



**RESOLUTION 06-1 ■**

**"A RESOLUTION OF THE RAYMORE CITY COUNCIL ADOPTING THE RAYMORE TRANSPORTATION PLAN."**

**WHEREAS**, the City commissioned a Transportation Plan from consultant TranSystems Corporation; and

**WHEREAS**, the City Council has received a presentation and has conducted two work sessions on said master plan; and

**WHEREAS**, the various master plans commissioned by the City in 2003 are to become appendices to the Growth Management Plan upon their formal acceptance by the City Council; and

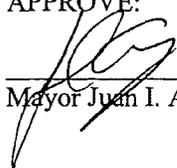
**WHEREAS**, the master plan is a guide which does not commit the City Council to any particular action but which serves to assist in the City's long-term planning;

**NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF RAYMORE, MISSOURI**, that the 2004 Transportation Plan is accepted as a guide for the future development of the City's transportation system.

Duly read and passed this 13th day of March, 2006 by the following vote:

Councilmember Adams	Aye
Councilmember Eldridge	Absent
Councilmember Goff	Aye
Councilmember Hubach	Aye
Councilmember Jacobson	Aye
Councilmember Seimears	Aye
Councilmember Van Hooser	Aye
Councilmember Waite	Aye

APPROVE:

  
\_\_\_\_\_  
Mayor Juan I. Alonzo

ATTEST:

  
\_\_\_\_\_  
Susan Gnefkow, City Clerk

**RESOLUTION 10-04**

**“A RESOLUTION OF THE RAYMORE CITY COUNCIL APPROVING AN AMENDMENT TO THE RAYMORE TRANSPORTATION MASTER PLAN.”**

**WHEREAS**, the City Council adopted the Transportation Master Plan on March 13, 2006; and

**WHEREAS**, the Transportation Master Plan is a guide which does not commit the City Council to any particular action but which serves to assist in the City's long-term planning; and

**WHEREAS**, the Street Classification Map, contained in the Transportation Master Plan, is included by reference in the Growth Management Plan that is adopted by the Raymore Planning and Zoning Commission; and

**WHEREAS**, the Planning and Zoning Commission, during its 2009 annual review and report on the Growth Management Plan, recommended to the City Council several amendments to the Street Classification Map.

**NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF RAYMORE, MISSOURI, AS FOLLOWS:**

Section 1. The amended Transportation Master Plan, attached hereto as Exhibit A, is hereby adopted as recommended by the Planning and Zoning Commission and as discussed by the City Council at its January 4, 2010 work session.

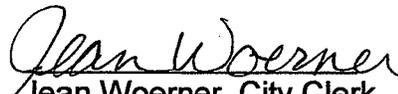
Section 2. This Resolution shall become effective on and after the date of passage and approval.

Section 3. Any Resolution or part thereof which conflicts with this Resolution shall be null and void.

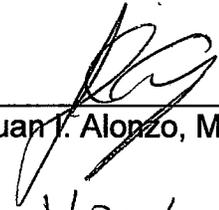
**DULY READ AND PASSED THIS 25TH DAY OF JANUARY 2010 BY THE FOLLOWING VOTE:**

Councilmember Adams	Aye
Councilmember Cox	Aye
Councilmember Hubach	Nay
Councilmember Kellogg	Aye
Councilmember Kerckhoff	Aye
Councilmember Lewis	Aye
Councilmember Medsker	Aye
Councilmember Seimears	Aye

ATTEST:

  
Jean Woerner, City Clerk

APPROVE:

  
\_\_\_\_\_  
Juan F. Alonzo, Mayor

11/26/10  
\_\_\_\_\_  
Date of Signature

## **Introduction**

---

This update to the City of Raymore's transportation plan was developed in conjunction with the on-going update of the City's Growth Management plan. This study consists of several major components, including:

- Future Traffic Volume Projections
- Street Classification Categories and Classification Map
- Typical Roadway Cross-Sections
- Improvement Prioritization and Costs

This report summarizes the findings and recommendations of each of these components.

## **Future Traffic Volume Projections**

---

This section summarizes the steps taken to project the 20-year future traffic volumes on major streets in Raymore and an assessment of the proposed street network.

### ***Existing Traffic Volumes***

Twenty-four hour machine traffic counts and peak hour turning movement counts were taken at various locations throughout the City to establish existing conditions. These counts are summarized on **Figure 1**. Traffic volumes shown in this figure were collected in a variety of ways. At some locations, road tubes were placed across the streets at traffic data was logged for a 24-hour period. At other locations, a person was stationed at the intersection and they counted traffic volumes on each leg of the intersection for a period ranging from 30 minutes to two hours (most counts were two hours, 30 minute counts were used on some minor cross streets and drives along Route 58 where longer counts were available at adjacent intersections). This data was then converted to daily traffic volumes based on factors developed from the 24-hour counts. These counts were taken at various times of the year and are intended only to indicate general magnitudes of traffic. The identified needs in the generally undeveloped areas were identified primarily using the future traffic projections, as described below.

### ***Future Traffic Projection Development***

Future traffic projections were developed for the major streets in the Raymore area by developing a simplified transportation demand model. This model takes into account the capacity of the proposed street system and anticipated development throughout the area over the next 20 years. The City was divided into a series of zones and the anticipated development assigned to each of those zones to reflect development patterns.

Population and employment growth over the next 20 years were obtained from the Growth Management Plan. This socio-economic data was distributed based on a factor of each traffic analysis zone's attractiveness and available land. Similar growth patterns were assumed for the available land in Lee's Summit, Belton and unincorporated Cass County.



***Adequacy of the Street Network***

The resulting future traffic projections indicated that most roadways in the major street network have traffic volumes under 3,000 vehicles per day. For these roadways, a basic two-lane facility is generally adequate. Route 58 will be the primary east-west route through the City. This route also will carry the highest traffic volumes. Existing and future projected traffic volumes on this route are summarized below (in vehicles per day):

Route 58

- At Kentucky – Existing 26,000, Future 37,000
- At Pine – Existing 14,000, Future 29,000
- At Route J – Existing 8,000, Future 25,000

Other key routes were grouped based on the ranges of future traffic volumes anticipated.

Traffic Volumes in the 8,000 to 20,000 vehicles per day range:

- Dean/Kentucky
- Route J/Kurzweil
- Ward Road
- 155th Street

Traffic Volumes in the 3,000 to 12,000 vehicles per day range:

- Foxridge
- North Madison
- South Madison
- Prairie Lane
- 163rd Street
- Lucy Webb Road
- Hubach Hill Road

It is also important to note that these are 20-year traffic volume projections. While adequate for identifying and prioritizing improvements, longer-term “ultimate” traffic needs should be considered when establishing the classification or right-of-way needs for roadways.

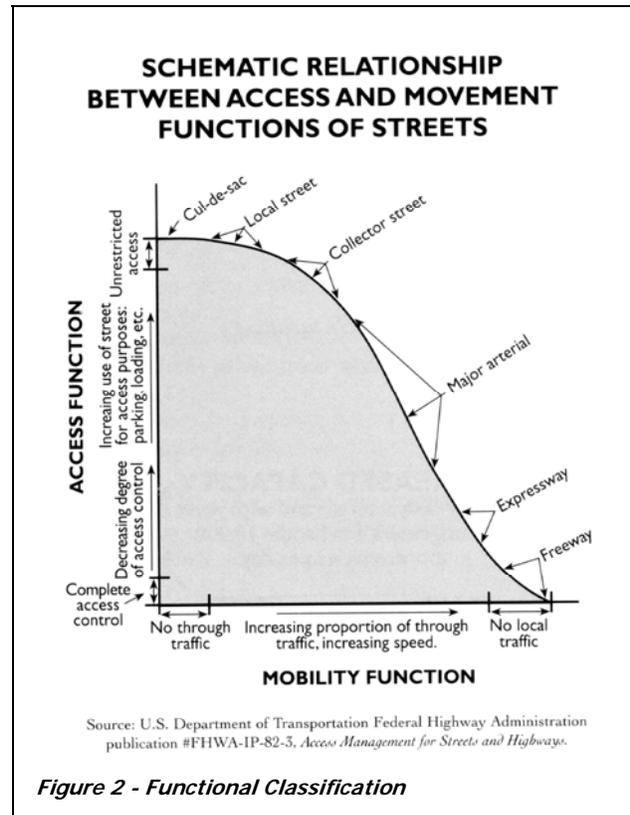
## Street Classification

Safe and efficient operation of streets and highways requires that these facilities be classified and designed for the functions that they will perform. The entire road system is traditionally classified by relating the proportion of through movement to the proportion of access such as shown in **Figure 2**. Freeways, which have full control of access and serve only the movement function, are at one end of the scale; local streets, which predominately provide for land access, are at the other end of the scale because they have little or no through movement. Collector and arterial streets normally must provide a balance between movement and access functions.

For the City of Raymore, five street classifications have been developed:

- **Major Arterial:** Roadway that is of regional importance and is intended to serve high volumes of traffic traveling relatively long distances. A major arterial is intended primarily to serve through traffic, and access is controlled.
- **Minor Arterial:** Roadway that is similar in function to major arterials, but operates under lower traffic volumes, serves trips of shorter distances, and provides a higher degree of property access than major arterials.
- **Major Collector:** Roadway that provides for traffic movement between arterials and local streets and carries moderate traffic volumes over moderate distances. Collectors may also provide direct access to abutting properties except individual residences.
- **Minor Collector:** Roadway that is similar in function to a major collector, but carries lower traffic volumes over shorter distances and has a higher degree of property access.
- **Local:** Roadway that is intended to provide access to abutting properties, tends to accommodate lower traffic volumes, serves short trips, and provides connection to collector streets.

Based on these functions, the proposed future land uses and estimated future traffic volumes, a major street classification map has been developed and is attached as **Figure3**.





Some general observations regarding this map:

- East-west travel is the predominate travel pattern in the City, particularly travel to and from U.S. 71. As such, Route 58 will serve as the Major Arterial route to move traffic to and from development within Raymore to the highway system and across the City. Therefore, it is critical that moving traffic efficiently be the primary function of this route and that access management along this route be a key priority.
- While not as significant as the east-west travel patterns, there are also north-south travel demands in the City. Most of this demand is to bring traffic from developed areas to Route 58, however, there is also some intercommunity north-south travel. To serve these needs, several north-south minor arterials have been identified.
  - Kentucky Avenue/Dean Avenue will serve to not only move north-south traffic but will be the key parallel route to U.S. 71 that provides local access to the higher intensity development along the highway. It is recommended that the offset between Dean Avenue and Kentucky Avenue at Route 58 be modified so that either both of these roads intersect Route 58 at the same location or be separated by at least 800 feet, otherwise these two closely spaced intersections will become a congestion point due to the inefficient operation of this configuration. Because existing or planned development likely precludes the alignment of the two routes, the street system map reflects a realignment of Kentucky Avenue to the east to provide the desired separation from Dean Avenue. The south leg of this intersection would align with a proposed major entrance to a development.
  - While Madison Avenue currently carries higher traffic volumes than Route J/Kurzweil, existing adjacent development will make it difficult/undesirable to expand in some areas and Route J/Kurzweil provides more regional connectivity, extending north into Lee's Summit as an arterial route and south into Peculiar as their primary north-south arterial. Because of Madison/School Road's importance as a connector to the high school, long-term improvements will be needed on this route to bring it up to minor arterial street standards.
  - Ward Road has also been identified as a north-south arterial to serve the eastern part of the community as it develops. Ward Road provides connectivity to the north into Lee's Summit as an arterial.
- Major collectors have been designated on the remaining east-west and north-south section line roads with the Raymore planning boundary. In addition, Foxridge Drive between Lucy Webb Road and 155th Street has also been designated as a major collector.
- Route 291 is planned as a future freeway. The street classification map also identifies the intersections with Route 58, Hubach Hill Road and 203rd Street as potential future interchange locations. The adjacent collector street system will be critical to the development of areas adjacent to the Route 291 highway. Connections to Route 58, Hubach Hill Road and 203rd Street within one-quarter mile of the ramps should also not be permitted.

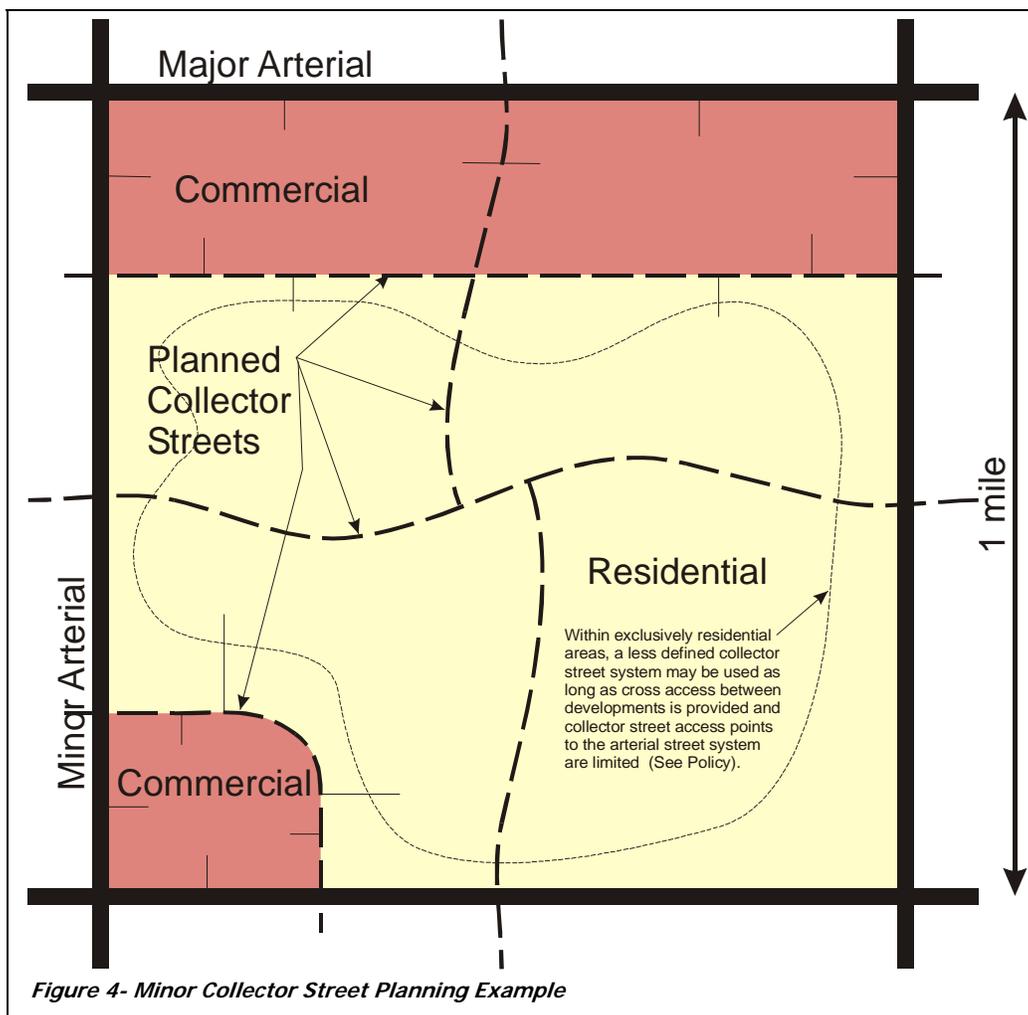
### ***Minor Collector Street Planning***

Collector streets are the backbone of an effective street network. These streets, both those classified as minor collector streets and those within or adjacent to developments that serve in this capacity, allow many developments to be efficiently served from a limited number of connections to the major (arterial) street system.

***The alignments shown for future minor collectors on the street classification map are not intended as exact alignments, they are shown to depict the general network only.*** The following requirements should be applied in the development of the minor collector street system.

- Prior to the approval of any new development in a section of land, the City shall develop a conceptual collector street system for the area bounded by the section line roads containing the development based on zoned and master planned land uses within the area. Consideration must also be given to existing or planned connections and collector streets in adjacent sections, existing property lines and topographic features.
- The proposed development plan may propose an alternative collector street system as long as the principals described above are followed. The alternative collector street system must be approved along with the development plan not only within the development itself but within the entire mile section. Within exclusively residential areas, continuous collector streets are desirable, but not essential. In these areas, a less defined collector system may be utilized, but should provide connectivity between developments and relatively direct access to the designated collector street connections to the arterial street system.
- Collector roads shall be public streets.
- A collector street may serve both residential and commercial development, but should be planned to discourage use by commercial traffic into residential areas.
- Minor collector streets should connect to arterial streets at desirable full access locations along these arterial routes (e.g. typically at ¼ mile or ½ mile spacing). The connection should also be made at a location suitable for future traffic signal installation.

An example of a collector street network is shown on **Figure 4**. Note that in order to maintain good connection spacing on the arterial roadways, commercial development areas should be at least 1/4 mile by 1/4 mile in size.



## **Typical Sections**

---

For each of these roadway types, several “typical” sections have been developed depending on the character of the adjacent development.

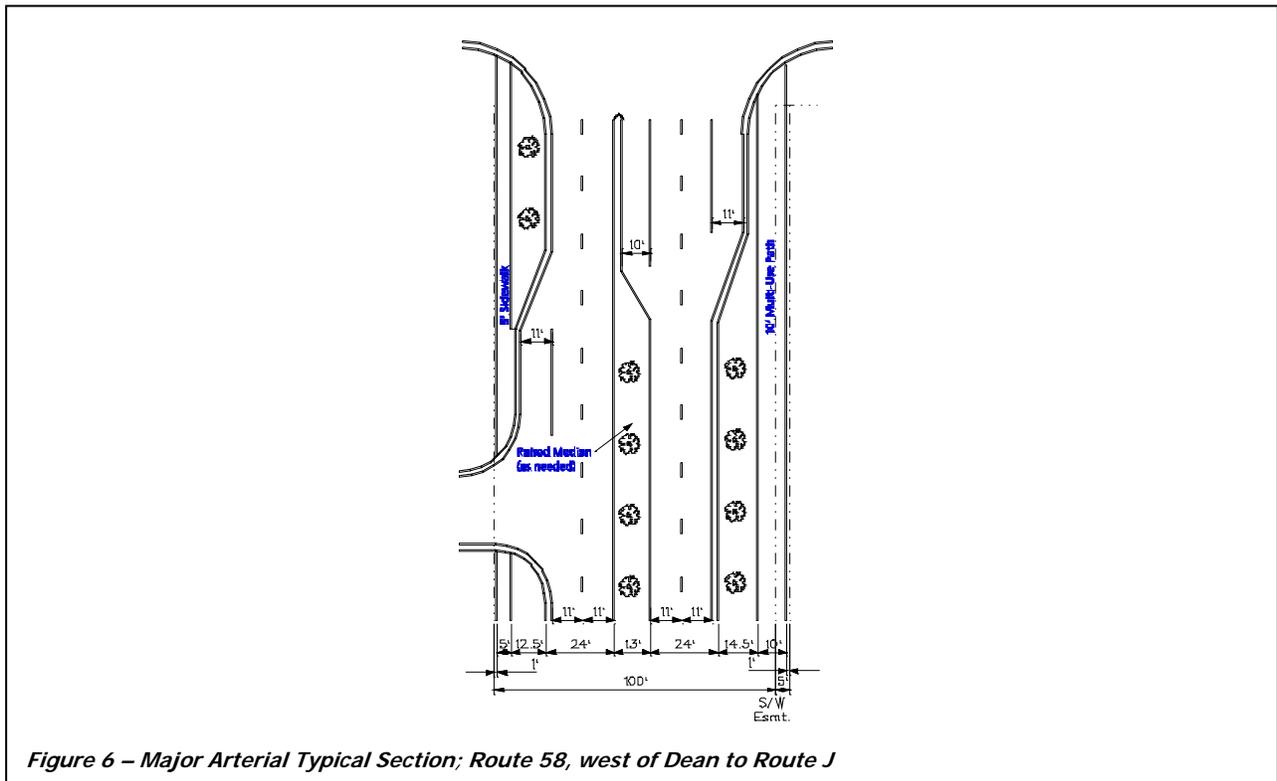
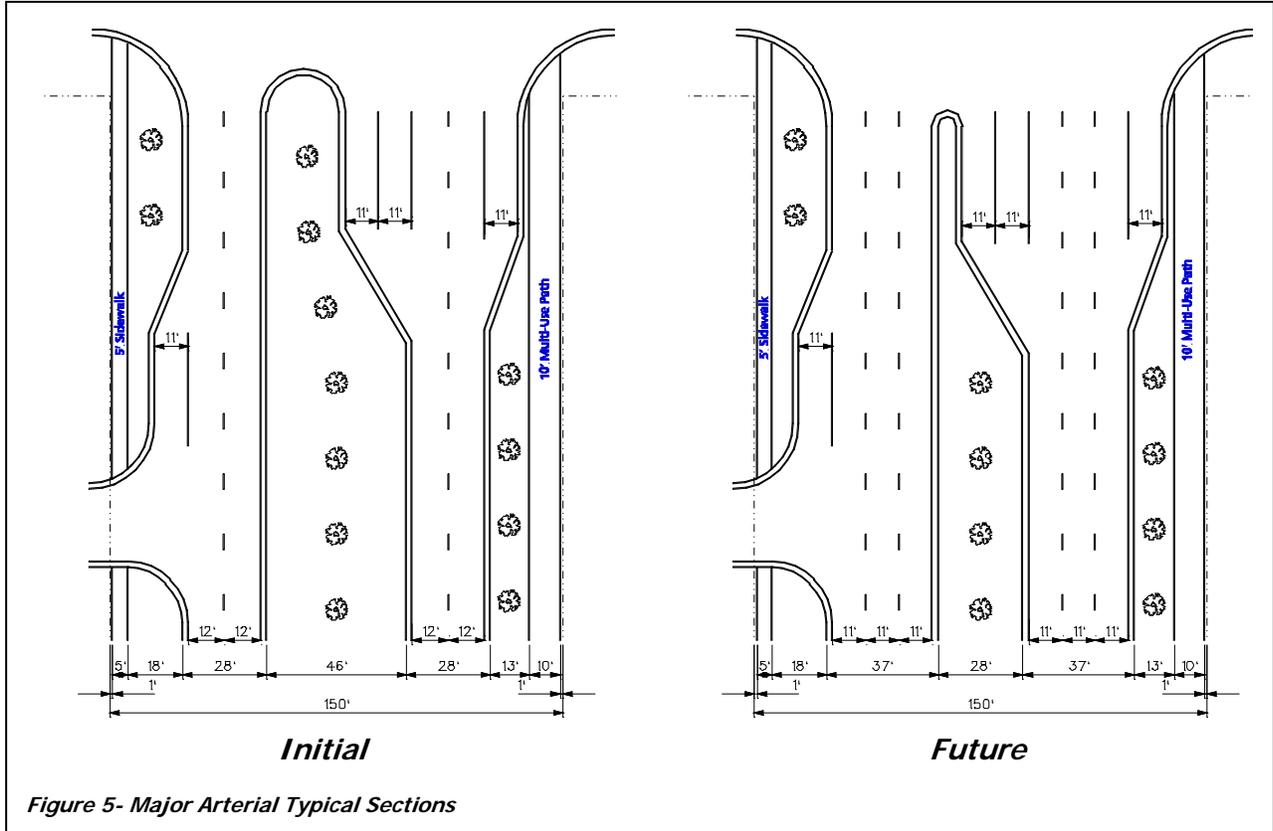
### *Major Arterial*

Route 58 should be developed to allow the maximum flexibility and expandability. This means allowing for dual left-turn lanes at key intersections, right-turn lanes at all intersections and left-turn lanes at all median openings. The roadway should have a raised median to control access. The cross section also provides for an ultimate six through lanes. While this may not be needed for 30 years or more, providing adequate right-of-way now before development occurs will be the one opportunity to preserve this right-of-way in a cost effective manner. Provisions are also provided for sidewalks and a multi-use path. If it is undesirable to construct raised medians at this time, 150-foot right-of-way should still be acquired in order to maintain the ability to install them along the corridor **if needed** in the future. The major arterial cross sections are shown on **Figure 5**.

This roadway shall be designed for a posted speed of 45 M.P.H. with a maximum grade of 6 percent.

For Route 58 through already developed areas, it will not be possible to provide 150 feet of right-of-way, therefore, a reduced cross section has been developed as shown below on **Figure 6**. For the section of Route 58 between Dean Avenue and Route J, it may be necessary to reduce the posted speed to 35 M.P.H.

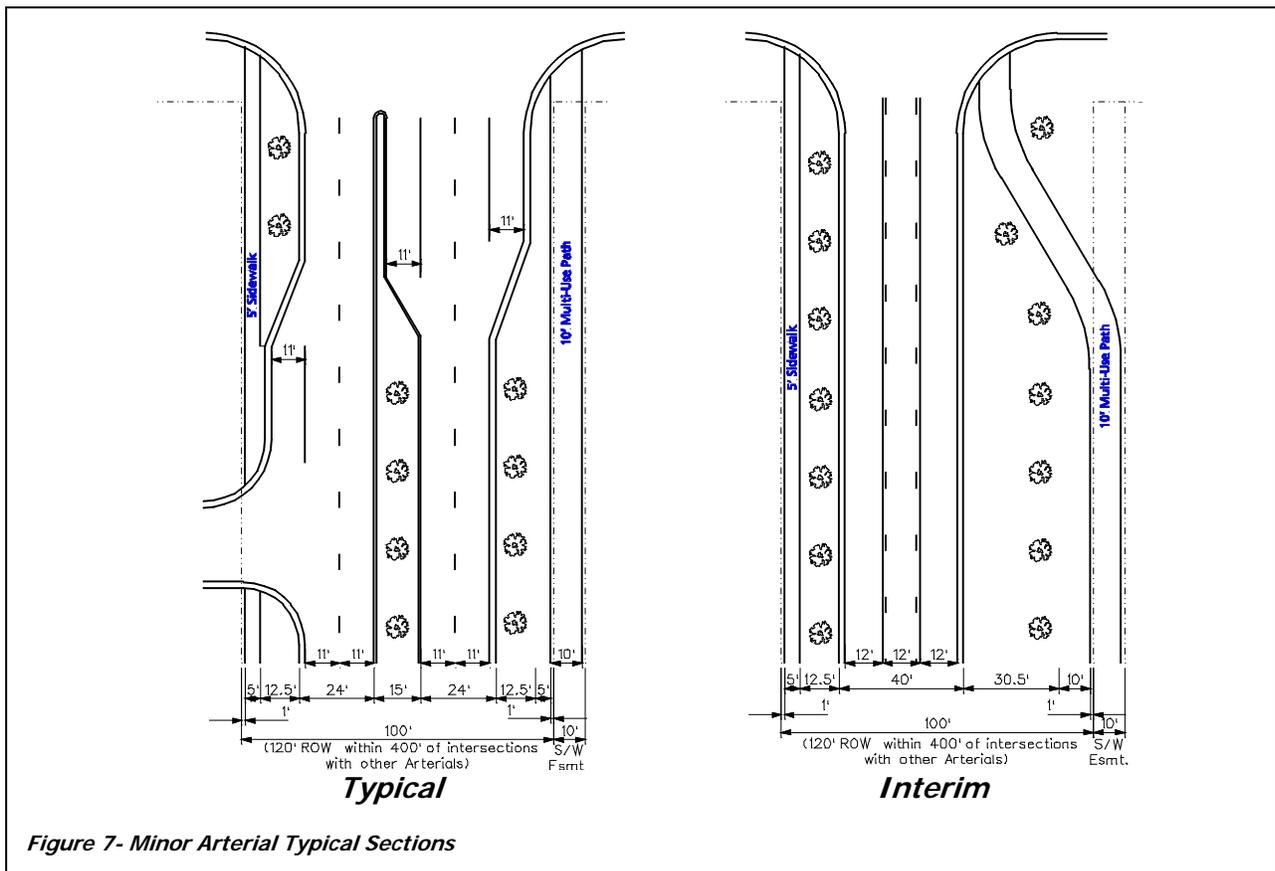
This cross-section includes reduced design standards in order to accommodate the existing roadway width. Where needed, these include a 10 foot left turn lane width and an adjacent three foot median. Due to the narrow median, it is also difficult to achieve fully effective median designs at the locations indicated for left-turn in, right-in/right-out at some of the cross streets and drives. The median design shown does not fully restrict the ability to left-turn out from these locations. Increase signing and enforcement may be required at these locations to keep vehicles from making illegal movements. Raised medians are recommended to be installed on Route 58 on an **if-needed** basis – in conjunction with new development projects or when safety or operational problems arise that are not suitable to be addressed by other means.



*Minor Arterial*

Two typical sections have been developed for minor arterials, one for sections where traffic volumes warrant the improvement to the full cross section in the short term and one for where the roadway is in need of improvements, but the full cross section will not be needed for 15 years of more. This interim cross section can then be expanded to the full cross section in the future. The minor arterial cross sections are shown on **Figure 7**.

Minor arterials shall be designed for a posted speed of 45 M.P.H. with a maximum grade of 6 percent.

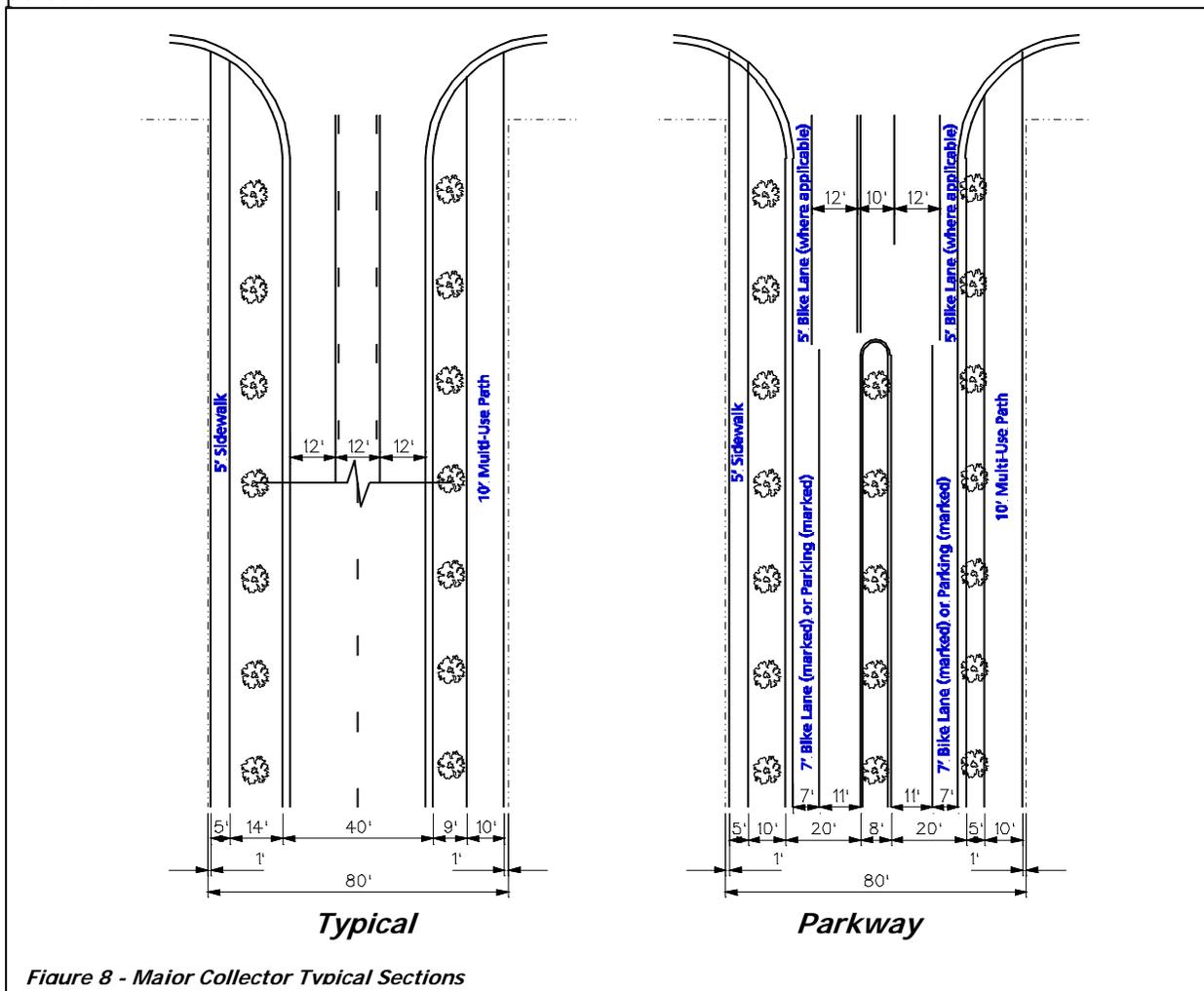


*Major Collector*

For major collector streets, four typical sections have been developed for use depending on the character of the adjacent development. The “typical” layout is for use in all areas except where one of the other cross sections are designated. In commercial areas or areas where cross streets are frequent, the pavement should be marked with a continuous center turn lane. Where major turning points are less frequent, the pavement can be marked as a two lane roadway with left-turn bays marked at major intersections or driveways.

The “rural” layout is for use in rural areas - those with adjacent low density residential (less than one unit per three acres) or agricultural use and limited driveways. This section can also be used as an "interim" cross section in areas not expected to develop for at least 15 years. The section should only be used in areas where cross section is appropriate for segments of at least one mile. The multi-use path is required along routes designated as bikeways or greenways. The major collector cross sections are shown on **Figure 8**.

Major collectors shall be designed for a posted speed of 35 M.P.H. with a maximum grade of 6 percent.



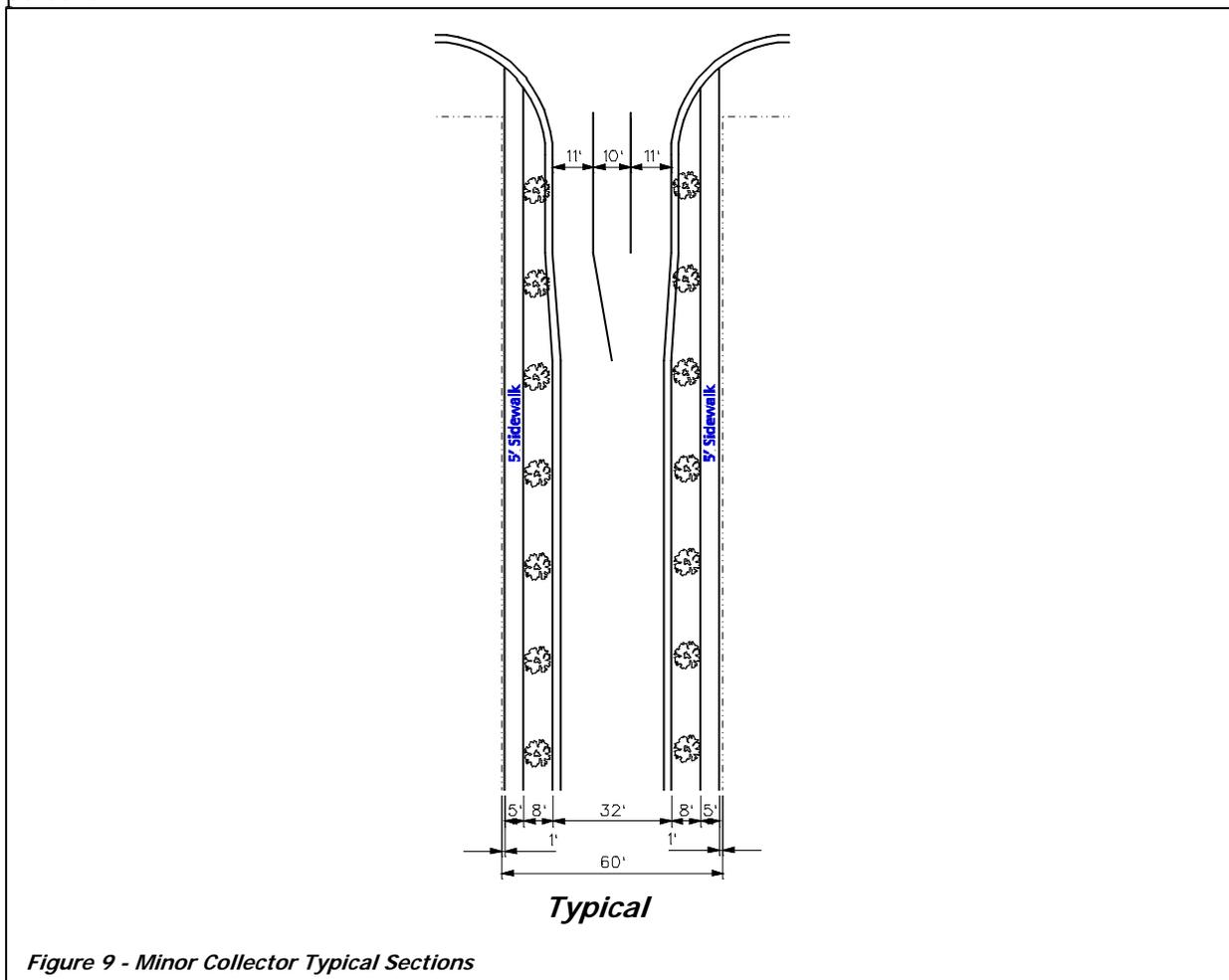
*Minor Collector*

For minor collector streets, three typical sections have been developed for use depending on the character of the adjacent development. The “typical” layout is for use in all areas except where one of the other cross sections are designated. Parking is permitted on one side of street. The roadway section should widen to 36' (back of curb to back of curb) within 250' of existing or future intersections with other collector or arterial streets to allow for left-turn lane.

The “rural” layout is for use in rural areas - those with adjacent low density residential (less than one unit per three acres). The layout should only be used in areas where the cross-section is appropriate for segments of at least one-half mile. The roadway section should widen to 32' within 250' of existing or future intersections with other collector or arterial streets to allow for a left-turn lane.

Minor collectors adjacent to or within commercial (retail, office, etc.) areas shall utilize the Major Collector cross-sections. The minor collector cross sections are shown on **Figure 9**.

Minor collectors shall be designed for a posted speed of 35 M.P.H. with a maximum grade of 8 percent.



### *Local Streets*

The typical recommended cross section for local streets is a 26 foot wide (back of curb to back of curb) roadway with five foot sidewalks on each side. The sidewalks should be located one foot inside the right of way limits, leaving a six foot green space between the curb and sidewalk on each side of the road.

### *Residential Driveways*

Residential driveways shall not be permitted on arterial or collector streets.

### *Traffic Signals*

While traffic signals are effective at reducing delay for cross-street traffic at high-volume major streets, they generally increase overall delay at the intersection and thus should only be installed when warranted per the Manual on Uniform Traffic Control Devices. Later in this study a plan has been developed to identify acceptable locations for traffic signals along the Route 58 corridor. At locations where cross street delays become high, but are not identified as future signal locations, it is recommended that left-turns be restricted from the cross-street instead of installing undesirable traffic signals.

Along major corridors, such as Route 58, it is recommended that interconnect be provided between all traffic signals. In addition, interconnect is recommended on all streets where the spacing between traffic signals in one-quarter mile or less. Providing interconnect between traffic signals allows the signals to communicate with each other and thus enables coordination between these signals, thus better facilitating traffic flow on the major streets.

### *Access Management*

In order to maintain the efficient flow of traffic on arterials streets development should adhere to the following access management standards:

- Access points along major arterials should be limited to one-eighth mile.
- Private drive access should not be permitted. A collector street system or cross access developed between properties that allows all traffic to achieve access via public cross streets.
- Full turning movements should be restricted to one-quarter mile spacing.
- Right turn lanes should be provided at all cross streets and commercial drives on major arterials. On minor arterials they should be provided at all cross streets and driveways anticipated to generate more than 25 right turns from the arterial in the peak hour.
- Right and left-turn bays shall provide 150 foot minimum storage.
- Corner radii shall be a minimum of 30 feet for all cross streets and for commercial drives anticipated to generate more that 25 right turns from the arterial in the peak hour. The minimum radii for all other non-residential driveways shall be 15 feet.

Raised medians are generally a key component of access management. Current direction of the City Council is not to include medians as part of the typical sections. However, consideration may be given to the installation of medians on a case by case basis.

Whenever medians are permitted by Council:

- Raised medians should be constructed with full median openings no more than every one-quarter mile.
- Left-in only median openings (that physically restrict left turns and through movements from the cross street) may be permitted at more frequent spacing as long as acceptable turn bays can be provided (typically 150 feet minimum storage) and the cross street meets the minimum access spacing requirements.
- Left-turn bays shall be provided at all median openings. Where left-turn volumes are anticipated to be in excess of 300 vehicles in the peak hour, dual left-turn lanes should be provided unless indicated otherwise by a traffic study.

In the future, as traffic volumes increase on major routes additional consideration should be given to the need for medians. Design of arterial roads, access points and internal site circulation should be done in a way that would accommodate medians as needed in the future.

Internal/cross access between compatible properties should be encouraged to minimize the frequency with which motorist need to turn on to and off of adjacent arterials. This internal circulation should allow motorists to move between developments, within reason, without having to utilize arterial streets. The cross access should also allow motorists improved access to collector and other side streets – this allows traffic to get to locations where it may be more suitable to place a traffic signal along the arterial corridors and reduce the need to provide traffic signals to serve relatively low volume cross streets as traffic volumes grow on the arterials.

**Improvement Prioritization and Cost Estimates**

***Existing Plans and Programs***

*1995 Raymore Growth Management Plan*

The 1995 Growth Management Plan identified a number of roadway system improvements, many of which have been completed. These are summarized, along with their status, in **Table 3**.

**Table 3**  
**1995 Growth Management Plan Projects**

<b>Project</b>	<b>Est. Cost</b>	<b>Status</b>
Lucy Webb – Outer Road to Foxridge, Madison to Kurzweil	\$200,000	Complete
Lucy Webb – Foxridge to Madison	\$200,000	Complete
S. Madison – Lucy Webb to Hubach Hill	\$200,000	Complete
N. Madison – Route 58 to 155th	\$3,600,000	Not Completed
163rd – Madison to Kentucky	\$3,600,000	Not Completed
Foxridge – Route 58 to 163rd	\$2,200,000	Complete
Kurzweil – 163rd to Route 58	\$2,500,000	Not Completed

*2004-2008 Raymore CIP*

A number of transportation capacity or traffic signal related projects are identified in the City’s 2004-2008 CIP. These projects include:

**Table 4**  
**2004-2008 Raymore CIP Projects**

<b>Project</b>	<b>Est. Cost</b>	<b>Construction</b>
Traffic Signal – Foxridge & Lucy Webb	\$223,000	2005
U.S. 71 & the North Cass Pkwy. (Future Route 58) interchange	\$3,350,000	2005
Ward Road – Route 58 to N. City Limits	\$2,825,000	Beyond 2008
Dean Avenue – Lucy Webb to Hubach Hill	\$2,369,000	Beyond 2008
Dean Avenue – Foxwood Drive to Lucy Webb	\$2,184,000	2006
Lucy Webb – Silvertop to Sunset	\$1,379,000	2008
Lucy Webb – Sunset to Madison	\$1,419,000	Beyond 2008
Madison Street – Foxwood to Gore Road	\$2,080,000	Beyond 2008
Madison Street – Lucy Webb to Hubach Hill	\$2,487,000	Beyond 2008

*MARC Transportation Improvement Program (TIP)*

There are currently no projects on the MARC TIP for 2004-2007; however, funding has been applied for in the 2008 TIP program for improvements to Kentucky Avenue from Route 58 to 155th Street. This project is estimated to cost approximately \$6 million dollars, \$500,000 for

engineering, \$250,000 for right of way, \$5.25 million for construction, of which \$4.2 million could come from the TIP program, if approved.

***Transportation Improvement Prioritization***

Based on City infrastructure projections, the primary growth areas in the City of Raymore over the next 10 years are going to focus on two areas: The roughly four square mile area north of Route 58 bounded by Kentucky Avenue, Madison Street and 155th Street; and an area wrapping around the southwest portion of existing development in the City, generally between U.S.71 and Foxridge from south of Route 58 to the proposed North Cass Parkway (Future Route 58) corridor, and then along the North Cass Parkway corridor from U.S.71 east to Route J. These two areas are also where the focus of transportation improvement needs are to support this future development.

In addition, resources should be focused on the increasing capacity needs of the Route 58 corridor, particularly from Sunset Street west to the City Limits. Obviously, the City has other transportation needs as well, to address pavement condition, developer agreements, system continuity, joint city agreements, etc. that will also have to be factored in to these priorities.

**Table 5**  
**Proposed Transportation Plan Projects**

<i>Project</i>	<i>Est. Construction Cost<sup>1</sup></i>	<i>Year<sup>2</sup></i>	<i>Comments</i>
<b><i>North of Route 58</i></b>			
Kentucky Avenue – Route 58 to 155th, improve to “interim” minor arterial standards (with Belton), relocate Route 58 intersection.	\$4,500,000	2008	These projects improve access for northern Raymore to U.S. 71 via 155th and 163rd Streets and thus provide relief to Route 58. With the commencement of the Creekmoor projects, these improvements will also help to shift that traffic away from Route 58
163rd Street – Foxridge to Kentucky, improve to major collector standards	\$2,200,000	2010	
155th Street – Foxridge to Kentucky, improve to “interim” minor arterial standards (with KCMO)	\$1,600,000	2012	
163rd Street – Madison to Sunset, improve to major collector standards	\$800,000	2010	Completes 163rd Street between U.S. 71 and Route 291 allowing 163rd Street to become an alternate parallel route to Route 58.
Madison Street – Route 58 to 163rd Street, improve to major collector standards	\$2,600,000	2015	As traffic volumes increase, this road will need improvement to City standards
Madison Street – Route 163rd to 155th Street, improve to major collector standards	\$2,700,000	2015	

<sup>1</sup>Construction in 2004 dollars – includes design, right-of-way, does not include utility relocation.

<sup>2</sup>Projections based on traffic volume growth, assumes uniform traffic growth in City, development patterns or safety needs may impact prioritization.

**Table 5 (continued)**  
**Proposed Transportation Plan Projects**

<i>Project</i>	<i>Est. Construction Cost<sup>1</sup></i>	<i>Year<sup>2</sup></i>	<i>Comments</i>
<b>South of Route 58</b>			
Dean Avenue – Route 58 to Lucy Webb, improve to minor arterial standards, relocate Route 58 intersection, install traffic signal	\$2,700,000	2006	Relocation of the Dean intersection east to align with Kentucky will allow better operation of the Route 58 corridor and provide north-south continuity for this roadway. This roadway will also allow the de-emphasis of the U.S. 71 east outer road – while not in Raymore, congestion at the outer road intersection at Route 58 influences the operation of the Route 58 corridor.
Dean Avenue – Lucy Webb to the North Cass Parkway (Future Route 58), improve to minor arterial standards	\$2,500,000	2008	Construction of Dean Avenue is necessary to support planned development along the U.S. 71 corridor.
North Cass Parkway (Future Route 58) – U.S. 71 Interchange and east to Hubach Hill Road, construct to major arterial standards	\$13,500,000	2008	North Cass Parkway will be a key element in supporting development in the southern part of Raymore and providing relief to Route 58
Hubach Hill Road – West North Cass Parkway (Future Route 58) intersection to Madison, improve to major collector standards	\$3,500,000	2009	Hubach Hill Road will serve as the major east-west link in southern Raymore until the North Cass Parkway can be constructed. It may be desirable to obtain 100' of right of way to preserve the ability to expand this section further, as necessary.
Hubach Hill Road – Madison to Route J, improve to major collector standards	\$2,800,000	2020	
Hubach Hill Road –Route J to east North Cass Parkway intersection, improve to major collector standards	\$2,000,000	2020	
North Cass Parkway (Future Route 58) – Hubach Hill Road to Prairie Lane ROW Preservation	\$1,400,000	2010	Preservation of right-of-way and access control will be critical to ensuring that this roadway can be constructed as funding becomes available
North Cass Parkway (Future Route 58) – Prairie Lane to Route 291 ROW Preservation	\$1,200,000	2010	
Madison Street – Route 58 to Lucy Webb, improve to major collector standards	\$1,500,000	2015	As traffic volumes increase, this road will need improvement to City standards
Madison Street – Lucy Webb to Hubach Hill Road, improve to major collector standards	\$2,400,000	2015	
Route J – Route 58 to Hubach Hill, improve to “interim” minor arterial standards	\$3,700,000	2020	As traffic volumes increase, this road will need improvement to City standards
Lucy Webb – Cedar Ridge to Sunset, improve to major collector standards	\$1,700,000	2012	
Lucy Webb – Sunset to Madison, improve to major collector standards	\$1,100,000	2013	

<sup>1</sup>Construction in 2004 dollars – includes design, right-of-way, does not include utility relocation.

<sup>2</sup>Projections based on traffic volume growth, assumes uniform traffic growth in City, development patterns or safety needs may impact prioritization.

**Table 5 (continued)**  
**Proposed Transportation Plan Projects**

<i>Project</i>	<i>Est. Construction Cost<sup>1</sup></i>	<i>Year<sup>2</sup></i>	<i>Comments</i>
<b>Route 58 Improvements</b>			
Route 58 – Bel Ray to Huntsman, improve section per corridor study	\$600,000	2007	See Route 58 corridor study
Route 58 – east of Huntsman to Foxridge, improve section per corridor study	\$800,000	2009	
Route 58 – east of Foxridge to Park Drive, improve section per corridor study	\$1,000,000	2011	
Route 58 & Route J Geometric Improvements, improve intersection and modify traffic signal	\$1,250,000	2020	
Traffic Signal <sup>3</sup> – Route 58 & Route J	\$300,000	2008	Add NB/SB left-turn lanes.
Traffic Signal <sup>3</sup> – Route 58 & S. Madison Signal	\$200,000	2010	
Traffic Signal <sup>3</sup> – Route 58 & Pine	\$300,000	2012	Add NB/SB left-turn lanes.
Traffic Signal <sup>3</sup> – Route 58 & Huntsman	\$300,000	2008	Add NB/SB left-turn lanes.
Traffic Signal <sup>3</sup> – Route 58 & Relocated Kentucky	\$150,000	Dev.	As needed by adjacent development.
Traffic Signal <sup>3</sup> – Route 58 & Sunset	\$150,000	Dev.	As needed by adjacent development.
Traffic Signal <sup>3</sup> – Route 58 & Monroe	\$350,000	Dev.	As needed by adjacent development. Add NB/SB left-turn lanes.
Traffic Signal <sup>3</sup> – Route 58 & Evans	\$300,000	Dev.	As needed by adjacent development. Add NB/SB left-turn lanes.

<sup>1</sup>Construction in 2004 dollars – includes design, right-of-way, does not include utility relocation.

<sup>2</sup>Projections based on traffic volume growth, assumes uniform traffic growth in City, development patterns or safety needs may impact prioritization and location.

<sup>3</sup>Traffic Signal projects only include signal and improvements indicated in comments, additional construction such as right-turn lanes or other modifications shown in the Route 58 corridor concept are included in the Route 58 improvement costs. Construction of new legs of intersections are also not included.

**APPENDIX A**

**RESOLUTION 04-74**

**"A RESOLUTION OF THE RAYMORE CITY COUNCIL ESTABLISHING A 2004 POLICY REGARDING THE CONSTRUCTION OF MEDIANS ON 58 HIGHWAY BETWEEN THE WESTERN CITY LIMITS AND J HIGHWAY."**

WHEREAS, there has been a great deal of concern regarding the possible construction of medians on 58 Highway between the City's western city limits and J Highway that would prevent traffic from turning left into or out of the existing driveways of businesses located along 58 Highway; and

WHEREAS, the City Council believes it would be in the best interests of the City to formally adopt a policy regarding the construction of medians on 58 Highway between the western city limits and J Highway;

**NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF RAYMORE AS FOLLOWS:**

**Section 1.** It shall be the policy of the City of Raymore that medians shall not be constructed on 58 Highway between the western city limits and J Highway in such a manner as to prevent left turns into and out of any driveway that currently exists without a finding by the City Council of good cause. The City Council shall not make a finding that good cause exists without holding a duly noticed public hearing.

Be it remembered that this resolution was adopted by the following vote:

Councilmember Doss	Aye
Councilmember Eldridge	Aye
Councilmember Holsman	Aye
Councilmember Hubach	Aye
Councilmember Jacobson	Aye
Councilmember Van Hooser	Aye
Councilmember Waite	Aye
Councilmember Wicks	Aye

Duly read and passed this 22nd day of November 2004 by the following vote:

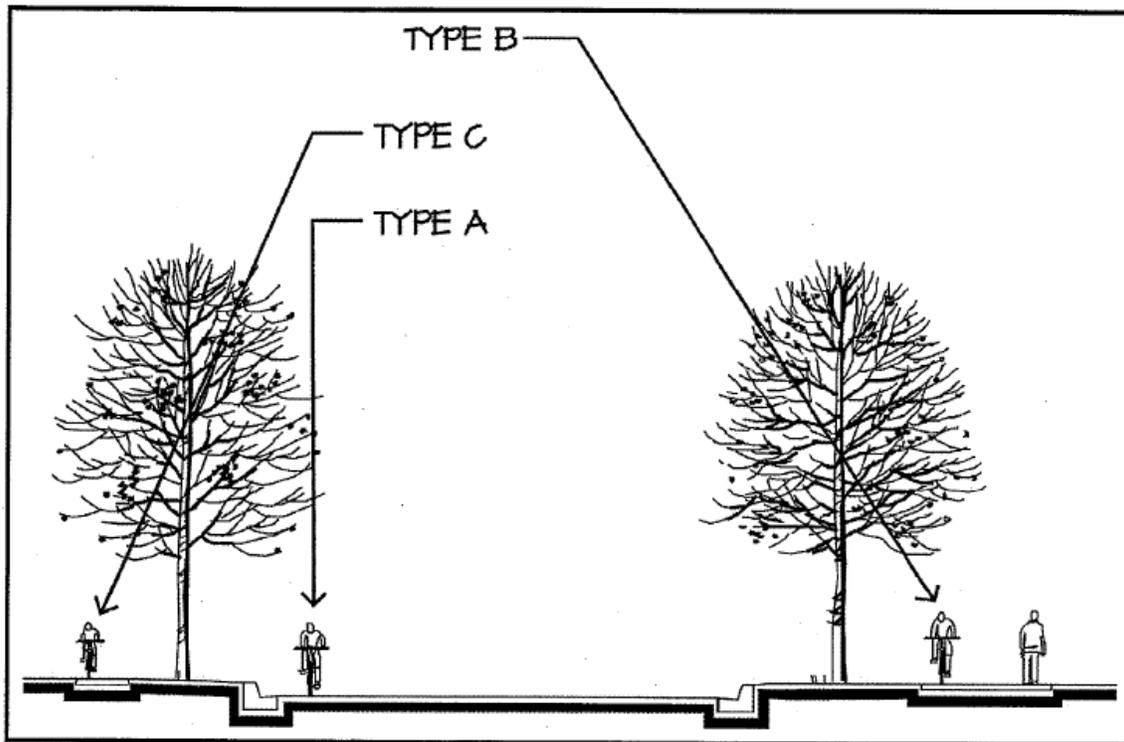
**APPROVE:**

  
\_\_\_\_\_  
Juan A. Alonzo, Mayor

**ATTEST:**

  
\_\_\_\_\_  
City Clerk, Susan Gnefkow

## APPENDIX B – TRAIL TYPES



Depending on the specific facility, trail types serve pedestrians, cyclists, rollerbladers, etc. A 1994 report by the Federal Highway Administration, “Selecting Roadway Design Treatments to Accommodate Bicyclists” used the general categories of bicycle user types (A, B and C) to assist transportation planners and engineers in determining the impact of different facility types and roadway conditions on bicycles:

Type A – These are advanced or experienced cyclists who use their bicycles as they would a motor vehicle. They want direct access to their destination without any delay. This type of cyclist is usually comfortable riding with motor vehicle traffic, but they need sufficient operation space on the traveled way or shoulder to eliminate the need for them or a passing vehicle to shift position.

Type B – These are basic or less confident adult cyclists that may also use their bicycles for transportation purposes. They are usually trying to get to the store or to visit friends, but they are less comfortable riding with motor vehicle traffic and avoid roads with fast busy motor vehicle traffic unless they have an ample amount of operation space. They are more comfortable riding on a neighborhood street, shared use path or a designated facility such as a bike lane or wide curb lane.

Type C – This type includes children that may be riding on their own or with parents. They do not travel as fast as an adult cyclist, but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. Neighborhood streets with low motor vehicle speeds, well-defined bike lanes or shared use paths best accommodate children without encouraging them to ride in the travel lane of busy roadways.

Suggested Facilities:

- **Bike Paths:** Bicycle paths should be 10 feet wide and installed on areas designated as Greenways in the City's Open Space and Linkage Plan in the Growth Management Plan (GMP)
- **Bike Lanes:** The standard in the MetroGreen Plan for bicycle lanes is five feet. Bicycle lanes should be installed on areas designated as Greenways in the City's Open Space and Linkage Plan in the Growth Management Plan (GMP).