



City of Cartersville

P.O Box 1390 – 10 Public Square – Cartersville, Georgia 30120

Telephone: 770-387-5616 – Fax 770-386-5841 – www.cityofcartersville.org

COUNCILPERSONS:

Matt Santini – Mayor
Dianne Tate – Mayor Pro Tem
Kari Hodge
Lindsey McDaniel, Jr.
Lori Pruitt
Jayce Stepp
Louis Tonsmeire, Sr.

AGENDA

Council Chamber, Third Floor of City Hall– 7:00
PM – 11/19/2015
Work Session – 6:00 P.M.

CITY MANAGER:

Sam Grove

CITY ATTORNEY:

David Archer

CITY CLERK:

Connie Keeling

I. Opening of Meeting

- Invocation
- Pledge of Allegiance
- Roll Call

II. Regular Agenda

A. Council Meeting Minutes

1. November 5, 2015 (Pages 1-15)

[Attachments](#)

B. Public Hearing - 1st Reading of Zoning/Annexation Requests

1. File Z15-04: Rezoning application by TPA Group (Jeff Watkins, representative) for property located at 118 Old Mill Road (approximately 63.5 acres) from R-20 to H-I(Pages 16-121)

[Attachments](#)

2. File Z15-07:Rezoning application by Thoro LLC (Jeff Watkins, representative) for property located at 49 North Avenue (approximately 1.03 acres) from L-I to G-C (Pages 122-132)

[Attachments](#)

C. Second Reading of Ordinances

1. Erosion and Sediment Control Ordinance Change (Pages 133-134)

[Attachments](#)

2. Amendment to Budget Ordinance for Fiscal Year 2014-15 (Pages 135-137)

[Attachments](#)

3. Amendment to Capacity Fee Ordinance (Pages 138-140)

[Attachments](#)

4. Revision to Gas Ordinances (Pages 141-142)

[Attachments](#)

D. Appointments

1. Police Chief (Page 143)

[Attachments](#)

E. Resolutions

1. Land Water Fund Conservation Grant Application (Pages 144-145)

[Attachments](#)

2. Electric Cities of Georgia Voting Delegate Resolution (Pages 146-147)

[Attachments](#)

F. Other

1. Georgia Utilities Protection Center Dues (Pages 148-149)

[Attachments](#)

2. November 3, 2015 Election Results (Pages 150-152)

[Attachments](#)

G. Engineering Services

1. Center Road 24-inch Sewer Replacement – Phase II (Page 153)

[Attachments](#)

H. Bid Award/Purchases

1. Distribution and Collection Restock #2 (Page 154)

[Attachments](#)

2. Smart Cover Sewer Monitoring System (Pages 155-172)

[Attachments](#)

3. 2016 Calendar (Page 173)

[Attachments](#)

4. Annual Cogsdale Software Maintenance (Pages 174-175)

[Attachments](#)

5. Renewal of United Healthcare Retiree Medicare Supplemental Insurance (Page 176)

[Attachments](#)

I. Monthly Financial Statement

1. September 2015 (Pages 177-181)

[Attachments](#)

PERSONS WITH DISABILITIES NEEDING ASSISTANCE TO PARTICIPATE IN ANY OF THESE PROCEEDINGS SHOULD CONTACT THE HUMAN RESOURCES OFFICE, ADA COORDINATOR, 48 HOURS IN ADVANCE OF THE MEETING AT 770-387-5616.



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
November 5, 2015

SubCategory:	Council Meeting Minutes
Department Name:	City Clerk
Department Summary Recommendation:	Attached are the minutes for your review and approval
City Manager's Remarks:	Minutes for Nov. 5th Council Meeting are recommended for your approval.
Financial/Budget Certification:	
Legal:	
Associated Information:	

City Council Meeting
 10 N. Public Square
 November 5, 2015
 6:00 P.M. – Work Session 7:00 P.M.

I. Opening Meeting

Invocation by Council Member Tate.

Pledge of Allegiance led by Council Member Stepp

The City Council met in Regular Session with Matt Santini, Mayor presiding and the following present: Kari Hodge, Council Member Ward One; Jayce Stepp, Council Member Ward Two; Louis Tonsmeire, Sr., Council Member Ward Three; Lindsey McDaniel Council Member Ward Four; Dianne Tate, Council Member Ward Five; Sam Grove, City Manager; Catheryn Hembree, Deputy City Clerk and Keith Lovell, Assistant City Attorney. Lori Pruitt, Council Member Ward Six; Connie Keeling, City Clerk; and David Archer, City Attorney were absent.

II. Regular Agenda

A. Council Meeting Minutes

1. October 15, 2015

A motion to approve the October 15, 2015 City Council Meeting Minutes as presented was made by Council Member Tate and seconded by Council Member McDaniel. Motion carried unanimously. Vote 5-0

B. Commendation/Recognition

1. Recognition of Martha Wellsandt

Rick Napps, Chairman of the Alcohol Control Board, recognized Martha Wellsandt for being a founding member of the Alcohol Control Board and served for 10 years until she resigned in 2014. The City would like to thank her for her dedicated service.

C. Proclamations

1. World Pancreatic Cancer Day

Diane Tate, Mayor Pro Tem, read a proclamation supporting the observance of November 13, 2015 as World Pancreatic Cancer Day in the City of Cartersville to help raise awareness in our community. Julie Parmenter said a few words and accepted the proclamation.

D. Public Hearing – 2nd Reading of Zoning/Annexation Requests

1. File #Z15-05: Rezoning application by Andy Womack for property located at 802 West Avenue (approximately .68 acres) from O-C (Office Commercial) to G-C (General Commercial).

Randy Mannino, Planning and Development Director stated that this Zoning and Annexation request had no conflicts with the other City Departments and all adjacent property owners have been notified and the required legal notices have been advertised. Mr. Mannino stated that this property includes a building constructed in approximately 1965. The current applicant seeks to rezone the property from O-C (Office Commercial) to G-C (General Commercial) to construct a new tunnel-style car wash. Mr. Mannino stated that there had been no corrections or deletions since the first reading, city staff had no objections and the Planning Commission recommended approval to allow the property to be zoned G-C and allow all O-C uses and a car wash only.

Mayor Santini opened up the floor for a public hearing. No one came forward. Mayor Santini closed the public hearing.

A motion to approve the rezoning of 802 West Avenue was made by Council Member Stepp and seconded by Council Member Hodge. Motion carried unanimously. Vote 5-0

Ordinance

of the

City of Cartersville, Georgia

Ordinance No. 34-15

Petition No. 15-06

NOW BE IT AND IT IS HEREBY ORDAINED by the Mayor and City Council of the City of Cartersville, Georgia, that all that certain tract of land owned by Boyd Morris. Property is located at 802 West Avenue. Said property contains .68 acres located in the 4th District, 3rd Section, Land Lot(s) 558 as shown on the attached plat Exhibit "A". Property is hereby rezoned from O-C to G-C with the following conditions; O-C district uses plus car wash. Zoning will be duly noted on the official zoning map of the City of Cartersville, Georgia.

BE IT AND IT IS HEREBY ORDAINED.

First Reading this the 15th day of October, 2015.

ADOPTED this the 5th day of November, 2015. Second Reading.

/s/ Matthew J. Santini

Matthew J. Santini

Mayor

ATTEST:

/s/ Catheryn Hembree

Catheryn Hembree

Deputy City Clerk

E. First Reading of Ordinances

1. Amendment to Budget Ordinance for Fiscal Year 2014-15

Tom Rhinehart, Finance Director, stated that after the completion of the FY 2014-15 close, the General Fund and the Special Revenue Fund budget need to be amended. The process of amending these budgets is done annually after the year end close and will bring the city General Fund and Special Revenue funds back into compliance with the Generally Accepted Accounting Principles standards. These adjustments reflect the necessary changes needed to bring the budgets back into balance where the revenues equal expenditures for the fiscal year. Mr. Rhinehart recommends approval. This being a first reading, a vote is not required.

Ordinance

of the

City of Cartersville, Georgia

Ordinance No.

NOW BE IT HEREBY ORDAINED by the Mayor and City Council that pursuant to the City of Cartersville Charter; the City of Cartersville Fiscal Year 2014 - 2015 budget.

2014 - 2015 Budget Summary

<u>General Fund</u>	<u>Revenues</u>	<u>Expenditures</u>
Revenues	\$39,589,590	
Expenditures:		
Legislative		\$18,998,790
Administration		\$ 932,505
Finance Dept.		\$ 1,130,100
Customer Service Dept.		\$ 647,630
Police		\$ 5,058,275
Fire		\$ 6,225,725
Municipal Court		\$ 218,735
Public Works		\$ 2,574,400
Recreation		\$ 2,864,830
Planning & Development		\$ 783,095

Downtown Development Authority **\$ 155,505**

Special Revenue Funds

SPLOST – 2003	\$ 360,490	\$ 360,490
SPLOST – 2014	\$ 3,038,250	\$ 3,038,250
DEA	\$ 1,150,460	\$ 1,150,460
State Forfeiture	\$ 3,000	\$ 3,000
Hotel/Motel Tax	\$ 552,340	\$ 552,340
Motor Vehicle Rental Tax	\$ 61,085	\$ 61,085
Grant Funds	\$ 0	\$ 0
Impact Fees	\$ 0	\$ 0
Business Improve Dist Tax	\$ 29,335	\$ 29,335
Development Fees	\$ 13,075	\$ 13,075
GO Park Bond Cons Series 2014	\$ 153,500	\$ 153,500
Supplemental Disaster Rec Grant	\$ 17,390	\$ 17,390
Cartersville Building Authority	\$ 1,226,890	\$ 1,226,890

Enterprise Funds

Fiber Optics	\$ 1,839,960	\$ 1,839,960
Electric	\$49,027,080	\$49,027,080
Gas	\$26,770,995	\$26,770,995
Solid Waste	\$ 2,448,375	\$ 2,448,375
Stormwater	\$ 1,645,065	\$ 1,645,065
Water & Sewer	\$15,373,335	\$11,010,755
Water Pollution Control Plant		\$ 2,159,160
Water Treatment Plant		\$ 2,203,420

Internal Service Fund

Garage	\$ 1,600,885	\$ 1,600,885
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BE IT AND IT IS HEREBY ORDAINED.

ADOPTED, this 5th day of June 2015. First Reading.

ADOPTED this day of June 2015. Second Reading.

/s/ Matthew J. Santini

Matthew J. Santini

Mayor

ATTEST:

/s/ Connie Keeling

Connie Keeling

City Clerk

2. Revision to Gas Ordinance

Gary Riggs, Gas Department Superintendent, stated that this revision to the Gas

Ordinance eliminates a conflict between ordinances. Tampering fees were stated in two separate sections. Mr. Riggs recommends approval. This being a first reading, a vote is not required

Ordinance
of the
City of Cartersville, Georgia
Ordinance No.

NOW BE IT AND IT IS HEREBY ORDAINED by the Mayor and City Council of the City of Cartersville, that the Code of Ordinances, City of Cartersville, Georgia **CHAPTER 24. ARTICLE IX. GAS SYSTEM. DIVISION 4. NATURAL GAS TERMS OF SERVICE.** Section 24-231 – Generally paragraph (j)(2) is hereby deleted in its entirety and replaced as follows:

1.

- 2) Tampering fees. Gas service cut off by the city for non-payment that the customer has turned back on illegally will be reinstated upon payment of the bill, late charge, reconnection fee and a tampering fee.**

Meters that had to be removed due to repeated tampering by the customer will be subject to a reinstallation charge.

Meters that are damaged or broken by customer tampering will be repaired or replaced at the customer's expense. Cost may include labor and equipment charges.

Tampering fee and Reinstallation fee shall be as indicated in Section 24-21.

2.

It is the intention of the city council and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances, City of Cartersville, Georgia, and the sections of this ordinance may be renumbered to accomplish such intention.

BE IT AND IT IS HEREBY ORDAINED.

First Reading this the 5th day of November 2015.
ADOPTED this the day of. Second Reading.

/s/ Matthew J. Santini
Matthew J. Santini
Mayor

ATTEST:

/s/ Connie Keeling
Connie Keeling
City Clerk

3. Erosion and Sediment Control Ordinance Change

Tommy Sanders, Public Works Director, stated that the Stormwater Management Plan approved by the Ga EPD states that the City is required to update our ordinance to ensure that construction waste language is included in our Erosion and Sediment Control Ordinance or Litter Ordinance by December 31, 2015. The requested ordinance change will add, "construction site operators shall control waste at the construction site, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste" to our existing ordinance. This change has been reviewed by the City Attorney and Mr. Sanders recommends approval. This being a first reading, a vote is not required.

Ordinance

of the

City of Cartersville, Georgia

Ordinance No.

Now be it and it is hereby **ORDAINED** by the Mayor and City Council of the City of Cartersville, that the **CITY OF CARTERSVILLE CODE OF ORDINANCES. CHAPTER 7.5. DEVELOPMENT REGULATIONS ARTICLE VII. SOIL EROSION AND SEDIMENT CONTROL CODE SECTION 7.5-184 (C)** is hereby amended by inserting the following numbered paragraph to Section 7.5-184(C):

1.

(17) Construction site operators shall control waste at the construction site, such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste.

2.

It is the intention of the city council and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances, City of Cartersville, Georgia, and that section 7.5-184(c) is amended by adding the above paragraph (17). The remaining provisions of said section shall remain as is.

BE IT AND IT IS HEREBY ORDAINED.

First Reading this the 5th day of November 2015.
ADOPTED this the day of. Second Reading.

/s/ Matthew J. Santini

Matthew J. Santini
Mayor

ATTEST:

/s/ Connie Keeling
Connie Keeling
City Clerk

4. Amendment to Capacity Fee Ordinance

Bob Jones, Water Superintendent, stated that during the review of Municipal Code updates an error was caught and needed to be corrected. During the adoption of the FY15-16 budget language was omitted and it must be approved again to return it to the ordinance for its originally intended purpose. The language is Sec. 24-64(d) "Other Provisions". Mr. Jones recommends approval of this item.

Mayor Santini opened the floor up for a public hearing. No one came forward. Mayor Santini closed the public hearing. This being a first reading, a vote is not required.

Ordinance

of the

City of Cartersville, Georgia

Ordinance No.

Now be it and it is hereby **ORDAINED** by the Mayor and City Council of the City of Cartersville, that the **CITY OF CARTERSVILLE CODE OF ORDINANCES. CHAPTER 24. Utilities. Article IV. Water Service 24-64. Water and Sewage Utility Rates (d) Other Provisions** is hereby amended by deleting Section 24-64 (d) Other Provisions only in its entirety and replacing it with the following:

1. OTHER PROVISIONS

1. Apartments and hotels per unit calculations.

All hotel and apartment units with refrigerator and stove are to be calculated as a single

(1) (¾" water meter equivalent) for capacity fees.

All hotel and apartment units without refrigerator and stove are to be calculated as one- half unit (¾" water meter equivalent) for capacity fees. The following, if part of an apartment or hotel and served by a single meter are to be considered a separate unit for capacity fees. The capacity fee will be calculated as a single (1)

unit based on meter size. If the following are served by a master meter, they are considered to be a separate unit to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent):

- (a) Restaurant;
- (b) Lounge;
- (c) Car wash;
- (d) Lobby;
- (e) Full kitchen (not part of restaurant).
- (f) Linen Laundry
- (g) Guest Laundry
- (h) Swimming Pool

2. Assisted Living Facility, Nursing Home and Hospital per unit calculations:

All resident/patient rooms with refrigerator and stove are to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent) for capacity fees.

All patient rooms without refrigerator and stove are to be calculated as one-half unit ($\frac{3}{4}$ " water meter equivalent) for capacity fees. The following, if part of a nursing home, assisted living facility or hospital and served by a single meter are to be considered a separate unit for capacity fees. The capacity fee will be calculated as a single (1) unit based on meter size. If the following are served by a master meter, they are considered to be a separate unit to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent):

- (a) Restaurant;
- (b) Lounge;
- (c) Car wash;
- (d) Lobby/Waiting Room;
- (e) Full kitchen (not part of restaurant).

BE IT AND IT IS HEREBY ORDAINED.

First Reading this the 5th day of November 2015.

ADOPTED this the day of. Second Reading.

/s/ Matthew J. Santini

Matthew J. Santini

Mayor

ATTEST:

/s/ Connie Keeling

Connie Keeling

City Clerk

F. Grant Application/Acceptance

1. GEFA Iib Technical Assistance Grant

Bob Jones, Water Superintendent, stated that in August of 2015 the Water Department applied for a GEFA Iib Technical Assistance Grant and were recently approved for the grant which requires no local match. The grant will fund the testing and calibration of both finished water meters at the water treatment plant. Based on recent water audit and data validity scores, this area was identified as “Critical” and thus qualified for the grant. The value of the work being done is approximately \$7,000.00. Mr. Jones recommends approval.

A motion to approve the acceptance of the grant was made by Council Member Stepp and seconded by Council Member Tonsmeire. Motion carried unanimously. Vote 5-0

G. Added Item

Mayor Santini asked for a motion to add an item to the agenda. Council Member Tate made a motion to add an item to the agenda. Council Member Tonsmeire seconded the motion and it passed unanimously. Vote 5-0

Bob Jones, Water Superintendent, stated that there is an emergency leak at the Water Treatment Plant. The pipe is about 18 feet underground and it needs to have 5- 48” joints, and 1- 58” joint repaired to stop the leak. Miller Pipeline is able to fix the leak for \$15,950.00 by crawling in the pipe and not digging it up. This method will save the City money. If approved Miller Pipeline can start repairs on Tuesday.

A motion to approve the repairs on the pipe was made by Council Member Hodge. The motion was seconded by Council Member Tonsmeire and it passed unanimously. Vote 5-0

H. Resolutions

1. Public Hearing for Capital Improvements Element Annual Update Regarding Impact Fees and Corresponding Transmittal Resolution if Approved

Randy Mannino, Planning & Development Director, stated that Cartersville adopted impact fees in 2006. In accordance with the Development Impact Fee Regulations as outlined by the state, we are required to file an annual update to the Capital Improvements Element of the Comprehensive Plan. The update is required to have a public hearing and then forwarded with the transmittal resolution to the Northwest Georgia Regional Commission and the Department of Community Affairs. After review the document needs to be approved by council. Staff recommends approval of the resolution that allows us to forward the update to the regional commission and the DCA for their required review.

Mayor Santini opened the floor for a public hearing. No one came forward. Mayor Santini closed the public hearing.

A motion to approve Resolution No. 21-15 was made by Council Member Tonsmeire and seconded by Council Member Tate. Motion carried unanimously. Vote 5-0

Resolution No.

TRANSMITTAL RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF CARTERSVILLE, GEORGIA.

Capital Improvements Element

WHEREAS, The City of Cartersville adopted a Capital Improvements Element as an amendment to the *Cartersville Comprehensive Plan*; and

WHEREAS, The City of Cartersville has prepared an Annual Update to the adopted Capital Improvements Element; and

WHEREAS, the Capital Improvements Element Annual Update was prepared in accordance with the “Development Impact Fee Compliance Requirements” and the “Minimum Planning Standards and Procedures for Local Comprehensive Planning” adopted by the Board of Community Affairs pursuant to the Georgia Planning Act of 1989, and a duly advertised Public Hearing was held on November 5, 2015, at 7:00 P.M. in the City Council meeting room at Cartersville City Hall;

BE IT THEREFORE RESOLVED, that the City Council of the City of Cartersville does hereby submit the draft Capital Improvements Element Annual Update to the Northwest Georgia Regional Commission for Regional and State review, as per the requirements of the Development Impact Fee Compliance Requirements.

ADOPTED this the 5th day of November 2015.

**/s/ Matthew J. Santini
Matthew J. Santini
Mayor**

ATTEST:

**/s/ Catheryn Hembree
Catheryn Hembree
Deputy City Clerk**

2. Freeport Exemption

Keith Lovell, Assistant City Attorney, stated that the City’s Freeport exemption is at 80% for certain classes of inventory as allowed by law. As a way to continue to help with economic development this resolution proposes the increase of the Freeport tax exemption to 100% beginning in 2016. The Cartersville School Board has approved this increase and Mr. Lovell

recommends approval.

A motion to approve Resolution No. 22-15 was made by Council Member Tonsmeire and seconded by Council Member Hodge. Motion carried unanimously. Vote 5-0

Resolution No. 22-15

WHEREAS, on Tuesday, June 17, 2003 pursuant to the provisions of O.C.G.A. §48-5-48.2, a referendum was held in the City of Cartersville, Georgia, known as the Freeport Referendum, regarding the exemption of certain property from ad valorem taxation as described in the aforementioned provisions; and

WHEREAS, the electors of the City of Cartersville, Georgia have approved in said Referendum the exemption of all three classes of inventory described in the aforementioned provisions, namely:

- a. Inventory of goods in the process of manufacture or production which shall include all partly finished goods and raw materials held for direct use or consumption in the ordinary course of the taxpayer's manufacturing or production business in this State.**
- b. Inventory of finished goods manufactured or produce in this State in the ordinary course of the taxpayer's manufacturing or production business when held by the original manufacturer or producer of such finished goods, and**
- c. Inventory of finished goods which, on January 1, are stored in a warehouse, dock, or wharf, whether public or private, and which are destined for a shipment to a final destination outside this State and inventory of finished goods which are shipped into this State from outside this State and store for transshipment to a final destination outside this State.**

WHEREAS, the governing authority of the City of Cartersville, Georgia wishes to implement the exemptions approved by the voters as hereinbefore described.

WHEREAS, the Mayor and City Council have received a Resolution of support from the Cartersville School Board to increase the Freeport exemption by an additional twenty percent (20%).

WHEREAS, by Resolution No. 23-03 dated July 17, 2003, the Mayor and Council resolved that all three classes of inventory described above be hereby exempt from ad valorem taxation at the rate of twenty (20%) percent of the value of said property as defined in O.C.G.A. §48-5-48.2, with said exemptions commencing January 1.

WHEREAS, by Resolution No. 05-12 dated February 15, 2012, the Mayor and Council resolved to increase for all three classes of inventory as described above are to be hereby exempt from ad valorem taxation at the rate of forty (40%) percent of the value of said property as defined in O.C.G.A. §48-5-48.2, with said exemptions commencing January 1, 2013.

WHEREAS, by Resolution No. 07-13 dated February 21, 2013 the Mayor and City Council resolved to increase for all three classes of inventory as described above are to be hereby exempt from ad valorem taxation at the rate of sixty percent (60%) of the value of said property as defined in O.C.G.A. § 48-5-48.2 with said exemptions commencing January 1, 2014.

WHEREAS, by Resolution No. 24-14, dated November 20, 2014, the Mayor and City Council resolved to increase for all three classes of inventory as described above are to be hereby exempt from ad valorem taxation at the rate of eighty percent (80%) of the value of said property as defined in O.C.G.A. §48-5-48.2 with said exemptions commencing January 1, 2015.

NOW THEREFORE by it hereby resolved by the Mayor and City Council that commencing January 1, 2016, said ad valorem taxation for all three classes of inventory described above is to be increased twenty percent (20%) and is to be hereby exempt at the rate of one hundred percent (100%) of the value of said property as defined in O.C.G.A. § 48-5-48.2, with said exemptions commencing January 1, 2016; and the Mayor is further directed to immediately transmit a certified copy of this Resolution to the Georgia State Revenue Commissioner and the Bartow County Tax Commissioner.

BE IT AND IT IS HEREBY RESOLVED.

ADOPTED this the 5th day of November 2015.

/s/ Matthew J. Santini
Matthew J. Santini
Mayor

ATTEST:

/s/ Catheryn Hembree
Catheryn Hembree
Deputy City Clerk

H. Other

1. Auditor's Management Letter

Tom Rhinehart, Finance Director, stated that the auditor's engagement letter is presented for the Mayor, City Manager, and Finance Director to sign. The engagement letter spells out the understanding of the services to be provided by the city's audit firm, Carr, Riggs, and Ingram,

LLC. It lists the responsibilities of the city's management with respect to the documents that the city will provide to the audit firm along with the documents the audit firm will complete. It also mentions the agreed upon price of \$41,500.00 to be paid for the FY 2015 audit to be completed. This is standard auditing practice and Mr. Rhinehart recommends approval.

A motion to approve the Auditor's Management Letter was made by Council Member Tonsmeire and seconded by Council Member Hodge. Motion carried unanimously. Vote 5-0

2. Quitclaim Deed Page Mine Properties 8, LLC

Keith Lovell, Assistant City Attorney, stated that Page Mine Properties 8, LLC is donating a piece of property to Advocates of Children located at 49 Monroe Crossing. This property is adjacent to City of Cartersville property which houses the Advocates administration office and the Flowering Branch Children's Shelter. Mr. Lovell recommends approval.

A motion to approve the quitclaim deed was made by Council Member Tonsmeire and seconded by Council Member Stepp. Motion carried unanimously. Vote 5-0

I. Bid Award/Purchase

1. 2016 Employee Health Insurance Renewal

Dan Porta, Assistant City Manager, stated that the City's current health insurance provider will increase at a rate of 10.6% for the 2016 calendar year. The City's health insurance broker, Shaw-Hankins, has shopped for our coverage again and has received proposals with Blue Cross/Blue Shield being the best option. The BC/BS is a fully insured insurance product the is 4.1% less than the current year's insurance premium from Cigna. In order for the City to move coverage the City would have to pay Cigna a supplemental premium from of \$637,315.00 to cover run out insurance claims. When you add this expense to the proposed insurance premium from BC/BS the estimated increase to the city is 9.4% compared to Cigna's 10.6% proposed rate increase.

A motion to approve moving the City's health insurance to BC/BS was made by Council Member Tate and seconded by Council Member Tonsmeire. Motion carried unanimously. Vote 4-0 with Council Member Stepp recusing himself.

2. Steel Pipe for Gas Department

Gary Riggs, Gas Superintendent, stated that the Gas Department received bids from 3 vendors for 2,790 feet of 4" steel pipe. This pipe is for a gas main extension to supply gas to the Cartersville Business Park. Mr. Riggs recommends accepting the low bid of \$18,972.00 from Consolidated Pipe.

A motion to approve the purchase of pipe from Consolidated Pipe was made by Council Member Tate and seconded by Council Member Tonsmeire. Motion carried unanimously. Vote 5-0

3. Garbage Cart and Recycling Cart

Tommy Sanders, Public Works Director, stated that the Public Works Department accepted bids for 400 Residential Garbage Carts and 400 Recycling Carts. The City received 5 bids ranging from \$33,667.99 to \$37,184.00. Mr. Sanders recommends accepting the low bid of \$33,667.99 from Toter, LLC.

A motion to approve the purchase of carts from Toter, LLC was made by Council Member Stepp and seconded by Council Member Tonsmeire. Motion carried unanimously. Vote 5-0

J. Contracts/Agreements

1. Stormwater Work-order/Inspection Software Agreement

Tommy Sanders, Public Works Director, stated that the Public Works Department currently utilizes HiperWeb work order software for solid waste, maintenance, grounds, and stormwater divisions to track upcoming and completed work orders. The stormwater division requests that we enter into an agreement with Electric Cities of Georgia to implement a module within HiperWeb that has a configuration for stormwater inspections that interfaces with the City's GIS. It will also assist in asset management and reporting that is vital in our MS4 annual report to Ga EPD. The cost of implementation is \$12,570 and an annual maintenance cost will be \$5,303.00. These fees are budgeted and Mr. Sanders recommends approval.

A motion to approve the software agreement with HiperWeb was made by Council Member Tonsmeire and seconded by Council Member McDaniel. Motion carried unanimously. Vote 5-0

After announcements a motion to adjourn the meeting was made by Council Member Stepp and needing no second. Motion carried unanimously. Vote 5-0

Meeting Adjourned

/s/ _____
Matthew J. Santini
Mayor

ATTEST:

/s/ _____
Catheryn Hembree
Deputy City Clerk



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM

File Z15-04: Rezoning application by TPA Group (Jeff Watkins, representative) for property located at 118 Old Mill Road (approximately 63.5 acres) from R-20 to H-I

SubCategory:	Public Hearing - 1st Reading of Zoning/Annexation Requests
Department Name:	Planning and Development
Department Summary Recommendation:	This property is 118 Old Mill Road, located on the south side of the road near the intersection with S. Erwin Street. There are a variety of uses adjacent to the property – industrial, restaurant, gas station, office, and residential south of this portion of the property. There are no structures on this section of the property proposed for rezoning – the houses, barns, and other structures are to the south of the area proposed for rezoning and are proposed to remain as such. The adjacent 17 acres to the east of the subject request was annexed and zoned (AZ08-13) to the H-I zoning district in 2008. The applicant seeks to rezone a 63.5 acre portion of the property from “R-20 to H-I with conditions” for development of the highest and best use based on the application. Because the applicant has noted that they are seeking up to a million square feet, the request met the threshold for requiring it to proceed through the States Development of Regional Impact (DRI) review process. The Northwest Georgia Regional Commission (NWGRC) did return a favorable recommendation noting the proposed project is consistent with local and regional plans, and encouraged to review and implement comments and guidelines presented. RECOMMENDATION: Planning Commission recommends approval as presented
City Manager's Remarks:	Planning Commission recommends your approval of this item.
Financial/Budget Certification:	
Legal:	
Associated Information:	

ZONING SYNOPSIS

Petition Number(s): **Z15-04**

APPLICANT INFORMATION AND PROPERTY DESCRIPTION

Applicant: **TPA Group**

Representative: **Jeff Watkins**

Property Owner: **William Wright**

Property Location: **118 Old Mill Road**

Access to the Property: **Old Mill Road**

Site Characteristics:

Tract Size: Acres: **63.5 acres** District: **4th** Section: **3rd** LL(S): **625, 672**

Ward: **3** Council Member: **Louis Tonsmeire, Sr.**

LAND USE INFORMATION

Current Zoning: **R-20 (Residential)**

Proposed Zoning: **H-I (Heavy Industrial) with conditions * (H-I conditioned to the permitted uses set forth in the L-I district including the uses listed for special use (which are allowed by right in HI), and further excluding special use for Tattoo/Body Piercing Parlors and Adult Entertainment Establishments as listed in the L-I district.)**

Proposed Use: **Development of highest and best use**

Current Zoning of Adjacent Property:

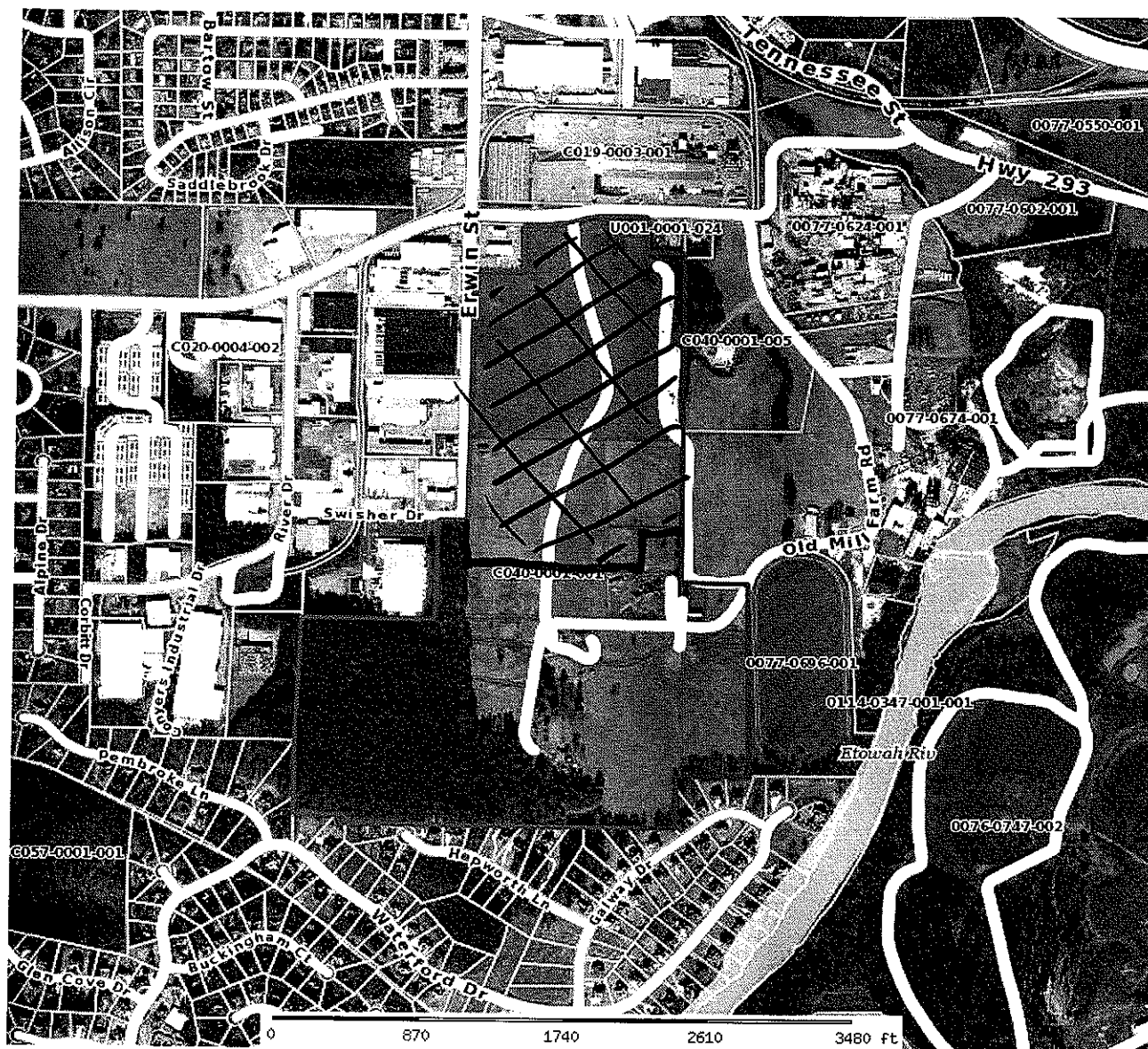
North: **H-I (Heavy Industrial)**

South: **R-20 (Residential)**

East: **H-I**

West: **L-I (Light Industrial)**

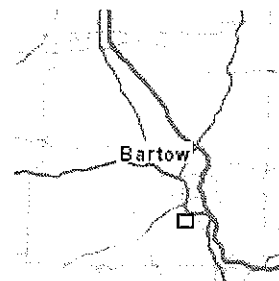
The Future Development Plan designates the subject property as: **Suburban Living**



Bartow County Assessor

Parcel: 36373 Acres: 0

Name:	WRIGHT WILLIAM W	Land Value:	\$ 630,400
Site:	831 ERWIN ST	Building Value:	\$ 512,300
Sale:	0 on 2001-02-01 Reason=U Qual=X	Market Value:	\$ 169,900
Mail:	P O BOX 68	Assessed Value:	\$ 1,312,600
	CARTERSVILLE, GA 30120		

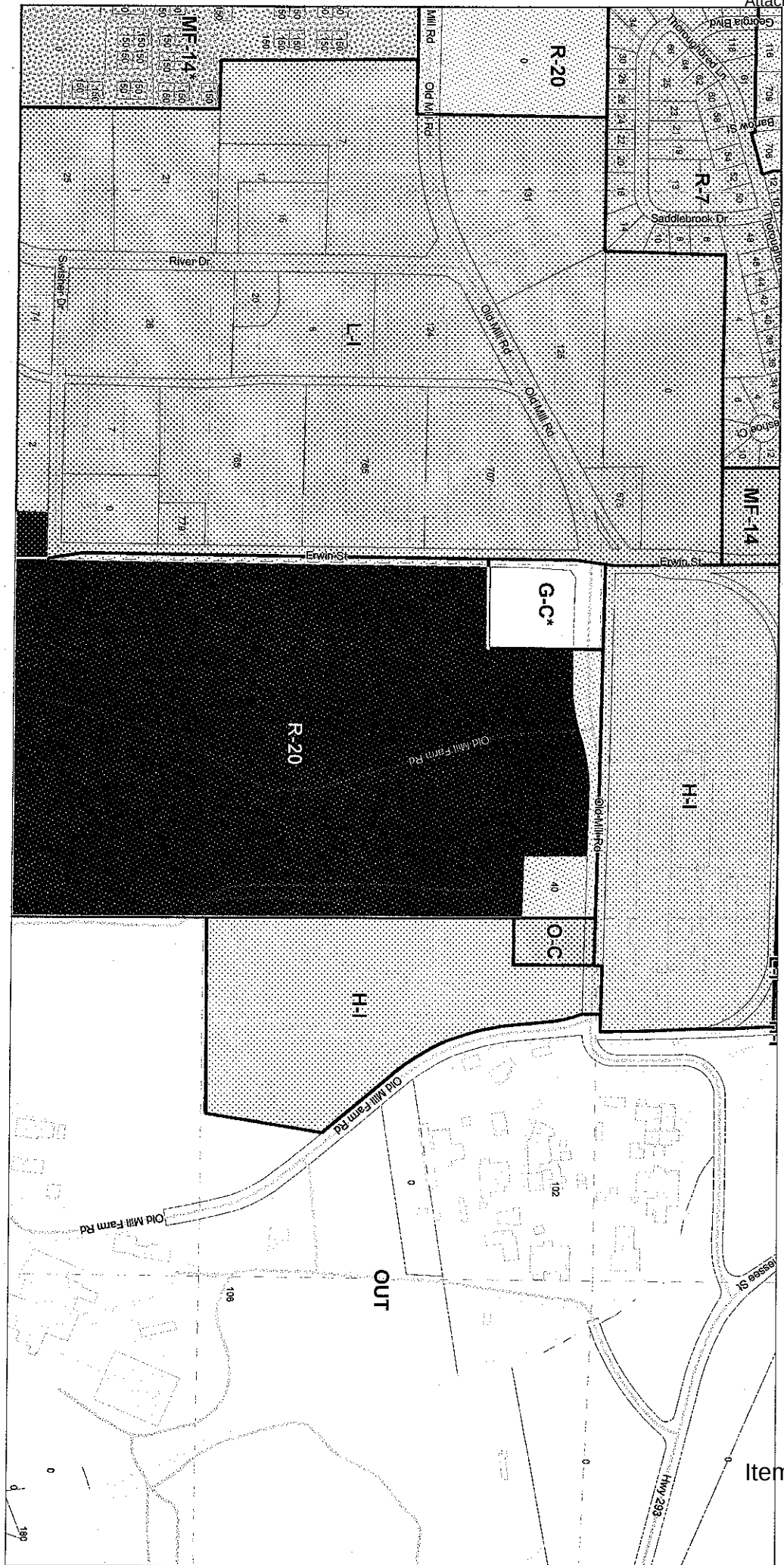


The Bartow County Assessor's Office makes every effort to produce the most accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use or interpretation. The assessment information is from the last certified taxroll. All data is subject to change before the next certified taxroll. PLEASE NOTE THAT THE PROPERTY APPRAISER MAPS ARE FOR ASSESSMENT PURPOSES ONLY NEITHER BARTOW COUNTY NOR ITS EMPLOYEES ASSUME RESPONSIBILITY FOR ERRORS OR OMISSIONS ---THIS IS NOT A SURVEY---

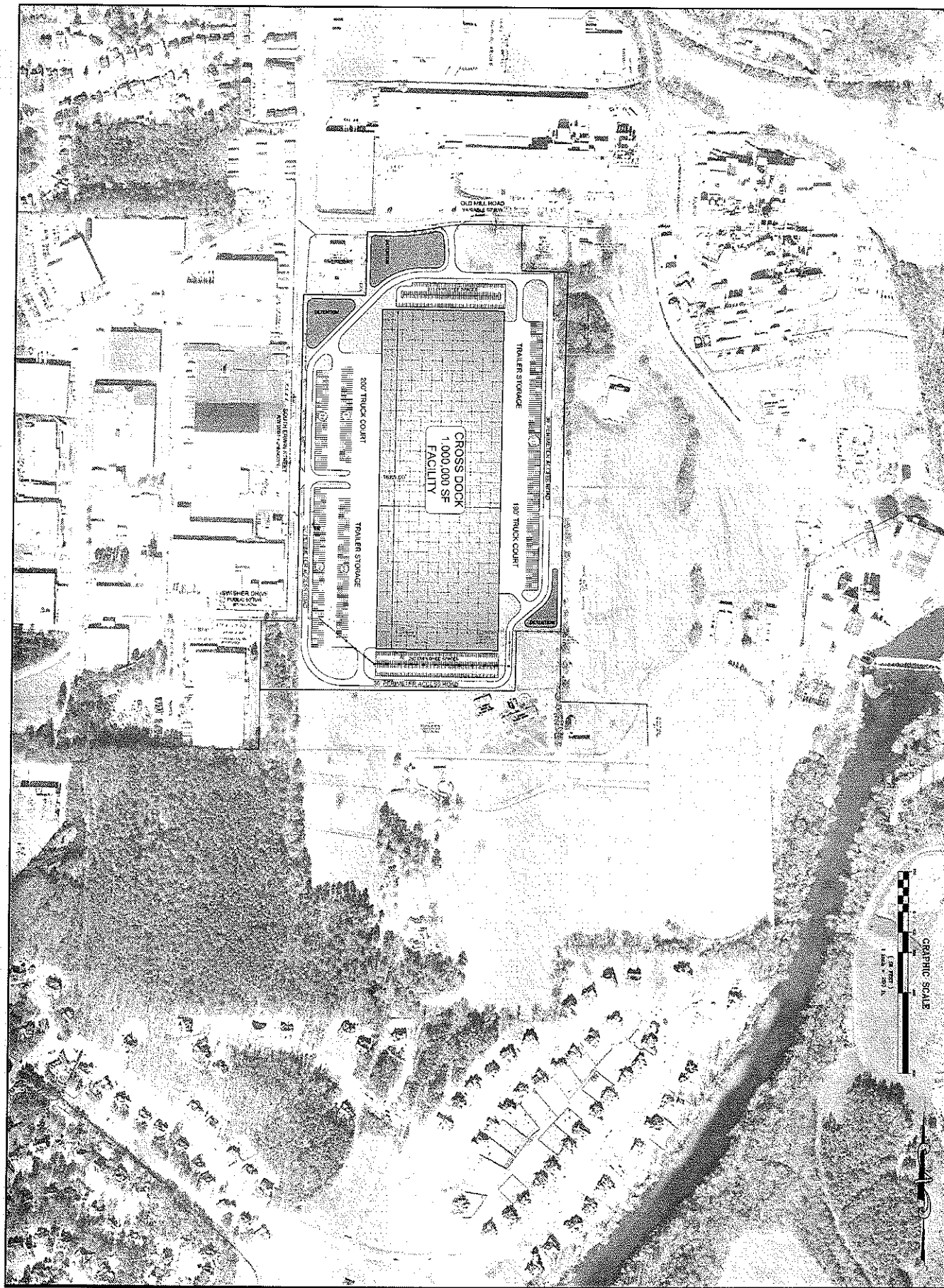
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Item # 2

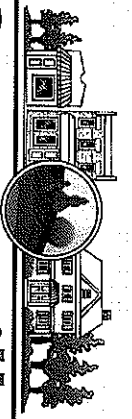
Old Mill Rd & S. Erwin St - rezoning R-20 to H-1



Item # 2



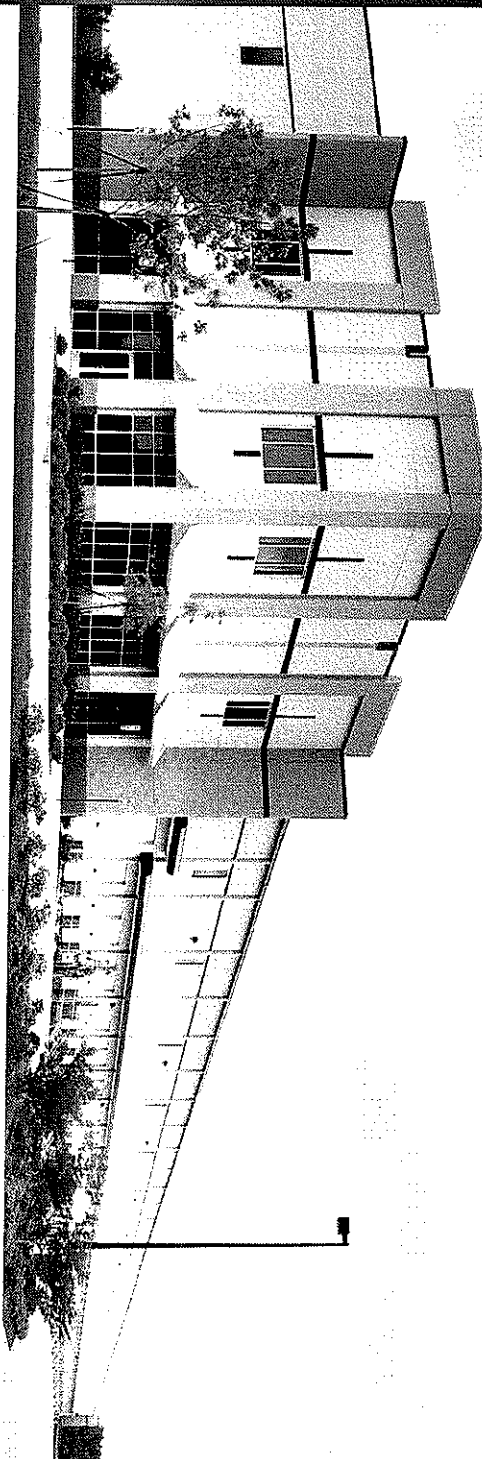
SHEET NO.: C201	SHEET TITLE: CONCEPTUAL SITE PLAN	PROJECT NO.: 15055 05/26/15	REVISIONS: DATE DESCRIPTION 1 2 3 4 5 6	Item #	SOUTH LAND ENGINEERING CIVIL ENGINEERS - LAND SURVEYORS - LAND PLANNERS 114 OLD MILL ROAD, CARTERSVILLE, GA 30120 PH: 770.387.0440 FAX: 770.607.5151	OLD MILL DISTRIBUTION CENTER CARTERSVILLE, GA



Cartersville
Be Charmed • Be Prosperous • Belong

118 Old Mill Rd Rezoning Z15-04

Item # 2



Application for Rezoning

Planning and Development Department
10 North Public Square
City of Cartersville
(770) 387-5600

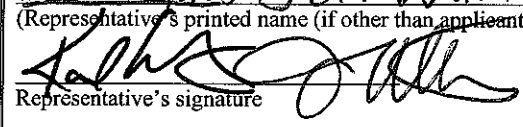
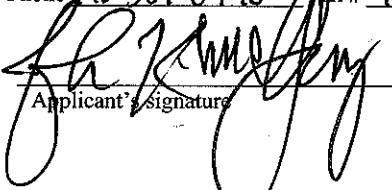
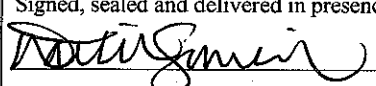
*Paid \$400
-RO*

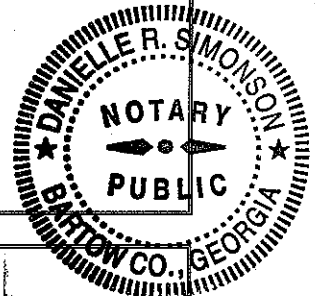
Application Number

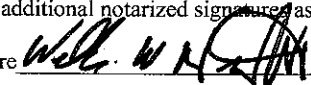
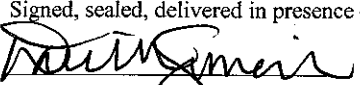
*Z15-04**8-11-15 @ 5:30*

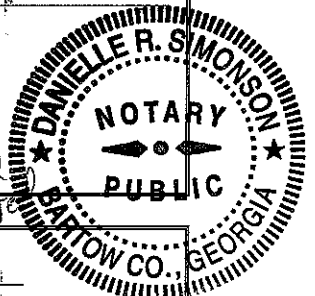
Hearing Dates

*8-20-15 @ 7:00**9-3-15 @ 7:00*

Applicant <u>TPA Group</u> (applicant's printed name)		Business/Cell Phone <u>404-900-8484</u>	
Address <u>3350 Riverwood Rwy, Suite 750</u>		Home Phone <u>770-430-5319</u>	
City <u>Atlanta</u>	State <u>GA</u>	Zip <u>30339</u>	Email <u>jmcgortney@tpa-grp.com</u>
Karl Watkins <u>Jeff Watkins</u> (Representative's printed name (if other than applicant))		Phone <u>770-387-0440</u>	Fax # <u>770-007-5151</u>
 Representative's signature		 Applicant's signature	
Signed, sealed and delivered in presence of:  Notary Public			
My commission expires: <i>1-24-17</i>			



Titleholder <u>William Wright</u> (titleholder's printed name)	Business _____	Home _____
*attach additional notarized signatures as needed on separate application page Address _____		
Signature 		
Signed, sealed, delivered in presence of:  Notary Public		
My commission expires: <i>1-24-17</i>		



Present Zoning District(s) <u>R-20</u>	Requested Zoning <u>H-1*</u>	<i>See attached applicant submitted conditions.</i>
Acreage <u>03.50189</u>	Land Lot(s) <u>025 & 072</u>	District(s) <u>4th</u> Section(s) <u>3rd</u>
Location of Property <u>118 Old Mill Rd, Cartersville, GA 30120; Erwin St + Old Mill Rd.</u> (street address, nearest intersections, etc)		
Reason for requested Rezoning: <u>Changing the use of the property for development of the highest and best use.</u> (attach additional statement as necessary)		

Attach a copy of a current boundary survey showing metes and bounds and indicating all existing site improvements and confirmation of the availability of all public utilities. Said site must meet the proposed zoning district development standards and access requirements of the City's regulations.

*Paid check # 0259
7/19/15*

REQUESTED ZONING
APPLICANT: TPA GROUP/APPLICATION NO. Z15-04

Heavy Industrial limited to the permitted uses set forth in the L-I District including the uses listed for a special use, but excluding tattoo and body piercing parlors and adult entertainment.

Rec'd from
applicant 10/29/15

ADDENDUM TO REZONING APPLICATION

TPA GROUP

CONSTITUTIONAL OBJECTIONS

The Zoning Ordinance for the City of Cartersville, Georgia, lacks adequate standards for the City Council to exercise its power to zone and rezone. In essence, the standards are not sufficient to contain the discretion of the City Council and to provide the Courts with a reasonable basis for judicial review. Because the stated standards (individually and collectively) are too vague and uncertain to provide reasonable guidance to the City Council, the Zoning Ordinance violates the Fifth and Fourteenth Amendments of the Constitution of the United States in matters of zoning. The Zoning Ordinance also violates Article I, Section III, Paragraph 1; and Article I, Section I, Paragraphs 1 and 2 of the Constitution of the State of Georgia, 1983.

The City Council is granted the power to zone pursuant to Article IX, Section II, Paragraph 4 of the Constitution of the State of Georgia, 1983. It is a power which must be fairly exercised. Based on this element of fairness, the Zoning Ordinance for the City of Cartersville violates Article IX, Section II, Paragraph 4 of the Constitution of the State of Georgia, 1983.

The Zoning Ordinance presently in effect, zoning this property as Zoning District R-20 is contrary to the best interest of the health and welfare of the citizens of the City of Cartersville, Georgia, and constitutes an arbitrary and capricious act. As a result, the Zoning Ordinance is in violation of Article I, Section I, Paragraphs 1

Item # 2

Failure to grant the application for rezoning to H-I with conditions set forth on Exhibit "A" or to zone the subject property to H-I with conditions other than those set forth on Exhibit "A", or to zone the subject property any other classification including other intervening classifications would be contrary to the best interest of the health and welfare of the citizens of the City of Cartersville, Georgia, and would further constitute an arbitrary and capricious act motivated by spite and ill will towards the Applicant for retaliatory purposes. As such, failure to grant the application would constitute a violation of Article I, Section I, Paragraph 1 of the Constitution of the State of Georgia, 1983; Article I, Section III, Paragraph 1 of the Constitution of the State of Georgia, 1983; and Article I, Section II, Paragraph 3 of the Constitution of the State of Georgia, 1983, together with due process clause and equal protection clauses of the Fifth and Fourteenth Amendments to the Constitution of the United States of America.

Any limitation on the time for presentation of the issues before the City Council who has the power to zone and rezone is a violation of the guarantees of free speech under Article I, Section I, Paragraph 5 of the Constitution of the State of Georgia, 1983 and the First Amendment of the Constitution of the United States of America. Further, said limitations are in violation of the right to petition and assemble, in violation of Article I, Section I, Paragraph IX of the Constitution of Georgia, 1983 and the First Amendment of the Constitution of the United States of America as well as the due process clauses of the Constitution of Georgia, 1983 and the Constitution of the United State of America.

Finally, the Applicant places the City of Cartersville, Georgia on notice that it will be strictly held accountable for all monetary damages sustained by them as a result of an illegal denial. The Applicant specifically reserves all the monetary and equitable remedies available to them pursuant to the United States Civil Rights Act, 42 U.S.C. § 1981a, Item # 2

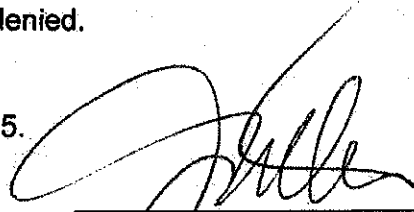
and 2 of the Constitution of the State of Georgia, 1983; Article I, Section III, Paragraph 1 of the Constitution of the State of Georgia; and Article I, Section II, Paragraph 3 of the Constitution of the State of Georgia, 1983. Furthermore, the Zoning Ordinance violates the due process clause and equal protection clauses of the Fifth and Fourteenth Amendments to the Constitution of the United States of America.

In addition, the Zoning Ordinance presently in effect, zoning this property in Zoning District R-20 is unconstitutional in that it renders this property unusable and destroys its marketability. Therefore, the Zoning Ordinance constitutes a taking of applicant's property without just and adequate compensation and without due process of law in violation of the Fifth and Fourteenth Amendments to the United States Constitution and in violation of Article I, Section I, Paragraph 1, and Article I, Section III, Paragraph 1 (a) of the Constitution of Georgia.

The failure to rezone the subject property to H-I with conditions set forth on Exhibit "A", as requested, or to zone the subject property to H-I with conditions other than those set forth on Exhibit "A" or to zone the property to any other classification including other intervening zoning classifications, would constitute the taking of property without due process and without the payment of adequate compensation in violation of Article I, Section I, Paragraph 1 of the Constitution of the State of Georgia, 1983; Article I, Section III, Paragraph 1 of the Constitution of the State of Georgia, 1983; and the Fifth and Fourteenth Amendments of the Constitution of the United States.

U.S.C. §§ 1983 and 1988 and laws of the State of Georgia as a result of the infringements of their constitutional rights in the foregoing provisions of this notice, which will result if the Application is denied.

This 10th day of November, 2015.



JEFFREY A. WATKINS, ESQ.
ATTORNEY FOR TPA GROUP

EXHIBIT "A"

REQUESTED ZONING

APPLICANT: TPA GROUP/APPLICATION NO. Z15-04

Heavy Industrial limited to the permitted uses set forth in the L-I District including the uses listed for a special use, but excluding tattoo and body piercing parlors and adult entertainment.



The Cartersville Waterford Homeowners' Association Board
PO Box 2545, Cartersville, GA 30120

A RESOLUTION

EXPRESSING OPPOSITION TO REZONING CASE NO. Z15-04

- WHEREAS:** There is a tract of land located at 118 Old Mill Road consisting of approximately 178 acres and which is currently advertised for sale; and
- WHEREAS:** This same tract of land has for many years been zoned as R-20 and has been used as a horse farm with pastures, fenced areas, stables, barns, and, a residence; and
- WHEREAS:** An application has been made to the city of Cartersville, Georgia to rezone approximately 60 acres of this tract to HI; and
- WHEREAS:** This tract of land shares a property line with twenty-two lots or homes in The Waterford, a residential development which broke ground in 1988 and now has 400 homes; and
- WHEREAS:** Approval of the rezoning request would bring development and usage noise thereby interfering with the quality of life experienced by homeowners in The Waterford; and
- WHEREAS:** Approval of the rezoning request would cause irreversible damage to property values in The Waterford and impact for many what is their largest asset, their home; and
- WHEREAS:** There are currently several vacant industrial buildings and warehouses within one-quarter mile of this land tract, some of which have been vacant for years, thereby negating the perceived need for additional acreage for heavy industrial purposes; and
- WHEREAS:** There exists the Cartersville Waterford Homeowners' Association, Inc. (Waterford HOA) whose members are all lot owners in The Waterford and which is governed by a board of directors elected by the members; and
- WHEREAS:** The Waterford HOA board of directors does at all times faithfully act in the best interests of its members; now
- THEREFORE:** Be it resolved by the Waterford HOA board of directors that the board does hereby adopt this resolution to express opposition to the rezoning application of case number Z15-04 and shall transmit a copy of this resolution to both the Cartersville Planning Commission and the Cartersville City Council and urges both bodies to deny the application.

Adopted by the board on July 27, 2015

Troy Weaver, President, Waterford HOA

We the undersigned, residents of The Waterford, do hereby petition the Cartersville Planning Commission, Mayor, and Cartersville City Council to not approve the proposed rezoning of 118 Old Mill Road from R-20 to H1.

Signature

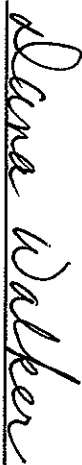
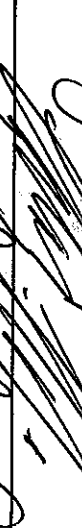
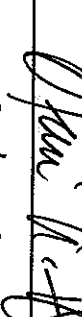
Print Name

Street Address

Item # 2

Bill Stambly	B. W. Gambill	495 Waterford Dr.
Glenda Tharville	Glenda Gambill	495 Waterford Dr.
Don Stare	Don Stare	495 Waterford Dr.
Dorrie Gore	Dorrie Gore	493 Waterford Dr.
Carolyn Fairchild	Carolyn Fairchild	20 Buckingha Ct
James Fairchild	IMMANUEL FAIRCHILD	20 Buckingha Ct
Debby Crim	Debby Crim	485 Waterford Dr.
Thomas Crim	SUSAN GAINN	22 BUCKINGHAM CT
Carolyn Crim	CL. ET DEMPSEY	39 Galway Dr
Melanie Dury	Melanie Dempsey	39 Galway Drive
Scott Dury	SCOTT McCarry	6 Buckingha Ct.
Jeremy Dury	Jeremy Morton	44 Galway Dr.
Carrie Morton	Carrie Morton	44 Galway Dr.
Scott Dury	SCOTT DORSEY	7 Jean Ct
Lance Walker	Lance Walker	477 Waterford Dr

We the undersigned, residents of The Waterford, do hereby petition the Cartersville Planning Commission, Mayor, and Cartersville City Council to not approve the proposed rezoning of 118 Old Mill Road from R-20 to H1.

Signature	Print Name	Street Address	Item # 2
	Dana Walker	477 Waterford Rd.	
	Melanie Taylor	27 Hastings Drive	
	Dana Gambill	26 Hepworth Lane	
	Kelly Nagel	27 Harting Dr	
	Charles E. Nagel	3 Oxford Dr	
	Brian R. Cahn	3 Oxford Dr	
	Angie Cahn	423 Waterford Dr	
	Karen Smith	7 Hampton	
	Keel Smith	7 Hampton	
	Gary Culler	23 Pembroke Lane	
	Dawn Kibbale	23 Pembroke	
	Staci Hery	515 Waterford Dr.	
	Misty Dasey	7 Duon Ct	
	Tristen Dasey	7 Duon Ct	

We the undersigned, residents of The Waterford, do hereby petition the Cartersville Planning Commission, Mayor, and Cartersville City Council to not approve the proposed rezoning of 118 Old Mill Road from R-20 to H1.

Signature	Print Name	Street Address	Item # 2
	Marc Stark	471 Waterford	
	Corey Gocher	4 Buckingham	
	Letame Gocher	4 Buckingham	
	David Roberts	528 Waterford	
	Johnny Bruce	513 Waterford	
	David Adsit	8 Hastings Dr.	
	Ryan Archer	4 Devon Ct.	
	Chad Wilson	9 Oxford Dr.	
	Michelle Gambill	2 Bristol Ct.	
	Steve Gambill	2 Bristol Ct.	
	Steve Youmans	5 Sterling Ct.	
	Fran Youmans	5 Sterling Ct.	
	Chris Sims	2 Sterling Ct.	
	Michele Sims	2 Sterling Ct.	
	Scott R. Parmenter	16 Buckingham Court	

We the undersigned, residents of The Waterford, do hereby petition the Cartersville Planning Commission, Mayor, and Cartersville City Council to not approve the proposed rezoning of 118 Old Mill Road from R-20 to H1.

Signature

Print Name

Street Address

Item # 2

Deborah Farmer

Deborah Farmer

16 Buckingham Ct.

Betsy Fulliam

Betsy Fulliam

12 Westings

Michael Williams

AMANDA WILKES

38 Westchester

Susan Stephens

Susan Stephens

527 Waterford Dr.

Matthew Gambill

Matthew Gambill

20 Hepworth Lane

Steve Larrison

Steve Larrison

20 HASTINGS

Marty Samsun

Marty Samsun

484 Delaware

Harl B. Sager

Harl B. Sager

18 HASTINGS DRIVE

Gretchen Sager

Gretchen Sager

" "

David Banner

David Banner

2 Devon Court

Tara Sager

Tara Sager

12 Reed Ave

David Samsun

DAVID SAMSUN

431 WATERFORD DR

Jane Mroczko

Jane Mroczko

35 Westchester Dr.

Ted Boone

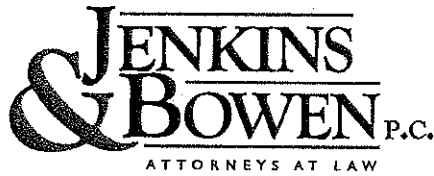
TED BOONE

40 GAWARD Dr.

Karen Boone

Karen Boone

40 Galway Dr



FRANK E. JENKINS, III
BRANDON L. BOWEN
ROBERT L. WALKER
ERIK J. PIROZZI
SARAH C. MARTIN

15 SOUTH PUBLIC SQUARE
CARTERSVILLE, GEORGIA 30120-3350
TELEPHONE (770) 387-1373
FACSIMILE (770) 387-2396
<http://www.ga-lawyers.pro>

SAVANNAH OFFICE
11 CEDAR VIEW DRIVE
SAVANNAH, GEORGIA 31410

REPLY TO: CARTERSVILLE

November 10, 2015

VIA HAND DELIVERY

Mayor and City Council of the City of Cartersville
City of Cartersville Planning Commissioners
c/o Randy Mannino, AICP
Carterville Zoning Administrator

LETTER OF CONSTITUTIONAL OBJECTIONS

Re: TPA Group / Wright rezoning application
Case # Z15—04

Dear Honorable Mayor, Council, and Planning Commissioners:

This firm represents a number of residents of Galway Drive directly adjacent to the subject of this rezoning application; I attach a list of names and addresses as Exhibit A for your reference. We would like to make a few essential points in regards to this application.

1. Rezoning to speculatively allow across the board special use permits is unconstitutional.

It is our understanding that the applicant seeks a Heavy Industrial zoning classification, but proposes as a condition that the permitted uses would be those permissible in the Light Industrial classification, expressly including those that are special uses. According to the City's zoning ordinance, this would allow as a matter of right manufacturing uses which emit smoke, noise, odor, dust, vibration or fumes outside of their building:

Manufacturing establishments which use limited water in the manufacturing operation either for processing, cooling, or heating; or which emit smoke, noise, odor, dust, vibrations, or fumes beyond the walls of the building in which housed shall not be allowed, except with approval of a special use in accordance with standards further described in section 16.4.9.¹

¹ Zoning Ordinance Sec. 10.1

November 10, 2015

Page 2 of 3

The effect of such a speculative rezoning would give the applicant the right to establish such noxious uses without the public notice and hearing process that is required of special use permits under the Zoning Procedures Law. It would also take away from the Planning Commission and City Council the right and ability to consider particular special uses and decide if they are right for our community. It simply makes no sense to rezone property in such a speculative fashion and give the applicant a blanket exception from the future public notice and decision-making process. The accepted process in jurisdictions throughout Georgia is that the applicant determines what use it will actually make of the property and then seeks rezoning that is site plan specific. This way the Planning Commission and City Council can know exactly what they are approving, and the public can have a meaningful opportunity to comment. Where appropriate, the City Council would be able to deny an application or impose reasonable conditions to mitigate concerns raised by the application. But by granting this speculative request, the City would be giving this up for no good reason and contrary to the interests of residents and other property owners in the vicinity.

2. The application is not consistent with City comprehensive planning.

As discussed in the Zoning Synopsis for this application, the request is not consistent with the City's comprehensive planning. The City's Character Area-Future Development Map shows this property as Suburban Living (See Exhibit B). The purpose of this character area is stated by the Comprehensive Plan as:

Preserves established suburban neighborhoods and adjacent areas with suitable land use patterns, potential infill and redevelopment opportunities where development pressure is the greatest due to the adjacency of current or proposed community infrastructure (such as sewer, water and transportation facilities). Embody the spirit of traditional neighborhoods, such as sense of place, human connectivity and safety.²

The approved zoning classifications are R-20 (the current zoning applicable to the County), R-15, and P-D. These are all residential classifications similar to our client's adjacent properties. We believe the existing zoning and planning is constitutional, and it would be unconstitutional to so drastically deviate from that planning for the benefit of one applicant to the detriment of the adjacent residential landowners. Moreover, making decisions that are consistent with the planning is essential to having enforceable zoning throughout the City in future years. If you rezone in a manner that is not consistent with the City's planning here, it will be more difficult to deny inconsistent rezoning applications in the future. The applicant will point to the fact that there are established industrial uses on the north side of the subject property and that the application does not seek to rezone the southern half of the property. But of course, as soon as the City rezones the north, now the southern half of the property will be adjacent to industrial property, further undermining the City's ability to remain consistent with the comprehensive plan.

² Comprehensive Plan, page 50

November 10, 2015

Page 3 of 3

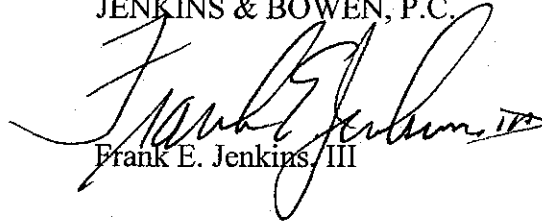
3. The applicant's traffic study is deeply flawed.

The traffic study presented to the City fails to consider the traffic signal that will likely be most adversely impacted by the siting of a distribution center on Old Mill Road. I am referring to the intersection of Old Mill Road and Etowah Drive. This intersection is already very busy in the morning peak time because two of the City's schools (Cartersville Primary and Elementary) are located on Old Mill near this intersection, along with Excel Christian Academy. In addition, the Cartersville Middle School is only a short way down Pine Grove Road. Thus, much of the City's school traffic will pass through this intersection one or more times every morning of the school year between 7 and 9 a.m. Likewise, east west traffic to the subject property will use Old Mill, passing through this intersection, and the above-named schools, on the most direct route to Georgia 113 and 61. The study is fundamentally flawed in failing to consider this proposed development's impact on the level of service of this intersection.

In summary, the City's existing zoning is constitutionally applied to the subject property; deviating from the comprehensive planning to benefit a developer at the expense of residents would be an unconstitutional exercise of the zoning power and a manifest abuse of the zoning power. We urge you to continue to stay the course and apply the sound zoning practices discussed above.

Very truly yours,

JENKINS & BOWEN, P.C.



Frank E. Jenkins, III

Enclosures

cc: Mr. David Archer (by facsimile)
Mr. Jeff Watkins (by facsimile)

Item # 2

EXHIBIT A

Herb and Rebecca Upton
13 Hepworth Lane
Cartersville, GA 30120

David & Erin Sinclair
431 Waterford Drive
Cartersville, GA 30120

Jeff & Sara Kellner
38 Galway Drive
Cartersville, GA 30120

Ted & Karen Boone
40 Galway Drive
Cartersville, GA 30120

David & Cynthia Hayes
415 Waterford Drive
Cartersville, GA 30120

Chris & Lisa Sward
433 Waterford Drive
Cartersville, GA 30120

Robby & Deena Stewart
4 Galway Drive
Cartersville, GA 30120

Brad & Stacey Wall
22 Hepworth Lane
Cartersville, GA 30120

Matthew & Danae Gambill
20 Hepworth Lane
Cartersville, GA 30120

Cory & Courtney Phillips
9 Galway Drive
Cartersville, GA 30120

Mark & Carol Wolfe
36 Galway Drive
Cartersville, GA 30120

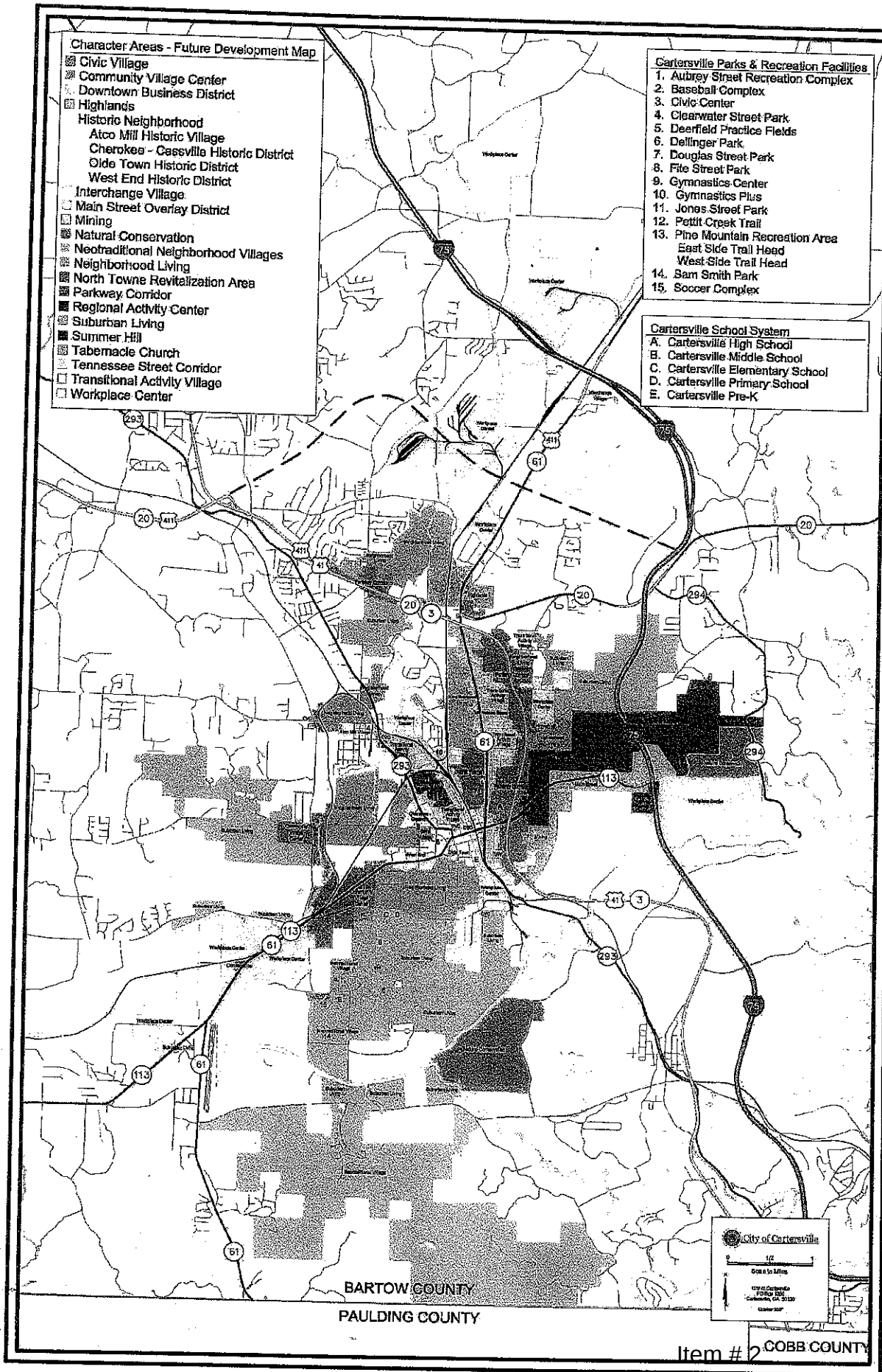
Brian & Angie Cahn
423 Waterford Drive
Cartersville, GA 30120

Donny & Jannae Cagle
32 Galway Drive
Cartersville, GA 30120

Steven & Leslie Chatman
416 Waterford Drive
Cartersville, GA 30120

Fred & Kathy Genrich
421 Waterford Drive
Cartersville, GA 30120

EXHIBIT B





City of Cartersville

PLANNING AND DEVELOPMENT

P.O. Box 1390 • 10 North Public Square • Cartersville, Georgia 30120
Telephone: 770-387-5600 • Fax: 770-387-5605 • www.cityofcartersville.org

File # **Z15-04**

DISCLOSURE OF INTERESTS BY LOCAL OFFICIAL

(To be completed by Mayor, City Council, and Planning Commission)

TPA Group (Jeff Watkins, rep.) has made a rezoning request on the following property:
Approximately 63.5 acres located at 118 Old Mill Road in the 4th District, 3rd Section, Land Lots
625 and 672 from R-20 (Residential) to H-I (Heavy Industrial).

Pursuant to O.C.G.A § 36-67A-2 any local government official considering a rezoning request must disclose if he has any of the following interest:

1. A Property interest in any real property affected by a rezoning request.
Yes _____ No _____ If the answer is Yes, please disclose the nature and extent of such interest.

2. A financial interest in any business entity which has a property interest in any real property affected by a rezoning action.
Yes _____ No _____
If the answer is Yes, please disclose the nature and extent of such interest.

3. A spouse, mother, father, brother, sister, son, or daughter with either of the above interests.
Yes _____ No _____ If the answer is Yes, please disclose the nature and extent of such interest.

TITLE: _____

DATE: _____

TRAFFIC IMPACT STUDY
OLD MILL DISTRIBUTION CENTER
CARTERSVILLE, BARTOW COUNTY, GEORGIA

Submitted October 21, 2015

Prepared By:
Robinson Transportation Consultants,
LLC
3010 Andora Drive
Marietta, GA 30064
770-630-4640

Prepared For:
Southland Engineering, Inc.
114 Old Mill Road
Cartersville, GA 30120
770-387-0440

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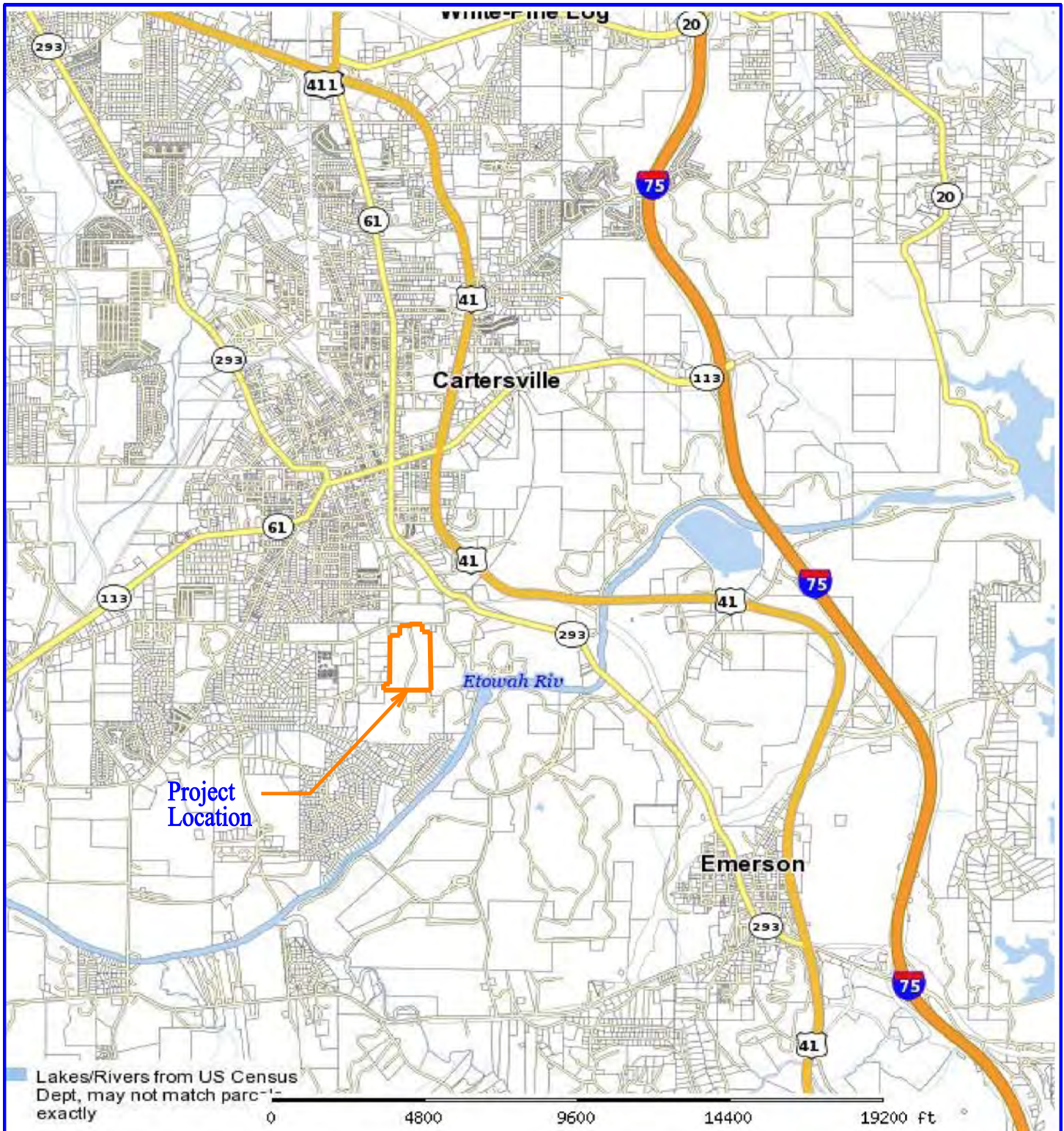
Study Overview

This study is being prepared for a zoning revision for a 60 acre site in Cartersville, GA fronting on Old Mill Road and Erwin Street. The location of the site is shown in Figure 1, Location Map. The site is being proposed to be developed as a 1,000,000 square foot distribution center with approximately 300 employees. The site for the Old Mill Road Distribution Center is surrounded on three sides with Industrial development with the fourth side, to the south of the site, being farmland. The primary regional access to this site is to and from I-75 by way of Joe Frank Harris Parkway (US 41) to Main Street (SR 113) and SR 293. This study is to determine the impact of the development on three nearby intersections: Erwin Street at Old Mill Road, Old Mill Road at State Route (SR) 293 and South Bridge Drive at Joe Frank Harris Parkway (US 41). The proposed development is shown in Figure 2, Site Plan.

Existing Traffic

To determine the impact of the proposed Old Mill Road Distribution Center on the three study intersections Erwin Street at Old Mill Road, Old Mill Road at State Route (SR) 293 and South Bridge Drive at Joe Frank Harris Parkway (US 41) two hours of a.m. and p.m. peak period turning movement counts were collected at the intersections. The peak periods were determined to be 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m. based on traffic counts conducted by the Georgia Department of Transportation on Old Mill Road, SR 293 and Joe Frank Harris Parkway. The peak hour turning movement counts were totaled and are identified in Figure 3, Existing Peak Hour Traffic. The two hour peak period traffic counts are in the appendix.

The existing traffic was analyzed at the three identified study intersections: Erwin Street at Old Mill Road, Old Mill Road at State Route (SR) 293 and South Bridge Drive at Joe Frank Harris Parkway (US 41). The analysis was conducted using Synchro, a traffic engineering industry-accepted traffic analysis software package, which utilizes the Transportation Research Board's (TRB) "Highway Capacity Manual" procedures to determine intersection levels of service. The level of service (LOS) at an intersection is a qualitative measure of the operation of an intersection based on delay. Level of service ranges from LOS A which equates to little to no delay at an intersection to LOS F which represents total breakdown of the intersection with high traffic congestion and long delays. LOS C is generally accepted as the minimum acceptable level of service at an intersection.



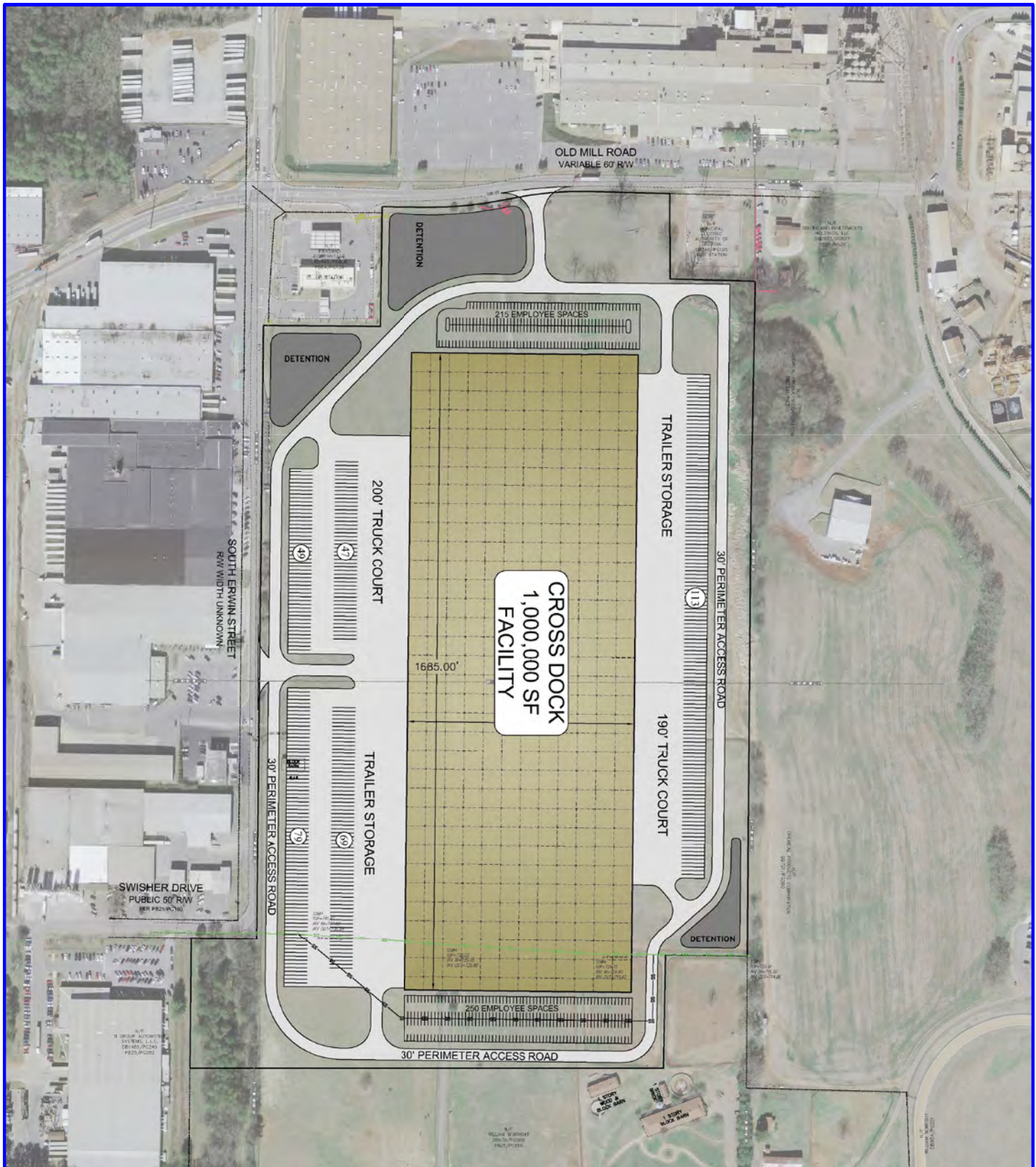
Robinson Transportation
Consultants, LLC



NTS

FIGURE 1
Project Location Map
Old Mill Road
Distribution Center
Cartersville, GA

Item # 2



Source:
Southland Engineering
Old Mill Distribution Center

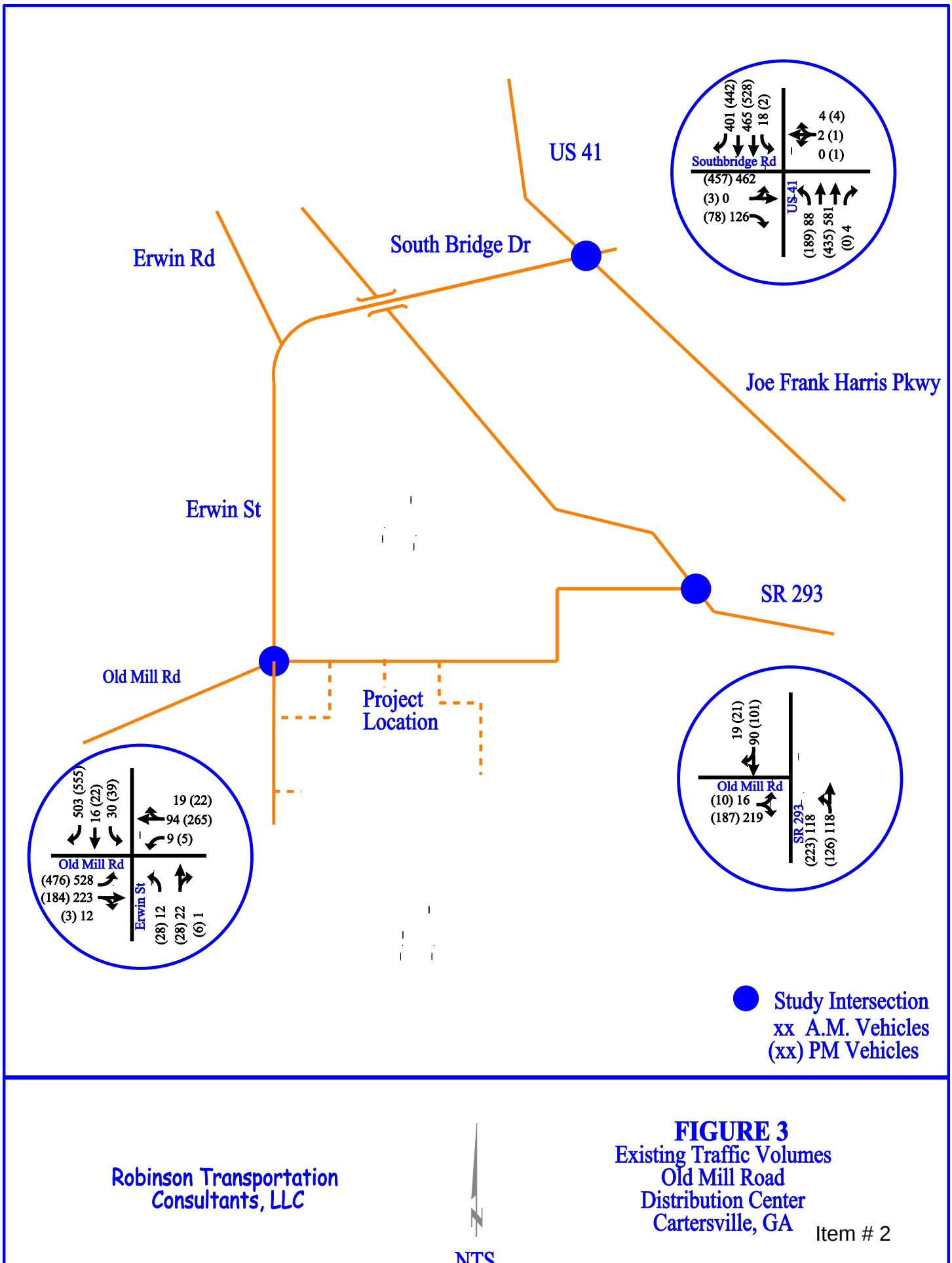
Robinson Transportation
Consultants, LLC



NTS

FIGURE 2
Site Plan
Old Mill Road
Distribution Center
Cartersville, GA

Item # 2



The signalized intersection of Old Mill Road and Erwin Street is the intersection of two two-lane roadways that widen out at the intersection to provide left turn lanes on all four approaches. In addition there is a channelized southbound right on Erwin Street. The heaviest movement at this intersection is the eastbound left turn movement and southbound right turn lane which provides a bypass around the City of Cartersville from US 41 on the east side of the city to SR 61 and SR 113 on the west side of the city. With the existing peak hour traffic the intersection of Old Mill Road and Erwin Street operates at LOS B during both the a.m. and p.m. peak hours. This intersection is the main intersection for the access to the proposed distribution center since there will be driveway access to the site east and west of the intersection.

The intersection of South Bridge Drive and Joe Frank Harris Parkway (SR 3 / US 41) is the intersection of a 4-lane divided state highway with a two lane roadway. The eastbound approach of South Bridge Drive is a railroad overpass and is along a major route for trucks and vehicles to travel from the industrial area along Old Mill to I-75. With the existing peak hour traffic the intersection of South Bridge Drive and Joe Frank Harris Parkway operates at LOS C during both the a.m. and p.m. peak hours.

The third intersection is the unsignalized intersection of SR 293 and Old Mill Road. This intersection is a key intersection to the access to the site since the shorter route to southbound I-75 is by way of SR 293 utilizing several routes. This intersection is the intersection of two two-lane roads with northbound SR 293 widening at the intersection to provide a left turn lane. The eastbound Old Mill Road approach is stop sign controlled with northbound and southbound SR 293 being free flow. The eastbound Old Mill Road approach operates at LOS B during both the a.m. and p.m. peak hour.

Background Traffic

The Distribution Center is not proposed to be opened and in operation until 2018. Therefore to show the impact of the Distribution Center existing traffic needs to be increased by the anticipated growth in traffic during the three years from 2015 to 2018. The growth in traffic is related to the anticipated growth in population within the area. The City Cartersville Comprehensive Master Plan 2030 projects that the population will increase by 111% over the next 25 years which a 3% growth rate per year.

Project Trip Generation

In order to estimate the impact of the proposed Distribution Center on the roadway network, the number of trips to be generated by the site needs to be calculated. Trip Generation 9th Edition published by the Institute of Transportation Engineers was used to determine the number of new trips that will be generated

by the Distribution Center. The Trip Generation Manual has several different land uses that they have determined the trip generation rates. The land use that was used for this development is High-Cube Warehouse Distribution Center. Based on this land use the 1,000,000 square foot Old Mill Distribution Center will generate 1,680 trips per day. During the A.M. peak hour the development will generate 140 trips with 99 vehicles entering and 41 vehicles exiting. 160 trips will be generated during the P.M. peak hour with 59 trips entering and 101 trips exiting. In the trip generation manual it states that the percentage of trucks could range from 9% to 29% to provide a conservative analysis it was assumed that the truck percentage would be 29%.

The trips that were determined by the Trip Generation was distributed on the road network as shown in Figure 4, Trip Distribution. The distribution of the trips was based on the locations of potential employees and the routes to the major highways such as US 41 and I-75. The shortest route to southbound I-75 and US 41 southbound is to use SR 293. The shortest route to northbound I-75 and US 41 is to South Bridge Drive to US 41. The new trips were distributed along the road network based on the distribution provided in Figure 4, Trip Generation and shown in Figure 5, Project Trips. The total anticipated trips on the road network in the opening year of the project is provided in Figure 6, 2018 Background Traffic + Project Traffic.

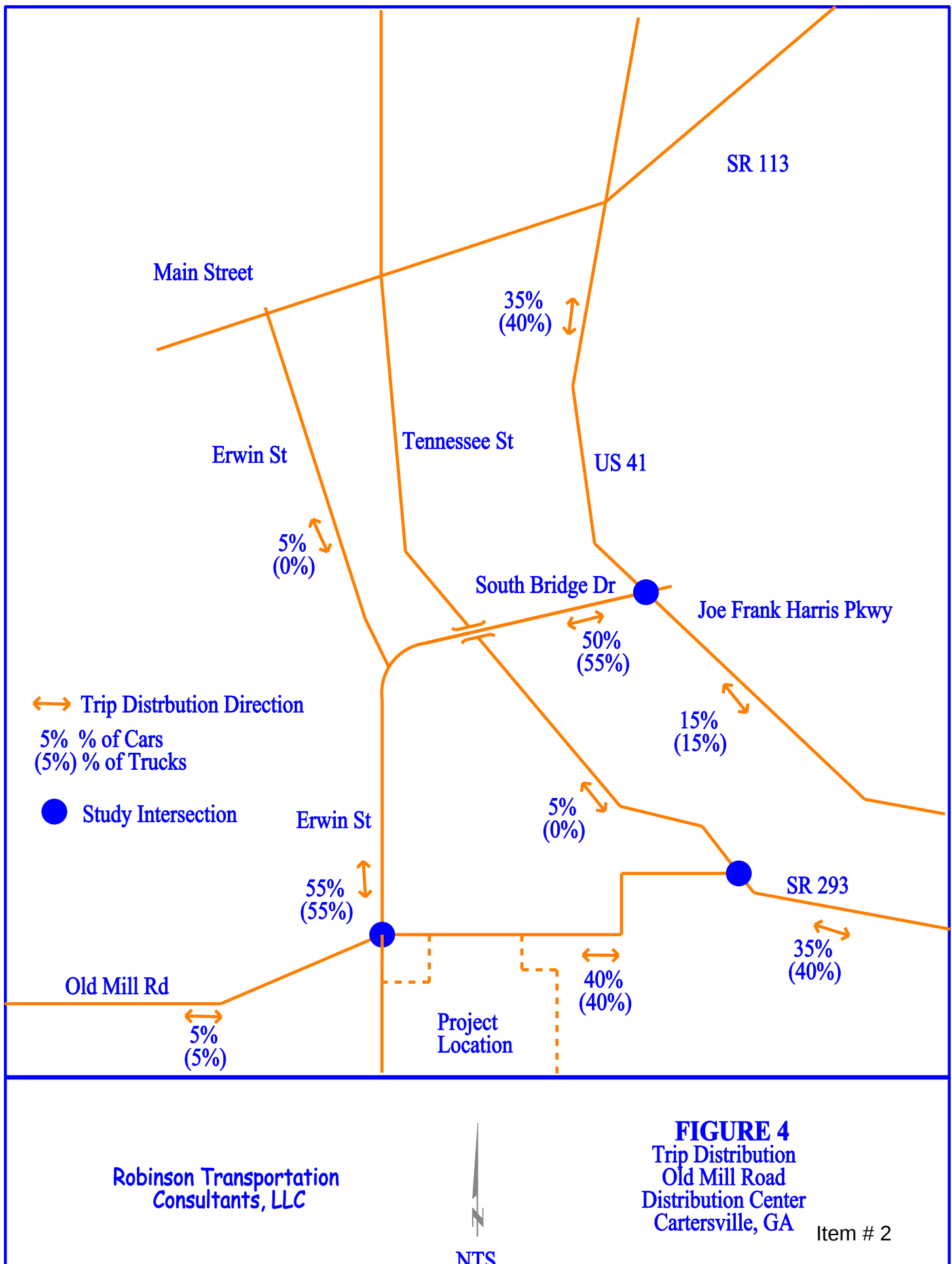
Future Traffic Analysis

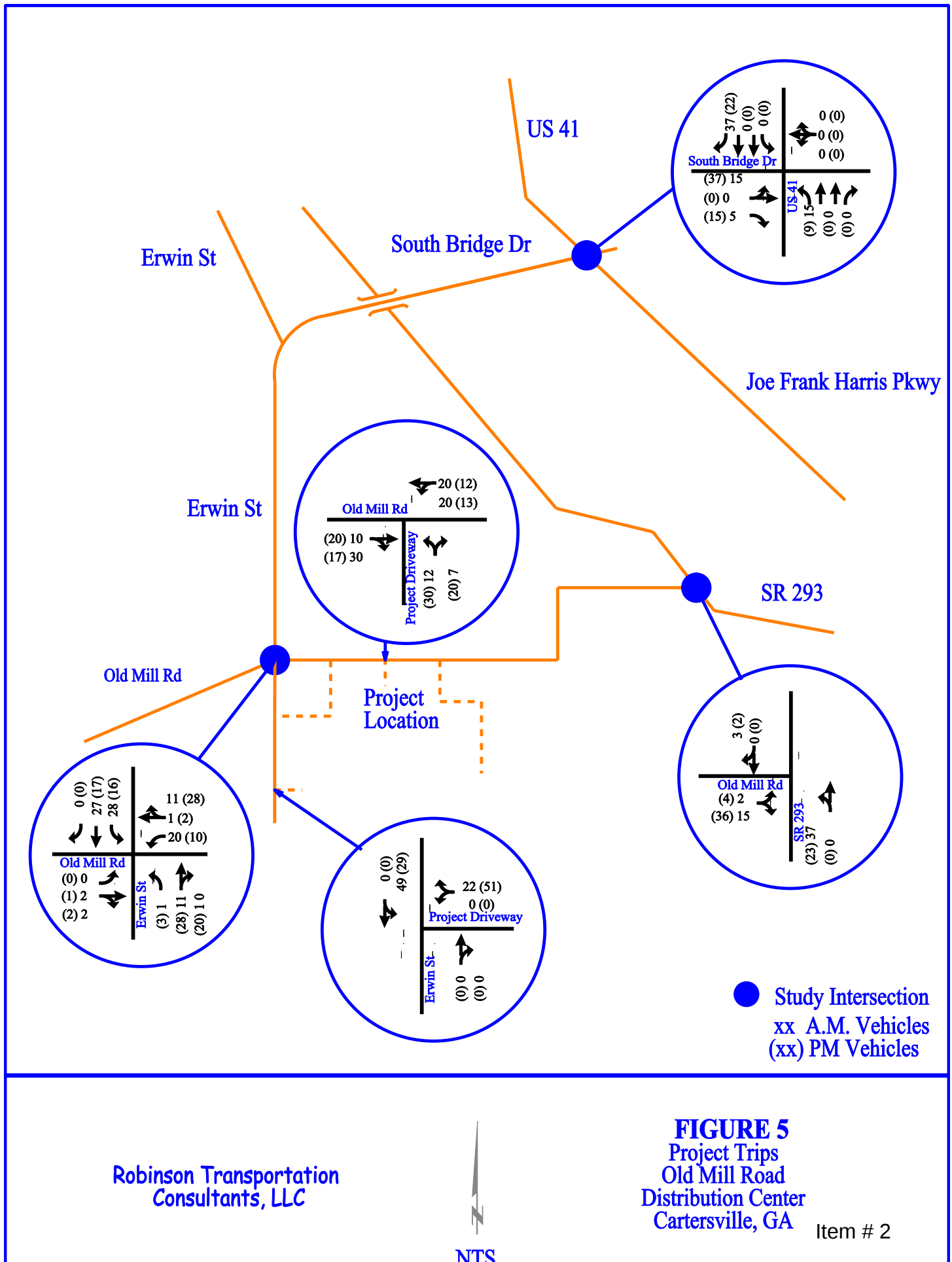
With the trips distributed to the network the anticipated impact to the traffic flow at the study intersections a capacity analysis was conducted using Synchro. The results of the Synchro analysis for 2018 traffic with and without the project is shown below in Table 1. The truck percentages were increased at the key turning movement volumes to reflect the truck traffic.

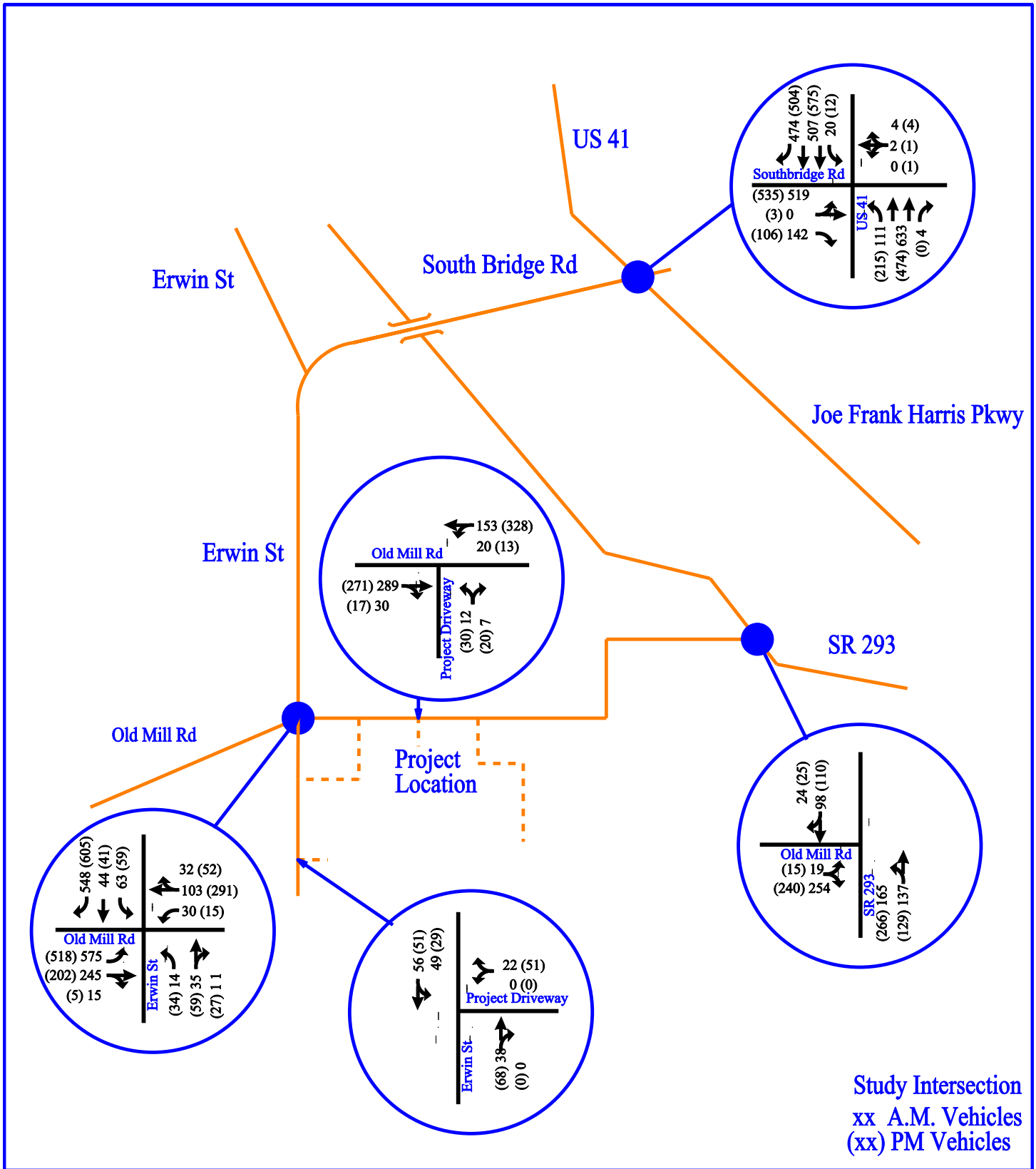
Table 1
Level of Service Analysis

Intersection	A.M. Peak Hour			P.M. Peak Hour		
	2015	2018	2018 w/ Project	2015	2018	2018 w/ Project
Old Mill Rd at Erwin St	B	B	B	B	B	C
Old Mill Rd at SR 293*	B	B	B	B	B	B
South Bridge Dr at US 41	C	C	C	C	D	D

* LOS at Old Mill Road and SR 293 is the LOS for the Eastbound approach since this intersection is stop sign controlled.







Robinson Transportation
Consultants, LLC



FIGURE 6
2018 Background + Project Traffic
Old Mill
Distribution Center
Cartersville, GA Item # 2

At the intersection of Erwin Street and Old Mill Road the LOS will be LOS B during the A.M. peak with and without the project in 2018; however; it will be reduced from LOS B to LOS C with the project during the P.M. The intersection with the project will still be working efficient and no improvements will be required.

The LOS for the intersection of Old Mill Road and SR 293 is based on the eastbound approach which is stop signed controlled. The eastbound approach will operate at LOS B in 2018 during the A.M. and P.M. peak hours with and without the project. The LOS analysis indicates that this intersection will operate efficiently with the present configuration and no improvements will be needed with the project implementation.

The intersection of US 41 and South Bridge Drive will operate at LOS C in 2018 with and without the project. During the P.M.; however; the LOS will be reduced to LOS D in 2018 without the project and with the project. To improve the intersection to LOS C the left turns would need to be made from two lanes. With the existing intersection configuration an efficient way of achieving LOS C would be to convert the exclusive right turn lane into a combined lane for the left turn, through and right turn movements and converting the existing left turn and through lane to an exclusive left turn lane. This configuration operates during the P.M. peak at LOS C without and with the project.

Driveway Analysis

Old Mill Distribution Center has a main driveway both on Old Mill Road and Erwin Street. The Erwin Street driveway will be the main truck access into and out of the complex. A capacity analysis was conducted for both driveways. During the A.M. and P.M. peak hours the Erwin Street driveway will operate at LOS A. The Old Mill Road entrance will operate at LOS B during the A.M. and LOS C during the P.M. peak hour.

Based on the capacity analysis at the entrances should operate efficiently and require no improvements on Erwin Street or Old Mill Road. To confirm that a westbound left turn lane Old Mill Road was not needed at the project driveway a left-turn lane analysis was conducted. The left turn analysis was based on the National Cooperative Highway Research Program (NCHRP) "Report 457 Evaluating Intersection Improvements: An Engineering Study Guide". The report includes a graphical procedure to determine if a left-turn lane is needed or based on the advancing traffic including the left-turn volume and the approaching traffic. The results of the analysis is that a left turn lane on Old Mill Road at the project driveway is not needed to have efficient traffic flow on Old Mill Road with the project. The left analysis for both the A.M. and P.M. Peak hours at Old Mill Road is provided the appendix.

Conclusion

The traffic analysis concludes that the proposed 1,000,000 square foot Old Mill Distribution Center will have minor impact on the traffic conditions at the three study intersections; Old Mill Road at Erwin Street, Old Mill Road at SR 293. and South Bridge Drive at US 41. The LOS at the intersection of Old Mill Road at Erwin Street during the P.M. peak hour will reduce from LOS B to LOS C. The intersection of South Bridge Drive and US 41 will be reduced to LOS D in 2018 due to increase in traffic without the project and will be LOS D with the project. The intersection can be improved to LOS C with minor lane changes to the eastbound approach to allow left turn out of two lanes.

Recommendations

This study indicates that the proposed development will have minor impact on the roadway and study intersections and only one intersection recommendation is proposed from the study which is required for the 2018 background traffic without the Old Mill Distribution Center.

- The one recommendation from the traffic analysis is that at the intersection of South Bridge Drive and US 41 the eastbound approach be modified to allow left turns to be made from the exclusive right turn lane since the eastbound and westbound approaches do not move at the same time. This would change the exiting exclusive right turn lane to a combined left turn, through and right turn lane. The existing left turn and through lane would be an exclusive left turn lane. This improvement require extending the taper into the lane and removal of the right turn channelization island.
- Another recommendation is based on field visit and public input. Old Mill road was relocated a few years ago to its present location. It initially went straight from Erwin Street to SR 293; however; now it routes around the Chemical Products Corporation site. Several GPS systems and internet maps still label the older alignment through the chemical plant as Old Mill Road; therefore; drivers not familiar to the relocated Old Mill Road alignment will turn into the Chemical Products Corporation driveway which has on a sign their Old Mill Road address. It is recommended that additional signing be installed to show drivers where the existing Old Mill Road alignment intersects with SR 293. This would included possibly installing an "Intersection Ahead" sign just north of the Chemical Products Corporation driveway with the a street name sign placard for Old Mill Road (lettering large enough to read prior to the driveway. In addition there is a "Truck Route" sign for both the northbound and southbound US 41 ramps to Old River Road directing drivers to SR 293. There are not any other truck route signs routing a driver to the truck Route. If the truck route is to take trucks to the industrial area along Old Mill Road it is recommended

that the truck route signing should be improved to include a sign at the intersection of SR 293 and Old River Road and at the intersection of Old Mill Road and SR 293. In addition an intermittent sign could be placed just south of the driveway for Chemical Products Cooperation with a through arrow to inform the drivers that they should not turn into the driveway.

Appendix A

Traffic Counts

Robinson Transportation Consultants, LLC

TMC Data
Old Mill Road & Erwin Street

09/24/15

Combined Cars + Trucks																	
Time Period	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	Vehicles
7:00 AM	87	59	3	149	4	17	7	28	3	9	0	12	7	4	87	98	287
7:15 AM	118	58	3	179	1	24	2	27	2	9	1	12	11	5	116	132	350
7:30 AM	158	49	2	209	2	30	2	34	3	3	0	6	10	4	149	163	412
7:45 AM	165	57	4	226	2	23	8	33	4	1	0	5	11	3	151	165	429
	528	223	12	763	9	94	19	122	12	22	1	35	39	16	503	558	1478
8:00 AM	84	43	4	131	2	34	2	38	4	3	0	7	6	4	73	83	259
8:15 AM	70	60	7	137	2	15	5	22	2	4	1	7	12	7	50	69	235
8:30 AM	57	45	2	104	0	29	1	30	2	4	3	9	8	3	52	63	206
8:45 AM	71	37	0	108	0	24	9	33	1	3	1	5	8	4	47	59	205
	282	185	13	480	4	102	17	123	9	14	5	28	34	18	222	274	905
Peak Hour																	
7:00 to 8:00 A.M.	528	223	12	763	9	94	19	122	12	22	1	35	39	16	503	558	1478
Trucks	0.8%	1.8%	33.3%	1.6%	44.4%	2.1%	0.0%	5.7%	0.0%	13.6%	0.0%	8.6%	0	18.8%	1.2%	0.6%	

Robinson Transportation Consultants, LLC

TMC Data

Old Mill Road & Erwin Street

09/24/15

Combined Cars + Trucks																	
	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	Vehicles
4:00 PM	111	46	2	159	2	53	11	66	3	11	1	15	9	2	148	159	399
4:15 PM	73	36	3	112	3	62	13	78	3	5	1	9	4	1	90	95	294
4:30 PM	89	36	2	127	2	40	3	45	6	11	4	21	4	6	100	110	303
4:45 PM	111	46	1	158	3	62	5	70	3	3	1	7	3	4	124	131	366
	384	164	8	556	10	217	32	259	15	30	7	52	20	13	462	495	1362
5:00 PM	163	60	0	223	1	71	10	82	12	12	3	27	8	4	139	151	483
5:15 PM	81	44	0	125	0	59	2	61	9	6	0	15	6	4	149	159	360
5:30 PM	121	34	2	157	1	73	5	79	4	7	2	13	13	10	143	166	415
5:45 PM	85	30	0	115	1	72	7	80	5	3	2	10	6	3	123	132	337
	450	168	2	620	3	275	24	302	30	28	7	65	33	21	554	608	1595
Peak Hour																	
4:45 to 5:45 P.M.	476	184	3	663	5	265	22	292	28	28	6	62	30	22	555	607	1624
	3.6%	3.3%	0.0%	3.5%	20.0%	5.7%	9.1%	6.2%	7.1%	10.7%	0.0%	8.1%	6.7%	18.2%	2.7%	3.5%	

Robinson Transportation Consultants, LLC

TMC Data

Old Mill Road & Erwin Street

09/24/15

Combined Cars + Trucks																	
	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	Vehicles
4:00 PM	111	46	2	159	2	53	11	66	3	11	1	15	9	2	148	159	399
4:15 PM	73	36	3	112	3	62	13	78	3	5	1	9	4	1	90	95	294
4:30 PM	89	36	2	127	2	40	3	45	6	11	4	21	4	6	100	110	303
4:45 PM	111	46	1	158	3	62	5	70	3	3	1	7	3	4	124	131	366
	384	164	8	556	10	217	32	259	15	30	7	52	20	13	462	495	1362
5:00 PM	163	60	0	223	1	71	10	82	12	12	3	27	8	4	139	151	483
5:15 PM	81	44	0	125	0	59	2	61	9	6	0	15	6	4	149	159	360
5:30 PM	121	34	2	157	1	73	5	79	4	7	2	13	13	10	143	166	415
5:45 PM	85	30	0	115	1	72	7	80	5	3	2	10	6	3	123	132	337
	450	168	2	620	3	275	24	302	30	28	7	65	33	21	554	608	1595
Peak Hour																	
4:45 to 5:45 P.M.	476	184	3	663	5	265	22	292	28	28	6	62	30	22	555	607	1624
	3.6%	3.3%	0.0%	3.5%	20.0%	5.7%	9.1%	6.2%	7.1%	10.7%	0.0%	8.1%	6.7%	18.2%	2.7%	3.5%	

Robinson Transportation Consultants, LLC

TMC Data

Old Mill Road & SR 293

10/06/15

Combined Cars + Trucks																	
Time Period	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	Running
7:00 AM	4	0	56	60	0	0	0	0	14	8	0	22	0	11	9	20	102
7:15 AM	3	0	40	43	0	0	0	0	34	10	0	44	0	17	4	21	108
7:30 AM	5	0	58	63	0	0	0	0	36	31	0	67	0	32	7	39	169
7:45 AM	4	0	61	65	0	0	0	0	29	32	0	61	0	16	2	18	144
	16	0	215	231	0	0	0	0	113	81	0	194	0	76	22	98	523
8:00 AM	1	0	55	56	0	0	0	0	27	28	0	55	0	21	4	25	136
8:15 AM	6	0	45	51	0	0	0	0	26	27	0	53	0	21	6	27	131
8:30 AM	3	0	53	56	0	0	0	0	23	24	0	47	0	17	2	19	122
8:45 AM	2	0	26	28	0	0	0	0	19	21	0	40	0	11	0	11	79
	12	0	179	191	0	0	0	0	95	100	0	195	0	70	12	82	468
Peak Hour																	
7:30 to 8:30 A.M.	16	0	219	235	0	0	0	0	118	118	0	236	0	90	19	109	580
Trucks	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	5.1%	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	

Robinson Transportation Consultants, LLC

TMC Data

South Bridge Dr & US 41

09/24/15

Combined Cars + Trucks																	
Time Period	Eastbound Approach				Westbound Approach				Northbound Approach				Southbound Approach				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	Vehicles
7:00 AM	70	0	31	31	0	0	0	0	15	78	0	93	4	109	74	187	311
7:15 AM	102	0	34	34	2	0	0	2	15	96	0	111	1	124	97	222	369
7:30 AM	139	0	24	24	0	0	0	0	30	117	2	149	2	121	139	262	435
7:45 AM	133	3	32	35	0	0	0	0	23	124	2	149	7	130	106	243	427
	444	3	121	124	2	0	0	2	83	415	4	502	14	484	416	914	1542
8:00 AM	88	0	36	124	0	0	0	0	20	98	0	118	8	90	59	157	399
8:15 AM	69	0	29	98	0	1	1	2	18	87	0	105	2	115	59	176	381
8:30 AM	60	1	31	92	0	1	0	1	16	108	1	125	13	97	43	153	371
8:45 AM	45	2	20	67	0	0	3	3	21	86	5	112	14	107	42	163	345
	0	3	116	119	0	2	4	6	75	379	6	460	37	409	203	649	1234
Peak Hour 7:15 to 8:15 A.M.	221 4.1%	3 0.0%	126 1.6%	217 5.1%	2 0.0%	0 0.0%	0 0.0%	2 0.0%	88 2.3%	435 0.7%	4 0.0%	527 0.9%	18 0.0%	465 2.6%	401 2.2%	884 2.4%	1630

Robinson Transportation Consultants, LLC

TMC Data

South Bridge Dr & US 41

09/24/15

Combined Cars + Trucks																	
Time Period	Eastbound				Westbound Approach				Northbound Approach				Southbound Approach				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	111	0	13	124	0	0	1	1	35	142	1	178	1	124	98	223	526
4:15 PM	67	0	15	82	0	0	1	1	24	138	1	163	2	108	81	191	437
4:30 PM	66	0	20	86	1	1	1	3	35	144	0	179	2	132	70	204	472
4:45 PM	90	0	16	106	0	0	0	0	35	131	0	166	4	110	96	210	482
Total	334	0	64	398	1	1	3	5	129	555	2	686	9	474	345	828	1917
5:00 PM	147	0	26	173	1	1	1	3	39	167	0	206	1	150	101	252	634
5:15 PM	88	0	19	107	0	0	2	2	52	155	0	207	0	125	117	242	558
5:30 PM	117	0	19	136	0	0	0	0	59	134	0	193	1	130	110	241	570
5:45 PM	105	0	14	119	0	0	1	1	38	125	0	163	0	123	114	237	520
Total	457	0	78	535	1	1	4	6	188	581	0	769	2	528	442	972	2282
Peak Hour																	
5:00 to 6:00 PM	457	0	78	535	1	1	4	6	188	581	0	769	2	528	442	972	2282
% Trucks	2.2%		0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	2.2%	1.4%	0.0%	1.6%	0.0%	1.9%	0.9%	1.4%	

Appendix B

Snychro Analysis

HCM 2010 Signalized Intersection Summary 3: Erwin St & Old Mill Rd

Existing AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	538	223	12	9	94	19	12	22	1	39	16	503
Future Volume (veh/h)	538	223	12	9	94	19	12	22	1	39	16	503
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1828	1900	1319	1863	1900	1863	1698	1900	1863	1597	1863
Adj Flow Rate, veh/h	672	242	16	16	121	32	16	36	4	44	20	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.92	0.75	0.56	0.78	0.59	0.75	0.61	0.25	0.89	0.80	0.83
Percent Heavy Veh, %	2	2	2	44	2	2	2	13	13	2	19	2
Cap, veh/h	939	1186	78	387	477	126	266	174	19	249	185	183
Arrive On Green	0.27	0.70	0.70	0.34	0.34	0.34	0.12	0.12	0.12	0.12	0.12	0.00
Sat Flow, veh/h	1774	1696	112	791	1421	376	1386	1502	167	1362	1597	1583
Grp Volume(v), veh/h	672	0	258	16	0	153	16	0	40	44	20	0
Grp Sat Flow(s),veh/h/ln	1774	0	1808	791	0	1796	1386	0	1669	1362	1597	1583
Q Serve(g_s), s	13.1	0.0	3.0	0.8	0.0	3.7	0.6	0.0	1.3	1.8	0.7	0.0
Cycle Q Clear(g_c), s	13.1	0.0	3.0	0.8	0.0	3.7	1.3	0.0	1.3	3.1	0.7	0.0
Prop In Lane	1.00		0.06	1.00		0.21	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	939	0	1265	387	0	603	266	0	193	249	185	183
V/C Ratio(X)	0.72	0.00	0.20	0.04	0.00	0.25	0.06	0.00	0.21	0.18	0.11	0.00
Avail Cap(c_a), veh/h	1038	0	1503	446	0	739	559	0	546	537	523	518
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.8	0.0	3.1	13.4	0.0	14.4	24.2	0.0	23.9	25.3	23.6	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.5	0.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	1.5	0.2	0.0	1.9	0.2	0.0	0.6	0.7	0.3	0.0
LnGrp Delay(d),s/veh	8.9	0.0	3.2	13.5	0.0	14.6	24.2	0.0	24.4	25.6	23.8	0.0
LnGrp LOS	A		A	B		B	C		C	C	C	
Approach Vol, veh/h	930				169				56			
Approach Delay, s/veh	7.3				14.5				24.3			
Approach LOS	A				B				C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4		5		6		8		
Phs Duration (G+Y+Rc), s	47.2			12.4		21.7		25.5		12.4		
Change Period (Y+Rc), s	5.5			5.5		5.5		5.5		5.5		
Max Green Setting (Gmax), s	49.5			19.5		19.5		24.5		19.5		
Max Q Clear Time (g_c+I1), s	5.0			5.1		15.1		5.7		3.3		
Green Ext Time (p_c), s	2.7			0.3		1.1		2.3		0.3		
Intersection Summary												
HCM 2010 Ctrl Delay				10.0								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary 3: Erwin St & Old Mill Rd

Existing PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	476	184	3	5	265	22	28	28	6	30	22	555
Future Volume (veh/h)	476	184	3	5	265	22	28	28	6	30	22	555
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1845	1900	1583	1786	1900	1776	1740	1900	1776	1610	1845
Adj Flow Rate, veh/h	652	239	8	12	291	40	48	48	12	52	40	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Peak Hour Factor	0.73	0.77	0.38	0.42	0.91	0.55	0.58	0.58	0.50	0.58	0.55	0.92
Percent Heavy Veh, %	4	3	3	20	6	6	7	11	11	7	18	3
Cap, veh/h	774	1232	41	431	502	69	253	170	42	237	203	198
Arrive On Green	0.28	0.69	0.69	0.33	0.33	0.33	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	1740	1775	59	959	1538	211	1298	1344	336	1275	1610	1568
Grp Volume(v), veh/h	652	0	247	12	0	331	48	0	60	52	40	0
Grp Sat Flow(s),veh/h/ln	1740	0	1835	959	0	1749	1298	0	1681	1275	1610	1568
Q Serve(g_s), s	13.3	0.0	2.9	0.5	0.0	9.6	2.1	0.0	2.0	2.4	1.4	0.0
Cycle Q Clear(g_c), s	13.3	0.0	2.9	0.5	0.0	9.6	3.5	0.0	2.0	4.3	1.4	0.0
Prop In Lane	1.00		0.03	1.00		0.12	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	774	0	1273	431	0	571	253	0	212	237	203	198
V/C Ratio(X)	0.84	0.00	0.19	0.03	0.00	0.58	0.19	0.00	0.28	0.22	0.20	0.00
Avail Cap(c_a), veh/h	987	0	1633	501	0	700	502	0	535	482	513	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	3.3	14.1	0.0	17.1	25.5	0.0	24.2	26.2	24.0	0.0
Incr Delay (d2), s/veh	5.4	0.0	0.1	0.0	0.0	0.9	0.4	0.0	0.7	0.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	1.5	0.1	0.0	4.7	0.8	0.0	1.0	0.9	0.6	0.0
LnGrp Delay(d),s/veh	14.4	0.0	3.4	14.1	0.0	18.1	25.9	0.0	25.0	26.7	24.4	0.0
LnGrp LOS	B		A	B		B	C		C	C	C	
Approach Vol, veh/h	899					343		108		92		
Approach Delay, s/veh	11.4					17.9		25.4		25.7		
Approach LOS	B					B		C		C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	48.0		13.2		22.5	25.5	13.2					
Change Period (Y+Rc), s	5.5		5.5		5.5	5.5	5.5					
Max Green Setting (Gmax), s	54.5		19.5		24.5	24.5	19.5					
Max Q Clear Time (g_c+l1), s	4.9		6.3		15.3	11.6	5.5					
Green Ext Time (p_c), s	3.9		0.6		1.7	2.8	0.6					
Intersection Summary												
HCM 2010 Ctrl Delay	14.9											
HCM 2010 LOS	B											

HCM 2010 TWSC
2: SR 293 & Old Mill Rd

Existing AM Peak

Intersection							
Int Delay, s/veh	6						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Traffic Vol, veh/h	16	219	118	118	90	19	
Future Vol, veh/h	16	219	118	118	90	19	
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	-	75	-	-	-	
Veh in Median Storage, #	0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	67	90	82	92	70	68	
Heavy Vehicles, %	2	3	4	5	3	2	
Mvmt Flow	24	243	144	128	129	28	
Major/Minor	Minor2	Major1		Major2			
Conflicting Flow All	559	143	157	0	-	0	
Stage 1	143	-	-	-	-	-	
Stage 2	416	-	-	-	-	-	
Critical Hdwy	6.42	6.23	4.14	-	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.327	2.236	-	-	-	
Pot Cap-1 Maneuver	490	902	1411	-	-	-	
Stage 1	884	-	-	-	-	-	
Stage 2	666	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	440	902	1411	-	-	-	
Mov Cap-2 Maneuver	440	-	-	-	-	-	
Stage 1	884	-	-	-	-	-	
Stage 2	598	-	-	-	-	-	
Approach	EB	NB		SB			
HCM Control Delay, s	11.4	4.1		0			
HCM LOS	B						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1411	-	825	-	-		
HCM Lane V/C Ratio	0.102	-	0.324	-	-		
HCM Control Delay (s)	7.8	-	11.4	-	-		
HCM Lane LOS	A	-	B	-	-		
HCM 95th %tile Q(veh)	0.3	-	1.4	-	-		

HCM 2010 TWSC
2: SR 293 & Old Mill Rd

Existing PM Peak

Intersection

Int Delay, s/veh 5.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	10	187	223	126	101	21
Future Vol, veh/h	10	187	223	126	101	21
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	-	75	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	87	90	92	79	68
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	12	215	248	137	128	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	776	143	159	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	633	-	-	-	-	-
Critical Hdwy	6.42	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	366	902	1414	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	302	902	1414	-	-	-
Mov Cap-2 Maneuver	302	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	436	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	5.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1414	-	816	-	-
HCM Lane V/C Ratio	0.175	-	0.278	-	-
HCM Control Delay (s)	8.1	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.1	-	-

HCM 2010 Signalized Intersection Summary 3: US 41 & South Bridge Rd

Existing AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	462	3	126	2	0	0	88	435	4	18	465	401
Future Volume (veh/h)	462	3	126	2	0	0	88	435	4	18	465	401
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1776	1845	1863
Adj Flow Rate, veh/h	557	12	0	8	0	0	121	494	8	32	522	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.83	0.25	0.88	0.25	0.92	0.92	0.73	0.88	0.50	0.56	0.89	0.72
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	3	2
Cap, veh/h	644	14	587	29	0	0	350	1388	621	297	860	388
Arrive On Green	0.37	0.37	0.00	0.02	0.00	0.00	0.09	0.39	0.39	0.25	0.25	0.00
Sat Flow, veh/h	1738	37	1583	1774	0	0	1774	3539	1583	851	3505	1583
Grp Volume(v), veh/h	569	0	0	8	0	0	121	494	8	32	522	0
Grp Sat Flow(s),veh/h/ln	1776	0	1583	1774	0	0	1774	1770	1583	851	1752	1583
Q Serve(g_s), s	24.2	0.0	0.0	0.4	0.0	0.0	3.8	8.0	0.3	2.4	10.8	0.0
Cycle Q Clear(g_c), s	24.2	0.0	0.0	0.4	0.0	0.0	3.8	8.0	0.3	2.4	10.8	0.0
Prop In Lane	0.98		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	658	0	587	29	0	0	350	1388	621	297	860	388
V/C Ratio(X)	0.86	0.00	0.00	0.28	0.00	0.00	0.35	0.36	0.01	0.11	0.61	0.00
Avail Cap(c_a), veh/h	1165	0	1039	174	0	0	416	1975	884	407	1311	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.8	0.0	0.0	39.6	0.0	0.0	19.0	17.5	15.1	24.1	27.3	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0	5.1	0.0	0.0	0.6	0.2	0.0	0.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	0.0	0.0	0.2	0.0	0.0	1.9	3.9	0.1	0.6	5.3	0.0
LnGrp Delay(d),s/veh	27.3	0.0	0.0	44.7	0.0	0.0	19.6	17.6	15.1	24.3	28.0	0.0
LnGrp LOS	C			D			B	B	B	C	C	
Approach Vol, veh/h	569				8				623			
Approach Delay, s/veh	27.3				44.7				18.0			
Approach LOS	C				D				B			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4		6		8				
Phs Duration (G+Y+Rc), s	38.5			36.2		12.0		6.8				
Change Period (Y+Rc), s	6.5			6.0		4.5		5.5				
Max Green Setting (Gmax), s	45.5			53.5		10.5		8.0				
Max Q Clear Time (g_c+1), s	10.0			26.2		5.8		2.4				
Green Ext Time (p_c), s	7.6			4.0		0.1		6.1				
Intersection Summary												
HCM 2010 Ctrl Delay	24.2											
HCM 2010 LOS	C											

HCM 2010 Signalized Intersection Summary 3: US 41 & South Bridge Rd

Existing PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	457	0	78	1	1	4	188	581	0	2	528	442
Future Volume (veh/h)	457	0	78	1	1	4	188	581	0	2	528	442
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	586	0	0	4	4	8	235	668	0	4	600	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.78	0.25	0.75	0.25	0.25	0.50	0.80	0.87	0.92	0.50	0.88	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	615	0	549	13	13	25	357	1443	645	274	849	380
Arrive On Green	0.35	0.00	0.00	0.03	0.03	0.03	0.11	0.41	0.00	0.24	0.24	0.00
Sat Flow, veh/h	1774	0	1583	423	423	846	1774	3539	1583	781	3539	1583
Grp Volume(v), veh/h	586	0	0	16	0	0	235	668	0	4	600	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1692	0	0	1774	1770	1583	781	1770	1583
Q Serve(g_s), s	26.9	0.0	0.0	0.8	0.0	0.0	7.9	11.5	0.0	0.3	12.9	0.0
Cycle Q Clear(g_c), s	26.9	0.0	0.0	0.8	0.0	0.0	7.9	11.5	0.0	0.3	12.9	0.0
Prop In Lane	1.00		1.00	0.25		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	615	0	549	50	0	0	357	1443	645	274	849	380
V/C Ratio(X)	0.95	0.00	0.00	0.32	0.00	0.00	0.66	0.46	0.00	0.01	0.71	0.00
Avail Cap(c_a), veh/h	617	0	551	172	0	0	357	1464	655	278	870	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.6	0.0	0.0	39.6	0.0	0.0	20.5	18.0	0.0	24.2	29.0	0.0
Incr Delay (d2), s/veh	24.9	0.0	0.0	3.6	0.0	0.0	4.4	0.2	0.0	0.0	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	0.0	0.0	0.4	0.0	0.0	4.2	5.6	0.0	0.1	6.6	0.0
LnGrp Delay(d),s/veh	51.5	0.0	0.0	43.2	0.0	0.0	24.9	18.3	0.0	24.2	31.6	0.0
LnGrp LOS	D			D			C	B		C	C	
Approach Vol, veh/h		586			16			903			604	
Approach Delay, s/veh		51.5			43.2			20.0			31.5	
Approach LOS		D			D			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		40.5		34.9	14.0	26.5		8.0				
Change Period (Y+Rc), s		6.5		6.0	4.5	6.5		5.5				
Max Green Setting (Gmax), s		34.5		29.0	9.5	20.5		8.5				
Max Q Clear Time (g_c+l1), s		13.5		28.9	9.9	14.9		2.8				
Green Ext Time (p_c), s		8.2		0.1	0.0	3.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			32.2									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary 3: Erwin St & Old Mill Rd

2018 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	575	243	13	10	102	21	13	24	1	35	17	503
Future Volume (veh/h)	575	243	13	10	102	21	13	24	1	35	17	503
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1829	1900	1319	1863	1900	1863	1697	1900	1863	1597	1863
Adj Flow Rate, veh/h	719	264	17	18	131	36	17	39	4	39	21	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.92	0.75	0.56	0.78	0.59	0.75	0.61	0.25	0.89	0.80	0.83
Percent Heavy Veh, %	2	2	2	44	2	2	2	13	13	2	19	2
Cap, veh/h	942	1199	77	372	462	127	260	173	18	241	182	181
Arrive On Green	0.29	0.71	0.71	0.33	0.33	0.33	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1774	1700	109	775	1408	387	1385	1514	155	1358	1597	1583
Grp Volume(v), veh/h	719	0	281	18	0	167	17	0	43	39	21	0
Grp Sat Flow(s),veh/h/ln	1774	0	1810	775	0	1794	1385	0	1669	1358	1597	1583
Q Serve(g_s), s	14.6	0.0	3.3	1.0	0.0	4.2	0.7	0.0	1.4	1.6	0.7	0.0
Cycle Q Clear(g_c), s	14.6	0.0	3.3	1.0	0.0	4.2	1.4	0.0	1.4	3.1	0.7	0.0
Prop In Lane	1.00		0.06	1.00		0.22	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	942	0	1277	372	0	589	260	0	190	241	182	181
V/C Ratio(X)	0.76	0.00	0.22	0.05	0.00	0.28	0.07	0.00	0.23	0.16	0.12	0.00
Avail Cap(c_a), veh/h	1001	0	1470	430	0	722	545	0	534	521	511	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.1	0.0	3.1	14.1	0.0	15.2	24.9	0.0	24.5	25.9	24.2	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.1	0.1	0.0	0.3	0.1	0.0	0.6	0.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	1.7	0.2	0.0	2.1	0.3	0.0	0.7	0.6	0.3	0.0
LnGrp Delay(d),s/veh	10.5	0.0	3.2	14.1	0.0	15.4	25.0	0.0	25.1	26.2	24.5	0.0
LnGrp LOS	B		A	B		B	C		C	C	C	
Approach Vol, veh/h	1000				185				60			
Approach Delay, s/veh	8.4				15.3				25.1			
Approach LOS	A				B				C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4		5		6		8		
Phs Duration (G+Y+Rc), s	48.5			12.5		23.0		25.5		12.5		
Change Period (Y+Rc), s	5.5			5.5		5.5		5.5		5.5		
Max Green Setting (Gmax), s	49.5			19.5		19.5		24.5		19.5		
Max Q Clear Time (g_c+1), s	5.3			5.1		16.6		6.2		3.4		
Green Ext Time (p_c), s	3.0			0.3		0.9		2.5		0.4		
Intersection Summary												
HCM 2010 Ctrl Delay	11.0											
HCM 2010 LOS	B											

2018 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	518	200	3	6	289	24	31	31	7	33	24	605
Future Volume (veh/h)	518	200	3	6	289	24	31	31	7	33	24	605
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1845	1900	1583	1786	1900	1776	1741	1900	1776	1610	1845
Adj Flow Rate, veh/h	710	260	8	14	318	44	53	53	14	57	44	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Peak Hour Factor	0.73	0.77	0.38	0.42	0.91	0.55	0.58	0.58	0.50	0.58	0.55	0.92
Percent Heavy Veh, %	4	3	3	20	6	6	7	11	11	7	18	3
Cap, veh/h	780	1257	39	406	480	66	239	163	43	221	197	192
Arrive On Green	0.31	0.71	0.71	0.31	0.31	0.31	0.12	0.12	0.12	0.12	0.12	0.00
Sat Flow, veh/h	1740	1781	55	941	1536	213	1293	1328	351	1267	1610	1568
Grp Volume(v), veh/h	710	0	268	14	0	362	53	0	67	57	44	0
Grp Sat Flow(s),veh/h/ln	1740	0	1836	941	0	1749	1293	0	1679	1267	1610	1568
Q Serve(g_s), s	15.4	0.0	3.2	0.7	0.0	11.5	2.5	0.0	2.3	2.8	1.6	0.0
Cycle Q Clear(g_c), s	15.4	0.0	3.2	0.7	0.0	11.5	4.0	0.0	2.3	5.1	1.6	0.0
Prop In Lane	1.00		0.03	1.00		0.12	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	780	0	1296	406	0	546	239	0	206	221	197	192
V/C Ratio(X)	0.91	0.00	0.21	0.03	0.00	0.66	0.22	0.00	0.33	0.26	0.22	0.00
Avail Cap(c_a), veh/h	1127	0	1733	443	0	614	454	0	485	432	465	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.6	0.0	3.2	15.4	0.0	19.1	27.2	0.0	25.7	28.0	25.4	0.0
Incr Delay (d2), s/veh	8.2	0.0	0.1	0.0	0.0	2.3	0.5	0.0	0.9	0.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	0.0	1.6	0.2	0.0	5.9	0.9	0.0	1.1	1.0	0.7	0.0
LnGrp Delay(d),s/veh	17.7	0.0	3.3	15.4	0.0	21.4	27.7	0.0	26.6	28.6	25.9	0.0
LnGrp LOS	B		A	B		C	C		C	C	C	
Approach Vol, veh/h		978			376			120			101	
Approach Delay, s/veh		13.8			21.2			27.1			27.5	
Approach LOS		B			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		50.7		13.3	25.2	25.5		13.3				
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s		60.5		18.5	32.5	22.5		18.5				
Max Q Clear Time (g_c+l1), s		5.2		7.1	17.4	13.5		6.0				
Green Ext Time (p_c), s		4.3		0.7	2.3	2.6		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			17.4									
HCM 2010 LOS			B									

HCM 2010 TWSC
2: SR 293 & Old Mill Rd

2018 AM Peak

Intersection

Int Delay, s/veh 6.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	17	234	129	129	98	21
Future Vol, veh/h	17	234	129	129	98	21
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	-	75	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	90	82	92	70	68
Heavy Vehicles, %	2	3	4	5	3	2
Mvmt Flow	25	260	157	140	140	31

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	610	155	171 0
Stage 1	155	-	- -
Stage 2	455	-	- -
Critical Hdwy	6.42	6.23	4.14 -
Critical Hdwy Stg 1	5.42	-	- -
Critical Hdwy Stg 2	5.42	-	- -
Follow-up Hdwy	3.518	3.327	2.236 -
Pot Cap-1 Maneuver	458	888	1394 -
Stage 1	873	-	- -
Stage 2	639	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	406	888	1394 -
Mov Cap-2 Maneuver	406	-	- -
Stage 1	873	-	- -
Stage 2	567	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	11.9	4.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1394	-	803	-	-
HCM Lane V/C Ratio	0.113	-	0.355	-	-
HCM Control Delay (s)	7.9	-	11.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	1.6	-	-

HCM 2010 TWSC
2: SR 293 & Old Mill Rd

2018 PM Peak

Intersection

Int Delay, s/veh 6.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	11	204	243	137	110	23
Future Vol, veh/h	11	204	243	137	110	23
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	-	75	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	87	90	92	79	68
Heavy Vehicles, %	2	3	3	2	2	2
Mvmt Flow	13	234	270	149	139	34

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	845	156	173 0
Stage 1	156	-	- -
Stage 2	689	-	- -
Critical Hdwy	6.42	6.23	4.13 -
Critical Hdwy Stg 1	5.42	-	- -
Critical Hdwy Stg 2	5.42	-	- -
Follow-up Hdwy	3.518	3.327	2.227 -
Pot Cap-1 Maneuver	333	887	1398 -
Stage 1	872	-	- -
Stage 2	498	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	269	887	1398 -
Mov Cap-2 Maneuver	269	-	- -
Stage 1	872	-	- -
Stage 2	402	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	11.6	5.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1398	-	790	-	-
HCM Lane V/C Ratio	0.193	-	0.314	-	-
HCM Control Delay (s)	8.2	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.7	-	1.3	-	-

2018 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	3	137	0	2	4	96	633	4	20	507	437
Future Volume (veh/h)	503	3	137	0	2	4	96	633	4	20	507	437
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1776	1845	1863
Adj Flow Rate, veh/h	606	12	0	0	2	4	132	719	8	36	570	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.83	0.25	0.88	0.25	0.92	0.92	0.73	0.88	0.50	0.56	0.89	0.72
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	3	2
Cap, veh/h	685	14	623	0	7	14	326	1385	620	244	891	402
Arrive On Green	0.39	0.39	0.00	0.00	0.01	0.01	0.09	0.39	0.39	0.25	0.25	0.00
Sat Flow, veh/h	1741	34	1583	0	556	1111	1774	3539	1583	691	3505	1583
Grp Volume(v), veh/h	618	0	0	0	0	6	132	719	8	36	570	0
Grp Sat Flow(s),veh/h/ln	1776	0	1583	0	0	1667	1774	1770	1583	691	1752	1583
Q Serve(g_s), s	28.8	0.0	0.0	0.0	0.0	0.3	4.5	13.8	0.3	3.7	12.9	0.0
Cycle Q Clear(g_c), s	28.8	0.0	0.0	0.0	0.0	0.3	4.5	13.8	0.3	5.3	12.9	0.0
Prop In Lane	0.98		1.00	0.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	699	0	623	0	0	21	326	1385	620	244	891	402
V/C Ratio(X)	0.88	0.00	0.00	0.00	0.00	0.29	0.40	0.52	0.01	0.15	0.64	0.00
Avail Cap(c_a), veh/h	1039	0	927	0	0	159	382	1852	829	314	1243	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.1	0.0	0.0	0.0	0.0	43.5	20.9	20.6	16.5	27.3	29.5	0.0
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.0	0.0	7.5	0.8	0.3	0.0	0.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.3	0.0	0.0	0.0	0.0	0.2	2.3	6.7	0.1	0.7	6.3	0.0
LnGrp Delay(d),s/veh	31.4	0.0	0.0	0.0	0.0	51.0	21.7	20.9	16.5	27.6	30.3	0.0
LnGrp LOS	C					D	C	C	B	C	C	
Approach Vol, veh/h		618			6			859			606	
Approach Delay, s/veh		31.4			51.0			21.0			30.1	
Approach LOS		C			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		41.3		41.0	12.2	29.1		6.6				
Change Period (Y+Rc), s		6.5		6.0	4.5	6.5		5.5				
Max Green Setting (Gmax), s		46.5		52.0	10.5	31.5		8.5				
Max Q Clear Time (g_c+l1), s		15.8		30.8	6.5	14.9		2.3				
Green Ext Time (p_c), s		10.1		4.2	0.1	7.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			26.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: US 41 & South Bridge Rd

2018 PM Peak w/ Dual Left
EB Dual Left Turn

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	500	0	85	1	1	4	205	633	0	3	575	482
Future Volume (veh/h)	500	0	85	1	1	4	205	633	0	3	575	482
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	641	0	0	4	4	8	256	728	0	6	653	0
Adj No. of Lanes	2	1	0	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.78	0.25	0.75	0.25	0.25	0.50	0.80	0.87	0.92	0.50	0.88	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	823	432	0	13	13	26	431	1719	769	320	1052	471
Arrive On Green	0.23	0.00	0.00	0.03	0.03	0.03	0.13	0.49	0.00	0.30	0.30	0.00
Sat Flow, veh/h	3548	1863	0	423	423	846	1774	3539	1583	738	3539	1583
Grp Volume(v), veh/h	641	0	0	16	0	0	256	728	0	6	653	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1692	0	0	1774	1770	1583	738	1770	1583
Q Serve(g_s), s	12.1	0.0	0.0	0.7	0.0	0.0	6.6	9.5	0.0	0.4	11.4	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	0.7	0.0	0.0	6.6	9.5	0.0	0.4	11.4	0.0
Prop In Lane	1.00		0.00	0.25		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	823	432	0	52	0	0	431	1719	769	320	1052	471
V/C Ratio(X)	0.78	0.00	0.00	0.31	0.00	0.00	0.59	0.42	0.00	0.02	0.62	0.00
Avail Cap(c_a), veh/h	2433	1277	0	201	0	0	593	2452	1097	406	1461	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.7	0.0	0.0	33.9	0.0	0.0	14.5	11.9	0.0	17.8	21.6	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	3.4	0.0	0.0	1.3	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.0	0.4	0.0	0.0	3.3	4.7	0.0	0.1	5.6	0.0
LnGrp Delay(d),s/veh	27.4	0.0	0.0	37.3	0.0	0.0	15.8	12.1	0.0	17.8	22.2	0.0
LnGrp LOS	C			D			B	B		B	C	
Approach Vol, veh/h	641			16			984			659		
Approach Delay, s/veh	27.4			37.3			13.0			22.2		
Approach LOS	C			D			B			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4		6	8					
Phs Duration (G+Y+Rc), s	41.2			22.6		27.7	7.7					
Change Period (Y+Rc), s	6.5			6.0		6.5	5.5					
Max Green Setting (Gmax), s	49.5			49.0		29.5	8.5					
Max Q Clear Time (g_c+l1), s	11.5			14.1		13.4	2.7					
Green Ext Time (p_c), s	11.2			2.5		7.9	0.0					
Intersection Summary												
HCM 2010 Ctrl Delay			19.8									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
3: US 41 & South Bridge Rd

2018 PM Peak w/ Dual Left
EB Dual Left Turn

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary 3: Erwin St & Old Mill Rd

2018 AM Peak w/ Project

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	575	245	15	30	103	32	14	35	11	63	44	548
Future Volume (veh/h)	575	245	15	30	103	32	14	35	11	63	44	548
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1835	1900	1242	1857	1900	1377	1386	1900	1667	1267	1863
Adj Flow Rate, veh/h	719	266	20	54	132	54	19	57	44	71	55	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Peak Hour Factor	0.80	0.92	0.75	0.56	0.78	0.59	0.75	0.61	0.25	0.89	0.80	0.83
Percent Heavy Veh, %	2	2	2	53	2	2	38	24	24	14	50	2
Cap, veh/h	875	1126	85	322	372	152	237	123	95	220	214	268
Arrive On Green	0.29	0.67	0.67	0.30	0.30	0.30	0.17	0.17	0.17	0.17	0.17	0.00
Sat Flow, veh/h	1774	1686	127	726	1254	513	993	726	561	1153	1267	1583
Grp Volume(v), veh/h	719	0	286	54	0	186	19	0	101	71	55	0
Grp Sat Flow(s),veh/h/ln	1774	0	1813	726	0	1767	993	0	1287	1153	1267	1583
Q Serve(g_s), s	17.6	0.0	4.2	3.8	0.0	5.6	1.1	0.0	4.8	4.0	2.5	0.0
Cycle Q Clear(g_c), s	17.6	0.0	4.2	3.8	0.0	5.6	3.7	0.0	4.8	8.8	2.5	0.0
Prop In Lane	1.00		0.07	1.00		0.29	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	875	0	1210	322	0	524	237	0	218	220	214	268
V/C Ratio(X)	0.82	0.00	0.24	0.17	0.00	0.35	0.08	0.00	0.46	0.32	0.26	0.00
Avail Cap(c_a), veh/h	875	0	1331	371	0	642	357	0	372	359	367	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.4	0.0	4.4	18.0	0.0	18.6	25.9	0.0	25.2	29.2	24.3	0.0
Incr Delay (d2), s/veh	6.3	0.0	0.1	0.2	0.0	0.4	0.1	0.0	1.5	0.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	0.0	2.1	0.8	0.0	2.7	0.3	0.0	1.8	1.3	0.9	0.0
LnGrp Delay(d),s/veh	15.7	0.0	4.5	18.2	0.0	19.0	26.1	0.0	26.8	30.0	24.9	0.0
LnGrp LOS	B		A	B		B	C		C	C	C	
Approach Vol, veh/h	1005				240			120			126	
Approach Delay, s/veh	12.5				18.9			26.7			27.8	
Approach LOS	B				B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	50.5			16.9		25.0	25.5	16.9				
Change Period (Y+Rc), s	5.5			5.5		5.5	5.5	5.5				
Max Green Setting (Gmax), s	49.5			19.5		19.5	24.5	19.5				
Max Q Clear Time (g_c+11), s	6.2			10.8		19.6	7.6	6.8				
Green Ext Time (p_c), s	3.5			0.8		0.0	2.9	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay	16.0											
HCM 2010 LOS	B											

HCM 2010 Signalized Intersection Summary 3: Erwin St & Old Mill Rd

2018 PM Peak w/ Project

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	518	202	5	15	291	52	34	59	27	59	41	605
Future Volume (veh/h)	518	202	5	15	291	52	34	59	27	59	41	605
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	1827	1834	1900	1545	1760	1900	1652	1374	1900	1557	1462	1845
Adj Flow Rate, veh/h	691	262	7	20	320	69	45	79	36	79	55	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Peak Hour Factor	0.75	0.77	0.75	0.75	0.91	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	4	3	3	23	6	6	15	33	33	22	30	3
Cap, veh/h	745	1222	33	345	397	86	264	163	74	195	266	257
Arrive On Green	0.34	0.69	0.69	0.28	0.28	0.28	0.18	0.18	0.18	0.18	0.18	0.00
Sat Flow, veh/h	1740	1778	47	917	1404	303	1191	894	407	1064	1462	1411
Grp Volume(v), veh/h	691	0	269	20	0	389	45	0	115	79	55	0
Grp Sat Flow(s),veh/h/ln	1740	0	1825	917	0	1707	1191	0	1302	1064	1462	1411
Q Serve(g_s), s	24.3	0.0	4.6	1.3	0.0	17.8	2.8	0.0	6.7	6.1	2.7	0.0
Cycle Q Clear(g_c), s	24.3	0.0	4.6	1.3	0.0	17.8	5.5	0.0	6.7	12.7	2.7	0.0
Prop In Lane	1.00		0.03	1.00		0.18	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	745	0	1255	345	0	483	264	0	237	195	266	257
V/C Ratio(X)	0.93	0.00	0.21	0.06	0.00	0.81	0.17	0.00	0.49	0.41	0.21	0.00
Avail Cap(c_a), veh/h	1074	0	1939	515	0	800	323	0	301	247	338	327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.7	0.0	4.8	22.2	0.0	28.1	31.6	0.0	30.9	36.6	29.3	0.0
Incr Delay (d2), s/veh	10.3	0.0	0.1	0.1	0.0	3.2	0.3	0.0	1.5	1.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	0.0	2.3	0.3	0.0	8.9	0.9	0.0	2.5	1.9	1.1	0.0
LnGrp Delay(d),s/veh	27.0	0.0	4.9	22.2	0.0	31.3	31.9	0.0	32.5	38.0	29.7	0.0
LnGrp LOS	C		A	C		C	C		C	D	C	
Approach Vol, veh/h	960				409				160		134	
Approach Delay, s/veh	20.8				30.8				32.3		34.6	
Approach LOS	C				C				C		C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5		6		8			
Phs Duration (G+Y+Rc), s	63.4		20.8		34.1		29.3		20.8			
Change Period (Y+Rc), s	5.5		5.5		5.5		5.5		5.5			
Max Green Setting (Gmax), s	89.5		19.5		44.5		39.5		19.5			
Max Q Clear Time (g_c+1l), s	6.6		14.7		26.3		19.8		8.7			
Green Ext Time (p_c), s	4.7		0.6		2.3		4.0		1.0			
Intersection Summary												
HCM 2010 Ctrl Delay			25.5									
HCM 2010 LOS			C									

HCM 2010 TWSC
2: SR 293 & Old Mill Rd

2018 AM Peak W/ Project

Intersection						
Int Delay, s/veh	6.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	19	254	166	129	98	21
Future Vol, veh/h	19	254	166	129	98	21
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	-	75	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	90	82	92	70	68
Heavy Vehicles, %	2	4	10	5	3	2
Mvmt Flow	28	282	202	140	140	31
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	700	155	171	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	545	-	-	-	-	-
Critical Hdwy	6.42	6.24	4.2	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.336	2.29	-	-	-
Pot Cap-1 Maneuver	405	886	1359	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	886	1359	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.7	4.8		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1359	-	775	-	-	
HCM Lane V/C Ratio	0.149	-	0.401	-	-	
HCM Control Delay (s)	8.1	-	12.7	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.5	-	1.9	-	-	

HCM 2010 TWSC
2: SR 293 & Old Mill Rd

2018 PM Peak w/ Project

Intersection

Int Delay, s/veh 6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	15	240	266	137	110	25
Future Vol, veh/h	15	240	266	137	110	25
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	-	75	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	87	90	92	79	68
Heavy Vehicles, %	7	4	6	2	2	4
Mvmt Flow	18	276	296	149	139	37

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	898	158	176 0
Stage 1	158	-	- -
Stage 2	740	-	- -
Critical Hdwy	6.47	6.24	4.16 -
Critical Hdwy Stg 1	5.47	-	- -
Critical Hdwy Stg 2	5.47	-	- -
Follow-up Hdwy	3.563	3.336	2.254 -
Pot Cap-1 Maneuver	304	882	1376 -
Stage 1	858	-	- -
Stage 2	463	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	239	882	1376 -
Mov Cap-2 Maneuver	239	-	- -
Stage 1	858	-	- -
Stage 2	363	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	12.7	5.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1376	-	757	-	-
HCM Lane V/C Ratio	0.215	-	0.388	-	-
HCM Control Delay (s)	8.3	-	12.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.8	-	1.8	-	-

HCM 2010 Signalized Intersection Summary 3: US 41 & South Bridge Rd

2018 AM Peak w/Project

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	519	3	142	0	2	4	111	633	4	20	507	474
Future Volume (veh/h)	519	3	142	0	2	4	111	633	4	20	507	474
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1863	1900	1810	1863	1863	1863	1845	1810
Adj Flow Rate, veh/h	625	12	0	0	2	4	152	719	8	36	570	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.83	0.25	0.88	0.25	0.92	0.92	0.73	0.88	0.50	0.56	0.89	0.72
Percent Heavy Veh, %	2	2	3	2	2	2	5	2	2	2	3	5
Cap, veh/h	680	13	618	0	7	14	324	1414	633	256	934	410
Arrive On Green	0.39	0.39	0.00	0.00	0.01	0.01	0.08	0.40	0.40	0.27	0.27	0.00
Sat Flow, veh/h	1726	33	1568	0	556	1111	1723	3539	1583	725	3505	1538
Grp Volume(v), veh/h	637	0	0	0	0	6	152	719	8	36	570	0
Grp Sat Flow(s),veh/h/ln	1759	0	1568	0	0	1667	1723	1770	1583	725	1752	1538
Q Serve(g_s), s	31.9	0.0	0.0	0.0	0.0	0.3	5.6	14.2	0.3	3.7	13.2	0.0
Cycle Q Clear(g_c), s	31.9	0.0	0.0	0.0	0.0	0.3	5.6	14.2	0.3	5.5	13.2	0.0
Prop In Lane	0.98		1.00	0.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	693	0	618	0	0	21	324	1414	633	256	934	410
V/C Ratio(X)	0.92	0.00	0.00	0.00	0.00	0.29	0.47	0.51	0.01	0.14	0.61	0.00
Avail Cap(c_a), veh/h	796	0	710	0	0	153	374	2155	964	387	1568	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.7	0.0	0.0	0.0	0.0	45.4	21.6	21.0	16.8	27.7	29.8	0.0
Incr Delay (d2), s/veh	14.5	0.0	0.0	0.0	0.0	7.6	1.1	0.3	0.0	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	0.0	0.0	0.0	0.0	0.2	2.8	6.9	0.1	0.7	6.5	0.0
LnGrp Delay(d),s/veh	41.2	0.0	0.0	0.0	0.0	53.0	22.6	21.3	16.8	28.0	30.5	0.0
LnGrp LOS	D					D	C	C	B	C	C	
Approach Vol, veh/h		637			6			879			606	
Approach Delay, s/veh		41.2			53.0			21.5			30.3	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		43.6		42.6	12.3	31.2		6.6				
Change Period (Y+Rc), s		6.5		6.0	4.5	6.5		5.5				
Max Green Setting (Gmax), s		56.5		42.0	10.5	41.5		8.5				
Max Q Clear Time (g_c+l1), s		16.2		33.9	7.6	15.2		2.3				
Green Ext Time (p_c), s		10.7		2.7	0.1	9.5		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			30.0									
HCM 2010 LOS			C									

2018 PM Peak w/ Project Traffic

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	535	3	106	1	1	4	215	474	0	12	575	504
Future Volume (veh/h)	535	3	106	1	1	4	215	474	0	12	575	504
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1828	1827	1900	1863	1900	1827	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	686	12	0	4	4	8	269	545	0	24	653	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.78	0.25	0.75	0.25	0.25	0.50	0.80	0.87	0.92	0.50	0.88	0.90
Percent Heavy Veh, %	2	2	4	2	2	2	4	2	2	0	2	2
Cap, veh/h	723	13	656	12	12	23	332	1414	633	261	813	364
Arrive On Green	0.42	0.42	0.00	0.03	0.03	0.03	0.13	0.40	0.00	0.23	0.23	0.00
Sat Flow, veh/h	1712	30	1553	423	423	846	1740	3539	1583	875	3539	1583
Grp Volume(v), veh/h	698	0	0	16	0	0	269	545	0	24	653	0
Grp Sat Flow(s),veh/h/ln	1742	0	1553	1692	0	0	1740	1770	1583	875	1770	1583
Q Serve(g_s), s	46.2	0.0	0.0	1.1	0.0	0.0	13.6	13.1	0.0	2.6	20.8	0.0
Cycle Q Clear(g_c), s	46.2	0.0	0.0	1.1	0.0	0.0	13.6	13.1	0.0	2.6	20.8	0.0
Prop In Lane	0.98		1.00	0.25		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	736	0	656	47	0	0	332	1414	633	261	813	364
V/C Ratio(X)	0.95	0.00	0.00	0.34	0.00	0.00	0.81	0.39	0.00	0.09	0.80	0.00
Avail Cap(c_a), veh/h	786	0	701	120	0	0	372	1612	721	291	932	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	0.0	0.0	57.1	0.0	0.0	30.4	25.5	0.0	36.5	43.5	0.0
Incr Delay (d2), s/veh	20.0	0.0	0.0	4.3	0.0	0.0	11.5	0.2	0.0	0.2	4.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.2	0.0	0.0	0.6	0.0	0.0	7.6	6.4	0.0	0.6	10.7	0.0
LnGrp Delay(d),s/veh	53.3	0.0	0.0	61.4	0.0	0.0	41.9	25.7	0.0	36.6	48.1	0.0
LnGrp LOS	D			E			D	C		D	D	
Approach Vol, veh/h	698			16			814			677		
Approach Delay, s/veh	53.3			61.4			31.0			47.7		
Approach LOS	D			E			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	54.3			56.5			34.0			8.8		
Change Period (Y+Rc), s	6.5			6.0			6.5			5.5		
Max Green Setting (Gmax), s	54.5			54.0			31.5			8.5		
Max Q Clear Time (g_c+1), s	15.1			48.2			22.8			3.1		
Green Ext Time (p_c), s	9.4			2.3			4.7			0.0		
Intersection Summary												
HCM 2010 Ctrl Delay	43.4											
HCM 2010 LOS	D											

2018 PM Peak w/ Project Traffic
EB Dual Left Turn Lane

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	535	3	106	1	1	4	215	474	0	12	575	504
Future Volume (veh/h)	535	3	106	1	1	4	215	474	0	12	575	504
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1828	1900	1900	1863	1900	1827	1863	1863	1900	1863	1827
Adj Flow Rate, veh/h	695	0	0	4	4	8	269	545	0	24	653	0
Adj No. of Lanes	2	1	0	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.78	0.25	0.75	0.25	0.25	0.50	0.80	0.87	0.92	0.50	0.88	0.90
Percent Heavy Veh, %	4	2	2	2	2	2	4	2	2	0	2	4
Cap, veh/h	874	459	0	13	13	26	417	1677	750	344	996	437
Arrive On Green	0.25	0.00	0.00	0.03	0.03	0.03	0.13	0.47	0.00	0.28	0.28	0.00
Sat Flow, veh/h	3480	1828	0	423	423	846	1740	3539	1583	875	3539	1553
Grp Volume(v), veh/h	695	0	0	16	0	0	269	545	0	24	653	0
Grp Sat Flow(s),veh/h/ln	1740	1828	0	1692	0	0	1740	1770	1583	875	1770	1553
Q Serve(g_s), s	13.7	0.0	0.0	0.7	0.0	0.0	7.5	7.0	0.0	1.5	12.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.7	0.0	0.0	7.5	7.0	0.0	1.5	12.0	0.0
Prop In Lane	1.00		0.00	0.25		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	874	459	0	51	0	0	417	1677	750	344	996	437
V/C Ratio(X)	0.80	0.00	0.00	0.31	0.00	0.00	0.65	0.32	0.00	0.07	0.66	0.00
Avail Cap(c_a), veh/h	2271	1193	0	196	0	0	460	2189	979	449	1419	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.8	0.0	0.0	34.9	0.0	0.0	15.7	12.0	0.0	19.5	23.3	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.0	3.4	0.0	0.0	2.7	0.1	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	0.4	0.0	0.0	3.9	3.4	0.0	0.4	5.9	0.0
LnGrp Delay(d),s/veh	27.5	0.0	0.0	38.3	0.0	0.0	18.4	12.1	0.0	19.6	24.0	0.0
LnGrp LOS	C			D			B	B		B	C	
Approach Vol, veh/h		695			16			814			677	
Approach Delay, s/veh		27.5			38.3			14.2			23.9	
Approach LOS		C			D			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		41.4		24.5	14.2	27.2		7.7				
Change Period (Y+Rc), s		6.5		6.0	4.5	6.5		5.5				
Max Green Setting (Gmax), s		45.5		48.0	11.5	29.5		8.5				
Max Q Clear Time (g_c+I1), s		9.0		15.7	9.5	14.0		2.7				
Green Ext Time (p_c), s		9.3		2.7	0.2	6.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			21.5									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
3: US 41 & South Bridge Rd

2018 PM Peak w/ Project Traffic
EB Dual Left Turn Lane

User approved volume balancing among the lanes for turning movement.

Appendix C

Driveway Left Turn Analysis

Left Turn Lane Analysis Old Mill Road at Project Driveway A.M. Peak Hour

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

2-lane roadway (English)

INPUT

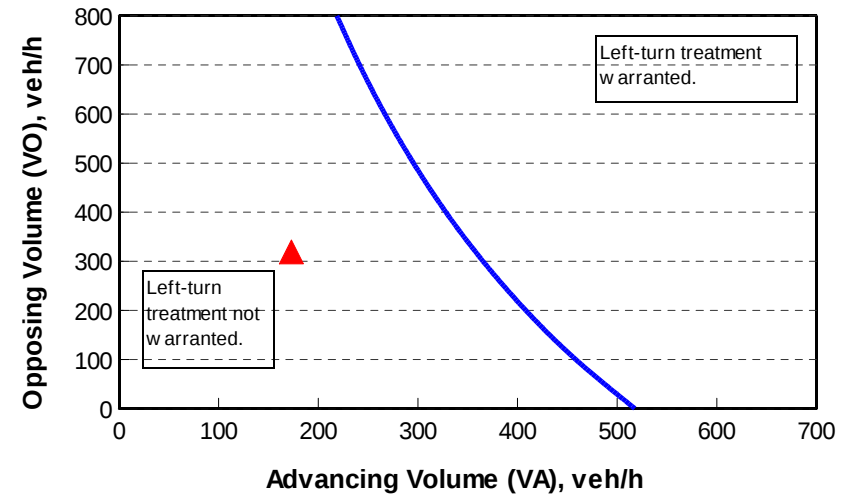
Variable	Value
85 th percentile speed, mph:	40
Percent of left-turns in advancing volume (V_A), %:	13%
Advancing volume (V_A), veh/h:	173
Opposing volume (V_O), veh/h:	319

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	358
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9



Left Turn Analysis Old Mill Road at Project Driveway P.M. Peak

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

2-lane roadway (English)

INPUT

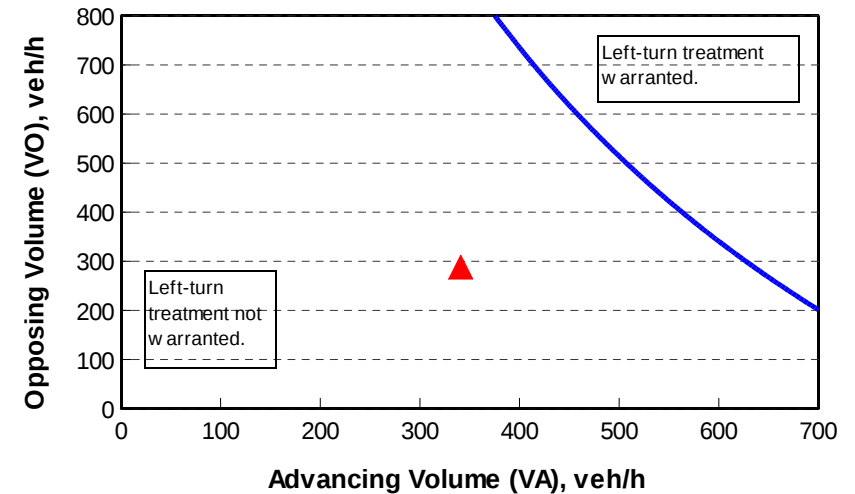
Variable	Value
85 th percentile speed, mph:	40
Percent of left-turns in advancing volume (V_A), %:	4%
Advancing volume (V_A), veh/h:	341
Opposing volume (V_O), veh/h:	288

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	635
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9



NWGRC

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Dalton Office: 503 West Waugh Street, Dalton, Georgia 30720 Phone (706) 272-2300 Fax (706) 272-2253

MEMORANDUM

To: Parties Notified of City of Cartersville Old Mill Industrial Development of Regional Impact (DRI 2510)

From: Lloyd Frasier, Executive Director

Date: September 8, 2015

Subject: Public Finding on City of Cartersville Old Mill Industrial Development of Regional Impact (DRI 2510)

The Northwest Georgia Regional Commission finds that the proposed development, with consideration of and implementation of the accompanying guidelines and comments from interested parties, where applicable, is consistent with local and regional plans. In making their local recommendations, the City of Cartersville is encouraged to review the comments and guidelines presented here.

Item # 2

City of Cartersville Old Mill Industrial DRI # 2510

Project Description

The proposed project will develop 1,000,000 SF of industrial space on 60 acres of land within the City limits of Cartersville, Georgia; the parcel address is 118 Old Mill Road, Cartersville, GA 30120. The 60 acres will be divided off of a total 152.56 acre parcel.

The project, being handled by TPA Group, is requesting rezoning for the property, currently R-20, to Industrial (preferably light industrial). The property is adjacent to industrial uses to the west and north. Plans to use the northern portion of the overall site would include a substantial buffer to the south to mitigate noise and other industrial effects to residential property. Please see attached parcel map.

The type of industrial development has not yet been determined.

While the type of industrial development has not been determined, it is estimated that the site will generate 531 Vehicle trips/day. This traffic will utilize Old Mill Road and US 41 to ultimately access I-75. A traffic study will be needed. The footprint of the building and parking will utilize 70% of the 60 acres; the site will require a stormwater management plan to be approved according to the City's stormwater management requirements. The City indicates that current water and wastewater capacity is sufficient.

Square Footage of Development

The project will develop 1,000,000 SF of industrial space on 60 acres of land within the City limits of Cartersville, Georgia. The building and parking will utilize approximately 70% of the site as impervious surfaces according to the initial concept plan.

Economic Impact

The estimated value of the site at build-out would be \$50,000,000; estimated local tax revenues to be generated would be approximately \$700,000. Approximately 531 am peak hour vehicle trips would be generated.

Location, Current Land Use

The proposed rezoning for the property would be from R-20 to Industrial zoning (preferably light industrial). Current use of the total property is as a horse farm; the southern portion of the property will not be rezoned at this time. The property is adjacent to industrial uses to the west and north. While uses to the south and east are residential, the proposed division of the property into the 60- acre industrial use parcel, with the remainder of the parcel keeping its

current use, would create a substantial buffer to the south to mitigate noise and other industrial effects to residential property. Please see attached parcel map.

Electrical Usage

No information on electrical usage is provided. The City of Cartersville is an electrical supplier.

Water Usage

Estimated annual water demand is 0.02 MGD and City of Cartersville has sufficient capacity.

Wastewater Disposal

Estimated annual wastewater demand is 0.02 MGD and City of Cartersville has sufficient capacity.

Solid Waste Impact

Solid Waste generation of 900 tons annually is anticipated. There is sufficient landfill capacity. No hazardous waste will be generated.

Stormwater Management

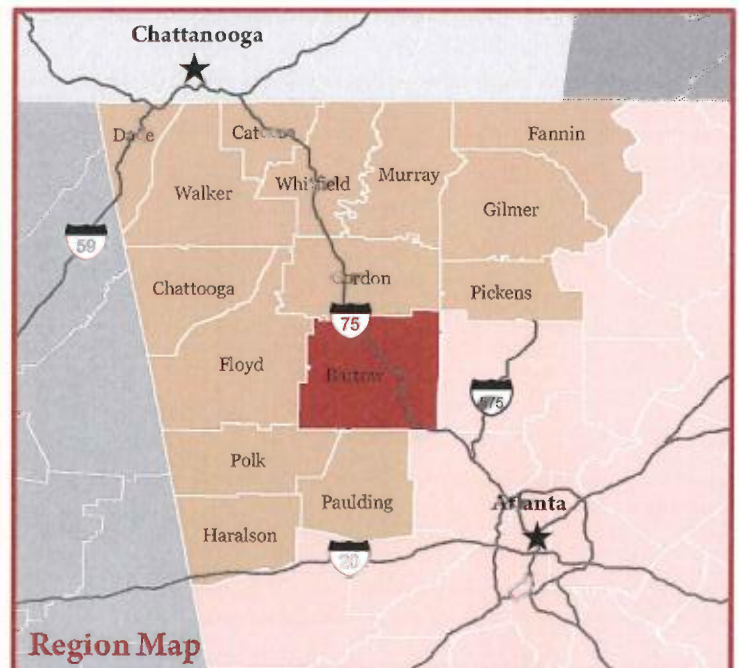
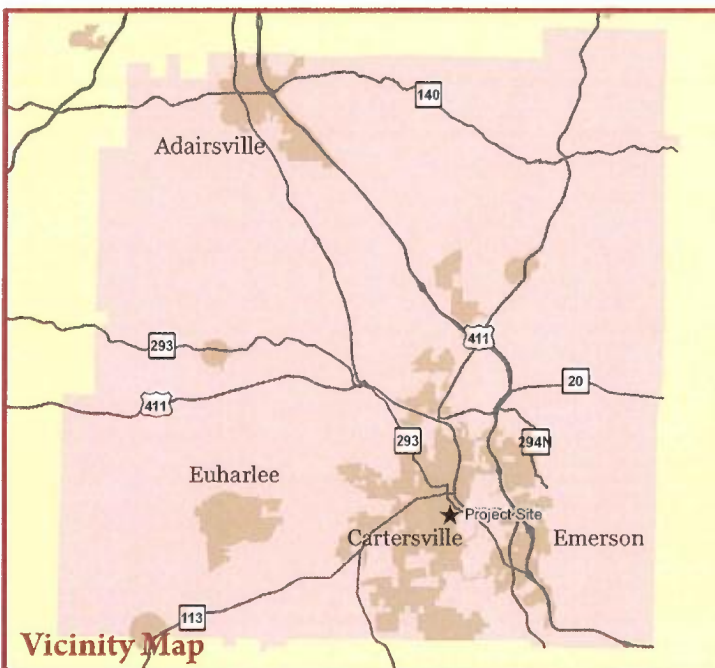
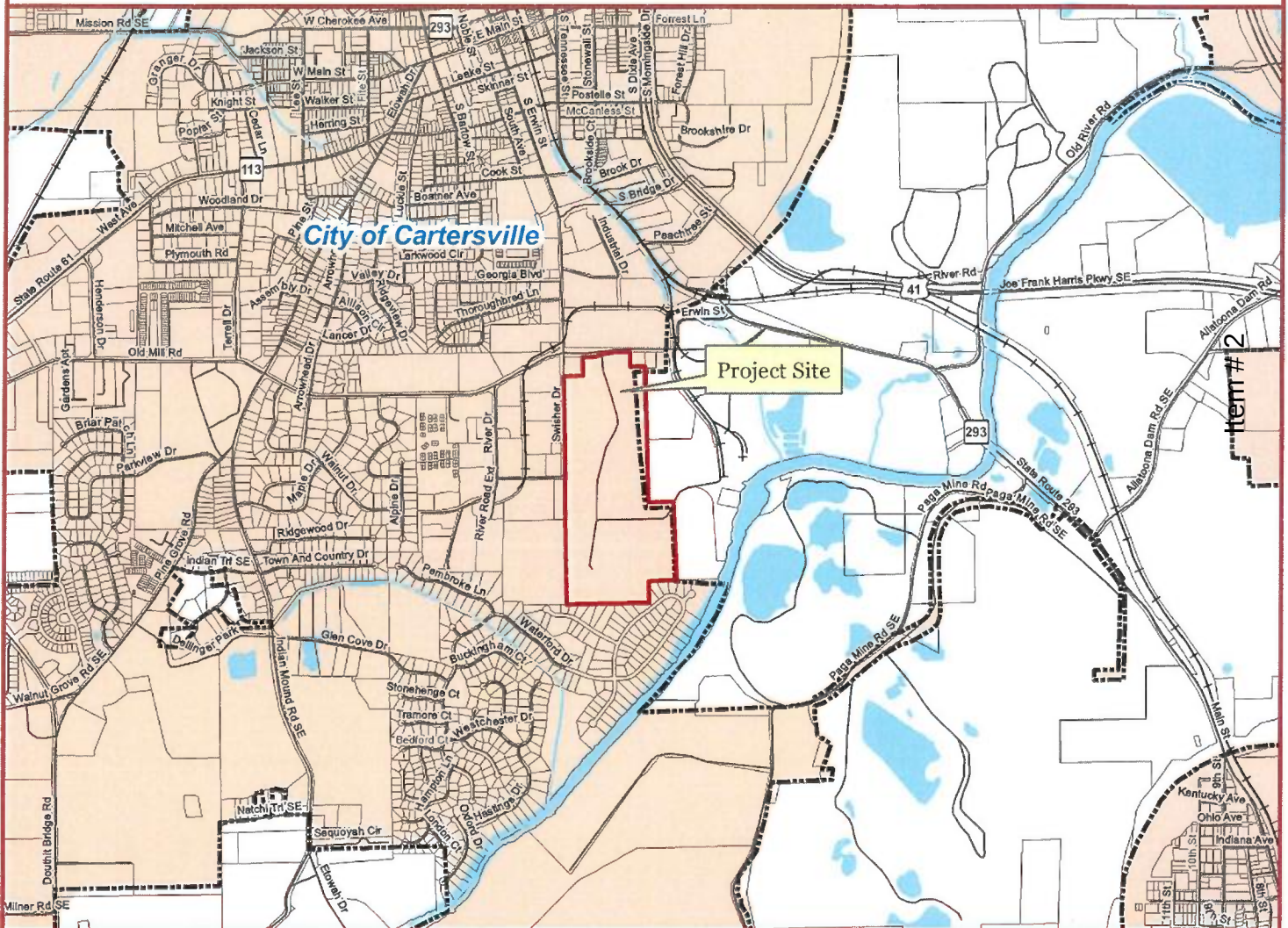
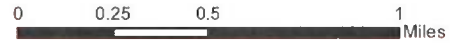
Approximately 70% of the site will be impervious surfaces. The development will follow the City of Cartersville's stormwater regulations, which follow the Georgia stormwater management manual, and include the development of ponds and other measures to meet stormwater quantity and quality control.

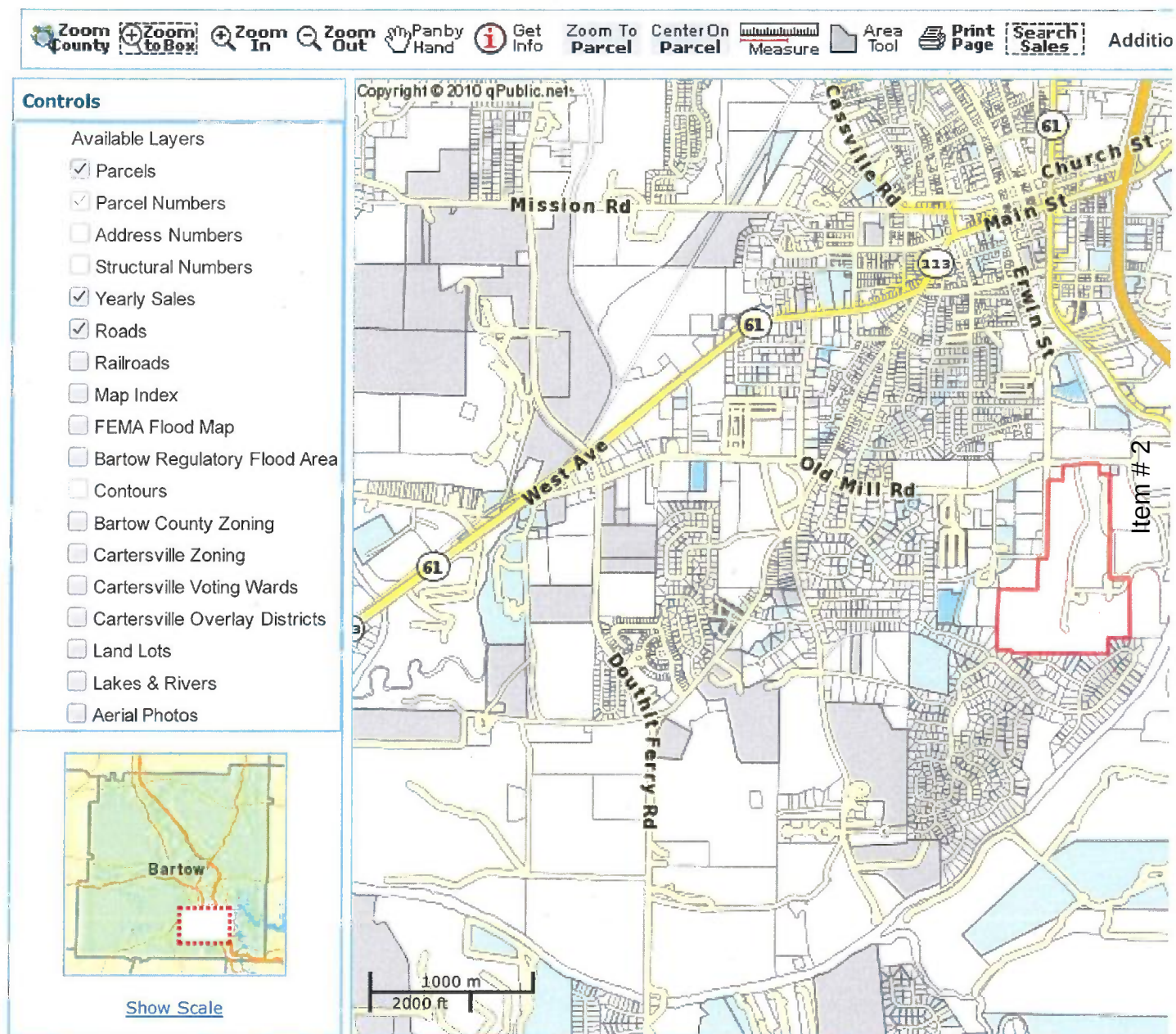
Transportation Impact

While the type of industrial development has not yet been determined, it is estimated that that the site will generate 531 Vehicle trips/day. This traffic will utilize Old Mill Road and US 41 to ultimately access I-75. A traffic study will be needed.

Please see the enclosed Concept Plan and related documentation as well as the DRI Initial and Additional Forms, and the list of Affected Parties Contacts.

118 Old Mill Road, Cartersville, GA 30120





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REVISIONS:	
DATE	DESCRIPTION
04/29/15	1
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	3
	4
	5
	6

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OLD MILL DISTRIBUTION
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CARTERSVILLE, GA

SHEET TITLE:
CONCEPTUAL
SITE PLAN
SHEET NO.:
C201

PROJECT NO.:
15055

COMMENTS FROM AFFECTED PARTIES

Julie Meadows

From: Waldrop, Grant <gWaldrop@dot.ga.gov>
Sent: Monday, August 31, 2015 2:07 PM
To: 'jmeadows@nwgrc.org'
Cc: Comer, DeWayne; Corson, Dee
Subject: RE: Request for Comments on City of Cartersville Old Mill Industrial DRI # 2510

Julie,

We have no comments, but we will need to review the traffic study once it is completed. It is possible that we will need to make some modifications to the intersection of South Bridge @ SR 3.

Thanks,

W. Grant Waldrop, P.E.
District Traffic Engineer
District 6
500 Joe Frank Harris Pkwy
Cartersville, Ga 30120
Office: (678) 721-5286
Cell: (404) 520-8427

Item # 2

From: Comer, DeWayne
Sent: Tuesday, August 25, 2015 3:01 PM
To: Waldrop, Grant
Subject: FW: Request for Comments on City of Cartersville Old Mill Industrial DRI # 2510

From: Julie Meadows [<mailto:jmeadows@nwgrc.org>]
Sent: Tuesday, August 25, 2015 12:06 PM
To: ahazell@gmrc.ga.gov; Alan.Giles@dnr.state.ga.us; bsnead@nwgrc.org; bchitwood@nwgrc.org; bhood@gordoncounty.org; becky.kelley@dnr.state.ga.us; bhickom@nwgrc.org; bjones@cityofcartersville.org; Marsh, Cherie; communications@cherokee.org; Chikita.M.Sanders@usace.army.mil; crobinson@paulding.gov; dan.forster@dnr.state.ga.us; comdevplanning@cobbcounty.org; daustin@paulding.gov; david.crass@dnr.state.ga.us; Davidp@mcn-nsn.gov; kingsga@bellsouth.net; dstone@nwgrc.org; Comer, DeWayne; elizabeth.shirk@dnr.state.ga.us; info@georgiaindiancouncil.org; apallone@emersoncityhall.com; mccordj@floydcountyga.org; ctywhite@comcast.net; jwatkins@cherokeega.com; jennifer.goodman@dnr.state.ga.us; jim.cooley@dnr.state.ga.us; jim.lathem@ga.usda.gov; jking@gordoncounty.org; jloughridge@gaswcc.org; jtuley@atlantaregional.com; jwest@dca.state.ga.us; jmeadows@nwgrc.org; kmcauliff@nwgrc.org; kmcburnett@emersoncityhall.com; maxeyl@floydcountyga.org; lfrasier@nwgrc.org; msantini@cartersvillega.gov; mdenton@polkga.org; mitch.bagley@aol.com; npope@pickenscountyga.gov; pmadison@adairsvillega.net; ptibbitts@paulding.gov; olsonp@bartowga.org; rmannino@cityofcartersville.org; rosborne@cityofcartersville.org; rjones@pickenscountyga.gov; robin_goodloe@fws.gov; sgrove@cityofcartersville.org; taylors@bartowga.org; Shiller@romea.us; SDunn@atlantaregional.com; sillst@bartowga.org; tsanders@cityofcartersville.org; dthayer@euharlee.com; Anna.Yellin@dnr.state.ga.us; yolasaun@nc-cherokee.com
Subject: Request for Comments on City of Cartersville Old Mill Industrial DRI # 2510

Julie Meadows

From: Yellin, Anna <Anna.Yellin@dnr.ga.gov>
Sent: Tuesday, September 08, 2015 4:26 PM
To: jmeadows@nwgrc.org
Subject: Environmental Review- DRI 2510
Attachments: ir_15918.pdf

Hello-

Please see attached Environmental Review for project in the City of Cartersville Old Mill Industrial DRI #2510, Bartow County, Georgia. If I can be of additional assistance, do not hesitate to contact me-

Thanks!
Anna

Anna Yellin
Environmental Review Coordinator, Nongame Conservation

Wildlife Resources Division
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Item # 2

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

WILDLIFE RESOURCES DIVISION

MARK WILLIAMS
COMMISSIONER

DAN FORSTER
DIRECTOR

September 08, 2015

Julie Meadows
Northwest Georgia Regional Commission
PO Box 1798
Rome, GA 30162

Subject: Known occurrences of natural communities, plants and animals of highest priority conservation status on or near City of Cartersville Old Mill Industrial DRI #2510, Bartow, Georgia

Dear Ms. Meadows:

This is in response to your request of August 25, 2015. Within a three mile radius of the project site, there are the following Natural Heritage Database occurrences

(Site Center: -84.791341, 34.147794, WGS84)

- Buchnera americana* (Bluehearts) [HISTORIC] approx. 2.6 mi SE of site
- US *Etheostoma scotti* (Cherokee Darter) approx. 2.0 mi SW of site
- US *Etheostoma scotti* (Cherokee Darter) approx. 3.0 mi NW of site
- US *Etheostoma scotti* (Cherokee Darter) approx. 2.3 mi NW of site
- US *Myotis septentrionalis* (Northern Myotis) approx. 1.9 mi SW of site
- Panax quinquefolius* (American Ginseng) approx. 3.0 mi SW of site
- Perimyotis subflavus* (Tri-colored Bat) approx. 1.8 mi S of site
- Perimyotis subflavus* (Tri-colored Bat) [HISTORIC] approx. 2.0 mi W of site
- GA *Sabatia capitata* (Cumberland Rose Gentian) approx. 2.5 mi E of site
- GA *Schisandra glabra* (Bay Star-vine) [HISTORIC] approx. 2.9 mi SE of site
- Villosa nebulosa* (Alabama Rainbow) [HISTORIC?] approx. 1.8 mi SW of site
- Davis Farm Cave approx. 2.5 mi SW of site
- Jordan Cave approx. 2.8 mi SE of site
- Ladd's Lime Cave #1 approx. 2.1 mi W of site
- Ladd's Lime Cave #2 approx. 2.1 mi W of site
- Ladd's Lime Cave #3 approx. 2.1 mi W of site
- Ladd's Lime Cave #4 approx. 2.1 mi W of site
- Ladd's Lime Cave #5 approx. 2.1 mi W of site
- Ladd's Lime Cave #6 approx. 2.1 mi W of site
- Ladd's Lime Cave #7 approx. 2.1 mi W of site
- Etowah River 4, Allatoona Lake (0315010410) [SWAP High Priority Watershed], approx. 2.9 mi NE of site

Pumpkinvine Creek (0315010411) [SWAP High Priority Watershed], approx. 0.9 mi SE of site

Etowah River 3 (0315010413) [SWAP High Priority Watershed], on site

Recommendations:

We have no records of high priority species or habitats within the project area. However, two federally listed species, *Etheostoma scotti* (Cherokee Darter) and *Myotis septentrionalis* (Northern Long-eared Bats) have been documented within three miles of the proposed project. To minimize potential impacts to these or other federally listed species, we recommend consultation with the United States Fish and Wildlife Service. In north Georgia, please contact Robin Goodloe (706-613-9493, ext.221 or Robin_Goodloe@fws.gov). Surveys for species of conservation concern should be conducted prior to commencement of construction.

The Northern Long-eared Bat (*Myotis septentrionalis*) was recently listed for federal protection with the Fish and Wildlife Service. This species has been declining at rapid rates from impacts of white-nose syndrome (WNS). Also of concern are the tracked tri-colored bats (*Perimyotis subflavus*), which has suffered a dramatic population decline in the last year. Trina Morris (Katrina.Morris@dnr.ga.gov) is available to answer questions related to bats and can give survey advice. Any clearing should be completed outside of the summer bat roosting season (October – March).

Please be aware that this project is also within three miles of state protected species. For information about these species, including survey recommendations, please visit our webpage at http://www.georgiawildlife.org/rare_species_profiles.

This project occurs within a high priority watershed. As part of the ongoing revision of Georgia's State Wildlife Action Plan, 165 high priority watersheds were identified to protect the best known populations of 168 high priority aquatic species. These watersheds were then prioritized by calculating a Global Significance Score (GSS), which was based upon the number of species identified in each watershed as well as the global rarity of each species. An additional 56 watersheds were designated as "significant" high priority watersheds, but were not further prioritized. Significant watersheds contained important coastal habitats, migratory corridors for anadromous species, recent occurrences or critical habitat for federally listed species, or occurred in a region of the state where high priority watersheds were poorly represented. Please refer to Appendix F of Georgia's State Wildlife Action Plan to find out more specific information about this high priority watershed.

We are concerned about stream habitats that could be impacted by construction activities. In order to protect aquatic habitats and water quality, we recommend that all machinery be kept out of streams during construction. We urge you to use stringent erosion control practices during construction activities. Further, we strongly advocate leaving vegetation intact within 100 feet of streams wherever possible, which will reduce inputs of sediments, assist with maintaining riverbank integrity, and provide shade and habitat for aquatic species. We realize that some trees may have to be removed, but recommend that shrubs and ground vegetation be left in place.

Item # 2

Consider constructing parking lots of porous asphalt, which can have economic and environmental benefits by aiding in storm-water management.

Disclaimer:

Please keep in mind the limitations of our database. The data collected by the Nongame Conservation Section comes from a variety of sources, including museum and herbarium records, literature, and reports from individuals and organizations, as well as field surveys by our staff biologists. In most cases the information is not the result of a recent on-site survey by our staff. Many areas of Georgia have never been surveyed thoroughly. Therefore, the Nongame Conservation Section can only occasionally provide definitive information on the presence or absence of rare species on a given site. Our files are updated constantly as new information is received. **Thus, information provided by our program represents the existing data in our files at the time of the request and should not be considered a final statement on the species or area under consideration.**

If you know of populations of highest priority species that are not in our database, please fill out the appropriate data collection form and send it to our office. Forms can be obtained through our web site (<http://www.georgiawildlife.com/node/1376>) or by contacting our office. If I can be of further assistance, please let me know.

Sincerely,



Anna Yellin
Environmental Review Coordinator

Data Available on the Nongame Conservation Section Website

- Georgia protected plant and animal profiles are available on our website. These accounts cover basics like descriptions and life history, as well as threats, management recommendations and conservation status. Visit <http://www.georgiawildlife.com/node/2721>.
- Rare species and natural community information can be viewed by Quarter Quad, County and HUC8 Watershed. To access this information, please visit our GA Rare Species and Natural Community Information page at: <http://www.georgiawildlife.com/conservation/species-of-concern?cat=conservation>.
- Downloadable files of rare species and natural community data by quarter quad and county are also available. They can be downloaded from: <http://www.georgiawildlife.com/node/1370>.

Item # 2

**REVIEW MEMORANDUM
DEVELOPMENTS OF REGIONAL IMPACT
(Former Executive Order 12372 Review)**

TO: Northwest Georgia Regional Commission
Rome Office
ATTN: Julianne Meadows
P.O. Box 1798
Rome, GA 30162-1798

FROM: Georgia DNR/EPD/Watershed Protection Branch
Non-Point Source Program, Floodplain Management Unit
ATTN: Alan J. Giles, CFM
2 Martin Luther King, Jr Drive, SE, Suite 1152 East
Atlanta, GA 30334-9000

PROJECT SPONSOR: City of Cartersville (Bartow County), Georgia,
DEVELOPER: TPA Group, Atlanta, Georgia

PROJECT: City of Cartersville Old Mill Industrial DRI # 2510: Construct a light industrial facility of about 1,000,000 SF on the northern 60-acre portion of a 152.56-acre parcel (Bartow County Board of Assessors account # 36373, parcel #C040-0001-001), the proposed building footprint and parking will use about 70-percent of the 60 acres, so a site stormwater management plan will need to be developed and approved by the City of Cartersville (located at 118 Old Mill Road SE, on both sides of Old Mill Farm Road, in Bartow County, as shown on the sponsor annotated maps)

FLOODPLAIN MGMT ID: GA150825001

DATE: 9-09-15

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This project is considered to be consistent with those state and /or regional goals, policies, plans, fiscal resources, criteria for development of regional impact, environmental impacts, federal executive orders, acts, and/or rules and regulations with which this organization is concerned. Review of the Flood Insurance Rate Map for Bartow County and incorporated areas (panel 268 G, revised September 28, 2007) along with sponsor provided narrative, maps, and DRI Forms, all indicate that the proposed project activities will not encroach on a federally delineated, Special Flood Hazard Area (SFHA) known as the area of the 1-percent annual chance flood event or 100-year floodplain. Because this project occurs in the Metropolitan North Georgia Water Planning District, the locally adopted flood damage prevention ordinance exceeds the National Flood Insurance Program minimum standards. These locally administered regulatory flood zones, shown on the Bartow county Board of Assessors online maps, were also reviewed. The sole area of encroachment that was identified occurred in the southeastern corner of the 152.56 parcel, well outside the 60-acre project area. The applicable FIRM panel may be viewed at the office of the local floodplain administrator or online from the FEMA Map Service Center site, <http://msc.fema.gov/> or from the Bartow County Board of Assessors site, <http://www.qpublic.net/ga/bartow/>, where the regulatory flood zones, topography, and parcels may also be viewed. Questions about this review should be directed to Alan Giles: (404) 651.8495 or alan.giles@dnr.ga.gov.

DRI 2510

GEORGIA QUALITY DEVELOPMENT ASSESSMENT

Item # 2



QDA



QDA



DEVELOPMENT OF REGIONAL IMPACT REVIEW

PART 3: GEORGIA QUALITY DEVELOPMENT ASSESSMENT

To be completed by the Regional Commission

COUNTY:	BARTOW			Date QDR Completed, M/D/YYYY: 9/8/2015	
DRI #:	2510			RC DRI Reviewer: Julianne Meadows	
TENTATIVE NAME OF DEVELOPMENT:	Old Mill Industrial				
TYPE OF DEVELOPMENT:	Industrial			Action Triggering Review: Rezoning	
I. MIX OF USES		Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Does the development incorporate a mixture of complementary land uses?		☐	☒		
Does the development have vertically mixed uses?		☐	☒		
If the development is primarily residential, are a healthy mix of uses (e.g., corner grocery stores, community facilities) located within an easy walking distance?		☐	☐	INDUSTRIAL DEVELOPMENT ONLY.	
For developments without a residential component, does the development add a compatible new use that is not prevalent in the immediately surrounding area/neighborhood?		☐	☒	INDUSTRIAL DEVELOPMENT; INDUSTRIAL IS A NEIGHBORING USE.	
II. TRANSPORTATION ALTERNATIVES		Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Are there sidewalks within the development?		☐	☒	SIDEWALKS AND/OR PEDESTRIAN IMPROVEMENTS WILL BE PROVIDED IF RECOMMENDED BY TRAFFIC STUDY OR IF REQUIRED BY CARTERSVILLE ORDINANCES.	SIDEWALKS AND/OR PEDESTRIAN IMPROVEMENTS WILL BE PROVIDED IF RECOMMENDED BY TRAFFIC STUDY OR IF REQUIRED BY CARTERSVILLE ORDINANCES.
Are there existing or proposed sidewalks along all adjacent external street frontages that connect to the internal sidewalk network?		☐	☒	ONE ADJACENT PARCEL WITH STREET FRONTAGE INCLUDES SIDEWALKS; OTHERS DO NOT.	
Are sidewalks designed to comply with ADA, AASHTO, and/or local standards of width and accessibility?		☒	☐	IF REQUIRED, SIDEWALKS WILL BE ADA COMPLIANT.	THE CITY WILL WORK WITH THE DEVELOPER TO COMPLY WITH THIS RECOMMENDATION IF REQUIRED.
Is bicycle parking provided at all non-residential buildings, multi-family buildings, and other key destinations?		☐	☒	ACCESS TO DEVELOPMENT IS ANTICIPATED PRIMARILY BY VEHICLE. BIKE FACILITIES MAY BE PROVIDED.	BIKE FACILITIES MAY BE PROVIDED.

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Does the development include construction of multi-use trails that will shorten walking distances between complimentary uses and/or the external sidewalk/trail network?	☐	☒	INDUSTRIAL AREA; ACCESS IS PRIMARILY BY VEHICLE.	
Are intersections designed for pedestrian safety, including marked crossing, curb extensions, median refuges, raised crosswalks, and/or pedestrian actuation devices?	☐	☒	PEDESTRIAN SAFETY AND SITE DESIGN ELEMENTS SHOULD BE INCORPORATED AS APPLICABLE.	PEDESTRIAN SAFETY AND SITE DESIGN ELEMENTS SHOULD BE INCORPORATED AS APPLICABLE.
Does the design include pedestrian connections between building entrances and the internal and external sidewalk network?	☐	☒	PEDESTRIAN SAFETY AND SITE DESIGN ELEMENTS SHOULD BE INCORPORATED AS APPLICABLE.	PEDESTRIAN SAFETY AND SITE DESIGN ELEMENTS SHOULD BE INCORPORATED AS APPLICABLE.
Does the development contribute to public streetscapes with pedestrian-friendly amenities, such as benches, lighting, street trees, trash cans, pedestrian entrance on street level, and windows at street level?	☒	☐	PEDESTRIAN SAFETY AND SITE DESIGN ELEMENTS SHOULD BE INCORPORATED AS APPLICABLE.	PEDESTRIAN SAFETY AND SITE DESIGN ELEMENTS SHOULD BE INCORPORATED AS APPLICABLE.
Will the development employ pedestrian-friendly block sizes (e.g., block face no more than 500 ft, average block perimeter 1350 ft)	☒	☐	NOT APPLICABLE	Item # 2
Will the development incorporate traffic calming measures, such as narrower street widths, raised pedestrian crossings, or rough pavement materials?	☐	☒	SITE DESIGN WILL INCORPORATE DESIGN ELEMENTS TO ADDRESS NEEDS OF TRUCK AND EMPLOYEE TRAFFIC.	
Was the transportation/land-use connection clearly considered as a factor affecting this development?	☐	☒	A TRAFFIC STUDY WILL BE PREPARED; 531 AM PEAK VEHICLE TRIPS/ HOUR ARE ANTICIPATED.	PREPARE A TRAFFIC STUDY.
III. CONNECTIVITY	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Will the development employ street layouts that match those in older parts of the community?	☐	☒	N/A. THE DEVELOPMENT WILL BE INDUSTRIAL IN NATURE.	
Will the development connect to the existing street network at many points?	☐	☒	ONE ACCESS TO OLD MILL ROAD IS PLANNED.	
Does the development provide multiple ingress/egress points and have access to multiple roadways?	☐	☒	N/A. NATURE OF DEVELOPMENT PROVIDES FOR ONE ACCESS POINT.	
Do internal streets within the development connect to adjacent developments and/or allow for future connections (at stub outs, dead end streets, etc.)?	☐	☒	N/A.	
Does the internal street network minimize traveling distance by providing relatively direct circulation throughout the site?	☒	☐		
Can the internal street network be reasonably anticipated to add to the public roadway network?	☐	☒	ACCESS FOR SITE ONLY.	
Where appropriate, will the development employ mid-block alleys?	☐	☒	N/A; INDUSTRIAL SITE.	

Will the development include external and internal connections that allow motorists to avoid using the roadway to access adjacent uses?	☐	☒	N/A. INDUSTRIAL SITE.	
IV. PARKING	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Does the development provide no more parking than the minimum required by the local jurisdiction?	☐	☒	PARKING WILL BE ADEQUATE FOR INDUSTRIAL USE.	
Does development seek reduced parking requirements for commercial and residential developments, particularly when nearby parking alternatives or public transit is available?	☐	☒	PARKING WILL BE ADEQUATE FOR INDUSTRIAL USE.	
Does development seek shared parking arrangements that reduce overall parking needs?	☐	☒	PARKING ON SITE WILL BE ADEQUATE FOR INDUSTRIAL USE.	
Does development use landscaped tree islands and medians to break up large expanses of paved parking?	☒	☐	GRASSED ISLANDS WILL FORM PART OF STORMWATER CONTROL AND SITE DESIGN.	
Is the development's parking located where it does not visually dominate the development from the street?	☐	☒	N/A. INDUSTRIAL USE.	
Does the parking design allow for easy and safe pedestrian access to buildings?	☒	☐		
V. INFILL DEVELOPMENT	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Is the development proposing to redevelop a previously developed site?	☒	☐		
Does the development re-use or rehabilitate existing and/or historic structures?	☐	☒		
Does this project involve reuse of abandoned structures; a site close to other development; a brownfield site; other underutilized properties?	☒	☐		
Is the development located on a site with existing infrastructure in place?	☒	☐		
Is the development designed to blend into existing neighborhoods by disguising its density (e.g., small scale apartment buildings, multi-family that looks like a single residence from the street, etc)?	☐	☒	INDUSTRIAL DEVELOPMENT.	
Are new housing opportunities being created out of former, underused commercial, warehouse, or industrial spaces?	☐	☒	N/A. INDUSTRIAL DEVELOPMENT.	
Is the development designed to revitalize existing neighborhood commercial centers (or create a new one on an infill site), capture more market activity and serve as a focal point for the surrounding neighborhood and community?	☐	☒	N/A. INDUSTRIAL DEVELOPMENT.	

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Is this a greyfield redevelopment that converts vacant or under-utilized commercial strips to mixed-use assets?	☐	☒	N/A. INDUSTRIAL DEVELOPMENT.	
VI. SENSE OF PLACE	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Does the development create or enhance community spaces such as public plazas, squares, parks, etc?	☐	☒	N/A. INDUSTRIAL DEVELOPMENT.	
Is the development consistent / compatible with the traditional character of the community, incorporating design principles of scale, placement and massing?	☒	☐		
If "big box" retail, is the development designed in a way that complements surrounding uses (e.g. appropriate massing and scale when in developed areas; landscaped buffers/berms when in less developed areas; etc.) and promotes long-term usability (e.g. allows for subsequent adaptation to other tenants/uses)?	☒	☐	N/A. INDUSTRIAL DEVELOPMENT.	Item # 2
Are structures oriented toward and located near existing and proposed street front(s) with parking located in places other than between the structure and the street/sidewalk?	☐	☒	N/A. INDUSTRIAL DEVELOPMENT.	
Does the development design include restrictions on the number and size of signs and billboards?	☐	☒	N/A.	
If the development is adjacent to a designated scenic byway, will the natural vegetative character of the scenic byway be maintained (e.g., with setbacks, vegetative buffers, landscaped berms)?	☐	☒	N/A.	
VII. TRADITIONAL NEIGHBORHOOD DEVELOPMENT (TND)	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	
Is the development designed to be an attractive, pedestrian-friendly activity center serving surrounding residential areas?	☐	☒	NA	
Will the development include a mix of housing types and sizes evocative of "traditional" development styles/patterns?	☐	☒	NA	
Are the planned street widths relatively narrow?	☐	☒	NA	
Are structures designed with small setbacks, and porches (where appropriate) that contribute to a continuous orientation to the street that is pedestrian-friendly and encourages interaction with neighbors and/or passers-by?	☐	☒	NA	

Are accommodations included for on-street parking and/or rear alleyway access for residents'/visitors' automobiles?	☐	☒	N/A	
VIII. OPEN/GREEN SPACE CONSERVATION	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Does the development set aside a substantial percentage of total land area as permanently protected open or green space, preferably connected to a green space network?	☐	☒	ADEQUATE STORMWATER FACILITIES WILL BE PROVIDED.	GA DNR RECOMMENDS STRINGENT EROSION CONTROL; VEGETATION PRESERVATION; AND PERMEABLE PAVEMENT WHERE POSSIBLE.
Is the development clustered to preserve open/green space within the development site?	☐	☒	NA	
Does the design of the development incorporate significant site features (view corridors, water features, farmland, wetlands, etc.) as amenities?	☐	☒	NA	
Does the design of the development include provisions to permanently preserve environmentally sensitive areas by setting them aside as public parks, trails, greenbelts, etc?	☐	☒	NA	
If public water/sewer is unavailable, does the design of the development make use of common area drain fields and/or neighborhood-scale wastewater treatment systems to reduce parcel size and/or cluster development in areas that must be served by septic tanks?	☐	☒	NA. WATER AND SEWER ARE AVAILABLE.	
Does the development contain, or is it in close proximity with direct access to permanently protected open/greenspace?	☐	☒	NA	
IX. ENVIRONMENTAL PROTECTION	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)

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Does the development avoid critical historical and environmental areas?	☐	☒	WITHIN A GROUNDWATER RECHARGE AREA. GEORGIA DNR HAS IDENTIFIED HIGH PRIORITY WATERSHEDS AND PLANT SPECIES AS WELL AS THE CHEROKEE DARTER AND NORTHERN LONG-EARED BAT WITHIN A THREE-MILE RADIUS OF THE PROJECT SITE; THE AREA IS ALSO WITHIN A 3-MILE RADIUS OF STATE-IDENTIFIED PROTECTED SPECIES.	COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL; GA DNR RECOMMENDS STRINGENT EROSION CONTROL; VEGETATION PRESERVATION; AND PERMEABLE PAVEMENT WHERE POSSIBLE.
Does the development avoid habitat that is currently under (or flagged for) conservation under a local, regional (e.g. Regional Resource Plan), state conservation or green infrastructure plan?	☐	☒	WITHIN A GROUNDWATER RECHARGE AREA.	COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL.
Does the project avoid land physically unsuitable for development (steep slopes greater than 20%, floodplains, stream corridors, groundwater recharge areas or wetlands), prime agricultural lands/soils and/or propose the appropriate mitigation measures?	☒	☐		

Does the development include measures to retain/protect a large proportion of existing trees and to maintain the health of new trees included in the development's landscaping?	☐	☒	NA	
Does the development incorporate native and drought-tolerant landscaping?	☐	☒	NA	
Is the development designed to avoid the need for a stream buffer variance under any applicable ordinances?	☐	☒	NA	
Does the development's stormwater management plan avoid increasing the rate and quantity of post-development stormwater runoff when compared with pre-development stormwater rates and quantities?	☒	☐	STORMWATER MANAGEMENT CONTROLS ARE REQUIRED.	COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL (WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL; GA DNR RECOMMENDS STRINGENT EROSION CONTROL; VEGETATION PRESERVATION; AND PERMEABLE PAVEMENT WHERE POSSIBLE.
Does the development reflect best management practices (e.g., bioretention strips, rain gardens or swales as alternatives to conventional practices) for water quality protection?	☒	☐		
Does the development propose water conservation covenants (e.g. prohibition of ornamental water features and fountains throughout the development)?	☐	☒	NA	
Is a substantial proportion of the total paved area (total of driveways, parking, etc) covered with permeable surfaces?	☐	☒	STORMWATER MANAGEMENT CONTROLS ARE REQUIRED.	CONSIDER PERMEABLE PAVEMENT WHERE POSSIBLE. GA DNR RECOMMENDS STRINGENT EROSION CONTROL; VEGETATION PRESERVATION; AND PERMEABLE PAVEMENT WHERE POSSIBLE.

Does the development design allow for parking lots that incorporate on-site stormwater mitigation or retention features, <u>other than those discussed above</u> ? If so, please describe.	☐	☒	STORMWATER MANAGEMENT CONTROLS ARE REQUIRED.	CONSIDER ADDITIONAL STORMWATER MANAGEMENT FEATURES WHERE POSSIBLE; GA DNR RECOMMENDS STRINGENT EROSION CONTROL; VEGETATION PRESERVATION; AND PERMEABLE PAVEMENT WHERE POSSIBLE.
Is the development seeking independent certification/recognition by a widely acknowledged development accreditation organization (e.g. LEED, EarthCraft, Green Globes, Energy Star, etc.)? Please specify program and, if applicable, the anticipated level of accreditation.	☐	☒	NA	
Does the development make use of alternative building materials that promote environmental protection and energy efficiency? Please specify.	☐	☒	NA	
X. HOUSING CHOICES	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
For developments with a residential component, will a diversity of housing types be provided in the development, including: Single family; Accessory housing units; Multi family; Affordable housing?	☐	☐		
For developments with a residential component, does the development add a new housing type to the immediately surrounding neighborhood?	☐	☐		
If the development includes a senior housing component, does the development include affordability and accessibility features and location to services and transportation alternatives?	☐	☐		
Will the development provide greater housing options for low and middle income residents and families?	☐	☐		
XI. ECONOMIC DEVELOPMENT	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Are the economic returns associated with the development projected to offset the local/regional costs for any infrastructure and service enhancements necessary to serve development?	☒	☐		
Does the design/location of this development clearly reflect consideration of the local and regional jobs/housing balance?	☒	☐		
Is the development located in a tax abatement zone, a tax allocation district, a designated/planned redevelopment area, an enterprise zone, or other governmentally supported redevelopment zones?	☐	☒	THE DEVELOPMENT IS ACROSS THE ROAD FROM A DESIGNATED OPPORTUNITY ZONE.	

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Will this development use or is it likely to enhance local or regional small-business development program(s)?	☒	☐	MAY REQUIRE EQUIPMENT OR OTHER FUNDING FROM LOCAL LENDERS.	
Is the development likely to spur other activities aimed at improving the quality of the local/regional workforce?	☒	☐		
Will the development enhance diversity in the local/regional economic base in that may result in greater resilience in times of economic stagnancy or decline?	☒	☐		
Will the development provide greater employment opportunities for low and middle income residents?	☒	☐		

OVERALL ASSESSMENT OF DEVELOPMENT'S QUALITY

→ THIS QUESTION MUST BE ANSWERED "YES" TO QUALIFY FOR EXPEDITED REVIEW. ←

Does the overall balance of "yes" and "no" answers, above, generally support expedited review?

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☒ **YES**, the proposed development DOES qualify for expedited review.

☐ **NO**, the proposed development DOES NOT qualify for expedited review.

Is the preponderance of answers, above, "Yes", and is the development generally reflective of the very best ideals and practices that the State of Georgia should expect and support in all developments of this type?

☐ **YES**, this regional commission recommends this development for a Georgia Quality Development Award.

☐ **NO**

NARRATIVE:

LOCAL IMPACTS ASSESSMENT



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DEVELOPMENT OF REGIONAL IMPACT REVIEW

PART 2: LOCAL IMPACTS ASSESSMENT

To be completed by the Regional Commission

COUNTY:	BARTOW			Date LIR completed, M/D/YYYY: 9/8/2015
DRI #:	2510			RC DRI Reviewer: Julianne Meadows
TENTATIVE NAME OF DEVELOPMENT:	Old Mill Industrial			
TYPE OF DEVELOPMENT:	Industrial			Action Triggering Review: Rezoning
I. ACCESS MANAGEMENT	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Is access to the site effectively managed through the use of internal roadways, access roads, or shared driveways, where appropriate?	☒	☐	SITE DESIGN INCLUDES 30' ACCESS ROAD.	
If the development is adjacent to more than one roadway, is access provided via the lowest functionally classified roadway?	☒	☐	ACCESS WILL BE VIA OLD MILL ROAD (MINOR ARTERIAL) TO SR 293 (MINOR ARTERIAL), US 41 (MINOR/PRINCIPAL ARTERIAL) AND I-75 (INTERSTATE)	COMPLETE TRAFFIC STUDY AND DESIGN PLANS IN COORDINATION WITH GDOT AND CITY OF CARTERSVILLE, CARTERSVILLE-BARTOW MPO FOR EVALUATION OF IMPACT TO LOCAL AND STATE ROAD SYSTEM (SEE GDOT COMMENTS ON POTENTIAL FOR NEEDED IMPROVEMENTS TO SOUTH BRIDGE @ SR 3).
Are access points aligned with opposing access points and/or with existing, planned or likely median breaks?	☒	☐	N/A	
Are proposed traffic signals located at the intersection of public roadways that provide access to the entire site?	☒	☐	N/A	
Does the proposed development provide an adequate, uninterrupted driveway throat length for the corridor?	☒	☐		
Are all proposed access points outside of the functional area of any adjacent intersections?	☒	☐		
Do the proposed access points meet minimum spacing requirements established by GDOT (or other permitting agency)?	☒	☐		

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II. ADEQUACY OF TRANSPORTATION INFRASTRUCTURE	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Do adequate transportation facilities currently exist to support the development?	☒	☐		
If the development is predominately industrial, is it located with reasonable proximity to an intermodal station or other freight transfer location?	☒	☐	CSX RAIL SHORTLINE/SPUR SERVES INDUSTRIES IN THIS AREA; PROPOSED INLAND PORT IN MURRAY COUNTY WILL ALSO SERVE VIA US 411	
If the development is predominately industrial, is it located in close proximity to an interstate highway?	☒	☐	I-75.	
Will developer-funded mitigation of the transportation impacts of this development be enhancements and/or improvements of the items already listed in the applicable transportation plan (STIP/TIP/LRTP)?	☒	☐	GDOT, CBMPO LIST POTENTIAL NEED FOR IMPROVEMENTS TO SOUTH BRIDGE @ SR 3 (TIP FOR CARTERSVILLE/BARTOW NOW IN PREPARATION)	INCLUDE SOUTH BRIDGE IMPROVEMENTS @ SR 3 IN CBMPO TIP.
III. ADEQUACY OF OTHER LOCAL ASSETS/SERVICES	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Do adequate wastewater/sewerage facilities currently exist to support the development?	☒	☐		
Do adequate water supply and treatment facilities exist to serve the development?	☒	☐		
Do adequate stormwater management facilities exist to serve the development?	☒	☐	DETENTION PONDS AND OTHER ON-SITE TREATMENT WILL BE REQUIRED	CONSULT WITH CITY ENGINEER TO DESIGN ADEQUATE STORMWATER MANAGEMENT INFRASTRUCTURE. COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL (WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL.
Do adequate solid waste facilities exist to support the development?	☒	☐		
Does the local school system have the capacity necessary to adequately support the development?	☒	☐	N/A	
Does the local workforce possess the skills/expertise/education to effectively to support the development?	☒	☐		
Are all other assets/services (public safety, etc.) adequate to serve the development?	☒	☐		
Is the local government fiscally capable of adequately providing any new facilities/services anticipated/likely to be required by the development?	☒	☐		

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IV. RESOURCE MANAGEMENT	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Are potential impacts upon <u>WATER SUPPLY WATERSHEDS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>WETLANDS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>GROUNDWATER RECHARGE AREAS</u> adequately addressed in the proposal?	☐	☒	CHANGE OF AGRICULTURAL USE TO INDUSTRIAL USE COULD GENERATE ADDITIONAL RUNOFF WHICH IF NOT TREATED AND CONTAINED ON SITE COULD IMPACT GROUNDWATER RECHARGE AREA.	CONSULT WITH CITY ENGINEER TO DESIGN ADEQUATE STORMWATER MANAGEMENT INFRASTRUCTURE. COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL WWW.GEORGIASTORMWATER.COM AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL.
Are potential impacts upon <u>RIVER CORRIDORS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>PROTECTED MOUNTAINS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>COASTAL RESOURCES</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>FLOODPLAINS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>SENSITIVE SOIL TYPES</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>STEEP SLOPES</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>PRIME AGRICULTURAL/FORESTRY AREAS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>RARE/ENDANGERED SPECIES</u> adequately addressed in the proposal?	☐	☒	GEORGIA DNR HAS IDENTIFIED HIGH PRIORITY WATERSHEDS AND PLANT SPECIES AS WELL AS THE CHEROKEE DARTER AND NORTHERN LONG-EARED BAT WITHIN A THREE-MILE RADIUS OF THE PROJECT SITE; THE AREA IS ALSO WITHIN A 3-MILE RADIUS OF STATE-IDENTIFIED PROTECTED SPECIES.	GEORGIA DNR RECOMMENDS STRINGENT EROSION CONTROL AND STREAM PROTECTION CONTROLS TO PREVENT DAMAGE TO HABITAT. PLEASE SEE ENCLOSED COMMENTS.
Are potential impacts upon <u>FEDERAL, STATE OR REGIONAL PARKS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>HISTORIC RESOURCES</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>DESIGNATED SCENIC BYWAYS</u> adequately addressed in the proposal?	☒	☐	N/A	
Are potential impacts upon <u>VIEWSHEDS OR SCENIC AREAS</u> adequately addressed in the proposal?	☒	☐	N/A	

IV. OVERALL ASSESSMENT OF DEVELOPMENT'S LOCAL IMPACTS

<i>Does the host local government need to take action to manage the potential adverse impacts of this development?</i>	YES ☒	NO ☐	NARRATIVE: Traffic study must be completed in coordination with GDOT, CBMPO, and any identified impacts mitigated; include potential South Bridge improvements @SR3 in CBMPO TIP. COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL (WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL.
<i>Should special requirements be placed on the developer(s) to mitigate adverse development impacts?</i>	YES ☒	NO ☐	NARRATIVE: Traffic study must be completed and shared with GDOT and CBMPO; meet any other local or state site design or permitting requirements. CONSULT WITH CITY ENGINEER TO DESIGN ADEQUATE STORMWATER MANAGEMENT INFRASTRUCTURE. COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL (WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL.

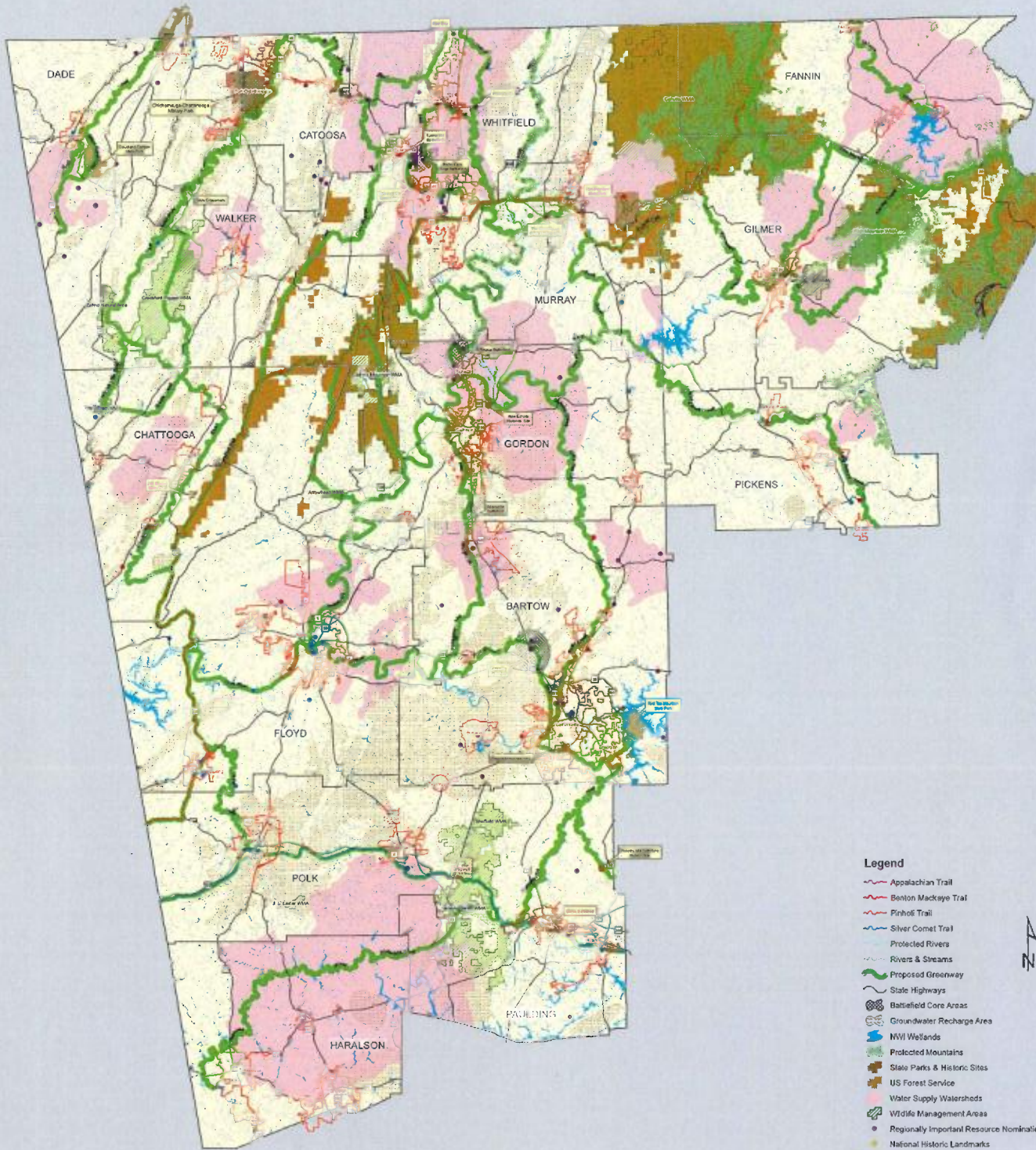
DRI 2510

REGIONAL CONSISTENCY ASSESSMENT

Item # 2

Item # 2

42



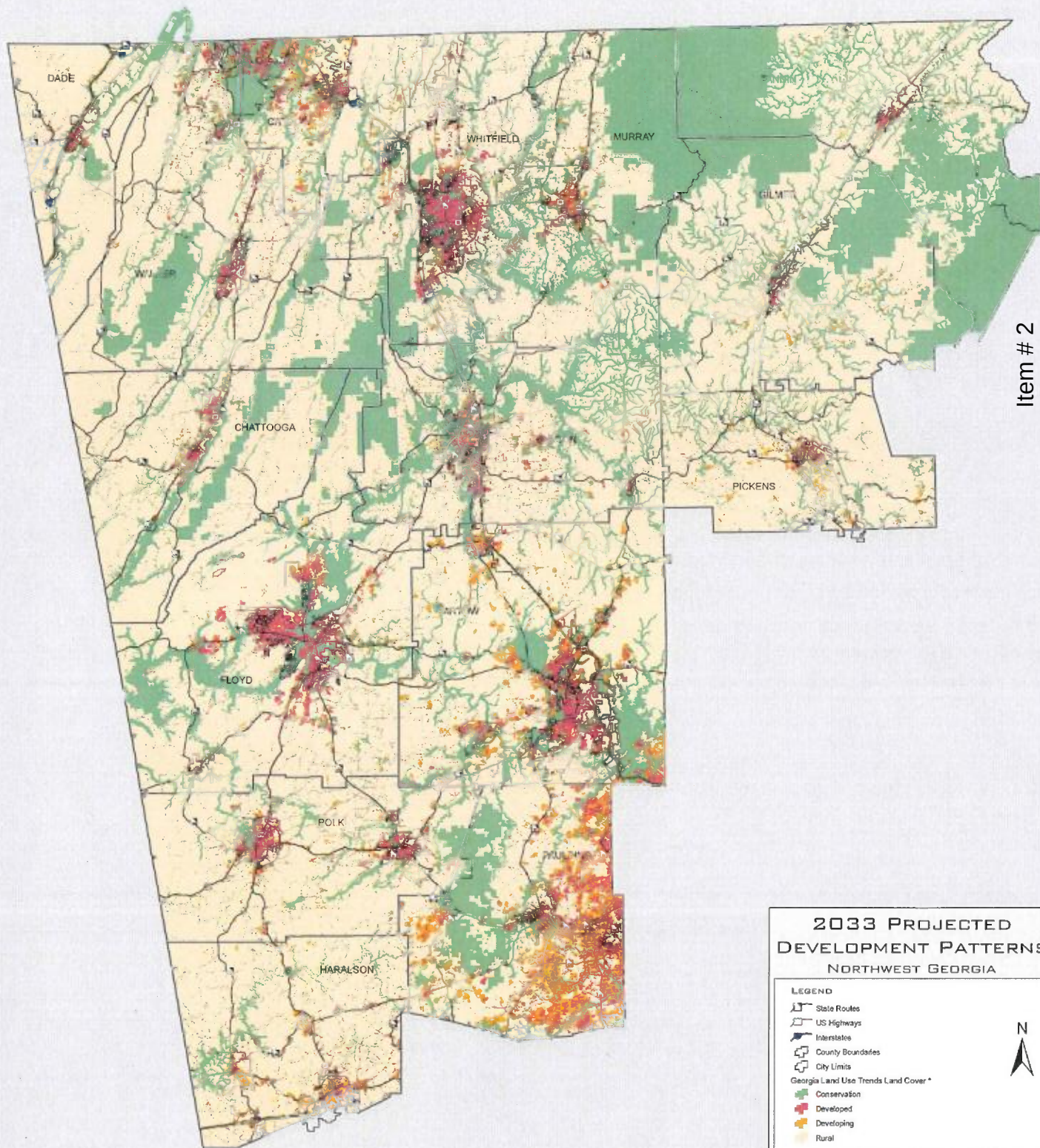
NORTHWEST GEORGIA REGIONAL RIR MAP

- Legend**
- Appalachian Trail
 - Benton Mackaye Trail
 - Pinhole Trail
 - Silver Comet Trail
 - Protected Rivers
 - Rivers & Streams
 - Proposed Greenway
 - State Highways
 - Battifield Core Areas
 - Groundwater Recharge Area
 - MWU Wetlands
 - Protected Mountains
 - State Parks & Historic Sites
 - US Forest Service
 - Water Supply Watersheds
 - Wildlife Management Areas
 - Regionally Important Resource Nominations
 - National Historic Landmarks
 - National Register Properties
 - National Level of Significance
 - State Level of Significance

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NWGRS
Northwest Georgia Regional Commission

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Item # 2

2033 PROJECTED DEVELOPMENT PATTERNS NORTHWEST GEORGIA

LEGEND

- State Routes
- US Highways
- Interstates
- County Boundaries
- City Limits

Georgia Land Use Trends Land Cover *

- Conservation
- Developed
- Developing
- Rural

* Source: 2030 Georgia Land Use Trends (GLUT) from the Natural Resources Spatial Analysis Laboratory of the University of Georgia

0 2.5 5 10 15 20 Miles



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RCA



RCA



DEVELOPMENT OF REGIONAL IMPACT REVIEW

PART 1: REGIONAL CONSISTENCY ASSESSMENT

To be completed by the Regional Commission

COUNTY:	BARTOW			Date RCR Completed, M/D/YYYY: 9/8/2015
DRI #:	2510			RC DRI Reviewer: Julianne MEadows
TENTATIVE NAME OF DEVELOPMENT:	Old Mill Industrial			
TYPE OF DEVELOPMENT:	Industrial			Action Triggering Review: Item # 2
I. REGIONAL PLAN	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Is the development consistent with the Regional Development Map and Defining narrative?	☒	☐		
Is the development consistent with the Guiding Principles or applicable Policies narrative of the Regional Plan?	☒	☐		
II. REGIONAL RESOURCE PLAN AND RIRS	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
If within one mile of any area on the RIR map, is the development consistent with the Guidance for Appropriate Development Practices in the Regional Resource Plan?	☒	☐	WITHIN A GROUNDWATER RECHARGE AREAS.	COMPLIANCE WITH APPLICABLE METROPOLITAN NORTH GEORGIA WATER PLANNING DISTRICT 2009 WATERSHED MANAGEMENT PLAN'S STORMWATER AND WATERSHED PROTECTION ORDINANCES, AS ADOPTED BY THE CITY OF CARTERSVILLE IS HIGHLY RECOMMENDED. IT SHOULD ALSO IMPLEMENT STORMWATER MANAGEMENT CONTROLS (STRUCTURAL AND/OR NONSTRUCTURAL) AS FOUND IN THE GEORGIA STORMWATER MANAGEMENT MANUAL (WWW.GEORGIASTORMWATER.COM) AND MEET THE STORMWATER MANAGEMENT QUANTITY AND QUALITY CRITERIA OUTLINED IN THE MANUAL
III. INTERJURISDICTIONAL IMPACTS	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)

Are adjacent land uses (even outside the host jurisdiction) compatible to proposed development's land use?	☒	☐		
Does the development avoid or mitigate negative effect on public facilities (roads, stormwater / floodplain management, water quality, etc.) in neighboring jurisdictions?	☒	☐	TRAFFIC STUDY IS NEEDED.	COMPLETE TRAFFIC STUDY AND DESIGN PLANS IN COORDINATION WITH GDOT AND CITY OF CARTERSVILLE, CARTERSVILLE-BARTOW MPO FOR EVALUATION OF IMPACT TO LOCAL AND STATE ROAD SYSTEM (SEE GDOT COMMENTS ON POTENTIAL FOR NEEDED IMPROVEMENTS TO SOUTH BRIDGE @ SR 3). GA DNR RECOMMENDS EROSION CONTROLS, PERMEABLE PAVEMENT AND VEGETATION PROTECTION.
Are neighboring jurisdictions aware of, and prepared to manage, impacts of the development on public facilities (roads, stormwater / floodplain management, water quality, etc.) in their jurisdictions?	☐	☐	COORDINATING WITH CBMPO.	COMPLETE TRAFFIC STUDY AND DESIGN PLANS IN COORDINATION WITH GDOT AND CITY OF CARTERSVILLE, CARTERSVILLE-BARTOW MPO FOR EVALUATION OF IMPACT TO LOCAL AND STATE ROAD SYSTEM (SEE GDOT COMMENTS ON POTENTIAL FOR NEEDED IMPROVEMENTS TO SOUTH BRIDGE @ SR 3).
Are other affected jurisdictions, including school boards, aware of, and prepared to manage, the impacts of this development?	☒	☐		
IV. TRANSPORTATION IMPACTS	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Is this project consistent with any applicable regional transportation plan(s)?	☐	☒		
Have the transportation impacts of this development been identified?	☐	☒	A TRAFFIC STUDY IS REQUIRED.	COMPLETE TRAFFIC STUDY AND DESIGN PLANS IN COORDINATION WITH GDOT AND CITY OF CARTERSVILLE, CARTERSVILLE-BARTOW MPO FOR EVALUATION OF IMPACT TO LOCAL AND STATE ROAD SYSTEM (SEE GDOT COMMENTS ON POTENTIAL FOR NEEDED IMPROVEMENTS TO SOUTH BRIDGE @ SR 3).
Does the existing transportation network, as well as the funded portion of the applicable transportation plan (STIP/TIP/LRTP) mitigate all identified project impacts?	☐	☒	COMPLETE TRAFFIC STUDY.	COMPLETE TRAFFIC STUDY AND DESIGN PLANS IN COORDINATION WITH GDOT AND CITY OF CARTERSVILLE, CARTERSVILLE-BARTOW MPO FOR EVALUATION OF IMPACT TO LOCAL AND STATE ROAD SYSTEM (SEE GDOT COMMENTS ON POTENTIAL FOR NEEDED IMPROVEMENTS TO SOUTH BRIDGE @ SR 3).
V. LOCALLY ADOPTED PLANS	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)

Is the development consistent with the host government's Future Development Map or other comparable document, including sub area plans?	☒	☐		
Is the development consistent with any adjacent or potentially affected local government's Future Development Map?	☒	☐		
VI. COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDs)	Yes	No	Explain (optional for "Yes" answers, required for "No" answers)	Recommendations (to the Developer for Improvement of the Project)
Is the development consistent with the CEDs?	☒	☐		

FINDING (OVERALL ASSESSMENT OF DEVELOPMENT'S REGIONAL CONSISTENCY)

Is the preponderance of answers, above, "Yes", and does the development support the long-term success and vitality of the region in a manner that is consistent with the region's stated vision, goals, and objectives?

- ☒ **YES**, "the proposed action IS in the best interest of the region and therefore of the state."
- ☐ **NO**, "the proposed action IS NOT in the best interest of the region and therefore not of the state."

NARRATIVE:

Item #2



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM

File Z15-07:Rezoning application by Thoro LLC (Jeff Watkins, representative) for property located at 49 North Avenue (approximately 1.03 acres) from L-I to G-C

SubCategory:	Public Hearing - 1st Reading of Zoning/Annexation Requests
Department Name:	Planning and Development
Department Summary Recommendation:	This property includes a building constructed in approximately 1950 according to Bartow County tax records that was used for many years for office uses. In the last 10 years, there have been a variety of tenants in the building, including a church, in between periods of vacancy. The building is currently vacant. The applicant seeks to rezone from L-I (Light Industrial) to G-C (General Commercial) and there is no specified future use. The structure itself appears to make it difficult for the applicant to attract industrial tenants, and a commercial type zoning may open up options to find future occupants for the building. City departments had no objections. RECOMMENDATION: Planning Commission recommends approval as submitted
City Manager's Remarks:	Planning Commission recommends your approval of this item.
Financial/Budget Certification:	
Legal:	
Associated Information:	

ZONING SYNOPSIS

Petition Number(s): **Z15-07**

APPLICANT INFORMATION AND PROPERTY DESCRIPTION

Applicant: **Thoro LLC**

Representative: **Jeff Watkins**

Property Owner: **Thoro LLC**

Property Location: **49 North Ave (corner Freeman St)**

Access to the Property: **North Ave and Freeman St**

Site Characteristics:

Tract Size: Acres: **1.03 acres** District: **4th** Section: **3rd** LL(S): **339**

Ward: **4** Council Member: **Lindsey McDaniel**

LAND USE INFORMATION

Current Zoning: **L-I (Light Industrial)**

Proposed Zoning: **G-C (General Commercial)**

Proposed Use: **None listed**

Current Zoning of Adjacent Property:

North: **L-I**

South: **L-I**

East: **L-I**

West: **H-I**

The Future Development Plan designates the subject property as:
Workplace Center with recommended zoning districts H-I, L-I, and P-D

ZONING ANALYSIS

City Departments Reviews

Water and Sewer:

No objections.

Public Works:

No objections.

Gas:

No objections.

Electric:

No objections.

Fire:

No objections.

Police:

No comments.

This property includes a building constructed in approximately 1950 according to Bartow County tax records that was used for many years for office uses. In the last 10 years, there have been a variety of tenants in the building, including a church, in between periods of vacancy. The building is currently vacant. The applicant seeks to rezone from L-I (Light Industrial) to G-C (General Commercial) and there is no specified future use. The structure itself appears to make it difficult for the applicant to attract industrial tenants, and a commercial type zoning may open up options to find future occupants for the building. City departments had no objections.

STANDARDS FOR EXERCISE OF ZONING POWERS.

- A. *Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby property.*
There is little commercial use in the adjacent and nearby properties; it is mostly industrial and residential.
- B. *Whether the zoning proposal will create an isolated district unrelated to adjacent and nearby districts.*
There is little nearby G-C zoned property.
- C. *Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property.*
The proposal for G-C, depending on the use, could affect the adjacent industrial properties.
- D. *Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned.*
As currently zoned for L-I, the may have a reasonable economic use as currently zoned.
- E. *Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools.*
The proposal may not cause an excessive use of existing streets and facilities. Utility, Public Works, and Planning & Development staff would review any future development/redevelopment based on possible use on roads, utilities, and other factors.
- F. *Whether the zoning proposal is in conformity with the local Comprehensive Land Use Plan.*
The proposal does not conform to the local Comprehensive Land Use Plan.
- G. *Whether the zoning proposal will result in a use which will or could adversely affect the environment, including but not limited to drainage, wetlands, groundwater recharge areas, endangered wildlife habitats, soil erosion and sedimentation, floodplain, air quality, and water quality and quantity.*
The proposal may not result in a use which could adversely affect the environment. Utility, Public Works, and Planning & Development staff would review any future development/redevelopment.

- H. Whether there are other existing or changing conditions affecting the use and development of the property which give supporting grounds for either approval or disapproval of the zoning proposal.

None

STAFF RECOMMENDATION: Staff has concerns about the variety of uses allowed in the G-C zoning district. GC is intended for regionally-oriented retail services and activities along major thoroughfares. This area is not a regional activity area nor is it along a major roadway corridor. The current L-I zoning district allows for a mixture of light industrial and some medium commercial uses, including office and wholesale trade & distribution. As an alternative to G-C, O-C would provide a variety of commercial uses (office, restaurant, retail, service) and have fewer heavy-use commercial potentials. However, this area continues to be predominately industrial and residential.

PLANNING COMMISSION RECOMMENDATION:

Planning Commission Rrecommends Approval as submitted

Application for Rezoning

Planning and Development Department
10 North Public Square
City of Cartersville
 (770) 387-5600

Application Number 215-07Hearing Dates 10-6-15
10-15-15
11-5-15

Applicant THORO, LLC Business/Cell Phone 770-382-8708
 (applicant's printed name)
 Address 27 CENTER ROAD Home Phone _____
 City CARTERSVILLE State GA Zip 30120 Email JEFF@JEFFWATKINSLAW.COM
JEFFREY A. WATKINS Phone 770-382-7017 Fax # 770-382-3833
 (Representative's printed name (if other than applicant))
 Representative's signature _____ Applicant's signature _____
 Signed, sealed and delivered in presence of:
Julia B. Gustin My commission expires: _____
 Notary Public

Titleholder THORO, LLC Business 770-382-8708 Home _____
 (titleholder's printed name)
 *attach additional notarized signatures as needed on separate application page Address 27 CENTER ROAD
 Signature _____ CARTERSVILLE, GA 30120
 Signed, sealed, delivered in presence of:
Julia B. Gustin My commission expires: _____
 Notary Public

Present Zoning District(s) L-1 Requested Zoning G-C
 Acreage 1.029 Land Lot(s) 339 District(s) 4TH Section(s) 3RD
 Location of Property
49 NORTH AVENUE, CARTERSVILLE, GEORGIA 30120
 (street address, nearest intersections, etc)
 Reason for requested Rezoning:
To allow for a general commercial use.
 (attach additional statement as necessary)

Attach a copy of a current boundary survey showing metes and bounds and indicating all existing site improvements and confirmation of the availability of all public utilities. Said site must meet the proposed zoning district development standards and access requirements of the City's regulations.

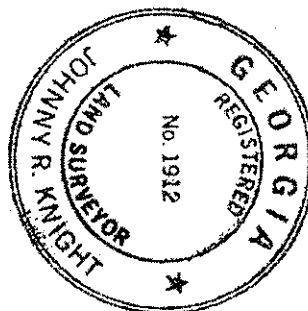
SURVEYED FOR

BUDDY HILL POST NO. 6124

VETERANS OF FOREIGN WARS
OF THE UNITED STATES, INC.

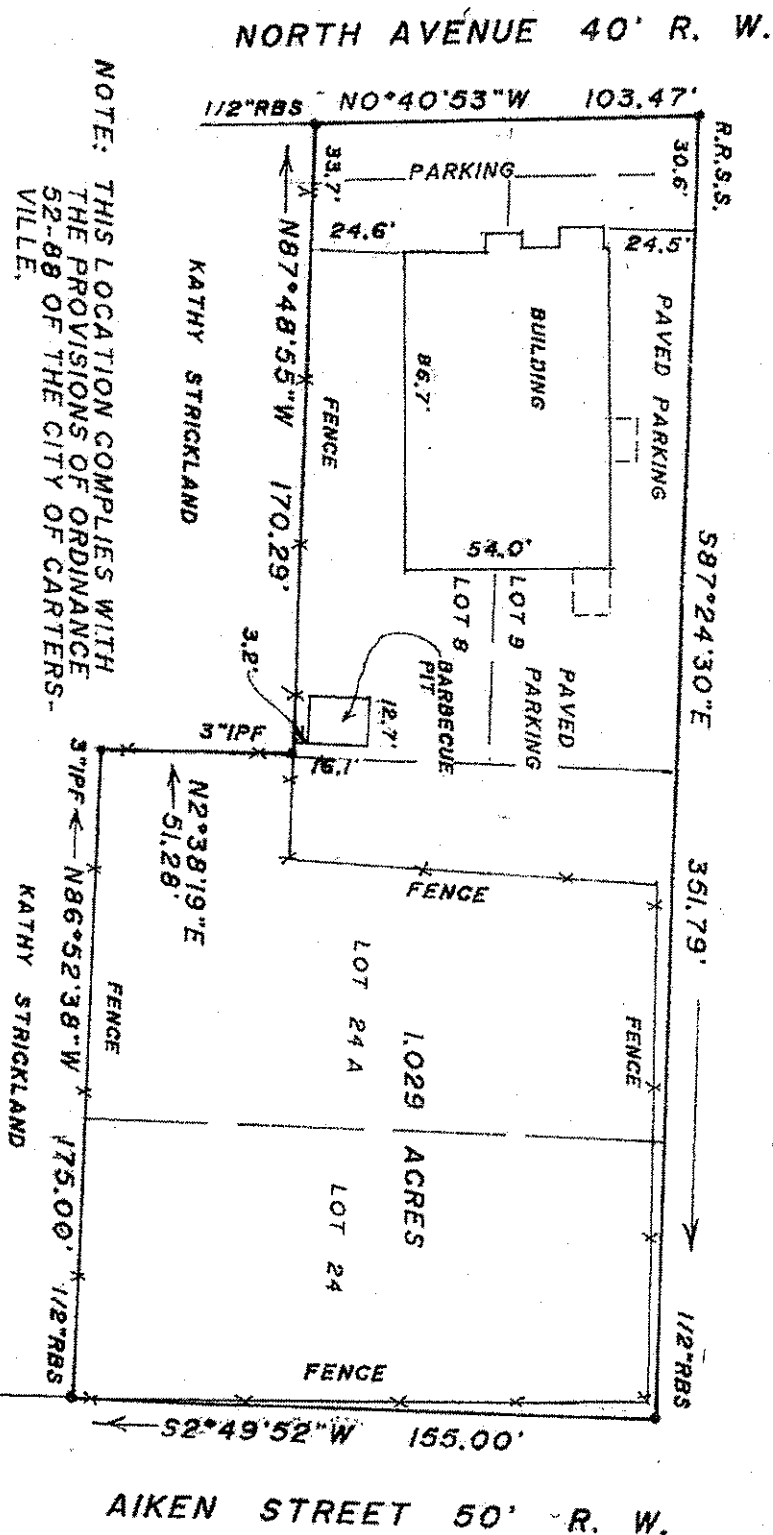
FIELD DATA:
CLOSURE: 1 IN 21,200
EQUIPMENT: TOPCON GTS-3
ANGULAR ERROR 0.4" PER ANGLE POINT
BEARINGS ARE MAG. CAL. FROM ANGLES
TURNED.
ADJUSTED, USING THE COMPASS RULE
PLAT CLOSURE, 1 IN 100,000.

1.029 ACRES IN LOTS 8 & 9, CARTERSVILLE
HEIGHTS, 8 LOTS 24 & 24A, OF THE JOHN W.
HODGE PROPERTY LOCATED IN CARTERSVILLE,
HEIGHTS, IN LAND LOT 339, 4TH DISTRICT,
3RD SECTION, CITY OF CARTERSVILLE, BARTOW
COUNTY, GEORGIA.
DATE 1-09-89
SCALE 1"=50'
KNIGHT & KNIGHT LAND SURVEYORS.



"FIA FLOOD HAZARD MAP" 0005 E
SHOWS THIS PROPERTY IS OUT OF
FLOOD ZONE.

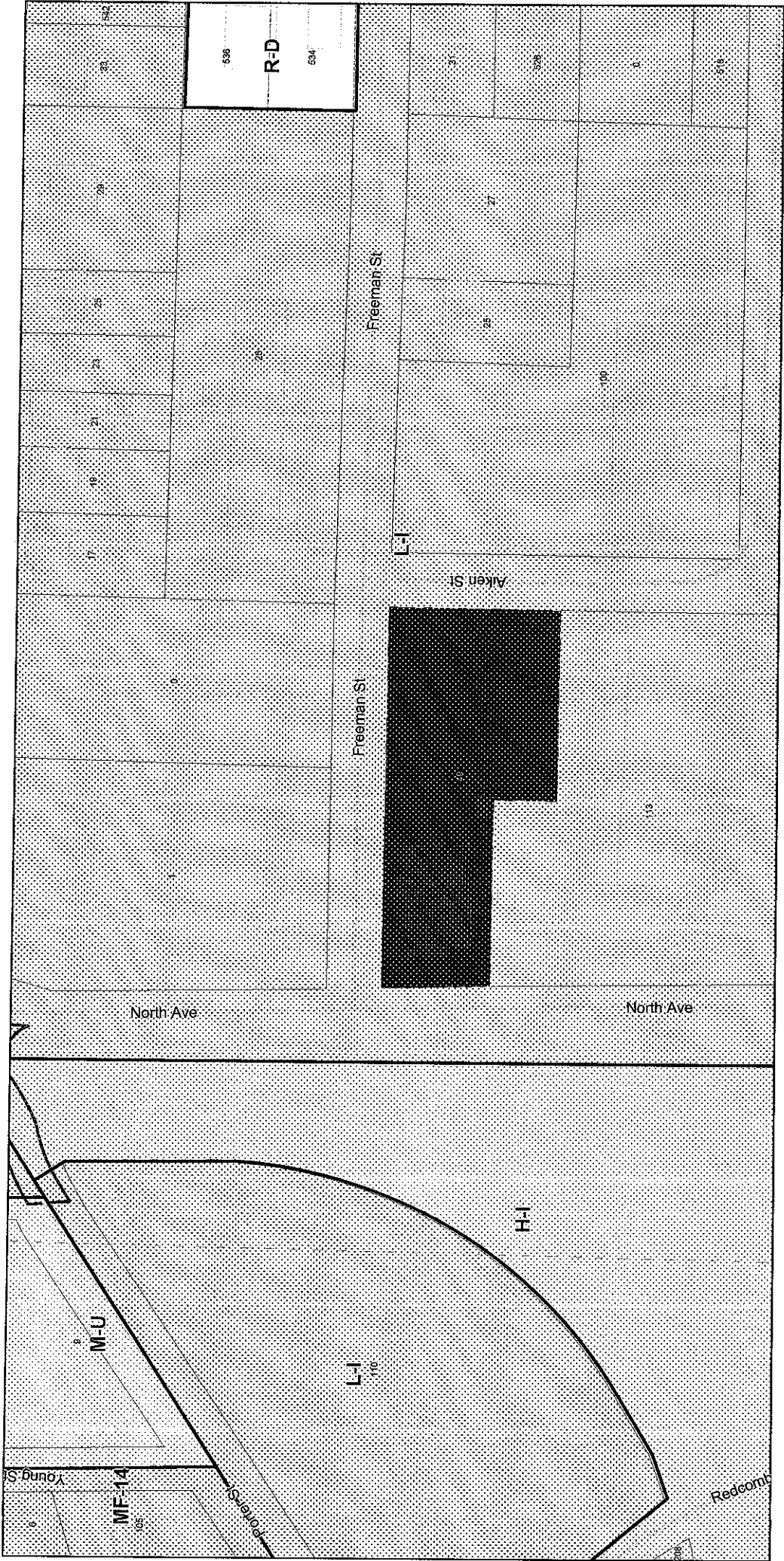
FREEMAN STREET 50' R. W.



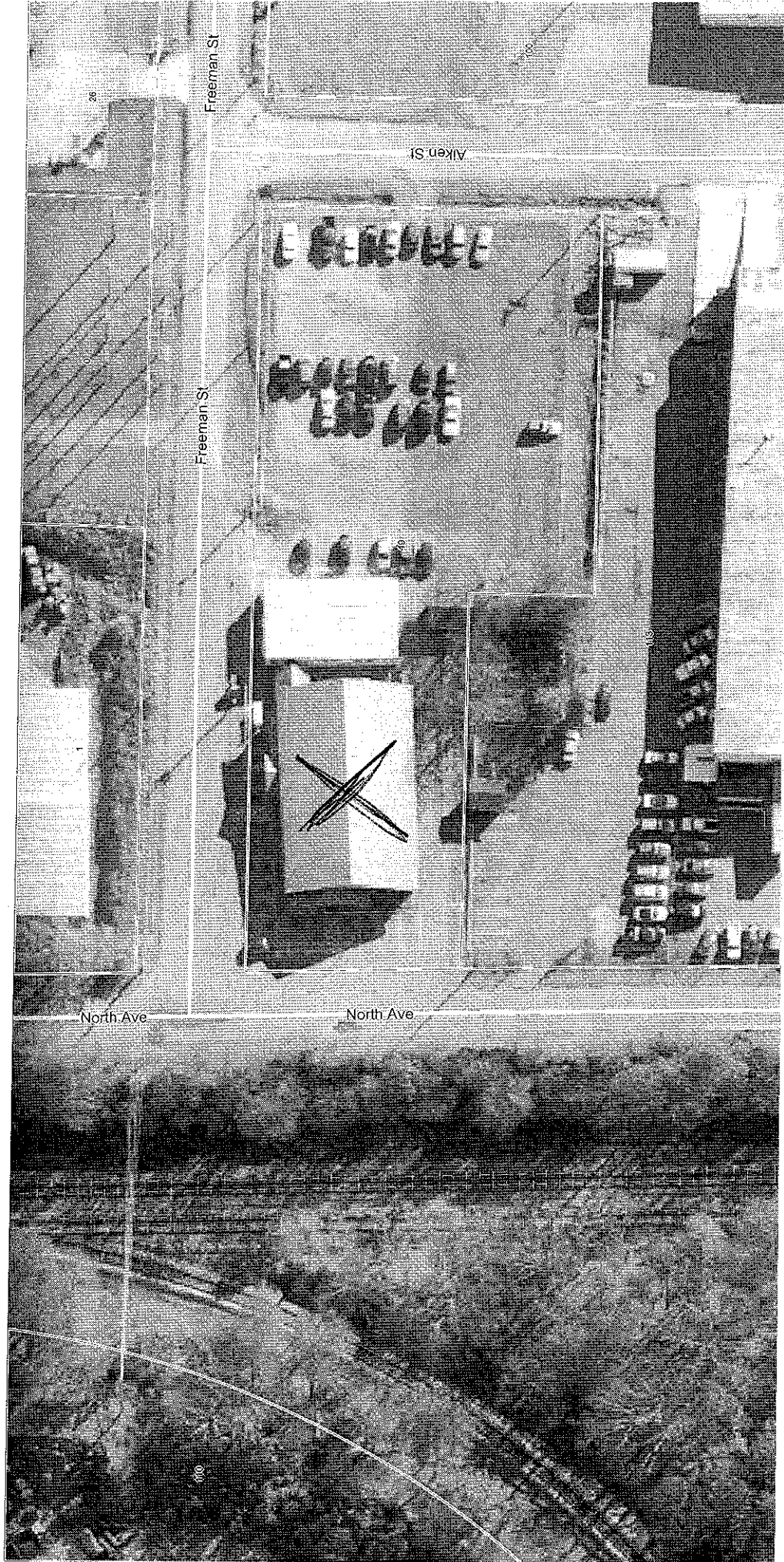
NOTE: THIS LOCATION COMPLIES WITH
THE PROVISIONS OF ORDINANCE
52-88 OF THE CITY OF CARTERS-
VILLE.

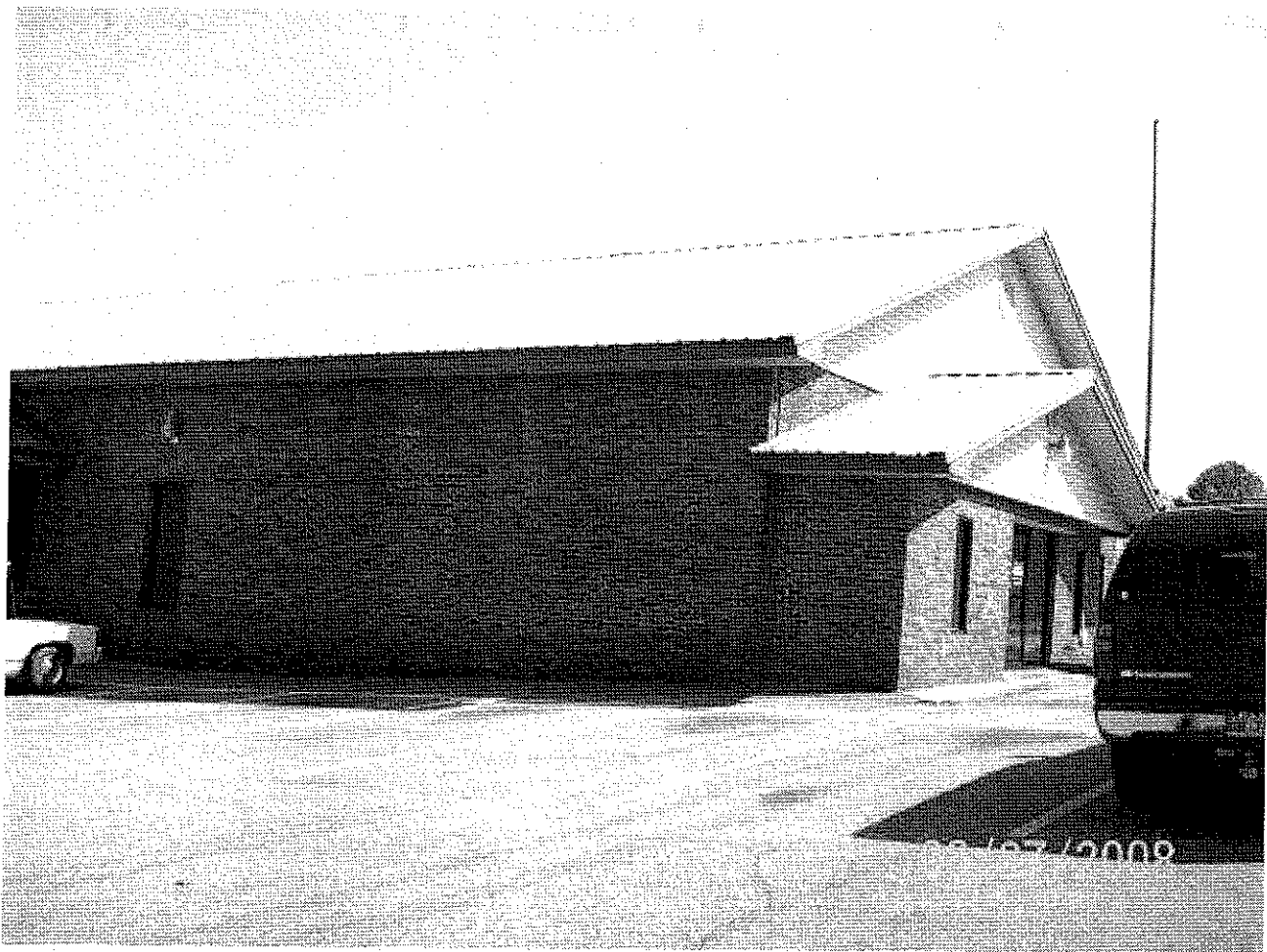
Item # 3

49 North Ave - rezoning case Z15-07



49 North Ave - rezoning case Z15-07





Item # 3



City of Cartersville

PLANNING AND DEVELOPMENT

P.O. Box 1390 • 10 North Public Square • Cartersville, Georgia 30120

Telephone: 770-387-5600 • Fax: 770-387-5605 • www.cityofcartersville.org

File # **Z15-07**

DISCLOSURE OF INTERESTS BY LOCAL OFFICIAL

(To be completed by Mayor, City Council, and Planning Commission)

Thoro LLC (Jeff Watkins, rep.) has made a rezoning request on the following property:
Approximately 1.03 acres located at 49 North Ave in the 4th District, 3rd Section, Land Lot 339
from L-I (Light Industrial) to G-C (General Commercial).

Pursuant to O.C.G.A § 36-67A-2 any local government official considering a rezoning request must disclose if he has any of the following interest:

1. A Property interest in any real property affected by a rezoning request.
 Yes _____ No _____ If the answer is Yes, please disclose the nature and extent of such interest.

2. A financial interest in any business entity which has a property interest in any real property affected by a rezoning action.
 Yes _____ No _____
 If the answer is Yes, please disclose the nature and extent of such interest.

3. A spouse, mother, father, brother, sister, son, or daughter with either of the above interests.
 Yes _____ No _____ If the answer is Yes, please disclose the nature and extent of such interest.

TITLE: _____

DATE: _____



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Erosion and Sediment Control Ordinance Change**

SubCategory:	Second Reading of Ordinances
Department Name:	Public Works
Department Summary Recommendation:	In our approved Stormwater Management Plan approved by the Georgia EPD, we are required to update our ordinance to ensure that construction waste language is included in our Erosion Sediment Control Ordinance or our Litter Ordinance by December 31, 2015. The requested ordinance change will add the statement that "construction site operators shall control waste at the construction site, such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste" to our exiting Soil Erosion and Sediment Control Ordinance. This ordinance modification has been reviewed by our city attorney.
City Manager's Remarks:	This is another in a long list of mandates from the state. Your approval of it is needed.
Financial/Budget Certification:	
Legal:	
Associated Information:	

Ordinance no. _____

Now be it and it is hereby ORDAINED by the Mayor and City Council of the City of Cartersville, that the CITY OF CARTERSVILLE CODE OF ORDINANCES. CHAPTER 7.5. DEVELOPMENT REGULATIONS ARTICLE VII. SOIL EROSION AND SEDIMENT CONTROL CODE SECTION 7.5-184 (C) is hereby amended by inserting the following numbered paragraph to Section 7.5-184(C):

1.

(17) Construction site operators shall control waste at the construction site, such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste.

2.

It is the intention of the city council and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances, City of Cartersville, Georgia, and that section 7.5-184(c) is amended by adding the above paragraph (17). The remaining provisions of said section shall remain as is.

BE IT AND IT IS HEREBY ORDAINED

FIRST READING: _____
SECOND READING: _____

_____(SEAL)
MATT SANTINI, MAYOR

ATTEST: _____(SEAL)
CONNIE KEELING, CITY CLERK



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Amendment to Budget Ordinance for Fiscal Year 2014-15**

SubCategory:	Second Reading of Ordinances
Department Name:	Finance
Department Summary Recommendation:	After completion of the Fiscal Year 2014-15 close, the General Fund and the Special Revenue Fund budget need to be amended. The process of amending these budgets is done annually after the year-end close and will bring the city General Fund and Special Revenue funds back into compliance with Generally Accepted Accounting Principles (GAAP) standards. These adjustments reflect the necessary changes needed to bring the budgets back into balance where the revenues equal expenditures for the fiscal year. I recommend your approval of the attached ordinance amendment.
City Manager's Remarks:	This is a budget neutral item that cleans up the numbers for the year end close. Your approval of it is recommended.
Financial/Budget Certification:	
Legal:	
Associated Information:	

Ordinance
of the
City of Cartersville, Georgia

Ordinance No.

NOW BE IT HEREBY ORDAINED by the Mayor and City Council that
pursuant to the City of Cartersville Charter; the City of Cartersville Fiscal Year
2014 - 2015 budget.

2014 - 2015 Budget Summary

<u>General Fund</u>	<u>Revenues</u>	<u>Expenditures</u>
Revenues	\$39,589,590	
Expenditures:		
Legislative		\$18,998,790
Administration		\$ 932,505
Finance Dept.		\$ 1,130,100
Customer Service Dept.		\$ 647,630
Police		\$ 5,058,275
Fire		\$ 6,225,725
Municipal Court		\$ 218,735
Public Works		\$ 2,574,400
Recreation		\$ 2,864,830
Planning & Development		\$ 783,095
Downtown Development Authority		\$ 155,505
 <u>Special Revenue Funds</u>		
SPLOST – 2003	\$ 360,490	\$ 360,490
SPLOST – 2014	\$ 3,038,250	\$ 3,038,250
DEA	\$ 1,150,460	\$ 1,150,460
State Forfeiture	\$ 3,000	\$ 3,000
Hotel/Motel Tax	\$ 552,340	\$ 552,340
Motor Vehicle Rental Tax	\$ 61,085	\$ 61,085
Grant Funds	\$ 0	\$ 0
Impact Fees	\$ 0	\$ 0
Business Improve Dist Tax	\$ 29,335	\$ 29,335
Development Fees	\$ 13,075	\$ 13,075
GO Park Bond Cons Series 2014	\$ 153,500	\$ 153,500
Supplemental Disaster Rec Grant	\$ 17,390	\$ 17,390
Cartersville Building Authority	\$ 1,226,890	\$ 1,226,890

Enterprise Funds

Fiber Optics	\$ 1,839,960	\$ 1,839,960
Electric	\$49,027,080	\$49,027,080
Gas	\$26,770,995	\$26,770,995
Solid Waste	\$ 2,448,375	\$ 2,448,375
Stormwater	\$ 1,645,065	\$ 1,645,065
Water & Sewer	\$15,373,335	\$11,010,755
Water Pollution Control Plant		\$ 2,159,160
Water Treatment Plant		\$ 2,203,420

Internal Service Fund

Garage	\$ 1,600,885	\$ 1,600,885
--------	--------------	--------------

BE IT AND IT IS HEREBY ORDAINED.

ADOPTED, this 5th day of June 2015. First Reading.

ADOPTED this day of June 2015. Second Reading.

/s/ _____
Matthew J. Santini
Mayor

ATTEST:

/s/ _____
Connie Keeling
City Clerk



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Amendment to Capacity Fee Ordinance**

SubCategory:	Second Reading of Ordinances
Department Name:	Water
Department Summary Recommendation:	On 10/16/2014 Council approved a second reading of an amendment to the capacity fee ordinance (text attached). That amendment clarified how capacity fees are calculated for multi-unit structures such as assisted living facilities, nursing homes and hospitals. During adoption of the FY15_16 Budget this language was omitted from Sec. 24-64(d)-“Other Provisions” (2) which removed the language that was adopted on 10/16/2014. It is therefore necessary to approve the language again so as to return it to the ordinance for its originally intended purpose. The error was caught during a review of Municode updates.
City Manager's Remarks:	This corrects a previous error in language. It's a house keeping item that doesn't change anything in practice. Your approval of this item is recommended.
Financial/Budget Certification:	
Legal:	
Associated Information:	

Ordinance No. _

Now be it and it is hereby ORDAINED by the Mayor and City Council of the City of Cartersville, that the CITY OF CARTERSVILLE CODE OF ORDINANCES. CHAPTER 24. Utilities. Article IV. Water Service 24-64. Water and Sewage Utility Rates (d) Other Provisions is hereby amended by deleting Section 24-64 (d) Other Provisions only in its entirety and replacing it with the following:

1. OTHER PROVISIONS

1. Apartments and hotels per unit calculations.

All hotel and apartment units with refrigerator and stove are to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent) for capacity fees.

All hotel and apartment units without refrigerator and stove are to be calculated as one-half unit ($\frac{3}{4}$ " water meter equivalent) for capacity fees. The following, if part of an apartment or hotel and served by a single meter are to be considered a separate unit for capacity fees. The capacity fee will be calculated as a single (1) unit based on meter size. If the following are served by a master meter, they are considered to be a separate unit to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent):

- (a) Restaurant;
- (b) Lounge;
- (c) Car wash;
- (d) Lobby;
- (e) Full kitchen (not part of restaurant).
- (f) Linen Laundry
- (g) Guest Laundry
- (h) Swimming Pool

2. Assisted Living Facility, Nursing Home and Hospital per unit calculations:

All resident/patient rooms with refrigerator and stove are to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent) for capacity fees.

All patient rooms without refrigerator and stove are to be calculated as one-half unit ($\frac{3}{4}$ " water meter equivalent) for capacity fees. The following, if part of a nursing home, assisted living facility or hospital and served by a single meter are to be considered a separate unit for capacity fees. The capacity fee will be calculated as a single (1) unit based on meter size. If the following are served by a master meter, they are considered to be a separate unit to be calculated as a single (1) unit ($\frac{3}{4}$ " water meter equivalent):

- (a) Restaurant;
- (b) Lounge;
- (c) Car wash;
- (d) Lobby/Waiting Room;
- (e) Full kitchen (not part of restaurant).

- (f) Linen Laundry
- (g) Guest Laundry
- (h) Swimming Pool

2.

The remaining provisions of Section 24-64(d) shall remain in full force and effect and are to remain as is.

3.

It is the intention of the City Council and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances, City of Cartersville, Georgia, and the sections of this ordinance may be renumbered to accomplish such intention.

BE IT AND IT IS HEREBY ORDAINED

FIRST READING: _____

SECOND READING: _____

MATTHEW J. SANTINI, MAYOR

ATTEST: _____

CONNIE KEELING, CITY CLERK



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
Revision to Gas Ordinances

SubCategory:	Second Reading of Ordinances
Department Name:	Gas Department
Department Summary Recommendation:	This revision eliminates a conflict between ordinances. I recommend council approval of this revision.
City Manager's Remarks:	This is a housekeeping item that is recommended for your approval.
Financial/Budget Certification:	N/A
Legal:	This revision was drafted by the City Attorney's office.
Associated Information:	N/A

Ordinance no. _____

NOW BE IT AND IT IS HEREBY ORDAINED by the Mayor and City Council of the City of Cartersville, that the Code of Ordinances, City of Cartersville, Georgia **CHAPTER 24. ARTICLE IX. GAS SYSTEM. DIVISION 4. NATURAL GAS TERMS OF SERVICE. Section 24-231 – Generally paragraph (j)(2)** is hereby deleted in its entirety and replaced as follows:

1.

2) Tampering fees. Gas service cut off by the city for non-payment that the customer has turned back on illegally will be reinstated upon payment of the bill, late charge, reconnection fee and a tampering fee.

Meters that had to be removed due to repeated tampering by the customer will be subject to a reinstallation charge.

Meters that are damaged or broken by customer tampering will be repaired or replaced at the customer's expense. Cost may include labor and equipment charges.

Tampering fee and Reinstallation fee shall be as indicated in Section 24-21.

2.

It is the intention of the city council and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances, City of Cartersville, Georgia, and the sections of this ordinance may be renumbered to accomplish such intention.

BE IT AND IT IS HEREBY ORDAINED

FIRST READING: _____
SECOND READING: _____

MATTHEW J. SANTINI, MAYOR

ATTEST: _____
CONNIE KEELING, CITY CLERK



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
Police Chief

SubCategory:	Appointments
Department Name:	Administration
Department Summary Recommendation:	Legal review of the applicable state and local laws indicate that if we do not interview candidates for Police Chief and if we do not discuss this in closed session, that the typical 14 day comment period required by state law is not applicable. We have not discussed this in closed session and haven't conducted interviews for the position. Local law also indicates that in appointment of department heads I 'recommend' the filling of positions and Council approves/disapproves. From that, I recommend that you approve appointing Frank McCann Police Chief on November 25, 2015, which is the effective date of Chief Culpepper's retirement.
City Manager's Remarks:	Your approval of this appointment above is recommended.
Financial/Budget Certification:	
Legal:	
Associated Information:	



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
Land Water Fund Conservation Grant Application

SubCategory:	Resolutions
Department Name:	Parks and Recreation
Department Summary Recommendation:	Cartersville Parks and Recreation Department wishes to apply for a Land and Water Conservation Fund grant. Grant funds will be applied toward the Dellinger picnic shelters replacement project. Shelter replacement is also listed as a recreation bond project. Maximum grant award is \$100,000.00 with a 50/50 match required. Shelter project is estimated at \$400,000 which will that meet the required grant match. Valerie Gilreath, City-County grant writer is preparing the grant pre-application. GA Department of Natural Resources administers this federal grant. I recommend approval of attached resolution related to Land and Water Conversation Fund grant plus authorize Mayor to sign other documents related to this grant application.
City Manager's Remarks:	Your approval of this item is recommended.
Financial/Budget Certification:	
Legal:	
Associated Information:	

RESOLUTION

NO. _____

STATE OF GEORGIA

COUNTY OF BARTOW

WHEREAS, at the regular meeting council meeting of City of Cartersville, of Bartow County, Georgia, held on Thursday November 19, 2015, a motion was made and duly seconded that City of Cartersville agrees to submit a Pre-application for funding from the Land and Water Conservation Fund. The City of Cartersville further agrees that in the event the City of Cartersville pre-application is recommended for funding by the Department of Natural Resources, the City of Cartersville certifies and assures that is has the ability and intention to finance their 50 percent of total project cost and will forward with due diligence to prepare, or have prepared, appropriate documentation required for a formal LWCF application.

CITY OF CARTERSVILLE

Mayor Matthew J. Santini_____
City Clerk – Connie Keeling



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Electric Cities of Georgia Voting Delegate Resolution**

SubCategory:	Resolutions
Department Name:	Electric Department
Department Summary Recommendation:	Electric Cities of Georgia (ECG) has asked the City to pass a resolution that appoints a Primary and Alternate voting delegate for ECG Board of Director's Elections. Typically what Cartersville has done in the past is to appoint the Director as primary voting delegate and the Assistant Director as the Alternate voting delegate. The Electric Department is recommending that Don Hassebrock be approved as the Primary Voting Delegate and Derek Hampton e approved as the Alternate Voting Delegate.
City Manager's Remarks:	Approval of Don and Derek as ECG voting delegates is recommended.
Financial/Budget Certification:	
Legal:	
Associated Information:	

A RESOLUTION

BE IT RESOLVED by the City of Cartersville ("Participant") that the following individuals are hereby appointed to serve as this Participant's primary & alternate voting delegates for the annual Electric Cities of Georgia, Inc. Board of Director's election, with authority to cast all votes to which this Participant is entitled.

Primary: Don Hassebrock

Alternate: Derek Hampton

IT FURTHER RESOLVED that all resolutions and ordinances, in actual conflict herewith be and the same shall thereupon stand superseded, repealed and terminated, respectively.

This _____ day of _____, 2015.

The City of Cartersville:

Matthew J. Santini

Title: Mayor

Attest:

Connie Keeling

Title: City Clerk

[SEAL]



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Georgia Utilities Protection Center Dues**

SubCategory:	Other
Department Name:	Gas Department
Department Summary Recommendation:	We have received an invoice from the Georgia Utilities Protection Center in the amount of \$8,311.62 for our 2016 membership dues. We are required by state law to be a member of the UPC. I recommend approval of this invoice.
City Manager's Remarks:	Your approval of this invoice is recommended.
Financial/Budget Certification:	This is a budgeted item.
Legal:	N/A
Associated Information:	N/A



Know what's below.
Call before you dig.

PO BOX 536434
ATLANTA, GA 30353-6434

Invoice

Date	Invoice #
1/1/2016	A16057

Member Code
CTV

Bill To
CITY OF CARTERSVILLE (CTV) P.O. Box 1390 Cartersville, GA 30120

☐	Monthly
☐	Quarterly
☐	Annual

Remit to:
Utilities Protection Center, Inc.
PO Box 536434
Atlanta, GA 30353-6434
770-476-6037

P.O. No.	Terms
	Due on Receipt

Item	Description	Quantity	Rate	Amount
Annual	2016 Annual Membership Fee	1	8,311.62	8,311.62

Please reference the invoice # and your member code on your check and include the top portion of this invoice with your check to ensure that proper credit is given.

In case of errors or questions about your bill; notify us on a separate piece of paper in writing to the address above. In your letter, give us the following information:

Your name, phone number & email address
Company Name
Member Code
Invoice Number

Describe the error and explain, if you can, why you believe there is an error. We must hear from you by no later than 30 days after we sent you the first bill on which the error or problem occurred.

Savina M. Hooper, CPA 770-476-6037

Total	\$8,311.62
Payments/Credits	\$0.00
Balance Due	\$8,311.62

shooper@georgia811.com

cl Gas
OCT 30 2015

Item # 11



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
November 3, 2015 Election Results

SubCategory:	Other
Department Name:	City Clerk
Department Summary Recommendation:	Attached are the results of the November 3, 2015 election for your review and approval.
City Manager's Remarks:	It is appropriate for Council to accept these results as official and approve them.
Financial/Budget Certification:	
Legal:	
Associated Information:	

November 19, 2015

Honorable Mayor and City Council
City of Cartersville
Cartersville, GA 30120

This report constitutes the returns of the General Election held on November 3, 2015 to the Governing Authority of the City of Cartersville, as required by the Georgia Municipal Election Code.

The purpose of the General Election was to elect the Mayor, City Council Members from Ward Two, Ward 4, and Ward 6; School Board Member at Large, Ward 3 and Ward 4; and ESPLOST (a city/county election)

The election review board was Rene Faunce and Cheryl Jackson.

Results of the November 3, 2015 General Election is as follows:

Office	Votes Received
Mayor Matthew J. Santini Write in Votes	877 0
Council Ward 2 Jayce B Stepp Write in Votes	135 0
Council Ward 4 Lindsey McDaniel Jr. Write in Votes	41 0
Council Ward 6 Lori Pruitt Taff Wren Write in Votes	64 147 0
Cartersville School Board At Large Linda Benton Write in Votes	861 0

Cartersville School Board Ward 3 Travis Popham Write in Votes	287 0
Cartersville School Board Ward 4 S Pat Broadnax Write in Votes	39 0

ESPLOST	Yes	No
Cartersville East	293	133
Cartersville West	414	127
Countywide Total	2269	1253

The number of registered voters is 8581

The number voting at the Cartersville West Precinct, Civic Center is 541

The number voting at the Cartersville East Precinct, Chamber of Commerce is 426

The number of valid absentee ballots is 17.

The number of provisional ballots is zero.

Respectfully Submitted,

Connie Keeling
Election Superintendent



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Center Road 24-inch Sewer Replacement – Phase II**

SubCategory:	Engineering Services
Department Name:	Water Department
Department Summary Recommendation:	Phase I of the Center Road 24-inch Sewer Replacement was completed in late 2014. Phase II of this project will complete the necessary improvements and replacement of existing infrastructure to fully serve several new subdivisions in the area. Home building has picked up dramatically in the area and completion of the project will soon be necessary to service that additional load. Jacobs Engineering submitted a proposal in the amount of \$24,300.00 to provide engineering services for Phase II. Jacobs provided these same services for Phase I and is already familiar with the project and desired outcome. I recommend approval of Jacobs Engineering for this project. The project is a budgeted item and will be paid with sewer capacity fees through account 505.3320.54.3381 – “Center Road Sewer Upgrade”.
City Manager's Remarks:	Your approval of Jacobs to do this work is recommended.
Financial/Budget Certification:	The project is a budgeted item and will be paid with sewer capacity fees through account 505.3320.54.3381 Center Road Sewer Upgrade.
Legal:	
Associated Information:	



City of Cartersville

**City Council Meeting
11/19/2015 7:00:00 PM
Distribution and Collection Restock #2**

SubCategory:	Bid Award/Purchases								
Department Name:	Water Department								
Department Summary Recommendation:	Bids were accepted for materials needed to restock the repair parts inventory for the Distribution and Collection Division. Bids were as follows: <table><tr><td>Kendall Municipal</td><td>\$6,075.65</td></tr><tr><td>HD Supply</td><td>\$7,873.25</td></tr><tr><td>Ferguson Waterworks</td><td>No Bid</td></tr><tr><td>Consolidated Pipe</td><td>Incomplete Bid</td></tr></table> I recommend purchase of materials from Kendall Municipal for \$6,075.65. This is a budgeted item and will be paid with operating revenue from accounts 505.3320.52.2380 – Maintenance to Mains and 505.3320.52.2390 – Maintenance to Meters	Kendall Municipal	\$6,075.65	HD Supply	\$7,873.25	Ferguson Waterworks	No Bid	Consolidated Pipe	Incomplete Bid
Kendall Municipal	\$6,075.65								
HD Supply	\$7,873.25								
Ferguson Waterworks	No Bid								
Consolidated Pipe	Incomplete Bid								
City Manager's Remarks:	I recommend approval of this item.								
Financial/Budget Certification:	This is a budgeted item and will be paid with operating revenue from accounts 505.3320.52.2380 Maintenance to Mains and 505.3320.52.2390 Maintenance to Meters								
Legal:									
Associated Information:									



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
Smart Cover Sewer Monitoring System

SubCategory:	Bid Award/Purchases
Department Name:	Water Dept
Department Summary Recommendation:	The Smart Cover system is a proprietary satellite sewer monitoring system that allows 24/7 real-time monitoring of sewer flows from under a manhole lid. The system can be configured with set points that when triggered will send a message directly to service personnel greatly reducing the response time to a surcharge event. With additional equipment (sensors) the system can be used to survey sewer lines for inflow and infiltration. The system can monitor and record flow levels to track how a sewer system responds to a rain event. Sewers that show a direct response to rain events can be identified and further evaluated for repair. I am requesting three smart covers to be initially located in the area of the 24-inch and 15-inch sewer lines that have been affected by sinkhole activity at the Gas Department campus (see attached Proposed Smart Cover Locations). This equipment will allow us to monitor these lines and respond in a more timely matter should further damage occur. The system is available only from Templeton and Associates (see attached sole source certification). Their bid for three smart cover sewer lids is \$15,477. This is not a budgeted item and will be paid from operating revenue through account 505.3320.63.1000 – “Sinkhole Expenses”.
City Manager's Remarks:	I recommend approval of the purchase of this item.
Financial/Budget Certification:	This is not a budgeted item and will be paid from operating revenue through account 505.3320.63.1000 Sinkhole Expenses.
Legal:	
Associated Information:	



QUOTATION

For

City of Cartersville, Ga
Offered by;
W C Equipment Sales
4324 Brogdon Exchange Suite 100
Suwanee, GA 30024

SmartCover® and SmartFLOE™
Monitoring Systems



Quotation Date: August 11, 2015

Section I: Pricing

Smart Covers is pleased to provide the following Proposal with Pricing (Section 1), System Description (Sections 2-%) and Warranty (Section 6).

Pricing Summary

Part Number	Description	Unit Qty.	Unit Price (Each)	Extended
SC-Q-S-15	SmartCover® system components: E-Box System Control with onboard computer, modem; fully potted and IP-68 rated. Distance Sensing Module (DSM) with 3" to 81" sensor range, with 15' or 25' cable. Mounting bracket kit with brackets and mounting hardware PowerPack® - lithium thionyl chloride battery with high power density. E-Square™ antenna , installation kit. Installation kit for antenna	3	\$4,795	\$14,385.00
Warranty	One (1) year, parts-only limited warranty on all system SmartCover® hardware. See Warranty Statement for complete details.	3	Included	Included
AMS-SC1	Active Site Monitoring, One-Year includes:: Software subscription with <i>unlimited users</i> . Unlimited data storage Provides regular updates and upgrades including the all new <i>SmartTrend™</i> . Satellite connectivity service to the Iridium Satellite System Ongoing technical support via phone or online.	3	\$364	\$1092
IST-1	Initial Set-up & Training: first-time customers only, one-time charge. - Dedicated, secure Customer Website Set-up. - Browser-based website with map of all installation sites, individual site data and graphs; Alarm set-up per site with User alarm receipt protocols. - Onsite maintenance and software training Note: this is a one-time charge and does not apply to follow-on orders.	1	\$899	Included
Ship	Shipping Charges			Included
Install	Installation Assistance 1/2 day Service			Included
Tax				N/A
TOTAL	All items above			\$15,477

OPTIONS- SmartCover®				
EW-SC1	Extended Parts Warranty covering 2nd Year: - E-Box System Control - Distance Sensing Module (DSM) - Antenna - Mounting bracket. PARTS ONLY Warranty NOTE: Discounted herein only if ordered at the time of the initial order Does not include PowerPack Warranty, see below.		\$371	TBD
PW-LTC1	PowerPack Warranty- extends warranty covering the 2nd Year NOTE: Discounted herein only if ordered at the time of the initial order		\$225	TBD
ASM-SC1	Active Site Monitoring, 1 year (for the 2 nd Year of service). NOTE: Discounted herein only if ordered at the time of the initial order.		\$364	TBD
Part Number	Description	Unit Qty.	Unit Price (Each)	Extended
OPTIONS- SmartFLOE™				
USC-x-x-xx	Upgrade of SmartCover® system to SmartFLOE™	TBD	\$985	TBD
SP-24-A	Stabilizer platform adjustable to 24" wide shelf for ultra-sonic head. Consult with Hadronex Applications Engineers to determine if required	TBD	\$1,195	TBD
SW-SR-2460	Stilling well for standard-range sensor. Length of stilling well is customized per application from 3' to 6' in one foot increments Provides a dynamic measurement range of 81". NOTE: upon survey of the site, length is determined.	TBD	\$287	TBD
SW-LR-2460	Stilling well for long-range sensor. Length is customized per application from 3' to 6' in one foot increments Provides a dynamic measurement range of 20' (240"). NOTE: upon survey of the site, length is determined.	TBD	\$287	TBD

Delivery

Six (6) weeks: upon receipt of a Purchase Order and receipt of complete engineering and site information as requested. Every reasonable effort will be made to provide earlier delivery if requested.

Ongoing Annual Costs

After the first year of operation, the following fees will provide **continued software support, satellite connectivity and power**. These are annual charges paid prior to the start of the year.

Active Site Monitoring**ASM-SC1****\$364**

One-Year software subscription, satellite connectivity, online maintenance, online S/C monitoring per unit per year.

ASM-SC2

\$679

Two-Year software subscription, satellite connectivity, online maintenance, online S/C monitoring per unit per year for two years.

Options:

PowerPack Warranty

Power Pack Warranty (PW-LTC1):

\$225

One-Year PowerPack Warranty for each installation site, part-only warranty on the PowerPack offering unlimited replacements during the Warranty term

Power Pack Warranty (PW-LTC2):

\$437

Two-Year PowerPack Warranty for each installation site, part-only warranty on the PowerPack offering unlimited replacements during the Warranty term.

Optional after First Year

Extended Warranty- parts-only warranty extension after the first year.

This warranty covers: E-Box System Control, Distance Sensing Module (DSM), antenna, and mounting bracket. This is a PARTS ONLY warranty.

1 Year Extension (EW-SC1) per unit:

\$ 399

2-Year Extension (EW-SC2) per unit

\$ 742

Terms and Conditions

- Payment: Net 30 days
- Late charges: A service charge of 1.5% per month will be added to all balances unpaid 30 days after invoice date. Failure to pay in accordance with these terms may void all warranties.
- Quote Validity: This proposal is valid for **90 days**.
- Cancellations: for all orders of less than \$10,000, cancellation is accepted prior to shipment. For orders equal to or greater than \$10,000, a 15% restocking charge is applied for cancellation.
- Returns: returns are accepted with a valid Return Material Authorization (RMA) number only.

End Section 1, proceed to Section 2, next page.

SECTION2: PRODUCT DESCRIPTION

Overview

Each SmartCover® System includes the following components which comprise the hardware delivered with each system:

- One (1) E-Box system control
- One (1) Ultrasonic Distance Sensing Module (DSM) with connecting cable.
- One (1) communications antenna for direct connection to the Iridium Satellite System.
- One (1) PowerPack™, a proprietary high power density lithium thionyl chloride battery
- One (1) bracket kit for either mounting flat to the underside of the manhole cover or for mounting to the manhole cover vein.
- One installation kit containing all hardware and accessories necessary to mount a single system

Item Descriptions:

E-Box

The E-Box is the system control containing the digital satellite radio, computer and signal processing components. It is fully potted and can be completely submerged in water (IP-68 rated) It is housed in an, ABS enclosure and shock tested to 10 G's.



SmartCover® E Box Control

PowerPack™

The PowerPack™ is a high power-density battery system designed for reliable, consistent delivery of power in the harsh wastewater environment. It is housed in a urethane coated pack containing Lithium Thionyl Chloride primary batteries. Typically the PowerPack provides at least one year of life and generally longer under normal operating conditions. PowerPacks have a 10 year shelf life prior to use.



SmartCover® PowerPack™

Distance Sensing Module (DSM)

The ultrasonic distance sensor is encased and sealed in an ABS housing. It is fully potted and completely water-proof, meeting IP-68 standards. The crystal controlled oscillator sensor is self-calibrating.

There are two ranges available. The standard range senses between 3" and 81" while the long-range sensor's range is 11" to 240".

The DSM has two standard cable lengths of 15' and 25'. Custom lengths are available, application dependent, up to 300'.

Hadronex Application Engineers are available to assist users to determine the correct DSM range and cable lengths.



SmartCover® DSM

E-Series™ Antennae

The E-Series™ antennae include the "E-Square" and the "E-Dot" types. Both are traffic rated and designed to mount directly to the manhole cover or vault lid. They communicate directly to the Iridium Satellite System and do not require any intermediary devices for boosting signals. The antennae are secured to the top of the manhole cover using a high strength, two-part acrylic adhesive specifically designed for high stress applications.

The E-Square antenna is a road-reflector type used in areas where there is no opportunity for dislocation from such hazards as snow plows.

The E-Dot antenna is for cold-weather climates where snow plow operation occurs and are designed to be mounted below the manhole profile.

E-Square™ Antenna

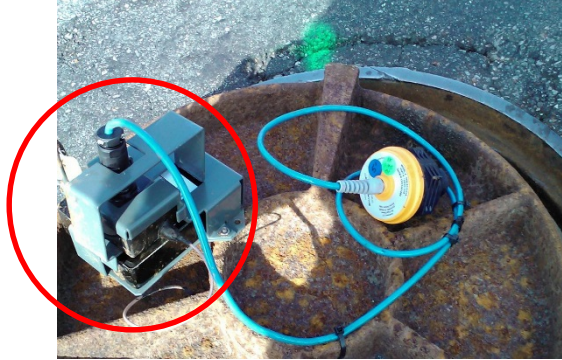


E-Dot™ Antenna

Mounting Bracket Kit

The mounting bracket is a ruggedized, corrosion resistant assembly designed to protect and secure system components. The bracket is secured with two stainless steel bolts whereby the installer drills two ¼" holes into the cover. The bracket is designed in such a manner such that **NO CONFINED SPACE ENTRY IS REQUIRED FOR INSTALLATION**. Its hard-anodized aluminum housing encloses the PowerPack and the E-Box control. The DSM (distance sensing module) is connected to the E-Box and suspended via a cable, typically over the invert.

The bracket is supplied as a three-piece kit for mounting directly to the underside "flat" of the manhole or, alternately, to the manhole cover vein.

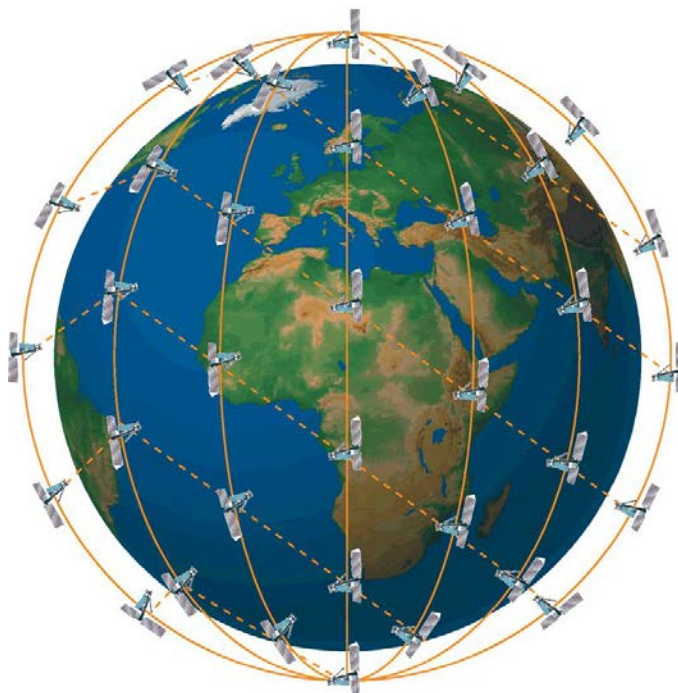


Bracket with E-Box and PowerPack on underside of manhole cover.

SECTION 3. DESCRIPTION OF THE SATELLITE COMMUNICATION SYSTEM

The SmartCover® system uses the high reliability **Iridium Satellite System** as its communications backbone. Iridium is a state-of-the-art system consisting of 66 Low Earth Orbiting (LEO) satellites. It provides highly superior connectivity to that of terrestrial systems such as GSM, GPRS and other cell phone based systems. With the distribution of satellites across the globe, connectivity can be achieved with a small fraction of the horizon available. SmartCover® communication is established in challenging locations with such impediments as tree canopies or overpasses. Iridium has a very strong record of performance and reliability.

SmartCover® data is highly secure with servers using 2048 bit encryption. These are redundant servers located in a climate controlled, secure facility with emergency power to prevent any interruptions. Servers store Historical Communication, Data, and Data Access information. Being a web or “cloud” based system; data is available at all times through a browser from a computer, tablet or phone. Users can access data through any web browser to the server via encrypted data and send notifications directly to the user.



Iridium Satellite Constellation

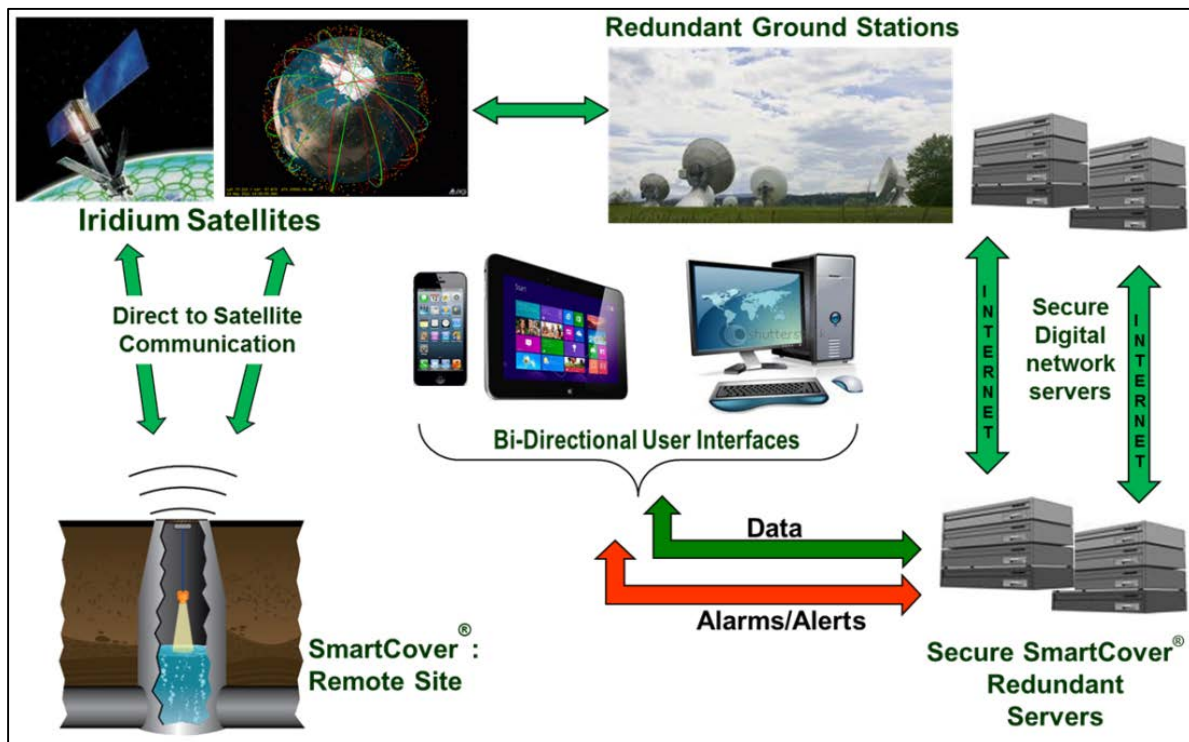
The Communication Process

As per the diagram below, the SmartCover® system communicates directly to an orbiting satellite. The communication signal is then sent to Iridium earth link stations and then to Hadronex secure servers.

For alarm signals, they are subsequently sent to the Customer via cell phone, Smart Phone, digital pager and/or to computers via the internet. It is possible to have alarms sent to a central control room as well.

SmartCover® communication is bi-directional. The user, for example, may change the alarm distance setting or turn the system “on” or “off”. These are accomplished through a web browser where the user logs onto the secure, dedicated Customer Web Page. The user then accesses Customer Management Page to change a given setting. The setting change is communicated from the Hadronex servers through the Iridium system and to the SmartCover® system at the designated site.

A major benefit of the Hadronex system is that data acquisition, alarms and system setting changes are enabled *remote from the installation* site saving time and resources.



SmartCover® communications system

SmartCover® System Operation

The SmartCover® system functions by the distance sensing module (DSM) taking a measurement every 6 minutes. Monitoring occurs 24 hours per day, seven (7) days per week.

Data Measurement Frequency

If the water being monitored is below the alarm level, the SmartCover® logs alternate readings, (every 12 minutes, five times per hour). These readings are “batched” and sent once per hour via satellite to the server and stored for user access such as trending and analysis.

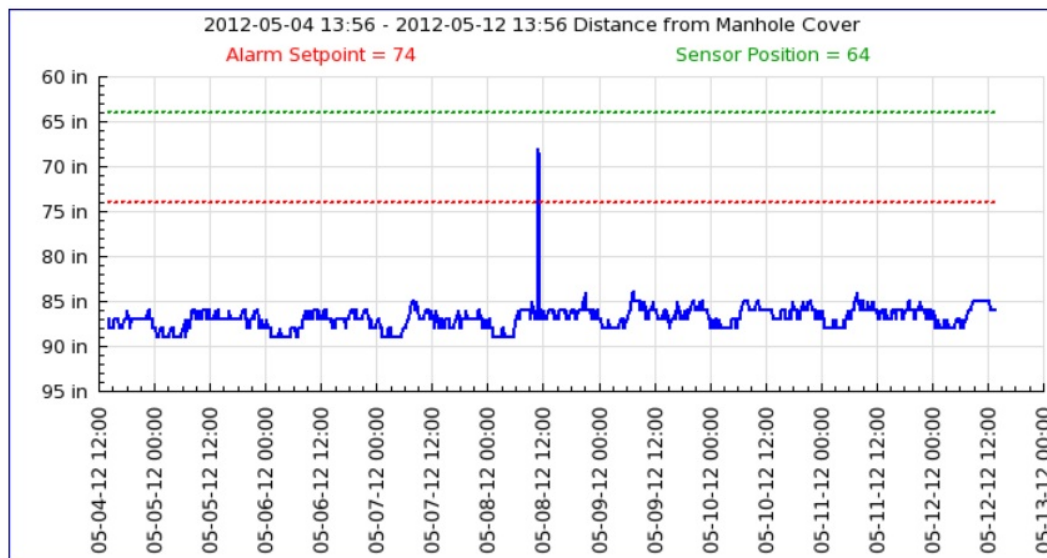
Alarming

If the SmartCover® system measures and senses that the water it is *above* the alarm level, an alarm notification is sent to the users by a pre-established communication protocol i.e., text message to a mobile device or an email message to a computer. Alarms through cell phones or pagers are via Short Message Service (SMS), or Smart Phones and emails via email messaging. A dedicated direct-from-satellite handheld system is available option for highly critical communications. Contact Hadronex for more information.

A LEVEL MEASUREMENT IS TAKEN EVERY 6 MINUTES AND DATA IS UPDATED ON THE SERVER EVERY HOUR. IN THE EVENT OF A HIGH WATER EVENT, THE ALARM IS SENT THE NEXT TIME A LEVEL MEASUREMENT IS MADE. THE LONGEST TIME BETWEEN THE TIME THE WATER REACHES THE ALARM LEVEL AND WHEN THE ALARM SOUNDS IS 5 MINUTES AND 59 SECONDS.

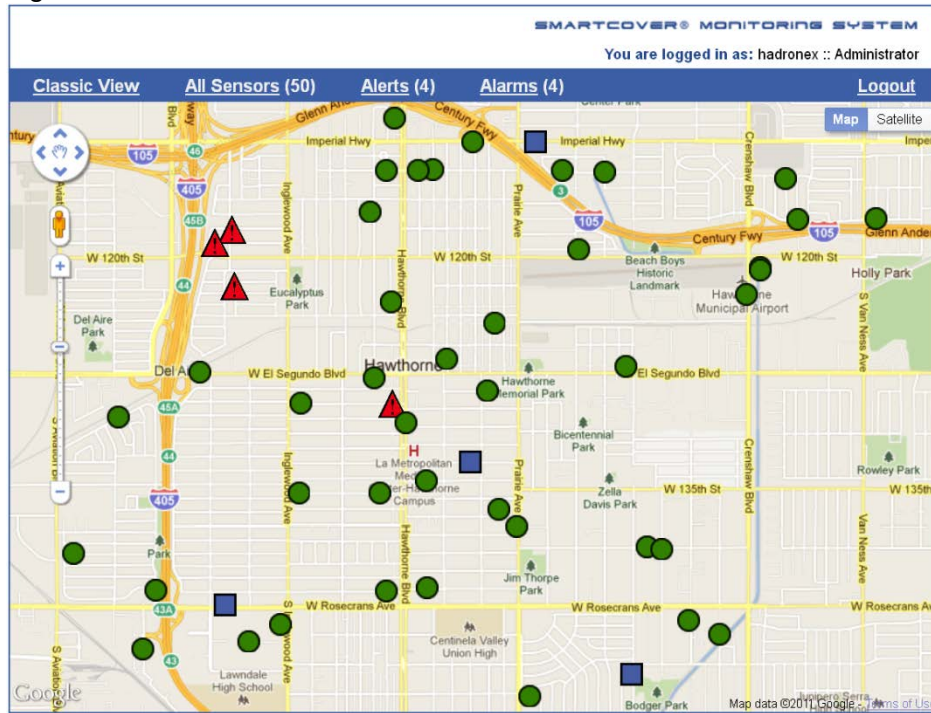
Graphical Data

A typical graph (below) illustrates what can be viewed on the secure Customer Web Page. This graph shows that flow levels are below the alarm level for several days with one surcharge occurring thereafter. This event exceeds user-determined alarm level and enables an alarm. Note that the alarm is set well below the level where a spill may occur and allows for sufficient time to respond. In this case the bottom of the sensor is 64 inches from the manhole cover and the alarm is set for 74 inches below the manhole cover.



System Map

When the user opens their secure web page they are able to view the location of every SmartCover® system. The map function has three, colored-coded symbols for ease of viewing and management.



Color Coded Symbols

GREEN (circle) – Indicates that the SmartCover® system is functioning properly and that the site does not have any alarms.

BLUE (square) – Indicates an “alert” and that a SmartCover® maintenance action is required. For example, it could mean the battery has low voltage and needs to be replaced or that a unit has not communicated within the expected interval.

RED (triangle) – Indicates that an “alarm” condition exists at this location. It could be high water event or an intrusion. Action is required.

SECTION 4. INSTALLATION AND ACTIVATION

Installation

Installation consists of physically attaching of the SmartCover® system. The antenna is mounted to the top of the cover or lid and the mouthing bracket, housing the PowerPack and E-Box with the DSM connected to the E-Box, to the bottom.

The antenna is mounted and secured with a high strength, MIL-Spec grade adhesive and a hole is drilled to feed the antenna wire to the underside where the E-Box control is located.

The bracket is mounted to the underside by drilling to two holes into the cover or lid. Two stainless steel screws secure the bracket. The DSM is connected to the E-Box control and it is suspended and aligned to the flow target area i.e., the invert.

On-site testing of the communication link is performed to ensure that the unit is operational.

- Standard Installation: The SmartCover® system (hardware) is installed in the field at the designated site.
- Offsite Installation: The SmartCover® system is installed on the selected cover at an offsite facility and transported to the designated location. This method can minimize onsite time to a few minutes reducing the need for traffic control and disruption.
- Typically, the Customer will provide personnel and equipment, as appropriate for traffic control as required by local regulations and safety of field personnel.

Activation

After the physical installation of the SmartCover® system(s), the following actions are taken to bring full functionality to the SmartCover® system.

- ***SmartCover® Activation: Customer Actions***
 - o Upon receipt of a Purchase Order, Hadronex the user will receive a questionnaire to obtain the information necessary to perform the SmartCover® service Set-Up. Proper system operation is dependent upon receipt of required information.
 - o This information is used as part of installation where communication will be tested to verify functionality.
- ***SmartCover® Activation: Hadronex Actions***
 - o At the Hadronex technical Support offices, the secure Customer Web Site is set up including a private account and database on the Hadronex secure server.
 - o Web site is configured for the Customer Web Site with SmartCover® system locations and users.
 - o Initial population of the Customer SmartCover® database.
 - o Registration of the SmartCover® system wireless radios with the network and setting the Customer default system operational parameters.

The installation and activation process typically takes one hour per unit to perform under normal conditions.

Training

Training is provided after completion of the installation process. Once on-site personnel are trained, Hadronex will be available to provide additional web site training remotely after the SmartCover® system has been installed and operational.

SECTION 5. ACTIVE SITE MONITORING

Active Site Monitoring (ASM) is a **compressive support service** for the SmartCover® system. It includes software support, satellite connectivity and ongoing technical support with these three elements described below.

It is an annual, per site service provided by Hadronex. ASM includes but is not limited to:

- **Website hosting-** initial set-up and ongoing hosting of all software and customer data. Note that all data is owned by the customer.
- **Website / Software Upgrades-** from time to time Hadronex provides new features and tools at no charge including such features supporting improved analytical tools, improved graphical tools and new reports.
- **Website maintenance** – maintaining the secure servers on which your web site resides, and providing free upgrades to the web sites as they become available.
- **Standard Reports** - Hadronex will support Customer in the preparation of these reports for management or regulators **Technical Telephone Support** - This service is offered by the Hadronex Technical Services team from 7am to 5 pm Pacific time and with additional support from local representatives.
- **Management Oversight**
 - o Hadronex Technical Services team monitors the proper operation of all installed systems including battery voltage, the radio signal strength and the communication to/from the systems.
 - o Hadronex coordinates the appropriate service to repair any components in the field with you or the local dealer
- **Alarm Processing** – maintaining the infrastructure of the alarm contact system.
- **After Hours Support** – on an as-needed basis. Contact Hadronex for details
- **Wireless Communications Connectivity** – Access to the two-way, wireless satellite network.

Product Improvements

The SmartCover® is continuously improving, adding new features and functions. Hadronex often uses customer input to add new features. Product improvements are backwards compatible to existing satellite systems with 0.10" resolution. There is no charge for these improvements as they are part of the annual ASM.

SECTION 6. ADDITIONAL TERMS & CONDITIONS, LIMITED WARRANTY

Mutual Hold Harmless. Hadronex hereby holds Customer harmless from any and all claims that may arise, or damages that may result, to Hadronex or Hadronex staff during the performance of this contract. Customer hereby holds harmless Hadronex, its founders, owners and staff, from any and all claims that may arise, of any kind or from any cause whatsoever, due to or as a result of the installation, operation, or use of the SmartCover® system.

Loss of Communications. Customer acknowledges that Hadronex is not responsible for the loss of wireless communication or internet communications or any communications used in the operation of this system.

Advisory Only. The SmartCover® System is an advisory service only. As such, Hadronex and its founders, owners, or staff are not responsible for any damage of any kind or from any cause whatsoever that may result from, in relation to, in connection with, due to, or as a result of the installation or operation of the system, including without limitation, equipment failure, or any consequential damages caused by, or resulting from, the use or installation of the SmartCover® system.

Limited Warranty

The equipment components of the SmartCover® system are warranted free from material defects of material and workmanship for a period of one year from the date of installation. Unless otherwise stated, the Hadronex warranty herein is a parts-only warranty.

Should the Customer discover any condition that might invoke a warranty claim, they are to expeditiously and without delay notify the Hadronex Technical Services group.

Upon notification, Hadronex will assess and instruct the user on follow-on actions.

Should a component fail as a result of a defect in material or workmanship, Hadronex will replace the component or repair it at the Hadronex location.

For all valid warranty claims, as determined by Hadronex, reasonable freight charges to and from Customer shall be paid by Hadronex. In all cases, Hadronex shall determine the shipping method and/or carrier unless otherwise agreed to in writing by Customer and Hadronex.

Upon approval of a warranty failure by Hadronex, Hadronex will either repair or replace the defective component at Hadronex' sole discretion.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). REPAIR OR REPLACEMENT IN THE MANNER PROVIDED ABOVE SHALL BE THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY AND SHALL CONSTITUTE FULFILLMENT OF ALL LIABILITIES OF HADRONEX WITH RESPECT TO THE QUALITY AND PERFORMANCE OF THE PRODUCTS.

THIS WARRANTY DOES NOT COVER DAMAGE OR REPAIRS OR REPLACEMENTS BY ANY CAUSE BEYOND THE CONTROL OF HADRONEX, INCLUDING ACTS OF NATURE, IMPROPER USE, LACK OF PROPER MAINTENANCE OR UNAUTHORIZED REPAIR.

REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY. HADRONEX SHALL NOT BE LIABLE FOR ANY ACTUAL, EXEMPLARY, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING DAMAGES FOR LOSS OF GOODWILL OR PROFITS AND/OR LOSSES FROM ANY CAUSE WHATSOEVER, EVEN IF HADRONEX HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

In no event shall HADRONEX's liability, whether in contract or in tort (including negligence and strict liability), exceed the price of the Product from which such liability arises.

Signatures

Hadronex

City of

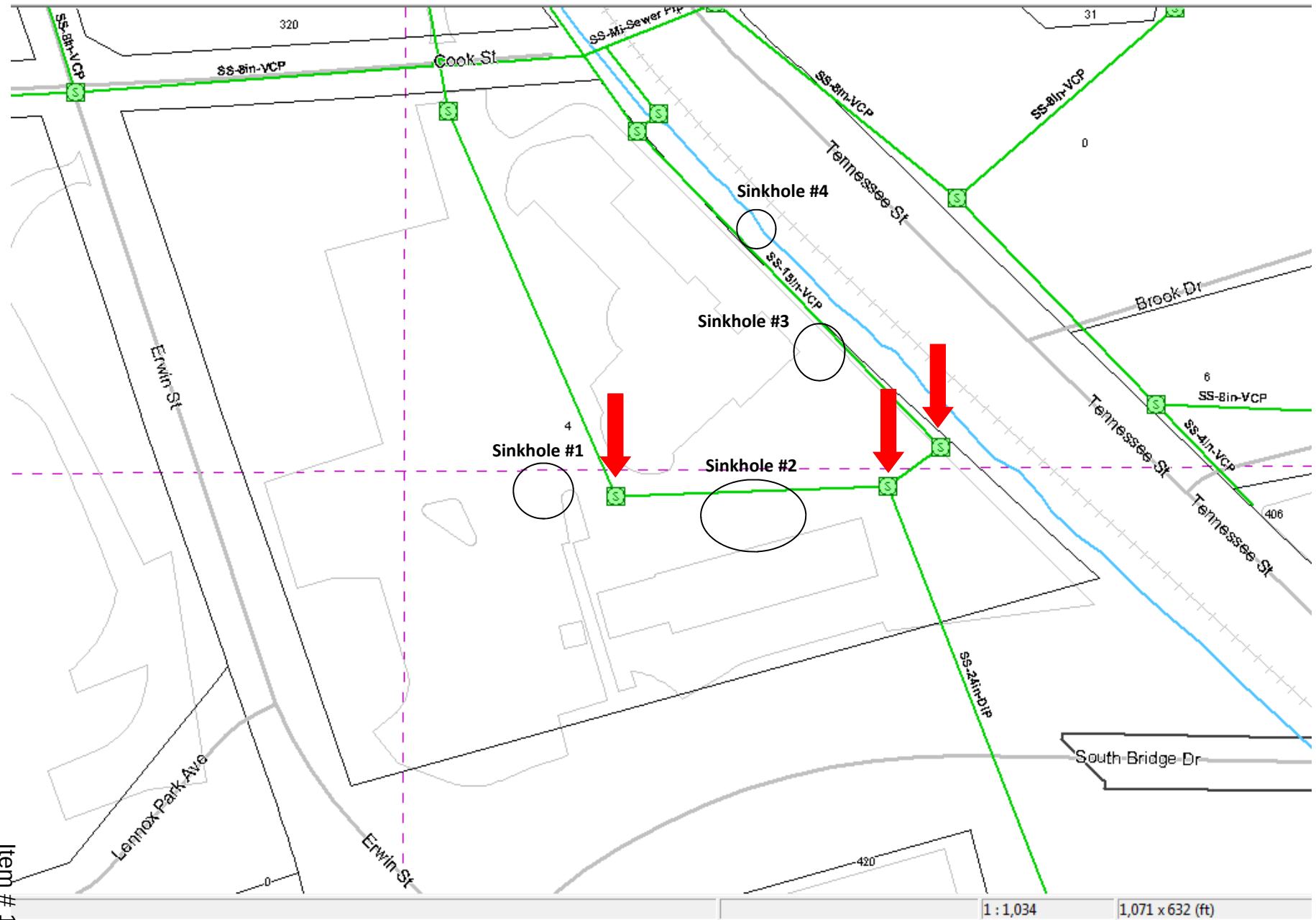
Signature

Signature

Date

Date

PROPOSED SMART COVER LOCATIONS



Sole Source Letter

This letter confirms that ***Templeton and Associates with corporate offices located at 4324 Brogdon Exchange, Suite 100, Suwanee, GA 30024***, is the authorized and exclusive distributor of all SmartCover® Systems™ products, including the award winning SmartCover® and SmartFLOE® in the ***State of Georgia***.

The SmartCover® and SmartFLOE™ systems are patented and proprietary systems designed and manufactured by SmartCover® Systems™. They provide users with unique qualities and functions to acquire water level data below the manhole cover or lift station lid, or other structures with open channel flows, using ultrasonic technology. The system acquires and transmits data and provides 24/7 user access via a secure web browser through a dedicated, secure user website.

These systems uniquely provide real-time, continuous monitoring capability operated by a long-life, lithium thionyl chloride battery which communicates by digital radio through the Iridium satellite system. They provide users with trend data, alarms for surcharges and intrusions, and alerts for maintenance of the monitoring system, all of which provide intelligence to users for corrective action.

These systems are protected by the following US Patents 7,292,143, 7,948,215, 7,944,352, 7,598,858 and 7,589,630. The product is also protected by registered trademarks and international patents.

Sincerely,



Date: August 13, 2015

Jay Boyd
Vice President of Sales & Marketing
(760) 291-1980
jboyd@hadronex.com



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
2016 Calendar

SubCategory:	Bid Award/Purchases
Department Name:	Administration
Department Summary Recommendation:	The printing and distribution of the 2016 Calendar was bid out and two quotes were received. We recommend the low bid of \$10,047.91 with A New Dimension. Breakdown of the price: printing is \$7,519, \$479 for the mailing service element, and an estimated postage price of .214 per piece.
City Manager's Remarks:	I recommend approval of this item.
Financial/Budget Certification:	
Legal:	
Associated Information:	



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
Annual Cogsdale Software Maintenance

SubCategory:	Bid Award/Purchases
Department Name:	Finance
Department Summary Recommendation:	The annual software maintenance invoice from Cogsdale has been received. The invoice is \$66,969.46 and represents an increase of about 2.50% from last year's invoice. The increase, like last year, will cover the increasing cost that Cogsdale has to pass on to its customers for providing support service and on-going product improvements. I was assured by Cogsdale that all of their clients have had an increase of the 2.5% along with Cogsdale's assurance that they are striving to constantly improve the level of support service they provide to their existing customers. This is a budgeted item and I recommend your approval of the Cogsdale invoice for payment in the amount of \$66,969.46.
City Manager's Remarks:	I recommend your approval of this invoice.
Financial/Budget Certification:	This is a budgeted item.
Legal:	
Associated Information:	



Invoice
Date
Page

MN0001893
10/31/2015
1 of 1

Please remit to:
62117 Collection Center Drive
Chicago, IL 60693-0621

Bill To
Cartersville, City of Dan Porta P.O. Box 1390 Cartersville, GA 30120-1390 USA

Ship To
Cartersville, City of Dan Porta P.O. Box 1390 Cartersville, GA 30120-1390 USA

Purchase order No	Customer ID.	Salesperson ID	Shipping Method	Payment Terms
	CART01	CAWLEYR	LOCAL DELIVERY	C.O.D.

Ordered	Item Number	Description	Unit Price	Ext Price
1.00	NOTE	Maintenance for the period Jan-1-16 to Dec-31-16	US\$0.00	US\$0.00
1.00	MAINT	4 Digit CC (QUO-2842)	US\$412.80	US\$412.80
1.00	MAINT	CSM	US\$27,893.25	US\$27,893.25
1.00	MAINT	Customer Web	US\$6,339.38	US\$6,339.38
1.00	MAINT	Electric Rate Change (QUO-2992)	US\$2,145.00	US\$2,145.00
1.00	MAINT	Greenshades	US\$424.75	US\$424.75
1.00	MAINT	Microsoft Dynamics GP Software	US\$29,754.28	US\$29,754.28
1.00	NOTE	Please note that payment is due on or before the maintenance period start date.	US\$0.00	US\$0.00
1.00	NOTE	Therefore, please allow 10 business days prior to the due date to mail your payment.	US\$0.00	US\$0.00
Invoice questions? Please contact Olesya Bondarenko @ 613-226-5511 ext 2503 or obondarenko@harriscomputer.com			Subtotal	US\$66,969.46
			Misc	US\$0.00
			Tax	US\$0.00
			Freight	US\$0.00
			Trade Discount	US\$0.00
			Total	US\$66,969.46

Item # 17



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
Renewal of United Healthcare Retiree Medicare Supplemental Insurance

SubCategory:	Bid Award/Purchases
Department Name:	Administration
Department Summary Recommendation:	City retirees are currently covered under a Medicare supplement through United Healthcare (UHC) Insurance. At this time there are 68 retirees and 16 dependents covered under this supplemental insurance. UHC has a 15.2% increase in the premium for 2016. Our insurance broker asked for proposals from other carriers but other carriers either did not submit proposals or declined to quote. The insurance renewal will be shared by the city and the retirees and I recommend approval to renew with United Healthcare Medicare supplement for 2016.
City Manager's Remarks:	Your approval of this item is recommended.
Financial/Budget Certification:	
Legal:	
Associated Information:	



City of Cartersville

City Council Meeting
11/19/2015 7:00:00 PM
September 2015

SubCategory:	Monthly Financial Statement
Department Name:	Finance
Department Summary Recommendation:	Attached is the September 2015 financial report. Also attached are the supplemental financial information and the cash position reports.
City Manager's Remarks:	Tom R. will present this information at Thursday's meeting.
Financial/Budget Certification:	
Legal:	
Associated Information:	

MONTHLY SUMMARY

As of September 30, 2015

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		FY 2014-15 MONTH OF September-14	FY 2015-16 MONTH OF September-15	FY 2014-15 Year to Date September-14	FY 2015-16 Year to Date September-15	100.00% OF BUDGET (Year to Date)
GENERAL FUND <i>excluding SPOILT, DDA & School System Property Tax Revenue & Expenditures</i>						
REVENUE		\$1,511,460	\$1,676,771	\$4,706,873	\$4,934,943	20.30%
EXPENDITURE		\$1,896,807	\$1,813,884	\$5,123,846	\$5,101,527	20.98%
Gen. Fund Net Profit (Loss)		(\$385,347)	(\$137,113)	(\$416,973)	(\$166,584)	
WATER & SEWER						
REVENUE		\$1,344,300	\$1,460,220	\$4,150,955	\$4,410,602	28.32%
EXPENDITURE		\$1,242,125	\$1,047,175	\$3,528,353	\$3,238,972	20.80%
Wtr. & Swr. Fund Net Profit (Loss)		\$102,175	\$413,045	\$622,602	\$1,171,630	
GAS						
REVENUE		\$1,270,694	\$1,407,924	\$3,994,095	\$3,970,967	17.15%
EXPENDITURES		\$1,853,695	\$1,618,495	\$5,378,745	\$4,390,083	18.96%
Gas Fund Net Profit (Loss)		(\$583,001)	(\$210,571)	(\$1,384,650)	(\$419,116)	
ELECTRIC						
REVENUE		\$4,532,816	\$4,509,554	\$13,308,922	\$14,014,688	28.11%
EXPENDITURES		\$4,286,869	\$4,266,462	\$12,661,865	\$12,519,221	25.11%
Electric Fund Net Profit (Loss)		\$245,947	\$243,092	\$647,057	\$1,495,467	
STORMWATER						
REVENUE		\$108,850	\$113,310	\$328,414	\$339,177	24.42%
EXPENDITURE		\$103,270	\$102,234	\$252,408	\$268,177	19.31%
Stormwater Fund Net Profit (Loss)		\$5,580	\$11,076	\$76,006	\$71,000	
SOLID WASTE						
REVENUE		\$180,884	\$184,171	\$542,949	\$553,439	23.17%
EXPENDITURE		\$228,541	\$163,445	\$480,420	\$422,057	17.67%
Solid Waste Fund Net Profit (Loss)		(\$47,657)	\$20,726	\$62,529	\$131,382	
FIBER OPTICS						
REVENUE		\$161,235	\$201,405	\$459,261	\$506,134	26.99%
EXPENDITURE		\$131,535	\$167,884	\$359,516	\$430,358	22.95%
Fiber Fund Net Profit (Loss)		\$29,700	\$33,521	\$99,745	\$75,776	

	Description	9/30/2015	FY 2016 Budget	% of Monthly Totals to Budget
General Fund	Total Revenues	\$4,934,943	\$24,315,565	20.30%
	GO Bond Proceeds from School	\$0	\$1,448,125	0.00%
	Property Taxes-City Portion Only	\$70,149	\$1,570,235	4.47%
	Local Option Sales Tax (LOST)	\$1,000,797	\$3,916,000	25.56%
	Other Taxes	\$1,405,070	\$7,719,290	18.20%
	Building Permit & Inspection Fees	\$79,736	\$140,000	56.95%
	Fines and Forfeitures	\$163,689	\$700,000	23.38%
	Operating Transfers In-City Utilities	\$1,102,947	\$4,603,245	23.96%
	Other Revenues	\$1,112,555	\$4,218,670	26.37%
	Total Expenditures	\$5,101,526	\$24,315,565	20.98%
	Personnel Expenses	\$3,702,356	\$15,730,045	23.54%
	Operating Expenses	\$1,285,115	\$5,988,545	21.46%
	Capital Expenses	\$430	\$298,500	0.14%
	GO Bond Proceeds from School	\$0	\$1,448,125	0.00%
	Debt Pymt - JDA/CBA	\$0	\$394,650	0.00%
	Library Appropriations	\$113,625	\$455,700	24.93%
Water & Sewer Fund	Total Revenues	\$4,410,602	\$15,575,145	28.32%
	Water Sales	\$2,700,457	\$9,432,605	28.63%
	Sewer Sales	\$1,582,421	\$5,424,540	29.17%
	Bond Proceeds	\$0	\$0	#DIV/0!
	Prior Year Bond Proceeds	\$0	\$0	#DIV/0!
	Prior Year Capacity Fees	\$0	\$305,000	0.00%
	Other Revenues	\$127,724	\$413,000	30.93%
	Total Expenditures	\$3,238,972	\$15,575,145	20.80%
	Personnel Expenses	\$766,548	\$3,465,290	22.12%
	Operating Expenses	\$659,074	\$3,346,775	19.69%
	Capital Expenses	\$84,874	\$2,630,500	3.23%
	Transfer To General Fund	\$626,893	\$2,507,570	25.00%
	Debt Payments	\$1,101,583	\$3,625,010	30.39%
Gas Fund	Total Revenues	\$3,970,967	\$23,159,760	17.15%
	Gas Sales	\$3,468,445	\$20,350,660	17.04%
	Gas Commodity Charge	\$336,213	\$1,245,000	27.01%
	Bond Proceeds	\$0	\$653,100	0.00%
	Proceeds from Capital Leases	\$0	\$76,000	0.00%
	Other Revenues	\$166,309	\$835,000	19.92%
	Total Expenses	\$4,390,083	\$23,159,760	18.96%
	Personnel Expenses	\$408,418	\$1,925,315	21.21%
	Operating Expenses	\$459,590	\$1,469,350	31.28%
	Purchase of Natural Gas	\$2,985,006	\$14,808,320	20.16%
	Transfer to General Fund	\$703,020	\$3,420,825	20.55%
	Capital Expenses	(\$165,951)	\$1,535,950	-10.80%

	Description	9/30/2015	FY 2016 Budget	% of Monthly Totals to Budget
Electric Fund	Total Revenues	\$14,014,688	\$49,860,820	28.11%
	Electric Sales	\$13,684,614	\$47,909,705	28.56%
	Other Revenues	\$330,074	\$1,308,030	25.23%
	Use of Reserves		\$643,085	0.00%
	Total Expenses	\$12,519,221	\$49,860,820	25.11%
	Personnel Expenses	\$529,742	\$2,326,270	22.77%
	Operating Expenses	\$340,416	\$1,353,135	25.16%
	Purchase of Electricity	\$10,506,967	\$42,211,805	24.89%
	Capital Expenses	\$421,936	\$1,088,970	38.75%
	Transfer to General Fund	\$720,160	\$2,880,640	25.00%
Stormwater Fund	Total Revenues	\$339,177	\$1,389,000	24.42%
	Stormwater Revenues	\$336,539	\$1,340,000	25.11%
	Mitigation Grant Revenue	\$0	\$0	#DIV/0!
	Other Revenues	\$2,638	\$13,000	20.29%
	Proceeds from Capital Leases	\$0	\$36,000	0.00%
	Prior Year Carryover	\$0	\$0	#DIV/0!
	Stormwater Improvement Funds	\$0	\$0	#DIV/0!
	Total Expenses	\$268,177	\$1,389,000	19.31%
	Personnel Expenses	\$155,091	\$698,585	22.20%
	Operating Expenses	\$113,086	\$579,695	19.51%
	Capital Expenses	\$0	\$110,720	0.00%
Solid Waste Fund	Total Revenues	\$553,439	\$2,388,600	23.17%
	Refuse Collections Revenues	\$537,316	\$2,177,450	24.68%
	Other Revenues	\$16,123	\$41,150	39.18%
	Proceeds From Capital Leases	\$0	\$170,000	0.00%
	Total Expenses	\$422,057	\$2,388,600	17.67%
	Personnel Expenses	\$198,483	\$1,081,240	18.36%
	Operating Expenses	\$223,574	\$1,137,360	19.66%
	Capital Expenses	\$0	\$170,000	0.00%
	Total Revenues	\$506,134	\$1,875,465	26.99%
	Fiber Optics Revenues	\$432,915	\$1,765,720	24.52%
Fiber Optics Fund	GIS Revenues	\$26,000	\$104,000	25.00%
	Other Revenues	\$47,219	\$5,745	821.91%
	Total Expenses	\$430,358	\$1,875,465	22.95%
	Personnel Expenses	\$151,726	\$785,395	19.32%
	Operating Expenses	\$170,378	\$752,880	22.63%
	MEAG Telecom Statewide Pymt	\$66,054	\$115,795	0.00%
	Debt Payment to Electric Dept	\$0	\$92,395	0.00%
	Capital Expenses	\$42,200	\$129,000	32.71%

6T # watl

Cash Position

	6/30/15	7/31/15	8/31/15	9/30/15	10/31/15	11/30/15	12/31/15
Total Unrestricted Cash Balance	\$14,730,500.90	\$14,002,158.95	\$15,198,260.99	\$15,972,077.87			
Total Restricted Cash Balance	\$64,560,610.64	\$63,821,933.72	\$62,696,702.71	\$61,893,236.40			

Cash Position

	1/31/16	2/28/16	3/31/16	4/30/16	5/31/16	6/30/16
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Total Unrestricted Cash Balance

Total Restricted Cash Balance

Highlights for the Month of September 2015:

Unrestricted cash increased due mainly to increases in cash balances in the water fund, electric fund, and the property and casualty insurance fund.

Restricted cash decreased mostly due to the pension plan assets decreasing in value due to the volatile market during the month.