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October 21, 2004

Mr. Joseph A. Dunn, AICP
Director of Development Services
City of College Station, Texas
P.O. Box 9960
College Station, TX 77842

RE: College Station Thoroughfare Plan Review

Dear Mr. Dunn:

We are pleased to submit this report documenting our review of the existing thoroughfare plan within the study area on the south side of the City. The study area includes the area bounded by SH 6 on the west, Rock Prairie Road on the north and east, and Peach Creek on the south, as illustrated in **Figure 1**.

The scope of this thoroughfare plan review included the following issues:

- Review of the overall thoroughfare plan within the study area for continuity, connectivity, and applicability with the proposed development master plans;
- Review and evaluation of the proposed Congressional Drive extension to Lakeway Drive and SH 6 and the three concepts developed by City staff as alternatives to the Congressional Drive extension;
- Review and evaluate the connectivity between Parkview, Venture, Lakeway, Congressional, Spearman, and St. Andrews and the need for additional roadway connections between the Pebble Creek Subdivision and Greens Prairie Road, Rock Prairie Road, and SH 6;
- Evaluate new arterial and collector street extensions/realignments in the Peach Creek area;
- Review and evaluate the roadway classifications and connectivity to SH 6, considering TxDOT's current plans for ramp relocations and new interchange location at Nantucket; and,
- Review and evaluate the connectivity of the roadway network between the north and south sides of Greens Prairie Road.

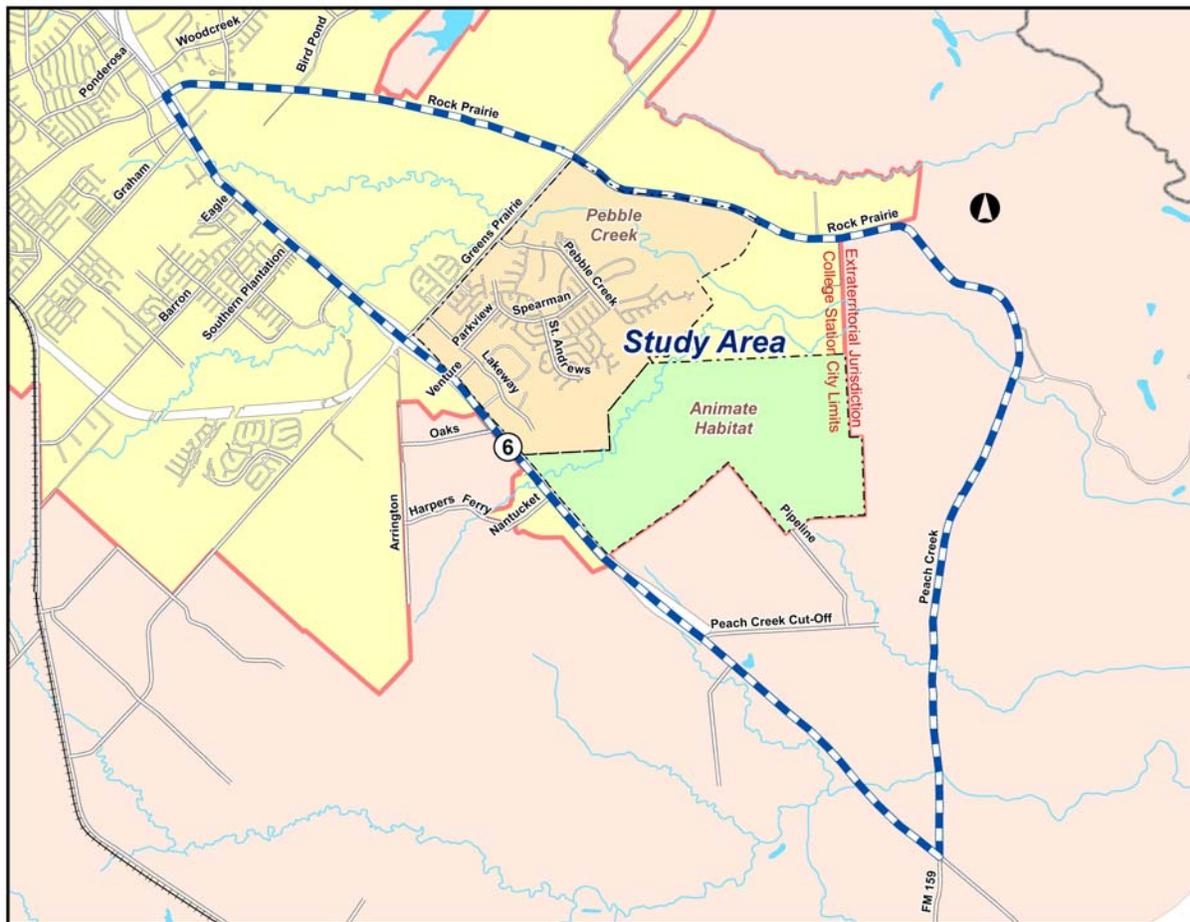


Figure 1. Study Area

Overall Thoroughfare Plan

The City of College Station's existing thoroughfare plan within the study area is identified in **Figure 2**. SH 6 serves as the southwestern boundary of the study area and is a four lane controlled access freeway facility, with two-lane two-way frontage roads. The study area is also served by one major arterial, Greens Prairie Road, which is currently under reconstruction to a four-lane divided cross section, and one minor arterial, Rock Prairie Road. Two other future minor arterials are included in the thoroughfare plan for the study area. One is an extension of Bird Pond Road between Rock Prairie Road and SH 6 and the other is a new minor arterial connecting Pebble Creek Parkway to the existing SH 6 interchange at Texas World Speedway. The study area is also served by numerous major and minor collector streets, including Pebble Creek Parkway, Lakeway, Venture, and Parkview.

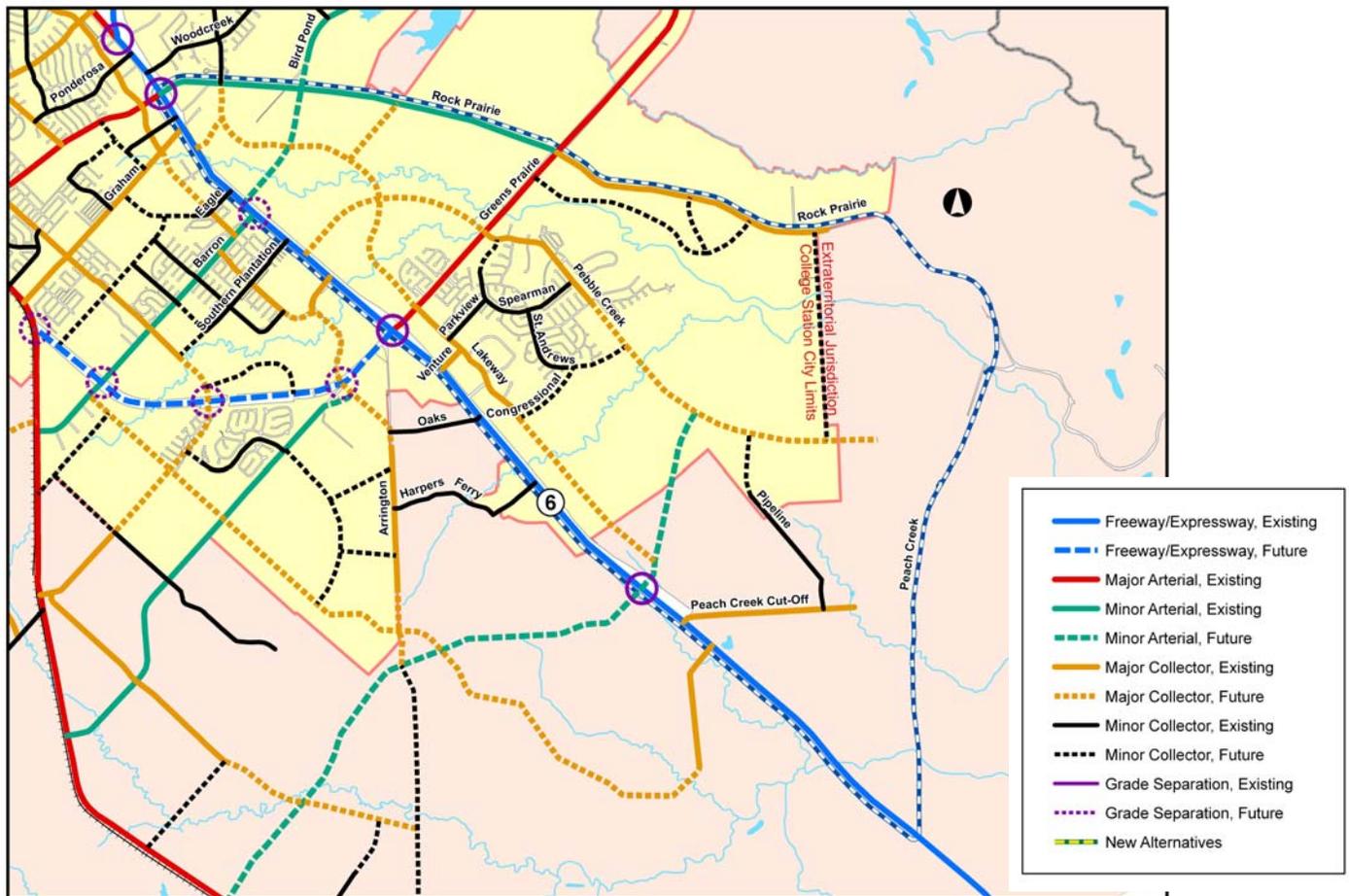


Figure 2. Existing Thoroughfare Plan within Study Area

Existing Daily Traffic Volumes

The City of College Station provided limited daily traffic volume data for a major arterial and several collector streets within the study area, as shown in **Table 1**. The highest recorded daily traffic volume along Greens Prairie Road was 13,100 vehicles per day between Lakeway Drive and SH 6. The highest recorded daily traffic volume along the local collector roadways of Parkview Drive, Venture Drive, and Lakeway Drive was recorded on Lakeway Drive between Parkview Drive and Greens Prairie Road, with 5,700 vpd. The smallest recorded daily traffic volume was along Venture Drive between SH 6 and Lakeway Drive, which indicates that more residents of the Pebble Creek Subdivision use Lakeway Drive and Greens Prairie Road to access SH 6, rather than Venture Drive.

Table 1
Existing Study Area Daily Traffic Volumes
College Station Thoroughfare Plan Review
College Station, Texas

| Roadway | Limits | Daily Traffic Volume |
|---------------------|--|----------------------|
| Parkview Drive | North of Lakeway Drive | 3,600 |
| Venture Drive | Between SH 6 and Lakeway Drive | 1,500 |
| Lakeway Drive | Between Parkview Drive and Venture Drive | 2,100 |
| Lakeway Drive | West of Parkview Drive | 5,700 |
| Greens Prairie Road | North of Lakeway Drive | 7,100 |
| Greens Prairie Road | Between Lakeway Drive and SH 6 | 13,100 |

Proposed Congressional Drive Extension

The City of College Station is reviewing four alternatives for Congressional Drive, which is a planned minor collector connecting with St. Andrews Drive on the north and Lakeway Drive on the south. In Alternative A, the general alignment and designation of Congressional Drive would be maintained as established in the 1997 City of College Station Thoroughfare Plan, as illustrated in **Figure 3**, where Congressional Drive intersects with St. Andrews Drive which then connects to Pebble Creek Parkway. North of St. Andrews, Congressional is classified as a local residential street, and has a smaller cross section than the proposed Congressional minor collector south of St. Andrews.

Residents in the Pebble Creek subdivision have expressed concerns about increased neighborhood traffic resulting from the connection of St. Andrews Drive to Lakeway Drive via Congressional Drive, and as a result the City of College Station has developed three additional alternatives for the planned Congressional Drive extension, as illustrated in **Figures 4 to 6**. In Alternative B, the planned roadway alignment for Congressional Drive would shift to the east and not directly connect with the local residential portion of Congressional north of St. Andrews. In Alternative C, a new unnamed minor collector would provide access to Pebble Creek Parkway and Lakeway and St. Andrews would form a T-intersection with the new unnamed minor collector. In Alternative D, a new unnamed minor collector would be offset from St. Andrews Drive.

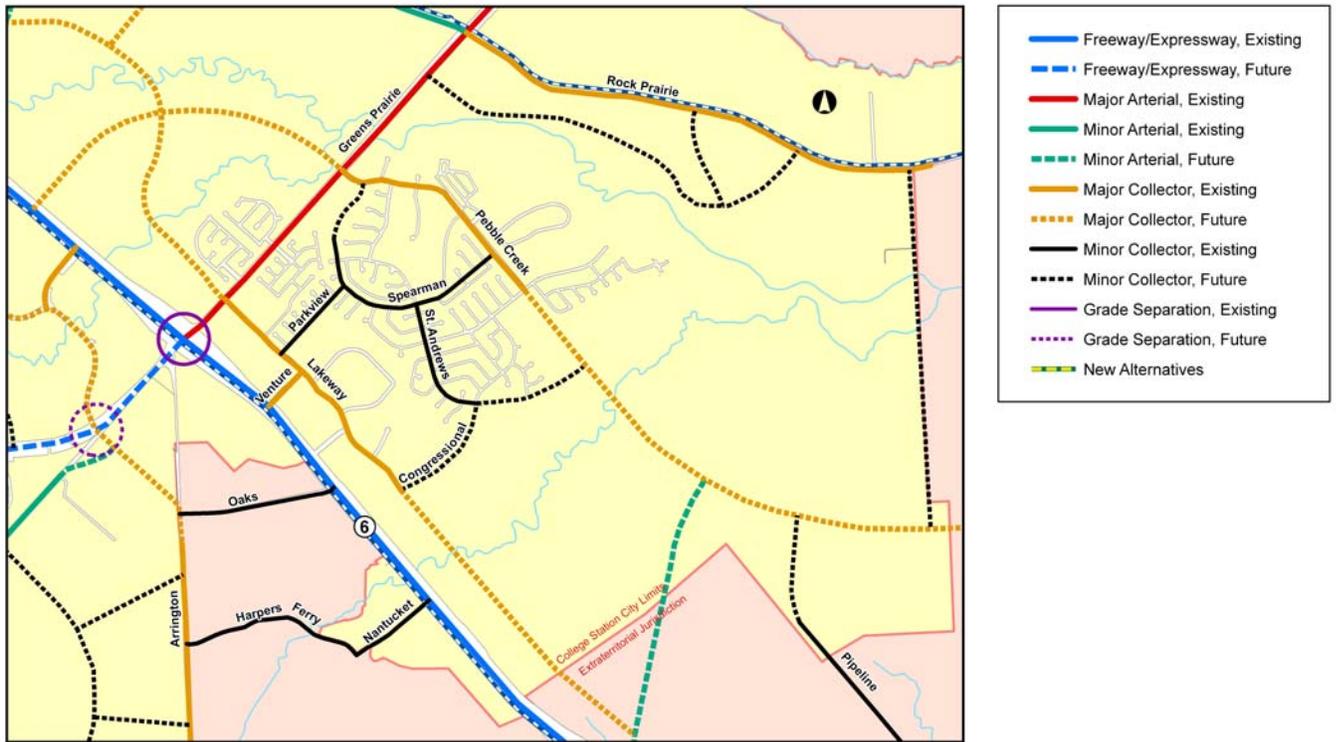


Figure 3. Congressional Drive Alternative A (Existing Thoroughfare Plan)

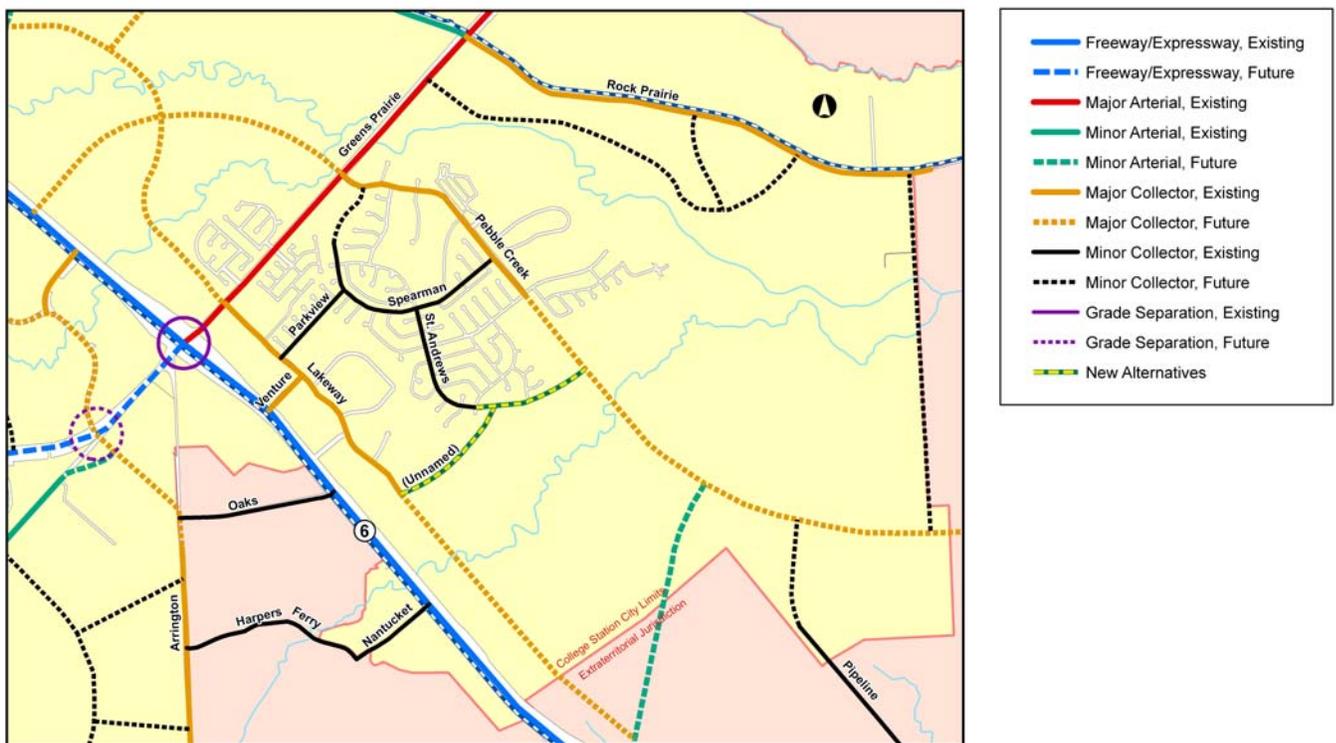


Figure 4. Congressional Drive Alternative B

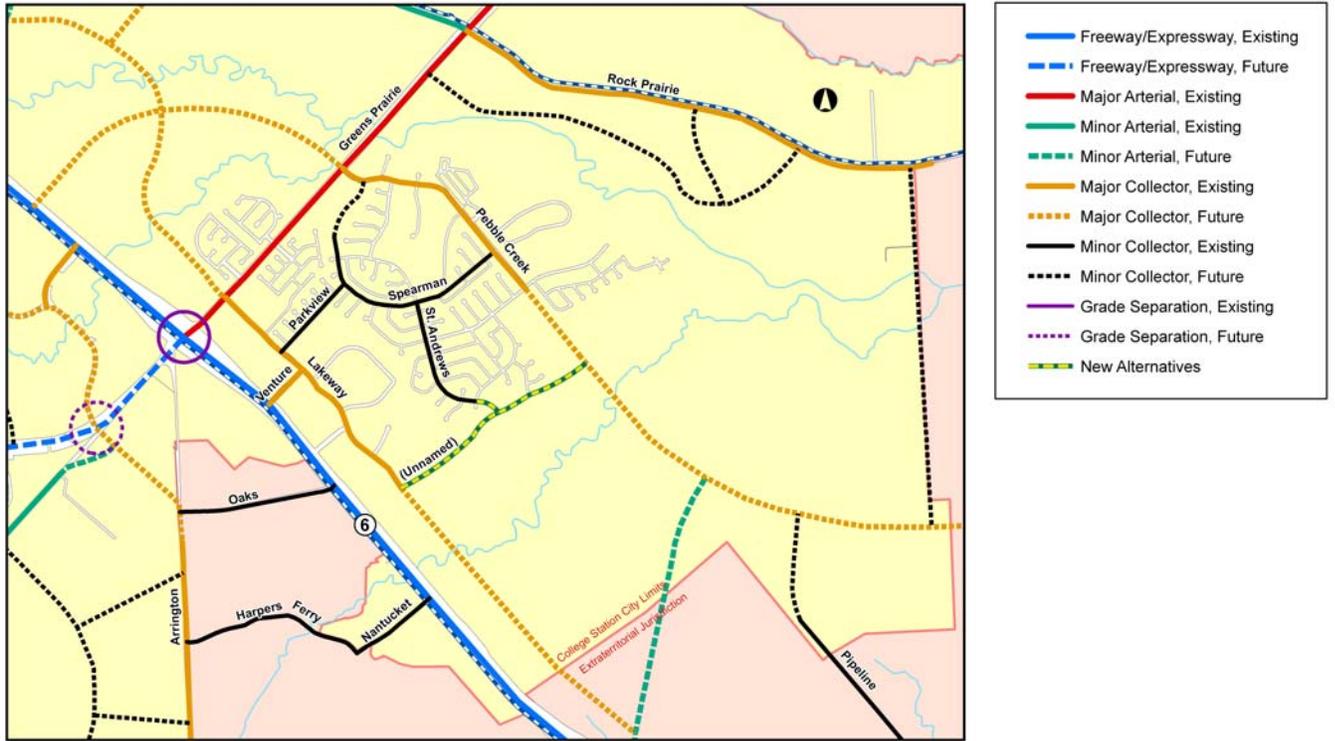


Figure 5. Congressional Drive Alternative C

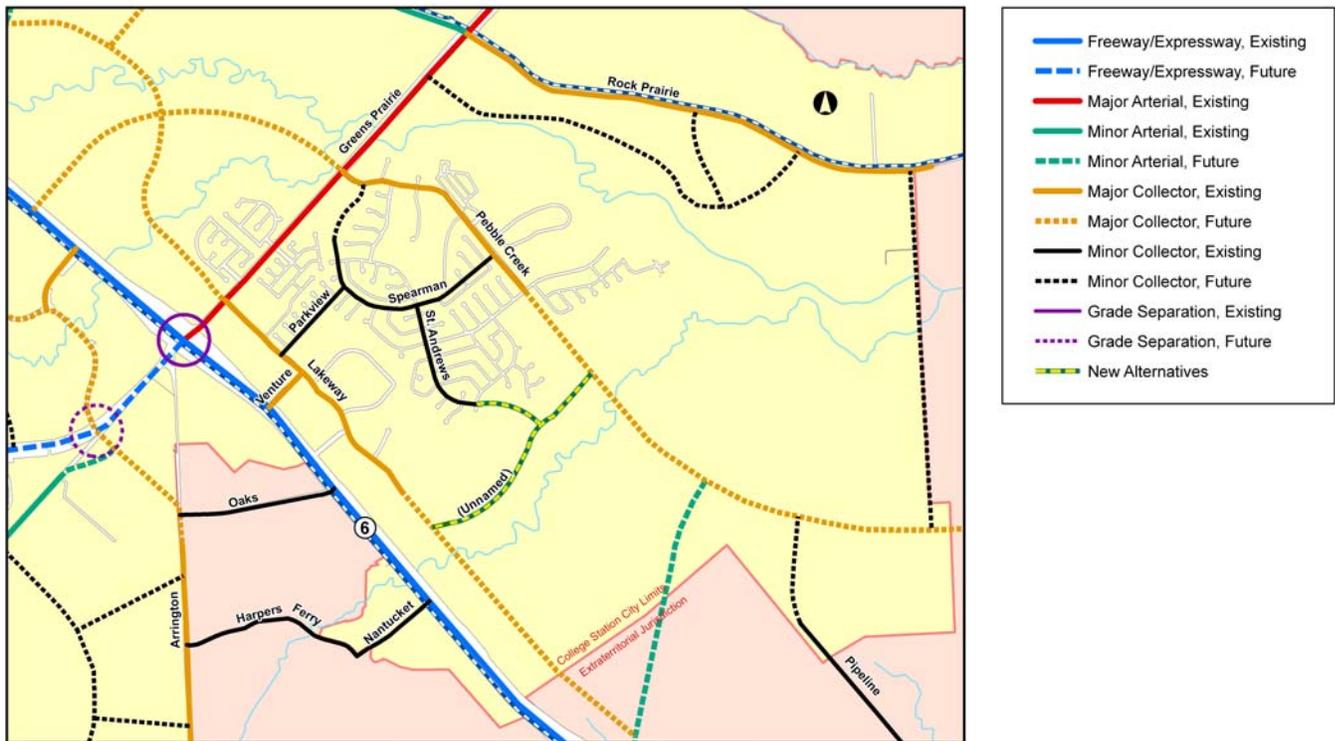


Figure 6. Congressional Drive Alternative D

Development Buildout Potential

The Pebble Creek development is a mixed-use development with an estimated 1,460 single family units, 91 acres of town home and other residential development, an elementary school, and 165 acres of office and commercial development. The office and commercial development includes a 50-acre Business Park and a 35-acre Regional Retail development.

The Animate Habitat development is also proposed for the study area and is a mixed-use development with an estimated 93 acres of regional retail development, 8 acres of neighborhood retail development, and 977 acres of residential development.

Using trip generation rates provided in the Institute of Transportation Engineers (ITE) publication entitled Trip Generation, 7th Edition, it is estimated that at build-out (and full occupation) the Pebble Creek development would generate approximately 80,400 daily entering and exiting trips, with more than 9,100 entering and exiting trips in the AM peak hour and 6,900 trips in the PM peak hour, as shown in **Table 2**. The Animate Habitat development is projected to generate more than 72,000 daily trips, including more than 3,600 trips in the AM peak hour and 6,700 trips in the PM peak hour.

Additional development is also anticipated within the study area, including the expansion of the College Station business park on the north side of Greens Prairie Road and additional business/industrial type development near Venture Drive. The potential development in these locations would also generate additional vehicular trips along the thoroughfare system.

Table 2
Estimated Development Trips at Build-out
 College Station Thoroughfare Plan Review
 College Station, Texas

| | Land Use Mix | Total Acreage | Estimated Site Trips | | | | | | | | |
|-----------------|--|---------------|----------------------|-------|-------|--------------|-------|-------|--------|--------|--------|
| | | | AM Peak Hour | | | PM Peak Hour | | | Daily | | |
| | | | Enter | Exit | Total | Enter | Exit | Total | Enter | Exit | Total |
| Pebble Creek | Residential/Retail/ Business/School | 800 | 4,646 | 4,460 | 9,106 | 3,153 | 3,763 | 6,916 | 40,200 | 40,200 | 80,400 |
| Animate Habitat | Residential/Retail | 1,079 | 1,556 | 2,116 | 3,672 | 3,698 | 3,021 | 6,719 | 36,450 | 36,450 | 72,900 |

Pebble Creek Subdivision Access to SH 6

For most residents south of Pebble Creek Parkway, the most convenient way to get to Greens Prairie Road is via Parkview Drive and then Lakeway Drive. Parkview Drive currently carries approximately 3,600 vpd. The extension of Congressional Drive or an alternative collector configuration would reduce the traffic on Parkway Drive, which would carry an estimated 3,500 vpd at build-out. Congressional Drive would carry approximately 3,600 vpd north of Lakeway

Drive. The generalized daily capacity for a minor two-lane collector with parking such as Parkview Drive is approximately 7,400 vpd. Therefore, at build-out Parkview Drive would have sufficient capacity to provide acceptable traffic operation.

Lakeway Drive is designated as a major collector, with a four-lane undivided cross-section, and a generalized daily capacity of approximately 21,000 vpd. It currently carries approximately 5,700 vpd and this would increase to approximately 22,400 vpd at build-out, which is in excess of the available capacity. The majority of traffic on Lakeway Drive would be traveling to SH 6 and although Congressional Drive in its present configuration provides an alternative to Parkway Drive, traffic would still end up using Lakeway Drive.

Findings and Conclusions

The City of College Station should consider the following items in revising the Thoroughfare Plan, with the proposed revisions illustrated in **Figure 7**:

- ◆ Based on the buildout potential of the Pebble Creek Subdivision and current traffic congestion occurring along Parkview and Lakeway near Greens Prairie Road, it is important for additional access routes to be provided between the subdivision and the major roadway system. The best alternative for providing the additional access on the southwest side of the subdivision is Alternative C, which provides a new major collector roadway adjacent to the Pebble Creek development but does not generate additional through traffic along the existing portions of Congressional Drive. The new minor arterial would connect to St. Andrews and extend from Pebble Creek Parkway to SH 6. The SH 6 connection is important, as future TxDOT plans for improvements to SH 6 include a northbound entrance ramp just south of Venture Drive. Therefore, the connection of the new major collector to SH 6 would provide access from the Pebble Creek Subdivision to northbound SH 6 without increasing traffic flow at the Greens Prairie Road intersection;
- ◆ Another opportunity for additional access to the Pebble Creek Subdivision is the proposed realignment of Spearman from its current terminus at Pebble Creek Parkway to Greens Prairie Road. The proposed realignment would intersect Greens Prairie Road directly across from Fire Station No. 5 currently under construction. The proposed realignment is preferred by the fire department as it would provide better, more direct access to the subdivision in the event of an emergency situation. In addition, the realignment would provide an additional access point for the subdivision to Greens Prairie Road and help to relieve existing traffic congestion along portions of Parkview and Lakeway;
- ◆ The Pebble Creek Subdivision is split into two major sections by Lick Creek, with all of the existing built sections located south of Lick Creek. Future development is projected to occur between Lick Creek and Rock Prairie Road. Currently, there are no plans to provide a connection between the two major sections, and all traffic generated on

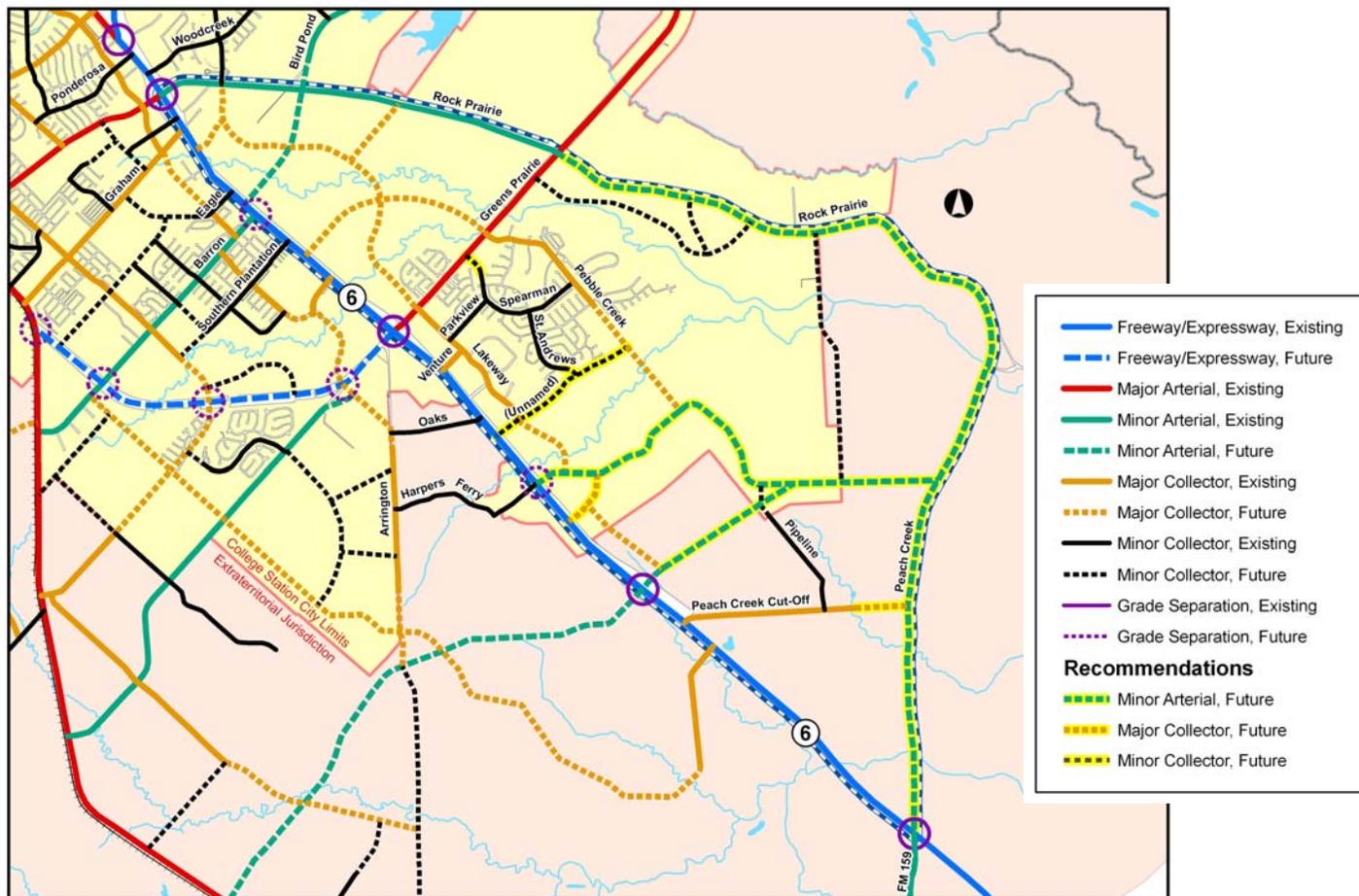


Figure 7. Recommended Thoroughfare Plan Modifications

the north side of Lick Creek will use Rock Prairie Road for access to Greens Prairie Road. The City of College Station should actively pursue another connection across Lick Creek to provide better circulation and connectivity within the Pebble Creek Subdivision;

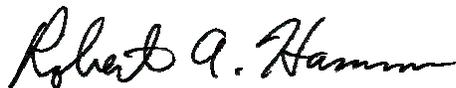
- ◆ With the proposed TxDOT interchange and grade separation at Nantucket and proposed Animate Habitat development, a new minor arterial connection is required to serve projected traffic volumes generated by the development. The new minor arterial would extend from the proposed Nantucket Overpass through the Animate Habitat development to Peach Creek;
- ◆ The City of College Station should also extend Pebble Creek Parkway as a major collector south to intersect with the new minor arterial within the Animate Habitat development. The connection is important from a regional perspective as it provides connectivity between the Pebble Creek Subdivision and the proposed retail land uses within the Animate Habitat development;

- ◆ Rock Prairie Road should be upgraded from its present classification of a major collector to a minor arterial south of Greens Prairie Road. Rock Prairie Road should be a continuous minor arterial throughout the study area (as it exists north of Greens Prairie Road) to serve existing and future development. While a portion of the vacant land in the area is considered undevelopable due to flood plain issues, there is significant potential for future development towards Peach Creek Road in the southern portion of the study area. In addition, Lick Creek Park is located in the area and generates traffic;
- ◆ On the existing Thoroughfare Plan, many future roadways disappear or abruptly terminate once they cross the city limit boundary. The Thoroughfare Plan should extend beyond the city limits to the ETJ boundary and preserve critical corridors to serve future traffic needs. Thus, Peach Creek Road (as the logical extension of Greens Prairie Road) should be identified on the thoroughfare plan as a minor arterial. In addition, Peach Creek Cutoff Road and the new minor arterial through the Animate Habitat Development should be extended to intersected with Peach Creek Road; and,
- ◆ On the northwest side of Greens Prairie Road, major collector facilities proposed on the existing Thoroughfare Plan provide significant benefits to the proposed business park planned by the City of College Station. These major collectors should remain on the Thoroughfare Plan and be actively pursued when the proposed business park is developed. Immediate priorities for implementation by the City should concentrate on the major collector streets on the southeast side of Greens Prairie Road between SH 6 and Pebble Creek Parkway.

We trust this analysis and information will assist the City of College Station in evaluating proposed changes to the City's Thoroughfare Plan. Should you need any further information, please advise me.

Sincerely,

WILBUR SMITH ASSOCIATES



Robert A. Hamm, P.E.
Project Manager