



Agenda for the Regular Meeting of Board of Commissioners
Monday, March 27, 2017 - 7:00 pm
Brentwood Municipal Center

Call to Order by Mayor
Roll Call
Invocation by Commissioner Gorman
Pledge of Allegiance to the Flag by Commissioner Little

Approval or Correction of Minutes

March 13, 2017

Comments from Citizens – *Individuals may comment on any item included in the Consent/Regular agenda or on any other matter regarding the City of Brentwood. All comments should be directed to the Board of Commissioners. Citizens who wish to request that an item be moved from the Consent Agenda to the Regular Agenda for discussion should make that known to the Board at this time.*

Report from City Manager
Report from the City Attorney
Reports and comments by Commissioners and Mayor

Note: All matters listed under the Consent Agenda are considered to be routine and will generally be enacted by one motion. Except for any items that are removed from the Consent Agenda, there will be no separate discussion of these items at this time.

Consent Agenda

1. Ordinance 2017-04 - AN ORDINANCE AMENDING MUNICIPAL CODE REGARDING THE REQUIRED FRONT YARD SETBACKS WITHIN AR (AGRICULTURAL/RESIDENTIAL) ZONING DISTRICTS, for consideration on second and final reading
2. Resolution 2017-23 - A RESOLUTION AUTHORIZING AN AGREEMENT KIMLEY-HORN & ASSOCIATES, INC. FOR A TRAFFIC SIGNAL OPTIMIZATION STUDY, for adoption
3. Official renaming of the dog park at Tower Park to Barkwood Dog Park

Old Business

1. Other old business

New Business

1. Other new business

A handwritten signature in black ink, appearing to read "Kirk Bednar", with a long horizontal flourish extending to the right.

Kirk Bednar
City Manager

Anyone requesting accommodations due to disabilities should contact Mike Worsham, A.D.A. Coordinator, at 371-0060, before the meeting.

Brentwood City Commission Agenda

Meeting Date: 03/27/2017

Approval or correction of minutes from Regular Scheduled Commission meeting

Submitted by: Debbie Hedgepath, Administration

Department: Administration

Information

Subject

Approval or correction of minutes from the March 13, 2017 meeting

Background

Staff Recommendation

Fiscal Impact

Attachments

Draft Minutes

MINUTES OF REGULAR MEETING OF BOARD OF COMMISSIONERS

BRENTWOOD, TENNESSEE

The Brentwood Board of Commissioners met in regular session on Monday, March 13, 2017 at 7:00 pm at the Brentwood Municipal Center.

Present were Mayor Regina Smithson; Vice Mayor Jill Burgin; Commissioners Ken Travis, Anne Dunn, Mark Gorman and Rhea Little; City Manager Kirk Bednar; Assistant City Manager Jay Evans; City Attorney Roger Horner and City Recorder Deborah Hedgepath. Commissioner Betsy Crossley was absent. Commissioner Dunn led the invocation. The Pledge of Allegiance was led by a Commissioner Gorman.

Public hearing was opened on Ordinance 2017-04 - AN ORDINANCE AMENDING MUNICIPAL CODE REGARDING THE REQUIRED FRONT YARD SETBACKS WITHIN AR (AGRICULTURAL/RESIDENTIAL) ZONING DISTRICTS. No one spoke either for or against the ordinance; therefore, the public hearing was closed.

Commissioner Little moved for approval of the minutes from the February 27, 2017 meeting as written; seconded by Vice Mayor Burgin. Approval was unanimous.

COMMENTS FROM CITIZENS

Gil Hutchinson, 1038 Highland View Road

John Vitucci, 1747 Umbria

CONSENT AGENDA

Resolution 2017-17 - A RESOLUTION AUTHORIZING THE ACCEPTANCE OF A PUBLIC ACCESS EASEMENT FROM MURRAY LANE DEVELOPMENT FOR A TRAIL SEGMENT TO BE LOCATED IN THE ARTERIAL ROAD BUFFER OF THE AVERY SUBDIVISION, for adoption

Resolution 2017-18 - A RESOLUTION AUTHORIZING THE ACCEPTANCE OF A PUBLIC ACCESS EASEMENT FROM HOLT WITHERSPOON, LLC FOR A TRAIL SEGMENT LOCATED IN THE ARTERIAL ROAD BUFFER AND PERMANENT OPEN SPACE FOR WITHERSPOON SUBDIVISION, for adoption

Resolution 2017-19 - A RESOLUTION AUTHORIZING AN AGREEMENT WITH HIGH TECH SPECIAL EFFECTS, INC. FOR FIREWORKS DISPLAY FOR THE FOURTH OF JULY, 2017, for adoption

Resolution 2017-20 - A RESOLUTION AUTHORIZING AN AGREEMENT WITH MARS PETCARE, A SUBSIDIARY OF MARS, INCORPORATED FOR SPONSORSHIP OF THE CITY'S DOG PARK LOCATED WITHIN TOWER PARK, for adoption

Commissioner Little moved for approval of the items on the Consent Agenda; seconded by Commissioner Travis. Approval was unanimous.

NEW BUSINESS

Commissioner Gorman moved for passage of Ordinance 2017-06 - AN ORDINANCE AMENDING MUNICIPAL CODE REGARDING BUILDING AND MECHANICAL PERMIT FEES AND PLANNING COMMISSION AND BOARD OF ZONING APPEALS SUBMITTAL FEES, seconded by Commissioner Travis. Ordinance 2017-06 passed on first reading unanimously.

Mayor Smithson moved for passage of Ordinance 2017-07 - AN ORDINANCE REZONING PROPERTY LOCATED AT 9714 SPLIT LOG ROAD FROM R-2 (SUBURBAN RESIDENTIAL) TO SI-2 (SERVICE-INSTITUTION-EDUCATIONAL) ZONING, seconded by Commissioner Little. Ordinance 2017-07 passed on first reading unanimously.

By request of the applicant, Ordinance 2017-08 - AN ORDINANCE REZONING PROPERTY LOCATED ON THE WEST SIDE OF RAGSDALE ROAD, NORTH OF INTERSECTION WITH SPLIT LOG ROAD FROM OSRD (OPEN SPACE RESIDENTIAL DEVELOPMENT) TO AR (AGRICULTURAL RESIDENTIAL) ZONING DISTRICT, was deferred from the agenda.

Commissioner Little moved for adoption of Resolution 2017-21 - A RESOLUTION AUTHORIZING AN AGREEMENT WITH VULCAN CONSTRUCTION MATERIALS, LLC FOR ROADWAY IMPROVEMENTS AND REALIGNMENT OF RAGSDALE ROAD AT THE INTERSECTION WITH SUNSET ROAD, seconded by Commissioner Dunn. Resolution 2017-21 passed unanimously.

Commissioner Little moved for adoption of Resolution 2017-22 - A RESOLUTION DECLARING REIMBURSEMENT FOR CERTAIN EXPENDITURES RELATING TO PUBLIC WORKS PROJECTS WITH THE PROCEEDS OF BONDS OR OTHER DEBT OBLIGATIONS TO BE ISSUED BY THE CITY IN AN APPROXIMATE AMOUNT OF \$4,900,000, seconded by Vice Mayor Burgin. Resolution 2017-22 passed unanimously.

Clellon Loveall was reappointed to the Board of Zoning Appeals for a three-year term ending March 31, 2020.

With no further business, the meeting adjourned at 8:25 pm.

APPROVED _____

Deborah Hedgepath

Deborah Hedgepath, City Recorder

Brentwood City Commission Agenda

Meeting Date: 03/27/2017

Ordinance 2017-04 - An Ordinance Amending the Front Yard Setback Requirements in AR Zoning Districts

Submitted by: Jeff Dobson, Planning & Codes

Department: Planning & Codes

Information

Subject

Ordinance 2017-04, which will amend Section 78-124 of the Zoning Ordinance. The section details the technical standards for the AR (Agricultural Residential) zoning district. Specifically, the amendments would allow a reduction in the depth of the front yard setback from 175 feet to 125 feet under certain defined circumstances.

Background

The developer of the Sneed Manor Subdivision, Mr. Bill Owen, has inquired about the possibility of a reduction in the required front yard setback, with the intent of providing a larger rear yard for the future homes to be constructed within the subdivision. The project is located on the south side of Old Smyrna Road and is zoned AR.

Staff has concluded this request merits further consideration, but only in certain specific circumstance. This issue was discussed with the City Commission during the October 20, 2016 agenda briefing. Based on the input received during that discussion, the attached ordinance would allow the Planning Commission to authorize a reduction of the front yard setback in the AR district to no less than 125 feet, only under the following circumstances:

1. The affected lots would front an internal, local street only, as designated by Section 78-483 of the zoning ordinance;
2. The internal, local street is not a through street that connects to adjacent properties.

Most properties with AR zoning front on arterial streets, with the largest concentration of AR-zoned land being along Old Smyrna Road. Other AR property fronts Franklin Road. The existing 175 foot setback requirement is intended to maintain the "view shed" and additional green space along more heavily traveled roads. The proposed zoning ordinance amendments are intended to maintain the existing setback requirements on any lots fronting arterial and collector roads while providing some setback flexibility along dead-end, internal streets within AR subdivisions.

A preliminary plan for the Sneed Manor Subdivision was approved by the Planning Commission on November 2, 2015. A revised plan was subsequently approved on July 5,

2016. The project is located along the south side of Old Smyrna Road and includes development of eight lots on approximately 31.4 acres of land. The project will be developed around the historic home. The home will be preserved and will be located on a lot that includes approximately 3.01 acres. Attached is a copy of the revised preliminary plan. Several of the building envelopes for the lots are long and narrow, which would support the developer's request. Given the size and value of the future homes that will be constructed on the lots, the developer desires to maximize the ability to create back yard living areas. The project is currently under construction.

The Planning Commission reviewed the proposed ordinance at its March 6, 2017 regular meeting and recommended approval of the proposed ordinance.

Second and final reading of the proposed ordinance is scheduled for March 27, 2017.

Should you have any questions, or require additional information, please contact the Planning and Codes Director.

Staff Recommendation

Staff recommends approval of Ordinance 2017-04.

Previous Commission Action

On March 13, 2017, the Board of Commissioners conducted the required public hearing for Ordinance 2017-04. No one spoke either for or against the proposed ordinance.

At its regular meeting of February 13, 2017, the Board of Commissioners voted unanimously, seven for and zero against (7-0) to approve Ordinance 2017-04 on first reading.

Fiscal Impact

Attachments

Ordinance 2017-04

Article III, Div. 2 -- AR Highlighted Version

Sneed Manor Approved Prelim Plan

Lot/Bldg Envelope Calculations

Setback Exhibit

Zoning Map

PC REview Memo -- Ord 2017-04

ORDINANCE 2017-04

AN ORDINANCE OF THE CITY OF BRENTWOOD, TENNESSEE, PROVIDING THAT THE CODE OF ORDINANCES OF THE CITY OF BRENTWOOD BE AMENDED BY REVISING SECTION 78-124 OF CHAPTER 78, IN REGARD TO THE REQUIRED FRONT YARD SETBACKS WITHIN AR (AGRICULTURAL/RESIDENTIAL) ZONING DISTRICTS

WHEREAS, subsection (4) of section 78-124 of the Code of Ordinances of the City of Brentwood establishes the required front yard setbacks within the AR (Agricultural/Residential) zoning district; and

WHEREAS, it is appropriate to revise said front yard setbacks to provide for additional space for outdoor living areas in the rear yards of lots within said zoning district; and

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF BRENTWOOD, TENNESSEE, AS FOLLOWS:

SECTION 1: That Chapter 78, section 78-124 of the Code of Ordinances of the City of Brentwood shall be amended by revising subsection (4) to read as follows:

- (4) Minimum required front yard setback, 175 feet. (The applicable front yard setback for structures facing Franklin Road shall be measured and calculated from the public right-of-way line as it existed on January 1, 1977.) The front yard setback may be reduced to no less than 125 feet, provided that:
 - a. The lot fronts a local street, as designated by Section 78-483 of this Code.
 - b. The local street is not a through street that connects to adjacent properties.
 - c. The setback reduction shall be subject to Planning Commission approval.

SECTION 2. In case of conflict between this ordinance or any part hereof, and the whole or part of any existing ordinance of the City, the provision that establishes the higher standard shall prevail.

SECTION 3. If any section, subsection, clause, provision or portion of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, subsection, clause, provision or portion of this ordinance.

SECTION 4. That this ordinance shall take effect from and after its final passage and publication thereof, or fifteen days after its first passage, whichever occurs later, the general welfare of the City of Brentwood, Williamson County, Tennessee, requiring it.

PASSED:	1st reading	_____	PLANNING COMMISSION	_____
	2nd reading	_____	NOTICE OF PASSAGE	
			Notice published in:	_____
PUBLIC HEARING			Date of publication:	_____
Notice published in:		_____		
Date of publication:		_____		
Date of hearing:		_____	EFFECTIVE DATE	_____

MAYOR Regina Smithson

RECORDER Deborah Hedgepath

Approved as to form:

CITY ATTORNEY Roger A. Horner

DIVISION 2. AR AGRICULTURAL/ RESIDENTIAL ESTATE

[Sec. 78-121. Intent.](#)

[Sec. 78-122. Uses permitted.](#)

[Sec. 78-123. Uses prohibited.](#)

[Sec. 78-124. Technical standards.](#)

[Sec. 78-125. Limitations on home occupation uses.](#)

[Sec. 78-126. Home occupation uses permitted under administrative review.](#)

[Sec. 78-127. Home occupation uses permitted on appeal.](#)

[Sec. 78-128. Accessory buildings: gazebos, arbors and pergolas.](#)

[Sec. 78-129. Sewer connection required.](#)

[Sec. 78-130. Designated open space.](#)

[Sec. 78-131. Erosion control and stormwater management.](#)

[Secs. 78-132—78-140. Reserved.](#)

Sec. 78-121. Intent.

It is the intent of this division to provide suitable areas for large estate lots and for agricultural uses such as the growing of crops, animal husbandry, and similar farm activities characteristic of rural rather than urban areas. Residential development in this district shall be characterized by very low density detached single-family dwellings of a rural character or by estate lot development that minimizes driveway access and traffic impact on heavily travelled arterial streets, including but not limited to residential lots fronting Franklin Road. Within the agricultural/residential estate (AR) districts, as shown on the zoning map of the city, the regulations set out in this division shall apply.

(Ord. No. 94-54, § 1(11-301), 12-19-94)

Sec. 78-122. Uses permitted.

The following uses are permitted within the AR zoning districts:

- (1) General farming activities such as the raising of trees, field and plant crops, breeding and keeping of domestic animals, and any similar agricultural uses which are in keeping with the character and intent of the district.
- (2) Detached single-family residences, subject to the limitations established in section 78-19 of this Code.
- (3) Designated open space including leisure facilities within a planned residential subdivision subject to the standards and limitations specified in section 78-130.
- (4) Accessory buildings customarily incidental to the above uses, subject to the standards and limitations specified in sections 78-22 and 78-128.
- (5) Home occupations, as defined in section 78-3, subject to the standards and limitations specified in sections 78-26 through 78-29.
- (6) Accessory uses such as:

- a. Swimming pools, tennis courts, pet enclosures, play structures and satellite dish antennas, including related pads, decks, patios, hard surfaces and enclosures. Such accessory uses shall not be subject to the standards and limitations set forth in sections 78-22 and 78-128 (except as specified for certain pet enclosure structures and play structures) but must be placed within the buildable area of the rear yard.
 - b. Gazebos, subject to the standards and limitations set forth in section 78-128. To the extent that any such structure is an "accessory building," as defined in section 78-3, such structure shall also be subject to the provisions of section 78-22.
 - c. Arbors, pergolas and similar freestanding open air structures, subject to the standards and limitations set forth in section 78-128.
 - d. Portable storage structures, subject to the standards and limitations set forth in section 78-24.
 - e. Windmills, subject to the standards and limitations set forth in section 78-25.
- (7) Bed and breakfast lodges, subject to the following requirements:
- a. A bed and breakfast lodge may be operated only by special exception granted by the board of zoning appeals. The historic commission shall provide a recommendation on any such application prior to the decision of the board of zoning appeals. A special exception granted for a bed and breakfast lodge may be contingent upon special conditions established by the board of zoning appeals in addition to the requirements herein. Failure to comply with any of the requirements herein or the special conditions established by the board of zoning appeals shall be grounds for revocation of the board's approval. A separate home occupation permit from the board of zoning appeals shall not be required for the operation of a bed and breakfast lodge.
 - b. A bed and breakfast lodge may be operated only at a dwelling which has been designated as a historically significant site pursuant to section 2-181 of this Code and which is located on a lot which is either:
 - 1. At least four acres in size; or
 - 2. Served by an arterial roadway.
 - c. An employee of the bed and breakfast lodge must remain on the premises overnight whenever guests are present. No more than two nonresident employees may be present at the bed and breakfast lodge at any given time.
 - d. Associated food service shall be provided only to overnight visitors. The sale of merchandise, except for the sale of incidental merchandise to overnight visitors, shall be prohibited.
 - e. All parking for guests and employees of the bed and breakfast lodge must be off-street. A clear access for emergency vehicles must be maintained at all times. Prior to consideration of the application by the board of zoning appeals, such emergency vehicle access shall be reviewed by the fire marshal. The fire marshal may make recommendations for improvements, which may be incorporated into any conditions of approval adopted by the board of zoning appeals. The board of zoning appeals may, at its discretion, require the applicant to submit, at the applicant's cost:
 - 1. A site plan, showing the proposed layout of parking areas for the property, along with ingress and egress; and/ or
 - 2. An opinion from a traffic engineer as to the sufficiency of the proposed ingress and egress, along with recommendations for any measures which should be taken to mitigate traffic impacts associated with the bed and breakfast lodge.
 - f. The prior approval of the planning commission, following review and recommendation of the historic commission, shall be required for any structural addition on the property; any modification to the exterior of the dwelling or accessory structures; or any addition or relocation of driveways, parking areas or other similar hard surfaces. The gross floor area of any existing structure used as a bed and breakfast lodge may not be expanded more than 25 percent.
 - g. The bed and breakfast lodge shall adhere to and operate within all applicable laws, regulations and guidelines established by the city, county and state. A copy of all inspection reports provided by the county or state shall be submitted to the planning and codes department. Furthermore, the lodge

shall be open to inspection by representatives of the city at all times for the purpose of determining compliance with the requirements hereunder.

h. The bed and breakfast lodge shall maintain current city and county business licenses.

- (8) Garage sales conducted by the owners or tenants of the property, provided that no person is compensated for conducting the sale, no more than two garage sales shall occur at the same location in any calendar year, and the duration of a single garage sale shall not exceed two days. Additionally, one auction or other sale to dispose of the household assets of a deceased resident or a resident who is relocating may be held at the resident's home, and the person or agency conducting such a sale may be compensated. No sale of merchandise purchased for resale shall be permitted at a garage sale.
- (9) Consignment sales conducted by the owners or tenants of the property, provided that consignment sales may only occur during the months of April and September, and between the hours of 8:00 a.m. and 6:00 p.m. No more than two consignment sales shall occur at the same location in any calendar year, and the duration of a single consignment sale shall not exceed three days. Setup for a consignment sale shall be commenced no sooner than three days prior to the first date of the sale. No tents shall be used in conjunction with a consignment sale. Cleanup of the sale location, including removal of all sale items, signs and displays, shall be accomplished within two days following the last date of the sale. Authorization to conduct a consignment sale shall be contingent upon application by an owner or tenant of the property and issuance of a permit by the city manager or his designee. No sale of merchandise purchased for resale shall be permitted at a consignment sale.
- (10) Merchandise sales conducted in conjunction with a lawful home occupation permitted under the provisions of this chapter, but only as provided for in section 78-29 herein.

(Ord. No. 94-54, § 1(11-302), 12-19-94; Ord. No. 2001-15, § 2, 10-22-2001; Ord. No. 2002-14, § 3, 8-26-2002; Ord. No. 2002-21, § 2, 10-28-2002; Ord. No. 2005-23, § 4, 10-24-2005; Ord. No. 2008-18, §§ 7, 8, 11-10-2008; Ord. No. 2009-09, §§ 4—8, 9-28-2009)

Sec. 78-123. Uses prohibited.

Any use or structure that is not specifically permitted in the AR agricultural/residential estate district is prohibited. In addition, any use or structure for which approval of the planning commission or planning and codes director is required shall be prohibited unless and until such approval is obtained. Any use or structure for which approval of the board of zoning appeals is required shall be prohibited unless and until such approval is obtained.

(Ord. No. 94-54, § 1(11-303), 12-19-94; Ord. No. 2002-04, § 3, 4-8-2002)

Sec. 78-124. Technical standards.

For all property within the AR zoning districts, the following minimum technical standards shall apply to each lot and the principal structure thereon:

- (1) Minimum required lot area, three acres.
- (2) Maximum lot coverage by all buildings, 25 percent.
- (3) Minimum required lot width at building line, 300 feet.
- (4) Minimum required front yard setback, 175 feet. (The applicable front yard setback for structures facing Franklin Road shall be measured and calculated from the public right-of-way line as it existed on January 1, 1977.) The front yard setback may be reduced to no less than 125 feet subject to the following:
 - a. The subdivision must be located along a local street, as designated by Section 78-483, of this Code.
 - b. All lots must front the internal street.
 - c. The lots cannot front a through street.

d. Approval of the setback reduction is subject to Planning Commission review.

- (5) Minimum required rear yard setback, 75 feet.
- (6) Minimum required side yard setback for side yards not abutting a public street, 50 feet.
- (7) Minimum required side yard setback for side yards abutting a public street, 75 feet.
- (8) Minimum off-street parking/driveway requirements, two per dwelling unit. The driveway shall comply with residential design standards as designated in subsection 78-486(14) of this chapter.
- (9) Maximum permitted height of structures, two stories (measured from the grade level at the front elevation of the structure) or a total of three stories if a full or partial underground basement level is included, provided that one-half of the perimeter walls of the basement level must be at least 50 percent below grade level. For purposes of this section, a finished or unfinished attic floor with dormer windows shall not be counted as a story. In no event shall the maximum height exceed 52 feet, measured from the lowest ground level of the structure to the highest point of the roof.
- (10) Private outdoor lighting, designed and installed not to exceed three footcandles measured at the property line of any abutting property unless the abutting residential property owners agree in writing to higher illumination standards at the time of installation.

(Ord. No. 94-54, § 1(11-304), 12-19-94; Ord. No. 95-18, § 1, 5-8-95; Ord. No. 96-04, § 2, 3-25-96; Ord. No. 2007-12, § 13, 4-23-2007)

Sec. 78-125. Limitations on home occupation uses.

Home occupations may be practiced on any property within an AR zoning district only after issuance of a permit pursuant to section 78-126 or section 78-127, provided that no such permit shall be required for general farming activities permitted under section 78-122. All permits for home occupations must be renewed with the city annually by July 1 if the home occupation is to be continued and shall expire if not renewed by such date. Failure by the occupant to renew the permit shall void the previous authorization of the home occupation use and may subject the occupant to enforcement action by the city if the home occupation use is continued at the property. All home occupation uses for which permits are required under this division shall be subject to the following limitations:

- (1) The home occupation shall be located and conducted in the dwelling unit only;
- (2) The principals and any other persons employed on the property in furtherance of the home occupation shall be residents of the dwelling unit in which it is located; provided, however, that where the board of zoning appeals finds that a hardship exists, one nonresident of the property may be employed on the property in furtherance of the home occupation on a temporary basis for a period not to exceed 12 months;
- (3) Not more than ten percent of the total floor area in the dwelling unit shall be devoted to the home occupation;
- (4) The dwelling unit shall not be used as a primary or incidental storage facility for a business, industrial, commercial or agricultural activity conducted elsewhere;
- (5) No articles, materials, goods or equipment indicative of the home occupation shall be visible from any public street or stored outside the dwelling unit;
- (6) The home occupation shall not be advertised by the display of goods or signs on the lot on which it is located;
- (7) The proposed use shall not generate noise, odor, fumes or smoke, nor create a nuisance of any kind which would adversely affect the residential character of the neighborhood in which it is located;
- (8) No traffic shall be generated by the home occupation in greater volume than would normally be expected in a residential neighborhood. Except as provided for in subsection (9) below, no client or customer shall visit the property for purposes of conducting a business transaction;
- (9) Teaching, including but not limited to tutoring and art, music and dance lessons, shall be permitted provided that it is limited to one pupil at any given time; and

- (10) The provisions of this section shall not be used under any circumstances to permit driver education or any use that requires overnight parking of more than one vehicle, barbershops, beauty shops, gift shops, gun sales, florist shops or other retail activities that are traditionally conducted in a commercial zoning district.

(Ord. No. 94-54, § 1(11-305), 12-19-94; Ord. No. 96-45, §§ 3, 4, 12-9-96; Ord. No. 2002-14, § 1, 8-26-2002)

Sec. 78-126. Home occupation uses permitted under administrative review.

- (a) The following home occupations, when deemed to be non-traffic generating uses posing no threat to the health, safety and welfare of the citizens of the city, shall be permitted within an AR zoning district subject to application by the occupant and issuance of a permit by the city manager or his designee:
- (1) Artist, sculptor, author and songwriter;
 - (2) Designer, planner, architect, engineer, contractor, draftsman and graphic artist; and
 - (3) Accountant, lawyer, information processing, traveling salesperson, manufacturer's representative, insurance agent, real estate agent and management and financial consultant.
- (b) Any person practicing a home occupation under this section shall be required to comply with all requirements for home occupation uses as specified in section 78-125. In addition, no business transaction shall occur on the property other than through telecommunication devices. Failure to comply with these requirements may result in revocation of the permit by the city manager or his designee.
- (c) If, in the opinion of the city manager or his designee, the proposed home occupation fails to meet the criteria of this section or if an existing permit is revoked due to failure by the occupant to comply with requirements of the permit, the occupant shall have the right to appeal the decision to the board of zoning appeals.

(Ord. No. 94-54, § 1(11-306), 12-19-94)

Sec. 78-127. Home occupation uses permitted on appeal.

Customary incidental home occupations not specifically provided for under section 78-126 may be permitted, provided that no building permit, certificate of occupancy or business license for such uses shall be authorized and issued by the city without the written approval of the board of zoning appeals. Any person practicing a home occupation under this section shall be required to comply with all requirements for home occupation uses as specified in section 78-125. Failure to comply with these requirements or any additional conditions required by the board of zoning appeals may result in revocation of the permit for the home occupation by the board of zoning appeals. The approval of the board of zoning appeals shall be subject to such additional conditions and limitations as the board may require in order to preserve and protect the character of the neighborhood in which the proposed use is located.

(Ord. No. 94-54, § 1(11-307), 12-19-94; Ord. No. 96-45, § 7, 12-9-96)

Sec. 78-128. Accessory buildings; gazebos, arbors and pergolas.

- (a) Accessory buildings which are customarily incidental to the other uses permitted in this division may be placed or constructed on any parcel within an AR zoning district, provided that all requirements for accessory buildings as set forth in section 78-22 are met. Each accessory building shall be placed within the buildable area of the lot, unless the board of zoning appeals grants an exception allowing the accessory building to be placed outside the buildable area. In considering a request for an exception to place an accessory building outside the buildable area, the board of zoning appeals shall consider the potential detriments or advantages to the neighboring properties and the surrounding neighborhood in general. In no event shall an accessory building within the AR zoning district be less than 50 feet away from any adjoining property line.

- (b) Gazebos may be placed or constructed on any parcel within an AR zoning district, provided that no gazebo may be less than 50 feet from any adjoining property line. To the extent that a gazebo is of sufficient size to be considered an "accessory building," as defined in section 78-3, such structure shall be subject to the provisions of section 78-22.
- (c) Arbors, pergolas and similar freestanding open air structures may be placed or constructed on any parcel within an AR zoning district. Any such structure which is more than ten feet in height or five feet in width shall be located at least 50 feet away from any adjoining property line. Any such structure which is ten feet or less in height and five feet or less in width may be placed anywhere within the lot, unless such placement would interfere with the use and maintenance of a public easement.

(Ord. No. 94-54, § 1(11-308), 12-19-94; Ord. No. 95-36, § 1, 7-24-95; Ord. No. 99-11, § 2, 7-26-99; Ord. No. 2008-18, § 9, 11-10-2008)

Sec. 78-129. Sewer connection required.

- (a) No parcel within an AR district may be subdivided into lots less than five acres unless provisions are made by the property owner to provide sanitary sewer service from the city to each newly created lot in a manner and method acceptable to the city manager or his designee. This requirement may be waived by formal resolution of the board of commissioners, provided a connection is made to another public sewer system or the use of a septic tank, drainfield or other private sewage treatment facility is authorized in advance for each parcel by the county health department.
- (b) For existing platted lots less than five acres, no building permit shall be issued for the construction of any single-family residence or other building allowed in this district unless the residence or other building is connected to the sanitary sewer system of the city. This requirement may be waived by formal resolution of the board of commissioners, provided a connection is made to another public sewer system or the use of a septic tank, drainfield or other private sewage treatment facility is authorized in advance by the county health department.

(Ord. No. 94-54, § 1(11-309), 12-19-94)

Sec. 78-130. Designated open space.

Residential subdivisions platted for approval under the provisions of this division may include designated open space tracts of size, location, shape and topography which will meet the intent of this division. All proposed open space designations and uses shall be subject to the review and approval of the planning commission. All facilities and improvements proposed for construction or installation by the developer in designated open spaces shall be fully bonded prior to the recording of the subdivision plat to ensure completion in accordance with the approved plan and timetable if the developer fails to complete such obligations. The following additional provisions shall apply to the designation and maintenance of open space:

- (1) *Permitted open space uses.* Open space may be set aside for:
 - a. Private recreational facilities such as golf courses, tennis courts, clubhouses, or swimming pools for which membership is limited to the owners or occupants of the lots located within the subdivision; and
 - b. Historically significant sites, public utilities and drainage improvements, parks, parkway areas, walking/jogging and bicycle trails, extensive areas with tree cover, and land along rivers and streams or steep hillsides when such areas are extensive and have natural features worthy of scenic preservation.
- (2) *Easements.*
 - a. For any new subdivision with designated open space tracts, the developer shall dedicate perpetual scenic easements for all portions of the open space that are to be left undisturbed and in a natural state. In addition, the developer shall dedicate public easements for pedestrian and bicycle use in areas that the planning commission deems appropriate and for which maintenance agreements between the city and the development can be negotiated.

- b. For any existing subdivision with designated open space tracts, the homeowners association or other entity which owns the open space may, subject to the planning commission's approval, dedicate perpetual scenic easements for any portions of the open space that, in the determination of the planning commission, should be left undisturbed and in a natural state. In addition, the homeowners association or other entity which owns the open space may dedicate public easements for pedestrian and bicycle use in areas that the planning commission deems appropriate and for which maintenance agreements between the city and the development can be negotiated.
- (3) *Requirements for operation and maintenance.* Operation and maintenance of designated open space in an AR district shall be carried out pursuant to the following provisions:
- a. Designated open space shall be deeded by the developer to a homeowners association or other organization approved by the planning commission. When such tracts are to be deeded to a homeowners association, the developer shall submit to the director of planning the legal framework for a homeowners association, with articles of incorporation and by-laws which, at a minimum, provide as follows:
 1. The homeowners association will be responsible for liability insurance, local taxes, and maintenance for the open space, including recreational and other facilities, for a period of not less than 40 years.
 2. The homeowners association shall not dispose of any designated open space, by sale or otherwise (except to an organization conceived and established to own and maintain the open space and approved by the planning commission) without first offering to dedicate the open space to the city, provided that such dedication must be approved by the board of commissioners, following review and recommendations by the planning commission. The conditions of any transfer shall conform to the officially recorded concept development plan.
 3. The homeowners association shall not be dissolved, except upon disposal of the designated open space as provided for in this section.
 4. When more than 50 percent of the lots within the subdivision are sold, a special meeting of the homeowners association shall be called within 60 days to initiate an orderly process for transfer of control to the homeowners.
 5. The deeds to individual lots within the subdivision shall require mandatory membership in the homeowners association, convey joint ownership in all the open space within the development, and provide at a minimum that:
 - i. The lot owner shall be responsible for paying a pro rata share of the costs of the homeowners association operation for a period of not less than 40 years;
 - ii. The assessments levied by the association may become a lien on the property if not paid;
 - iii. The association may adjust its by-laws and structure to meet changing needs;
 - iv. The lot owner shall have permanent unrestricted right to use lands and facilities owned by the association; and
 - v. The lot owner shall be responsible for a proportional share of any cost of maintaining designated open space incurred by the city pursuant to the provisions of this division, except where a maintenance agreement establishing other provisions has been negotiated between the city and the development, and any such costs assessed but not paid shall become a lien on the owner's property.
 - b. If the organization established to own and maintain any designated open space, or any successor organization, shall at any time after the establishment of the residential subdivision fail to maintain the open space in reasonable order and condition in accordance with the officially recorded concept development plan, the city manager may serve written notice upon such organization and/or the owners of all property within the subdivision advising of such deficiencies and the right to a formal hearing regarding such deficiencies. Upon request received by the city manager within 14 days of the date of such notice, he shall conduct a hearing to allow proposals for the maintenance of such space to be heard. If such deficiencies are not corrected within 30 days, or within such time as the city manager may establish after conducting a hearing on the deficiencies, the city manager may call upon any public or private agency to maintain the open space for a period of one year. If after one

year, the city manager determines that the organization is still unable or unlikely to maintain the open space, he may continue to call upon any public or private agency to maintain the space for yearly periods. The cost of maintenance shall be assessed proportionally against the properties within the residential subdivision that have a right of enjoyment of the open space, and, if not paid, shall become a lien on such properties.

(Ord. No. 94-54, § 1(11-310), 12-19-94; Ord. No. 2002-18, § 1, 10-14-2002)

Sec. 78-131. Erosion control and stormwater management.

- (a) The control of erosion during and after development and the design of drainage systems suitable to handle stormwater runoff after the site is developed shall comply with the requirements of chapter 56 of this Code and the subdivision regulations of the city.
- (b) Erosion and sediment control measures, drainage calculations and stormwater management plans shall be included with each subdivision plan presented for approval, in accordance with the requirements of chapter 56 of this Code.
- (c) Waterway natural areas (WNAs), if required pursuant to chapter 56 of this Code, shall be identified on the subdivision plan, and shall be designated as open space, as provided for in this division. No portion of a WNA may be within a private lot.

(Ord. No. 2008-02, § 8, 3-24-2008)

GENERAL NOTES:

This preliminary plan is subject to a vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. Upon expiration of the vesting period, development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The vesting period for this plan expires on November 2, 2018, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on November 2, 2015. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Any changes to plans approved by the Planning Commission will require staff review and re-approval by the Planning Commission.

Approval of the preliminary plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) must be submitted to the Planning Department for review.

An archaeological survey shall be completed around the cemetery to verify that there are no graves located outside of the existing stone fence. The study shall be completed and submitted for staff review before grading permit will be issued for the project.

Temporary street signs having a sign face width of 6", a letter height of 4", and that meet the height standards of TDOT, must be installed before a building permit can be issued.

A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

Preliminary Plan approval shall remain valid for a period of two years and shall expire on November 2, 2017.

A preliminary plan for a subdivision shall be vested for a period of three years from the date of approval. Approval of a preliminary plan shall become effective upon the date the planning commission votes to approve the plan.

If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the subdivision, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary plan.

All existing trees that are proposed to be preserved shall be protected in accordance with the requirements of Section 78-513 of the Municipal Code. The tree protection measures shall be shown on the grading plans and be installed before any permits will be issued for the project.

The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

All applicable security, that meets the requirements of Article Eight of the Brentwood Subdivision Regulations must be received by staff for all required roadway, drainage, street lighting, water, and sewer, amenity and landscaping improvements before the plat for the phase can be signed by the Planning Commission Secretary for recording. The landscaping security shall be posted in an amount equal to one hundred ten percent (110%) of the total cost of the materials and installation of the improvements.

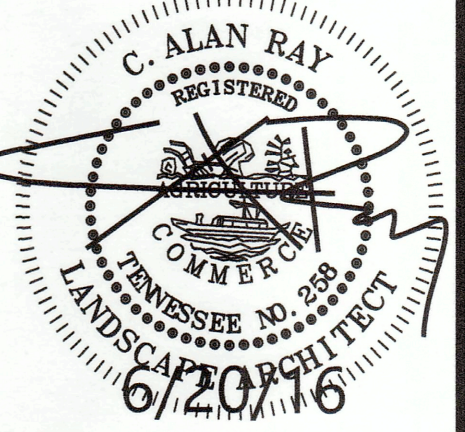
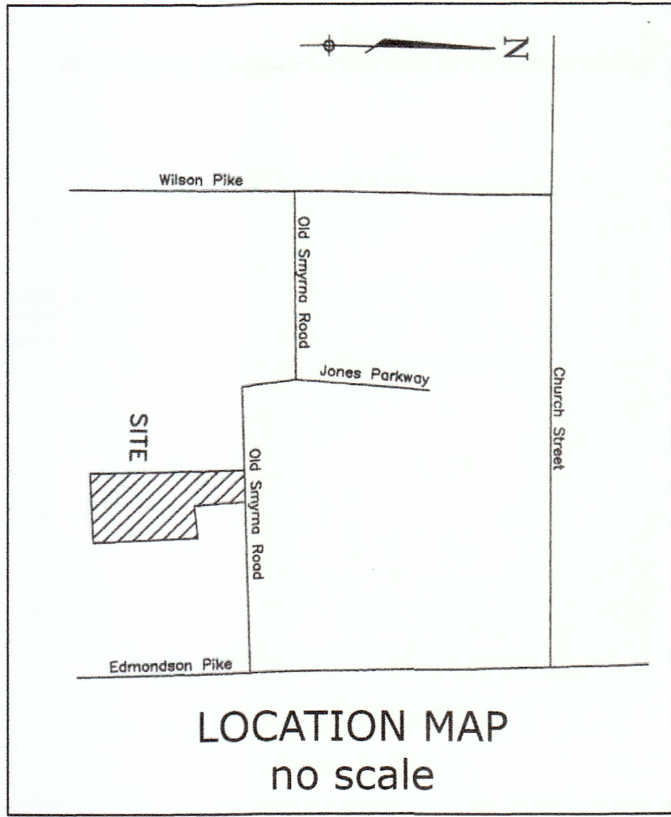
Homeowners' documents/restrictive covenants shall be submitted for review by City staff to determine compliance with the requirements of the OSRD zoning district. The documents must be recorded with the initial final plat Mylar and updated with each subsequent section or phase. A recorded copy must be received by for City files.

All legal instruments pertaining to the establishment of the property owners association and responsibility for the maintenance of the open space areas, including but not limited to master deeds, bylaws and declarations of covenants shall be approved as to legal form by the city attorney and subject to review and approval by the city's director of planning. The documents must be recorded with the first phase of the development and updated to include each subsequent phase.

Provide the Planning staff with a digital copy of the proposed subdivision section and the entire project. This request is consistent with Article 2.3(2)(g) of the Brentwood Subdivision Regulations. The file should be in AutoCAD .DWG or .DXF compatible format and CD-ROM. The file shall use the Tennessee State Plane coordinate system, Zone 5301, FIPS Zone 4100, NAD 83 datum. The digital copies must be received before the plat may be recorded.

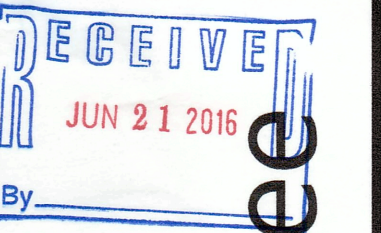
Complete plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun.

Failure to comply with any condition of approval as required may result in re-appearance before the Planning Commission to address any deficiencies. Delays of project actions may also occur, such as issuance of permits recordation of the final plat and extensions to approvals.



Alan Ray, rla
landscape architect

alanrayrla.com
arayrla@att.net
615.500.0402



Sneed Manor
Old Smyrna Road
Brentwood, Tennessee

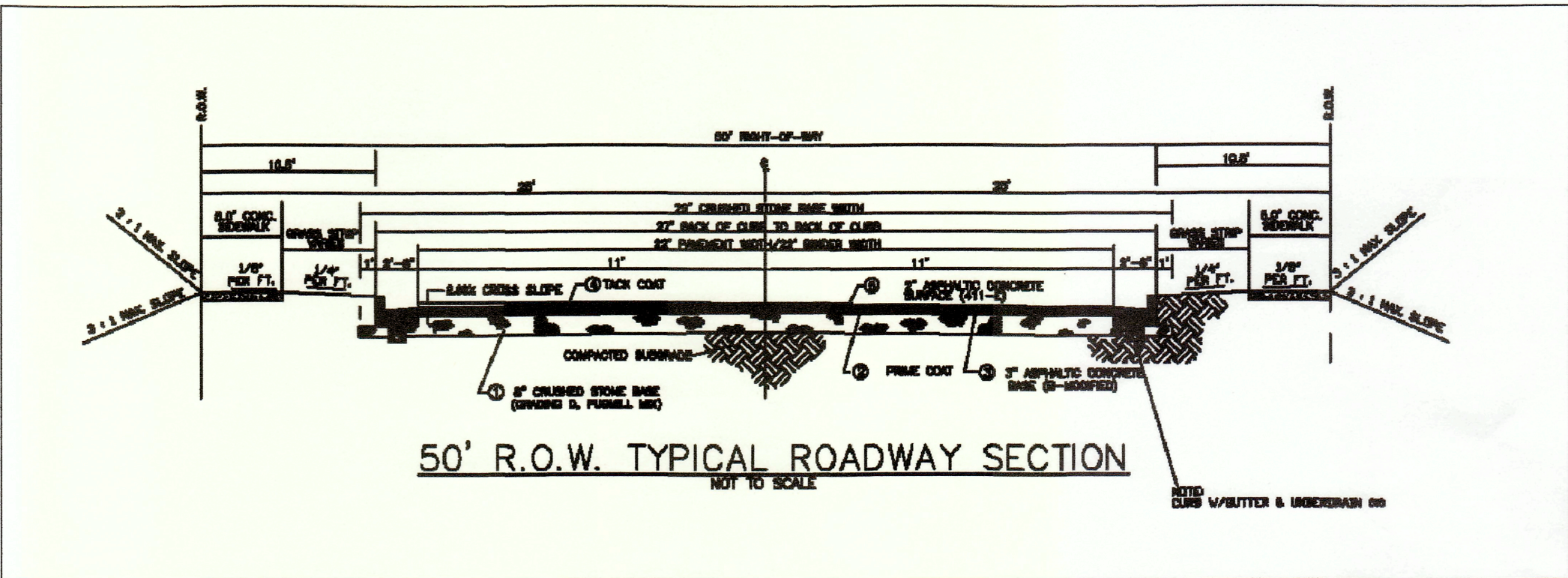
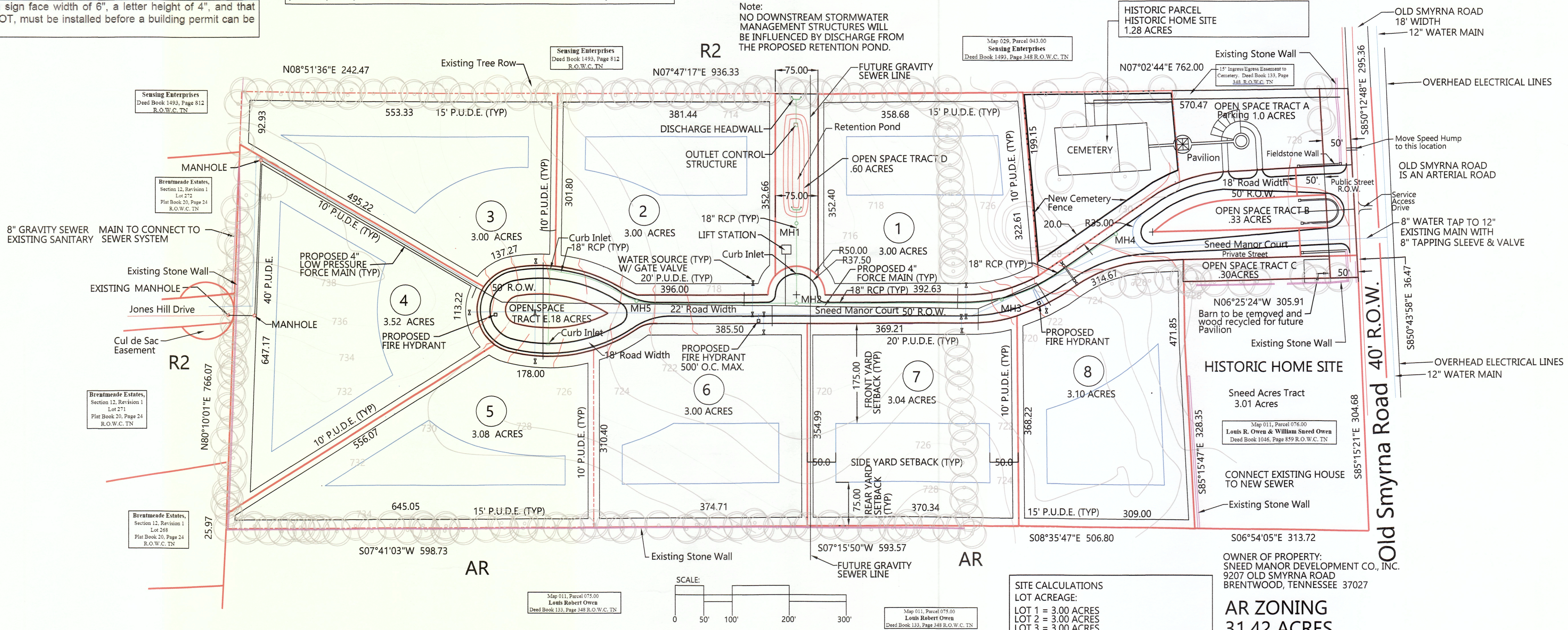


Preliminary
Site Plan

Scale: 1"=100'

10/23/15
REV. 5/30/16
REV. 6/20/16

L-1



SITE CALCULATIONS
LOT ACREAGE:
LOT 1 = 3.00 ACRES
LOT 2 = 3.00 ACRES
LOT 3 = 3.00 ACRES
LOT 4 = 3.52 ACRES
LOT 5 = 3.08 ACRES
LOT 6 = 3.00 ACRES
LOT 7 = 3.04 ACRES
LOT 8 = 3.10 ACRES
OPEN SPACE ACREAGE:
OPEN SPACE TRACT A = 1.0 ACRES
OPEN SPACE TRACT B = .33 ACRES
OPEN SPACE TRACT C = .30 ACRES
OPEN SPACE TRACT D = .60 ACRES
OPEN SPACE TRACT E = .18 ACRES
HISTORIC PARCEL (CEMETARY) = 1.28 ACRES
ROAD RIGHT OF WAY ACREAGE:
PRIVATE STREET R.O.W. = 2.51 ACRES
PUBLIC STREET R.O.W. = .48 ACRES
TOTAL SITE = 31.42 ACRES

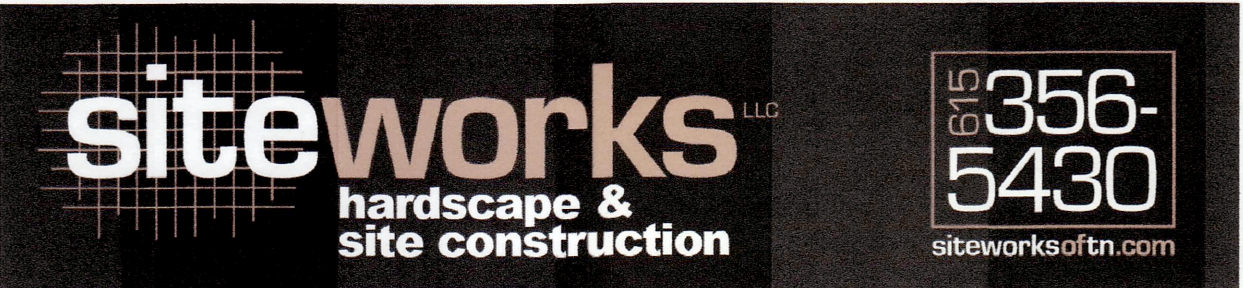
UTILITY PROVIDERS:
Water and Sewer:
Brentwood Water and Sewer
Electric:
Nashville Electric Service
Gas:
Piedmont Natural Gas

AR ZONING
31.42 ACRES

Minimum Building Setbacks:
175' FRONT YARD SETBACK
75' REAR YARD SETBACK
50' SIDE YARD SETBACK

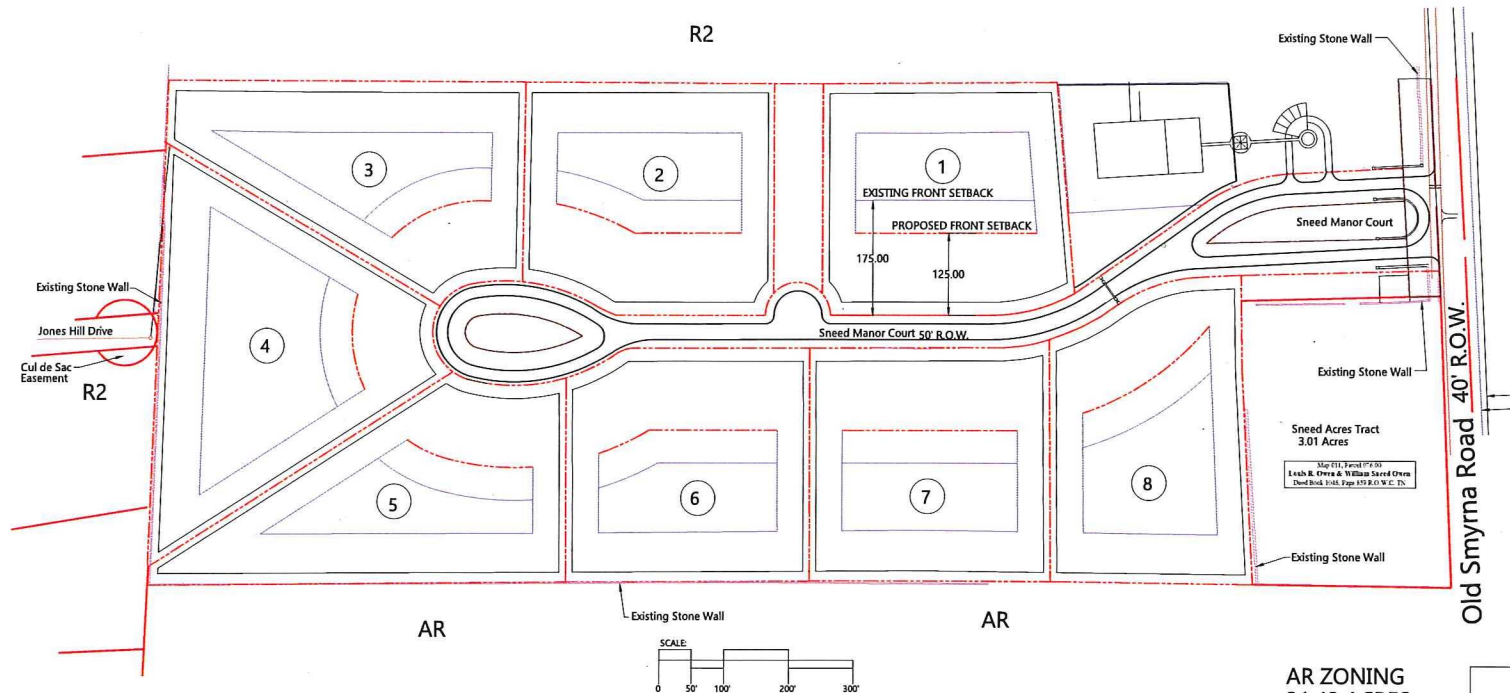
Minimum P.U.D.E. Setbacks:
20' FRONT YARD EASEMENT
15' REAR YARD EASEMENT
10' SIDE YARD EASEMENT

TOPOGRAPHIC DATA OBTAINED
FROM G.I.S. MAPPING



**SNEED MANOR
SITE CALCULATIONS**

LOT #	LOT AREA (AC)	LOT AREA (SF)	BUILDING ENVELOPE AREA AS APPROVED	BUILDING ENVELOPE AREA AS PROPOSED	DIFFERENCE	% INCREASE IN BUILDING AREA
1	3.00	130,680.00	27,744	41,560	13,816	49.80%
2	3.00	130,680.00	25,650	40,296	14,646	57.10%
3	3.00	130,680.00	30,888	40,658	9,770	31.63%
4	3.52	153,331.20	60,459	69,246	8,787	14.53%
5	3.08	134,164.80	26,386	37,745	11,359	43.05%
6	3.00	130,680.00	27,002	41,142	14,140	52.37%
7	3.04	132,422.40	27,677	41,191	13,514	48.83%
8	3.10	135,036.00	36,185	47,848	11,663	32.23%
AVERAGE INCREASE IN BUILDING ENVELOPE AREA					12,211.88	41.19%
OPEN SPACE (AC)			2.41	** The request involves a decrease in the front yard setback as required by Sec. 78-124, from 175' to 125'.		
CEMETERY (AC)			1.28			
PUBLIC ROW (AC)			0.48			
PRIVATE STREET EASEMENT (AC)			2.51			
TOTAL SITE AREA (AC)			31.42			



AR ZONING
31.42 ACRES



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Sneed Manor
Old Smyrna Road
Brentwood, Tennessee

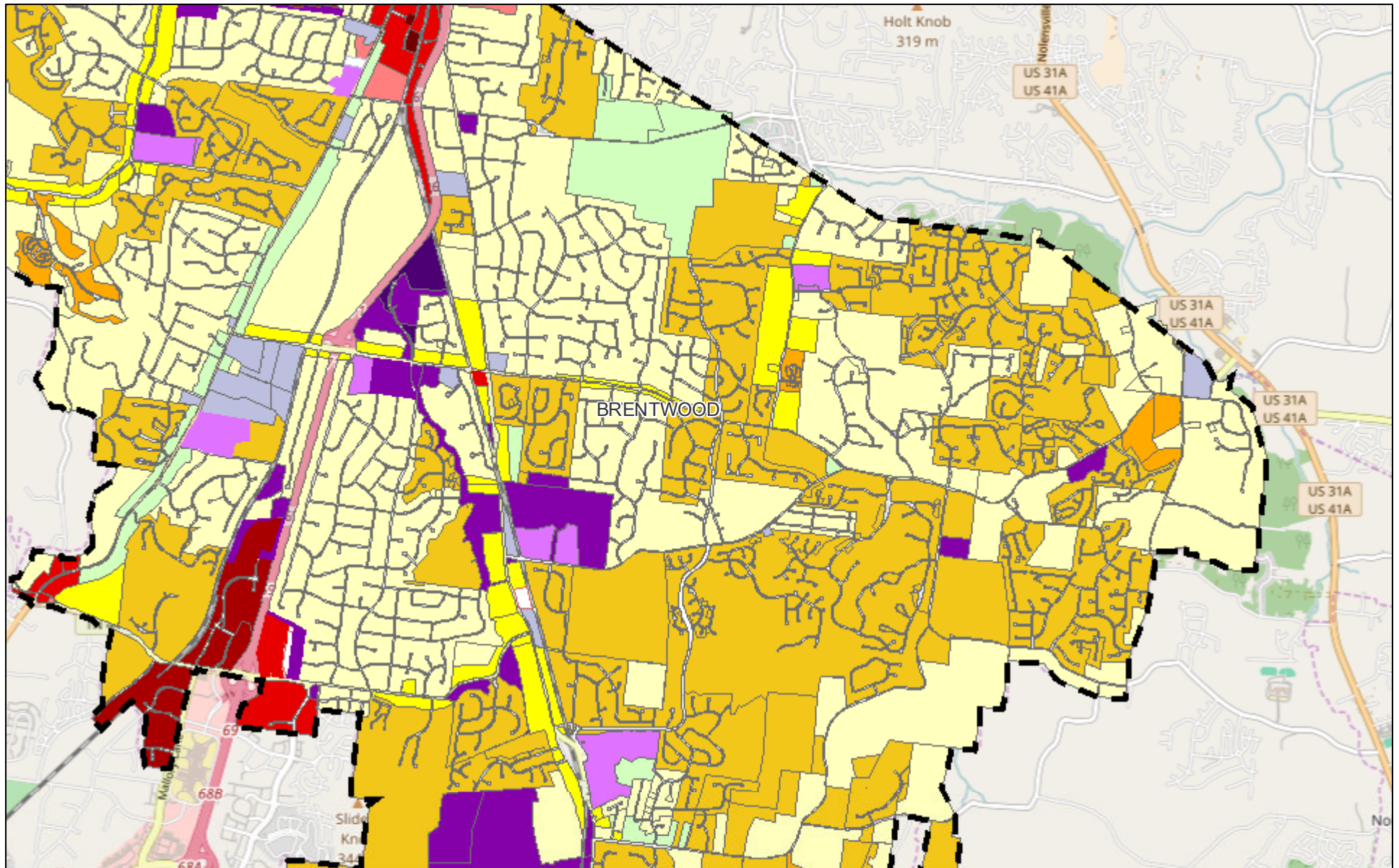


Proposed
Setback Lines
Scale: 1"=100'

1/6/16

L-00
Page 20 of 60

City of Brentwood ArcGIS Web Map



October 17, 2016

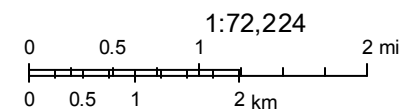
City Limits

Zoning

AR - Agricultural/Res. Estate

R1 - Large Lot Residential

R2 - Suburban Residential



Map data © OpenStreetMap contributors, CC-BY-SA

Page 21 of 60

Web AppBuilder for ArcGIS
Map data © OpenStreetMap contributors, CC-BY-SA |

REGINA SMITHSON
MAYOR
JILL BURGIN
VICE-MAYOR
KIRK BEDNAR
CITY MANAGER



COMMISSIONERS
BETSY CROSSLEY
ANNE DUNN
MARK W. GORMAN
RHEA E. LITTLE, III
KEN TRAVIS

City of Brentwood
Planning & Codes Department

**PLANNING AND CODES DEPARTMENT MEMORANDUM
2017-07**

TO: Honorable Mayor and City Commission Members

THROUGH: Kirk Bednar, City Manager

FROM: Jeff Dobson, Planning and Codes Director

SUBJECT: **ORDINANCE 2017-04 AN ORDINANCE OF THE CITY OF BRENTWOOD, TENNESSEE, PROVIDING THAT THE CODE OF ORDINANCES OF THE CITY OF BRENTWOOD BE AMENDED BY REVISING SECTION 78-124 OF CHAPTER 78, IN REGARD TO THE REQUIRED FRONT YARD SETBACKS WITHIN AR (AGRICULTURAL/RESIDENTIAL) ZONING DISTRICTS**

DATE: March 7, 2017

At its March 6, 2017 regular meeting, the Planning Commission voted unanimously nine for and zero against (9-0) to forward a recommendation of approval of Ordinance 2017-04 to the Board of Commissioners.

Brentwood City Commission Agenda

Meeting Date: 03/27/2017

Resolution 2017-23 - Authorizing an Agreement with Kimley-Horn and Associates, Inc. for Traffic Signal Optimization Study

Submitted by: Mike Harris, Engineering

Department: Engineering

Information

Subject

Resolution 2017-23 - Authorizing an Agreement with Kimley-Horn and Associates, Inc. for Traffic Signal Optimization Study

Background

The City of Brentwood applied for and received \$216,000 in federal funding for a Congestion Mitigation and Air Quality (CMAQ) grant through the Metropolitan Planning Organization (MPO) and the Tennessee Department of Transportation (TDOT). Staff plans to utilize the CMAQ funding to improve traffic flow along four of the City's primary arterials: Concord Road (SR-253), Moores Lane (SR-441), Wilson Pike (SR-252) and Murray Lane. All four of these roadways are classified as 'Urban Minor Arterial' based upon the Tennessee Department of Transportation's urban functional classification system prepared by the Long Range Planning Division. These four corridors include 31 of the City's traffic signals. This grant is 100% reimbursable with no match; therefore, there is no out of pocket cost for the city.

This project provides for the development of synchronized/optimized signal timings along each corridor. Optimized signal timings will result in improved mobility by reducing traffic delays, pollutants emitted while vehicles are idling, and fuel consumption. Additionally, roadway capacity will be preserved, which will result in an extended life for the existing roadway network.

Primary activities of the signal timing portion of the project include the collection of data, analysis of the corridors, implementation of the signal timings, and documentation of recommended improvements. The data required for analysis includes full traffic counts, including turning movements at each intersection, existing signal timing data, and travel time runs. The data collected will be entered into Synchro (traffic simulation software) to validate existing conditions and develop coordinated signal timing plans. Once the timing plans are complete, they will be implemented and adjusted as necessary by the consultant to provide maximum efficiency.

In addition to improving traffic flow at 31 signalized intersections, a preliminary engineering phase will be conducted for these intersections. The preliminary engineering phase will assess curb ramp compliance with ADA regulations. Additionally, this phase will provide an up-to-date signal inventory and identify any pedestrian signal deficiencies and any faulty vehicle detection equipment at each of the traffic signals. This will allow for improved management of Brentwood's signal system and improve safety for drivers and pedestrians. A list of the intersections involved in this study is included in the attached consultant agreement and a map is also attached to this agenda item.

Staff advertised for statements of qualifications from transportation consultants on January 4, 2017. A copy of the Request for Qualifications (RFQ) is attached. Five responses were received, and the responses were reviewed by the City's Consultant Evaluation Committee. Each response was evaluated based on the criteria specified in the RFQ. Kimley-Horn and Associates, Inc. received the highest score. (See scoring matrix, attached.) Based on the scoring, and in accordance with our consultant selection policy, staff contacted Kimley-Horn and negotiated the fee to provide the desired professional services. A copy of the fee proposal/agreement with Kimley-Horn is attached. The fee to accomplish the project is \$212,000 which is within the \$216,000 grant funding. Staff recommends approval of the agreement with Kimley-Horn. If approved, staff intends to begin work immediately and with a targeted completion of six to eight months.

Please direct any questions to the Engineering Director.

Staff Recommendation

Staff recommends approval of the proposed agreement with Kimley-Horn.

Previous Commission Action

At its June 27, 2016 meeting, the City Commission approved an agreement with TDOT to allow the City of Brentwood to locally manage this CMAQ grant project.

Fiscal Impact

Amount : \$216,000

Source of Funds: CIP/Grant

Account Number: 311-43100-1007

Fiscal Impact:

The grant is a reimbursable type grant with no match. The city will pay invoices using funds established in the approved CIP and then request reimbursement from TDOT.

Kimley Horn's fee is \$212,000 and the city may incur some administrative costs such as advertising and document reproduction charges, therefore staff is requesting authorization to utilize the full grant funding of \$216,000 if necessary.

Attachments

Resolution 2017-23
Kimley Horn Agreement
Request for Qualifications
Evaluation Matrix
Map of Intersections

RESOLUTION 2017-23

A RESOLUTION OF THE CITY OF BRENTWOOD, TENNESSEE TO AUTHORIZE THE MAYOR TO EXECUTE AN AGREEMENT BY AND BETWEEN THE CITY OF BRENTWOOD AND KIMLEY-HORN AND ASSOCIATES, INC. FOR A TRAFFIC SIGNAL OPTIMIZATION STUDY, A COPY OF SAID AGREEMENT BEING ATTACHED HERETO AND MADE A PART OF THIS RESOLUTION BY REFERENCE

BE IT RESOLVED BY THE CITY OF BRENTWOOD, TENNESSEE, AS FOLLOWS:

SECTION 1. That the Mayor is hereby authorized to execute an agreement by and between the City of Brentwood and Kimley-Horn and Associates, Inc. for a traffic signal optimization study, a copy of said agreement being attached hereto and made a part of this resolution by reference.

SECTION 2. That this resolution shall take effect from and after its passage, the general welfare of the City of Brentwood, Williamson County, Tennessee requiring it.

MAYOR

Regina Smithson

ADOPTED: _____

Approved as to form:

RECORDER

Deborah Hedgepath

CITY ATTORNEY

Roger A. Horner



March 14, 2017

Mr. Mike Harris, Director of Engineering
City of Brentwood
5211 Maryland Way
Brentwood, Tennessee 37027

**RE: *Professional Services Agreement
Brentwood Signal Timing Optimization Program
Nashville Area MPO 2017-2020 TIP Number 2015-67-215
TDOT PIN: 123421.00
Brentwood, Tennessee***

Dear Mr. Harris:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "the Consultant") is pleased to submit this letter agreement (the "Agreement") to the City of Brentwood ("the Client") for professional consulting services for the referenced project.

PROJECT UNDERSTANDING

Based on the information provided, we understand that the City of Brentwood wishes to improve traffic operations through a signal timing optimization program for the intersections referenced below. Kimley-Horn will provide coordinated traffic signal timing plans for the following 31 signalized intersections within the Brentwood city limits:

Concord Road (State Route (SR)-253) Corridor:

1. Concord Road at Franklin Road (SR-6 / US-31)
2. Concord Road at Brentwood Baptist Church west driveway
3. Concord Road at Brentwood Baptist Church east driveway
4. Concord Road at I-65 Southbound Ramp / General Macarthur Drive
5. Concord Road at I-65 Northbound Ramp / Lipscomb Drive
6. Concord Road at Knox Valley Drive / Heritage Way
7. Concord Road at Wilson Pike (SR-252)
8. Concord Road at Green Hill Boulevard
9. Concord Road at Edmondson Pike / Elmbrooke Boulevard
10. Concord Road at Crockett Road
11. Concord Road at Sunset Road

Moore's Lane (SR-441) Corridor:

12. Moore's Lane at Franklin Road (SR-6 / US-31)
13. Moore's Lane at Landings Drive
14. Moore's Lane at Mooreland Boulevard

15. Moores Lane at General George Patton Drive
16. Moores Lane at Mallory Lane
17. Moores Lane at Galleria Boulevard
18. Moores Lane at I-65 Southbound Ramp
19. Moores Lane at I-65 Northbound Ramp
20. Moores Lane at Westgate Circle
21. Moores Lane at Carothers Parkway
22. Moores Lane at Gordon Petty Drive
23. Moores Lane at Wilson Pike (SR-252)

Wilson Pike (SR-252) Corridor:

24. Wilson Pike at Split Log Road
25. Wilson Pike at Raintree Parkway
26. Wilson Pike at Crockett Road

Murray Lane Corridor:

27. Murray Lane at Franklin Road (SR-6 / US-31)
28. Murray Lane at Brentwood High School east driveway
29. Murray Lane at Brentwood High School west driveway
30. Murray Lane at Granny White Pike / Brass Lantern Place
31. Granny White Pike at Belle Rive Drive / McGavock Road

In addition, a preliminary engineering phase to assess traffic operations, standards compliance, signal system components, and a Systems Engineering Analysis (SEA) will be developed as part of this project along with other ancillary items detailed in this letter agreement. Our Scope of Services, Fee, and Schedule are as follows:

SCOPE OF SERVICES

Task 1 – Project Coordination Services

This task will consist of general project management, administrative, and accounting activities for the project. It will further consist of a kick-off meeting with City of Brentwood staff, project status and review meetings, preparing and distributing reports and memos, scheduling of review meetings and activities, monthly project status reporting, and discussion of any project issues during the project. In addition, this task will consist of monthly work planning efforts and will comprise the initial schedule development and monthly maintenance of the scope of services and project milestones.

Kimley-Horn will coordinate and facilitate up to three (3) total project meetings at the offices of either the City of Brentwood or Kimley-Horn (to be determined by City staff). Each meeting will consist of project status updates, schedule review, and discussion of upcoming milestones for both the project team and City staff. We will prepare and distribute both meeting agendas and meeting minutes for each meeting. We anticipate these meetings to occur as follows:

- Project Status Meeting 1 (Project Kick-off Meeting)
- Project Status Meeting 2 (Mid-point of the project scope, following Task 5 efforts)
- Project Status Meeting 3 (Project Close-out Meeting)

Task 2 – Environmental Documentation Services

Given the absence of any proposed construction, this project is a likely candidate for classification as a “Programmatic Categorical Exclusion” or a “Categorical Exclusion” as described in 23 CFR Part 771.117(d). This determination can only be made, however, by the Tennessee Department of Transportation (TDOT) in cooperation with the Federal Highway Administration (FHWA). Kimley-Horn will prepare a project map and description of the proposed improvements for submittal to TDOT. Based on this information, TDOT and FHWA will determine the level of documentation and technical studies required for this project.

Based on the assumption that TDOT and FHWA will determine that a Categorical Exclusion (CE) document is appropriate for this project, Kimley-Horn will prepare the CE document in accordance with the Tennessee Environmental Procedures Manual and FHWA guidance as outlined in FHWA Technical Advisory T6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents. A preliminary Categorical Exclusion document will be submitted to TDOT for review and comment. After incorporating TDOT’s comments, a final Categorical Exclusion will be submitted to TDOT for acceptance.

Kimley-Horn will prepare a draft environmental document incorporating the results of the coordination and limited technical studies outlined above and submit the document electronically to TDOT for review and comment. After incorporating TDOT’s comments, a final environmental document will be submitted to TDOT for acceptance.

If it is determined that additional technical studies beyond those described above are required, or that a Programmatic Categorical Exclusion or Categorical Exclusion is not applicable for this project, any additional required technical studies will be performed after authorization by the City in accordance with the Additional Services clause of this agreement.

Task 3 – Data Collection Services

This task will encompass the collection of traffic counts, intersection geometry, and signal timing settings necessary to complete signal timing coordination. In addition, it will consist of the observation of existing field conditions.

Task 3.1 – Assemble Existing Data

Kimley-Horn will assemble available information accessible from the City and TDOT. Information to be provided by these agencies, as available, may comprise, but is not limited to, the following:

- Historical turning movement count (TMC) data, if available
- Historical average daily traffic (ADT) volume data with directional split
- Current signal timings and operational settings (in hard copy format and/or electronic format, if available)
- As-built traffic signal plans or file drawings showing current lane configurations, signal heads, detectors, storage bay lengths, or other features
- Current signal controller user’s manual, coding sheets, and signal system / database software programs

Task 3.2 – Data Collection

Kimley-Horn staff will perform traffic data collection efforts necessary for this project. Kimley-Horn will collect turning movement counts at the study intersections. Eight (8)-hour turning movement counts (TMC's) will be obtained. The time periods may vary per corridor to capture early AM or early PM peak periods. The time frames will consist of:

- Weekday AM peak (two (2) to three (3) hours)
- Weekday Mid-Day (MD) peak (two (2) hours: 11:00 – 13:00)
- Weekday PM peak (three (3) to four (4) hours)

Directional ADT tube counts will also be acquired along each of the corridors from TDOT.

Crash data for the study corridors will be obtained from TDOT's Tennessee Integrated Traffic Analysis Network (TITAN). If this information is not available through TITAN, Kimley-Horn will request the crash records from the City of Brentwood Police Department. This information will be compiled per intersection and used as part of the operational analysis (Task 4 efforts).

Task 3.3 – Field Inventories and Observation

Field inventories will be performed at each intersection to confirm signal phasing, signal head displays, existing geometry, lane widths, turn-bay storage lengths, approach and corridor speed limits, adjacent land uses, distances between signalized intersections, and other physical features deemed pertinent to the project. Photographs will also be taken for each approach of each intersection within the signal system. In addition, we will take a photograph of each signal cabinet to confirm the contents of the cabinet. Permission and access to the City's traffic signal controllers will be required for this effort. Once count data has been obtained, Kimley-Horn will perform a field visit to each traffic signal during the peak periods. During this time, Kimley-Horn will observe existing platooning and progression of the traffic, confirm existing timing plans (cycle lengths, phasing sequences), observe queuing patterns, identify and monitor traffic flow patterns, and monitor sub-peaks within the peak periods.

Task 3.4 – Data Compilation / Validation

Prior to developing new coordination timings, it is important to understand and validate the existing conditions. Using the data collected in the field and knowledge of the conditions observed during the field observations, a network will be developed for each peak using *Synchro*. Existing geometry and traffic volumes along with existing signal timings/settings provided by City staff will be duplicated in *Synchro* and simulated in *SimTraffic*. The *Synchro* / *SimTraffic* model will be developed using aerial photography as the background.

Task 4 – Preliminary Engineering Services

Preliminary engineering services will consist of the development of an SEA, compiling intersection and arterial levels of service (LOS), and an operational analysis.

Task 4.1 – ITS Documentation

Consistent with Federal Highway Administration (FHWA) requirements, we will prepare a Systems Engineering Analysis (SEA) for this project. This document will be prepared in a single submittal for review and approval by City staff. Once approved by City staff, we will then submit the document to TDOT's Traffic Operations Division for review and approval.

Task 4.2 – Level of Service Determination

Using the *Synchro* files compiled in Task 3.4, Kimley-Horn will determine and tabulate intersection / arterial LOS within the project limits. For the intersection capacity analysis, the LOS, delay and volume-to-capacity ratios will also be tabulated.

Task 4.3 – Operational Analysis

Kimley-Horn, once the field data has been collected and compiled, will perform an operational analysis for each of the intersections. Capacity analyses consistent with the Highway Capacity Manual will be performed when comparing improvement options. Existing and proposed signal phasing and sequencing will be analyzed as well as identifying other possible operational improvements (e.g. pavement marking changes, geometric improvements, traffic safety modifications, signal system / signal control equipment additions and/or upgrades).

Rough order of magnitude (ROM) cost estimates will be prepared for the improvements recommended in the operational analysis. This information will be compiled in a summary memorandum and presented to City staff as part of Project Status Meeting 2.

Task 5 – Timing Plan Development Services

Using the data collected and compiled in Task 3, Kimley-Horn will prepare up to six (6) timing plans for each of the signalized corridors as follows:

- Weekday AM Peak timing plan
- Weekday Mid-day (MD) Peak timing plan
- Weekday PM Peak timing plan
- Up to three (3) additional plans to consist of an off-peak, weekend peak, school, church and/or other peak timing plan to be determined during timing plan development efforts

Task 5.1 – Local Controller Settings Development

Using the criteria set forth in the Institute of Transportation Engineer's (ITE) *Manual of Traffic Signal Design* and the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices*, Kimley-Horn will calculate and recommend values for the following local controller settings (minimum vehicular green, yellow clearance interval, all-red clearance interval, pedestrian walk time, and pedestrian flashing don't walk time). These values will be tabulated in a spreadsheet format and shared with City staff for review and approval.

Task 5.2 – Determine System Boundaries

Kimley-Horn will evaluate signal system boundaries along the corridor. We will use the following criteria when choosing boundaries:

- ADT and TMC count data
- Signal spacing
- Cycle length requirements
- Driver expectancy
- Existing features (line of sight, topography, etc.)
- *Synchro* coordinatability factors
- Coupling Index ($I = V/D$, where D = distance, V = link volume, and I = coupling index). The need for coordination between any two signals is directly proportional to the traffic volume and inversely proportional to the distance between the two signals.
- Information gathered during field observations
- Input from City staff

Task 5.3 – Cycle, Split, Offset, and Phase Sequence Development

Using the electronic files developed in Task 3, Kimley-Horn will begin the retiming process by performing peak hour cycle length evaluations in *Synchro* by evaluating the natural cycle lengths and coordinatability factors for each signal. Using evaluations from *Synchro* along with knowledge gained via observations in the field, a cycle length will be recommended for each timing plan. Preliminary cycle length recommendations will be tabulated for staff review along with accompanying remarks. This information will then be provided to City staff and agreed upon prior to further timing plan development.

Once the cycle lengths for each period have been finalized, each intersection will be evaluated to determine the optimal phase splits for each vehicle movement. Next, phase sequencing and offset manipulation will be analyzed to maximize the arterial greenbands. Recommended timing plans will be reviewed by City staff and approved prior to field implementation via Project Status Meeting 2.

Task 5.4 – Coding Sheet and TOD Clock Development

Using the ADT counts gathered in Task 3, Kimley-Horn will develop a Time-of-Day (TOD) clock for each signal system to determine the optimal timing plan for each hour of a typical weekday and weekend day. Furthermore, we will transfer the recommended timings for each intersection per timing plan into a coding sheet format that is compatible with the City's Econolite ASC-3 or Cobalt ATC signal controllers. Copies of the City's signal database software, coding sheet format, and signal controller user's manuals will be necessary for this task.

Task 6 – Field Implementation Services

Kimley-Horn will provide coding sheet data to City staff in electronic format consistent with the City's signal controllers and signal software. Kimley-Horn will coordinate with City staff to hand key the data into the field controllers and/or load them at the TMC and push the data out to the field controllers. Kimley-Horn and City staff will conduct field observations of each signalized intersection. Using the Time Space Diagrams (TSD's, developed in *Synchro*) for each signal, the coordinated timings will be verified as to effectiveness and fine-tuned as necessary.

Progression, as well as split times, may be adjusted based on this observation. During field implementation, any immediate adjustments recognized will be made that day in the field. These

adjustments will be communicated to City staff so that they can be edited in the City's system or changed directly at the local controller by Kimley-Horn staff.

Task 7 – Before and After Studies

Kimley-Horn will collect and compile travel time, delay, and air quality data for selected corridors during the weekday AM, MD, and PM peak periods prior to the implementation of the new timings (before conditions). Following implementation and fine-tuning of the new timings, after conditions will be collected for the corridor. The after travel time data will be collected once the system has had ample time to stabilize when the new timings have been implemented. Corridor selection will be discussed and finalized with City staff prior to performing the travel time and delay studies.

The air quality analyses will be performed in accordance with FHWA program guidance for CMAQ projects. We will determine the existing system's production of carbon monoxide (CO), mono-nitrogen oxides (NOx), and volatile organic compounds (VOC) emissions for both the before and after conditions.

Using the travel time data collected in the field, Kimley-Horn will prepare before and after comparisons using the following parameters:

- Total travel time
- Running time
- Stopped time
- Average speed
- Running speed
- Number of stops
- Fuel consumption
- Vehicle emissions

A minimum of four successful travel time runs in each direction will be completed for each corridor. This data will be collected electronically using a laptop computer equipped with global positions system (GPS) technology.

Task 8 – Project Documentation Services

Once all timings have been implemented and fine-tuned, we will prepare a final report summarizing the signal timing effort. The final report will summarize the following:

- Project overview
- Project results
- Summary of all data collected
- Recommended improvements (from Operational Analysis)
- Timing plan data
- Results of field implementation / fine-tuning
- Before and After results
- Benefit / Cost comparisons for the project

In addition, a brief two-page 11" x 17" bi-fold summary brochure will be prepared. The summary brochure will be geared more towards the public and non-technical City staff (e.g. City Boards and Commissions). Up to ten (10) hard, glossy, color copies of the brochure will be submitted along with an electronic copy in PDF format.

Task 9 – Additional Services

Any services not specifically provided for in the above scope, as well as any changes in the scope the Client requests, will be considered Additional Services and will be performed at our then current hourly rates. Additional Services Kimley-Horn can provide include, but are not limited to, the following:

- Environmental documentation if something other than a PCE / CE is required by TDOT / FHWA
- Additional traffic data collection
- Additional timing plans
- Design phase services
- Other services as requested by City staff

INFORMATION PROVIDED BY CLIENT

We shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives. The following information is requested of the Client:

- Existing traffic data (TMC or ADT), if it exists
- Existing GIS data for the project limits
- Crash data for the project intersections
- Signal system database information (current signal timings / operational settings)
- Signal controller's user manual
- As-builts or signal design plans, if they exist

SCHEDULE

Once given notice to proceed, Kimley-Horn will complete the services listed in Tasks 1 through 8 based upon a schedule to be mutually determined at the project kick-off meeting. However, the City should note that Kimley-Horn has no control over internal FHWA and TDOT review processes as they relate to environmental approvals and the issuances of Notices To Proceed (NTP) from the TDOT Local Programs office.

< < This Section Left Intentionally Blank > >

FEE AND BILLING

Kimley-Horn will perform the Scope of Services in Task 1 through 8 for a total lump sum fee below. Individual task amounts are informational only.

Task 1 – Project Coordination Services	\$21,200
Task 2 – Environmental Documentation Services	\$11,700
Task 3 – Data Collection Services	\$38,700
Task 4 – Preliminary Engineering Services	\$24,400
Task 5 – Timing Plan Development Services	\$49,800
Task 6 – Field Implementation Services	\$35,500
Task 7 – Before and After Studies	\$18,200
Task 8 – Project Documentation Services	\$12,500

Total Lump Sum Fee:	\$212,000
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These tasks will utilize funds from the current project phases which are detailed in the City's contract with TDOT: PE-N (\$39,000) and PE-D (\$177,000), which totals \$216,000 for NEPA and DESIGN efforts.

Kimley-Horn will provide the Scope of Services in Task 9 (Additional Services) on a labor fee plus expense basis. Effort associated with Task 9 will not be performed without written authorization from the City.

Fees and expenses will be invoiced monthly based, as applicable, upon the percentage of services performed or actual services performed and expenses incurred as of the invoice date. Payment will be due within 25 days of your receipt of the invoice.

CLOSURE

In addition to the matters set forth herein, our Agreement shall include and be subject to, and only to, the attached Standard Provisions, which are incorporated by reference. As used in the Standard Provisions, "Consultant" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to the **City of Brentwood, Tennessee**.

Kimley-Horn, in an effort to expedite invoices and reduce paper waste, submits invoices via email in an Adobe PDF format. We can also provide a paper copy via regular mail if requested. Please provide the following information:

_____ Please email all invoices to _____

_____ Please copy _____

If you concur in all the foregoing and wish to direct us to proceed with the services, please have authorized persons execute both copies of this Agreement in the spaces provided below, retain one

copy, and return the other to us. We will commence services only after we have received a fully-executed agreement.

We appreciate the opportunity to provide these services to you. Please contact us if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Christopher D. Rhodes, P.E.
Project Manager / Vice President

Attachment – Standard Provisions

Agreed to this _____ day of _____, 2017.

CITY OF BRENTWOOD, TENNESSEE
A City Government

By: _____

(Date)

(Print or Type Name)

(Email Address)

_____, Witness

(Print or Type Name)

Official Seal:

**KIMLEY-HORN AND ASSOCIATES, INC.
STANDARD PROVISIONS**

(1) **Consultant's Scope of Services and Additional Services.** The Consultant's undertaking to perform professional services extends only to the services specifically described in this Agreement. However, if requested by the Client and agreed to by the Consultant, the Consultant will perform Additional Services, which shall be governed by these provisions. Unless otherwise agreed to in writing, the Client shall pay the Consultant for any Additional Services an amount based upon the Consultant's then-current hourly rates plus an amount to cover certain direct expenses including telecommunications, in-house reproduction, postage, supplies, project related computer time, and local mileage. Other direct expenses will be billed at 1.15 times cost.

(2) **Client's Responsibilities.** In addition to other responsibilities described herein or imposed by law, the Client shall:

- (a) Designate in writing a person to act as its representative with respect to this Agreement, such person having complete authority to transmit instructions, receive information, and make or interpret the Client's decisions.
- (b) Provide all information and criteria as to the Client's requirements, objectives, and expectations for the project including all numerical criteria that are to be met and all standards of development, design, or construction.
- (c) Provide to the Consultant all previous studies, plans, or other documents pertaining to the project and all new data reasonably necessary in the Consultant's opinion, such as site survey and engineering data, environmental impact assessments or statements, upon all of which the Consultant may rely.
- (d) Arrange for access to the site and other private or public property as required for the Consultant to provide its services.
- (e) Review all documents or oral reports presented by the Consultant and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of the Consultant.
- (f) Furnish approvals and permits from governmental authorities having jurisdiction over the project and approvals and consents from other parties as may be necessary for completion of the Consultant's services.
- (g) Cause to be provided such independent accounting, legal, insurance, cost estimating and overall feasibility services as the Client may require.
- (h) Give prompt written notice to the Consultant whenever the Client becomes aware of any development that affects the scope, timing, or payment of the Consultant's services or any defect or noncompliance in any aspect of the project.
- (i) Bear all costs incidental to the responsibilities of the Client.

(3) **Period of Services.** Unless otherwise stated herein, the Consultant will begin work timely after receipt of a properly executed copy of this Agreement and any required retainer amount. This Agreement is made in anticipation of conditions permitting continuous and orderly progress through completion of the services. Times for performance shall be extended as necessary for delays or suspensions due to circumstances that the Consultant does not control. If such delay or suspension extends for more than six months (cumulatively), Consultant's compensation shall be renegotiated.

(4) **Method of Payment.** Compensation shall be paid to the Consultant in accordance with the following provisions:

- (a) Invoices will be submitted periodically for services performed and expenses incurred. Payment of each invoice will be due within 25 days of receipt. The Client shall also pay any applicable sales tax. All retainers will be held by the Consultant for the duration of the project and applied against the final invoice. Interest will be added to accounts not paid within 25 days at the maximum rate allowed by law. If the Client fails to make any payment due to the Consultant under this or any other agreement within 30 days after the Consultant's transmittal of its invoice, the Consultant may, after giving notice to the Client, suspend services and withhold deliverables until all amounts

due are paid in full and may commence proceedings, including filing liens, to secure its right to payment under this Agreement.

(b) If the Client relies on payment or proceeds from a third party to pay Consultant and Client does not pay Consultant's invoice within 60 days of receipt, Consultant may communicate directly with such third party to secure payment.

(c) If the Client objects to an invoice, it must advise the Consultant in writing giving its reasons within 14 days of receipt of the invoice or the Client's objections will be waived, and the invoice shall conclusively be deemed due and owing. If the Client objects to only a portion of the invoice, payment for all other portions remains due within 25 days of receipt.

~~(d) If the Consultant initiates legal proceedings to collect payment, it may recover, in addition to all amounts due, its reasonable attorneys' fees, reasonable experts' fees, and other expenses related to the proceedings. Such expenses shall include the cost, at the Consultant's normal hourly billing rates, of the time devoted to such proceedings by its employees.~~ If either party initiates legal proceedings in regard to this Agreement, the prevailing party may recover, in addition to all amounts due, its reasonable attorney's fees, and other expenses related to the proceedings. Such expenses shall include the cost, based on the Consultant's normal billing rates, or the Client's hourly pay rates plus reasonable overhead, of the time devoted to such proceedings by Consultant's or Client's employees.

(e) The Client agrees that the payment to the Consultant is not subject to any contingency or condition. The Consultant may negotiate payment of any check tendered by the Client, even if the words "in full satisfaction" or words intended to have similar effect appear on the check without such negotiation being an accord and satisfaction of any disputed debt and without prejudicing any right of the Consultant to collect additional amounts from the Client.

(5) **Use of Documents.** All documents, including but not limited to drawings, specifications, reports, and data or programs stored electronically, prepared by the Consultant are related exclusively to the services described in this Agreement, and may be used only if the Client has satisfied all of its obligations under this Agreement. They are not intended or represented to be suitable for use, partial use or reuse by the Client or others on extensions of this project or on any other project. Any modifications made by the Client to any of the Consultant's documents, or any use, partial use or reuse of the documents without written authorization or adaptation by the Consultant will be at the Client's sole risk and without liability to the Consultant, and to the extent permitted by law the Client shall indemnify, defend and hold the Consultant harmless from all claims, damages, losses and expenses, including but not limited to attorneys' fees, resulting therefrom. The Consultant's electronic files and source code developed in the development of application code remain the property of the Consultant and shall be provided to the Client only if expressly provided for in this Agreement. Any electronic files not containing an electronic seal are provided only for the convenience of the Client, and use of them is at the Client's sole risk. In the case of any defects in the electronic files or any discrepancies between them and the hardcopy of the documents prepared by the Consultant, the hardcopy shall govern. Because data stored in electronic media format can deteriorate or be modified without the Consultant's authorization, the Client has 60 days to perform acceptance tests, after which it shall be deemed to have accepted the data. Notwithstanding the foregoing, the Consultant acknowledges that records in the Client's custody are subject to the public records laws of the State of Tennessee, and that such laws shall take precedence over the terms and provisions of this section.

(6) **Opinions of Cost.** Because the Consultant does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to opinions as to the costs of construction and materials, shall be made on the basis of its experience and represent its judgment as an experienced and qualified professional, familiar with the industry. The Consultant cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. If the Client wishes greater assurance as to the amount of any cost, it shall employ an independent cost estimator. Consultant's services required to bring costs within any limitation established by the Client will be paid for as Additional Services.

(7) **Termination.** The obligation to provide further services under this Agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party, or upon thirty days' written notice for the convenience of the terminating party. If any change occurs in the ownership of the Client, the Consultant shall have the right to immediately terminate this Agreement. In the event of any termination, the Consultant shall be paid for all services rendered and expenses incurred to the effective date of termination, and other reasonable expenses incurred by the Consultant as a result of such termination. If the Consultant's compensation is a fixed fee, the amount payable for services will be a proportional amount of the total fee based on the ratio of the amount of the services performed, as reasonably determined by the Consultant, to the total amount of services which were to have been performed.

(8) **Insurance.** The Consultant carries Workers' Compensation insurance, professional liability insurance, and general liability insurance. ~~If the Client directs the Consultant to obtain increased insurance coverage, the Consultant will take out such additional insurance, if obtainable, at the Client's expense.~~

(9) **Standard of Care.** The standard of care applicable to Consultant's services will be the degree of care and skill ordinarily exercised by consultants performing the same or similar services in the same locality at the time the services are provided. No warranty, express or implied, is made or intended by the Consultant's undertaking herein or its performance of services, and it is agreed that the Consultant is not a fiduciary with respect to the Client.

(10) **LIMITATION OF LIABILITY.** In recognition of the relative risks and benefits of the Project to the Client and the Consultant, the risks have been allocated such that the Client agrees, to the fullest extent of the law, and notwithstanding any other provisions of this Agreement or the existence of applicable insurance coverage, that the total liability, in the aggregate, of the Consultant and the Consultant's officers, directors, employees, agents, and subconsultants to the Client or to anyone claiming by, through or under the Client, for any and all claims, losses, costs or damages whatsoever arising out of, resulting from or in any way related to the services under this Agreement from any cause or causes, including but not limited to, the negligence, professional errors or omissions, strict liability or breach of contract or any warranty, express or implied, of the Consultant or the Consultant's officers, directors, employees, agents, and subconsultants, shall not exceed twice the total compensation received by the Consultant under this Agreement or \$50,000, whichever is greater. Higher limits of liability may be negotiated for additional fee. Under no circumstances shall the Consultant be liable for extra costs or other consequences due to changed conditions, or for costs related to the failure of contractors to perform work in accordance with the plans and specifications. This Section 10 is intended solely to limit the remedies available to the Client or those claiming by or through the Client, and nothing in this Section 10 shall require the Client to indemnify the Consultant.

(11) **Mutual Waiver of Consequential Damages.** In no event shall either party be liable to the other for any consequential, incidental, punitive, or indirect damages including but not limited to loss of income or loss of profits.

(12) **Certifications.** The Consultant shall not be required to execute certifications or third-party reliance letters that are inaccurate, that relate to facts of which the Consultant does not have actual knowledge, or that would cause the Consultant to violate applicable rules of professional responsibility.

(13) **Dispute Resolution.** All claims by the Client arising out of this Agreement or its breach shall be submitted first to mediation in accordance with the Construction Industry Mediation Procedures of the American Arbitration Association as a condition precedent to litigation. Any mediation or civil action by Client must be commenced within one year of the accrual of the cause of action asserted but in no event later than allowed by applicable statutes.

(14) **Hazardous Substances and Conditions.** In no event shall Consultant be a custodian, transporter, handler, arranger, contractor, or remediator with respect to hazardous substances and conditions. Consultant's services

will be limited to professional analysis, recommendations, and reporting, including, when agreed to, plans and specifications for isolation, removal, or remediation. The Consultant shall notify the Client of hazardous substances or conditions not contemplated in the scope of services of which the Consultant actually becomes aware. Upon such notice by the Consultant, the Consultant may stop affected portions of its services until the hazardous substance or condition is eliminated.

(15) Construction Phase Services.

(a) If the Consultant's services include the preparation of documents to be used for construction and the Consultant is not retained to make periodic site visits, the Client assumes all responsibility for interpretation of the documents and for construction observation, and the Client waives any claims against the Consultant in any way connected thereto.

(b) If the Consultant provides construction phase services, the Consultant shall have no responsibility for any contractor's means, methods, techniques, equipment choice and usage, sequence, schedule, safety programs, or safety practices, nor shall Consultant have any authority or responsibility to stop or direct the work of any contractor. The Consultant's visits will be for the purpose of endeavoring to provide the Client a greater degree of confidence that the completed work of its contractors will generally conform to the construction documents prepared by the Consultant. Consultant neither guarantees the performance of contractors, nor assumes responsibility for any contractor's failure to perform its work in accordance with the contract documents.

(c) The Consultant is not responsible for any duties assigned to the design professional in the construction contract that are not expressly provided for in this Agreement. The Client agrees that each contract with any contractor shall state that the contractor shall be solely responsible for job site safety and for its means and methods; that the contractor shall indemnify the Client and the Consultant for all claims and liability arising out of job site accidents; and that the Client and the Consultant shall be made additional insureds under the contractor's general liability insurance policy. To the extent that the Consultant prepares contract documents for the Client, it shall be the Consultant's responsibility to include the requirements identified in the foregoing sentence with such contract documents.

(16) No Third-Party Beneficiaries; Assignment and Subcontracting. This Agreement gives no rights or benefits to anyone other than the Client and the Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole benefit of the Client and the Consultant. The Client shall not assign or transfer any rights under or interest in this Agreement, or any claim arising out of the performance of services by Consultant, without the written consent of the Consultant. The Consultant reserves the right to augment its staff with subconsultants as it deems appropriate due to project logistics, schedules, or market conditions. If the Consultant exercises this right, the Consultant will maintain the agreed-upon billing rates for services identified in the contract, regardless of whether the services are provided by in-house employees, contract employees, or independent subconsultants.

(17) Confidentiality. The Client consents to the use and dissemination by the Consultant of photographs of the project and to the use by the Consultant of facts, data and information obtained by the Consultant in the performance of its services. If, however, any facts, data or information are specifically identified in writing by the Client as confidential, the Consultant shall use reasonable care to maintain the confidentiality of that material.

(18) Miscellaneous Provisions. This Agreement is to be governed by the law of the State of Tennessee. This Agreement contains the entire and fully integrated agreement between the parties and supersedes all prior and contemporaneous negotiations, representations, agreements or understandings, whether written or oral. Except as provided in Section 1, this Agreement can be supplemented or amended only by a written document executed by both parties. Provided, however, that any conflicting or additional terms on any purchase order issued by the Client shall be void and are hereby expressly rejected by the Consultant. Any provision in this Agreement that is unenforceable shall be ineffective to the extent of such unenforceability without invalidating the remaining

provisions. The non-enforcement of any provision by either party shall not constitute a waiver of that provision nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

REQUEST FOR QUALIFICATIONS (RFQ)

for

Brentwood Signal Timing Optimization Program Consultant

Project Identification No. 123421.00

Issued by

City of Brentwood

On Behalf of

Tennessee Department of Transportation

Local Programs Development Office

James K. Polk Building, Suite 600

505 Deaderick Street

Nashville, TN 37243

November 30, 2016



COMPLIANCE WITH REGULATIONS

Submitting firms acknowledge that work under this project shall be governed by and construed in accordance with the laws of the State of Tennessee. Any submitting firm agrees that they will be subject to the exclusive jurisdiction of the courts of the State of Tennessee in actions that may arise under this project. Submitting firms acknowledge and agree that any rights or claims against the City of Brentwood or its employees hereunder, and any remedies arising therefrom, shall be subject to and limited to those rights and remedies, if any, available under Tennessee Code Annotated, Sections 9-8- 101 through 9-8-407.

Submitting firms are assumed to be familiar with and observe and comply with those Federal, State, and local laws, ordinances, and regulations in any manner affecting the conduct of the work and those instructions and prohibitive orders issued by the State and Federal Government regarding fortifications, military and naval establishments and other areas. Submitting firms shall observe and comply with those laws, ordinances, regulations, instructions, and orders in effect.

Submitting firms hereby agree that failure to comply with this provision shall constitute a material breach of this agreement and subject the firm to the repayment of all damages suffered by the City of Brentwood as a result of said breach.

Nothing in this request shall require the firms to observe or enforce compliance with any provision thereof, perform any other act or do any other thing in contravention of any applicable state law, provided, that if any of the provisions of this request violate any applicable state law, the responding firm will at once notify the City of Brentwood in writing in order that appropriate changes and modifications may be made.

**CITY OF BRENTWOOD, TENNESSEE
REQUEST FOR QUALIFICATIONS (RFQ)**

Traffic Signal Timing Optimization Project Consultant

1.0 Introduction

The City of Brentwood plans to utilize CMAQ funding to improve traffic flow along four (4) of the City's primary arterials: Concord Road (SR-253), Moores Lane (SR-441), Wilson Pike (SR-252), and Murray Lane. All four (4) of these roadways are classified as 'Urban Minor Arterial' based upon the Tennessee Department of Transportation's urban functional classification system prepared by the Long Range Planning Division. These four (4) corridors include 31 of the City's traffic signals.

This project provides for the development of synchronized/optimized signal timings along each corridor. Optimized signal timings, which will include Manual on Uniform Traffic Control Devices (MUTCD)-compliant local controller settings, will result in improved mobility by reducing traffic delays, pollutants emitted while vehicles are idling, and fuel consumption. Additionally, roadway capacity will be preserved, which will result in an extended life for the existing roadway network. The timing portion of the project will develop optimized traffic signal operations for 31 signalized intersections within the city limits.

Primary activities of the signal timing portion of the project include the collection of data, analysis of the corridors, implementation of the signal timings, and documentation of recommended improvements. The data required for analysis includes turning movement counts at each intersection, existing signal timing data, and travel time runs. The data collected will be entered into Synchro (traffic simulation software) to validate existing conditions and develop coordinated signal timing plans. Once the timing plans are complete, they will be implemented and adjusted as necessary by the selected consultant.

In addition to improving traffic flow at 31 signalized intersections, a preliminary engineering phase will be developed for these traffic signals within the City's jurisdiction. The preliminary engineering phase will identify potential signal deficiencies related to the Americans with Disabilities Act (ADA) requirements (PROWAG – Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way – July 26, 2011) and MUTCD compliance. This preliminary engineering phase will provide an up-to-date signal inventory and also identify any pedestrian signal deficiencies and any faulty vehicle detection at each of the traffic signals. This will allow for improved management of Brentwood's signal system. A list of the intersections involved in this study is provided at Appendix B and a map of the intersections is provided at Attachment C.

The City of Brentwood received federal funding for this study through the Nashville Area Metropolitan Planning Organization (MPO) and TDOT. Therefore, additional requirements and reporting are necessary to comply with applicable regulations.

The Request for Qualifications (RFQ) for the Traffic Signal Timing Optimization Program may be downloaded from the City of Brentwood Website (www.brentwood-tn.org) on or after January 4, 2017. Alternately, a printed version of the RFQ may be obtained from the City of Brentwood on or after January 4, 2017 by written, email or fax request to:

City of Brentwood
Attn: Mike Harris
P.O. Box 788
Brentwood, TN 37024
Fax: (615) 371-2225
mike.harris@brentwoodtn.gov

Technical questions should be addressed to:
Mike Harris, P.E.
E-mail: mike.harris@brentwoodtn.gov
Fax: (615) 371-2225

The deadline for technical questions is 4:00 PM, local time, Tuesday, January 24, 2017. All technical questions must be submitted electronically via e-mail. No answers will be given over the phone. Written answers, including any amendments to the RFQ, if necessary, will be posted on the Brentwood website no later than close of business on Wednesday, January 31, 2017. This material will also be e-mailed to each firm that requested the RFQ.

Firms may form teams with other firms in order to fulfill the Scope of Work (Appendix A).

2.0 Required Qualifications

Responses to this RFQ should demonstrate that the proposing firm/team has the following qualifications and experience:

- Experience performing environmental impact evaluations in accordance with the National Environmental Policy Act (NEPA)
- Experience managing projects with TDOT through the Local Programs Office
- Professional Engineers licensed to practice in the State of Tennessee on staff
- Conducts traffic counts and route studies in accordance with industry accepted methods
- Perform analyses utilizing highway capacity software (HCS) and traffic signal simulation software (SYNCHRO or other industry accepted software) in order to determine optimal signal timings and offsets
- Must be listed on TDOT's approved list of consultants

- Experience with MUTCD & ADA compliance as they relate to signalized intersections
- Perform travel time and delay studies along arterial corridors
- Experience programming traffic signal controllers
- Quantify the anticipated benefit/s of changes/recommendations
- Demonstrated experience and familiarity with the latest in signal systems, software and operating technologies

In addition,

- Heavy consideration will be given to the relevant experience and qualifications of the project manager and other team members; and
- The lead firm must have an established local office within the Nashville MPO region.

3.0 Disadvantaged Business Enterprise (DBE) Participation:

It is the policy of the City of Brentwood that DBE's, as defined in 49 C.F.R., Part 26, as amended, shall have the opportunity to participate in the performance of this project. The DBE requirements of applicable federal and state regulations apply to this project; including but not limited to project goals and good faith effort requirements.

Submitting firms agree to ensure that Disadvantaged Business Enterprises, as defined in applicable federal and state regulations, have the opportunity to participate in the performance of this project. In this regard, all recipients and Contractors shall take all necessary and reasonable steps in accordance with applicable federal and state regulations, to ensure that the Disadvantaged Business Enterprises have the opportunity to compete for and perform work under this project. Submitting firms shall not discriminate on the basis of race, color, national origin or sex in the award and performance of this project.

4.0 Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-- Primary Covered Transactions:

A Responding firm certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State or local department or agency;
2. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or agreement under a public transaction ; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery , falsification or destruction of records, making false statements, or receiving stolen property;

3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in this certification; and
4. Have not within a 3-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
5. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

5.0 Equal Employment Opportunity:

In connection with the performance of this project the submitting firms shall not discriminate against any employee or applicant for employment because of race, age, religion, color, sex, national origin, disability or marital status. Firms will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, age, religion, color, sex, national origin, disability or marital status. Such action shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships.

6.0 Lobbying

Submitting firms certify that no federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, and entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this grant, loan, or agreement, the firm shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

7.0 Title VI Civil Rights Act of 1964

Submitting firms shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), 49 C.F.R., Part 21, and related statutes and regulations. Submitting firms shall include provisions in all agreements with sub-tier firms and/or contractors that ensure compliance with Title VI of the Civil Rights Act of 1964, 49 C.F.R., Part 21, and related statutes and regulations.

8.0 Iran Divestment Act Requirements

Pursuant to Tennessee Code Annotated § 12-12-106 (as enacted by Chapter 817 of the Public Acts of 2016) the chief procurement officer for the State of Tennessee shall publish a list of persons determined to be engaging in investment activities in Iran. The list is to be posted on the website of the State of Tennessee. When competitive bidding is required, Tennessee Code Annotated § 12-12-111 requires every bid or proposal submitted to a local government for goods or services to include the following statement, subscribed or affirmed by the bidder as true under the penalty of perjury:

By submission of this bid or proposal, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

9.0 Americans with Disabilities Act of 1990 (ADA):

Submitting firms will comply with all the requirements as imposed by the ADA and the regulations of the Federal governments issued hereunder.

10.0 Conflicts of Interest:

No amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the submitting firms or their sub-contractors in connection with any work contemplated or performed relative to this agreement. Submitting firms hereby agree to include this requirement in all sub-tier agreements related to this project.

11.0 Statement of Qualifications

Firms must submit 3 copies of their Statement of Qualifications package that contains the following sections:

Letter of Commitment. The Letter of Commitment, addressed to:

Mr. Mike Harris
City of Brentwood
Traffic Signal Timing Optimization Project
P.O. Box 788
Brentwood, TN 37024

The letter should identify the lead firm and contact person, and other firms (if any) included on the team. The letter must identify the proposed project manager and other key staff of the team, and commit them to the contract if the team is selected. A Letter of Commitment should be included for each additional firm (if any) that is a member of the team. The letter must also state that the Statement of Qualifications shall remain in effect and will not be withdrawn for 90 days from the due date. Letters of Commitment should be signed by the duly authorized official of the firm/s.

Scope of Work. The Statement of Qualifications must include a statement that briefly summarizes the team's understanding of the work to be accomplished, with specific reference to the tasks described in the Scope of Work (Appendix A). The statement should also demonstrate that each member of the proposing team has a clear understanding of the work they may be asked to perform.

Statement of Approach. The work under this project requires specific expertise. This section of the Statement of Qualifications should describe the team's plan to accomplish the project. The Statement of Approach should include at a minimum: the team's approach to kick off the project; and the team's approach to staff assignment to areas of specialized need; and the firm's step-by-step overall general approach to accomplish the scope of work. Firms are encouraged to submit relevant samples of similar projects.

Qualifications / Relevant Experience. This section of the Statement of Qualifications should describe how the lead firm and any subcontracting firms are qualified to conduct the various tasks listed in the Scope of Work (Appendix A), and should summarize the experience of the lead firm and any subcontracting firms on similar projects. Include qualifications and experience of the firm and the project team, with particular emphasis placed on similar projects. Small and disadvantaged businesses that will be part of the team should be noted in this section.

Key Staff. Resumes for the proposed project manager and other key members of the team must be provided in the Statement of Qualifications. Information regarding State of TN professional engineering licensure and other traffic engineering related certifications should be included. Firms must also include an organizational chart of the team listing the specific specialties of each key staff member. The project manager is the most important member of the team. This person will serve as the single point of contact for the project. It is strongly recommended that the proposed Project Manager be the person that will have actual hands on responsibility for producing work products and directly managing day-to-day activity on assigned work tasks. This section should include a statement addressing the availability of personnel to work on this specific project.

11.0 Selection Process. The proposals will be evaluated by a "Consultant Evaluation Committee" that includes representatives of City of Brentwood staff. Award shall be made to the responsible firm whose proposal is determined to be the most advantageous, taking into consideration the evaluation factors set forth below. Each proposal will be ranked on a 1 to 10 scale for each of the evaluation criteria and multiplied by the weight factor. The scores on each factor will then be added to create the total score. The maximum score is 100. No cost information is to be submitted in initial responses to this RFQ.

WEIGHT	CRITERION	STANDARD
3.0	Scope/Approach	Does the proposal reflect a thorough, thoughtful, creative approach to the task? Is there evidence of a clear understanding of the project objectives, methodology to be used and results that represent goals desired from the project?
2.0	Experience	What specific applicable experience does the firm possess? What projects demonstrate relevant experience? Overall, how qualified is the firm to perform the specific elements in the scope of work?
2.0	Assigned Personnel	Do the persons who will be working on the project have the necessary skills? Are sufficient people of the requisite skills assigned to the project?
2.0	Availability	Can the work be completed in the necessary time? Can the target start and completion dates be met? Are other qualified personnel available to assist in meeting the project schedule if required? Is the project team available to attend meetings as required by the Scope of Work?
1.0	Small and Disadvantaged Business (SDB)	Does the response indicate Disadvantaged Business participation? SDB Participation? The higher the level of participation the more points possible in this category.

Based upon the evaluation of the written proposals, the highest ranking firms may be requested to participate in an in-person interview. If multiple interviews are conducted they will be subsequently ranked in order of ability to perform the work as demonstrated through the personal interviews.

12.0 Negotiations.

Once the most qualified firm is selected a cost proposal will be requested. Based on the information submitted and internal budgetary considerations, it may be necessary to adjust the Scope of Work based on funding limitations and input from the selected firm. If negotiations cannot produce a contract, an impasse will be declared and we will open negotiations with the second ranked firm. If agreement cannot be reached with the second ranked firm, contract negotiations are begun with the third ranked firm. This process continues until all interviewed firms are exhausted or a firm is awarded a contract.

13.0 Insurance.

Without limiting its liability, the selected consultant shall maintain, during the life of the contract: Worker's Compensation Insurance, Comprehensive General Liability Insurance, Automobile Liability Insurance, and Consultant's Professional Liability Insurance. This coverage may not be canceled, reduced or allowed to lapse without written notice to the City of Brentwood.

14.0 Form of Contract.

The City of Brentwood will be the lead agency in terms of execution of the contract, invoicing, and payment. The City of Brentwood anticipates that this procurement will result in a contract with one firm. It is anticipated the contract will take the form of the standard AIA contract with minor changes approved by the City of Brentwood and the selected firm. Consulting fees shall be paid monthly upon satisfactory completion of work tasks within each individual work order.

15.0 Completion.

The contract will cover a 12-month period from the date of contract award with options to extend for an additional period if necessary and approved by the City of Brentwood. Completion requirements for work tasks to be conducted under the contract(s) will vary depending upon the final scope of work and any approved changes made throughout the course of the project. Specific details of such requirements will be included under each individual work order.

16.0 Due Date / Instructions for Submission.

Three copies of the Statement of Qualifications must be received by the City of Brentwood at the address below no later than 2:00 PM, prevailing time, on Wednesday, February 8, 2017. Statements of Qualifications not received by that time and date will not be considered, and will be returned, unopened, to the proposing firm. The anticipated procurement schedule is summarized in Appendix D.

City of Brentwood
Attn: Mike Harris
Director of Engineering
P.O. Box 788;
5211 Maryland Way
Brentwood, TN 37024

17.0 Federal and State Interest.

The funding for this project is provided from state sources through the Tennessee Department of Transportation (TDOT) from federal sources through the Federal Highway Administration (FHWA). Specifically, the project is funded with Congestion Mitigation Air Quality (CMAQ) funds. Any contracts awarded pursuant to this Request for Qualifications will contain provisions required by the federal and state funding sources, as appropriate.

APPENDIX A

SCOPE OF WORK

This scope of work intended to provide a baseline from which to begin the project. The details of the scope of work may change slightly based on input from the selected consultant. The City of Brentwood will be the lead agency; however, the project will be administered in cooperation with TDOT Local Programs office. The scope of work below is intended to be general in nature and to serve as a starting point to accomplish the project objectives:

- Conduct kick-off meetings with the City of Brentwood;
- After notice to proceed, prepare and submit NEPA documentation for the efforts contained in this scope per local, state and federal requirements, coordinate approval, and any necessary revisions with TDOT Local Programs, TDOT Environmental Division, FHWA and the City of Brentwood.
- After NEPA approval and receipt of NTP to Preliminary Engineering phase, conduct a comprehensive study of the listed intersections (See Appendix B) to include collection of traffic data at all intersections in the study area to include volume and classification, travel times, route analysis, accident data as well as existing geometric data; and other tasks necessary to fully understand and document current conditions.
- Analyze the current signal timings, system configurations, equipment and coordination patterns;
- Conduct modeling of study area using the latest software and techniques;
- Develop new signal timing plans that optimize the signal systems along the corridors based on the latest traffic patterns that provides for maximum signal coordination
- Evaluate/modify number of time of day plans and periods required for maximum efficiency;
- Evaluate/develop special time of day plans for localized heavy patterns such as schools, etc;
- Provide recommendations for other modifications in the study area (i.e. signal system enhancements, turn lane construction, widening, pavement marking modifications, signage, etc.)
- Identify potential intersection deficiencies related to the Americans with Disabilities Act (ADA) requirements (PROWAG – Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way – July 26, 2011) and MUTCD.
- Coordinate with the City of Brentwood, TDOT as directed or needed throughout the study;
- Prepare a comprehensive final report documenting the results and recommendations of the study.

APPENDIX B

Intersection List:

CONCORD ROAD (SR-253) CORRIDOR

1. Concord Road at Franklin Road (SR-6 / US-31)
2. Concord Road at Brentwood Baptist Church west driveway
3. Concord Road at Brentwood Baptist Church east driveway
4. Concord Road at I-65 Southbound Ramp / General Macarthur Drive
5. Concord Road at I-65 Northbound Ramp / Lipscomb Drive
6. Concord Road at Knox Valley Drive / Heritage Way
7. Concord Road at Wilson Pike (SR-252)
8. Concord Road at Green Hill Boulevard
9. Concord Road at Edmondson Pike / Elmbrooke Boulevard
10. Concord Road at Crockett Road
11. Concord Road at Sunset Road

MOORES LANE (SR-441) CORRIDOR

12. Moores Lane at Franklin Road (SR-6 / US-31)
13. Moores Lane at Landings Drive
14. Moores Lane at Mooreland Boulevard
15. Moores Lane at General George Patton Drive
16. Moores Lane at Mallory Lane
17. Moores Lane at Galleria Boulevard
18. Moores Lane at I-65 Southbound Ramp
19. Moores Lane at I-65 Northbound Ramp
20. Moores Lane at Westgate Circle
21. Moores Lane at Carothers Parkway
22. Moores Lane at Gordon Petty Drive
23. Moores Lane at Wilson Pike (SR-252)

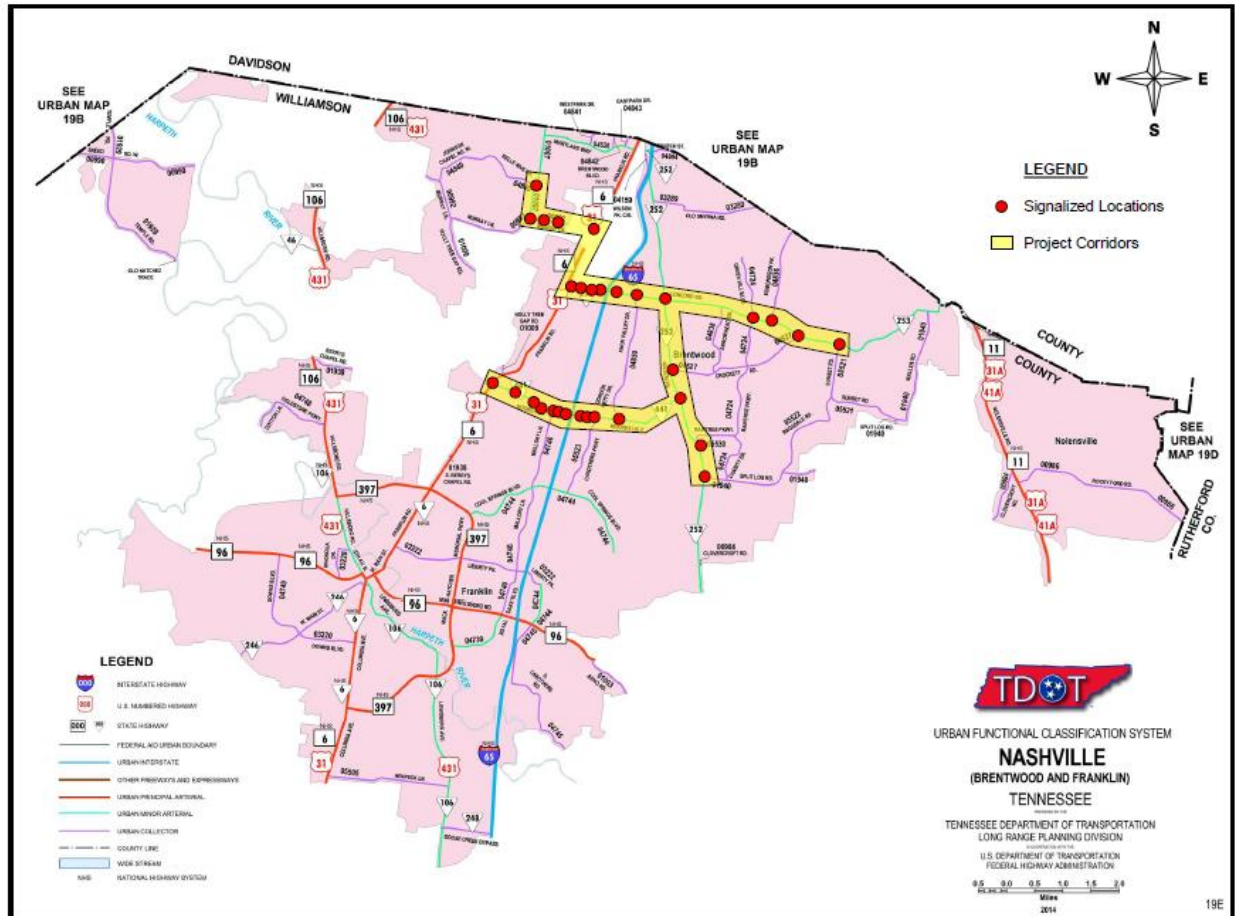
WILSON PIKE (SR-252) CORRIDOR

24. Wilson Pike at Split Log Road
25. Wilson Pike at Raintree Parkway
26. Wilson Pike at Crockett Road

MURRAY LANE CORRIDOR

27. Murray Lane at Franklin Road (SR-6 / US-31)
28. Murray Lane at Brentwood High School east driveway
29. Murray Lane at Brentwood High School west driveway
30. Murray Lane at Granny White Pike / Brass Lantern Place
31. Granny White Pike at Belle Rive Drive / McGavock Road

Appendix C



APPENDIX D

ANTICIPATED PROCUREMENT TIME SCHEDULE

January 4, 2017: RFQ Issued

January 24, 2017: Deadline for Technical Questions

January 31, 2017: Response to Technical Questions

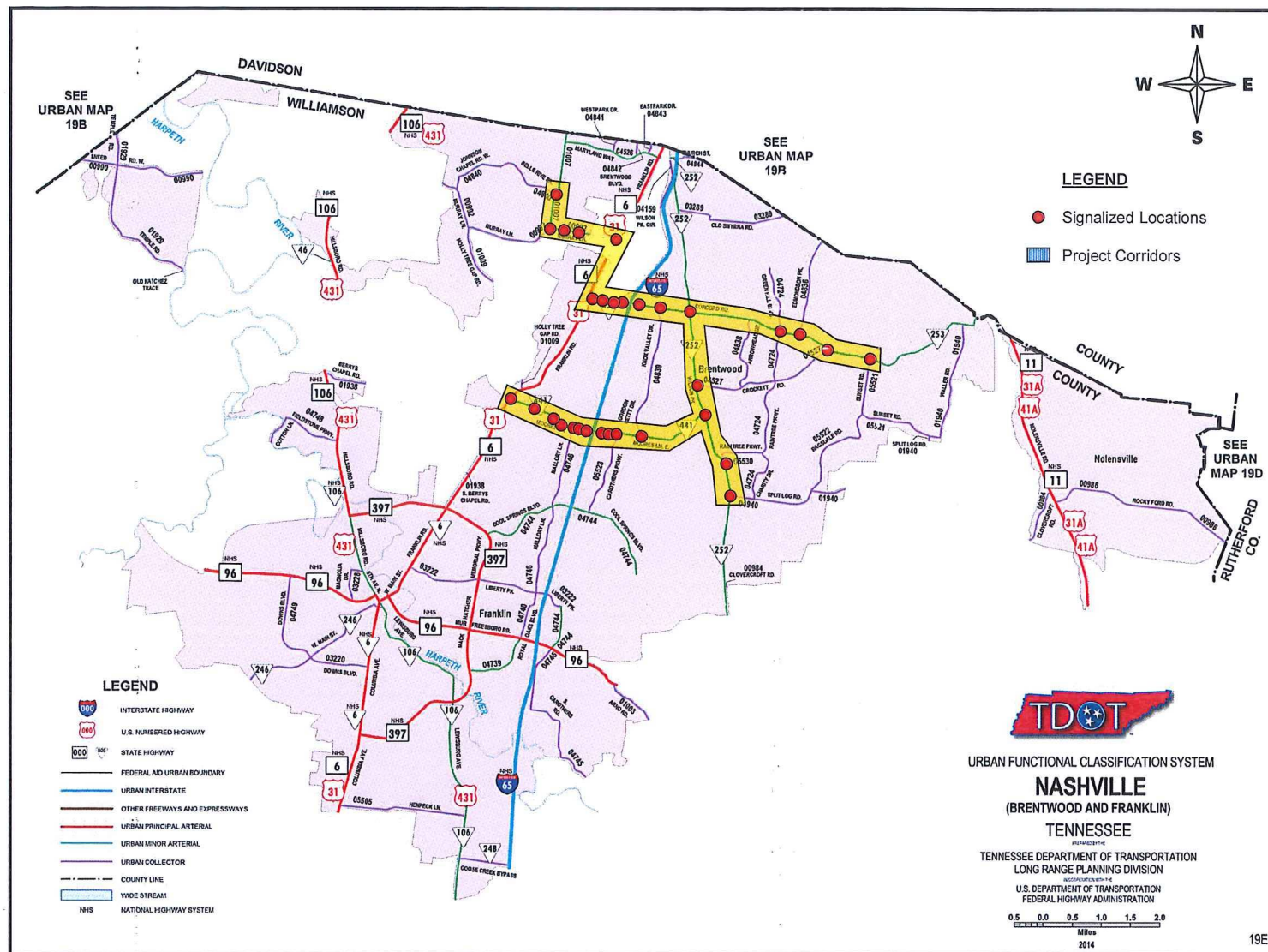
February 8, 2017: Statements of Qualifications Due

February 21-23, 2017: Presentations by Short Listed Firms *(if needed)*

March 13, 2017: Contract Award(s) and Notice(s) to Proceed

RFQ Evaluation for CMAQ Signal Study Project (1-10 points per category)

	Team Firms		Scope/Approach	Experience	Personnel	Availability	DBE	Total	Notes
Fisher Arnold	FTE		9	9	8	0	0	61	No DBE's and Out of State Team
Gresham Smith	Booker/Marr Traffic		10	9	10	9	5	91	Good proposal, not as familiar team members
Kimley Horn	ATDS		10	10	10	9	5	93	Good overal proposal
Neel Schaffer	RG Phillips/ATDS		9	10	10	9	7	92	Most DBE participation, a lot of work in pipeline
RPM	HFR		10	10	9	10	0	88	No DBE's and unfamiliar personnel



Brentwood City Commission Agenda

Meeting Date: 03/27/2017

Official Renaming of the Dog Park at Tower Park to Barkwood Dog Park

Submitted by: Dave Bunt, Parks & Recreation

Department: Parks & Recreation

Information

Subject

Official renaming of the dog park at Tower Park to Barkwood Dog Park.

Background

For the past five year, the City's dog park has been known as the Nutro Dog Park under a sponsorship agreement with Nutro. At the March 13, 2017 City Commission meeting, the Commission approved a new three year sponsorship agreement with Mars Petcare for the dog park at Tower Park. As part of the sponsorship negotiations, Mars indicated that it wanted the City to name the dog park with Mars Petcare being recognized as the park sponsor.

At its March 6, 2017 meeting, the Park Board was given six potential names that were provided by staff. The Park Board selected Barkwood Dog Park as the name it is recommending to the City Commission for adoption. If the new name is approved, appropriate new signage will be installed using funds accumulated from the sponsorship agreement.

Please contact the Parks Director or Community Relations Director if you have any questions.

Staff Recommendation

Staff is recommending approval of this name change.

Previous Commission Action

At the March 13, 2017 meeting, the City Commission approved a sponsorship agreement with Mars Petcare for the city's dog park.

Fiscal Impact

Amount : 500.00

Source of Funds: Park Trust

Account Number: 615-41900-83153

Fiscal Impact:

New Signage will be made for this name change using funds set aside in the Park Trust account.

Attachments

No file(s) attached.
