

**PRE-MEETING AGENDA
MOUNTAIN BROOK CITY COUNCIL**

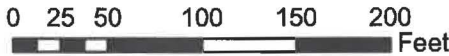
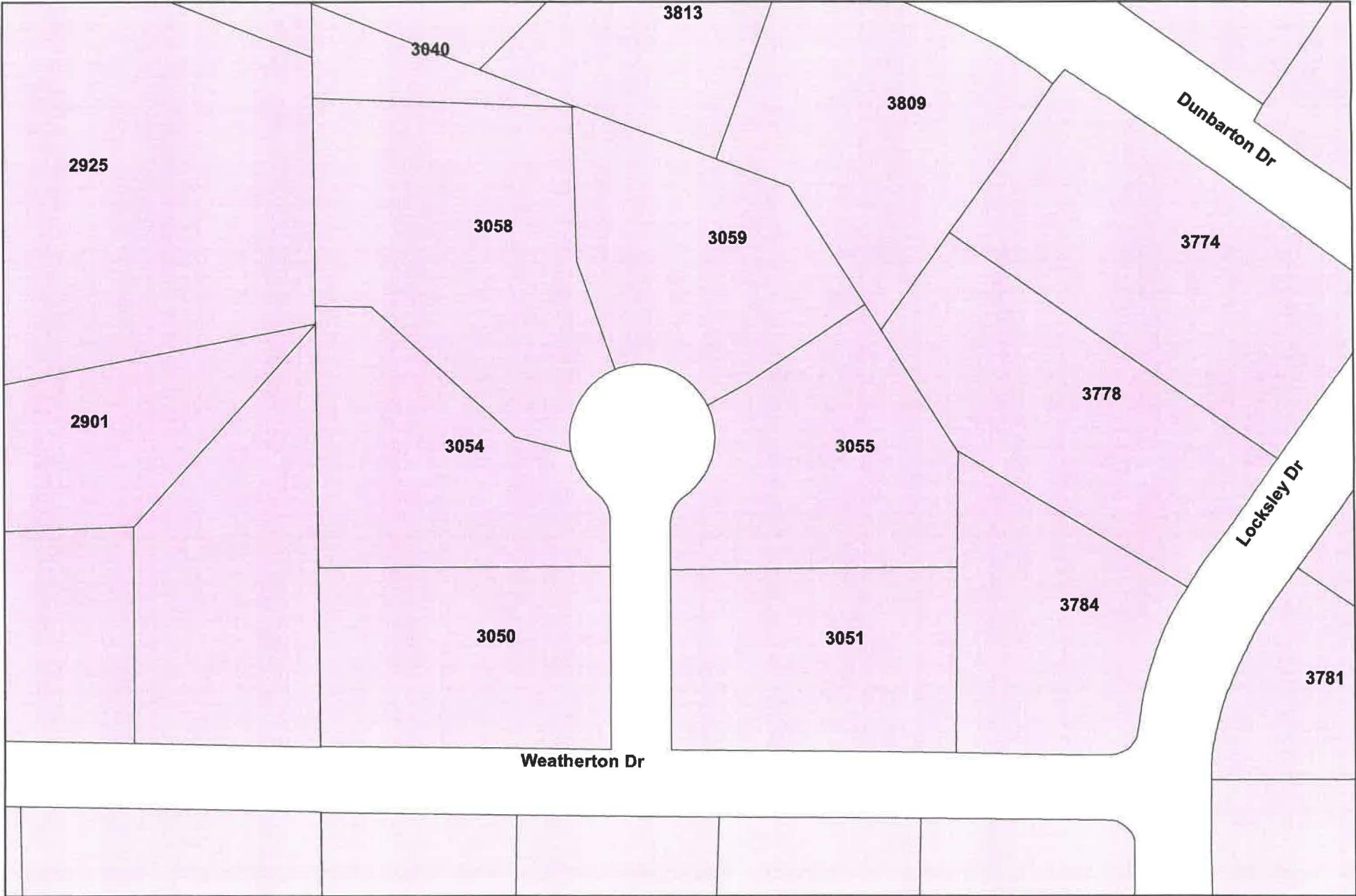
**CITY HALL COUNCIL CHAMBER (A108)
56 CHURCH STREET
MOUNTAIN BROOK, AL 35213**

MARCH 27, 2023, 6:00 P.M.

As a matter of convenience, members of the public are invited to listen, observe and participate in public meetings by Internet video conference. Presenters and others interested in a particular matter for discussion are encouraged to attend the meeting in-person. The City is not responsible for technical issues that may occur that interfere with the virtual meeting. The City Council, at its sole discretion, may proceed with its in-person business meeting regardless of whether virtual attendees can hear and/or observe the proceedings. The City intends to make the meeting available by way of the Zoom app (re: Meeting ID 801-559-1126, password 03272023)

1. Stop sign on Lewis Circle at Weatherton Drive-Chief Loggins (See attached map.)
2. Board of Equalization nominations-Sam Gaston (See attached information.)
3. Board of Landscape Design appointment-Tyler Slaten (See attached information. This item may be added to the formal agenda.)
4. Residents near the Overton Road/North Woodridge intersection to request the city remove the rumble strips installed in this area in 2021-Ryan Ramage (See attached information.)
5. Executive Session

Lewis Circle And Weatherton Drive



City of Mountain Brook GIS Department
Created by: Eddy Parsons
Date: 3-20-23

March 13, 2023

TO THE GOVERNING BODIES OF ALL MUNICIPALITIES

Section 40-3-2, Code of Ala. 1975, requires the governing bodies of the state's incorporated municipalities to submit nominations to the Alabama Department of Revenue (ALDOR) for members of their County Boards of Equalization. The specific requirements for municipalities are below:

- The governing body of the largest municipality in the county must nominate three persons.
- The governing bodies of all other incorporated municipalities may nominate one person.

All nominees must:	
<ul style="list-style-type: none">• Be competent to serve• Reside in the county for at least 5 years• Own taxable real property in the county	<ul style="list-style-type: none">• Be registered as a qualified elector in the county• Not hold any public office or government employment

To ensure adequate time for boards to be appointed, please submit your nominations on the enclosed form by August 1, 2023. Forms may either be emailed or mailed to:

PropertyTaxDivision@revenue.alabama.gov


ALDOR, Property Tax Division
P.O. Box 327210
Montgomery, AL 36132-7210

From the names submitted, ALDOR will select one for appointment as a member of your County Board of Equalization. The remaining two members of your County Board of Equalization will be appointed through a similar nomination process by the county commission and the county board of education.

Please be sure to communicate with these other nominating bodies in your county to avoid duplicating nominations of the same individuals by the municipalities, commission, and board of education.

If you have questions, call the Property Tax Division at 334-242-1525.

Sincerely,



Vernon Barnett
Commissioner

VB:bc
Enclosures

MUNICIPALITY

**OFFICIAL REPORT
Nominations for the
County Board of Equalization
Term beginning October 1, 2023**

STATE OF ALABAMA)
)
 _____ County) _____ City or Town

To the State Commissioner of Revenue
Montgomery, Alabama

We, the undersigned members of the governing body of the above municipality, do hereby nominate the persons as shown below for consideration as members of the County Board of Equalization and certify that in our opinion they are competent to serve under the provisions of the law.

As provided in Section 40-3-2, Code of Ala. 1975, each nominee has been a resident of this county for at least five years, is an owner of taxable real property located within this county, is a qualified voter within this county, and is otherwise well fitted for the duties of the office for which he/she is nominated. It is understood further that no member of the Board of Equalization can hold employment or office of profit with the United States, the State of Alabama, any county or other political subdivision of said State, or with any county school board or with any municipality.

Under all the conditions stated above, we nominate the following persons:

- 1. _____ Name (As usually signed)
_____ Exact Post Office Address
- 2. _____ Name (As usually signed)
_____ Exact Post Office Address
- 3. _____ Name (As usually signed)
_____ Exact Post Office Address

Signatures of all members of the governing body of the above municipality.

DATE: _____, _____

STATE OF ALABAMA)

_____ COUNTY)

AFFIDAVIT OF ELIGIBILITY TO SERVE

I, _____, having been nominated for appointment as a member of the Board of Equalization for _____ County, hereby certify that I meet the requirements to serve as specified in Title 40, Chapter 3, Code of Ala. 1975. I attest the following:

1. I am competent to serve on this County Board of Equalization.
2. I have resided in said county for at least five years.
3. I own taxable real property in said county.
4. I am registered as a qualified elector in said county.
5. I do not hold employment or office of profit with the United States; the State of Alabama; any county or other political subdivision of the state; any board, department, other agency of the United States, the State of Alabama, and county or other political subdivision of the state; any county school board; or any municipality.

Nominee Signature: _____

Date: _____

CITY OF MOUNTAIN BROOK



Tyler Slaten
Senior Planner
56 Church Street
Mountain Brook, Alabama 35213
Telephone: 205.802-3811
Fax: 205.879.6913
slatent@mtnbrook.org
www.mtnbrook.org

DATE: March 27, 2023

TO: Mayor, City Council & City Manager

FROM: Tyler Slaten, City Planner

RE: Board of Landscape Design Supernumerary Appointment

The Board of Landscape Design has a vacant supernumerary position. The members of the Board have unanimously recommended Mr. Dustin Dew for that position. I have included his application and resume. Mr. Dew is the only active applicant we have for the Board of Landscape Design.

**City of Mountain Brook
Public Service Application**

Date: 10-31-21 Name Dustiin A Dew

Phone Number: (919) 935 - 2265 Email: dustindew@gmail.com

Address: 825 Sims Ave Mountain Brook AL 35213
Street City State Zip Code

How long have you been a resident of Mountain Brook? 2 years

Which Board/Commission/Committee are you applying for? (check only one)

Planning Commission	Board of Zoning Adjustments	Board of Landscape Design
Village Design and Review	Board of Education	Parks and Recreation Board
Editorial Board	Finance Committee	Emmet O'Neal Library Board

Previous Board Appointments

Please list any current or previous board appointments you have held for the City of Mountain Brook.

Name of Board	Dates Served

Community Activities

Please list any current or past experience you have with civic, fraternal, volunteer, non-profit organizations in which you are or have been active.

Name of organization	Dates Served	Title, Specific Projects, or Other Info.
UWCA VAT Team 11	2022	VAT Team
TechBirmingham	2020-Present	Board Member
Redeemer Community Church	2016-Present	Member
Alabama Cycling Association	2015-Present	Race Director
Mid-AL Red Cross	2021-2022	Board Member
Committee for the Future-Children's of Alabama	2019	Class of 2019
Birmingham Business Alliance ON Board	2015	Inaugural Class 2015
Freshwater Land Trust	2014-2016	Junior Board Member

Appointment Interest

Please provide a brief statement describing your interest in serving on the selected board.
I take pride in the city of Mountain Brook and its beautiful landscape. Since the landscape and trees are the first impressions to visitors, it would be an honor to serve alongside the City Arborist and Planner to maintain and sustain our community forest.

What specific objectives would you work towards as a member of the selected board?
I would work with the City's Arborist to make their knowledge available to the public so our citizens can make responsible decisions concerning tree removal. Additionally, citizens could then have access to resources for planting trees that are complementary to our city's ecosystem.

Summarize your qualifications that you believe would benefit the selected board. Include education, experience, licenses, etc. You may attach a resume also.
See my resume attached.

Certification

By initialing here (___DD___), I certify the following:

- I am a resident of Mountain Brook
- I understand the commitment requirements for the board for which I am applying.
- I understand that I will be serving without compensation.
- I will report to the city if a conflict of interest arises or something changes that would affect my membership on the Board.
- I will keep an open mind and consider all sides of issues presented to the board.
- I understand that this application and appointment will become public record.

<u>Dustin A. Dew</u> Printed Name of Applicant	 Signature	<u>10-31-22</u> Date
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Note: If additional space is needed to complete the application, you may either write on the back of one of the pages or add additional pages. You may also attach any valid documentation you feel necessary to give us a better understanding of your qualifications. This includes a resume, copy of licenses or degrees, etc.
Submit the application to: www.mtnbrook.org or Sam Gaston, City Manager at gastons@mtnbrook.org

Applications will be kept for three years from the date listed on the front page. You will need to re-apply periodically if you are still interested in serving on any of the boards. If your contact information changes within the three years, please submit a new application.

DUSTIN A. DEW

(919) 935-2265 ▪ dustindew@gmail.com
825 Sims Ave., Birmingham, AL 35222

EDUCATION

East Carolina University Greenville, North Carolina
Masters of Art in Health Education and Promotion, December 2013

Appalachian State University Boone, North Carolina
Bachelor of Science in Health Promotion, May 2010
Minor: Psychology

Honors: Dean's List

Activities: Cycling Team, Undergraduate Research, Community Fitness Testing

PROFESSIONAL EXPERIENCE

Protective Life Corporation Birmingham, Alabama
Innovation Leader, March 2022 – Present

- Support the company's growth by either entering net new markets, developing brand-new products and service models, or developing new ways of running our current business
- Drive a portfolio of projects within the context of our corporate innovation center of excellence
- Develop prototype solutions in partnership with the business
- Support an organization-wide innovation program that allows staff to develop and test new ideas
- Train internal teams on the principles of customer-led, lean innovation while staying relevant to trends in technology and startups to help the company stay abreast of major opportunities that can accelerate our growth

Lakeshore Foundation-UAB/Lakeshore Research Collaborative Birmingham, Alabama
Director of Research Operations, July 2018 – March 2022

- Oversee daily operations for \$7 million in research projects with direct oversight of \$2 million in funding. (funding sources-NIH, CDC, NIDDLR, Neilson Foundation, etc) which includes protocol and budget oversight, risk management, adverse events, technology, and logistics
- Supervise and mentor 20 staff including hiring, termination, and evaluation
- Developed organization wide innovation program that allowed staff to develop and test new ideas
- Work with the executive leadership team to attract new projects to our facility to generate revenue
- Serve as the primary contact to all UAB faculty and staff to generate new grant ideas for research and programs
- Facilitate relationships with community partners by educating them about our organizations and potential partnerships. Since our capital campaign, the focus has been more on donor relations and increasing awareness
- Work with the Alabama start-up and technology community to create collaborations with Lakeshore to drive innovation on our campus
- Key Foundation contact on the development of a \$7 million 17,000 sqft building addition and \$5 million 14,000sqft building renovation
- Serve on Lakeshore Foundation Strategic Planning Committee and Risk Management as well as the development of onboarding policies for staff work on our campus.

Alabama Cycling Association

Birmingham, Alabama

Race Director, February 2015 – Present

- Manage the production of a 6 race mountain bike series for over 800 youth in grades 6-12.
- Supervise 15 core staff and 90 volunteers for each race weekend
- Work with State land managers to plan and execute each race which includes lodging, emergency services, venue insurance, risk management, etc.
- Serve as a league training coordinator for the National Interscholastic Cycling Association

UAB/Lakeshore Research Collaborative

Birmingham, Alabama

Collaborative Manager, July 2015 – July 2018

- Oversaw daily research operations in our research projects that include budget oversight, risk management, and protocol development.
- Supervised and mentor 15 staff working on the projects
- Monitored grant funds (approx. \$5 million/year)
- Facilitated relationships with external researchers working with the Collaborative and proactively identified new relationships and future direction of the research
- Developed and implemented a 4-day workshop on Transformative Exercise
- Collaborated with national and international researchers to progress Paralympic Sport
- Served on Lakeshore Foundation Risk Management Board and Website Committee

Exercise and Sport Science Laboratory Coordinator, February 2014 – July 2015

- Managed all aspects of the 18 ongoing research projects within the Sports Science Laboratory (equipment, testing, inventory, etc.)
- Worked with managers, coaches, and athletes to coordinate sports science testing
- Developed exercise testing protocols for research projects
- Prepared and monitor IRB applications and guidelines
- Supervised one lab assistant

Appalachian State/North Carolina Research Campus Human Performance Lab

Boone, North Carolina

Research Manager, May 2010 – February 2014

- Coordinated over 45 research studies focused in novel nutrition supplements and their effects on exercise performance, inflammation, oxidative stress, and changes in immune function in athletes
- Helped with the development of IRB applications and designing research protocols
- Managed all aspects of subject recruitment, compliance, and retention for research studies
- Supervised one research assistant
- Organized data analysis, subject reports, and staffing for data collection
- Facilitated internship programs for undergraduate, graduate, and PhD level internships
- Implemented the community fitness testing program
- Performed nutrient analysis and blood assays in the bio-chemistry lab

Professional Boards & CIVIC AFFILIATIONS

United Way Central Alabama Visiting Allocation Team 11 (2022)

Mid-Alabama American Red Cross Board Member (2021-2022)

Birmingham Business Journal NextGenBHM: Health, Tech and Innovation (2020)

TechBirmingham Board Member (2020-Present)

Committee for the Future- Children's of Alabama (Class of 2019)

Birmingham Business Journal Top 40 under 40 class of 2017

Redeemer Community Church Member

Birmingham Business Alliance ON BOARD Member (Summer 2015)

RESNA Committee on Inclusive Fitness (2014-2016)

Fresh Water Land Trust Junior Board Member (Spring 2014-Fall 2016)

Southeastern College of Sports Medicine Member (2010-Present)

Appalachian State University Cycling Team (2009-2010)

Sam Gaston

From: Ryan Ramage <ryan@amacbuilders.com> on behalf of Ryan Ramage
Sent: Thursday, March 23, 2023 11:25 AM
To: Sam Gaston
Subject: Fwd: Rumble Strips on Overton Road

Should have put names and addresses that are included in the below email. I didn't hear back from you and thought them on the email was enough.

Adam & Brooke Slaughter - 2801 Overton Road
Ryan & Ashley Ramage - 2805 Overton Road
Stewart & Nicole Webb - 2807 Overton Road
Hiliary and Sara Henderson - 2817 Overton Road

All asked that I send to you and I don't mind resending with them echoing the nuisance.

----- Forwarded message -----

From: Ryan Ramage <ryan@amacbuilders.com>
Date: Fri, Mar 17, 2023 at 9:29 AM
Subject: Rumble Strips on Overton Road
To: Sam Gaston <gastons@mtnbrook.org>, Brooke Slaughter <btinsley7@hotmail.com>, <adamslaugh@yahoo.com>, <nicolevwebb@gmail.com>, <mswebbjr@gmail.com>, Ashley Ramage <arthompson10@yahoo.com>, Hiliary Henderson <Stonewood.development@gmail.com>, <kcrommelin@raypoynor.com> <kcrommelin@raypoynor.com>, Ryan Ramage <rt_ramage@bellsouth.net>

Sam - Appreciate your help and providing me with the information about the installation of the rumble strips on Overton Road. I have spoken with our neighbors and understand no official notification was made to the owners of the properties, but the installer mentioning the strips were being installed during installation. Based on the conversations with my neighbors and our real estate agent, we would like to request the immediate removal of the rumble strips on Overton Road and an alternative means for traffic control be explored. The installation of the rumble strips has severely impacted our rights to quiet enjoyment, is causing a decrease in the value of our homes, and has impacted the potential sale of our house.

Issues caused:

- 1) Noise nuisance from the rumble strips at all times of the evening. White noise machines have to be used in numerous rooms to lessen the noise from the rumble strips and to allow for sleep.
- 2) Has not slowed traffic - we have seen on more than one occasion vehicles run through the rumble strips as though they were not there.
- 3) Home valuation / marketability - We have numerous complaints about the road noise from the showings on our house that could have cost us a sale and continue to deter potential buyers (Our real estate agent is copied for verification).

Fellow neighbors and Katie, please feel free to add any additional comments/concerns. Sam, thanks again for your guidance and hopefully these can be removed immediately. If further steps are required, we would appreciate you letting us know.

Sam Gaston

From: Sam Gaston
Sent: Wednesday, March 15, 2023 9:21 AM
To: 'Ryan Ramage'; 'Richard Caudle'
Cc: Ronald Vaughn
Subject: RE: Speed bumps on Overton Road

I don't remember specifically, but it seems we may have notified the residents next to this area. I will check my files. I would suggest you get some of your other neighbors to go in with you on a letter/email to me on this request. Then we can present to our City Council for discussion.

Sam S.Gaston
City Manager
City of Mountain Brook, AL.
56 Church Street
P.O. Box 130009
Mountain Brook-AL. 35213
(205) 802-3803 Phone
www.mtnbrook.org



From: Ryan Ramage [mailto:ryan@amacbuilders.com]
Sent: Wednesday, March 15, 2023 9:20 AM
To: Richard Caudle
Cc: Sam Gaston; Ronnie Vaughn
Subject: Re: Speed bumps on Overton Road

All, first thank you for the very quick response to my question!

The report is very thorough and I really appreciate being able to review it. Sam/Ronnie - I do see clearly in the report noise issue with the rumble strips and its surrounding houses. Was there any conversation with the homeowners or discussions in the city council meeting of the negative impact these strips can have on the neighbors? I didn't see anything come to us and have talked with my neighbors as well as this is a very noisy solution chosen that does impact our right to quiet enjoyment. What are the next steps that we can take to look at a different option? We feel the noise has caused an issue with selling our house and has decreased the value of the house. Appreciate any insight on what we can do.

Ryan Ramage

On Tue, Mar 14, 2023 at 2:13 PM Richard Caudle <richard@skipperinc.com> wrote:

Good afternoon.

Rumble strips were recommended because of the number of rear end crashes which have occurred on Overton Road eastbound due to the queue of cars which builds up waiting for a vehicle to turn left from Overton Road onto North Woodridge Road. I have attached a copy of the report recommending the rumble strips which shows the crash history information. The report (on page 11) does note that traffic noise will be a by-product of the rumble strips.

There are options which the City could consider:

1. Remove the rumble strips – I would oppose this option due to the crash history
2. Remove the rumble strips and replace the existing BE PREPARED TO STOP sign with a flashing beacon – there would be a significant cost associated with the cost of the flashing beacon and power service. I estimate a cost of \$16,000 to install a flashing beacon, plus a yearly power bill of \$500.

The City Council authorized the installation of the rumble strips on October 25, 2021. It is my opinion that any alteration would also need to be approved by the City Council, particularly if expenditure of funds is involved.

Richard L. Caudle, P.E. (registered in AL and MS)
Skipper Consulting, Inc.

3644 Vann Road Suite 100

Birmingham, Alabama 35235

richard@skipperinc.com

Office (205) 655-8855 Direct (205) 767-0183

Cell (205) 790-4307 Home (205) 594-4708

From: Sam Gaston <gastons@mtnbrook.org>
Sent: Tuesday, March 14, 2023 1:36 PM
To: Ryan Ramage <ryan@amacbuilders.com>
Cc: Richard Caudle <richard@skipperinc.com>; Ronnie Vaughn <vaughnr@mtnbrook.org>
Subject: RE: Speed bumps on Overton Road

If I remember correctly, these were recommended by our traffic consultant, Skipper Engineering, due to the blind curve aspect and accident rates here.

I am copying Richard Caudle so he can reply.

Sam S.Gaston

City Manager

City of Mountain Brook, AL.

56 Church Street

P.O. Box 130009

Mountain Brook AL. 35213

(205) 802-3803 Phone

www.mtnbrook.org



From: Ryan Ramage [mailto:ryan@amacbuilders.com]

Sent: Tuesday, March 14, 2023 1:30 PM

To: gastons@mtnbrook.org

Subject: Speed bumps on Overton Road

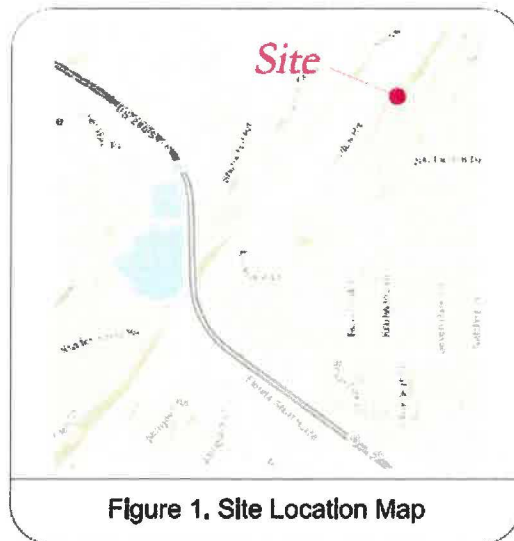
Sam - Good afternoon and hope all is well! I need a little help please on why the speed humps/bumps/noisey items were put at the big turn on Overton Road. The noise that they make each and every time a car passes really is a nuisance and well above normal car noise. We have a house at 2805 Overton Road that we are trying to sell and now have had two different feedbacks that the road noise is too much. I don't remember getting anything in the mail or being notified of this but it has affected our right to quiet enjoyment and now seems to be affecting the value of our property. Our agent is Katie Crommelin with Ray & Poyner and she will be happy to reiterate the comments from potential buyers. Is there an alternative that can be done there to reduce this noise?

Appreciate your help and look forward to hearing from you soon.

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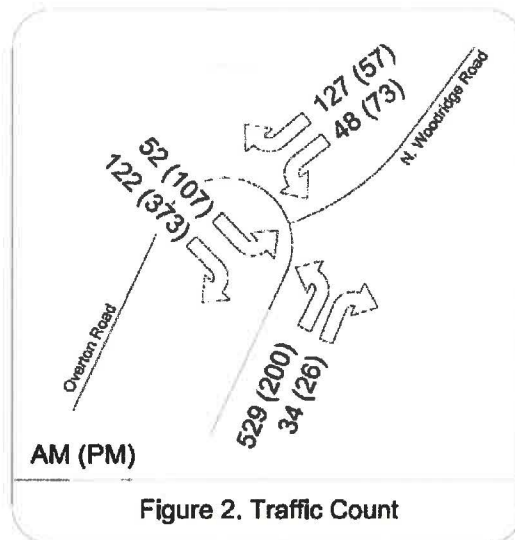
Overton Road at North Woodridge Road

This report documents a traffic study performed for the intersection of Overton Road at North Woodridge Road in the City of Mountain Brook, Alabama. The location of the site with respect to the area roadway network is shown in Figure 1. In the vicinity of the site, Overton Road is a non-classified roadway (local road) with a posted speed limit of 30 miles per hour. North Woodridge Road is a local roadway with a posted speed limit of 30 miles per hour.



Existing Intersection Turning Movement Traffic Count

An existing intersection turning movement traffic count was performed at the intersection of Overton Road at North Woodridge Road on Tuesday, August 17, 2021 by Traffic Data, LLC on behalf of Skipper Consulting, Inc. The traffic count data is included in Appendix A. The a.m. and p.m. peak hour intersection turning movement traffic counts are illustrated in Figure 2.



Existing Intersection Capacity Analysis

Existing a.m. and p.m. peak hour intersection capacity analyses were performed for the intersection of Overton Road at North Woodridge Road using the method of analysis included in the 2010 *Highway Capacity Manual*, published by the Transportation Research Board. Capacities are expressed as levels of service, and range from a level of service "A" (highest quality of service) to a level of service "F" (jammed conditions). As a general rule, operation at a level of service "C" or better is desirable, with a level of service "D" considered acceptable during peak hours of traffic flow. The results of the intersection capacity analyses are included in Appendix B and are summarized in Table 1.

Table 1
Existing Intersection Capacity Analysis
Overton Road at North Woodridge Road

<i>Approach</i>	<i>Movement</i>	<i>Level of Service</i>	
		<i>AM Peak</i>	<i>PM Peak</i>
Overton Road Eastbound	Left-Through	A	A
North Woodridge Road Southbound	Left-Right	D	C

Existing Queue Calculations

Existing queue calculations were performed for each approach of the intersection of Overton Road at North Woodridge Road for a.m. and p.m. peak hour traffic conditions. The queue calculations are included in Appendix C and are summarized in Table 2.

Table 2
Existing Queue Calculations
Overton Road at North Woodridge Road

<i>Approach</i>	<i>Movement</i>	<i>Level of Service</i>	
		<i>AM Peak</i>	<i>PM Peak</i>
Overton Road Eastbound	Left-Through	76'	75' –
Overton Road Westbound	Through-Right	22'	0'
North Woodridge Road Southbound	Left-Right	102'	141'

Existing Machine Traffic Counts

Existing machine traffic counts were performed on Overton Road east and west of North Woodridge Road and on North Woodridge Road north of Overton Road on Tuesday to Wednesday, August 17 to 18, 2021 by Traffic Data, LLC. The traffic count data is included in Appendix D. Hourly traffic counts are summarized in Table 3.

**Table 3
Existing Hourly Traffic Counts**

Overton Road west of North Woodridge Road

<i>Time</i>	<i>Westbound</i>	<i>Eastbound</i>	<i>Total</i>	<i>Time</i>	<i>Westbound</i>	<i>Eastbound</i>	<i>Total</i>
12-1 AM	8	2	10	12-1 PM	240	233	473
1-2 AM	2	4	6	1-2 PM	223	246	469
2-3 AM	2	4	6	2-3 PM	236	237	473
3-4 AM	2	4	6	3-4 PM	205	314	519
4-5 AM	17	6	23	4-5 PM	214	412	626
5-6 AM	86	31	117	5-6 PM	195	414	609
6-7 AM	166	86	252	6-7 PM	193	270	463
7-8 AM	556	133	689	7-8 PM	95	193	288
8-9 AM	407	171	578	8-9 PM	60	137	197
9-10 AM	252	185	437	9-10 PM	34	91	125
10-11 AM	204	174	378	10-11 PM	26	45	71
11-12 PM	208	225	433	11-12 PM	10	15	25
<i>Subtotal</i>	<i>1910</i>	<i>1025</i>	<i>2935</i>	<i>Subtotal</i>	<i>1731</i>	<i>2607</i>	<i>4338</i>

<i>Daily</i>	<i>Westbound</i>	<i>Eastbound</i>	<i>Total</i>
		3641	3632

Overton Road east of North Woodridge Road

<i>Time</i>	<i>Westbound</i>	<i>Eastbound</i>	<i>Total</i>	<i>Time</i>	<i>Westbound</i>	<i>Eastbound</i>	<i>Total</i>
12-1 AM	8	1	9	12-1 PM	223	224	447
1-2 AM	2	2	4	1-2 PM	202	243	445
2-3 AM	2	4	6	2-3 PM	218	194	412
3-4 AM	1	3	4	3-4 PM	189	312	501
4-5 AM	11	7	18	4-5 PM	211	361	572
5-6 AM	60	30	90	5-6 PM	189	397	586
6-7 AM	156	74	230	6-7 PM	165	254	419
7-8 AM	455	140	595	7-8 PM	108	150	258
8-9 AM	355	150	505	8-9 PM	67	106	173
9-10 AM	207	173	380	9-10 PM	31	87	118
10-11 AM	162	169	331	10-11 PM	23	34	57
11-12 PM	189	213	402	11-12 PM	10	15	25
<i>Subtotal</i>	<i>1608</i>	<i>966</i>	<i>2574</i>	<i>Subtotal</i>	<i>1636</i>	<i>2377</i>	<i>4013</i>

<i>Daily</i>	<i>Westbound</i>	<i>Eastbound</i>	<i>Total</i>
		3244	3343

**Table 3 (continued)
Existing Hourly Traffic Counts**

North Woodridge Road north of Overton Road

<i>Time</i>	<i>Southbound</i>	<i>Northbound</i>	<i>Total</i>	<i>Time</i>	<i>Southbound</i>	<i>Northbound</i>	<i>Total</i>
12-1 AM	0	1	1	12-1 PM	117	102	219
1-2 AM	0	2	2	1-2 PM	105	99	204
2-3 AM	0	0	0	2-3 PM	122	130	252
3-4 AM	1	1	2	3-4 PM	151	121	272
4-5 AM	8	1	9	4-5 PM	113	142	255
5-6 AM	20	5	25	5-6 PM	120	146	266
6-7 AM	39	30	69	6-7 PM	98	102	200
7-8 AM	164	66	230	7-8 PM	62	77	139
8-9 AM	113	83	196	8-9 PM	19	65	84
9-10 AM	116	103	219	9-10 PM	20	27	47
10-11 AM	129	85	214	10-11 PM	3	11	14
11-12 PM	98	104	202	11-12 PM	4	3	7
<i>Subtotal</i>	<i>668</i>	<i>481</i>	<i>1169</i>	<i>Subtotal</i>	<i>934</i>	<i>1025</i>	<i>1959</i>

<i>Daily</i>	<i>Southbound</i>	<i>Northbound</i>	<i>Total</i>
	1622	1506	3128

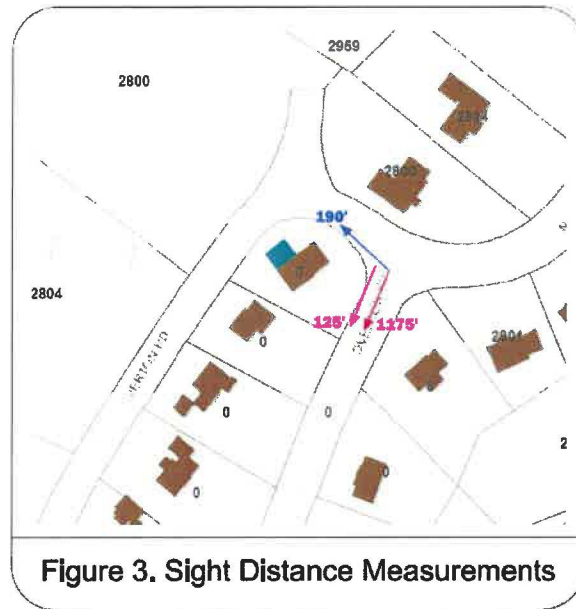
Existing Speed Survey

Existing machine speed surveys were performed on Overton Road east and west of North Woodridge Road on Tuesday to Wednesday, August 17 to 18, 2021 by Traffic Data, LLC. The speed survey data is included in Appendix E and is summarized below.

	<u>West of N. Woodridge Rd.</u>	<u>East of N. Woodridge Rd.</u>
Average Speed	30 mph	36 mph
85 th Percentile Speed	33 mph	40 mph
Pace Speed	24-34 mph	30-40 mph
Percent in Pace	88%	82%
Vehicles over 30 mph	3365 (46%)	6102 (93%)
Vehicles over 35 mph	309 (4%)	3867 (59%)
Vehicles over 40 mph	31 (0%)	1084 (16%)

Existing Sight Distance Measurements

Existing sight distance measurements were taken for North Woodridge Road exiting onto Overton Road and for the left turn from Overton Road onto North Woodridge Road by Skipper Consulting, Inc. The sight distance measurements are illustrated in Figure 3.



The minimum required sight distances for each of these three movements based on the 85th percentile travel speeds are as follows:

Left Turn from North Woodridge Road	
Looking to left	335'
Looking to the right	390'
Right Turn from North Woodridge Road	
Looking to left	335'
Left Turn from Overton Road	
Looking ahead	285'

As shown above, the minimum required sight distances are not met for either the left turn from North Woodridge Road onto Overton Road or the left turn from Overton Road onto North Woodridge Road.

The driver's view looking to the right in order to make a left turn from North Woodridge Road onto Overton Road is blocked by the curvature of the roadway and the ground elevation of the inside of the curve. This cannot be corrected by any typical measures. A picture of the limited sight distance looking to the right from North Woodridge Road is shown on the following page.



The driver's view looking ahead in order to make a left turn from Overton Road onto North Woodridge Road is blocked by bushes at the driveway of 2801 Overton Road. A picture of these bushes is shown below. Google Earth history shows that these bushes were not present in 2015. The sight distance for vehicles turning left from Overton Road onto North Woodridge Road is limited to 125 feet by these bushes. Without the bushes, the sight distance would be approximately 1,200 feet. The City of Mountain Brook has worked with the homeowner to cut back these bushes prior to the publication of this report, so this sight distance limitation no longer exists.



Crash History

Crash reports for the intersection of Overton Road at North Woodridge Road were obtained from the Mountain Brook Police Department for the years 2011 to 2021. A total of 21 crashes have occurred over the 10 year period. The following is a summary of the crash data:

2011 – 2 crashes	2017 – 3 crash	Rear End – 10 crashes
2012 – 2 crashes	2018 – 2 crashes	Loss of Control – 7 crashes
2013 – 1 crash	2019 – 2 crashes	Right Angle – 3 crashes
2014 – 2 crashes	2020 – 5 crashes	Head On – 1 crash
2015 – 0 crashes	2021 – 1 crashes	
2016 – 1 crash		

As shown, the prevalent crash pattern at the intersection is rear end crashes. Most of these rear end crashes occur in the eastbound travel lane on Overton Road, as vehicles come around the curve and cannot stop in time for another vehicle waiting to turn left onto North Woodridge Road.

As an immediate improvement, it is recommended that the City of Mountain Brook Install a W3-4 BE PREPARED TO STOP (36"x36") sign on Overton Road going away from U.S. Highway 280 approximately 100 feet in advance of the curve at North Woodridge Road. The City has subsequently installed this sign prior to the publication of this report.



W3-4

The societal cost of a PDO crash is currently \$11,000. The societal cost of an Injury crash is currently \$65,000. Therefore, the total societal cost of crashes at the intersection of Overton Road at North Woodridge Road over the last 10 years has been approximately \$340,000.

Video Observations

Video observations of the traffic flow at the intersection of Overton Road at North Woodridge Road were undertaken on Wednesday to Thursday, September 29 to 30, 2021. Due to lighting, review of the videos was limited to the time period of 6:15 a.m. to 6:45 p.m. A total of 25 hours of video were reviewed. The purpose of the review was to note circumstances which might lead to a crash, and include factors such as bad driving behavior, long queues, and excessive wait times to make turns.

During the 25 hour observation period, 50 separate instances of circumstances which could contribute to a crash were noted. Table 4 is a summary of the instances noted.

Table 4
Video Observation Results

Long Queue on Overton Road Eastbound		
	5-9 vehicles	18
	10-14 vehicles	6
	15-19 vehicles	3
	20+ vehicles	1
Long Queue on N. Woodridge Rd.	4 vehicles	1
Excessive Delay to make Left Turn from N. Woodridge Rd.		
	35-44 seconds	4
	45-54 seconds	2
	55-64 seconds	4
	65-74 seconds	2
	75-84 seconds	2
	85-94 seconds	0
	95+ seconds	1
Excessive Delay to make Right Turn from N. Woodridge Road	38 seconds	1
Failure to Stop for Stop Sign		4
Right Turn Conflict on N. Woodridge Rd.		1

As shown in Table 4, the most prevalent contributing circumstance to possible crashes in long queues of vehicles on Overton Road eastbound approaching North Woodridge Road. The videos show that these queues build up behind a vehicle waiting to turn left onto North Woodridge Road. A total of 28 long queues were recorded in the 25 hours. These queues may contribute the rear end crashes at the intersection.

The other observation of interest in the number of times a vehicle experienced an excessive delay waiting to turn left from North Woodridge Road onto Overton Road. A total of 18 occurrences were noted. Some of the occurrences involved more than one waiting vehicle. These occurrences of excessive delay may contribute to right angle crashes at the intersection, as drivers become more and more impatient to make the maneuver in a riskier and riskier manner.

Alternatives Considered

Multi-Way Stop

Warranting of multi-way stops is based on crash history or traffic volumes. A multi-way stop requires that at least five or more crashes have occurred within a twelve month period which are of a type susceptible to correction by installation of a multi-way stop. The only crash type of those crashes which have occurred at the intersection of Overton Road at North Woodridge Road which are susceptible to correction by a multi-way stop are right angle crashes, of which there have been 3 over the past 10 years. The crash criteria for a multi-way stop is not met.

The traffic volume criteria requires that the major street approach traffic volume exceed 300 vehicles per hour for any 8 hours of an average day, along with the minor street approach traffic volume exceeding 200 vehicles per hour for the same 8 hours. The highest eight hours on the North Woodridge Road approach varies from 113 to 164 vehicles per hour; therefore, the traffic volume warrant for a multi-way stop is not warranted.

While Overton Road and North Woodridge Road are both classified local roadways, the nature of Overton Road and the differential in traffic volumes on Overton Road and North Woodridge Road both indicate that Overton Road serves a higher mobility function than North Woodridge Road. Multi-way stops on roadways serving a higher mobility function is discouraged due to potential traffic re-routing to other less significant roadways.

Other factors which mitigate against installation of a multi-way stop is lack of sight line visibility for motorists to see the stop sign on Overton Road eastbound (which could result in even more rear-end crashes) and expected long queues forming on Overton Road during the peak hours of traffic flow.

In order to determine the efficacy and impacts of implementation of a multi-way stop, peak hour intersection capacity analyses and queue analyses were performed for existing traffic volumes and assuming the installation of a multi-way stop. The results of the intersection capacity analyses are included in Appendix F and are summarized in Table 5. The results of the queue calculations are included in Appendix G and are summarized in Table 6.

Table 5
Intersection Capacity Analysis with Multi-Way Stop
Overton Road at North Woodridge Road

Approach	Movement	Level of Service	
		AM Peak	PM Peak
Overton Road Eastbound	Left-Through	B	C
Overton Road Westbound	Through-Right	E	B
North Woodridge Road Southbound	Left-Right	B	B
Overall Intersection		D	C

Table 6
Queue Calculations with Multi-Way Stop
Overton Road at North Woodridge Road

Approach	Movement	Level of Service	
		AM Peak	PM Peak
Overton Road Eastbound	Left-Through	79'	141'
Overton Road Westbound	Through-Right	213'	100'
North Woodridge Road Southbound	Left-Right	101'	100'

As shown in the tables above, implementation of a multi-way stop would yield an inadequate level of service on Overton Road westbound during the a.m. peak hour (level of service "E"). This would manifest itself in a maximum queue of approximately 215', or 8-9 vehicles.

Traffic Signalization

Minimum traffic volumes to warrant traffic signalization according to the 2009 *Manual on Uniform Traffic Control Devices* are shown below.

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

- ^a Basic minimum hourly volume
- ^b Used for combination of Conditions A and B after adequate trial of other remedial measures
- ^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000
- ^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

In order to meet Condition A, the Overton Road approaches to the intersection would need to carry 500 vehicles per hour for 8 hours in a day, and the North Woodridge Road approach would need to carry 150 vehicles per hour for the same 8 hours. North Woodridge Road will not meet the criteria of Condition A. In order to meet Condition B, the Overton Road approaches would need to carry 750 vehicles per hour for 8 hours in say, and the North Woodridge Road approach would need to carry 75 vehicles per hour for the same 8 hours. Overton Road will not meet the criteria of Condition B. Therefore, traffic signalization is not considered an alternative to be further considered for the intersection of Overton Road at North Woodridge Road.

Vehicle Approaching When Flashing Light Warning System

A third alternative considered is the installation of a flashing light warning system which would advise drivers of a vehicle approaching. This would be an effective system to warn motorists turning left from North Woodridge Road onto Overton Road a vehicle coming around the curve on Overton Road, and also for a vehicle making a left turn from Overton Road eastbound onto North Woodridge Road. However, design of a system which would alert motorists on Overton Road eastbound of a stopped vehicle around the curve waiting to turn left onto North Woodridge Road would be more difficult because of the extended area of detection required. Construction of such a system would also be problematic because of the apparent presence of rock very near the surface of the roadway shoulders, which would make drilling of pole foundations and installation of conduit difficult. There is power available at the intersection. It is estimated that the cost to install a flashing light warning system would be approximately \$40,600 and the cost to operate and maintain the system would be approximately \$5,000 over the next 10 years. Based on these factors, a flashing light warning system is not recommended.

Left Turn Lane on Overton Road

The intersection of Overton Road at North Woodridge Road was examined to see if a left turn lane could be built on Overton Road eastbound turning left onto North Woodridge Road. A field review showed that excavation of the rock face along Overton Road would be required to achieve sufficient widening for a left turn lane. Construction of a left turn lane is not recommended.

Rumble Strips

The primary crash pattern at the intersection of Overton Road at North Woodridge Road is rear end crashes on Overton Road eastbound approaching the intersection. Immediate improvements which have already been implemented include installation of a BE PREPARED TO STOP warning sign in advance of the intersection. In order to reinforce this sign and encourage drivers to slow down and pay attention approaching the curve, rumble strips could be installed on Overton Road eastbound in conjunction with the new sign. A drawback to the installation of rumble strips is the noise that they create for the residents which surround the intersection.

Recommendation

In addition to the improvements which have already been made at the intersection of Overton Road at North Woodridge Road, it is recommended that the rumble strips be installed on Overton Road eastbound approaching the curve at North Woodridge Road. The proposed improvements are depicted in Figure 4. A typical drawing of rumble strips is included in Appendix H. The cost estimate to perform this work would be approximately \$3,000.



Figure 4. Recommended Improvements