2016 - Total=1460 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**154**	**205**	**250**	**260**	**202**	**157**	**128**	**60**	**27**	**17**	
-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	45	46	63	68	48	28	17	6	7	2
-	-	-	-	-	-	-	-	-	-	-	-	-	0	55	47	71	88	47	36	38	18	3	6	1
-	-	-	-	-	-	-	-	-	-	-	-	-	0	53	65	59	55	39	38	39	11	12	2	1
-	-	-	-	-	-	-	-	-	-	-	-	0	0	46	48	74	54	48	35	23	14	6	2	1

* Thursday, April 28, 2016 - Total=2825, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	**5**	**6**	**5**	**12**	**11**	**83**	**228**	**180**	**142**	**153**	**139**	**185**	**160**	**211**	**215**	**230**	**262**	**211**	**148**	**125**	**65**	**31**	**13**	
2	2	3	2	0	1	10	**47**	44	33	34	34	52	43	48	55	53	**65**	51	54	35	19	8	1	4
1	1	0	1	2	1	12	**51**	49	34	45	33	39	47	46	52	50	**65**	53	27	31	21	7	6	3
1	1	1	0	2	7	26	**64**	49	36	43	32	38	40	59	53	68	**75**	64	31	31	18	10	5	5
1	1	2	2	8	2	35	**66**	38	39	31	40	56	30	58	55	**59**	57	43	36	28	7	6	1	5

AM Peak 0700 - 0800 (228), AM PHF=0.86 PM Peak 1645 - 1745 (264), PM PHF=0.88

* Friday, April 29, 2016 - Total=764 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
17	**6**	**3**	**6**	**10**	**23**	**79**	**227**	**173**	**137**	**83**	**0**	**0**	**0**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
4	3	2	1	3	3	7	42	**52**	36	34	0	0	0	0	0	-	-	-	-	-	-	-	-	-
3	3	0	3	1	7	11	**54**	41	27	30	0	0	0	0	0	-	-	-	-	-	-	-	-	-
5	0	1	1	4	4	24	**64**	37	38	19	0	0	0	0	0	-	-	-	-	-	-	-	-	-
5	0	0	1	2	9	37	**67**	43	36	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-

AM Peak 0715 - 0815 (237), AM PHF=0.88

MetroCount Traffic Executive
Vehicle Counts

VehicleCount-109 -- English (ENU)

Datasets:

Site:	**[000001] Davis Rd East of Huiet**
Attribute:	Davis Rd
Direction:	8 - East bound A>B, West bound B>A. **Lane:** 1
Survey Duration:	12:45 Wednesday, April 27, 2016 => 15:43 Friday, April 29, 2016,
Zone:	
File:	Davis Rd.EC1 (Plus)
Identifier:	JG19KA2D MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v4.06)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**12:46 Wednesday, April 27, 2016 => 15:43 Friday, April 29, 2016 (2.12352)**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	5 - 100 mph.
Direction:	North, East, South, West (bound), P = East
Separation:	GapX > 0 sec, Span 0 - 300 ft
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Non metric (ft, mi, ft/s, mph, lb, ton)
In profile:	Vehicles = 61 / 61 (100.00%)

*** Wednesday, April 27, 2016 - Total=17 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**1**	**6**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	
-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	3	1	1	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	1	2	1	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	0	2	1	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	2	2	0	0	0	0	0	0	0	0

*** Thursday, April 28, 2016 - Total=30, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**1**	**2**	**7**	**2**	**4**	**3**	**3**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	
0	0	0	0	0	0	0	2	0	0	0	**3**	1	**1**	0	1	0	1	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	1	**1**	1	**0**	1	1	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	1	0	1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	1	0	**1**	1	0	**1**	1	1	1	0	0	0	0	0	0	0	0

AM Peak 1045 - 1145 (7), AM PHF=0.58 PM Peak 1300 - 1400 (4), PM PHF=0.50

*** Friday, April 29, 2016 - Total=14 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**5**	**4**	**0**	**0**	**0**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
0	0	0	0	0	0	0	1	0	**1**	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-
0	0	0	0	0	0	0	0	0	**2**	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
0	0	0	0	0	0	0	1	**1**	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
0	0	0	0	0	0	0	0	**2**	1	3	0	0	0	0	-	-	-	-	-	-	-	-	-	-

AM Peak 0830 - 0930 (6), AM PHF=0.75

Appendix B

Intersection Analysis Methodology

Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2010 edition (HCM 2010). Synchro 8 software, which emulates the HCM 2010 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and stop-sign controlled (unsignalized) intersections.

Signalized Intersections

The criteria for evaluating signalized intersections are capacity and level of service. The capacity analysis of an intersection compares the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This produces a volume-to-capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available and indicates a temporary excess of demand. The HCM 2010 methodology computes a critical v/c ratio for an intersection based on the critical lane groups or approaches. This critical v/c ratio is an indication of overall intersection sufficiency.

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

Table A – Level of Service Criteria for Signalized Intersections

Control Delay (s/veh)	Level of Service by Volume-to-Capacity Ratio	
	≤1.0	>1.0
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

Source: Highway Capacity Manual 2010

Unsignalized Intersections

The operations at an unsignalized intersection are defined in terms of levels of service. Level of service (LOS) is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory,

factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream.

Levels of service are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay. The level of service criteria for unsignalized intersections are presented in Table B.

Table B – Level of Service Criteria for Unsignalized Intersections

Control Delay (s/veh)	Level of Service by Volume-to-Capacity Ratio	
	≤1.0	>1.0
0 – 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

Source: Highway Capacity Manual 2010

Appendix C

Existing Intersection Operational Analysis

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	3	2	263	1	1	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	86	86	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	5	306	1	1	139

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	448	306	0	0	307	0
Stage 1	306	-	-	-	-	-
Stage 2	142	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	568	734	-	-	1254	-
Stage 1	747	-	-	-	-	-
Stage 2	885	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	567	734	-	-	1254	-
Mov Cap-2 Maneuver	567	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	884	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	624	1254	-
HCM Lane V/C Ratio	-	-	0.019	0.001	-
HCM Control Delay (s)	-	-	10.9	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	2	3	4	200	123	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	5	233	141	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	385	143	144	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	618	905	1438	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	616	905	1438	-	-	-
Mov Cap-2 Maneuver	616	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	795	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	762	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	7	28	12	243	130	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	89	89	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	35	13	273	138	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	439	139	139	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	300	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	575	909	1445	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	569	909	1445	-	-	-
Mov Cap-2 Maneuver	569	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	744	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1445	-	812	-	-
HCM Lane V/C Ratio	0.009	-	0.054	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	10	68	153	196	98	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	90	90	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	87	170	218	132	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	388	0	-	0	392	279
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	113	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1170	-	-	-	612	760
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	912	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1170	-	-	-	605	760
Mov Cap-2 Maneuver	-	-	-	-	605	-
Stage 1	-	-	-	-	768	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1170	-	-	-	632
HCM Lane V/C Ratio	0.011	-	-	-	0.265
HCM Control Delay (s)	8.1	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	62	1	3	159	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	79	79	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	1	4	201	10	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	86	0	295	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	209	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1510	-	696	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1510	-	694	973
Mov Cap-2 Maneuver	-	-	-	-	694	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	824	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	784	-	-	1510	-
HCM Lane V/C Ratio	0.02	-	-	0.003	-
HCM Control Delay (s)	9.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	56	122	216	25	21	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	89	89	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	151	243	28	22	121

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	423	257	0	0	271	0
Stage 1	257	-	-	-	-	-
Stage 2	166	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	588	782	-	-	1292	-
Stage 1	786	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	577	782	-	-	1292	-
Mov Cap-2 Maneuver	577	-	-	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	703	1292	-
HCM Lane V/C Ratio	-	-	0.313	0.017	-
HCM Control Delay (s)	-	-	12.4	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	5	2	152	5	2	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	58	58	84	84	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	3	181	6	2	291

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	479	184	0	0	187	0
Stage 1	184	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	545	858	-	-	1387	-
Stage 1	848	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	544	858	-	-	1387	-
Mov Cap-2 Maneuver	544	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	753	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	608	1387	-
HCM Lane V/C Ratio	-	-	0.02	0.002	-
HCM Control Delay (s)	-	-	11	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	2	2	2	121	178	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	33	33	73	73	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	6	3	166	198	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	372	201	203	0	-	0
Stage 1	201	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	629	840	1369	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	628	840	1369	-	-	-
Mov Cap-2 Maneuver	628	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	857	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1369	-	719	-	-
HCM Lane V/C Ratio	0.002	-	0.017	-	-
HCM Control Delay (s)	7.6	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	9	79	3	147	256	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	86	86	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	100	3	171	356	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	538	360	364	0	-	0
Stage 1	360	-	-	-	-	-
Stage 2	178	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	504	684	1195	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	502	684	1195	-	-	-
Mov Cap-2 Maneuver	502	-	-	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	850	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1195	-	660	-	-
HCM Lane V/C Ratio	0.003	-	0.169	-	-
HCM Control Delay (s)	8	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	29	136	95	92	157	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	84	84	88	88	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	162	108	105	171	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	213	0	-	0	391	160
Stage 1	-	-	-	-	160	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1357	-	-	-	613	885
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1357	-	-	-	596	885
Mov Cap-2 Maneuver	-	-	-	-	596	-
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1357	-	-	-	619
HCM Lane V/C Ratio	0.025	-	-	-	0.311
HCM Control Delay (s)	7.7	0	-	-	13.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	141	5	6	116	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	82	82	33	33
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	142	5	7	141	6	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	142	0	298	142
Stage 1	-	-	-	-	142	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1441	-	693	906
Stage 1	-	-	-	-	885	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1441	-	690	906
Mov Cap-2 Maneuver	-	-	-	-	690	-
Stage 1	-	-	-	-	885	-
Stage 2	-	-	-	-	868	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	783	-	-	1441	-
HCM Lane V/C Ratio	0.015	-	-	0.005	-
HCM Control Delay (s)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	34	80	124	48	56	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	93	144	56	78	283

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	611	172	0	0	200	0
Stage 1	172	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	457	872	-	-	1372	-
Stage 1	858	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	426	872	-	-	1372	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	606	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	1.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	665	1372	-
HCM Lane V/C Ratio	-	-	0.199	0.057	-
HCM Control Delay (s)	-	-	11.8	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.2	-

Appendix D

Future Intersection Operational Analysis

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	11	15	277	3	4	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	86	86	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	36	322	3	4	146

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	479	324	0	0	326	0
Stage 1	324	-	-	-	-	-
Stage 2	155	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	545	717	-	-	1234	-
Stage 1	733	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	543	717	-	-	1234	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	870	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	631	1234	-
HCM Lane V/C Ratio	-	-	0.098	0.004	-
HCM Control Delay (s)	-	-	11.3	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	7	5	212	128	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	11	6	247	147	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	407	149	152	0	-	0
Stage 1	149	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	600	898	1429	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	597	898	1429	-	-	-
Mov Cap-2 Maneuver	597	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1429	-	708	-	-
HCM Lane V/C Ratio	0.004	-	0.034	-	-
HCM Control Delay (s)	7.5	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	31	16	256	140	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	89	89	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	39	18	288	149	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	476	152	154	0	-	0
Stage 1	152	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	548	894	1426	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	540	894	1426	-	-	-
Mov Cap-2 Maneuver	540	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	722	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1426	-	788	-	-
HCM Lane V/C Ratio	0.013	-	0.062	-	-
HCM Control Delay (s)	7.6	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	16	74	160	203	105	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	90	90	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	95	178	226	142	38

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	403	0	-	0	427	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1156	-	-	-	584	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1156	-	-	-	573	748
Mov Cap-2 Maneuver	-	-	-	-	573	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	873	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1156	-	-	-	603
HCM Lane V/C Ratio	0.018	-	-	-	0.298
HCM Control Delay (s)	8.2	0	-	-	13.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.2

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	6	64	1	3	164	3	6	0	4	10	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	79	79	79	63	63	63	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	89	1	4	208	4	10	0	6	12	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	211	0	0	89	0	0	332	325	89	326	323	209
Stage 1	-	-	-	-	-	-	106	106	-	217	217	-
Stage 2	-	-	-	-	-	-	226	219	-	109	106	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1360	-	-	1506	-	-	621	593	969	627	595	831
Stage 1	-	-	-	-	-	-	900	807	-	785	723	-
Stage 2	-	-	-	-	-	-	777	722	-	896	807	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1360	-	-	1506	-	-	604	588	969	619	590	831
Mov Cap-2 Maneuver	-	-	-	-	-	-	604	588	-	619	590	-
Stage 1	-	-	-	-	-	-	895	802	-	780	721	-
Stage 2	-	-	-	-	-	-	758	720	-	885	802	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	10.2	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	711	1360	-	-	1506	-	-	727
HCM Lane V/C Ratio	0.022	0.006	-	-	0.003	-	-	0.041
HCM Control Delay (s)	10.2	7.7	0	-	7.4	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	5	6	3	6	21	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	70	70	70	70	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	9	4	9	26	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	16	0	28	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	17	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1602	-	987	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	984	1070
Mov Cap-2 Maneuver	-	-	-	-	984	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1003	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1010	-	-	1602	-
HCM Lane V/C Ratio	0.038	-	-	0.003	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	62	136	223	28	24	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	89	89	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	168	251	31	26	129

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	446	266	0	0	282	0
Stage 1	266	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	570	773	-	-	1280	-
Stage 1	779	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	557	773	-	-	1280	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	832	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	689	1280	-
HCM Lane V/C Ratio	-	-	0.355	0.02	-
HCM Control Delay (s)	-	-	13.1	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	9	10	162	11	16	265
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	58	58	84	84	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	17	193	13	19	308

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	544	199	0	0	206	0
Stage 1	199	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	500	842	-	-	1365	-
Stage 1	835	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	492	842	-	-	1365	-
Mov Cap-2 Maneuver	492	-	-	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	705	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	630	1365	-
HCM Lane V/C Ratio	-	-	0.052	0.014	-
HCM Control Delay (s)	-	-	11	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	6	4	5	129	187	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	33	33	73	73	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	12	7	177	208	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	406	216	223	0	-	0
Stage 1	216	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	601	824	1346	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	597	824	1346	-	-	-
Mov Cap-2 Maneuver	597	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	837	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	671	-	-
HCM Lane V/C Ratio	0.005	-	0.045	-	-
HCM Control Delay (s)	7.7	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	12	87	6	156	273	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	86	86	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	110	7	181	379	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	580	385	390	0	-	0
Stage 1	385	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	477	663	1169	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	474	663	1169	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	832	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1169	-	632	-	-
HCM Lane V/C Ratio	0.006	-	0.198	-	-
HCM Control Delay (s)	8.1	0	12.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	34	143	104	98	164	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	84	84	88	88	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	170	118	111	178	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	230	0	-	0	425	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	251	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1338	-	-	-	586	869
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	791	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1338	-	-	-	567	869
Mov Cap-2 Maneuver	-	-	-	-	567	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	765	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1338	-	-	-	594
HCM Lane V/C Ratio	0.03	-	-	-	0.346
HCM Control Delay (s)	7.8	0	-	-	14.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.5

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	19	145	5	6	119	10	2	0	2	7	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	82	82	82	33	33	33	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	146	5	7	145	12	6	0	6	10	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	157	0	0	146	0	0	359	357	146	354	351	151
Stage 1	-	-	-	-	-	-	185	185	-	166	166	-
Stage 2	-	-	-	-	-	-	174	172	-	188	185	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1423	-	-	1436	-	-	596	569	901	601	573	895
Stage 1	-	-	-	-	-	-	817	747	-	836	761	-
Stage 2	-	-	-	-	-	-	828	756	-	814	747	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1423	-	-	1436	-	-	577	558	901	588	562	895
Mov Cap-2 Maneuver	-	-	-	-	-	-	577	558	-	588	562	-
Stage 1	-	-	-	-	-	-	805	736	-	823	757	-
Stage 2	-	-	-	-	-	-	809	752	-	796	736	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.3	10.2	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	703	1423	-	-	1436	-	-	744
HCM Lane V/C Ratio	0.017	0.013	-	-	0.005	-	-	0.035
HCM Control Delay (s)	10.2	7.6	0	-	7.5	0	-	10
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	4	20	12	7	12	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	25	15	9	15	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	30	0	57	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1583	-	950	1061
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1583	-	941	1061
Mov Cap-2 Maneuver	-	-	-	-	941	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	973	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.6	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	978	-	-	1583	-
HCM Lane V/C Ratio	0.023	-	-	0.009	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	38	90	131	55	65	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	105	152	64	90	294

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	659	184	0	0	216	0
Stage 1	184	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	429	858	-	-	1354	-
Stage 1	848	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	395	858	-	-	1354	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	1.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	637	1354	-
HCM Lane V/C Ratio	-	-	0.234	0.067	-
HCM Control Delay (s)	-	-	12.4	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.2	-

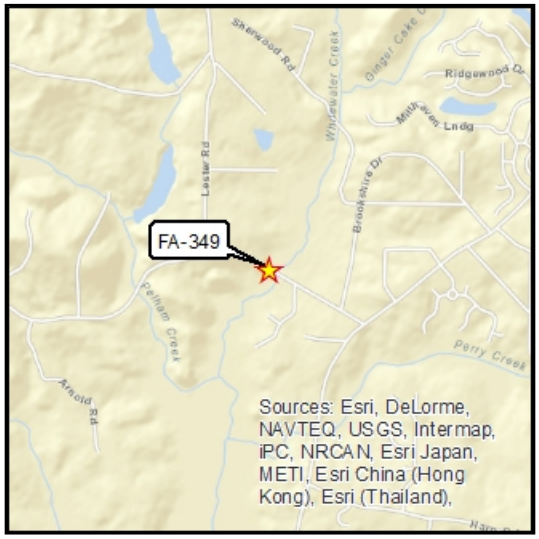
Appendix E

Programmed Transportation Infrastructure Project Sheets

FA-349

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	EBENEZER CHURCH ROAD BRIDGE REPLACEMENT AT WHITEWATER CREEK
GDOT Project No.	0008598
Federal ID No.	CSBRG-0008-00(598)
Status	Programmed
Service Type	Roadway / Bridge Upgrade
Sponsor	GDOT
Jurisdiction	Fayette County
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)
Existing Thru Lane	2
Planned Thru Lane	2



Network Year	TBD
Corridor Length	0.4 miles

Detailed Description and Justification

This project will upgrade the bridge at Ebenezer Church Road at Whitewater Creek.

Phase	Status & Funding Information	Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	STP - Urban (>200K) (ARC)	AUTH	2016	**$107,559**	~~$86,047~~	~~$21,512~~	~~$0,000~~	~~$0,000~~
ROW	Local Jurisdiction/Municipality Funds		2018	**$100,000**	$0,000	$0,000	$0,000	$100,000
CST	STP - Statewide Flexible (GDOT)		2019	**$900,000**	$720,000	$180,000	$0,000	$0,000
				$1,107,559	**$806,047**	**$201,512**	**$0,000**	**$100,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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FA-351

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	SR 85 CONNECTOR, BROOKS WOOLSEY ROAD AND EBENEZER ROAD - RESURFACING
GDOT Project No.	0012623
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Operations & Safety
Sponsor	Fayette County,Town of Brooks
Jurisdiction	Fayette County
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)
Existing Thru Lane	N/A
Planned Thru Lane	N/A

Network Year	TBD
Corridor Length	9.8 miles

Detailed Description and Justification

This project involves resurfacing three roadways important for mobility with Fayette County and connecting with adjacent jurisdictions. The facilities are: 1) SR 85 Connector, a rural major collector, from Woods Road to the Spalding County Line, a distance of 3.5 miles, 2) Brooks Woolsey Road, a rural major collector, from Antioch Road to Hwy 85 Connector, a distance of 4.1 miles, and 3) Ebenezer Road, an urban minor arterial, from Ebenezer Church Road to Robinson Road, a distance of 2.2 miles. The project is being funded under the Roadway Operations and Safety Program, a regional program defined in PLAN 2040 to make smaller-scale improvements along existing roadways which are the most critical for cross-jurisdictional travel. With the exception of certain system-wide programs with broad benefits across a defined geographic area, eligibility under this program is limited to facilities on the Regional Strategic Transportation System, with additional priority given to those also identified as a Regional Thoroughfare. SR 85 Connector and Brooks Woolsey Road are both on the RSTS. Ebenezer Road is one of two major roads on the east side of Peachtree City that cross Camp Creek (the other is Redwine Road, located at the south end of the City) and is a key north-south corridor for central Peachtree City. Within Peachtree City, Ebenezer Road serves as an extension of Crosstown Drive, the City's primary east-west corridor south of SR 54. The remaining portion of Ebenezer Road received full-depth reclamation a few years ago and this project would complete appropriate maintenance activities for the corridor. Roadway resurfacing is an integral part of Fayette County's pavement preservation program. These roads have all been systematically rated and are in-need of maintenance.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	STP - Urban (>200K) (ARC)	AUTH	2014	**$50,000**	~~$40,000~~	~~$0,000~~	~~$0,000~~	~~$10,000~~
CST	STP - Urban (>200K) (ARC)		2016	**$882,000**	$705,600	$0,000	$0,000	$176,400
				$932,000	**$745,600**	**$0,000**	**$0,000**	**$186,400**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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Contiguous Area -free and clear of zoning setbacks and buffers, watershed protection buffers and setbacks, floodplain, jurisdictional wetlands, and easements of any kind

1 ac to < 2 ac - .3 ac contiguous area

2 ac to < 3 ac - .9 ac contiguous area

3 ac and plus – 1.5 ac contiguous area

Minimum lot Width - 125 feet

100 foot undisturbed buffer along entire eastern and western boundary of the development – said buffer would take the place of the applicable setback on the individual lots

- **Sec. 110-??. - Keeping of hens in conjunction with residential use.**

The number of hens allowed per principal dwelling unit is limited to three (3) and one (1) additional hen for each additional acre to a maximum of five (5) hens shall be allowed in the following zoning districts: EST, C-S, R-85, R-80, R-78, R-75, R-72, R-70, R-55, R-50, R-45, R-40, R-20, DR-15, RMF, MHP, PUD-PRD, PUD-PRL, PUD-PEF, O-I, C-C, C-H, L-C, M-1, M-2, and BTP. No roosters are allowed. No on-site slaughter is allowed. Hen houses/coops are allowed in side and rear yards only and shall be set back from all property lines a minimum of 50 feet. Hens shall be contained on the lot. The containment area shall be in side and rear yards only and shall be limited to no more than 40 percent of the lot.

EXISTING REGULATUIONS

- **Sec. 110-86. - Raising and keeping of horses in residential districts.**

The raising and keeping of no more than one horse on a lot consisting of a minimum of three acres and one additional horse for each additional acre shall be allowed on any lot for which single-family residential is a permitted use (EST, R-85, R-80, R-78, R-75, R-72, R-70, R-55, R-50, R-45, R-40, R-20, PUD-PRD, and C-S). An accessory structure related to the shelter of horses shall be allowed, as long as, such accessory structure complies with this article. The boarding of horses and commercial riding lessons shall be prohibited.

- **Sec. 110-87. - Keeping of animals in residential and agricultural-residential districts.**

The number of animals allowed per principal dwelling unit is limited to three in the following zoning districts: EST, C-S, R-85, R-80, R-78, R-75, R-72, R-70, R-55, R-50, R-45, R-40, R-20, DR-15, RMF, MHP, PUD-PRD, PUD-PRL, PUD-PEF, O-I, C-C, C-H, L-C, M-1, M-2, and BTP. One litter of animals of not more than six months of age shall not count toward this limit. The number of animals allowed in the A-R zoning district kept for personal use or hobby breeding is unlimited. A dog house and dog pen/run as regulated in this article and similar open air animal enclosures are allowed in side and rear yards only and shall meet the setbacks of the applicable zoning district.

- **Sec. 110-88. - Beekeeping.**

Beekeeping shall be allowed on any lot for which single-family residence is a Permitted Use (C-S, EST, R-85, R-80, R-78, R-75, R-72, R-70, R-55, R-50, R-45, R-40, R-20, and PUD-PRD) under the following conditions:

(1) All beehives shall meet the setbacks for the applicable zoning district.
(2) The beekeeper shall have 30 days from the time of a complaint to bring the beehives into compliance.
(3) The on-premises sale of honey produced on the premises shall be allowed. Approval of a home occupation shall not be required.

ZONING ORDINANCE- SECTION 110-3 DEFINITIONS (the following to be added in its entirety to the list of definitions)

Deer processing facility means a facility where deer is processed into various cuts of venison.

ZONING ORDINANCE- Sec. 110-169. - Conditional use approval. (the following to be added in its entirety to the list of Conditional Uses in A-R)

#. *Deer processing facility*. The facility shall only be utilized for deer processing. The facility shall not be utilized for the processing of livestock or other wild game. Allowed in the A-R zoning district.

1. Minimum lot size: five acres;
2. These facilities shall not be permitted on a lot which accesses a road designated as an internal local road by the county thoroughfare plan and/or the County Engineer;
3. Sale of the processed venison to the general public shall be prohibited. This provision shall not prohibit the processing of meat in conjunction with the Department of Natural Resources' "Hunters for the Hungry" program;
4. All deer processing, including the storage of processing waste, shall take place within an enclosed structure. Said structure shall be at least 100 feet from all property lines and to the side or rear of the principal structure, as applicable. The deer processing facility shall comply with regulations for auxiliary structures (see Sec, 110-169, u.);
5. The deer processing facility shall have a current Wildlife Storage Permit from the Georgia Department of Natural Resources, Wildlife Resources Division;
6. The deer processing facility shall have a NPDES Permit, as applicable, from the Environmental Protection Division of the Georgia Department of Natural Resources and said permit shall be filed with the Department of Environmental Management;
7. All deer processing waste, not being routed to a rendering plant or other venders, shall be disposed of in compliance with the Guidance Document Disposal of Deer Processing Waste from the Georgia Department of Natural Resources, Environmental Protection Division. Deer processing waste shall be treated as "commercial solid waste" and shall only be disposed of in Municipal Solid Waste Landfills (MSWL). The burial of any deer processing waste is prohibited;
8. A vehicle drop-off area shall be provided with a circulation pattern permitting vehicles to re-enter the public street in a forward manner. The parking area shall comply with Article VIII. - Off-Street Parking and Service Requirements of the Development Regulations. Graveled parking areas shall be exempt from Nonresidential Development Landscape Requirements of the Fayette County Development Regulations, but shall provide the following:

    (i) Exterior and interior parking aisles shall be terminated at both ends by a landscape island.
    (ii) Landscape islands shall be provided for each 150 feet of continuous parking length.
    (iii) One (1) canopy tree, six (6) feet high at planting, is required per landscape island.

Paved parking areas shall meet the Nonresidential Development Landscape Requirements of the Fayette County Development Regulations.

9. A site plan meeting the full requirements of the Fayette County Development Regulations is not required. A sketch, drawn to scale, on a survey of the lot depicting all buildings utilized for the processing facility, parking area, drop-off area/circulation pattern and any waste containment facilities/structures shall be required. The survey shall also depict FEMA and MNGWPD floodplain and elevations, and watershed protection buffers and setbacks, as applicable. In the event that 5,000 or more square feet of impervious surface is added in conjunction with a deer processing facility, a site plan compliant with stormwater requirements of the Fayette County Development Regulations shall be required. The site will be exempt from the Nonresidential Development Landscape Requirements and Tree Retention, Protection, and Replacement of the Fayette County Development Regulations. A site located on a State Route shall comply with the applicable Transportation corridor overlay zone (Sec. 110-173) with the exception of the Architectural standards.

ZONING ORDINANCE- Sec. 110-169. - Conditional use approval. (the following to be amended as follows)

f. *A-R wedding/event facility*. The facility shall be utilized for private and public weddings and events by a third party who provides some form of consideration to the owner or his/her agent. The facility shall not be utilized for concerts, sporting events, or vehicle racing. A horse show, rodeo, carnival, community fair, and/or religious tent meeting shall also be allowed as regulated in this article and this section and the most restrictive conditions shall apply. Allowed in the A-R zoning district.

1. Minimum lot size: fifteen acres.
2. These facilities shall not be permitted on a lot which accesses a road designated as an internal local road by the county thoroughfare plan and/or the county engineer.
3. Facilities which access an unpaved county-maintained road are limited to 12 weddings/events per calendar year. A wedding/event permit from the planning and zoning department is required prior to holding the wedding/event.
4. A minimum 100 foot setback shall separate all buildings and areas utilized for weddings and events from any abutting residential zoning district. Otherwise all buildings and areas utilized for weddings and events shall meet the minimum A-R setbacks.
5. Adequate off-street parking shall be required and a 50-foot setback shall separate parking areas from any abutting residential zoning district. A prepared surface is not required for the parking areas. However, any parking area with a prepared surface shall comply with Article VIII. - Off-Street Parking and Service Requirements of the Development Regulations and must be depicted on a sketch, drawn to scale on a survey

of the lot. Grassed and gravel parking areas shall be exempt from Nonresidential Development Landscape Requirements of the Fayette County Development Regulations. The following is required for gravel parking areas:

(i) Exterior and interior parking aisles shall be terminated at both ends by a landscape island.

(ii) Landscape islands shall be provided for each 150 feet of continuous parking length.

(iii) One (1) canopy tree, six (6) feet high at planting, is required per landscape island.

Paved parking areas shall meet the Nonresidential Development Landscape Requirements of the Fayette County Development Regulations.

6. Hours of operation for weddings and events shall be between the hours of 9:00 a.m. and 10:00 p.m. on weekdays and 9:00 a.m. and 11:00 p.m. on weekends. These hours of operation shall not limit the setup and cleanup time before and after the wedding or event.
7. All structures utilized for weddings and events shall meet all applicable building and fire codes.
8. Sanitation facilities shall be approved by the environmental health department.
9. Food service shall meet all state and local requirements.
10. Tourist accommodations shall not be allowed in conjunction with an A-R wedding and event facility.
11. Tents shall require ~~the~~ county fire marshal approval, as applicable ~~of the county fire marshal~~.
12. A site plan meeting the full requirements of the Fayette County Development Regulations is not required. A sketch, drawn to scale on a survey of the lot depicting all existing buildings and specific areas utilized for weddings and events shall be required. The survey shall also depict FEMA and MNGWPD floodplain and elevations, and watershed protection buffers and setbacks as applicable. In the event that 5,000 or more square feet of impervious surface is added in conjunction with a wedding and event facility, a site plan compliant with stormwater requirements of the Fayette County Development Regulations shall be required. The site will be exempt from the Nonresidential Development Landscape Requirements and Tree Retention, Protection, and Replacement of the Fayette County Development Regulations. A site located on a State Route shall comply with the applicable Transportation corridor overlay zone (Sec. 110-173) with the exception of the Architectural standards.

ZONING ORDINANCE- Sec. 110-91. - (the following to be amended as follows)

- **Sec. 110-91. -Recreational vehicles and boats.**

Camping trailers, ~~recreational vehicles~~, travel trailers, camper pick-up coaches, motorized homes, boat trailers and boats shall not be parked on any residential or A-R lot that has not been improved with a dwelling nor any nonresidential lot that has not been improved with a dwelling nor any nonresidential lot that has not been improved with a principal building except in conjunction with the construction of a principal building for which a building permit has been issued. Application for a permit for the parking of such recreational vehicles shall be made to the zoning administrator. Such a permit shall be issued for a period not to exceed six months and shall not be renewable when associated with the construction of a dwelling. This provision shall not be interpreted as precluding the parking of such recreational vehicles for a period not to exceed 14 days. One recreational vehicle, when utilized for temporary occupancy, shall be allowed to be parked in any zoning district on a lot which contains a single-family dwelling or in A-R or any residential zoning district. The duration shall not exceed 14 days and said duration shall be allowed two times per year. Recreational vehicles shall include camping trailers and travel trailers in addition to self-propelled vehicles which do not exceed 8½ feet in width, when in travel mode, and 45 feet in length, not including the towing vehicle.

DEVELOPMENT REGULATIONS - ARTICLE II. - NONRESIDENTIAL CONSTRUCTION PERMIT AND COMPLIANCE PROCEDURES

- **Sec. 104-27. - Use and structures.**

Property shall not be used and structures shall not be constructed or modified unless it is shown that a proposed use or storage is in compliance with all county regulations as verified by a certificate of zoning compliance.

(1)

Building permit. Before issuing any type of building permit for the site, the building official must receive a certificate of zoning compliance approved by the zoning administrator.

(2)

Site plan required. Prior to the issuance of the certificate of zoning compliance by the zoning administrator, a site plan must be approved for any new nonresidential structure (including additions), use, and/or a change or expansion of a use, except as otherwise exempted in the Zoning Ordinance. Exemption of the requirement for a site plan approval for a new nonessential storage structure or a minor addition to an existing structure shall be granted by the zoning administrator upon determination that it does not affect septic, stormwater, parking, circulation and/or lot coverage requirements. Exemption of the requirement for a site plan approval for a change or expansion of a use shall be granted by the zoning administrator upon determination of compliance with all of the following criteria:

a.

New structures, additions, and/or expansions are not proposed for the new use, except as otherwise provided herein.

b.

The proposed use is a permitted use in the zoning district (conditional uses not exempt, except as otherwise exempted in the Zoning Ordinance).

c.

The proposed use is a similar or less intensive use than the last authorized use of the property.

d.

Thresholds for water use, septic systems, etc., are similar or less intensive than the last authorized use of the property.

e.

The site complies with the minimum parking requirements for the proposed use and all other existing uses on site.

f.

The site is in compliance with all conditions of approval, and site standard in effect at the time the pervious use was authorized.

Exemption from the site plan approval process for a change of use does not also exempt the requirement for all other necessary permits and inspections.

(Code 1992, § 8-26; Ord. No. 99-08, 6-24-1999; Ord. No. 2001-06, § 1, 6-28-2001; Ord. No. 2012-01, § 1, 3-22-2012)

- **Sec. 104-28. - Site plans.**

(a)

Filing of site plan. The site plan shall be submitted in accordance with the schedule of established application deadlines and meeting dates, a copy of which is available in the planning and zoning department. The site plan shall be deemed filed when it has been submitted to the zoning administrator.

(b)

Site plan distribution. Fifteen copies of a 24 inches by 36 inches site plan shall be submitted to the planning and zoning department for distribution and review by the applicable departments.

(c)

Site plan contents. The site plan shall:

(1)

Be prepared by an engineer of architect registered in the state;

(2)

Include a recorded signed and sealed survey indicating metes and bounds; and

(3)

Contain all applicable information as required on the site plan review checklist, a copy of which is available at the planning and zoning department.

(d)

Department approval. Upon completion of site plan review by the required departments, each department will return its comments to the planning and zoning department, who will make the appropriate entries on the site plan review checklist and notify applicant of approval, administrative conditions of approval, or additional requirements.

(e)

Fee. A site plan review and compliance fee as specified in this Code will be collected and a receipt provided at the time of issuance of the certificate of zoning compliance by the zoning administrator and prior to the issuance of a building permit.

(f)

Other plans required. The following plans if applicable shall be submitted at the time of site plan submittal and shall be approved prior to site plan approval:

(1)

Floodplain management plan. Reference article IV of this chapter of the development regulations for applicability and plan requirements (two sets).

(2)

Landscape plan. Reference article V of this chapter for applicability and plan requirements (two sets).

(3)

Tree protection plan. Reference article VI of this chapter for applicability and plan requirements (two sets).

(4)

Soil erosion, sedimentation and pollution control plan. Reference article IX of this chapter for applicability and plan requirements (three sets).

(5)

Grading plan. Required only when a land disturbance permit is not applicable (two sets).

a.

Clearing, grubbing or grading shall not be undertaken until a land disturbance permit has been approved by the ~~stormwater~~ environmental management department. If a land disturbance permit is not required, a grading plan shall be approved prior to any clearing, grubbing, or grading.

b.

No clearing, grubbing or grading involving the use of explosive may be undertaken until a permit has been issued by the fire marshal.

c.

No installation or removal of underground tanks for class I, II, or III flammable liquids shall be undertaken until appropriate permits and inspections have been conducted by the fire marshal.

(6)

Water plan. If required by the water system (two sets).

(g)

Verification of lot. In addition to an approved site plan, an applicant must provide verification that a plat of subdivision has been approved and recorded if required by article XV of this chapter.

(h)

Approval by zoning administrator. Upon approval of the site plan by all the applicable departments, the zoning administrator may approve the certificate of zoning compliance.

(i)

Certification of building official and fire marshal. The applicant will be notified by the zoning administrator's issuance of the certificate of zoning compliance that the site plan has been approved. A copy of the certificate of zoning compliance will be presented to the building official and fire marshal.

(j)

Building construction plans. Two sets of building construction plans including one set in electronic media format known as a PDF (portable document file) format on a CD/RW shall be submitted to the fire marshal for review and approval by both the fire marshal and building official. Construction plans shall not be submitted to the fire marshal prior to the site plan approval process. Building construction plan documents should include:

(1)

One PDF file on CD/RW with project manual PDF (complete set of construction drawings including site plans). Architect/engineer signed/sealed stamp required.

(2)

Two complete sets of architectural construction drawings with appropriate architect/engineer signed/sealed stamp. Architectural drawings—floor plans; elevations; mechanical plans; plumbing plans; fire protection plans—fire extinguishers; alarm; smoke/heat detection; sprinkler plans. Construction type by International Building Code and building square footage should be noted. In addition to the fire marshal's requirements, the permits and inspection department requirements shall include, but not be limited to the following:

a.

COM check; use and occupancy classification; occupant load; electrical panels and panel schedules; ARC fault current calculations and interrupt ratings for equipment; electrical load calculations; structural load packages; engineered trust/joist packages; framing details; statement of special inspections; footing/foundation specifications; gas line isometric details; ventilation, outside air, and makeup air schedules; specific hazardous area details; energy code details/specifications.

b.

Check with the permits and inspections department for specific details/requirements for the project.

c.

If applicable, two sets of project manuals with specifications.

(k)

Site plan changes. Any deviations from an approved site plan must be shown on a revised site plan and approved by the applicable departments. Changes shall be authorized in writing on the revised site plan by the applicable departments. A copy of the revised site plan will then be given to the building official for inclusion in the project file.

(l)

Fire marshal approval. The fire marshal shall approve all construction plans and submit to the building official a written report of compliance with chapter 12, fire prevention. Prior to any building construction, the applicant must obtain a construction permit through the bureau of fire prevention. This permit will not be in lieu of required permits through the building official.

(m)

Certificate of occupancy. In no case shall a certificate of occupancy be issued by the building official unless an as-built condition is reflected on an approved site plan.

(n)

Expiration of certificate of zoning compliance. If no application is made to obtain a building permit from the building official within 12 months of the date of zoning compliance, then said compliance shall be deemed null and void.

(Code 1992, § 8-27; Ord. No. 1986-13, § 2-1, 7-24-1986; Ord. of 3-24-1988; Ord. No. 1997-08, 4-24-1997; Ord. No. 1998-08; Ord. No. 2001-06, 6-28-2001; Ord. No. 2012-01, § 1, 3-22-2012)

- **Sec. 104-29. - Compliance.**

(a)

~~*Batter board and footing inspection*~~ *Foundation survey.* A ~~batter board inspection~~ signed and sealed foundation survey by a registered land surveyor shall be required ~~in addition to~~ after the ~~footing inspection~~ foundation is poured. ~~required by the International Building Code~~. ~~A batter board inspection shall be required by the planning and zoning department and the stormwater environmental management management department who shall be notified by the building official whenever a batter board inspection is requested.~~ The planning and zoning department and the ~~stormwater environmental management~~ environmental management department shall ~~inspect~~ review ~~the project~~ each structure's foundation survey for compliance ~~and/or require a surveyor's certification~~. The planning and zoning department and ~~stormwater~~ environmental management department shall certify ~~in writing~~ to the ~~building official~~ permits and inspections department that the building location and ~~other and~~ other aspects of the site comply with the approved site plan. Approval of a foundation survey is required prior to ~~a footing inspection by~~ the ~~building official~~ framing of the structure.

(b)

Final and 80 percent inspections. The building official shall notify the planning and zoning department and the ~~stormwater~~ environmental management department, and the fire marshal whenever a final inspection is requested. The planning and zoning department, the ~~stormwater~~ environmental management department, and the fire marshal shall inspect the project and shall certify ~~in writing~~ to the building official that the site is in compliance, or that proper surety, as provided for in various county ordinances, has been posted. The building official shall not allow a structure to be occupied nor issue a certificate of occupancy prior to receiving certification of approval ~~in writing~~ from the above named county employees. The fire marshal shall be notified directly by the owner or contractor whenever an 80 percent inspection is due.

(c)

Fire marshal inspections. In addition to requesting an 80 percent inspection directly from the bureau of fire prevention, an applicant shall notify the bureau of fire prevention for other scheduled inspections. The fire marshal shall report in writing to the building official any deficiencies noted during the inspections. Certificates of fire safety compliance issued by the fire marshal shall not grant authority to occupy a building until the appropriate certificates have been issued by the building official.

(Code 1992, § 8-27; Ord. No. 2012-01, § 1, 3-22-2012)

- **ARTICLE III. - STREET DESIGN STANDARDS AND SPECIFICATIONS**

- **Sec. 104-55. - Driveway and encroachment control.**

(a)

The latest edition of the GDOT Regulations for Driveway and Encroachment Control is incorporated into this section by reference. The rules and requirements contained within the GDOT document shall apply to county roads and streets unless a regulation is in conflict or superseded by other text in this article. On county roads and streets, the county engineering department shall act as the implementing body in lieu of the state department of transportation.

(b)

In situations where the following provisions: Residential access, nonresidential access, access for new road construction and auxiliary turn lanes, cannot be satisfied due to unusual site characteristics, technical, or legal reasons, the number and location of curb cuts or turn lanes shall be approved by the county engineer with input from the county's technical review committee.

(c)

Residential access.

(1)

Zoning ordinance reference. Every residential lot shall meet the minimum requirements of section 110-67, street frontage for access.

(2)

Driveway application permits. No new driveway to county right-of-way or prescriptive casement shall be made without an approved driveway application permit from the engineering department. Residential developments on internal local roads are exempt from the driveway application permit requirement.

(3)

Numbers of driveways. Residential lots shall have at least one (unless a shared driveway is authorized) and no more than two driveway cuts. Driveways to agricultural-residential (A-R) zoned properties for agricultural or other nonresidential purposes are exempt from the two-per-lot limit but shall meet all other residential access standards.

(4)

Location. Driveways shall be located at least two feet from any side or rear property line.

(5)

Maximum width. The maximum width of any driveway shall not exceed 24 feet at the right-of-way line. For roads with prescriptive casement, the width measurement shall be made 18 feet back from the edge of existing road.

(6)

Multiple road frontage. Residential lots with road frontage on multiple roads shall have the driveways located on the street with the lowest functional classification unless authorized otherwise by the county engineer. Exceptions may be provided if doing so improves safety, minimizes environmental impacts, or is appropriate based on site-specific physical characteristics of the property.

(7)

Sight distance. Minimum sight distances shall be satisfied for all new driveways. Properties on local roads, or any other county road with a posted speed limit of 25 miles per hour or less, shall have a minimum sight distance of 200 feet in either direction. Sight distance requirements and measurements for all other roads shall be per GDOT's Regulations for Driveway and Encroachment Control. ~~The county shall be responsible for removing vegetation within the county right-of-way if the vegetation is restricting sight distance below the required amount. The owner shall be responsible for clearing vegetation or other obstructions, as needed, on private properties.~~

(8)

Shared driveways. A maximum of two residential lots may share a single driveway if the following conditions are satisfied:

a.

The shared driveway is justified by either insufficient sight distance at one of the lots or otherwise authorized by the county engineer because doing so improves safety, minimizes environmental impacts, or is appropriate based on site-specific physical characteristics of the property;

b.

The width of the shared driveway shall be a minimum of 12 feet and constructed of an all-weather surface approved by the engineering department;

c.

The driveway shall have a minimum clear zone of 20 feet that extends, continuous, from the right-of-way to both homes served by the driveway. The purpose of the clear zone is to ensure unobstructed emergency access to the homes;

d.

A permanent cross-access easement shall be recorded and the easement reflected on the plat and deed of both properties; and

e.

The street address of each lot shall be clearly marked at the road and at all forks in the shared driveway.

(9)

Circular driveways. Each lot may have one circular (e.g., a horseshoe drive) if the sight distance requirements can be satisfied for both entrances. Circular driveways may also connect multiple frontages if both streets have the same functional classification. Circular driveways shall count as one driveway cut with respect to limits on the number of driveways per lot.

(10)

Mailing address. Mailing addresses arc issued by the county's building permits and inspections department.

(d)

Nonresidential access.

(1)

Zoning ordinance reference. Every nonresidential lot shall meet the minimum requirements of section 110-67, street frontage for access.

(2)

Driveway application permits. No new driveway to county right-of-way or prescriptive casement shall be made without an approved site plan and/or certificate of zoning compliance from the planning and zoning department. This requirement may be waived by the engineering department if the reason for the new driveway is a result of a county initiated project.

(3)

Numbers of driveways. The number of driveways for nonresidential lots shall be determined by the available road frontage and the minimum spacing criteria established in the GDOT's Regulations for Driveway and Encroachment Control.

(4)

Multiple road frontage. Nonresidential lots with road frontage on multiple roads shall have the driveway located in a manner consistent with GDOT's Regulations for Driveway and Encroachment Control.

(5)

Sight distance. Minimum sight distances shall be satisfied for all new driveways. Properties on local roads, or any other county road with a posted speed limit of 25 miles per hour or less, shall

have a minimum sight distance of 200 feet in either direction. Sight distance requirements and measurements for all other roads shall be per GDOT's Regulations for Driveway and Encroachment Control. ~~The county shall be responsible for removing vegetation within the county right-of-way if the vegetation is restricting sight distance below the required amount. The owner shall be responsible for clearing vegetation or other obstructions, as needed, on private properties.~~

(6)

Design criteria. All new or modified nonresidential driveways shall meet all applicable standards as established in the GDOT's Regulations for Driveway and Encroachment Control. Developments with site plans that requires changes to the parking area or internal drives shall improve existing driveways to meet current standards, including addition of left or right turn lanes, as applicable.

(7)

Driveway offset from property line. All driveways for nonresidential lots shall be no closer than 20 feet to any property line.

(8)

Shared driveways. Shared driveways for nonresidential lots are encouraged, although the following criteria shall be satisfied.

a.

The width of the shared driveway shall be a minimum of 24 feet (if two-way) and paved with asphalt or concrete per the approved site plan;

b.

A permanent cross-access casement shall he recorded and the easement reflected on the plat and deed of both properties;

c.

The street address of each lot shall be clearly marked at locations and with markers approved by the fire and emergency services department;

d.

Each lot shall have the minimum required road frontage; and

e.

Shared driveways are exempt from the 20-foot minimum offset from property lines as specified above in (7) ~~section 104-213~~.

(8)

Interparcel access. Interparcel access shall be provided between adjacent nonresidential properties. If the neighboring property does not have an existing stub, parking lot or driveway feasible for tie-in, then a stub shall be constructed to the side or rear property line. Access easements shall be provided, as described in subsection (d)(7) of this section for shared driveways, to allow for through traffic. This requirement may be waived by the county engineer if site circumstances make interparcel access impractical, such as natural grades in excess of 15 percent, sensitive environmental areas, incompatible uses, excessive distances, etc.

(9)

Mailing address. Mailing addresses arc issued by the county's building permits and inspections department.

Sec. 104-63. – Road and intersection visibility.

In order to ensure adequate sight distance on roads and intersections no vegetation or obstruction shall block the view of oncoming traffic. Sight distance requirements and measurements shall be per GDOT's Regulations for Driveway and Encroachment Control. The county shall be responsible for removing vegetation or obstructions within the county right-of-way if sight distance is restricted below the required amount. On private properties, the property owner shall be responsible for removing vegetation or obstructions if sight distance is restricted below the required amount.

DEVELOPMENT REGULATIONS - ARTICLE V. - NONRESIDENTIAL DEVELOPMENT LANDSCAPE REQUIREMENTS

- **Sec. 104-111. - Purpose and intent.**

(a)

The purpose of this article is to establish minimum landscape requirements for ~~landscape area and buffers in the county's~~ nonresidential development ~~zoning districts~~. It is hereby determined that:

(1)

Landscaping preserves the aesthetic character of communities, improves the aesthetic quality of the built environment, and increases property values.

(2)

Trees and landscaping replace vegetative cover lost during land development. Vegetation slows soil erosion, helping to reduce nonpoint source pollution found in stormwater runoff.

(3)

Well-chosen landscaping can improve the compatibility between different types or intensities of land uses by providing a visual buffer.

(4)

Landscaping visually interrupts the barren expanse of large parking lots and provides shade that cools air and surface temperatures helping negate the "heat island" effect of pave parking lots.

(b)

This article seeks to meet that purpose through the following objectives:

(1)

Improve the appearance of the county's nonresidential properties;

(2)

Minimize noise, glare, and erosion;

(3)

Provide a visual separation between incompatible uses;

(4)

Establish measures for water conservation; and

(5)

Reduce the adverse environmental effects of impervious parking areas.

(Code 1992, § 8-156; Ord. No. 2008-08, § II, 9-25-2008)

- **Sec. 104-112. - Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Arterial road means a major arterial or minor arterial in article III of this chapter.

Caliper means a method of measuring the diameter of a tree trunk to determine size, grading, and/or classification of nursery stock. Caliper measurement of the trunk shall be taken six inches above the ground up to and including four-inch caliper size. If the caliper at six inches above the ground exceeds four inches, the caliper should be measured at 12 inches above the ground.

Canopy (overstory) tree means any tree that, under normal forest conditions, will compose the top layer or canopy of vegetation and generally will reach a mature height of greater than 40 feet.

Collector road is defined as collector road in article III of this chapter.

Deciduous means plants that annually lose their leaves.

Evergreen means plants that retain foliage throughout the year.

Exterior parking aisle means a parking aisle adjoining a property line, required landscape area, and/or zoning buffer along a property line.

Ground cover means a plant with a low-growing, spreading habit, grown specifically to cover the ground, generally not attaining a height of more than two feet.

Interior parking aisle means a parking aisle that does not adjoin a property line, required zoning buffer, or building wall.

Landscape island means a minimum ten by 20-foot island placed in parking lots to guide traffic, preserve vegetation, and increase aesthetic quality.

Landscape plan means a scaled plan that clearly delineates vehicular use areas and displays and describes all landscaping.

Local road means defined as county local or internal local in article III of this chapter.

Native plants means plants indigenous or naturalized to a given area.

Owner means the legal or beneficial owner of a site, including, but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm or corporation in control of the site.

Shrub means a plant with persistent woody stems and a relatively low growth habit, distinguished from a tree by producing several basal stems instead of a single trunk.

Side yard landscape area means the landscape area adjacent to a side lot line.

Street frontage landscape area means the landscape area adjacent to street frontage.

Tree means a self-supporting woody perennial plant that, at maturity, has one or more stems or trunks that attain a diameter of at least three inches; a more or less definitely formed crown of foliage; and a height of ten feet or more.

Zoning buffer is defined in chapter 110, zoning.

(Code 1992, § 8-157; Ord. No. 2008-08, § II, 9-25-2008)

- **Sec. 104-113. - General provisions.**

(a)

Applicability. This article shall be applicable to all nonresidential zoning districts; all nonresidential uses allowed within residential zoning districts; and all existing nonpaved areas that are to be developed into paved parking areas, except as otherwise exempted in the Zoning Ordinance.

(b)

Exemptions. Existing parking areas where additional parking spaces are not required.

(c)

Administration of article. The county ~~stormwater~~ environmental management department shall administer this article.

(d)

Compatibility with other regulations. This article is not intended to modify or repeal any other ordinance, rule, regulation, statute, easement, covenant, deed restriction or other provision of law. The requirements of this article are in addition to the requirements of any other ordinance, rule, regulation or other provision of law, and where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or impose higher protective standards for human health or the environmental shall control.

(e)

Technical standards. Standards for plant selection and installation listed as follows are incorporated by reference:

(1)

"American Standard for Nursery Stock" (ANSI Z60.1-2004);

(2)

"Manual for Woody Landscape Plants" (Michael Dirr, 2009, Stipes);

(3)

"Principles and Practices of Planting Trees and Shrubs" (Watson and Himelick, 1997, ISA).

(Code 1992, § 8-158; Ord. No. 2008-08, § II, 9-25-2008)

- **Sec. 104-114. - Landscape requirements and submittals.**

(a)

Submittals. Unless specifically exempted by this article, any owner or developer proposing any land development activity, shall submit a landscape plan with the grading plan to the ~~stormwater~~ environmental management department. The ~~stormwater~~ environmental management department shall have a maximum of 14 calendar days from the submittal date, or each resubmittal date, for plan review. If the plan is not approved a deficiency checklist will be submitted back to the applicant.

(1)

Landscape plans shall be prepared by a professional landscape architect, or other licensed professional of similar design discipline.

(2)

Any deviations from the approved landscape plan must be approved by the county ~~stormwater~~ environmental management department prior to installation.

(3)

A final inspection and approval by the county ~~stormwater~~ environmental management department is required prior to the issuance of a certificate of occupancy.

(4)

Trees shall have minimum caliper requirements of 2½ inches measures at six inches above ground at time of planting.

(5)

Plants with vigorous root systems shall not be planted within the dripline area of said plant next to any nitrification field, sanitary sewer, or public water easement including but not limited to the eastern cottonwood, willow, and Lombardy poplar.

(6)

Allow at least 200 square feet of contiguous soil space per overstory tree. No parking space shall be more than 40 feet from a tree.

(7)

Ground covers, flowers, stones, and mulch shall be utilized as needed to meet vegetative ground cover requirements.

(b)

Landscape plan requirements. The landscape plan shall include:

(1)

Project name, design professional's name, and contact information;

(2)

Property boundary lines, all zoning buffer and landscape areas, and entire septic systems;

(3)

Locations of existing plant materials to be retained and/or new plant materials to be installed, with all details drawn at a scale of one inch to 100 feet or greater;

(4)

Plant material list, that shall include: Common and/or botanical names of all proposed plants;

(5)

Plant quantities;

(6)

Spacing;

(7)

Remarks, as necessary, for proper plant selection at installation; and

(8)

Caliper, height, and condition of plants.

(Code 1992, § 8-159; Ord. No. 2008-08, § II, 9-25-2008)

- **Sec. 104-115. - Landscape and buffer categories.**

(a)

Street frontage landscape areas. Landscape areas fronting on county maintained roads shall be measured from the right-of-way, or from where county maintenances stops on prescriptive easements. Trees/shrubs may be planted in groups provided that the required number of trees/shrubs is distributed along the entire length of the area to be landscaped.

(b)

Parking lot landscape areas. Landscape areas shall be provided for every other interior parking aisle. Exterior and interior parking aisles shall be terminated at both ends by a landscape island. Landscape islands shall be provided for each 150 feet of continuous parking length. All trees planted in parking lot landscape areas shall be canopy trees.

(c)

Side yard landscape areas. A landscape area shall be established along the side property lines of all lots. A side-yard landscape area may not be substituted when a zoning buffer landscape area is required.

(d)

Zoning buffer areas. Zoning buffer areas shall be established and maintained subject to the requirements listed as follows:

(1)

Zoning buffer areas shall consist of evergreen plant material planted in staggered double rows that will provide a screen for the purpose of visual privacy. If existing vegetation is requested to count

toward the zoning buffer area landscape requirements, such information shall be indicated on the landscape plan as required by the ~~stormwater~~ environmental management department.

(2)

Listed below are suggested evergreen plant combinations characteristic of buffer area plantings. Additional plant choices can be found at the county website under ~~stormwater~~ environmental management.

a.

Trees, shrubs, groundcovers;

b.

Virginia pine, abelia, liriope;

c.

Red cedar, Burfordi holly, euonymus;

d.

Nellie R. Stevens holly, cleyera, wintercreeper;

e.

Cherry laurel, Asiatic jasmine;

f.

Cryptomeria, hetzi juniper, evergreen ferns;

g.

Lusterleaf holly, leucothoe, creeping raspberry;

h.

Loblolly pine, loropetalum, vinca, evergreen dogwood, pfitzer juniper, mondo grass;

i.

Laurel oak, pragense viburnum, asiatic jasmine,

j.

Chinese evergreen, osmanthus;

k.

Oak, wax myrtle;

l.

Leyland cypress, yaupon holly;

m.

Green giant;

n.

Arborbvitae;

o.

Southern magnolia; and

p.

Eastern red cedar.

DEVELOPMENT REGULATIONS - ARTICLE VI. - TREE RETENTION, PROTECTION AND REPLACEMENT

- **Sec. 104-150. - Introduction.**

It is hereby determined that:

(1)

Trees are a valuable asset to the rural/urban environment of the county and can generate such benefits as: the purification of air; moderation of the microclimate; reduction of noise and glare; conservation of energy in terms of heating and cooling; prevention of soil erosion; reduced stormwater management costs; minimization of flood potential; improved water quality; enhancement and stabilization of property values; increased aesthetics; and preservation of the rural character of the unincorporated county.

(2)

Therefore, the county adopts this article to provide requirements to protect the rural and wooded character of unincorporated the county through the preservation and replanting of trees when new development occurs.

(Code 1992, § 8-176; Ord. No. 2012-02, § 1, 3-22-2012; Ord. No. 2012-12, § 1, 12-13-2012)

- **Sec. 104-151. - Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Certified arborist means an arborist certified by the international society of arboriculture (ISA).

Clearing means an activity that removes or disturbs the vegetative cover including trees.

Critical root zone (CRZ) means the minimum area beneath a tree which must be left undisturbed. The critical root zone shall be equal to 1½ feet of radial distance for every inch of the tree's DBH, with a minimum of eight feet.

Deciduous tree means any tree which drops its leaves at the end of the growing season or a tree that annually loses leaves.

Diameter-at-breast-height (DBH) means standard measure of existing tree size and is the trunk diameter measured in inches at height of 4½ feet above the ground. If a tree splits into multiple trunks below 4½ feet, then the trunk is measured at its most narrow point beneath the split. A tree that splits into multiple trunk above 4½ feet is measured as a single tree at 4½ feet.

Dripline means a line on the ground established by a vertical plane extending from a tree's outermost branch tips down to the ground; i.e., the line enclosing the area directly beneath the tree's crown from which rainfall would drip.

Erosion, sedimentation and pollution control plan means a plan required by the Erosion, Sedimentation and Pollution Control Act, O.C.G.A. § 12-7-1 et seq., that includes, at a minimum, protections at least as stringent as this article.

Evergreen tree means tree that retains its green foliage throughout the year.

Existing density unit (EDU) means a tree density unit assigned for the preservation of existing trees that will remain on site and protected during construction and where EDU is equivalent to inch of DBH when the DBH is a minimum size of four inches.

Land disturbance permit means authorization to conduct a land disturbing activity under the provisions of article IX of this chapter, soil erosion, sedimentation and pollution control.

Land disturbing activity means any land change which may result in soil erosion from water or wind and the movement of sediment into state water or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting and filling of land, other than federal lands.

Landscape areas means an area set aside for the installation and maintenance of ornamental planting materials.

Landscaping means any additions to the natural features of a plot of ground to restore construction disturbance and to make an area more attractive.

Overstory (canopy) tree means any tree that, under normal forest conditions, will compose the top layer or canopy of vegetation and generally will reach a mature height of greater than 40 feet. Examples include: oak, maple, elm, bald cypress, cryptomeria.

Replacement density unit (RDU) means a tree density unit assigned to a new tree planted to achieve the site density unit (SDU) and is equivalent to the number of inches of trunk diameter measures at six inches above the ground.

Shrub means a plant with persistent woody stems and a relatively low growth habit, distinguished from a tree by producing several basal stems instead of a single trunk.

Site means that portion of a tract of land that will be dedicated to a proposed development, including the land containing trees that will be counted toward satisfying the requirements of these provisions.

Site density unit (SDU) means the minimum number of tree density units which must be achieved on a nonresidential site after development and is equal to existing density units (EDU) plus replacement density units (RDU).

Specimen tree or *stand* means any tree or grouping of trees that is determined to be of high value and qualifies for special consideration for preservation because of its species, size, or historical significance.

Tree means a self-supporting woody perennial plant that, at maturity, has one or more stems or trunks that attain a diameter of at least three inches; a more or less definitely formed crown of foliage; and a height of ten feet or more.

Tree density units (TDU) means a unit of measurement for tree density based on the diameter of the tree.

Tree protection area means a barrier constructed around trees at construction sites sufficient to prevent damage or injury to tree trunks, limbs, and roots. The tree protection area shall be either the dripline of the tree or the critical root zone of a tree or clusters of trees to be retained, whichever is greater.

Understory tree means a tree that, under normal forest conditions, grows to maturity beneath overstory trees and will generally reach a mature height of at least ten feet, but less than 40 feet. Examples include dogwood, red bud, fringe tree, lusterleaf holly, and red cedar.

Utility means public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, stormwater systems, railroads, or other utilities identified by a local government.

Variance means a grant of relief from the CRZ requirements of this article that permits construction in a manner otherwise prohibited by this article.

(Code 1992, § 8-177; Code 1992, § 8-177; Ord. No. 2000-02, 1-27-2000; Ord. No. 2012-02, § 1, 3-22-2012; Ord. No. 2012-12, § 1, 12-13-2012)

- **Sec. 104-152. - General provisions.**

(a)

Purpose and intent. The purpose of this article is to establish minimum requirements for tree retention, protection and replacement in the county and to protect the rural and wooded character of the county through the preservation and replanting of trees when new development occurs. It is the intent of this article that all site planning and design for development of land be undertaken with a survey of trees on the property and that the grading, final placement of buildings, structures, and roads, utilities, and other features minimizes the removal of existing trees, and insures aesthetic replacement and distribution.

(b)

Applicability. This article shall apply to any activity that requires a preliminary plat, erosion, sedimentation, and pollution control plan or site plan as defined in article II of this chapter (except as otherwise exempted in the Zoning Ordinance). Residential subdivisions without common infrastructure are still required to submit a tree protection plan but are not required to submit tree density units.

(c)

Exemptions.

(1)

Trees determined to be dead, diseased, or infested as determined by the state forestry commission or a certified arborist and approved by the ~~stormwater~~ environmental management department.

(2)

Orchards and tree nurseries in active commercial operation.

(3)

Agricultural operation as defined in article IX of this chapter.

(4)

Nonresidential subdivisions development projects without common infrastructure.

(5)

Public roads as exempted in section 104-266.

(6)

Public utilities, as exempted in section 104-266(10) and (11), including telecommunication towers.

(7)

Commercial forestry operations, including timber harvesting.

(8)

Residential and nonresidential subdivision development projects are exempt from tree density requirements, but are required to submit a TPP.

(d)

Designation of article administrator. The county ~~stormwater~~ environmental management department shall administer this article.

(e)

Compatibility with other regulations. This article is not intended to modify or repeal any other ordinance, rule, regulation, statute, easement, covenant, deed restriction or other provision of law. The requirements of this article are in addition to the requirements of any other ordinance, rule, regulation or other provision of law, and where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or impose higher protective standards for human health or the environmental shall control.

(f)

Technical standards. Standards for plant selection and installation listed below are incorporated by reference:

(1)

"American Standard for Nursery Stock" (ANSI Z60.1-2004).

(2)

"Manual for Woody Landscape Plants" (Michael Dirr, 2009, Stipes)."

(3)

"Principles and Practices of Planting Trees and Shrubs" (Watson and Himelick, 1997, ISA).

(4)

"American National Standards for Tree Care Operations" (ANSI A300).

(5)

University of Georgia Cooperative Extension Service Bulletin No. 625 Landscape Plants for Georgia.

(Code 1992, § 8-178; Ord. No. 2012-02, § 1, 3-22-2012; Ord. No. 2012-12, § 1, 12-13-2012)

- **Sec. 104-153. - Tree retention, protection and replacement requirements.**

For all sites with three acres or less, all trees used in the SDU calculation shall be individually inventoried. For all sites over three acres industry standard sampling methods may be used to prepare a tree survey when trees are of such density to make individual tree identification impractical. In such cases the tree surveyor shall show tree stands and provide estimates of size and species on the tree protection plan.

(1)

Site density requirements. The required tree density for each nonresidential site is referred to as the site density unit (SDU). Each property subject to this article shall have a minimum required SDU based on total number of disturbed acres on the project site.

a.

The total SDU required equals existing density units (EDU) plus replacement density units (RDU).

b.

Property subject to this article that is greater than or equal to three acres shall have or exceed an average SDU of 100 TDUs per acre.

c.

Property subject to this article that is less than three acres shall have or exceed an average SDU of 50 TDUs per acre.

d.

Credit will be given to trees retained on a property having a DBH of four inches or more.

e.

At least 50 percent of the EDUs per acre must be located outside of any zoning or watershed protection buffers as referenced in articles V and VII of this chapter.

f.

Palm trees are not acceptable for SDU credit.

(2)

Specimen trees.

a.

Criteria for determination of specimen trees or stands are as follows:

1.

Any deciduous canopy tree whose DBH equals or exceeds 24 inches.

2.

Any evergreen canopy tree whose DBH equals or exceeds 30 inches.

3.

Any understory tree whose DBH equals or exceeds ten inches.

4.

Any tree which has significant historical value and can be documented through historical records or otherwise.

b.

Removal. Any specimen tree removed without prior approval of the ~~stormwater~~ environmental management department will be replaced by trees equaling two times an inch-for inch replacement of the tree removed. Size alone will determine whether a tree was of specimen quality if the tree is removed without approval and there is no evidence of its condition. Such action may result in a stop work order issued by the ~~stormwater~~ environmental management department.

c.

Written justification must be given for any specimen tree designated for removal. The county ~~stormwater~~ environmental management department may require additional information including, but not limited to, a certified arborist's appraisal of the tree's viability and anticipated life span.

d.

Any specimen tree may be removed if it is shown that at least one of the following conditions is met:

1.

The location of the tree prevents the opening of reasonable and necessary vehicular traffic lanes.

2.

The location of the tree prevents the construction of utility lines or drainage facilities which may not feasibly be relocated.

3.

The location of the tree prevents reasonable access to the property, if no alternate exists.

4.

The tree is diseased, dead, or dying to the point that repair or restoration is not practical or the disease may be transmitted to other trees.

5.

There is no reasonable assurance that if the tree is saved with proper construction precautions, it will continue to live as an asset to the site.

e.

Preservation. All reasonable efforts should be made to preserve specimen trees and incorporate them into the design of the project. Specimen trees saved by a specifically designed feature of the building, hardscape, or utilities shall be given EDU credit of two inches per inch of DBH.

(3)

Replacement tree requirements. All trees selected for replacement density units must meet the following requirements:

a.

Trees must be free of disease, injury, or infestation, and must be ecologically compatible with the specifically intended growing area, and planted in accordance with standards established by the international society of arboriculture.

b.

At a minimum, four species mixture of different trees, with at least three being deciduous hardwoods should be utilized.

c.

No more than 30 percent of replacement trees may be of a single species.

d.

A 50 percent mix of overstory and understory trees shall be maintained.

e.

Trees shall have a minimum caliper requirement of 2½ inches in diameter as measured at six inches above the ground at time of planting.

f.

All trees planted to fulfill the replacement tree requirements shall be in place before a certificate of occupancy is granted. In the event that the requirements of this article cannot be met at the time a certificate of occupancy is otherwise granted, refer to "buffer and landscape areas," section 104-117 performance surety, in these development regulations.

g.

All trees planted under the requirements of this article which do not survive for 24 months after issuance of a certificate of occupancy will be replaced as a condition of occupancy. Trees shall be bonded via a maintenance agreement in the amount of 100 percent of their replacement cost. Bonds will be released after the 24-month period has passed, and the health of the trees have been certified and accepted by the county. Refer to section 104-118, pertaining to general maintenance.

h.

See sections 104-115(d)(2) and 104-116 for suggested tree species. For additional tree species, especially understory (small) trees, see University of Georgia Cooperative Extension Service Bulletin No. 625 Landscape Plants for Georgia.

(4)

Tree protection requirements.

a.

A tree protection area shall be maintained around all trees and stands of trees to be retained throughout the duration of construction by tree protection fencing.

b.

The tree protection area of stand-alone trees and stands of trees shall be marked with standard tree protection fencing (orange), chainlink fencing, stakes, and/or continuous engineering tape and "Tree Protection Area" signs. At least two "Tree Protection Area" signs shall be posted at each individual tree protection area.

c.

All tree protection fencing shall be inspected for proper installation by the ~~stormwater~~ environmental management department during the initial erosion and sediment control inspection.

d.

During subdivision street construction, land disturbance allowed by a development permit shall be limited to areas needed for street right-of-way, drainage easements, erosion and sediment control practices and utilities. All other areas shall remain undisturbed for tree protection purposes.

e.

If utilities must run through the tree protection area and the running of those utilities will encroach into the critical root zone CRZ of any trees to be saved, the utility must be tunneled at a depth of 24 inches. When feasible, utilities will run along streets, roadways, driveways, or sidewalks. Reasonable efforts shall be made to save as many trees as possible.

If it is determined that irreparable damage has occurred to a tree or trees within a designated tree protection area, as determined by the county ~~stormwater~~ environmental management department, the state forestry commission, or a certified arborist, it shall be the responsibility of the developer/builder to remove and replace the tree or trees and guarantee survival after the issuance of the certificate of occupancy as references in subsection (3)(g) of this section and article V of this chapter.

(5)

Tree protection plan.

a.

Procedures.

1.

The TPP shall be submitted with the preliminary plat, erosion, sedimentation and pollution control plan or the site plan, whichever is the first submittal required by the county planning and zoning department.

2. The tree protection plan shall be prepared by either a licensed landscape architect or forester, certified arborist, or other licensed professional of similar design discipline licensed in the state.

3. The ~~stormwater~~ environmental management department shall have a maximum of 14 calendar days from the submittal date, or each resubmittal date, for plan review. If the plan is not approved a deficiency checklist will be submitted back to the applicant.

b. *Submittal.* The tree protection plan shall be submitted on a scale of no less than one inch to 100 feet and shall include project name, design professional's name and contact information, north arrow, graphic scale, and date. The plan should clearly show and label the following:

1. Tree save areas noting the location, size, DBH, dripline, CRZ, and species name (common name) of each tree that will be retained to fulfill the SDU requirements. Five or more trees whose dripline and CRZ combine into one tree protection area may be outlined as a group with the exception of specimen trees.

2. Summary table listing the DBH and species name of each RDU and EDU tree used to obtain the required SDU under "Notes."

3. If a group of trees is outlined on the plan as a tree save area, include a summary table listing the size, DBH and species name of each tree within that group under "Notes."

4. Location of all new replacement trees including species name and DBH that fulfill RDU requirements.

5. Location of any specimen tree designated in a tree protection area including the DBH, CRZ and species name even if contained in a group. If construction is limited to streets, drainage easements and utilities the TPP only needs to show all specimen trees located within 100 feet of the centerline of any right-of-way, or drainage/utility easements.

6. Location of any specimen trees designated for removal during construction including the size, DBH and species name.

7. Location, depth and height of all existing and proposed utility lines.

8. Boundaries of property, buffer and landscaped areas, buildings and structures, vehicle use areas, and other impervious areas.

9. Calculations for meeting all required site density units under "notes." If a scientific method is used to determine the site density units, label all sample areas and provide estimates of trees by size and species as based on sampling method requirements.

10. Under "notes" state the following: "No land disturbance, construction processes, or storage of equipment or materials shall take place within a designated tree protection area in order to prevent direct physical root damage that occurs during site clearing and grading and can cause transport or feeder roots to be cut, torn, or removed; indirect root damage

caused from grade changes; and trunk and crown damage caused by direct contact with land clearing machinery or galling of adjacent trees."

(Code 1992, § 8-179; Ord. No. 2000-02, 1-27-2000; Ord. No. 2012-02, § 1, 3-22-2012; Ord. No. 2012-12, § 1, 12-13-2012)

- **Sec. 104-154. - Appeals and variances.**

(a)

The following variance and appeals procedures shall apply to an applicant who has been denied a permit for a development activity or to an owner or developer who has not applied for a permit because it is clear that the proposed development activity would be inconsistent with the provisions of this article:

(1)

Requests for variances shall only be given for a reduction in the critical root zone (CRZ).

(2)

Requests for a variance from the CRZ requirements of this article shall be submitted to the ~~stormwater~~ environmental management department. All such requests shall be heard and decided in accordance with procedures to be published in writing by the ~~stormwater~~ environmental management department.

(3)

Any person adversely affected by any decision of the ~~stormwater~~ environmental management department shall have the right to appeal such decision to the county zoning board of appeals as established by the county in accordance with article IX of chapter 110, zoning. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.

(4)

Any person aggrieved by the decision of the county zoning board of appeals may appeal such decision to the county state court, as provided in O.C.G.A. § 5-4-1.

(5)

In reviewing such requests, the ~~stormwater~~ environmental management department and the county zoning board of appeals shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this article.

(6)

Variances shall only be considered based on the follow criteria:

a.

Disturbance of the CRZ of less than 30 percent;

b.

A reduction in the CRZ based on industry standards less stringent than outlined in this article.

(7)

Conditions for variances:

a.

A variance shall be issued only when all of the following conditions are met:

1.

A finding of good and sufficient cause; and

2.

A determination that failure to grant the variance would result in exceptional hardship.

b.

Any person to whom a variance is granted shall be given written notice specifying the difference between the current CRZs requirements and the CRZs requested in the variance.

c.

The county ~~stormwater~~ environmental management department shall maintain the records of all appeal actions.

d.

Any person requesting a variance shall, from the time of the request until the time the request is acted upon, submit such information and documentation as the county ~~stormwater~~ environmental management department and the county zoning board of appeals shall deem necessary to the consideration of the request including, but not limited to, a certified arborist's appraisal of the tree's viability and anticipated life span.

e.

Upon consideration of the factors listed above and the purposes of this chapter, the county ~~stormwater~~ environmental management department and the county zoning board of appeals may attach such conditions to the granting of variances as they deem necessary or appropriate, consistent with the purposes of this chapter.

1.

Variances shall not be issued "after the fact."

2.

At a minimum, a variance request shall include the following information:

(i)

A site map that includes locations of all streams, wetlands, floodplain boundaries and other natural features, as determined by field survey;

(ii)

A description of the shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;

(iii)

A detailed site plan that shows the locations of all existing and proposed structures and other impervious cover, the limits of all existing and proposed land disturbance, both inside and outside CRZ. The exact area of the CRZ to be affected shall be accurately and clearly indicated;

(iv)

Documentation of unusual hardship should the CRZ be maintained;

(v)

At least one alternative plan, which does not include CRZ disturbance or reduction, or an explanation of why such a site plan is not possible;

(vi)

A calculation of the total area and length of the proposed intrusion;

(vii)

Proposed mitigation, for the intrusion. If mitigation is not proposed, the request must explain why.

f.

The following factors may be considered in determining whether to issue a variance:

1.

The shape, size, topography, slope, soils, vegetation and other physical characteristics of the property;

2.

The location and extent of the proposed CRZ intrusion;

3.

Whether alternative designs are possible which require less intrusion or no intrusion;

4.

The long-term impacts of the proposed variance; and

5.

Whether issuance of the variance is at least as protective of natural resources and the environment.

(b)

Any applicant who is aggrieved by any decision of the county ~~stormwater~~ environmental management department relating to the application of this article shall have the right to appeal as provided under article IX of chapter 110, zoning.

(Code 1992, § 8-180; Ord. No. 2012-02, § 1, 3-22-2012; Ord. No. 2012-12, § 1, 12-13-2012)

- **Sec. 104-155. - Violations, enforcement and penalties.**

(a)

Violation of application. Any action or inaction which violates the provisions of this article or the requirements of an approved ~~stormwater~~ environmental management application may be subject to the enforcement actions outlines in this section. Any such action or inaction, which is continuous with respect to time, is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described in subsection (c) of this section shall not prevent such equitable relief.

(b)

Notice of violation. If the ~~stormwater~~ environmental management department determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, an approved ~~stormwater~~ environmental management plan or the provisions of this article, it shall issue a written notice of violation to such applicant or other responsible person. Where a person is engaged in activity covered by this article without having first secured a permit, the notice of violation shall be served on the owner of the responsible person in charge of the activity being conducted on the site. The notice of violation shall contain:

(1)

The name and address of the owner or the applicant or the responsible person;

(2)

The address or description of the site upon which the violation is occurring;

(3)

A statement specifying the nature of the violation;

(4)

A description of the remedial measures necessary to bring the action or inaction into compliance with the permit, the ~~stormwater~~ environmental management action plan or this article and the date for the completion of such remedial action; and

(5)

A statement of the penalties that may be assessed against the person to whom the notice of violation is directed.

(c)

Penalties. In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed. Before taking any of the following actions or imposing any of the following penalties, the ~~stormwater~~ environmental management department shall first notify the applicant or other responsible person in writing of its intended action, and shall provide a reasonable opportunity, of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hours notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the ~~stormwater~~ environmental management department may take one or more of the following action or impose any one or more of the following penalties:

(1)

Stop work order. The ~~stormwater~~ environmental management department may issue a stop work order that shall be served on the applicant or other responsible person. The stop work order shall remain in effect until the applicant other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(2)

Withhold certificate of occupancy. The ~~stormwater~~ environmental management department may recommend that the county permits and inspection department refuse to issue a certificate of occupancy for the building other improvements constructed or being constructed on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

(3)

Suspension, revocation or modification of permit. The ~~stormwater~~ environmental management department may suspend, revoke or modify the permit authorizing the land development project. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violations or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the ~~stormwater~~ environmental management department may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(4)

Citations. For intentional and flagrant violations of this article, or in the event the applicant or other responsible person fails to take the remedial measures set forth in previously issued notice of violations or otherwise fails to cure the violations within ten days, the ~~stormwater~~ environmental management department may issue a citation to the applicant or other responsible person, requiring such person to appear in state court of the county to answer charges of such violation. Upon conviction, such person shall be punished by a fine not to exceed $1,000.00 or imprisonment for 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

(Code 1992, § 8-181; Ord. No. 2012-02, § 1, 3-22-2012; Ord. No. 2012-12, § 1, 12-13-2012)

DEVELOPMENT REGULATIONS - ARTICLE VIII. - OFF-STREET PARKING AND SERVICE REQUIREMENTS

- **Sec. 104-211. - Scope of provision.**

Except as provided in this article, no application for a building permit shall be approved unless there is included with the plan for such building, improvements, or use, a plot plan showing the required space reserved for off-street parking and service purposes. Occupancy shall not be allowed unless the required off-street parking and service facilities have been provided in accordance with those shown on the approved plan.

(Code 1992, § 8-215; Ord. No. 98-01, § 1, 1-14-1998)

- **~~Sec. 104-212. - Reduction of parking and maximum lot coverage.~~**

~~Off street parking spaces for all nonresidential uses shall not be reduced by more than five percent below the minimum required number for the use or facility to which they are assigned.~~ ~~In addition, lot coverage (impervious surfaces) for conditional uses located in residential or A-R zoning districts shall not exceed 50 percent of the total acreage of the lot.~~ DELETE OR CREATE VARIANCE PROCEDURE – PC OR ZBA

(Code 1992, § 8-216; Ord. No. 98-01, § 1, 1-14-1998; Ord. No. 2000-15, § 1, 10-26-2000; Ord. No. 2001-13, § 1, 10-25-2001)

- **Sec. 104-213. - Street access; curb cuts in other than residential districts.**

~~Curb cut for service drives, entrances, exits and other similar facilities on public streets in other than residential zoning districts shall not be located within 50 feet of any intersection or within 40 feet of another curb cut.~~ A curb cut shall be no greater than 50 feet in width and no closer than 20 feet to any property line. MOVE TO STREET DESIGN OR SITE PLAN? **OK. Need to move the blue to Article 3.**

(Code 1992, § 8-217; Ord. No. 98-01, § 1, 1-14-1998; Ord. No. 2001-11, § 1, 7-26-2001)

- **Sec. 104-214. - State highway department approval.**

~~All entrances or exits of any street or drive, public or private, from or to any state highway shall be approved by the state highway department prior to the construction of such street or drive, or the issuance of any development permit for any improvement to be served by such street or drive, but permit approval shall not be held longer than 30 days.~~

(Code 1992, § 8-218; Ord. No. 98-01, § 1, 1-14-1998)

- **Sec. 104-215. - Corner visibility clearance.**

~~In order to ensure adequate sight distance at intersections formed by two streets, a driveway and a street, or a street and a railroad track, no fence, structure, sign, planting or other obstruction shall be constructed and maintained adjacent to such an intersection in such a manner as to block the view of oncoming traffic from a driver stopped at or approaching that intersection. The standards for sight distance are set forth in section 104-54(b).~~

(Code 1992, § 8-219; Ord. No. 98-01, § 1, 1-14-1998)

- **Sec. 104-216. - Off-street automobile parking.**

Off-street automobile parking shall be provided in accordance with all applicable provisions of this article.

(Code 1992, § 8-220; Ord. No. 98-01, § 1, 1-14-1998)

- **Sec. 104-217. - Design standards.**

All parking facilities, including entrances, exits and maneuvering areas, and access drives shall comply with the following provisions, except as otherwise exempted in the Zoning Ordinance:

(1)

Have access to a public street. Only single-family residences shall be allowed backward egress from a driveway onto a local street. In all other cases, maneuvering and access aisle areas shall be sufficient to permit vehicles to enter and leave the vehicular use area in a forward motion.

(2)

Be graded and paved, and be curbed when needed for effective drainage control; however, due to their limited hours of operation, parking facilities for churches, charitable or nonprofit organizations and other uses as appropriate, need only be graded and have, at a minimum, an all-weather surface approved by the county engineer, whose approval shall be based on compliance with article IX of this chapter, soil erosion and sedimentation control. Use of pervious types of pavement for required parking spaces and overflow parking areas is encouraged. Pervious types of pavement include but are not limited to pervious concrete, gravel with geo-web reinforcement, brick pavers, etc. All pervious types of pavement are subject to compliance with established specifications for that type of material which will be reviewed and approved by the county engineer. All types of pavement, pervious or impervious, are required to be maintained to the original design by the property owners.

(3)

Have all spaces marked with painted lines, ~~curbstones~~ curb stops, or other similar designations.

(4)

Parking area. Parking stalls shall have a minimum width of ten feet and length of 20 feet. For any nonresidential use providing 50 or more spaces, a maximum of ten percent of the required parking spaces may be marked for compact cars, which may be a minimum of nine feet by 18 feet in size. There shall be provided adequate interior driveways to connect each parking space with a public right-of-way. Interior driveways shall be at least 24 feet wide where used with 90-degree angle parking, at least 18 feet wide where used with 60-degree angle parking, at least 12 feet wide where used with parallel parking, or where there is no parking, interior driveways shall be at least 12 feet wide for one-way traffic movement and at least 24 feet wide for two-way traffic movement.

(5)

Curb return radii shall not exceed 15 feet or be less than ten feet.

(6)

~~Be drained so as to prevent damage to abutting properties or public streets. Runoff from vehicular use areas shall be controlled and treated on site if possible. The drainage design shall include measures based on stormwater quality best management practices. Recommended methods for drainage and on-site treatment of parking lot stormwater runoff include the use of vegetated open channels, parking lot perimeter infiltration trenches or sand filter strips, bioretention areas, and dry swales. Parking lot drainage is required to be reviewed by the county engineer; and no permit shall be issued until the drainage design is approved by the county engineer.~~

(7)

~~Be separated from sidewalks and streets by a strip of land at least ten feet wide as measured from the right-of-way, reserved as open space and planted in grass.~~

(8)

~~If a parking area is established within a residential zoning district for a nonresidential use permitted in a residential zoning district, a continuous visual buffer at least four feet in height between the parking area and the abutting residential zoning district property shall be provided on a strip of land at least ten feet wide adjoining the lot uses for residential purposes.~~

(9)

Adequate lighting shall be provided if the facilities are to be used at night. Such lighting shall be arranged and installed so as not to reflect or cause glare on abutting properties.

(10)

~~No parking or loading areas shall be established within the required front yard of any RMF District, provided, however, that the governing authority may at the time of consideration of the application for rezoning include within the zoning or rezoning ordinance, provisions for parking and loading in the front yard in such districts, upon a finding of fact that such front yard parking or loading would not adversely affect the appearance and aesthetic conditions and values of the particular property~~

and upon a further finding of fact that such front yard parking is necessary. Said governing authority shall have the authority to determine the number of front yard parking or loading areas to be allowed in each particular case based upon the space available and safety and aesthetic conditions, and any other provisions of this article to the contrary notwithstanding.

(11)

No parking or loading area shall be established in the required front yard of any residential zoning district except for a single-family residential use; no more than 35 percent of the required front yard may be used for parking in such case.

The provisions of subsections (2), (3), (7), (9), and (10) of this section shall not apply to single-family residential uses where three or less spaces are required.

(Code 1992, § 8-221; Ord. No. 98-01, § 1, 1-14-1998; Ord. No. 2000-15, § 2, 10-26-2000)

- **Sec. 104-218. - Location.**

All parking facilities shall be located in accordance with the following provisions:

(1)

The required space shall be provided on the same plot with the use it serves, except as provided herein;

(2)

If vehicular parking or storage space required cannot be reasonably provided on the same lot on which the principal use is conducted, the zoning board of appeals may permit such space to be provided on other off-street property provided such space lies within 400 feet of the main entrance to such principal use. Such vehicular parking space shall be associated with the permitted use and shall not hereafter be reduced or encroached upon in any manner; and

(3)

The required parking space for any number of separate uses may be combined in one lot but the required space assigned to one may not be assigned to another use at the same time, except that one-half of the parking space required for churches, theaters, or assembly halls whose attendance will be at night or on Sunday may be assigned to a use which will be closed at nights or Sundays.

(Code 1992, § 8-222; Ord. No. 98-01, § 1, 1-14-1998)

- **Sec. 104-219. - Recreational vehicle parking.**

Camping trailers, recreational vehicles, travel trailers, camper pick-up coaches, motorized homes, boat trailers and boats shall not be parked on any residential or A-R lot that has not been improved with a dwelling nor any nonresidential lot that has been improved with a dwelling nor any nonresidential lot that has not been improved with a principal building except in conjunction with the construction of a principal building for which a building permit has been issued. Application for a permit for the parking of such recreational vehicles shall be made to the zoning administrator. Such a permit shall be issued for a period not to exceed six months and shall not be renewable when associated with the construction of a dwelling. This provision shall not be interpreted as precluding the parking of such recreational vehicles for a period not to exceed 14 days.

(Code 1992, § 8-224; Ord. No. 98-01, § 1, 1-14-1998)

- **Sec. 104-220. - Minimum number of loading spaces required.**

Industrial, wholesale and retail operations shall provide loading spaces as follows:

(1)

Spaces appropriate to functions. Off-street loading spaces shall be provided as appropriate to the functions and scope of operation of individual or groups of buildings and uses.

(2)

Design of loading spaces. Off-street loading spaces shall be designed and constructed so that all maneuvering to park ~~and~~ ~~unpark~~ vehicles for loading can take place entirely within the property lines of the premises. Loading spaces shall be provided so as not to interfere with the free and normal movement of vehicles and pedestrians on public rights-of-way.

(3)

Ingress and egress. Ingress and egress to off-street loading spaces shall conform to driveway entrance regulations of the county. Along state highways, ingress and egress may be limited in order to provide for safe access to the development and to provide for maintenance of adequate sight distances. Where frontage drives are required, these may be extended to the side property line in order to permit joint use by adjacent properties.

(Code 1992, § 8-226; Ord. No. 98-01, § 1, 1-14-1998)

- **Sec. 104-221. - Number of parking spaces.**

In order to assure a proper and uniform development of public parking areas throughout the area of jurisdiction of this article, to relieve traffic congestion on the streets, and to minimize any detrimental effects on adjacent properties, off-street parking spaces shall be provided and maintained as called for in the following schedule; the requirements shall be the same as a similar use as mentioned herein. Parking requirements for additions to existing uses shall be based upon the new addition even if the existing use is deficient.

(1)

Duplex or multi-family dwelling

Three spaces for each dwelling unit, plus any required spaces for recreation areas, sales office, etc. as required by the zoning ordinance.

(2)

Assembly, public (including auditorium and stage theater):

One space for every 200 square feet in the main assembly room.

(3)

Athletic field:

One space for every four bleacher seats or 30 spaces per field, whichever is greater.

(4)

Automobile sales and repairs:

Three spaces for every service area within the garage, or one space for every service employee, whichever is greater.

(5)

Bowling alley:

Four spaces per alley, plus requirements for any other use associated with the establishment such as a restaurant, etc.

(6)

Care home:

One space for every four beds, plus one space for every employee.

(7)

Car wash (principal use):

One space for each employee plus one space for every 250 square feet of gross floor area

(8)

Church, temple, or place of worship:

One space for every 150 square feet of occupiable floor area.

(9)

Club or lodge:

One space for every 200 square feet of assembly area.

(10)

Combined uses:

Parking spaces shall be the total of the spaces required for each separate use established by this schedule.

(11)

Dance school:

One space for every employee plus one space for every 150 square feet of gross floor area, plus safe and convenient loading and unloading of students.

(12)

Developed residential recreational/amenity areas:

One space for every 250 square feet of clubhouse, pool house, pavilion, and swimming pool water surface area; and

Two spaces for every other amenity provided (including but not limited to tennis, volleyball, basketball, and playgrounds).

(13)

Dry cleaning/laundry plant:

One space for every 10,000 square feet of gross floor area, plus one space for every employee.

(14)

Entertainment, indoor (except bowling alleys):

One space for every 250 square feet of floor area devoted to patron use.

(15)

Entertainment, outdoor:

~~10~~ Ten spaces for every acre.

(16)

Fraternity or sorority:

One parking space for every two residents and one space for every two employees.

(17)

Funeral parlor:

One space for every three seats in the chapel plus space for each funeral vehicle.

(18)

Furniture, appliance, or carpet sales:

One space for every 500 square feet of showroom, plus one space per 750 square feet of indoor storage space.

(19)

Gas station

No parking spaces are required for gas pump uses. All other uses on the site must meet the requirements for retail, service, and repair etc.

(20)

Gas and fuel, wholesale:

One space for each employee ~~every 250 square feet.~~

(21)

Golf course:

Two spaces for every hole and one space for every two employees, plus requirements for any other use associated with the golf course.

(22)

Greenhouse or nursery, retail:

One space for every 10,000 square feet plus one space for every employee.

(23)

Trade school, college, or university:

One space for every two students, one space for every 300 square feet of administrative and educational office space, plus safe and convenient loading of students, plus additional spaces for stadium, gymnasium, and auditorium uses.

(24)

Hospital:

One and one-half spaces for every two beds plus one space for every employee.

(25)

Hotel:

One space for every guest room plus one space for every two employees on the largest shift.

(26)

Industrial facility, manufacturing or processing establishment:

One space for every 1,000 square feet of gross floor area, plus one space for every employee.

(27)

Kennel, commercial:

One space for every 300 square feet of cage and retail area.

(28)

Kindergarten, nursery school, or day care center:

One space for every employee, plus a covered, safe, and convenient transient parking area for the loading/unloading of students.

(29)

Manufactured home park:

Two spaces for every manufactured home.

(30)

Medical or dental office:

One space for every employee, plus one space for every examining room.

(31)

Motel:

One space for every guest room.

(32)

Movie theater:

One space for every five seats.

(33)

Moving and storage:

One space for every 10,000 square feet of gross floor area, plus one space for every employee.

(34)

Museum, art gallery, library, or similar use:

One space for every 400 square feet of gross space to which the public has access.

(35)

Office, business or professional, bank, or similar use:

One space for every 300 square feet of gross floor area.

(36)

Personal service establishment:

One space for every 300 square feet of gross floor area, but not less than two spaces for every employee/operator.

(37)

Printing and copying services:

One space for every 250 square feet of gross floor area.

(38)

Repair services, limited (small items):

One space for every 250 square feet of gross floor area.

(39)

Restaurant or place dispensing food, drink or refreshments:

One space for every two seats provided for patron use.

(40)

Retail stores of all types not mentioned otherwise:

One space for every 300 square feet of gross floor area

(41)

School, elementary and middle:

One space for every employee, and one space for every classroom, plus safe and convenient area for loading and unloading of students.

(42)

School, high:

One space for every two students, plus one space every employee.

(43)

Self service storage facility:

One space for every 75 storage bays plus one space for every employee, plus two customer spaces.

(44)

Shopping center:

One space for every300 square feet of gross floor area.

(45)

Stable, commercial:

One space for every 300 square feet within stable, plus one space per three animal stalls.

(46)

Swimming pool, public:

One space for every 200 square feet of water surface area plus requirements for additional uses in association with establishments such as a restaurant, etc.

(47)

Upholstery shop:

One space for every 250 square feet of gross floor area.

(48)

Vehicle sales and rental:

One space for every 500 square feet of enclosed area, plus one space for every 5,000 square feet of outdoor sales, rental, and display area, plus one space for every service bay, plus one space for every employee.

(49)

Veterinarian office or clinic:

One space for every employee plus one space for every 500 square feet of gross floor area.

(50)

Warehouse and bulk storage facility:

One space for every 2,000 square feet of gross floor area, plus one space for every employee.

(51)

Wholesale, or open yard establishment:

One space for each employee, one space for every 2,000 square feet of gross floor area, and one space for every company vehicle to be stored on the site.

(52)

Woodworking or cabinetmaking:

One space for every 250 square feet of gross floor area.

(Ord. No. 2015-01, § 1, 1-22-2015)