Mountain Brook Sidewalks

APPLE Study

PREPARED FOR:

RPC Regional Planning Commission of Greater Birmingham

CITY OF MOUNTAIN BROOK · 1942 ·

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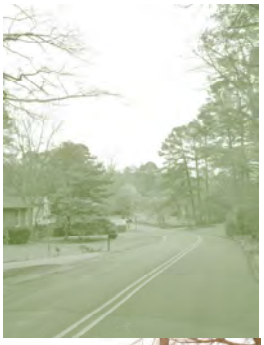

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SAIN PROJECT# 160217

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SAIN associates
ENGINEERING BETTER PARTNERSHIPS

Executive Summary

Study Initiation

The study was initiated by the City of Mountain Brook through the Advanced Planning, Programming, and Logical Engineering (APPLE) program developed by the Regional Planning Commission of Greater Birmingham (RPCGB). The City requested professional planning assistance to evaluate the feasibility of installing sidewalks along roadways located in the city limits of Mountain Brook.

Purpose for the Study

The study area includes all roadways located in the City of Mountain Brook. Prior to this study, the City of Mountain Brook developed a walkway master plan. Since that plan's development, many sidewalks have been installed and there are currently two sidewalk projects under construction. However, there are still areas that lack sidewalk where it is desired. The overall goal of this study is to determine the feasibility of constructing the sidewalks identified in the walkway master plan, as well as other logical sidewalk locations. The strategy to achieve this goal includes several steps:

- Identify where sidewalks are needed and/or desired
- Evaluate their constructability
- Determine an opinion of probable cost
- Prioritize the installation of potential sidewalk segments
- Identify construction phasing
- Identify available funding for sidewalk installation

Potential Sidewalk Locations

Most of the potential sidewalk locations were identified in the City's previously prepared Walkway Master Plan. In addition to these locations, many residents, via face-to-face discussions, e-mail, or through a city-wide survey, have supplied suggestions for new sidewalks. All of these requested routes were included in the feasibility evaluation. Also, as part of a windshield review, several additional potential sidewalk locations were identified based on the relative ease of construction and based on their ability to provide connectivity to destinations. The total lengths of the considered routes are listed below in linear feet (LF) and miles:

- Existing walkways: 243,334 LF (46.09 miles)
- Previously identified phases: 53,685 LF (10.17 miles)
- Newly identified phases: 16,472 LF (3.12 miles)
- User requested phases: 37,885 LF (7.18 miles)
- Previously studied and eliminated walkways: 12,915 LF (2.45 miles)

Constructability Review

An in-field constructability review was performed for each potential sidewalk segment. This review identified the existing travel lane widths, the roadway shoulder type and condition, the presence of utilities, potential grading difficulties, and property impacts. From the in-field review, sidewalk segments were placed in four installation categories: easy, medium, difficult, and infeasible.

Prioritization Procedure

For this study, criteria for prioritizing potential projects were selected from the Federal Highway Administration's (FHWA) *Pedestrian Safety Guide and Countermeasure Selection System* and from FHWA's *How to Develop a Pedestrian Safety Action Plan* according to the main needs of the Mountain Brook community. Establishing priorities for potential sidewalk segments included three steps:

1. Development of a prioritized list of criteria
2. Development of a methodology for using the criteria to evaluate potential sites
3. Creation of a prioritized list of sites for sidewalk improvements

The following criteria were applied for establishing priorities:

- Cost
- Feasibility
- Public Support
- Severity of Problem
- Probable Use
- Effectiveness of Solution

Points were assigned to each criterion. Segments were then awarded points accordingly, with the maximum number of available points totaling 100. After assigning points to each segment, three priority groups were determined. The high-priority group had an average score of 63 points; the medium-priority group had an average score of 51 points; the low-priority group had an average score of 37 points.

Project Phasing

Following the sidewalk segment prioritization, sidewalk installation phases were identified. When identifying project phases, available funding and user requests were the main considerations. The first step in the phasing process was to identify locations where the City could use their own forces to complete the work. Potential sidewalks providing connectivity between existing facilities and with construction costs around the $100,000 mark were defined as City-funded projects.

Next, project phases were created by identifying the most requested segments and selecting adjacent or relatively close segments, geographically speaking, to create projects with costs ranging between $1M and $2.5M. Projects with costs of this magnitude are good candidates for Federal funding match programs (i.e. Congestion

Mitigation and Air Quality (CMAQ) funding and Transportation Alternatives Program (TAP) funding). An estimated timeframe for completion of projects using Federal funding is estimated at five to eight years.

Next Steps

If the City chooses to move forward with implementing any of the proposed sidewalks and would like to pursue Federal funding, the next step would be to request inclusion of a project in RPCGB's Transportation Improvement Plan (TIP). In 2019, RPCGB will solicit new projects to be included in the next TIP planning cycle. However, projects that utilize the APPLE program provide local governments the opportunity to request funding between TIP cycles. The preparation of this feasibility study can be used in the application for funds from the RPCGB for future improvements.

Once Federal funds are in place for the project, an environmental document will need to be prepared. The environmental document must include technical studies and public involvement outreach necessary to comply with procedures of the National Environmental Policy Act (NEPA). Once the environmental study has been completed, the design would be undertaken, and construction would follow. If it is determined that additional right-of-way is required, acquisition would be conducted prior to construction.

Should the City elect to use local funds, the timing, scheduling, and implementation of the installation would be at their discretion.

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1 Introduction

1.1 Purpose of the Feasibility Study

The study was initiated by the City of Mountain Brook through the Advanced Planning, Programming, and Logical Engineering (APPLE) program developed by the Regional Planning Commission of Greater Birmingham (RPCGB). The City requested professional planning assistance to evaluate the feasibility of installing sidewalks along roadways located in the city limits of Mountain Brook.

Prior to this study the City of Mountain Brook developed a walkway master plan. Since that plan's development, many sidewalks have been installed and there are currently two sidewalk projects under construction. However, there are still areas that lack sidewalk where it is desired. The overall goal of this study is to determine the feasibility of constructing the potential sidewalks identified in the walkway master plan, as well as other logical sidewalk locations. The strategy to achieve this goal includes several steps:

- Identify where sidewalks are needed and/or desired
- Evaluate their constructability
- Determine an opinion of probable cost
- Prioritize the installation of potential sidewalk segments
- Identify construction phasing
- Identify available funding for sidewalk installation

1.2 Study Approach

The study was performed using a two-stage process. Stage one included an evaluation of the existing conditions and an evaluation of potential sidewalk locations. Stage 2 included prioritizing potential sidewalk segments and recommending project phasing for future sidewalk projects.

For stage one, a base map was prepared using aerial images and available GIS data. The previously prepared *City of Mountain Brook Walkway Master Plan* was reviewed and a field review was also performed as part of stage one. This field review consisted of confirming the presence of existing sidewalks and performing a constructability review of potential sidewalk locations. The constructability review consisted of walking the study area, taking measurements and inventory, and investigating what impacts sidewalk installation would have to the adjacent areas.

For stage two, potential sidewalk segments were prioritized and placed into project phases. Mapping showing results of the constructability review, prioritization, and phasing was presented at a public involvement meeting before being finalized.

2 Existing Conditions

The *City of Mountain Brook Walkaway Master Plan* was first developed in 1992. Since that time adjustments have been made to meet the City's needs and many sidewalks have been installed. There are currently two sidewalk projects under construction. Although much has been accomplished relating to sidewalk installation in the City of Mountain Brook, there are still areas that lack sidewalk where it is desired. This section provides an overview of the existing sidewalk network and summarizes the constructability review. The study area includes all roadways located in the City of Mountain Brook. Figure 1 provides a location map that shows Mountain Brook City Limits in red. Appendix A provides an inventory of existing sidewalks and potential sidewalk segments.

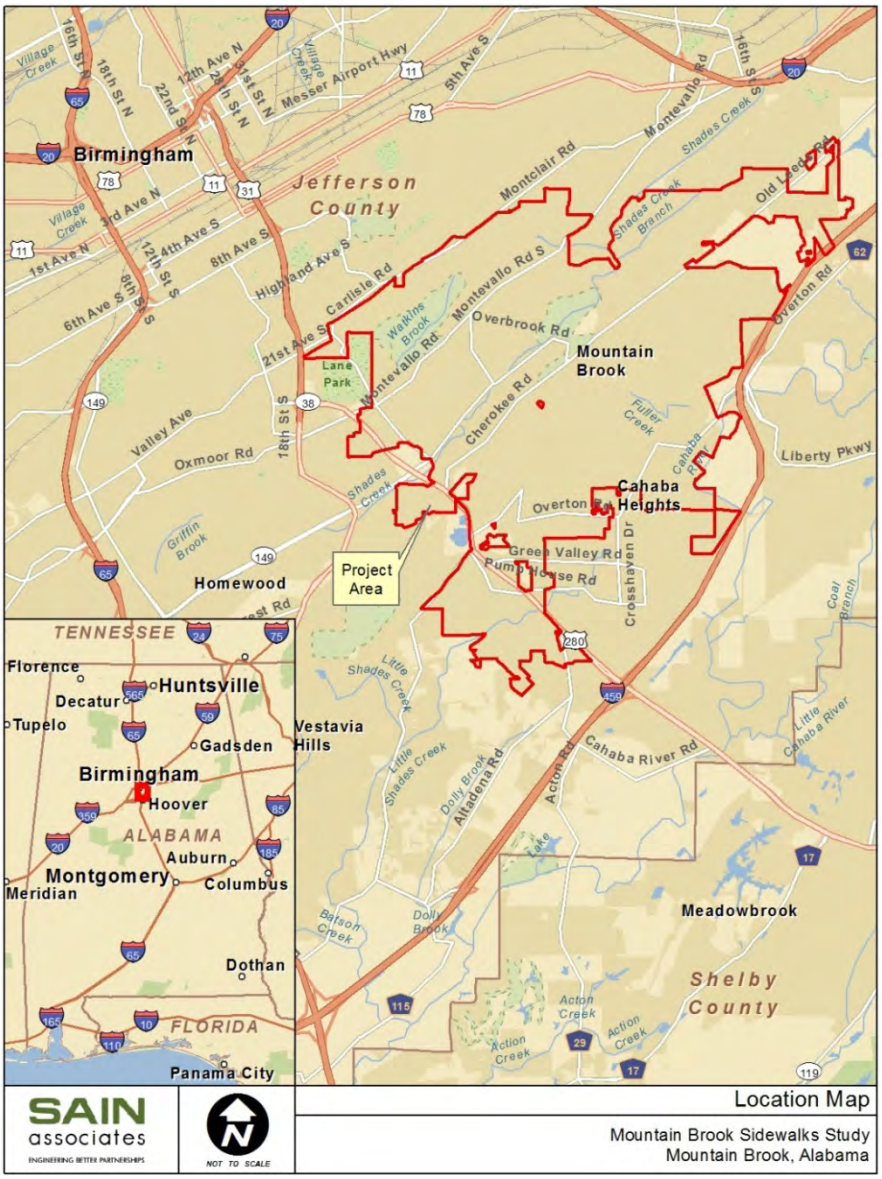


Figure 1: Location Map

2.1 Constructability Review

Field reviews of the area were performed on January 27, 2017, March 13, 2017, and July 12, 2017. During the field visits, a constructability review was performed for each potential sidewalk segment. This review identified the existing travel lane widths, the roadway shoulder type and condition, the presence of utilities, potential grading difficulties, and property impacts. From the in-field review, sidewalk segments were placed in four installation categories: easy, medium, difficult, and infeasible. A map showing the ease of installation is provided in Appendix B.

2.3.1 Easy Installation

Easy installation segments are defined as portions of roadway that would require minor grading, minor challenges with mailboxes, and few impacts to properties, driveways, and/or utilities. Perhaps the segments with the easiest installation are those where the existing pavement is wide (twenty-four feet or greater) which allows for pavement removal as a way to achieve enough room for sidewalk installation. This type of construction is referred to as a road diet. The segment on Locksley Drive from Wheatherton Drive to Dunbarton Drive is an example of easy sidewalk constructability (see Figure 2). Although this segment presents some challenges associated with utilities, it is considered an easy installation since the adjacent area is relatively flat and the pavement width is 24 feet, making it a road diet candidate.

Figure 2: Easy Sidewalk Installation – Locksley Drive from Wheatherton Drive to Dunbarton Drive

2.3.2 Medium Installation

Medium installation segments are defined as portions of roadway that would experience moderate challenges during installation. These include: moderate grading, substantial mailboxes, moderate property impacts, steeper driveways, and/or the presence of utilities. The segment on Westbury Road from Bethune Drive to Crosshill Road is an example of medium sidewalk constructability (see Figure 3) considering its numerous brick mailboxes, driveway entrance treatments, and storm drainage structures that would require modification.

Figure 3: Medium Sidewalk Installation – Westbury Road from Bethune Drive to Crosshill Road

2.3.3 Difficult Installation

Difficult installation segments are defined as portions of roadway that would experience major challenges during construction. These challenges include: major grading and/or retaining walls, increased property impacts associated with tie slopes and driveways, and/or utilities. The segment of Old Leeds Road from Crosshill Road to Cherokee Road is an example of difficult sidewalk constructability (see Figure 4). The roadway is approximately 21 feet wide, so a road diet is not viable. There is a narrow ditch with a steep back slope on the south side, which will likely result in the need for a retaining wall. There are also some aerial utility poles that may be affected.

Figure 4: Difficult Sidewalk Installation – Old Leeds Road from Crosshill Road to Cherokee Road

2.3.4 Infeasible Installation

Infeasible installation segments are defined as portions of roadway with extensive challenges requiring very high costs, right-of-way acquisition, and considerable grading operations. The segment of Old Leeds Lane from Old Leeds Road to Hillock Drive is an example of infeasible sidewalk constructability (see Figure 5). On the south end of the road there is what appears to be a US Army Corps of Engineers jurisdictional stream, and on the north side of the road there is a steep rock cut section. The roadway is only 22' wide; therefore, a road diet is not viable. Although this particular section is deemed infeasible, the City could still install sidewalk with the knowledge that costs and timeframe are much greater than other locations. Segments labeled as infeasible were not eliminated from the study and are included in prioritization and project phasing.

Figure 5: Infeasible Sidewalk Installation – Old Leeds Lane from Old Leeds Road to Hillock Drive

3 Environmental Features

3.1 Threatened and Endangered Species

A letter was sent to the United States Fish and Wildlife Service (USFWS) on February 20, 2017 to obtain background information on potential items of concern. USFWS responded with a letter dated March 8, 2017 noting that there are twelve (12) endangered or threatened species that may occur in the project area. The project area is within the habitat range of listed bat species; therefore, it is suggested that USFWS be contacted in case trees need to be cleared to complete the project. Also, USFWS recommends that project plans should include protections for water quality, the Cahaba River and its tributaries. See Appendix C for the USFWS response letter.

The presence of any of these species does not prevent the City from moving forward with a sidewalk project but it may have an impact. Should the City elect to use Federal funding for the design or construction of the sidewalks, additional coordination with USFWS will be required and the presence of certain species could impact construction scheduling.

3.2 Prime and Unique Farmlands

The National Environmental Policy Act requires that a project area be evaluated to determine the presence of prime and unique farmlands. On February 20, 2017 a letter was sent to the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS). Mapping produced via USDA's Web Soil Survey was also included with the letter. This mapping shows the study area as well as areas of prime farmland and farmland of statewide importance. The intent of the letter was to obtain concurrence from NRCS that these farmlands would not be impacted by the proposed sidewalks.

Per correspondence from NRCS dated March 28, 2017, the area of consideration for the sidewalk study does contain "Prime Farmlands"; however, the area does not meet the criteria set forth by the Farmland Protection Policy Act (FPPA) and Land Evaluation Site Assessment (LESA) of June 22, 1982. It is recommended by NRCS that erosion and sediment control measures should be implemented and maintained during the construction phase to protect land, water, and related resources. Also, NRCS suggests that plans for construction should include sediment basins or traps and other erosion control practices. Appendix D provides the package submitted to NRCS and their concurrence.

3.3 Historic and Archaeological Properties

Per the National Register of Historic Places (NRHP) database, there are two (2) historic properties located in the study area:

- Mountain Brook Estates Building: this building was significant to the community during the period from 1925 to 1949. It was registered at the NRHP in April, 2003. The building is located at the intersection between Cahaba Road and Montevallo Road, where existing sidewalks are present.
- Redmont Gardens Apartments: the period of significance of this area included the years from 1925 to 1949. Redmont Gardens Apartments are classified as a historical district, registered as eligible for the NRHP since August, 1993. The apartments are located on Fairway Drive, where existing sidewalks are present.

There are existing sidewalks where both historic resources are located within the study area; therefore, the current project will not affect these sites.

There are no National Historic Landmarks (NHL) or Alabama Register of Landmarks and Heritage (ARLH) properties recorded within the study area.

Should the City move forward with obtaining Federal monies for the installation of the sidewalks, it is recommended that a Phase 1 cultural resources study be performed. This study would be able to identify and document any historic properties, as well as identify any known or unknown archaeological sites. The Alabama Historic Commission would

also have to concur with the findings in the cultural resources study. If local funds are used, a phase 1 cultural resources study is not required.

3.4 Wetlands and Floodplains

Per correspondence from NRCS dated March 28, 2017, the area of consideration for the sidewalk study does not contain hydric soils (blue) that meet the definition for wetland criteria. Mapping showing wetlands and flood zones is provided in Appendix E.

3.5 Environmental Justice

Environmental Justice is a component of the National Environmental Policy Act (NEPA) that seeks to ensure that all socio-economic groups share in the benefits and burdens of Federal transportation projects. Two areas of environmental justice that frequently become a concern are areas with a high minority population or areas where the majority of the inhabitants are members of low income households.

Table 1 provides a very brief overview of the socioeconomic demographics of the study area as shown in 2015 American Community Survey (ACS), a statistical survey by the U.S. Census Bureau. The minority populations and the percentage of families living below the poverty level in the study area are below those seen for the entire County. Therefore, it can be concluded that installation of any of the sidewalks proposed in this study would not cause any adverse impact.

Table 1: Socioeconomic Overview

Socioeconomic Overview	City of Mountain Brook	Jefferson County
Population Total	20,518	659,026
White	96.1%	52.8%
African American	1.7%	42.3%
Hispanic	1.5%	3.8%
% Families Living Below Poverty Level	1.3%	15.0%

4 Potential Sidewalk Locations

4.1 New Sidewalk Locations

Most of the potential sidewalk locations were identified in the City's walkway master plan. In addition to these locations, many residents, via face-to-face discussions, e-mail, or a city-wide survey, have supplied the suggestions on where the City should install new sidewalks. All of these requested routes were included in the feasibility evaluation.

Also, as part of a windshield review, several additional potential sidewalk locations were identified based on the relative ease of construction and based on their ability to provide connectivity to destinations. Mapping of these locations is shown in Appendix A. The total lengths of the considered routes are:

- Existing walkways: 243,334 LF (46.09 miles)
- Previously identified phases: 53,685 LF (10.17 miles)
- Newly identified phases: 16,472 LF (3.12 miles)
- User requested phases: 37,885 LF (7.18 miles)
- Previously studied and eliminated: 12,915 LF (2.45 miles)

4.2 Prioritization Procedure

For this study, criteria for prioritizing potential projects were selected from the Federal Highway Administration's (FHWA) *Pedestrian Safety Guide and Countermeasure Selection System* and from FHWA's *How to Develop a Pedestrian Safety Action Plan* according to the main needs of the Mountain Brook community. Establishing priorities for potential sidewalk segments included three steps:

1. Develop a prioritized list of criteria
2. Develop a methodology for using the criteria to evaluate potential sites
3. Create a prioritized list of sites for sidewalk improvements

4.2.1 Prioritized List of Criteria

The following criteria were applied for establishing priorities:

Cost

The total cost of each project is the sum of the estimated cost to install the sidewalk and the estimated cost of utility relocation.

Feasibility

Feasibility of construction is primarily based on roadway profile condition, approximate cut/fill slope and height, and characteristics of drainage and utilities.

Public Support

Through various avenues, the public provided feedback to the City stating where they felt sidewalk is needed.

Severity of Problem

This criterion is usually defined according to the crash history of the site or based on the likelihood of crash frequency and severity. After an analysis of pedestrian-related crash data, no crash trends were observed. In this analysis, severity of the problem was estimated based on the speed limit of the road. There is a direct relationship between speed and the severity of pedestrian-related crashes, thus resulting in a greater need to separate pedestrians from motor vehicles on high-speed facilities.

Probable Use

Travel demand was estimated based on the proximity to pedestrian trip generators. Priority was given for sidewalks within 0.25 miles from:

1. Schools: children are especially vulnerable
2. Parks: high pedestrian activity for leisure or fitness activities
3. Transit: transit riders need sidewalks to access transit stops
4. Other generators: places of worship and community centers

Effectiveness of Solution

The effectiveness of the solution was based on the relevance of the connectivity provided by the sidewalk segment. It is important to install sidewalks to connect pedestrian areas to each other and create continuous walking systems.

4.2.2 Methodology for Using the Criteria

The FHWA's *Pedestrian Safety Guide and Countermeasure Selection System* recommends the *Points Method* as one of the methodologies for selecting locations for improvements. A weighted points system was used; all of the criteria were assigned a range of numbers. The weights were adapted from the FHWA's *How to Develop a Pedestrian Safety Action Plan* according to the main needs of the Mountain Brook community. Priority is higher for projects with higher scores. Table 2 shows the points assigned to each criterion.

Table 2: Points per Criterion

Criteria	Cost	Feasibility	Public Support	Severity of Problem	Probable Use	Effectiveness of Solution	TOTAL POINTS
Points	20	20	10	20	20	10	100

Cost

Cost points for a segment were calculated in relation to the highest project cost. Lower cost projects have higher priority. The segment on Caldwell Mill Road from Pump House Road to Dolly Ridge Road has the highest cost ($1,260,216.60) while the segment on Cherokee Court from Smyer Road to the cul-de-sac has the lowest cost ($22,011.98). If the segment cost represents approximately:

1. 1 time the highest project cost: assign 2 points
2. 1/2 times the highest project cost: assign 4 points
3. 1/3 times the highest project cost: assign 6 points
4. 1/4 times the highest project cost: assign 8 points
5. 1/5 times the highest project cost: assign 10 points
6. 1/6 times the highest project cost: assign 12 points
7. 1/7 times the highest project cost: assign 14 points
8. 1/8 times the highest project cost: assign 16 points
9. 1/9 times the highest project cost: assign 18 points
10. 1/10 or less times the highest project cost: assign 20 points

Feasibility

Points for ease of installation were attributed for each segment as follows:

1. Easy installation: assign 20 points
2. Medium installation: assign 15 points
3. Difficult installation: assign 10 points
4. Infeasible installation: assign 0 points

Public Support

User requested sidewalks were assigned points based on input received by the City:

1. User requested segments: assign 10 points
2. Segments not requested by users: assign 0 points

Severity of Problem

Speed limit points were defined for each project. If the speed limit of the road segment where the sidewalk is located is:

1. 20 to 25 MPH: assign 5 points
2. 30 to 35 MPH: assign 10 points
3. 40 to 45 MPH: assign 15 points
4. 50 to 55 MPH: assign 20 points

Probable Use

Travel demand points were determined as the sum of the points assigned for each trip generator. If the segment was located within 0.25 miles from:

1. Schools: assign 8 points
2. Parks: assign 6 points
3. Transit: assign 4 points
4. Other generators: assign 2 points

The Probable Use criterion has a minimum of zero and a maximum of 20 points. When the segment is within 0.25 miles from school, park, transit, and another generator, points assigned are 8+6+4+2=20. If the segment is not within 0.25 miles of pedestrian trip generators, zero points are assigned.

Effectiveness of Solution

Effectiveness points were assigned based on the importance of the connectivity provided by the sidewalk:

1. Important connectivity: assign 10 points
2. Connectivity less relevant: assign 0 points

4.2.3 Prioritized List of Sites for Sidewalk Improvements

After assigning points to each segment, three priority groups were determined. The high-priority group had an average score of 62 points; the medium-priority group had an average score of 48 points; the low-priority group had an average score of 36

points. Priority groups can be seen in Table 3, Table 4, and Table 5. Appendix F provides mapping of the project prioritization.

Table 3: High-Priority Segments

	Road Name	From Road	To Road	TOTAL POINTS
Priority I (High)	Overhill Rd	Balmoral Rd	Hastings Rd S	73
	Pine Ridge Rd	Overbrook Rd	Pine Ridge Road	72
	River Oaks Rd	Briar Oaks Dr	Overton Rd	71
	Pine Ridge Rd	Pine Ridge Lane	Mountain Park Dr	70
	Montclair Rd	Memory Ln	Mountain Park Dr	69
	Oakdale Rd	Oakdale Dr	Existing Sidewalk	68
	Corinth Dr	Kennesaw Dr	Existing Sidewalk	67
	Lane Park Rd	Garden Pl	Country Club Cir	64
	Pine Ridge Rd	Mountain Park Dr	Old Leeds Rd	64
	Corinth Dr	Existing Sidewalk	Cul-de-sac	63
	Cherokee Rd	Overbrook Rd	Old Leeds Rd	63
	Northcote Dr	Warrington Rd	Colchester Rd	61
	Spring Hill Rd	Sedley Dr	S Brookwood Rd	60
	Country Club Rd	Montclair Rd	Sidewalk Terminus	60
	Sedley Dr	N Woodridge Rd	Spring Hill Rd	59
	Briar Oak Dr	Overton Rd	River Oaks Rd	59
	Kingshill Rd	Bethune Dr	S Woodridge Rd	58
	Crosshill Rd	Old Leeds Rd	Brookwood Rd	57
	Balmoral Rd	Overhill Rd	Pine Crest Rd	57
	Cherokee Ct	Smyer Rd	Cul-de-sac	56
	AVERAGE POINTS FOR GROUP I			63

Table 4: Medium-Priority Segments

	Road Name	From Road	To Road	TOTAL POINTS
Priority II (Medium)	Locksley Dr	Dunbarton Rd	Warrington Rd	56
	Kennesaw Drive	Stone River Rd	Wilderness Rd	55
	Country Club Rd	Salisbury Rd	Rockdell Rd	55
	Old Leeds Road	Near Highlands School	Existing Sidewalk	55
	Old Leeds Rd	Crosshill Rd	Brook Leeds Rd	55
	Locksley Dr	Warrington Rd	N Woodridge Rd	53
	Old Leeds Road	Brook Leeds Rd	City Limits	52
	Montevallo Ln	Montevallo Rd	Richmar Dr	42
	N Woodridge Rd	Westbury Pl	S Woodridge Rd	51
	Richmar Drive	Montevallo Ln	Mountain Park Dr	50
	Lane Park Rd	Somerset Cir	Country Club Rd	49
	Mountain Park Dr	Pine Ridge Rd	Michael Ln	49
	Dunbarton Dr	N Woodridge Rd	Locksley Dr	49
	Pine Crest Rd	Montevallo Rd	Overbrook Rd	49
	S Brookwood Rd	Brookwood Forest School	Bottom of hill	48
	Montclair Rd	Country Club Rd	Memory Ln	48
	N Woodridge Rd	Robin Dr	Sedley Dr	48
	Hagood St	Euclid Ave	City Limits	48
	Dexter Ave	Existing Sidewalk	Vine St	47
	Warrington Rd	Locksley Dr	Northcote Dr	47
	AVERAGE POINTS FOR GROUP II			51

Table 5: Low-Priority Segments

	Road Name	From Road	To Road	TOTAL POINTS
Priority III (Low)	N Woodridge Rd	S Woodridge Rd	Croshill Rd	46
	Colchester Rd	Northcote Dr	Overton Rd	45
	S Woodridge Rd	N Woodridge Rd	Kingshill Rd	45
	Highway 280 W	Pump House Rd	City Limits	43
	Old Leeds Ln	Antietam Dr	Stone River Rd	43
	Old Leeds Rd	Cherokee Rd	Crosshill Rd	43
	Caldwell Mill Rd	Pump House Rd	Dolly Ridge Rd	42
	Highway 280 W	City Limits	Cahaba Village	40
	Brookwood Rd	Crosshill Rd	City Limits	40
	E Briarcliff Rd	Brookwood Rd	Overcrest Rd	39
	Smyer Rd	Brookwood Mall	Valley Christian Church	39
	Pump House Rd	Rocky Ridge Rd	City Limits	38
	Old Leeds Ln	Hillock Dr	Antietam Dr	37
	Old Leeds Rd	Shady Ln	Old Leeds Ln	36
	Westbury Rd	Bethune Dr	Crosshill Rd	29
	Spring Valley Ct	N Woodridge Rd	Kingshill Rd	28
	Old Leeds Ln	Old Leeds Rd	Hillock Dr	27
	Mountain Park Dr	Michael Ln	Montrose Rd	23
	Kingshill Rd	Spring Valley Ct	Bethune Dr	21
	AVERAGE POINTS FOR GROUP III			37

4.3 Project Phasing

Following the sidewalk segment prioritization, sidewalk installation phases were identified. When identifying project phases, available funding and user requests were the main considerations. The first step in the phasing process was to identify locations where the City could use their own forces to complete the work. Potential sidewalks providing connectivity between existing facilities and with construction costs around the $100,000 mark were defined as City-funded projects.

Next, project phases were created by identifying the most requested segments and selecting adjacent or relatively close segments, geographically speaking, to create projects with costs ranging between $1M and $2.5M. Projects with costs of this magnitude are good candidates for Federal funding match programs (i.e. Congestion Mitigation and Air Quality (CMAQ) funding and Transportation Alternatives Program (TAP) funding). An estimated timeframe for completion of projects using Federal funding is estimated at five to eight years.

After City funded projects, there are essentially 9 phases. The hierarchy of these identified project phases was based upon input from users and the degree of connectivity the project segments provided for the City. Segments with a higher number of requests from Mountain Brook citizens and those which offered the most connectivity to places of interest were placed in higher phases. Appendix G provides mapping of the project phasing. Tables 6 and 7 provide a summary of the phases and the segments included in those phases.

Table 6: Project Phases (City Funded through Phase 3)

Phase	Segment	Estimated Cost of Phase
City Funded	Overhill Road (Balmoral Road to Hastings Road South)	$540,000
	Lane Park Road (Garden Place to Country Club Circle)	
	Corinth Drive (Existing Sidewalk to Cul-de-sac)	
	Cherokee Court (to Smyer Road)	
	Country Club Road (Montclair Road to Sidewalk Terminus)	
	Dexter Avenue (Existing Sidewalk to Vine Street)	
	Hagood Street (Euclid Avenue to Greeenbriar Circle)	
Phase 1	Pine Ridge Road (Overbrook Road to Pine Ridge Lane)	$2.44M
	Pine Ridge Road (Pine Ridge Lane to Mountain Park Drive)	
	Pine Ridge Road (Mountain Park Drive to Old Leeds Road)	
	Montevallo Lane (Montevallo Road to Richmar Drive)	
	Richmar Drive (Montevallo Lane to Mountain Park Drive)	
	Mountain Park Drive (Pine Ridge Road to Michael Lane)	
	Mountain Park Drive (Michael Lane to Montrose Road)	
Phase 2	Montclair Road (Memory Lane to Mountain Park Drive)	$2.0M
	Country Club Road Salisbury Road to Rockdell Lane)	
	Lane Park Road (Somerset Circle to Country Club Road)	
	Montclair Road (Country Club Drive to Memory Lane)	
	Pine Crest Road (Balmoral Road to Overbrook Road)	
	Balmoral Road (Overhill Road to Pine Crest Road)	
Phase 3	Corinth Drive (Kennesaw Drive to Existing Sidewalk)	$1.5M
	Kennesaw Drive (Stone River Road to Wilderness Road)	
	Old Leeds Lane (Antietam Drive to Stone River Road)	
	Old Leeds Lane (Hillock Drive to Antietam Drive)	
	Old Leeds Lane (Old Leeds Road to Hillock Drive)	
	Old Leeds Road (Shady Lane to Old Leeds Lane)	

Table 7: Project Phases Continued (Phase 4 through Phase 9)

Phase	Segment	Estimated Cost of Phase
Phase 4*	River Oaks Road (Briar Oaks Drive to Overton Road)	$3M
	Northcote Drive (Warrington Road to Colchester Road)	
	Spring Hill Road (Sedley Drive to S Brookwood Road)	
	Sedley Drive (N Woodridge Road to Spring Hill Road)	
	Briar Oak Drive (Overton Road to River Oaks Road)	
	Locksley Drive (Dunbarton Drive to Warrington Road)	
	Locksley Drive (Warrington Road to N Woodridge Road)	
	Dunbarton Drive (N Woodridge Road to Locksley Drive)	
	S Brookwood Road (Brookwood Forest School to Bottom of hill)	
	N Woodridge Road (Robin Drive to Sedley Drive)	
	Warrington Road (Locksley Drive to Northcote Drive)	
	Colchester Road (Northcote Drive to Overton Road)	
	E Briarcliff Road (Brookwood Road to Overcrest Road)	
Phase 5	Kingshill Road (Bethune Drive to S Woodridge Road)	$2.4M
	N Woodridge Road (Westbury Place to S Woodridge Road)	
	N Woodridge Road (S Woodridge Road to Crosshill Road)	
	S Woodridge Road (N Woodridge Road to Kingshill Road)	
	Westbury Road (Bethune Drive to Crosshill Road)	
	Spring Valley Court (N Woodridge Road to Kingshill Road)	
	Kingshill Road (Spring Valley Court to Bethune Drive)	
Phase 6	Crosshill Road (Old Leeds Road to Brookwood Road)	$2.3M
	Cherokee Road (Overbrook Road to Old Leeds Road)	
	Old Leeds Road (Brook Leeds Road to City Limits)	
	Old Leeds Road (Crosshill Road to Brook Leeds Road)	
	Old Leeds Road (near Highlands School)	
	Brookwood Road (Crosshill Road to City Limits)	
	Old Leeds Road (Cherokee Road to Crosshill Road)	
Phase 7	Highway 280 W (Pump House Road to City Limits)	$1.4M
	Highway 280 W (City Limits to Cahaba Village)	
	Smyer Road (Brookwood Mall to Valley Christian Church)	
Phase 8	Caldwell Mill Road (Pump House Road to Dolly Ridge Road)	$1.3M
Phase 9	Pump House Road (Rocky Ridge Road to City Limits)	$1.1M

*Phase 4 includes improving the existing pedestrian accommodations on S Brookwood Road (near Brookwood Forest School). If this segment were removed from Phase 4, the estimated cost would be reduced approximately $236,000.

5 Accessibility

Per the Americans with Disabilities Act (ADA), facilities located within the public right-of-way must provide accessibility for all users including those with disabilities. The United States Access Board has developed proposed guidelines for pedestrian facilities in public rights-of-way. These guidelines are more commonly referred to as *Public Rights-Of-Way Accessibility Guidelines* or PROWAG. Per PROWAG, design, construction, and any alteration of pedestrian facilities within public rights-of-way, including local rights-of-way, must be made accessible for pedestrians with disabilities. Although PROWAG has not yet been officially adopted by the United States Department of Justice, it is the standard recognized by ALDOT. Once PROWAG is officially adopted it will be mandatory that the guidelines set forth by the United States Access Board be implemented into projects located within public rights-of-way.

Recently, the City completed a *Transition Plan for ADA Compliance (June 28, 2017)*. As a part of the preparation of the transition plan, forty-five miles of existing sidewalk was evaluated. The purpose of this plan is to "ensure that these existing pedestrian facilities are accessible to all Mountain Brook citizens in as timely and complete manner as is reasonably possible." The plan states that the City will strive to complete improvements to existing sidewalk conditions over the course of ten years, beginning with the 2017-2018 fiscal year and with a $150,000 per year budget. This timeline and budget is based upon the City's current revenue and is subject to change.

6 Funding Sources

Costs associated with the design and construction of the proposed sidewalks could exceed the City's current available resources. This section discusses federal and private funding sources that are available to aid in design and construction. Federal programs are administered by the Alabama Department of Transportation. Table 8 details funding sources, the category of the source and type of project for which the funding can be used.

Table 8: Funding Options

Funding Source	Category	Relevant Project Type	Match Type
City of Mountain Brook	Local	Provides connectivity with an estimated cost of $100,000	NA
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Federal	Pedestrian facilities	80% Federal/ 20% City (Design and Construction)
Transportation Alternatives Program (TAP)	Federal	Pedestrian facilities	80% Federal/ 20% City (Construction Only)
Highway Safety Improvement Program (HSIP)	Federal	Projects with the goal of reducing traffic crashes	90% Federal/ 10% City (Construction Only)

Federal Funding

Below is a brief description of available federal funding programs.

- CMAQ and TAP funding programs have been continued through the Fixing America's Surface Transportation Act (FAST Act). The Metropolitan Planning Organization (MPO) receives approximately $10 Million of CMAQ funds and $1.2 Million of TAP funds annually. These funds are then distributed amongst various municipalities and ALDOT. The members of the MPO vote to determine which projects receive funding. The CMAQ and TAP funding programs are further discussed below.
    - The Congestion Mitigation and Air Quality Improvement (CMAQ) Program's goal is to improve air quality. The installation of pedestrian facilities is one way CMAQ achieves this goal. Pedestrian facilities have the potential to reduce vehicle emissions since they encourage walking instead of motor vehicle transportation. CMAQ funding can be used for both design and construction of a project. With CMAQ funding, an 80/20 match is required meaning the Federal government provides 80% of the funding and the City would be responsible for the remaining 20% of funding. Since this report was prepared as part of the APPLE program, it can be used in conjunction with the application and will streamline the City's request for CMAQ funding. The downside to CMAQ funding is the time it adds to the overall project. Additional time is required in order to account for ALDOT and FHWA involvement including additional plan reviews and more stringent design and construction standards. For these reasons, a timeframe for completing a CMAQ pedestrian facility project is estimated at three to five years.
      http://www.fhwa.dot.gov/environment/air_quality/cmaq/
    - Projects defined as transportation alternatives are eligible for Transportation Alternatives Program (TAP) funding. More specifically, applicable projects include: construction of facilities for pedestrians; construction of safe routes for non-drivers; community improvement activities; and environmental mitigation activities. TAP applicable projects are funded through a competitive process. Project design is not covered by TAP funds, meaning the City would have to use other funding for engineering services. Like CMAQ funding, an 80/20 match is required with TAP funding. TAP funds cover 80% of the construction cost and the City would be responsible for 20% of the construction cost plus all engineering services for the project. In theory the timeframe for completing a TAP project should be shorter than a CMAQ project since the design is separate from the construction funding; however, three to five years should be assumed since design plans and construction specifications are required to meet ALDOT standards. The application deadline for 2018

funding is Friday, December 15, 2017 at 5:00PM. The total amount a project sponsor can apply for has been increased this year from $500,000 to $800,000 ($640,000 Federal and $160,000 local match). Municipalities wanting to pursue TAP funds should apply with RPCGB and ALDOT.
http://www.fhwa.dot.gov/environment/transportation_alternatives/
https://www.rpcgb.org/transportation-alternatives-program/

- The Highway Safety Improvement Program (HSIP) is a 90/10 match Federal program that funds projects with the goal of reducing traffic crashes. ALDOT's Traffic and Safety Operations Section manages HSIP funds. Applications for HSIP funds must demonstrate a project's ability to reduce crashes in order to be approved for funding.

7 Stakeholder and Public Input

Several stakeholder meetings were conducted during the life of the study. In addition, a public involvement meeting was conducted and discussion was included at several City Council meetings. This section summarizes those meetings.

7.1 Stakeholder Input

A scoping stakeholder meeting was held on October 17, 2016 at the Mountain Brook City Hall. The purpose of this meeting was to discuss the goals of the study and review the needs for next steps. Representatives from the City of Mountain Brook and RPCGB were present. During this meeting, an overview of the APPLE program and the project were provided. Participants expressed a strong desire to determine if there are areas where sidewalks are needed but have not yet been considered by the City Walkway Master Plan.

Following the development of potential sidewalk locations, crash data analysis, and field observations, a stakeholder progress meeting was held on January 5, 2017 at Mountain Brook City Hall. Again, representatives from the City of Mountain Brook and RPCGB were present. A second progress meeting was held on March 22, 2017 at Mountain Brook City Hall, with representatives from the City of Mountain Brook and RPCGB. The tasks accomplished before these meetings included: in-field constructability review, cost estimates, and prioritization procedure.

City Council meetings were attended on April 24, 2017, May 8, 2017, July 10, 2017 and July 24, 2017 to obtain feedback from the Council Members and provide updates associated with the study.

7.2 Public Involvement

Over the course of the study, the City received numerous e-mails requesting sidewalks in various areas. The City also conducted a city-wide survey separate from this study.

Input received via e-mail and through the survey was incorporated into the study. An official public involvement meeting was held at City Hall on June 27, 2017.

At the Public Involvement meeting, attendees were guided through four stations. The first station included a map displaying inventory of existing sidewalks and potential sidewalk locations. Station two included an ease of installation map which provided an overview of the potential sidewalk segments and their associated construction level of difficulty. The third station provided a map with the same sidewalk segments but instead of construction feasibility, prioritization was displayed. Lastly, station four exhibited a project phasing map. A ten day comment period was provided to allow the public time to provide input. Appendix H includes a list of comments received as a result of the public meeting and how they were addressed in the study.

8 Next Steps

If the City chooses to move forward with implementing any of the proposed sidewalks and would like to pursue Federal CMAQ or TAP funding, the next step would be to request inclusion of a project in RPCGB's Transportation Improvement Plan (TIP). In 2019, RPCGB will solicit new projects to be included in the next TIP planning cycle. However, projects that utilize the APPLE program provide local governments the opportunity to request funding between TIP cycles. The preparation of this feasibility study can be used in the application for funds from the RPCGB for future improvements.

Once Federal funds are in place for the project, an environmental document will need to be prepared. The environmental document must include technical studies and public involvement outreach necessary to comply with procedures of the National Environmental Policy Act (NEPA). Once the environmental study has been completed, the design would be undertaken, and construction would follow. If it is determined that additional right-of-way is required, acquisition would be conducted prior to construction.

Should the City elect to use local funds, the timing, scheduling, and implementation of the installation would be at their discretion.

List of Appendices

Appendix A

Sidewalk Inventory Map

NOT TO SCALE

NO.	DESCRIPTION	BY	CKD.	DATE
	REVISIONS			

SAIN associates
ENGINEERING BETTER PARTNERSHIPS
Two Perimeter Park South
Suite 500 East
Birmingham, Alabama 35243
Phone: (205) 940-6420
Website: www.sain.com

Legend

Walking Points

Generators

- Church
- Park
- School
- Village

Sidewalk Master Plan

LineType

- Existing and Funded Walkways and Trails
- Previously Identified Potential Phases
- Newly Idendified Phases
- Sidewalk Under Consideration by Other Municipality
- User Requested Phases
- Previously Studied and Eliminated
- Other Parcels
- Properties Within 1/4 Mile of Generators
- City Limits

DRAWING NAME
Sidewalk Inventory

Sidewalk Master Plan Study
City of Mountain Brook, AL
for
Regional Planning Commission of Greater Birmingham

DRN. BY	JOB NO.
DRM	16-0217
CKD. BY	SCALE
JB	AS SHOWN
PROJ. MGR.	DATE
AB	8/30/2017

SHEET NO.

Appendix B

Ease of Installation Map

NOT TO SCALE

NO.	DESCRIPTION	BY	CKD.	DATE
	REVISIONS			

Legend

Walking Points

Generators

- Church
- Park
- School
- Village

Sidewalks

Ease of Installation Type

- Existing Sidewalk
- Easy Installation
- Medium Installation
- Difficult Installation
- Infeasible Installation
- Parcels
- City Limits

SAIN associates
ENGINEERING BETTER PARTNERSHIPS
Two Perimeter Park South
Suite 500 East
Birmingham, Alabama 35243
Phone: (205) 940-6420
Website: www.sain.com

DRAWING NAME
Ease of Installation Map

Sidewalk Master Plan Study
City of Mountain Brook, AL
for
Regional Planning Commission of Greater Birmingham

DRN. BY DRM	JOB NO. 16-0217
CKD. BY JB	SCALE AS SHOWN
PROJ. MGR. AB	DATE 8/30/2017

SHEET NO.

Appendix C

USFWS Correspondence

SAIN associates
ENGINEERING BETTER PARTNERSHIPS

February 20, 2017

Mr. William J. Pearson
Field Supervisor
U.S. Fish and Wildlife Service
1208-B Main Street
Daphne, AL 36526

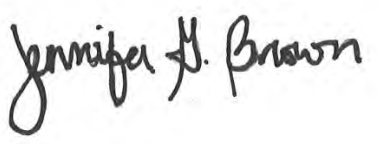
Subject: **USFWS Species Request**
Mountain Brook Sidewalks Study
Regional Planning Commission of Greater Birmingham
Mountain Brook, Alabama

Dear Mr. Pearson:

The City of Mountain Brook in conjunction with the Regional Planning Commission of Greater Birmingham is evaluating the feasibility of installing sidewalk along various roadways within the city limits. The intent of this letter is to request your assistance in identifying threatened and endangered species that may occur in the vicinity of the study area. The study area is shown on the enclosed map.

Please let me know if you have any questions or need additional information.

Sincerely,



Jennifer G. Brown, PE
Project Manager
Alabama Reg. #32726

Attachment

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

IN REPLY REFER TO:
2017-TA-0393

MAR 0 8 2017

RECEIVED
MAR 1 0 2017
BY: .....

Jennifer G. Brown
Sain Associates
Two Perimeter Park South
Suite 500 East
Birmingham, AL 35243

Dear Ms. Brown:

Thank you for your letter dated February 20, 2017, requesting a species list to assist in preparing an environmental feasibility study for a proposed project that involves sidewalks along various roadways within city limits in Jefferson County, Alabama. Following is the Service's list of species concerning this project as it relates to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 Cr.S.C. 1531 et seq.) and the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e).

Federally Listed Species
The following species may occur within or near your project area:
Indiana bat *Myotis sodalis* - Endangered
Northern long-eared bat *Myotis septentrionalis* - Threatened with 4d Rule
Gray Bat *Myotis grisescens* - Endangered
Alabama moccasinshell *Medionidus acutissimus* - Threatened
Fineline Pocketbook *Hamiota altilis* - Threatened
Orange-nacre mucket *Hamiota perovalis* - Threatened
Ovate clubshell *Pleurobema perovatum* - Endangered
Southern acronshell *Epioblasma othcaloogensis* - Endangered
Triangular kidneyshell *Ptychobranchus greenii* - Endangered
Southern clubshell *Pleurobema decisium* - Endangered
Upland combshell *Epioblasma metastriata* - Endangered
Cahaba Shiner *Notropis cahabae* - Endangered
Critical habitat Unit 13 for Alabama moccasinshell, fineline pocketbook, orangenacre mucket, ovate clubshell, southern acronshell, southern clubshell, triangular kidneyshell, and upland combshell. Cahaba River and Little Cahaba River, Jefferson, Shelby, Bibb Counties, Alabama. This unit includes the Cahaba River from U. S. Highway 82, Centerville, Bibb County, upstream to Jefferson County Road 143, Jefferson County, Alabama, and the Little Cahaba River from its confluence with the Cahaba River, upstream to the confluence of Mahan and Shoal Creeks, Bibb County, Alabama (69 FR 40084 40171).

Site-specific concerns:
The project area is within listed bat range. If trees will be cleared to complete the project please contact this office for further guidance. Critical habitat Unit 13 is within the project boundary. Therefore, project plans should include protections for water quality, the Cahaba River and its tributaries.

Under regulations that implement section 7 of the Endangered Species Act the accuracy of this species list should be verified after 90 days. We appreciate your concern for threatened and endangered species. If you have any questions or need additional information, please contact Ms. Jennifer Grunewald at (251) 441-6633. Please refer to the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

Appendix D

NRCS Correspondence

SAIN associates
ENGINEERING BETTER PARTNERSHIPS

February 20, 2017

Mr. Milton Tuck
Resource Soil Scientist
Natural Resources Conservation Service
Milton.tuck@al.usda.gov
420 Hackberry Lane
Tuscaloosa, Alabama 35486

Subject: **Primary and Unique Farmland Concurrence Request**
Mountain Brook Sidewalks Study
Regional Planning Commission of Greater Birmingham
Mountain Brook, Alabama

Dear Mr. Tuck:

The City of Mountain Brook in conjunction with the Regional Planning Commission of Greater Birmingham is evaluating the feasibility of installing sidewalk along various roadways within the city limits. Mapping is included for your use in determining the prime farmland status for the subject project.

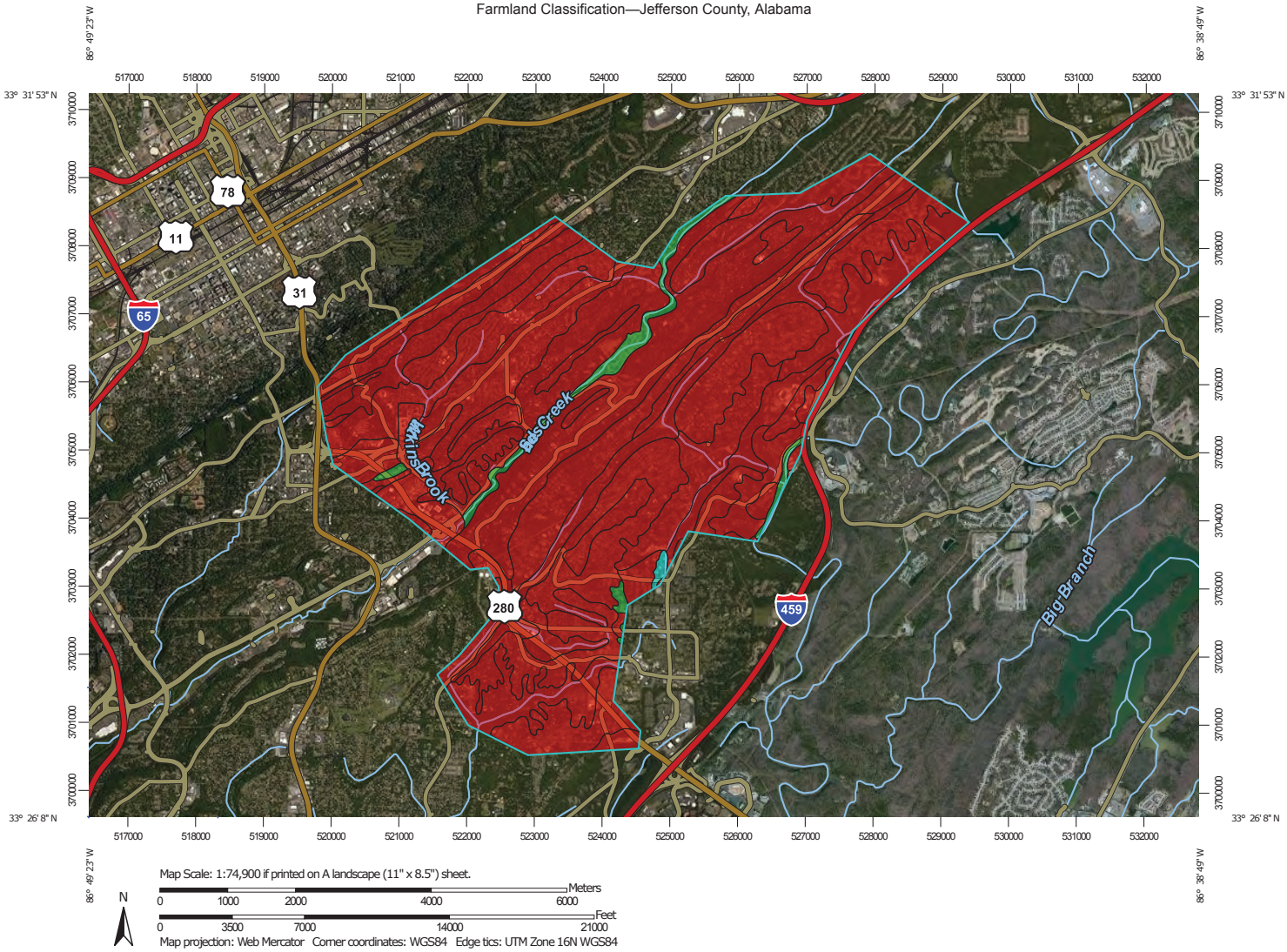
Please let me know if you have any questions or need additional information.

Sincerely,

Jennifer G. Brown

Jennifer G. Brown, PE
Project Manager
Alabama Reg. #32726
D: (205) 263-2159
jbrown@sain.com

Attachment


86° 49' 23" W
86° 38' 49" W
517000
518000
519000
520000
521000
522000
523000
524000
525000
526000
527000
528000
529000
530000
531000
532000
33° 31' 53" N
33° 26' 8" N
3710000
3709000
3708000
3707000
3706000
3705000
3704000
3703000
3702000
3701000
3700000
78
11
31
65
280
459
Big Creek
Mill Branch
Big Branch
Map Scale: 1:74,900 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0
1000
2000
4000
6000
Feet
0
3500
7000
14000
21000
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

Not prime farmland

All areas are prime farmland

Prime farmland if drained

Prime farmland if protected from flooding or not frequently flooded during the growing season

Prime farmland if irrigated

Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

Prime farmland if irrigated and drained

Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Prime farmland if subsoiled, completely removing the root inhibiting soil layer

Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

Prime farmland if irrigated and reclaimed of excess salts and sodium

Farmland of statewide importance

Farmland of local importance

Farmland of unique importance

Not rated or not available

Soil Rating Lines

Not prime farmland

All areas are prime farmland

Prime farmland if drained

Prime farmland if protected from flooding or not frequently flooded during the growing season

Prime farmland if irrigated

Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

Prime farmland if irrigated and drained

Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Prime farmland if subsoiled, completely removing the root inhibiting soil layer

Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

Prime farmland if irrigated and reclaimed of excess salts and sodium

Farmland of statewide importance

Farmland of local importance

Farmland of unique importance

Not rated or not available

Soil Rating Points

Not prime farmland

All areas are prime farmland

Prime farmland if drained

Prime farmland if protected from flooding or not frequently flooded during the growing season

Prime farmland if irrigated

Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

Prime farmland if irrigated and drained

Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Prime farmland if subsoiled, completely removing the root inhibiting soil layer

Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

Prime farmland if irrigated and reclaimed of excess salts and sodium

Farmland of statewide importance

Farmland of local importance

Farmland of unique importance

Not rated or not available

Water Features

MAP INFORMATION

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Jefferson County, Alabama
Survey Area Data: Version 9, Sep 23, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 13, 2011—May 20, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Jefferson County, Alabama (AL073)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
5	Allen-Urban land complex, 8 to 15 percent slopes	Not prime farmland	397.3	4.0%
8	Bodine-Birmingham association, steep	Not prime farmland	144.0	1.5%
13	Docena complex, 0 to 4 percent slopes	Farmland of statewide importance	18.0	0.2%
20	Gorgas-Rock outcrop complex, steep	Not prime farmland	703.9	7.1%
21	Gorgas-Rock outcrop-Urban land complex, 8 to 15 percent slopes	Not prime farmland	1,492.6	15.1%
25	Holston-Urban land complex, 2 to 8 percent slopes	Not prime farmland	610.7	6.2%
27	Leesburg-Rock outcrop complex, steep	Not prime farmland	1,817.1	18.4%
28	Montevallo-Nauvoo-Urban land complex, 10 to 40 percent slopes	Not prime farmland	1,709.0	17.3%
31	Nauvoo fine sandy loam, 8 to 15 percent slopes	Not prime farmland	370.8	3.7%
33	Nauvoo-Urban land complex, 8 to 15 percent slopes	Not prime farmland	1,055.8	10.7%
34	Nauvoo-Montevallo association, 10 to 40 percent slopes	Not prime farmland	498.9	5.0%
39	Sullivan-State complex, 0 to 2 percent slopes	All areas are prime farmland	252.4	2.6%
40	Townley-Nauvoo complex, 8 to 15 percent slopes	Not prime farmland	10.5	0.1%
41	Townley-Urban land complex, 8 to 15 percent slopes	Not prime farmland	571.4	5.8%
44	Urban land	Not prime farmland	222.4	2.2%
W	Water	Not prime farmland	13.7	0.1%
Totals for Area of Interest			**9,888.5**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Natural Resources Conservation Service
1300 Meridian Street, Suite 23-F
Huntsville, AL 35801

March 28, 2017

ATTN: Jennifer Brown
Sain Associates
Two Perimeter Park S.
Suite 500 East
Birmingham, AL 35243

REF: Primary and Unique Farmland Concurrence Request
Mountain Brook Sidewalks Study
Regional Planning Commission of Greater Birmingham
Mountain Brook, Alabama

Dear Jennifer Brown:

The area of consideration for the sidewalk study **does** contain "Prime Farmlands" as defined in Appendix A of Department Regulation No. DR 9500-3 dated March 22, 1983; however, **does not** meet the criteria set forth by the Farmland Protection Policy Act (FPPA) and Land Evaluation Site Assessment (LESA) of June 22, 1982.

The area of consideration for not subject to Farmland Protection Policy Act.

> *''Farmland'' does not include land already in or committed to urban development or water storage. Farmland ''already in'' urban development or water storage includes all such land with a density of 30 structures per 40-acre area. Farmland already in urban development also includes lands identified as ''urbanized area'' (UA) on the Census Bureau Map, or as urban area mapped with a ''tint overprint'' on the USGS topographical maps, or as ''urban-built-up'' on the USDA Important Farmland Maps. Areas shown as white on the USDA Important Farmland Maps are not ''farmland'' and, therefore, are not subject to the Act.*

In addition, area of consideration **does not** contain hydric soils (blue) that meet the definition for wetland criteria, as required by 180-V-NFSAM Third Edition, Amend 2, November 1996 part 513.11.a.

Erosion and sediment control measures should be implemented and maintained during the construction phase to protect land, water, and related resources. Plans for construction should include sediment basins or traps and other erosion control practices, including coverage of bare soil as soon as possible by temporary and permanent vegetation and structures.

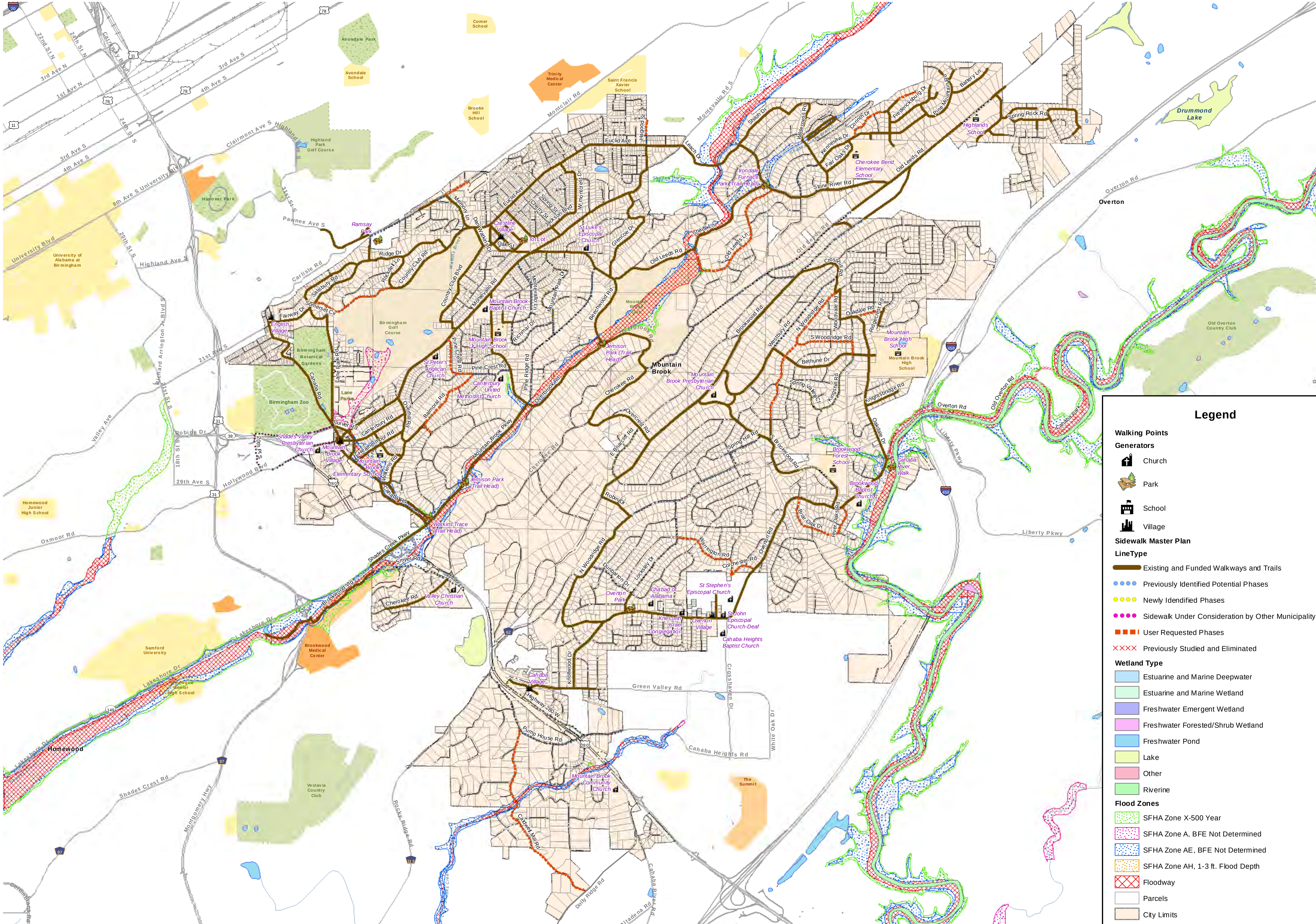
If you need further assistance, please contact your local NRCS office, or feel free to call myself, Christopher Ford, Acting Resource Soil Scientist, at (256) 372-5949.

Sincerely,

Christopher Ford
Acting Resource Soil Scientist

Appendix E

Wetlands and Floodplains Mapping


Legend
Walking Points
Generators
Church
Park
School
Village
Sidewalk Master Plan
LineType
Existing and Funded Walkways and Trails
Previously Identified Potential Phases
Newly Idenified Phases
Sidewalk Under Consideration by Other Municipality
User Requested Phases
Previously Studied and Eliminated
Wetland Type
Estuarine and Marine Deepwater
Estuarine and Marine Wetland
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Lake
Other
Riverine
Flood Zones
SFHA Zone X-500 Year
SFHA Zone A, BFE Not Determined
SFHA Zone AE, BFE Not Determined
SFHA Zone AH, 1-3 ft. Flood Depth
Floodway
Parcels
City Limits
Mountain Brook
Homewood
Overton
NOT TO SCALE

NO.	DESCRIPTION	BY	CKD.	DATE

REVISIONS

SAIN associates
ENGINEERING BETTER PARTNERSHIPS
Two Perimeter Park South
Suite 500 East
Birmingham, Alabama 35243
Phone: (205) 940-6420
Website: www.sain.com

DRAWING NAME
Wetlands and Flood Zones

Sidewalk Master Plan Study
City of Mountain Brook, AL
for
Regional Planning Commission of
Greater Birmingham

DRN. BY	JOB NO.
DRM	16-0217
CKD. BY	SCALE
JB	AS SHOWN
PROJ. MGR.	DATE
AB	8/30/2017

SHEET NO.

Appendix F

Prioritization Map

NOT TO SCALE

NO.	DESCRIPTION	BY	CKD.	DATE
	REVISIONS			

SAIN associates
ENGINEERING BETTER PARTNERSHIPS
Two Perimeter Park South
Suite 500 East
Birmingham, Alabama 35243
Phone: (205) 940-6420
Website: www.sain.com

DRAWING NAME
Prioritization Map

Sidewalk Master Plan Study
City of Mountain Brook, AL
for
Regional Planning Commission of Greater Birmingham

DRN. BY: DRM	JOB NO.: 16-0217
CKD. BY: JB	SCALE: AS SHOWN
PROJ. MGR.: AB	DATE: 8/30/2017
SHEET NO.	

Legend

Walking Points

Generators

- Church
- Park
- School
- Village

Sidewalks

- Existing Sidewalk

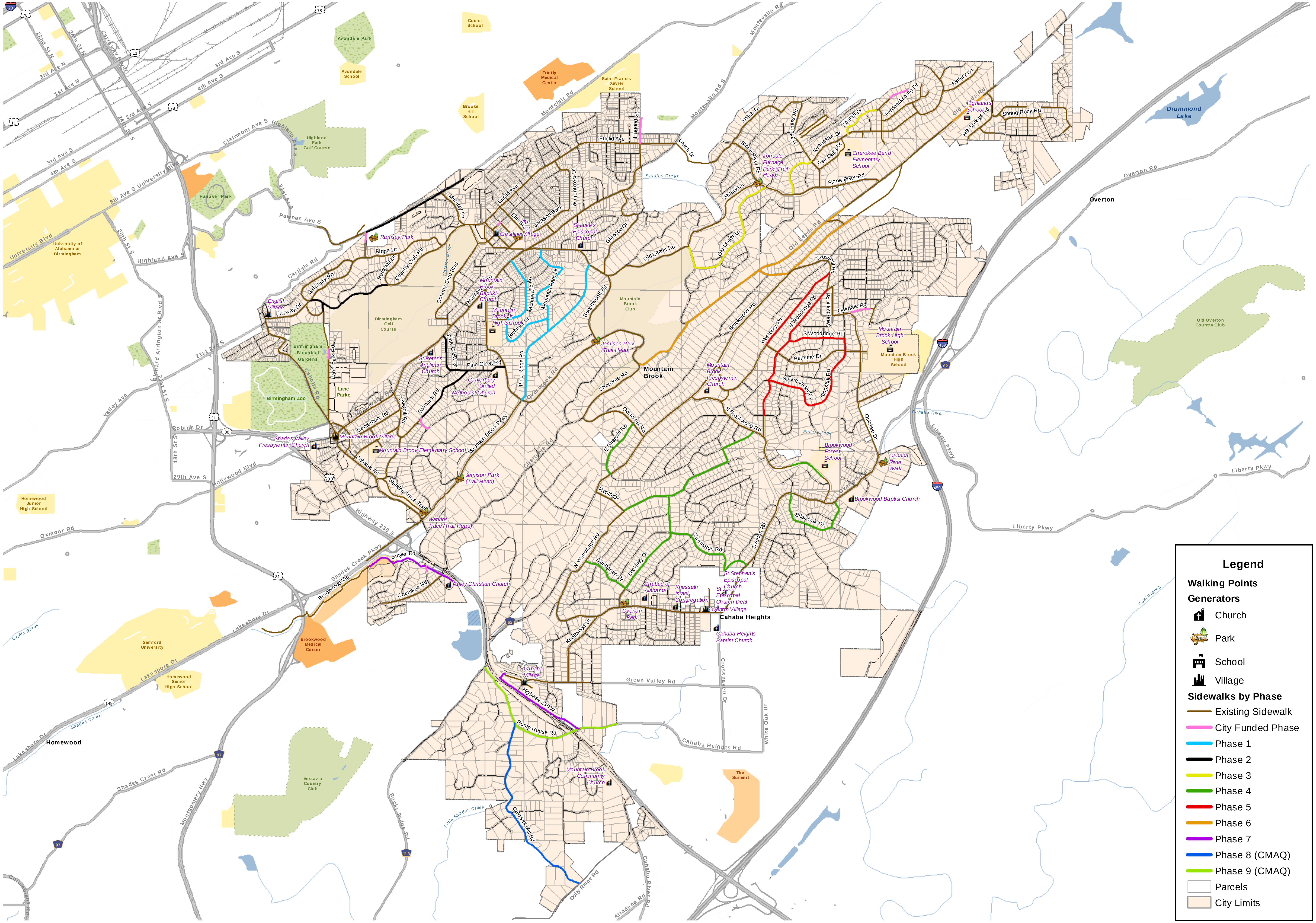
Priority

- Priority I (High)
- Priority II (Medium)
- Priority III (Low)
- Parcels
- City Limits

Overton
Cahaba Heights
Homewood
Mountain Brook
Drummond Lake
Old Overton Country Club
Mountain Brook Club
Birmingham Golf Course
Highland Park Golf Course
Hanover Park
Avondale Park
Avondale School
Comer School
Trinity Medical Center
Saint Francis Xavier School
Brooke Hill School
University of Alabama at Birmingham
Birmingham Botanical Gardens
Birmingham Zoo
Lane Parke
Homewood Junior High School
Samford University
Homewood Senior High School
Brookwood Medical Center
Vestavia Country Club
The Summit
Cherokee Bend Elementary School
Irondale Furnace Park (Trail Head)
Ramsay Park
Creative Village
St.Luke's Episcopal Church
Mountain Brook Baptist Church
Mountain Brook High School
English Village
Jemison Park (Trail Head)
St.Peter's Anglican Church
Canterbury United Methodist Church
Mountain Brook Village
Mountain Brook Elementary School
Shades Valley Presbyterian Church
Mountain Brook Presbyterian Church
Brookwood Forest School
Brookwood Baptist Church
Cahaba River Walk
Watkins Trace (Trail Head)
Valley Christian Church
Overton Park
Chabad of Alabama
Knesseth Israel Congregation
St Stephen's Episcopal Church
St Stephen's Episcopal Church-Deaf
Cahaba Village
Cahaba Heights Baptist Church
Cahaba Village
Mountain Brook Community Church
Cahaba River
Shades Creek
Little Shades Creek
Griffin Brook
Coal Branch
Big Branch
Overton Rd
Montevallo Rd
Montclair Rd
Euclid Ave
Leach Dr
Shades Creek Pkwy
Highway 280 S
Green Valley Rd
Cahaba Heights Rd
Old Leeds Rd
Old Overton Rd
Cross Hill Rd
Oakdale Rd
S Woodridge Rd
Bethune Dr
S Brookwood Rd
Cherokee Rd
Overcliff Rd
Robin Dr
Briar Oak Dr
Warrington Rd
Overton Rd
Liberty Pkwy
Spring Rock Rd
Old Rock Mill Rd
Mill Springs Rd
Battery Ln
Frederick Berg Dr
Country Dr
Kenilworth Dr
Fair Oaks Dr
Shady Ln
Stone River Rd
Shiloh Dr
Montevallo Rd S
Euclid Ave
Elmwood Cir
Jackson Ln
Wynnterest Dr
Glencoe Dr
Old Leeds Rd
Old Leeds Ln
Mountain Brook Jr High School
Montevallo Ln
Meadow Brook Rd
Country Club Rd
Ridge Dr
Rockdell Ln
Salisbury Rd
Fairway Dr
Richland Dr
Pine Crest Rd
Pine Ridge Rd
Lane Park Rd
Overbrook Rd
Balmoral Rd
Canterbury Rd
Mountain Brook Pkwy
Cahaba Rd
Walkers Trace Trl
Jemison Park (Trail Head)
Cherokee Rd
Pine Crest Rd
Bashinoon Rd
Richland Rd
Montevallo Ln
Wynnterest Dr
Jackson Ln
Elmwood Cir
Euclid Ave
Meadow Brook Rd
Country Club Rd
Ridge Dr
Rockdell Ln
Salisbury Rd
Fairway Dr
Carlisle Rd
Highland Ave S
University Blvd
8th Ave S University Blvd
20th St S
Pawnee Ave S
Clairmont Ave S
Highland Ave S
3rd Ave S
4th Ave S
1st Ave N
2nd Ave N
22nd St N
24th St N
Richard Arrington Jr Blvd
21st St S
Valley Ave
Robins Dr
18th St S
29th Ave S
Hollywood Blvd
Oxmoor Rd
Shades Creek Pkwy
Brookwood Vlg
Lakeshore Dr
Shades Crest Rd
Montgomery Hwy
Rocky Ridge Rd
Dolly Ridge Rd
Altadena Rd
Cahaba Beach Rd
Cahaba Valley Rd
Pump House Rd
White Oak Dr
Crosshaven Dr
Knollwood Dr
Dunnington Dr
Lockley Dr
N Woodridge Rd
Smyer Rd
Cherokee Rd
Valley Ave
Highway 280 S
Shades Creek Pkwy
Lakeshore Dr
Shades Crest Rd
Montgomery Hwy
Cahaba Valley Rd
Dolly Ridge Rd
Altadena Rd
Cahaba Beach Rd
Rocky Ridge Rd
Pump House Rd
Green Valley Rd
Cahaba Heights Rd
White Oak Dr
Crosshaven Dr
Knollwood Dr
Dunnington Dr
Lockley Dr
N Woodridge Rd
Warrington Rd
Overton Rd
Briar Oak Dr
Brookwood Baptist Church
Brookwood Forest School
Cahaba River Walk
Fulton Creek
Oakdale Dr
Liberty Pkwy
Spring Valley Dr
Norsworth Rd
Westbury Rd
N Woodridge Rd
S Woodridge Rd
Oakdale Rd
Cross Hill Rd
S Brookwood Rd
Bethune Dr
Mountain Brook High School
Mountain Brook Presbyterian Church
Jemison Park (Trail Head)
Mountain Brook Club
Old Overton Country Club
Drummond Lake
Liberty Pkwy
Overton Rd
Old Rock Mill Rd
Mill Springs Rd
Spring Rock Rd
Battery Ln
Frederick Berg Dr
Country Dr
Kenilworth Dr
Fair Oaks Dr
Shady Ln
Stone River Rd
Shiloh Dr
Montevallo Rd S
Irondale Furnace Park (Trail Head)
Cherokee Bend Elementary School
Highland Schools
Overton
Cahaba Heights
Homewood
Mountain Brook

Appendix G

Project Phasing Map



DRAWING NAME
Phasing Map

Sidewalk Master Plan Study
City of Mountain Brook, AL
for
Regional Planning Commission of Greater Birmingham

SAIN associates
ENGINEERING BETTER PARTNERSHIPS
Two Perimeter Park South
Suite 500 East
Birmingham, Alabama 35243
Phone: (205) 940-6420
Website: www.sain.com

NOT TO SCALE

REVISIONS

NO.	DESCRIPTION	BY	CKD.	DATE

DRN. BY	JOB NO.
DRM	16-0217
CKD. BY	SCALE
JB	AS SHOWN
PROJ. MGR.	DATE
AB	8/30/2017

SHEET NO.

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Appendix H

Public Involvement Summary

Mountain Brook Sidewalks APPLE Study

Public Invovlement Meeting Response Summary

Citizen Suggested Roadway	Review	Direction needed from the City	Sain Recommendation
Hagood Street #Votes: 16	As you know, Hagood Street was suggested by 13 citizens. The portion of Hagood Street located within Mountain Brook city limits is already included as a City funded project. The projects shown as City funded are not prioritized; however, the City may want to take this into consideration when selecting their next sidewalk project.	None.	Based on GIS information from the City, the portion of Hagood Street within the City limits extends to Greenbriar Circle. Construction will be difficult due to storm drainage. Many of the comments referenced Saw's which is located outside the City limits.
Balmoral Road #Votes: 13	This segment was already included in the plan; however, we took a closer look at its constructability and proximity to MBE and MBJH. We're not convinced that construction would not be difficult, as it is currently labeled. This is primarily due to the parking areas adjacent to the roadway, embankments, and steep driveways. We do feel that the prioritization of Balmoral and Pine Crest could be shifted higher up the list.	None.	Due to the response from citizens, this segment is being moved to Phase 2 and will include surrounding roadways (Phase 3 is now Phase 2)
Pine Crest Road #Votes: 9	A portion of Pine Crest Road was already included in the plan. We reviewed the constructability of installing sidewalk for the portion of Pine Ridge Road between Balmoral Road and Montevallo Road since it was included in several suggestions from citizens. This addition will provide connectivity in the area with varying levels of difficulty.	**Is the City in agreement to add all of Pine Crest Road to the plan?**	Connect Pine Crest Road from Overbrook Road to Montevallo Road. This connection will provide connectivity for residents.
Virginia Road #Votes: 2	Constructability for Virginia Road would be difficult due to narrow pavement width (18') which doesn't allow for any pavement removal for sidewalk installation. Also, the roadway has steep side slopes, some retaining walls, and large trees.	Virginia Road is a low speed roadway and does not appear to be a cut through street and if sidewalks were installed on Pine Crest Road and Balmoral, residents could access those for connection to schools, etc. **Does the City want Virginia Road included on the plan?**	Do not include. Construction would be difficult and those living on this roadway can access the sidewalks proposed for Pine Crest and Balmoral Road. This does not appear to be a cut through roadway.
Pine Haven Road #Votes: 1	We found the majority of Pine Haven Road to have a medium constructability rating; however, the portion of Pine Haven Road between Balmoral and Virginia would be difficult	Like Virginia Road, Pine Haven Road is low speed and does not appear to be a cut through for non-local traffic. **Does the City want Pine Haven Road included on the plan?**	Do not include. Construction would be difficult and those living on this roadway can access the sidewalks proposed for Pine Crest and Balmoral Road. This does not appear to be a cut through roadway.
Hastings Road #Votes: 1	No further review; already included in the plan.	None.	Keep in plan.
Southwood Road #Votes: 2	The network of Southwood Road to Guilford Road to Overhill Road was suggested by a citizen as a way to connect to Jemison Park. During our field review we noted primarily difficult installation for this network. Even though there are relatively flat areas they are not consistent and would cause some "zig-zagging" of the sidewalk meaning mid-block crossings which are not ideal.	**In previous discussions the City chose not to include this area in the plan. Is that still the case?**	Do not include based on previous discussions with the City.
Sharpsburg Road 25 MPH #Votes: 1	All three of these roadways have 25 feet of pavement and 2.5' valley gutter on both sides of the roadway. This width makes them ideal candidates for narrowing the pavement to install sidewalk (an easy installation). All three are also low speed roadways.	Installation of sidewalk on these roadways would allow for connectivity to the Irondale Furnace Park as well as connect more homes, via sidewalk, to Cherokee Bend Elementary School. **Would the City like to include these roadways or a portion of these roadways in the plan?**	Do not include. The pavement widths for these roadways is 25 feet excluding the valley gutter width which allows for more room for pedestrian activity.
Harpers Ferry Road 25 MPH #Votes: 1			
Little River Road 20 MPH #Votes: 1			
Cherokee Road #Votes: 1	No further review; already included in the plan.	None.	Keep in plan.
Country Club Road #Votes: 1	No further review; already included in the plan.	None.	Keep in plan.
Euclid Avenue #Votes: 1	The request was for sidewalks on the south side of the roadway. Based on previous guidance from the City, no additional sidewalk is planned for Euclid with this plan.	None.	Keep as is.
Old Leeds Lane #Votes: 1	No further review; already included in the plan.	None.	Keep in plan.
Old Leeds Road #Votes: 1	No further review; already included in the plan.	None.	Keep in plan.
Pine Ridge Road #Votes: 5	No further review; already included in the plan.	None.	Keep in plan.