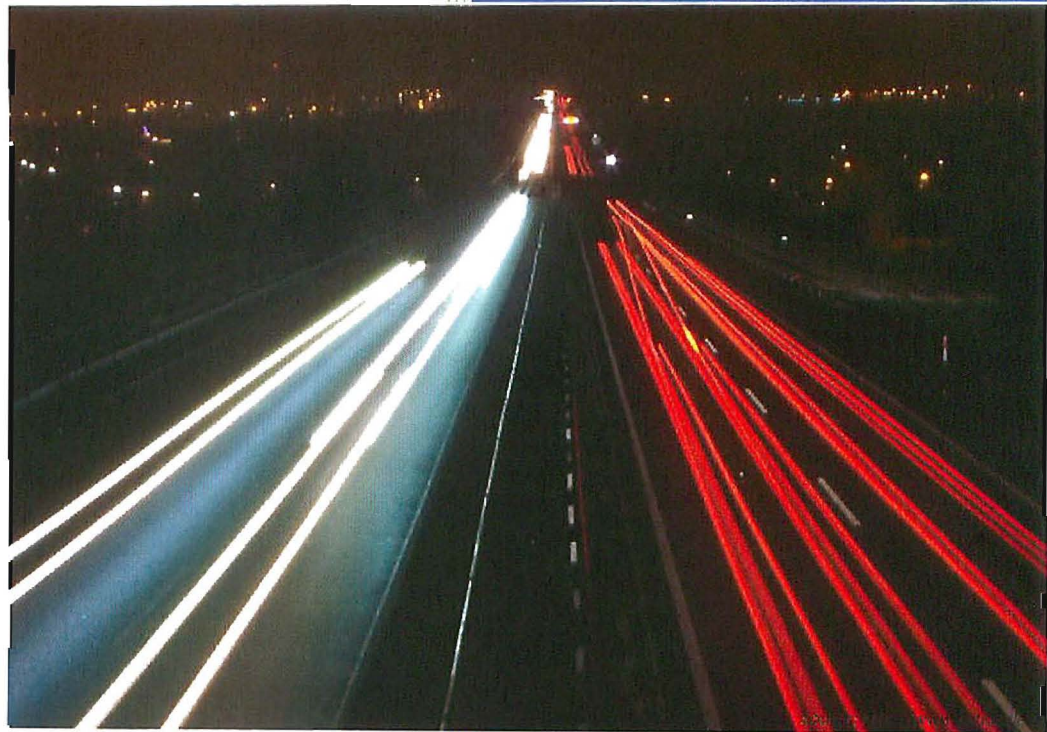


2009

SH 29 Safety Improvements Study



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Executive Summary

In the fall of 2008, Williamson County initiated a Safety Improvements Study (Safety Study) along State Highway 29 (SH 29), from the Burnet County Line to DB Wood Road. The purpose of the Safety Study was to examine potential improvements to the existing facility that would enhance the safety and operational characteristics of SH 29. Projects to be considered under this document should be those considered feasible for completion within the next one to five years contingent upon available funding.

To guide the development of the Safety Study, as well as to provide local input and knowledge of the facility, the SH 29 Safety Task Force (Task Force) was formed. Task Force members included local emergency responders, school districts, local and state governmental entities, and other appropriate planning personnel. The Task Force also served as the review entity for this document.

CP&Y conducted an extensive background data collection effort, including construction documents (as-builts) research, traffic and accident data research, multiple project site visits, meetings with planning personnel from local, county and state agencies, and meetings with individual property owners along the corridor. The Task Force, in conjunction with CP&Y, held an Open House meeting to actively solicit public input on safety concerns in the area. Together with input by email through the County website, a total of 89 comments were collected and reviewed.

All potential projects developed from this input process were evaluated to determine viability. Those projects which were not deemed viable, as discussed in the 'Planned (by others), Non-Viable, and Other Considered Projects' section, were eliminated from further consideration. The remaining projects were further investigated in order to determine the site-specific issue(s), and a subsequent project scope and planning-level estimate were developed to address those specific issues. Finally, the projects were prioritized using High, Medium, and Low designations based on engineering judgment and cost effectiveness of the safety improvement to fix the issue(s).

All projects listed are considered viable and fulfill a real need to improve safety and operational characteristics of SH 29. The ranking methodology employed during this study is intended to identify projects that offer relatively similar cost-effective improvements and short to moderate timeframes to implement. The following tables summarize the recommended projects. The complete list, including Alternative and TxDOT Maintenance Projects, can be found in the 'Recommended Projects' section.

This report identified a series of interim solutions that can be implemented in the next few years by Williamson County to enhance the safety and operational efficiency of the SH 29 corridor from the Burnet County Line to DB Wood Rd. The report recommendations were developed by CP&Y, in close coordination with the SH 29 Safety Task Force, Williamson County personnel, and the TxDOT Austin District, for the purpose of providing the Williamson County Commissioners' Court a planning mechanism for applying any available funding to cost-effective, short to medium-range safety improvement projects.

Table 1. High Priority Project List

Location	Project Description	Length (mi)	Estimated Cost*
Burnet Co. Line to DB Wood Rd.	Raised Profile Pavement Markers	18.88	\$ 255,222
Liberty Hill Cemetery to west of CR 200	Two-way left turn lane (TWLTL) and 10-ft Improved Shoulders	0.88	\$ 3,156,410
West of CR 200 to AUAR Railroad	10-ft Improved Shoulders ^(A)	0.32	\$ 772,485
CR 214	EB Deceleration/Turn Lane	0.11	\$ 219,244
CR 214	WB Deceleration/Turn Lane	0.19	\$ 352,692
FM 1869	EB Deceleration/Turn Lane	0.11	\$ 188,546
FM 1869	WB Deceleration/Turn Lane		\$ 164,930
CR 260 and CR 266	Improve Turning Radii and Right-of-way (ROW) clips	0.06	\$ 249,137
Park Place Dr. (Gabriel's Overlook)	EB Deceleration/Turn Lane	0.14	\$ 352,874
Jack Nicklaus (Cimarron Hills)	WB Deceleration/Turn Lane	0.14	\$ 187,708
Cedar Hollow	Advanced Highway Flashing Beacon (Solar Powered) & Additional Signage		\$ 44,834
		Total	\$5,944,082

Prices based from published TxDOT bid prices from March 04, 2009.

* Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies

^(A) This project includes adding deceleration/turn lanes at CR 200 and Loop 332 (Main St.)

Table 2. Medium Priority Project List

Location	Project Description	Length (mi)	Estimated Cost*
Main St. (Loop 332) @ SH 29	Raise Height of Roadway	0.08	\$ 168,984
Liberty Hill High School Driveway	EB Deceleration/Turn Lane	0.12	\$ 189,242
		Total	\$358,226

Prices based from published TxDOT bid prices from March 04, 2009.

* Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies

Table 3. Low Priority Project List

Location	Project Description	Length (mi)	Estimated Cost*
Burnet Co. Line to Liberty Hill Cemetery	10-ft Improved Shoulders	3.42	\$ 6,263,386
Bronco Blvd. (Sundance Estates)	WB Deceleration/Turn Lane	0.11	\$ 136,695
Capital Aggregates Quarry	WB Deceleration/Turn Lane	0.14	\$ 118,094
		Total	\$6,518,175

Prices based from published TxDOT bid prices from March 04, 2009.

* Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies

Background

Project Purpose and Need

In the fall of 2008, Williamson County engaged the services of CP&Y, Inc. (CP&Y) to prepare a State Highway 29 (SH 29) Safety Improvements Study (Safety Study) to identify and prioritize short and medium-range projects for implementation in one to five years that would enhance the safety and operational efficiency of the existing SH 29 roadway. This effort is intended to compliment the SH 29 Improvement Study which is focused on meeting the long-range capacity and mobility needs of one of the fastest growing counties in the United States.

SH 29 Safety Task Force

The SH 29 Safety Task Force (Task Force) was created to guide CP&Y in the development of this report and its' recommendations. The members of the Task Force are listed in Table 4 below. The Task Force held meetings, provided input and data throughout the process, and served as the review body for the document.

Table 4. Task Force Members

Task Force Member	Agency
Kenny Schnell (Task Force Chair)	Director of Williamson County EMS
Chief James Pogue	Liberty Hill Fire and Rescue
Interim-Chief Clay Shell	Georgetown Fire Department
Deputy Chief Bill Gardner	Leander Fire Department
Dr. Abbe Boring	Georgetown ISD
Dr. Robert Hart	Liberty Hill ISD
Joe Granberry	Operations Director of Williamson County EMS
Lt. Mike Gleason	Williamson County Sheriff's Office
Chief Randall Williams	Liberty Hill Police Department
Lt. Evelyn Mclean	Georgetown Police Department
Joe England	Williamson County Engineer
John Wagner	TxDOT Georgetown Area Engineer
Tina Walker	URS Corporation
Keith Brainard	Georgetown City Council, District 3
Charles Canady	Liberty Hill Mayor, Pro-Tem

Study Limits and Existing Conditions

The Safety Study is focused along 18.8 miles of SH 29, primarily from the Williamson/Burnet County Line in the west to DB Wood Road near Georgetown, Texas in the east. SH 29 is a 148-mile, predominately east-west high-speed major arterial, stretching from US 83 near Menard, Texas, east to SH 95 near Taylor, Texas. Approximately 36 of the 148-mile length are within Williamson County, where it passes through the municipalities and unincorporated localities of Liberty Hill, Leander, Georgetown, and Jonah. See Figure 1 for the Safety Study project limits, city limits, and ETJ's for the respective municipalities.

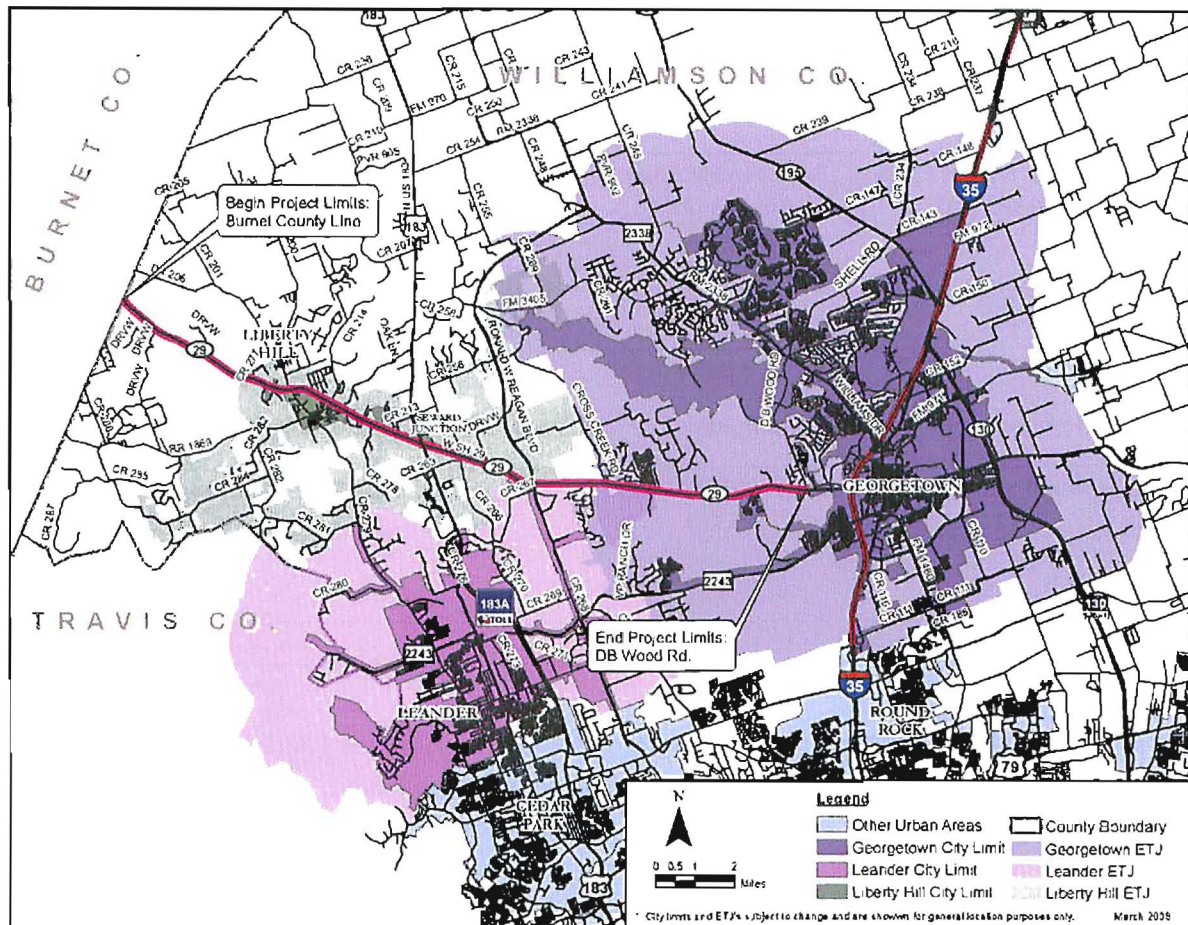


Figure 1. Project Location, City and ETJ limits

Within the 18.8-mile Safety Study limits, the existing road has several varying lane configurations, from a 4-lane undivided highway to a 5-lane section with a two-way left turn lane (TWLTL). Lane widths vary from 11-ft to 12-ft; shoulders widths vary from an improved 4-ft to a full width 10-ft, and the TWLTL width varies from 11-ft to 12-ft (refer to Figure I in Appendix A for detailed existing typical sections). Driving east from the Burnet County Line, the 65-mph speed limit decreases to 55-mph throughout the City of Liberty Hill, then increases back to 65-mph until reaching the City of Georgetown's city limits, west of DB Wood Rd. (refer to Figure II in Appendix A for speed limits and typical section locations).

Numerous city, county, and state roadways intersect SH 29 in this area, both signalized and unsignalized, making each intersection unique with different contributing elements. Signalized intersections are primarily located in and around Liberty Hill and Georgetown, although some additional signals are located throughout the corridor at major cross-streets such as US 183 and Ronald Reagan Boulevard. Rapid commercial and residential development along the corridor is also accelerating the rate of signal installations at intersecting roadways, a trend that is expected to continue for the foreseeable future.

The current 2008 Average Daily Traffic (ADT) varies significantly throughout the corridor, ranging from 9,697 Vehicles-Per-Day (VPD) to 18,214 VPD. Based on the detailed Demographic and Traffic Study

performed by Alliance Transportation Group for the SH 29 Improvement Study, future ADT's in the corridor are expected to increase by at least 25-percent by 2012.

Table 5. SH 29 Average Daily Traffic (ADT) counts

Year	Between Burnet C/L & FM 1869 (ADT)	Between FM 1869 & US 183 (ADT)	Between US 183 & Ronald Reagan (ADT)	Between Ronald Reagan & DB Wood (ADT)
2008	9,697	18,214	12,273	13,565
2010	11,024	19,535	13,252	14,473
2015	15,190	23,273	16,054	17,019

Source: Alliance Transportation Group, Inc.

Table 6. SH 29 Percentage increase of ADT from 2008

Year	Between Burnet C/L & FM 1869	Between FM 1869 & US 183	Between US 183 & Ronald Reagan	Between Ronald Reagan & DB Wood
2009	13.70%	7.30%	8.00%	6.70%
2012	56.70%	27.80%	30.80%	25.50%
2017	115.90%	52.20%	58.50%	47.50%

Source: Alliance Transportation Group, Inc.

In general, the existing pavement structure throughout the study limits is a variable depth hot-mix asphalt concrete pavement (HMACP) surface on 12 inches of Flexible Base. The shoulder pavement section varies from 4-ft or 10-ft improved shoulders matching the through lane configuration, to 4-ft or 10-ft shoulders consisting of a two-course-surface treatment (2-CST) on Flexible Base (refer Figure I in Appendix A for more information). The existing pavement structure data is based on TxDOT construction documents research (as-built), and is not intended for bidding or construction purposes.

The Austin Area Terminal Rail Road (AUAR) is located approximately 600-ft east of CR 200, within and near the western limits of the Liberty Hill. The rail-line is in daily use at this time, and the potential exists for it to become part of the Austin-San Antonio Inter-municipal Commuter Rail District at some future date. There are, on average, four daily train movements which, range in speed from 5-mph to 35-mph. The railroad crossing configuration is an at-grade, skewed intersection with existing SH 29 with an overhead train warning light system without traffic signals (gate arms). According to the TxDOT Austin District, there are no planned signal projects at this location; however, there is an active planking project awaiting estimate finalization.

TxDOT Safety Improvement Index and Highway Safety Improvement Plan

TxDOT uses the Safety Improvements Index (SII) to prioritize safety improvement projects, as detailed in TxDOT's Highway Safety Manual. While this Safety Study did not strictly utilize the SII methodology, it's worth describing some of the parameters in order to provide a framework for understanding the relative value of various safety improvements, based on historical data. Table 7 summarizes the different types of improvements considered during the course of the Safety Study and their relative effectiveness in reducing a given type of accident. Although the Reduction Factor percentages listed

below do not represent the actual decreased percentage of accidents for each type of safety improvement, they provide a relative comparison of the potential effectiveness of each improvement.

Table 7. TxDOT SH Highway Safety Improvement Plan (HSIP) Reduction Factors and Service Life

HSIP Description	Reduction Factor	Service Life (Yrs)
Install Continuous Turn Lane**	45%	10
Resurfacing	42%	10
Widen Paved Shoulders (to > 5 ft.)	40%	20
Safety Lighting	40%	15
Install Traffic Signal	28%	10
Install Intersection Flashing Beacon	25%	10
Add Right Turn Lane	25%	10
Install Pavement Markings	20%	2
Install Advance Warning Signals and Signs (Intersection-Existing Signal, Flashing Beacon or STOP signs)	15%	10
Texturize Shoulders (Profile Pavement Markers)	15%	5
Increase Turning Radius	10%	10
Add Acceleration/Deceleration Lanes	10%	10

Source: TxDOT Highway Safety Manual

Note: Percentage Reduction Factor represents the percentage reduction in crash costs or severity that can be expected as a result of the improvement

***For ADT's below 20,000*

Data Collection and Public Input

During the data collection phase, numerous government agencies and local citizens were contacted to help form a complete picture of the safety needs within the project area. The CP&Y team held several meetings with TxDOT, including the Georgetown Area Office, Burnet Area Office, and the District Traffic Office to help identify areas of concern and use their engineering and local expertise. Meetings with local municipalities included the City of Liberty Hill and the City of Georgetown. Data gathered in these meetings included, but was not limited to, determining known areas of concern and any planned or upcoming projects in the vicinity of SH 29 that might impact the viability of any proposed safety projects. This process lead to dismissing certain projects, as discussed further in the 'Planned (by others), Non-Viable, and Other Considered Projects' section.

The initial stage of this Safety Study was a Task Force kickoff meeting, held on October 15, 2008. The Task Force representatives discussed the purpose of the study and developed a preliminary list of safety improvement projects that should be analyzed. After the kickoff meeting, a notification went out to all listed public participants in the SH 29 Improvement Study mailing list requesting input on the safety related issues within the project limits. Participants were encouraged to submit comments by either hard copy or email.

In order to actively solicit input from the general public, an Open House was held at Bill Burden Elementary School in Liberty Hill on Tuesday, November 18, 2008. Personnel from CP&Y, as well as numerous members of the Task Force, were on hand to discuss and record public comments. The Open

Upon completion of the initial phases of data collection, the Task Force then conducted a site visit to review the potential areas of concern “on-the-ground”. The site visit was conducted on December 3, 2008, utilizing a Liberty Hill Independent School District bus which allowed project discussion among all members and helped facilitate collaboration on potential safety issues and solutions. Several additional concerns were identified and documented during the visit to known potential project sites.

Accident data within the corridor was gathered to assist in identifying potential safety issues and the underlying causes. Data was provided by the Williamson County EMS, Williamson County Sheriff's Office, and TxDOT. The data was compiled, compared, analyzed, and discussed to assist in determining areas of concern. The accident data, combined with the public input from the Open House, and

comments received through the County website, formed the basis for determining potential safety projects identified in this report. The following tables summarize the accident. Although not location specific, they provide a quantitative basis of the number of reported accidents along SH 29 within the Safety Study project limits. While every effort has been made to ensure the completeness of the data, not all accident data was available at the time this report was finalized.

Table 8. Williamson County Sheriff's Department Accident Tally's by Severity

Year	Major	Minor	Unknown	Other	Total
2005	6	8	0	1	15
2006	3	2	2	0	7
2007	8	11	8	2	29
Total	17	21	10	3	51
%	33.3%	41.2%	19.6%	5.9%	100%
2008YTD	18	9	6	1	34

Table 9. TxDOT CRIS Summary: Crashes by Severity

Year	Non-Injury or Property Damage Only (PDO)	Possible Injury (C)	Non-Incap. Injury (B)	Incapacitating Injury (A)	Fatality (K)	Total
2005	28	6	10	1	1	46
2006	17	7	10	4	1	39
2007	10	13	7	1	1	32
Total	55	26	27	6	3	117
%	47.00%	22.20%	23.10%	5.10%	2.60%	100.00%
2008YTD	27	9	12	2	2	52

Table 10. TxDOT CRIS Summary: Crashes by Major Type of Collision

Year	Head On	Run off the Road/Fixed Object/Overturn (ROR/FO/OT)	Side-Swipe	Rear End	Left Turn	Right Angle	Other	Total
2005	3	12	3	12	4	8	4	46
2006	5	7	0	8	5	12	2	39
2007	0	7	2	10	3	3	7	32
Total	8	26	5	30	12	23	13	117
%	6.80%	22.20%	4.30%	25.60%	10.30%	19.70%	11.10%	100.00%
2008YTD	2	12	0	11	4	14	9	52

Table 11. TxDOT CRIS Summary: Crashes by Intersection-Related Detail

Year	Intersection	Intersection-Related	Driveway	Non-Intersection	Total
2005	8	10	5	23	46
2006	10	4	10	15	39
2007	4	9	1	18	32
Total	22	23	16	56	117
%	18.80%	19.70%	13.70%	47.90%	100.00%

Table 12. TxDOT CRIS Summary: Crashes by Light Condition

Year	Dawn	Daylight	Dusk	Dark-Not Lighted	Dark-Lighted	Other (Unknown, Etc.)	Total
2005	0	35	2	7	2	0	46
2006	1	34	0	3	1	0	39
2007	2	17	0	9	3	1	32
Total	3	86	2	19	6	1	117
%	2.60%	73.50%	1.70%	16.20%	5.10%	0.90%	100.00%

Table 13. TxDOT CRIS Summary: Crashes by Surface Condition

Year	Dry	Wet	Other(s)	Total
2005	42	2	2	46
2006	37	2	0	39
2007	23	9	0	32
Total	102	13	2	117
%	87.20%	11.10%	1.70%	100.00%

Almost 48-percent of accidents occurred at locations other than driveways and intersections, 74-percent during the day, and 87-percent on dry, normal pavement conditions. Based on these results, some potential projects that had been discussed, such as installing additional traffic signals at intersections for better visibility during dusk and dawn, better intersection illumination or corridor wide illumination, were eliminated. Since most accidents reported do not indicate these safety improvements would be beneficial, they were not investigated further.

Finally, the CP&Y team conducted individual meetings and collected potential projects from local cities, individual property owners, and TxDOT. CP&Y also developed an internal set of potential projects based on accident data findings and other safety issues observed during numerous site visits to the project corridor. The complete list of potential projects and the associated public comments are located in Table in Appendix A.

Planned (by others), Non-Viable, and Other Considered Projects

To help ensure that any unnecessary, conflicting, redundant, or unfeasible potential projects were not included in the recommended project list, all local and regional Transportation Plans were cross-referenced against the potential project list. These plans include those published by the City of Georgetown, the City of Leander, the City of Liberty Hill, Williamson County, TxDOT and the Capital Area Metropolitan Planning Organization (CAMPO) (refer to Figure III and Table _in Appendix A). Refer to each appropriate agency for full listings of planned projects. Those shown and discussed in this report are for informational purposes only and are not the complete lists.

Several currently planned projects emerged from this process. Those projects, and the impact to the potential safety projects, are enumerated below.

Already in the Planning/Design Process

US 183 Safety Improvements (S. San Gabriel River to north of Seward Junction)

This project is in the final stages of design, with construction expected to begin in 2009. This project proposes to completely reconfigure the US 183/SH 29 intersection, thereby effectively rendering any potential projects in that intersection unnecessary.

SH 29 just west of Ronald Reagan Blvd. – Anticipated Development

TxDOT officials have indicated that a traffic impact analysis (TIA) is being performed in this area for a substantial development that may impact the existing roadway with a signal and/or deceleration lanes. No additional information is available at this time.

SH 29 at Jack Nicklaus Blvd. Intersection Improvements (Cimarron Hills)

TxDOT has indicated that a new traffic signal will be installed at this intersection in 2009. However, while the signal pole setback distance is sufficient for a future westbound (WB) deceleration lane, the signal construction plans do not include one. Based on this information, a deceleration lane is still considered an option in this report.

SH 29, Oaks at San Gabriel (Vista Heights)-Planned Development, Deceleration Lane

A planned private development of about 800 units is to be constructed in the near future just east of Jack Nicklaus Blvd. (Cimarron Hills.) This development, in coordination with TxDOT and the City of Georgetown, will be installing a deceleration lane off westbound SH 29. No further investigation is being done.

Not Viable at this Time

SH 29 at Avant Property (Capitol Aggregates Quarry)

Several comments were received regarding the entrance for the Capitol Aggregates Quarry, located approximately 1.3 miles west of DB Wood Road. Accident data indicates some accident history at this location; however, a specific pattern of accidents that would lead to a feasible solution is not entirely clear. The primary cause of the accidents appears to be the result of conflicting movements of vehicles entering or exiting the quarry with SH 29 through traffic. No site-specific geometry or sight-distance limiting issues exist, as observed from the driveway. Potential options investigated included converting

the existing two-way left turn lane (TWLTL) into an acceleration/deceleration lane for quarry vehicles or the installation of a traffic signal. Converting the TWLTL to an acceleration/deceleration lane is likely not practical in this location as upcoming development on the south side of the roadway may attempt to use the restriped lanes for left turns, potentially creating an unsafe condition with accelerating/decelerating trucks. The installation of a traffic signal presents at least three inherent issues: 1) based on recent traffic data from TxDOT, the signal does not meet engineering warrants for a signal 2) the installation of a stand-alone signal on a high speed rural facility has been shown to create driver expectancy issues that can create a separate safety issue and 3) the close proximity of the horizontal curve just east of the driveway makes that location a less than ideal place to install a signal. Therefore, these options were eliminated from consideration in this report.

SH 29, US 183 to DB Wood Rd. – Adding 10-ft Shoulders

Several public comments requested the widening of the existing 4-ft improved shoulders to full 10-ft driveable shoulders throughout the corridor. In the section from US 183 to DB Wood Road, the existing SH 29 right-of-way (ROW) is nominally 100-ft. There is approximately 18-ft from the existing pavement edge line to the ROW line. Due to the rural (non-curbed) cross-section, ditches must be maintained along each side of the ROW to drain water away from the facility. The existing ditch slopes are generally near the maximum allowed for safety purposes. Consequently, it is estimated that at least 10-ft of additional ROW needs to be acquired on each side of the roadway to construct the 10-ft shoulder. The acquisition of a substantial amount of ROW from numerous property owners is outside the scope of this Safety Study (short and medium-term considered in this report), and was therefore excluded from further consideration.

SH 29, Burnet County Line to DB Wood Rd. – Lowering the Speed Limit

Considerable public feedback was provided regarding the current speed limit throughout the project limits. Many people expressed concerns that the speed limit is currently too fast and should be lowered, especially inside Liberty Hill. TxDOT performed a speed study from the Burnet County line to Georgetown in late December 2008, and found the currently posted speed limits are representative of the actual travel speeds, therefore, no speed reduction is warranted at this time. Based on TxDOT's findings, lowering the speeds limits was excluded from further consideration.

Other Projects Considered

SH 29 TWLTL – From just west of CR 200 to west of the Liberty Hill Cemetery

TxDOT officials have expressed interest in extending the TWLTL for the above limits. However, at this time, they are unable to determine when funding might be available for the project. Based on this information, the TWLTL project was included for consideration in this report due to the large number of requests and recent accident history.

SH 29 at CR 260 and CR 266 Intersection Improvements

Major development is anticipated for the SE corner of US 183 and SH 29, including a CVS Pharmacy, Pedernales Electric Cooperative (PEC) facility, a major retail center, and an HEB grocery store. It is expected that upgrades to the adjoining existing roadway network will be performed by the developer at the time of development in order to accommodate the greatly increased traffic volume. However,

due to the uncertainty of the development timeframe for these facilities, it is prudent to consider upgrades to the intersection to improve current operational and safety issues.

SH 29 at Cedar Hollow Rd. Improvements

TxDOT officials have indicated that they expect this intersection will meet engineering warrants for a signal installation in the near future and that a signal pre-cursor, such as a flashing warning light, might be prudent. Therefore, such an interim solution will be considered in this report.

SH 29 at Ronald Reagan, Liberty Hill High School Driveway– Signal Operations

During the public comment phase, concerns were expressed regarding the operation of these two signals. TxDOT officials have acknowledged the concerns and are currently investigating the source of the operational issues. This issue will not be included for further consideration in this report.

Project Selection Process

Through a process of public input, site investigations, and coordination with local municipalities, Williamson County and TxDOT, a comprehensive list of concerns, suggestions, ideas, and solutions were developed.

All items in this list were initially investigated to determine the validity and viability of the issue(s). Background research was performed to verify the issue(s) and to determine, if possible, any underlying root cause(s). The background research included several steps.

Firstly, accident data was compiled from numerous sources, such as the Williamson County Sheriff's Office, Williamson County EMS, and TxDOT's Crash Records Information System (CRIS) system. This accident data was then analyzed to determine any driver pattern(s) or roadway defects that contributed to the perceived issue that could be corrected through short to medium-range safety improvements. Secondly, the CP&Y team met with local and state officials, and members of the general public, to gather additional information on specific issues. These meetings included both office and field-based meetings. Thirdly, the CP&Y team performed multiple site visits to each location to observe the function of the roadway and to determine any specific site conditions contributing to the perceived need. Finally, the list of verifiable issues was closely coordinated with TxDOT and local municipalities to remove any redundant or non-viable solutions to the observed issues.

Once the initial list of issues was properly vetted, a scope of work was developed to address the specific issue(s) at each location. Site-specific options were developed for each location, along with a preliminary estimate for each option. Using engineering judgment, an option was selected for each location which provided the most cost-effective solution that addressed the actual need, in conjunction with any anticipated future improvements to be performed by Williamson County, TxDOT, or other municipalities.

Planning-level estimates were then developed for each viable project. The viable projects were then further stratified into three tiers – High, Medium, and Low Priority. This stratification was based on engineering judgment of the relative cost effectiveness of the safety improvement derived from the project site visits, accident data, and the level of feedback and concern demonstrated by the general public and the appropriate agencies.

Two additional groupings were developed-Alternative and TxDOT Maintenance Projects. The projects categorized in the Alternative Projects are alternatives for projects that are listed in the three-tiered prioritized list. These alternative projects would not need to be implemented in conjunction with a tiered project; rather, they are various safety improvement projects that could be chosen in lieu of a tiered project. The TxDOT Maintenance Projects group, are those projects that were identified through the course of this study that are considered general roadway maintenance, or the project is outside the limits of this study.

Recommended Projects

As previously discussed in the 'Project Selection Process', all viable projects were broken down into three tiers-High, Medium, and Low Priority based on analyzing the data collected through the various phases of the project and engineering judgment. This three tier stratification of projects can be seen below in Figure 3, indicating the location of each potential safety project; Red indicating High Priority Projects, Yellow for Medium, and Green for Low. The Alternative and TxDOT Maintenance projects are displayed in pink and grey, respectively. Detailed cost estimates for all projects can be found in Appendix B.

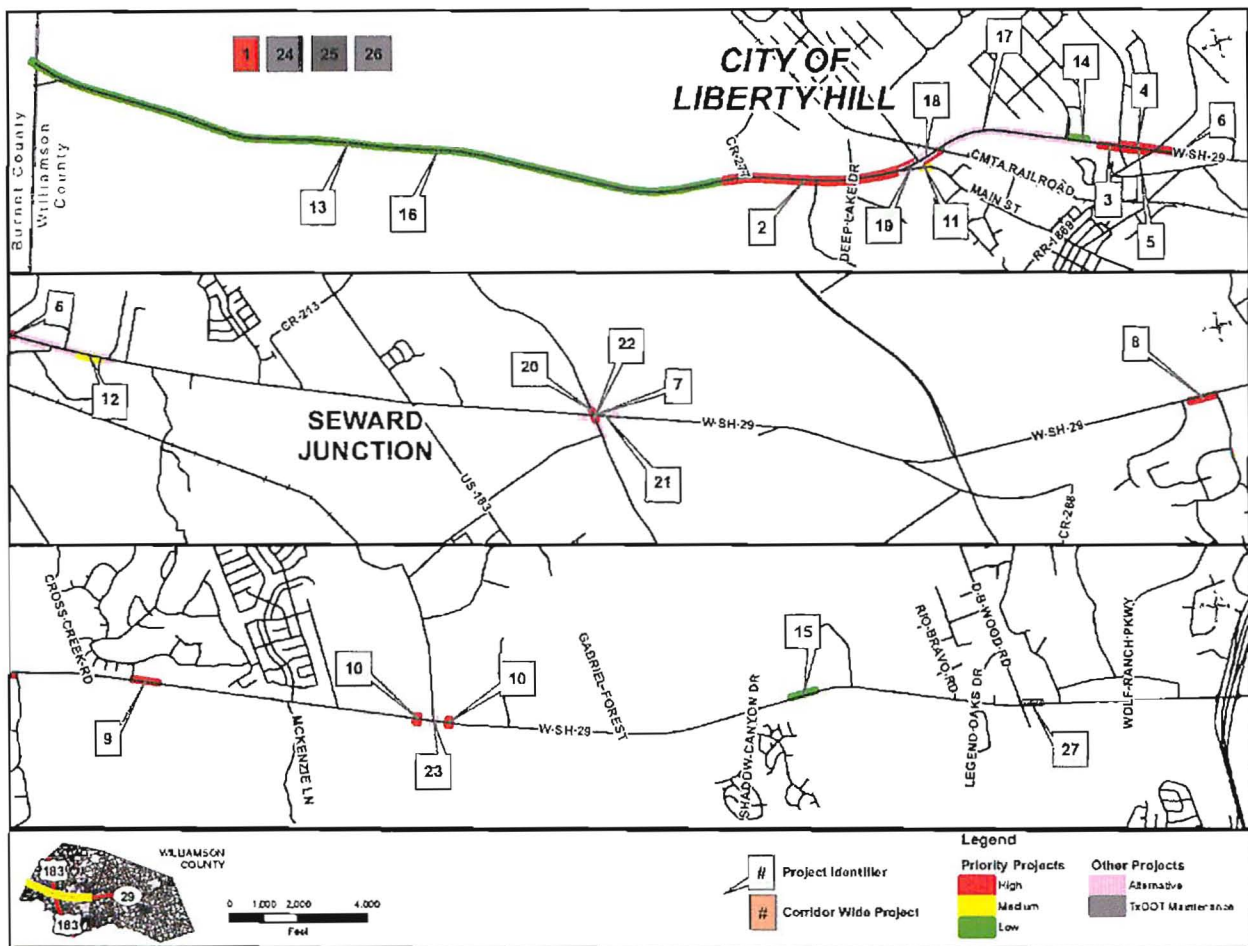


Figure 3. Recommend Project Locations

High Priority Projects

The safety projects in the High Priority project list are recommended for immediate implementation to increase the safety and operational characteristics along SH 29. High Priority projects are primarily for cross street intersections and not corridor-wide since these improvements would provide the most cost effective, short-term solutions.

Table 14. High Priority Project List

Map ID	Location	Project Description	Length (mi)	Estimated Cost*	Page Number	Reference Figure
1	Burnet Co. Line to DB Wood Rd.	Raised Profile Pavement Markers	18.88	\$ 255,222	Page-16	Figure 4
2a	Liberty Hill Cemetery to west of CR 200	Two-way left turn lane (TWLTL) and 10-ft Improved Shoulders	0.88	\$ 3,156,410	Page-17	Figure 8
2b	West of CR 200 to AUAR Railroad	10-ft Improved Shoulders ^(A)	0.32	\$ 772,485	Page-17	Figure 9
3	CR 214	EB Deceleration/Turn Lane	0.11	\$ 219,244	Page-21	Figure 14
4	CR 214	WB Deceleration/Turn Lane	0.19	\$ 352,692	Page-21	Figure 14
5	FM 1869	EB Deceleration/Turn Lane	0.11	\$ 188,546	Page-21	Figure 14
6	FM 1869	WB Deceleration/Turn Lane		\$ 164,930	Page-21	Figure 14
7	CR 260 and CR 266	Improve Turning Radii and Right-of-way (ROW) clips	0.06	\$ 249,137	Page-24	Figure 17
8	Park Place Dr. (Gabriel's Overlook)	EB Deceleration/Turn Lane	0.14	\$ 352,874	Page-27	Figure 20
9	Jack Nicklaus (Cimarron Hills)	WB Deceleration/Turn Lane	0.14	\$ 187,708	Page-30	Figure 23
10	Cedar Hollow	Advanced Highway Flashing Beacon (Solar Powered) & Additional Signage		\$ 44,834	Page-32	-
			Total	\$5,944,082		

Refer to Figure 3 on page 14 for project locations. Prices based from published TxDOT bid prices from March 04, 2009.

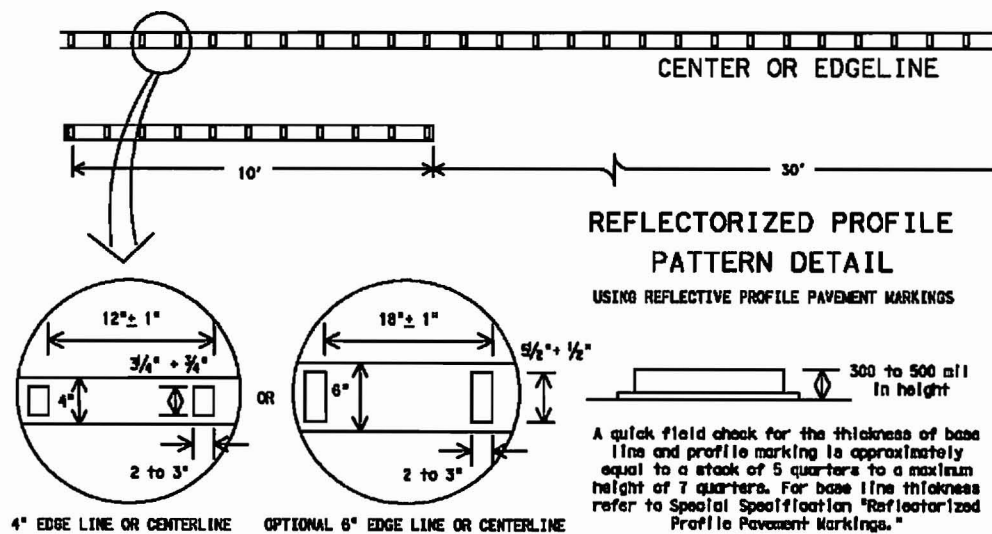
* Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies

^(A) This project includes adding deceleration/turn lanes at CR 200 and Loop 332 (Main St.)

Burnet County Line to DB Wood Rd.: Raised Profile Pavement Markers

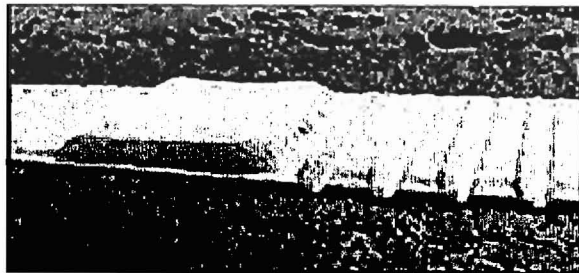
(Map ID No. 1; Estimated Cost=\$ 255,222; Refer to Figure 3 on page 14 for project location)

According to the *Texas Strategic Highway Safety Plan (SHSP)*, run-off the road (ROR) accidents account for over 30-percent of annual fatalities and 20-percent of injuries. ROR accidents can occur when a driver departs from the travel lane and has insufficient recovery room or drivable surface to correct; the result is over-correction or the inability to get back onto the roadway. According to TxDOT accident records (Table 9 through Table 13), 22-percent of accidents from 2005 through 2007 were ROR. Reducing the amount of ROR accidents can be accomplished by alerting the driver they are departing the travel lane. There are several methods available that produce audible noise and vehicle vibration, such as milled or rolled in rumble strips traffic buttons or raised profile thermoplastic markings. All methods have their benefits, and for this application, the raised profile markers are the best application. Figure 4 below is from TxDOT's pavement marking standards and depicts a typical application of raised profile markers and Figure 5 is an installed application.



Source: TxDOT Typical Standard Pavement Markings

Figure 4. Burnet Co. Line to DB Wood Rd.: Raised Profile Pavement Markers



Source: Caltrans

Figure 5. Raised Profile Pavement Markings

Liberty Hill Cemetery to AUAR Railroad: Two-way left turn lane (TWLT) and 10-ft Improved Shoulders

TWLT & 10-ft Improved Shoulders to west of CR 200 (Map ID No. 2a; Estimated Cost=\$ 3,156,410)

10-ft Improved shoulders to AUAR

(Map ID No. 2b; Estimated Cost=\$ 772,485)

Refer to Figure 3 on page 14 for project location)

In 1990, TxDOT added a 14-ft two-way left turn lane (TWLT) from west of CR 200 to the Liberty Hill High School driveway. In 2001 the TWLT was extended from the High School to US 183. As seen in Table 5 and Table 6, the VPD trend will increase by 13-percent next year, and 56-percent by 2012 between the Burnet County Line and FM 1869. This project would include installing a TWLT and 10-ft improved shoulders from the Liberty Hill Cemetery to the current TWLT terminus west of CR 200. The 10-ft improved shoulders would be carried approximately 1700-ft further east to the AUAR Railroad, including the addition of deceleration lanes for CR 200 and Loop 332. With the additional width of pavement to be installed, some utility relocation is expected.

From TxDOT's Highway Safety Manual, the HSIP reduction factors (refer to Table 7) for installing a continuous turn lane and widening paved shoulders to greater than 5-ft, have values of 45 and 42 percent, respectively. Adding the TWLT adds a buffer between the opposing traffic lanes which will help reduce head-on collisions, and the 10-ft improved shoulders will help reduce ROR accidents and head-on collisions by providing wider, more traversable recovery space in the event of a lane departure.

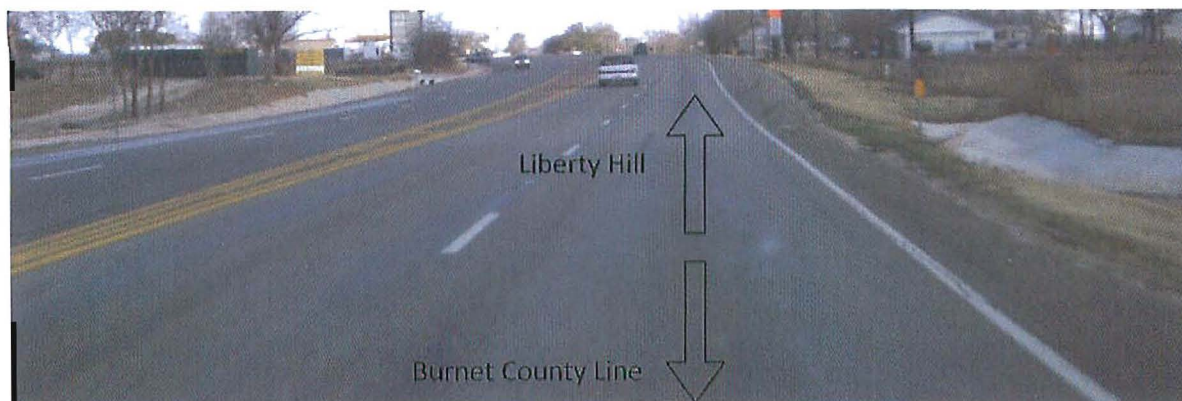


Figure 6. Existing Condition: West of CR 200, beginning of existing TWLT



Figure 7. Existing Condition: Liberty Hill City Limit Shoulders

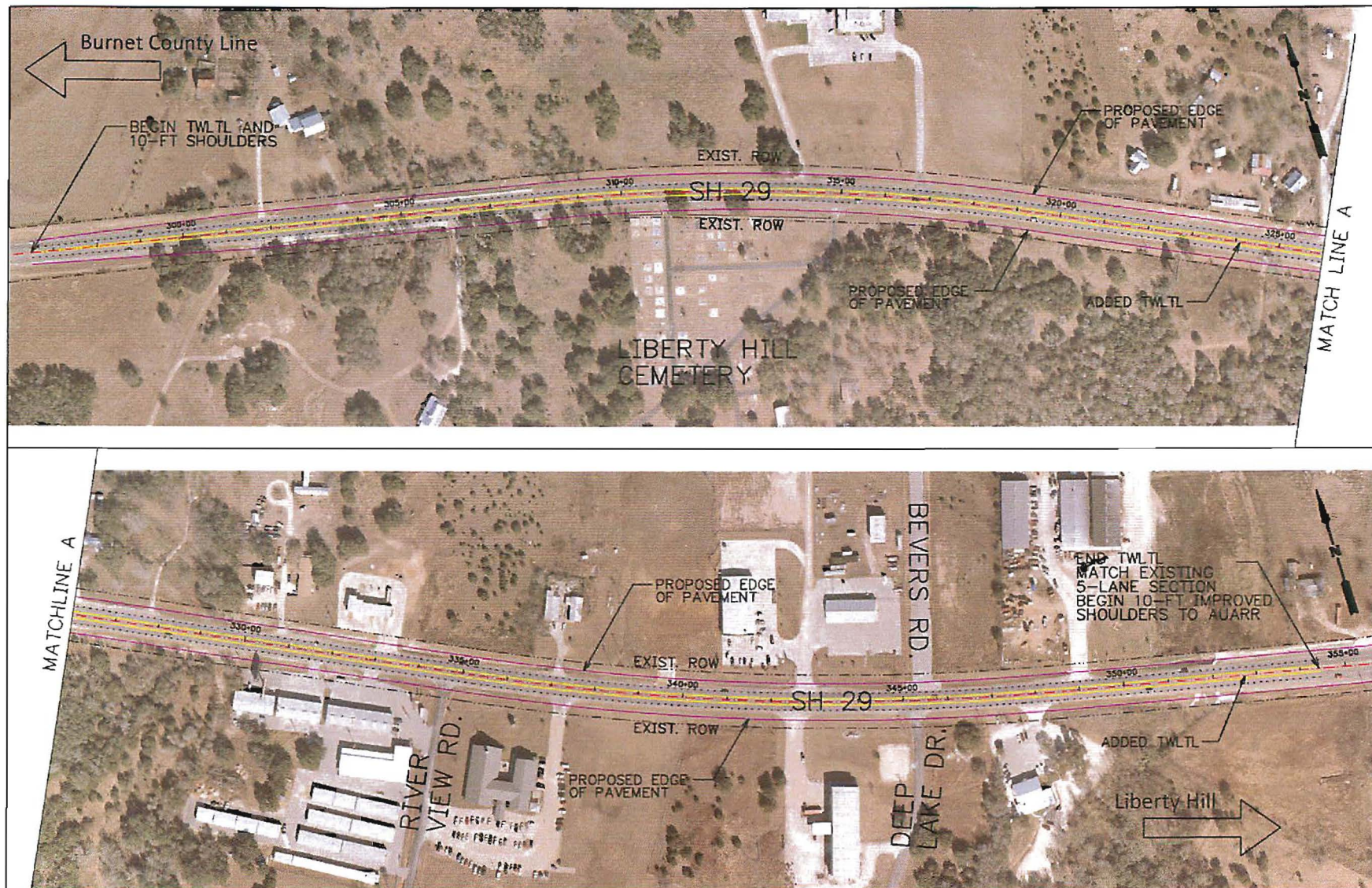


Figure 8. Liberty Hill Cemetery to west of CR 200: TWLTL and 10-ft improved shoulders

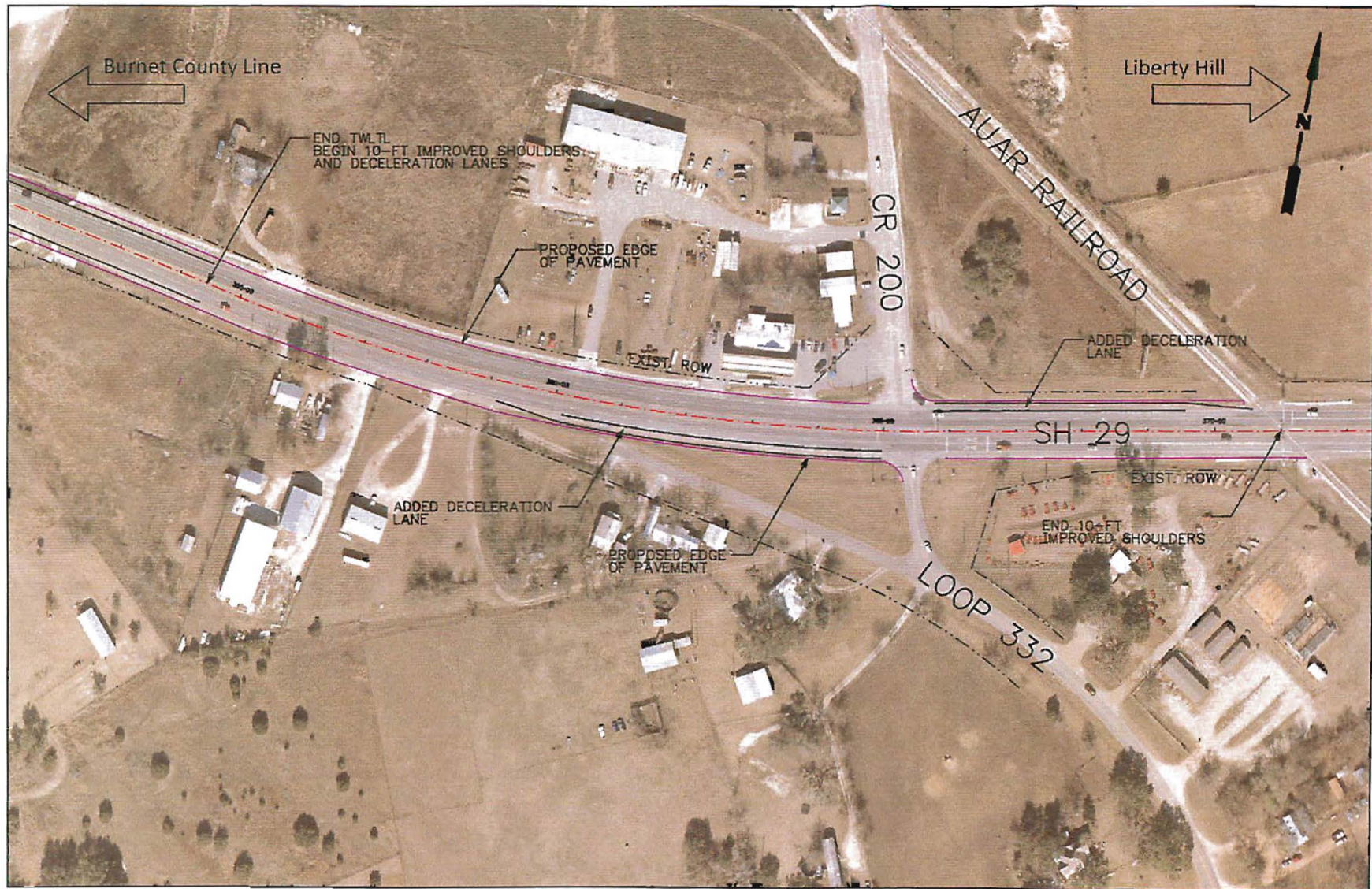


Figure 9. West of CR 200 to AUAR Railroad: 10-ft Improved Shoulders and Deceleration Lanes

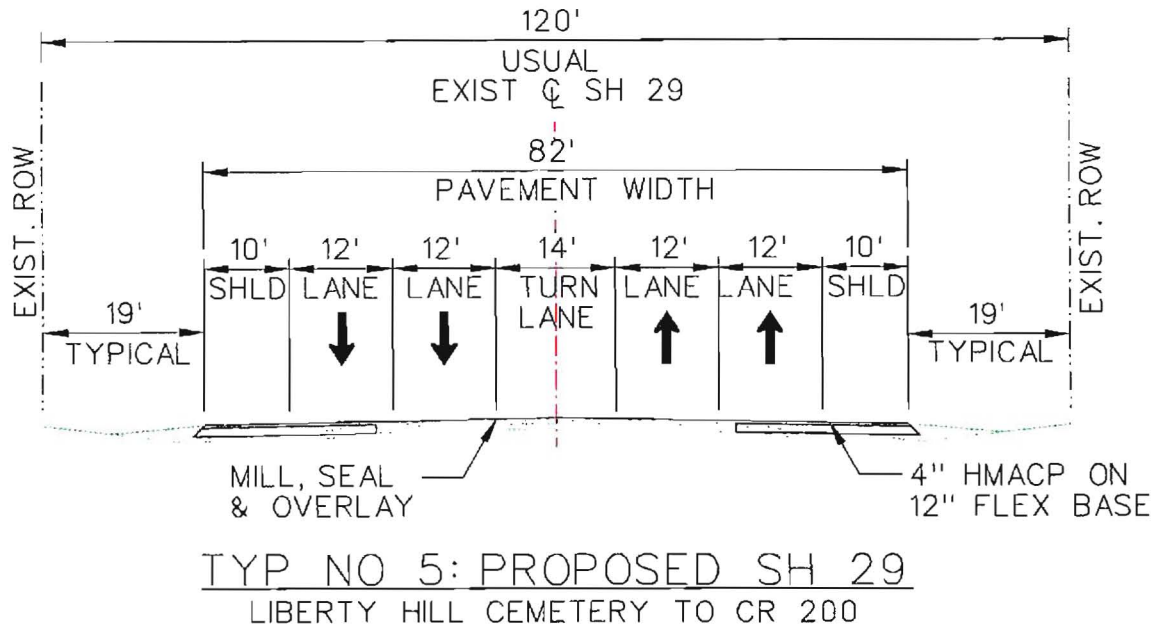


Figure 10. Proposed Typical Section: TWLTL and 10-ft Improved Shoulders

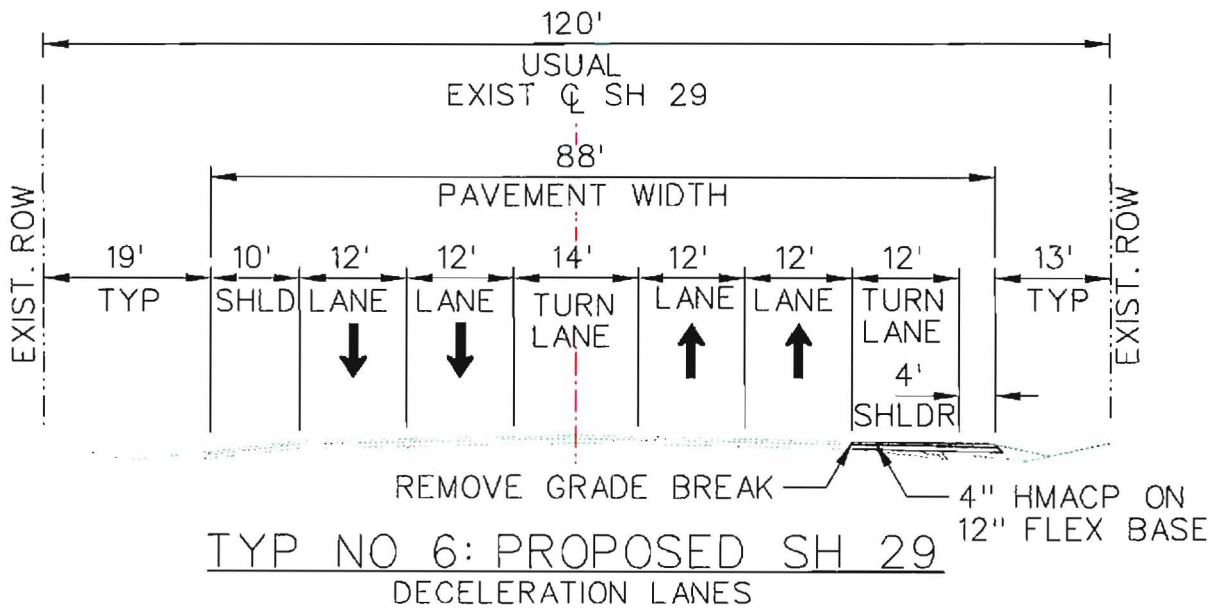


Figure 11. Proposed Typical Section: WB|EB Deceleration Lanes-Liberty Hill City Limits

CR 214 and FM 1869: WB and EB Deceleration Lanes

EB CR 214	(Map ID No. 3; Estimated Cost=\$ 219,244)
WB CR 214	(Map ID No. 4; Estimated Cost=\$ 352,692)
EB FM 1869	(Map ID No. 5; Estimated Cost=\$ 188,546)
WB FM 1869	(Map ID No. 6; Estimated Cost=\$ 164,930)
Refer to Figure 3 on page 14 for project location)	

The intersections of CR 214 and FM 1869 are approximately 1,000-ft apart, with FM 1869 being a signalized intersection. There were numerous public suggestions for the addition of a traffic signal at CR 214; however, traffic signal spacing requirements could not be met due to the proximity to FM 1869. A long term solution that could be implemented at these two intersections is to realign FM 1869 further east so that the intersection is perpendicular to SH 29. With this adjustment, the intersection spacing could conceivably allow a traffic signal to be installed at CR 214; however, this option is beyond the scope of this report. A short-term operational and safety enhancement is to install deceleration lanes and auxiliary lanes. The deceleration lanes would serve the WB traffic at FM 1869, and the EB traffic at CR 214. Auxiliary lanes between the two intersections could be considered in order to allow for safe turn at cross-streets and the numerous intermediate driveways.

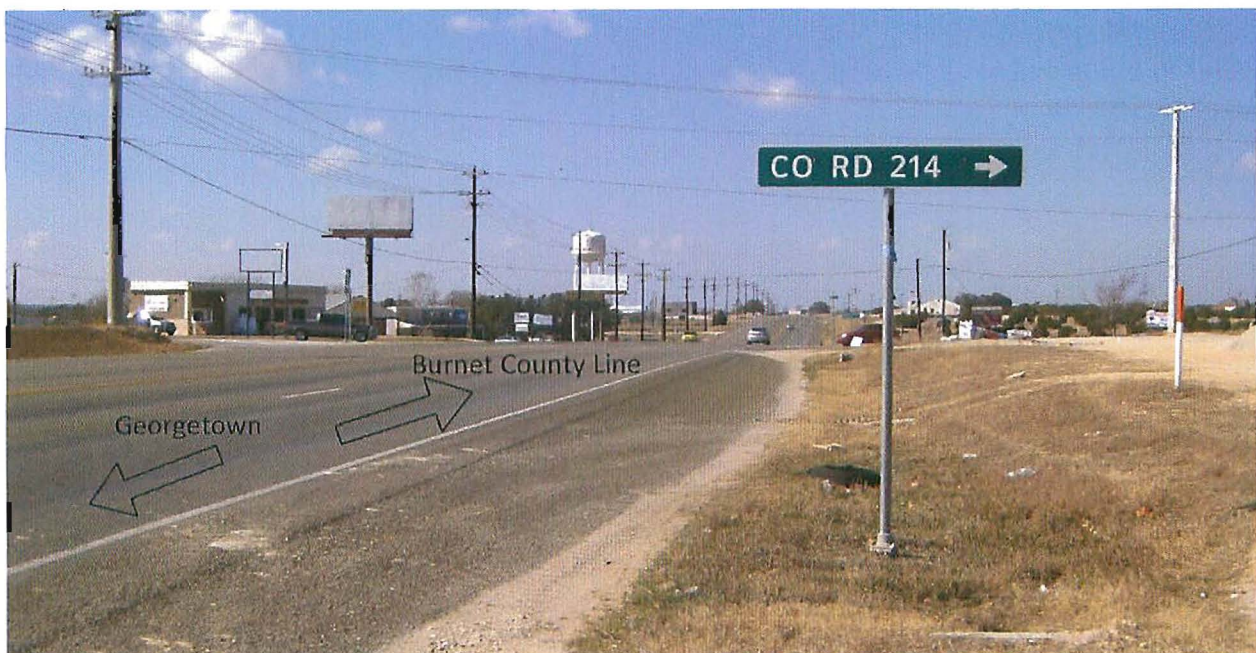


Figure 12. Existing Conditions: CR 214



Figure 13. Existing Conditions: FM 1869

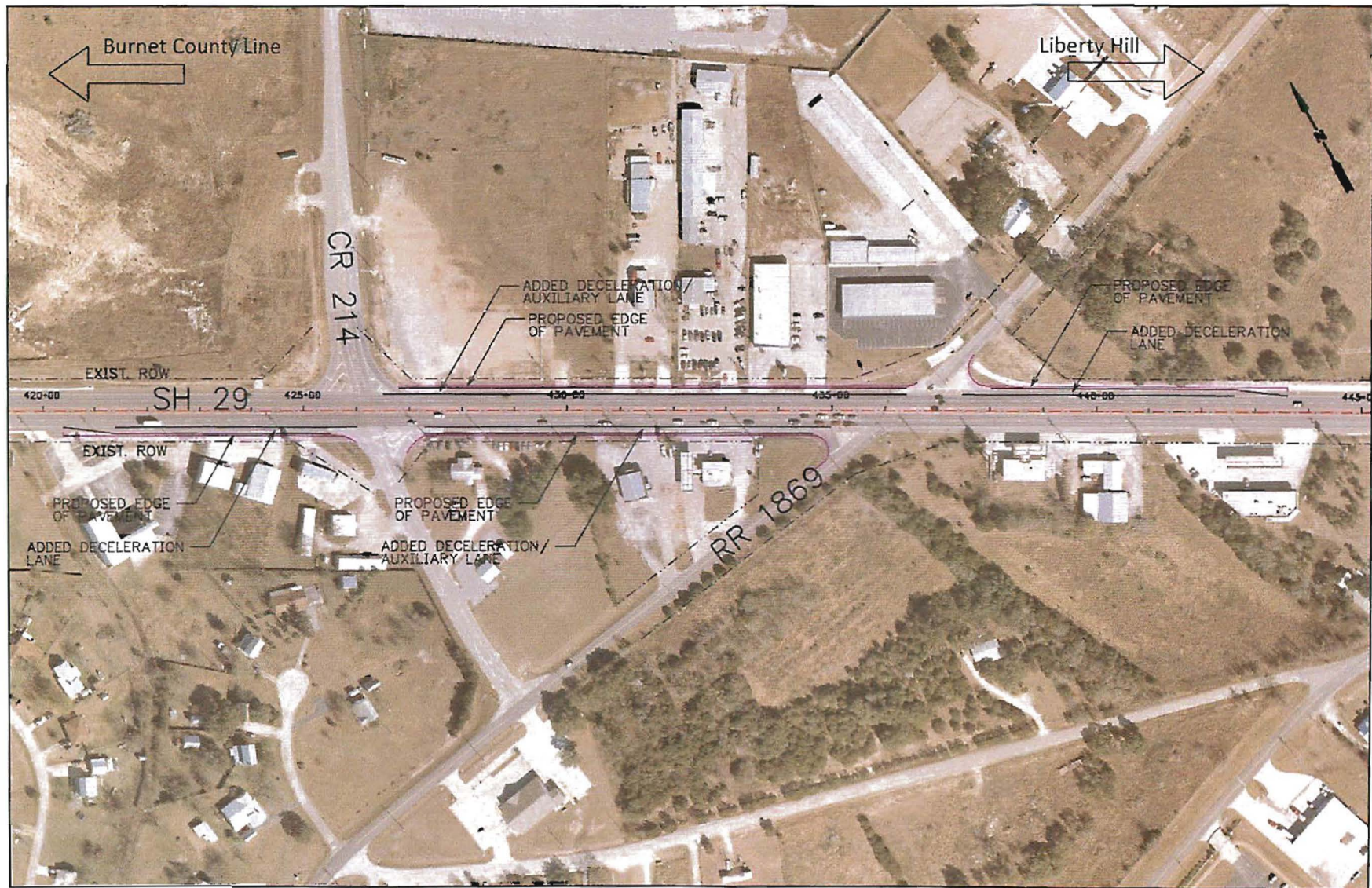


Figure 14. CR 214 and FM 1869: Deceleration Lanes

CR 260 and CR 266: Improve Turning Radii and ROW clips

(Map ID No. 7; Estimated Cost=\$ 249,137; Refer to Figure 3 on page 14 for project location)

The existing unsignalized intersection of CR 260 and CR 266 just east of US 183 is orientated at a 60 degree skew, making turning in and out of these 20-ft width roads (10-ft lanes) difficult for larger vehicles. According to public comments, large vehicles are unable to turn off SH 29 when vehicles are stopped on the cross-streets. TxDOT performed a traffic signal warrant study in 2005 and insufficient traffic to warrant a signal.

By improving the radii on all four quadrants, large trucks will be able to turn in and out of SH 29 without having to stop in the through lanes or enter the opposing traffic lanes. A total of four options were considered at this intersection, and increasing the radii proved to be the most cost effective solution to achieve the desired results. Purchasing ROW "corner clips" on all four corners will be required. See Figure 38 through Figure 40 in the 'Alternative Projects' section for all investigated options for this intersection.

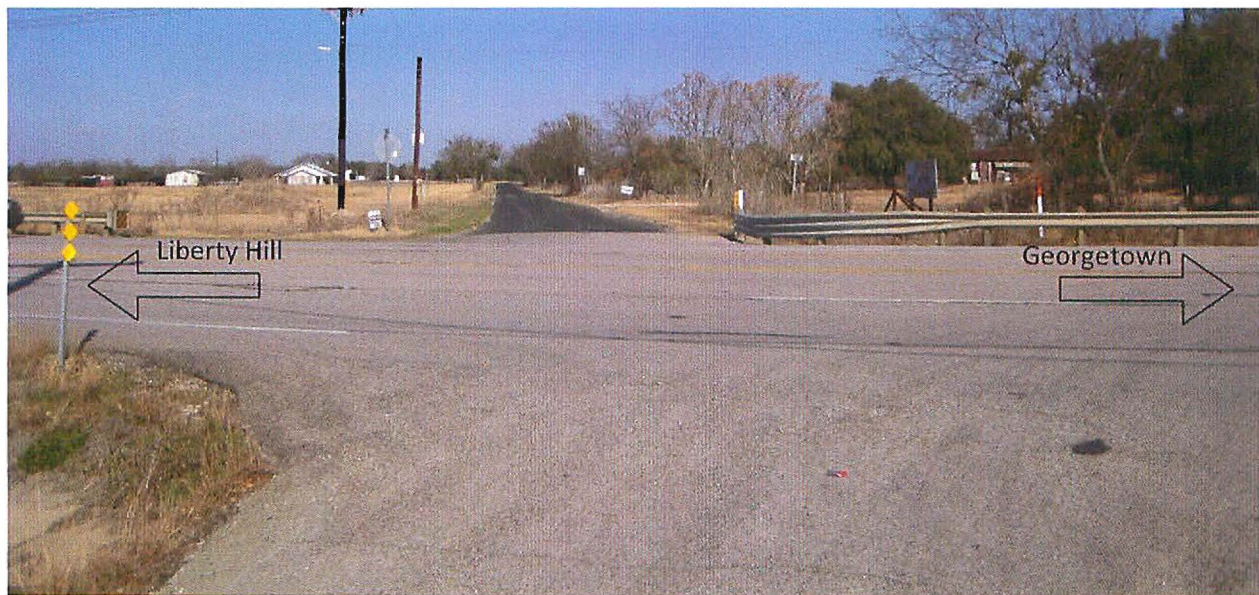


Figure 15. Existing Condition: CR 260



Figure 16. Existing Condition: CR 266

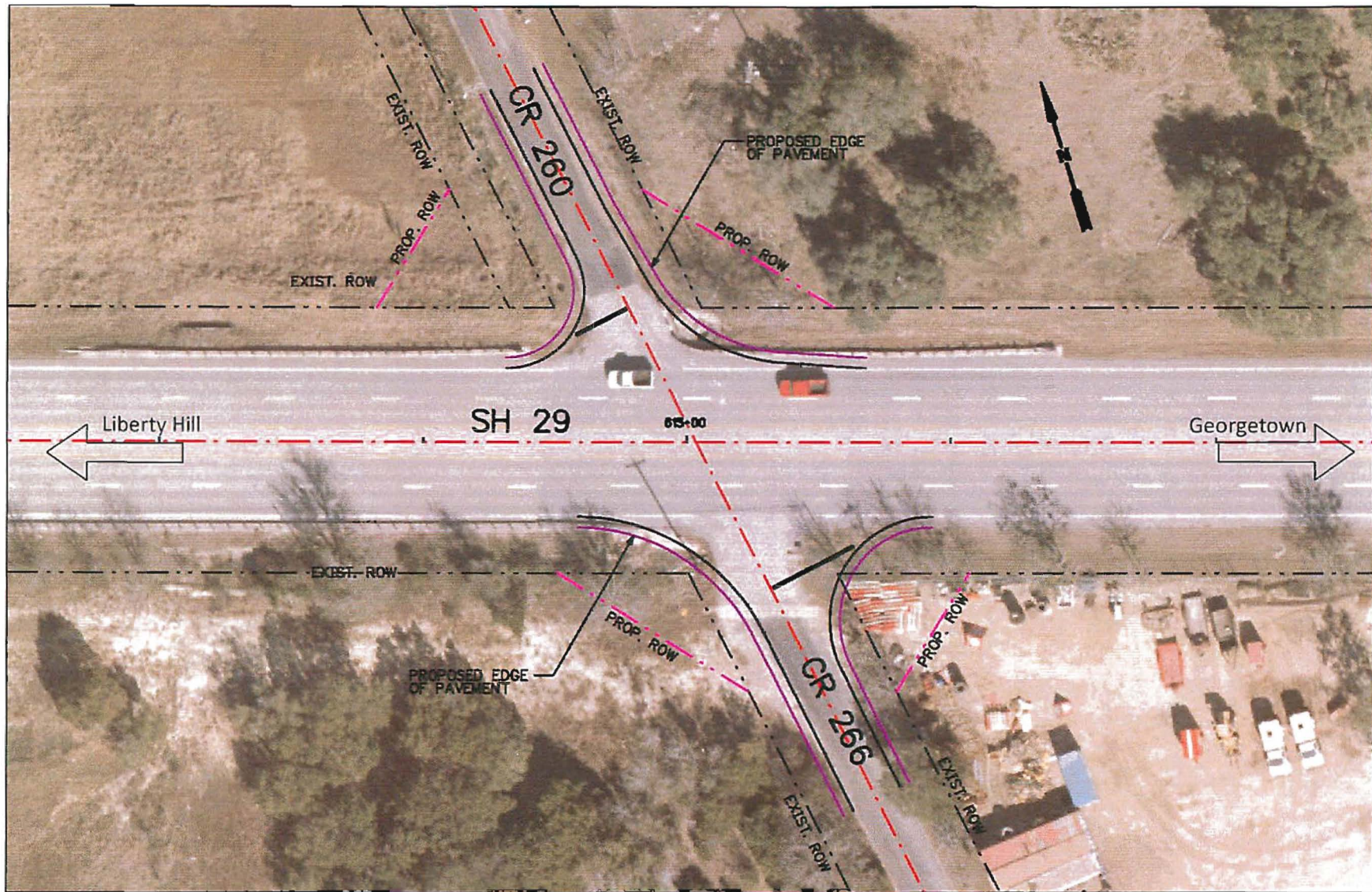


Figure 17. CR 260 and CR 266: Radii improvements with ROW clips



Park Place Dr. (Gabriel's Overlook): EB Deceleration Lane

(Map ID No. 8; Estimated Cost=\$ 352,874; Refer to Figure 3 on page 14 for project location)

Park Place Drive, the connecting street for the sub-division of Gabriel's Overlook, is located on a rural section of SH 29 with a speed limit of 65-mph (refer to Figure I and Figure II in Appendix A). With the 4-ft shoulders and 20-ft turning radius, residents have to slow down significantly before turning off SH 29. With current SH 29 ADT values around 12,000 VPD, and a projected 30-percent increase by 2012, adding a right turn/deceleration lane onto Park Place Dr. will allow those turning movements to place outside of the through traffic.

With limited ROW in this location, between US 183 and Georgetown (nominally 100-ft), adding TxDOT desirable design widths (12-ft deceleration lane and 4-ft shoulders) will require the need for additional ROW and costly utility relocations. From information gathered during the SH 29 Improvement Study, there is an underground 20-in CTSUD water line approximately 12-ft outside the existing ROW limits, and an underground telephone cable approximately 10-ft from the existing edge of pavement. If the 12-ft deceleration lane and 4-ft shoulder are implemented, then adjustments to these utilities, and the purchase of an additional width of utility easement will be required.

CP&Y recommends adding a deceleration lane matching the through lane widths (11-ft) with 2-ft outside shoulders, subject to TxDOT approval. Although these values are less than TxDOT desirable widths, they would minimize the need for purchasing ROW and utility relocations, while providing an adequate facility for turning vehicles. Metal beam guard fence with concrete slopes will be required for safety protection from the existing property line fence and utility poles. If this project is implemented, further investigation will be needed to determine if this project is viable with the constraints that have been identified and those which are currently unknown.



Figure 18. Existing Condition: Park Place

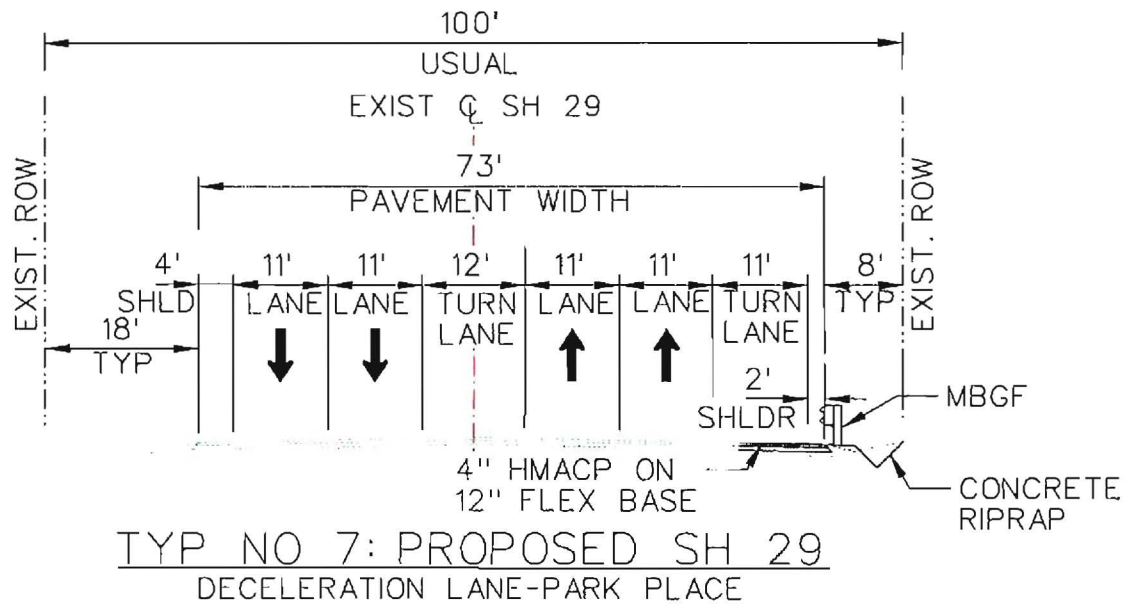


Figure 19. Proposed Typical Section: EB Deceleration Lane-Park Place (Gabriel's Overlook)

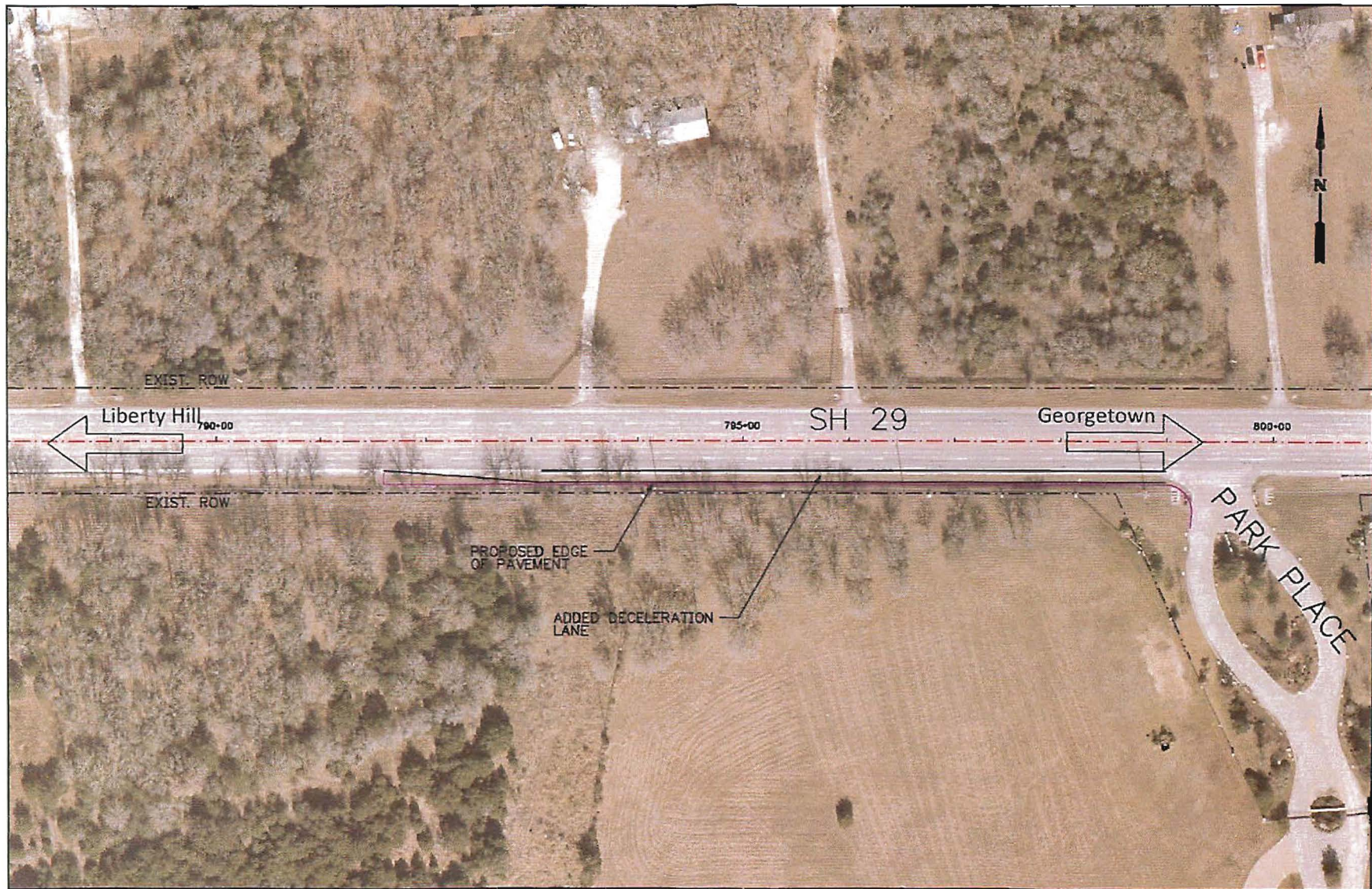


Figure 20. Park Place (Gabriel's Overlook): Deceleration Lane

Jack Nicklaus [Cimarron Hills]: WB Deceleration Lane

(Map ID No. 9; Estimated Cost=\$ 187,708; Refer to Figure 3 on page 14 for project location)

Jack Nicklaus is the local street connecting the sub-division of Cimarron Hills to SH 29. This situation is similar to Park Place (Gabriel's Overlook) in that there is limited ROW, high ADT's, 4-ft shoulders and small turning radii into and out of the sub-division, however, there are not any known utility issues identified at this time. Approximately 12-ft of slope easement dedication is anticipated in order to install this deceleration lane.

TxDOT performed a traffic signal warrant study in 2005 and found an engineering warrant was met at this location and has plans to install a signal in 2009. Coordination with TxDOT will be needed to insure these two projects operate safely and efficiently.

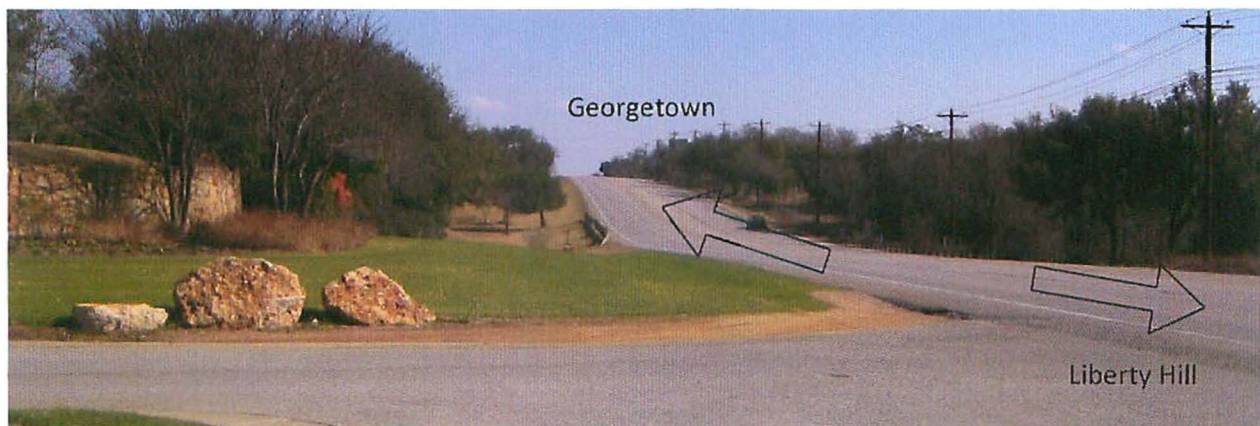


Figure 21. Existing Condition: Jack Nicklaus (Cimarron Hills)

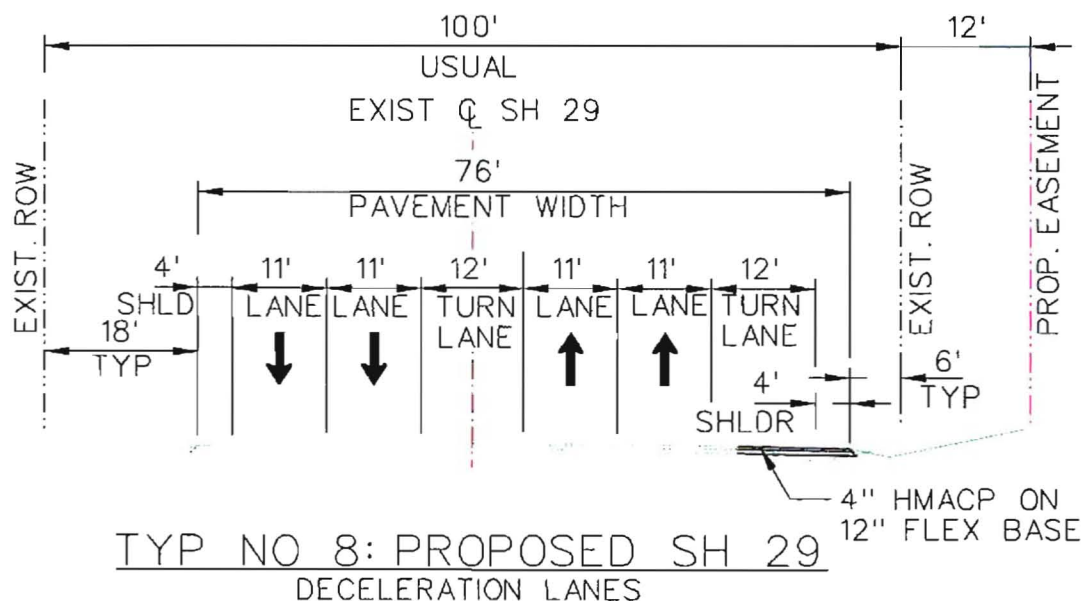


Figure 22. Proposed Typical Section: WB Deceleration Lane-Jack Nicklaus (Cimarron Hills) & Capital Aggregates Quarry Driveway.

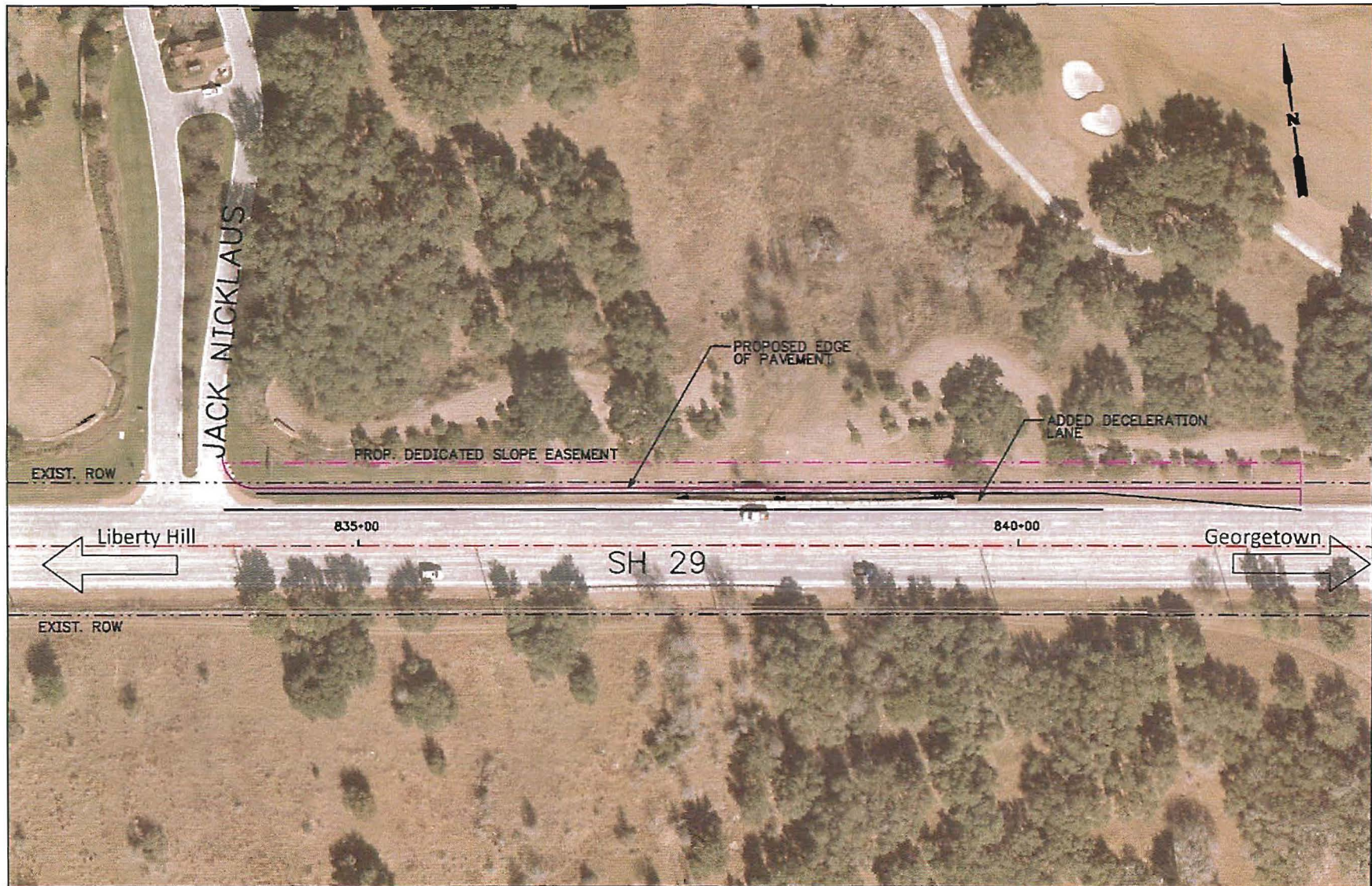


Figure 23. Jack Nicklaus (Cimarron Hills): Deceleration Lane

Cedar Hollow: Advanced Highway Flashing Beacon (Solar Powered) & Additional Signage

(Map ID No. 10; Estimated Cost=\$ 44,834; Refer to Figure 3 on page 14 for project location)

Cedar Hollow is a local collector which serves as the only access point to SH 29 for the residents. The road was improved to enhance sight distance by raising the tie-in point at SH 29. As seen in Figure 24 the sight distance is still limited due to the proximity of vertical curves along SH 29. TxDOT performed a traffic signal warrant study at this intersection in 2005 and found there was not an engineering warrant; however, long-term trends indicate a signal may be warranted in the future.

To improve the safety of this intersection and to coordinate with TxDOT's future plans, an advanced solar powered flashing beacon with an "Intersection Ahead" sign will help alert drivers of the intersection and turning vehicles. In addition to the flashing beacon, advanced guidance signs indicating the name of the street are recommended.

An alternative method to alert drivers of an intersection and turning vehicles is to install an overhead flashing beacon system at the intersection with highway illumination. This cost estimate can be found in the 'Alternative Projects' section. Both options are compatible with the installation of a traffic signal, should one be warranted in the future.



Figure 24. Existing Condition: Cedar Hollow Sight Distance

Medium and Low Priority Projects

Projects listed in the lower tiers (Medium and Low Priority), were examined based on public input or suggestions from Task Force members. These projects represent viable options to improve safety along SH 29, should additional funding be available.

Table 15. Medium Priority Project List

Map ID	Location	Project Description	Length (mi)	Estimated Cost*	Page Number	Reference Figure
11	Main St. (Loop 332) @ SH 29	Raise Height of Roadway ^(A)	0.08	\$ 168,984	Page-34	Figure 26
12	Liberty Hill High School Driveway	EB Deceleration/Turn Lane	0.12	\$ 189,242	Page-36	Figure 29
			Total	\$358,226		

Refer to Figure 3 on page 14 for project locations. Prices based from published TxDOT bid prices from March 04, 2009.

** Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies*

^(A) Full roadway reconstruction

Table 16. Low Priority Project List

Map ID	Location	Project Description	Length (mi)	Estimated Cost*	Page Number	Reference Figure
13	Burnet Co. Line to Liberty Hill Cemetery	10-ft Improved Shoulders	3.42	\$ 6,263,386	Page- 40	Figure 34
14	Bronco Blvd. (Sundance Estates)	WB Deceleration/Turn Lane	0.11	\$ 136,695	Page-36	Figure 30
15	Capital Aggregates Quarry	WB Deceleration/Turn Lane	0.14	\$ 118,094	Page-36	Figure 31
			Total	\$6,518,175		

Refer to Figure 3 on page 14 for project locations. Prices based from published TxDOT bid prices from March 04, 2009.

** Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies*

Main St. (Loop 332) @ SH 29: Raise Height of Roadway

(Map ID No. 11; Estimated Cost=\$ 168,984; Refer to Figure 3 on page 14 for project location)

The intersection of Loop 332 (Main St.) and CR 200 has many different elements that impact the operational characteristics of the facility. The close proximity to the AUAR railroad and horizontal curve present operational challenges with the cross-street tie-ins. The limited sight distance hinders the driver's abilities to spot oncoming traffic while performing turns onto SH 29. The steep uphill slope of Loop 332 at the intersection also makes it difficult to see the vehicles coming around the horizontal curve of SH 29 while attempting to make a right-hand turn. Figure 25 shows vehicles are attempting to bypass a stopped vehicle at the traffic signal by driving on the topsoil to turn, creating additional operational concerns.

One short-term solution to implement at this intersection is to raise the vertical profile of Loop 332 creating a flatter roadway at SH 29. A right turn lane is also suggested on Loop 332 as part of this recommendation.

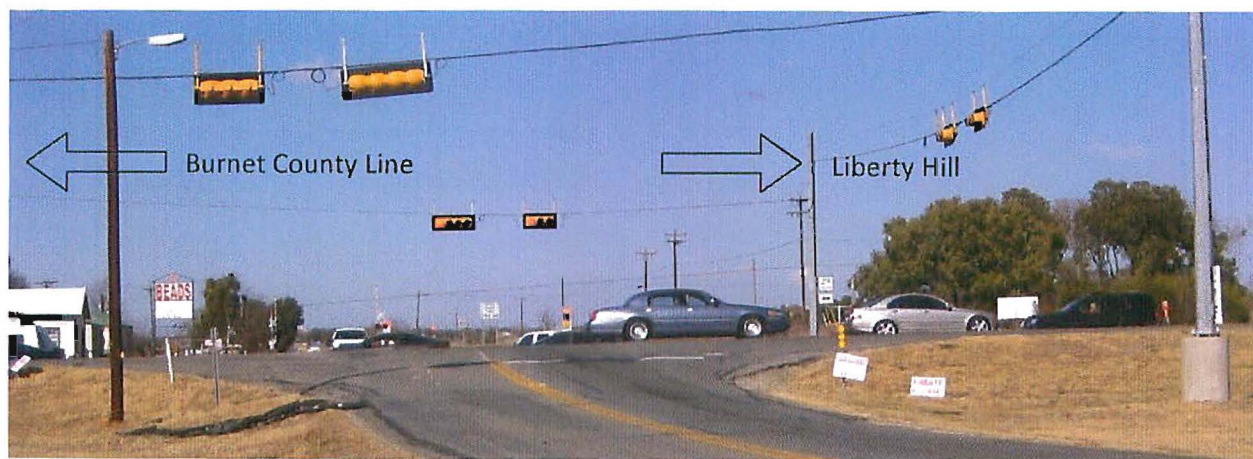


Figure 25. Existing Conditions: Main St. (Loop 332) @ SH 29

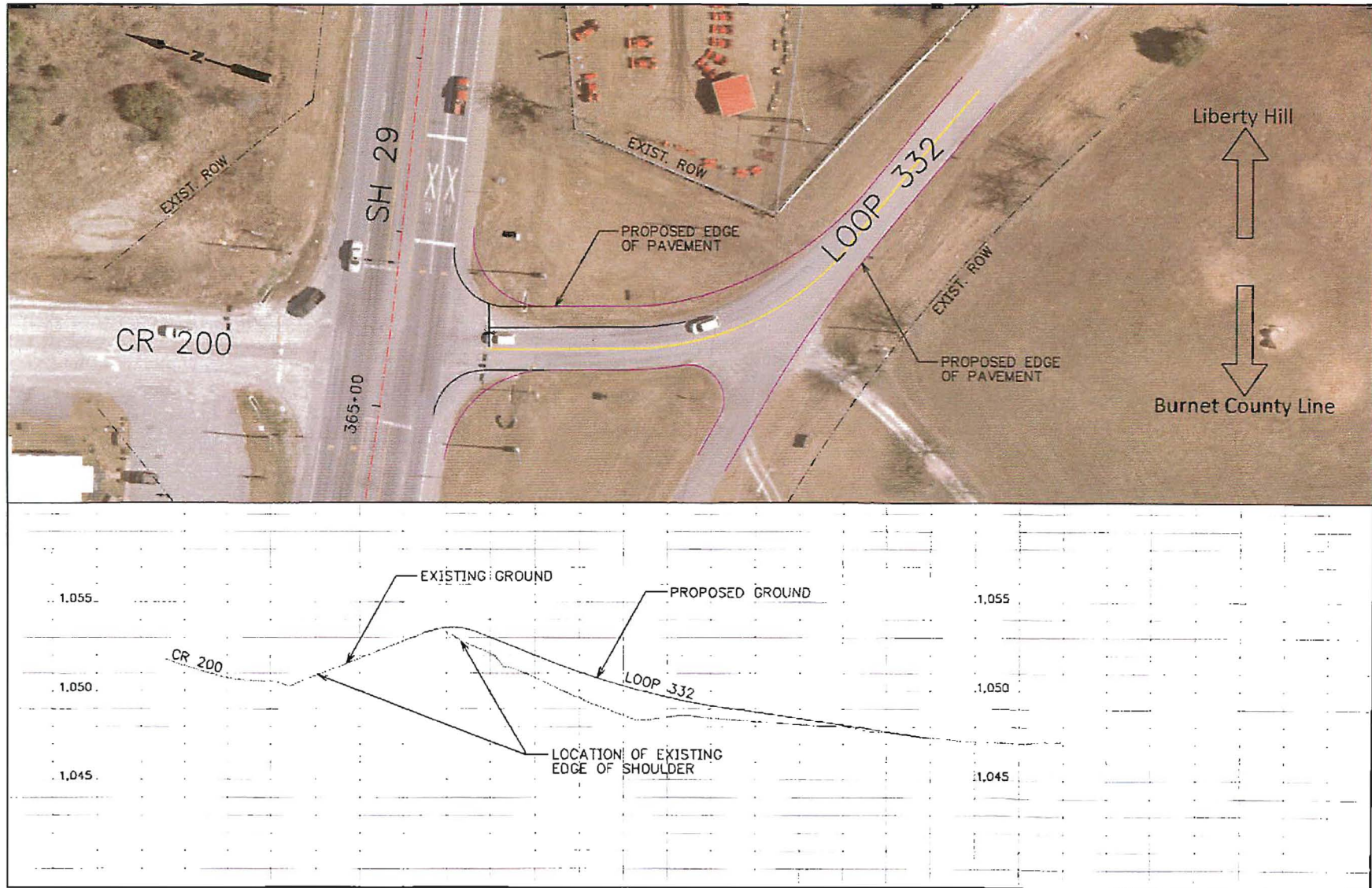


Figure 26. Main St. (Loop 332) @ SH 29: Raise Height of Roadway

Liberty Hill High School Driveway, Bronco Blvd. and Capital Aggregates Quarry Driveway:

Deceleration Lane

Liberty Hill High School Driveway (Map ID No. 12; Estimated Cost= \$ 189,242)

Bronco Blvd. Capital (Map ID No. 14; Estimated Cost=\$ 136,695)

Capital Aggregates Quarry (Map ID No. 15; Estimated Cost=\$ 118,094)

Refer to Figure 3 on page 14 for project location)

At the intersections of Bronco Blvd., Liberty Hill High School driveway and Capital Aggregates Quarry driveway, the addition of deceleration lanes will allow turning vehicles to exit the through lanes of SH 29. Refer to Figure 11 on page 20 for the proposed typical section of deceleration lanes for Liberty Hill High School driveway and Bronco Blvd, and Figure 22 on page 30 for the Capital Aggregates Quarry driveway. The figures on the following pages are intersections diagrams depicting the proposed deceleration lanes.

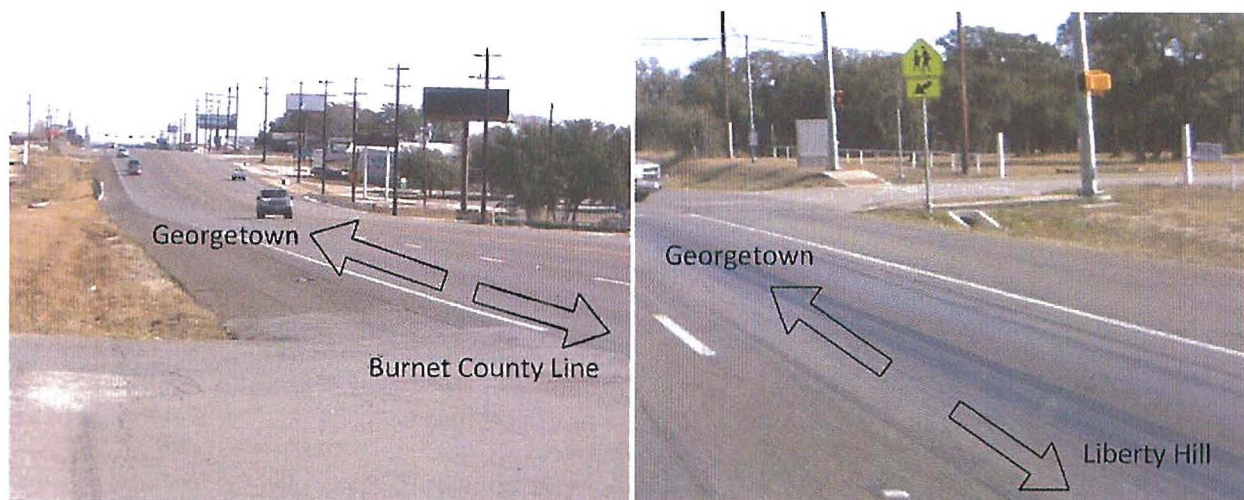


Figure 27. Existing Conditions: Bronco Blvd (Left); Liberty Hill High School driveway (Right)



Figure 28. Existing Conditions: Capital Aggregates Quarry

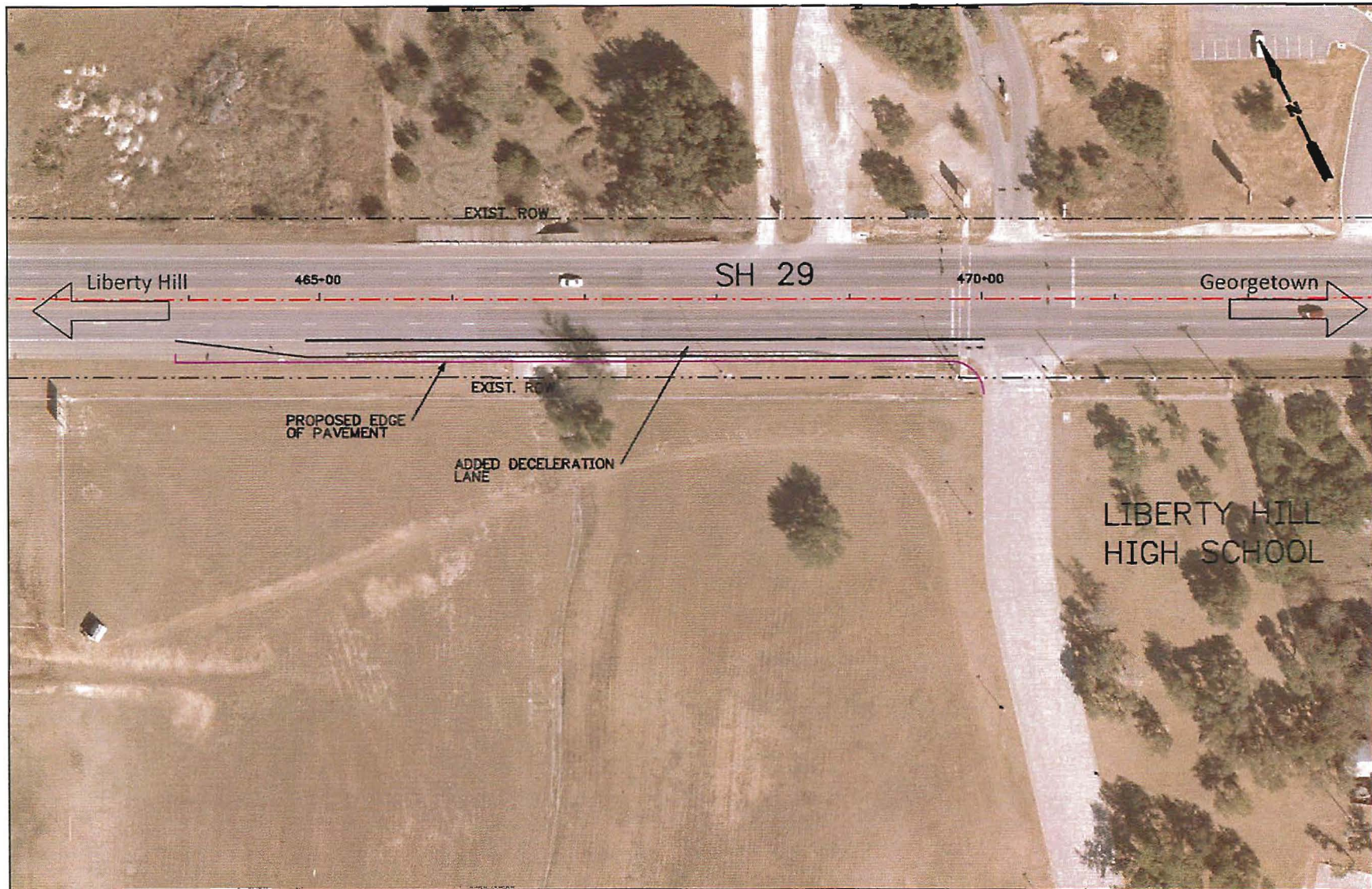


Figure 29. Liberty Hill High School Driveway: Deceleration Lane

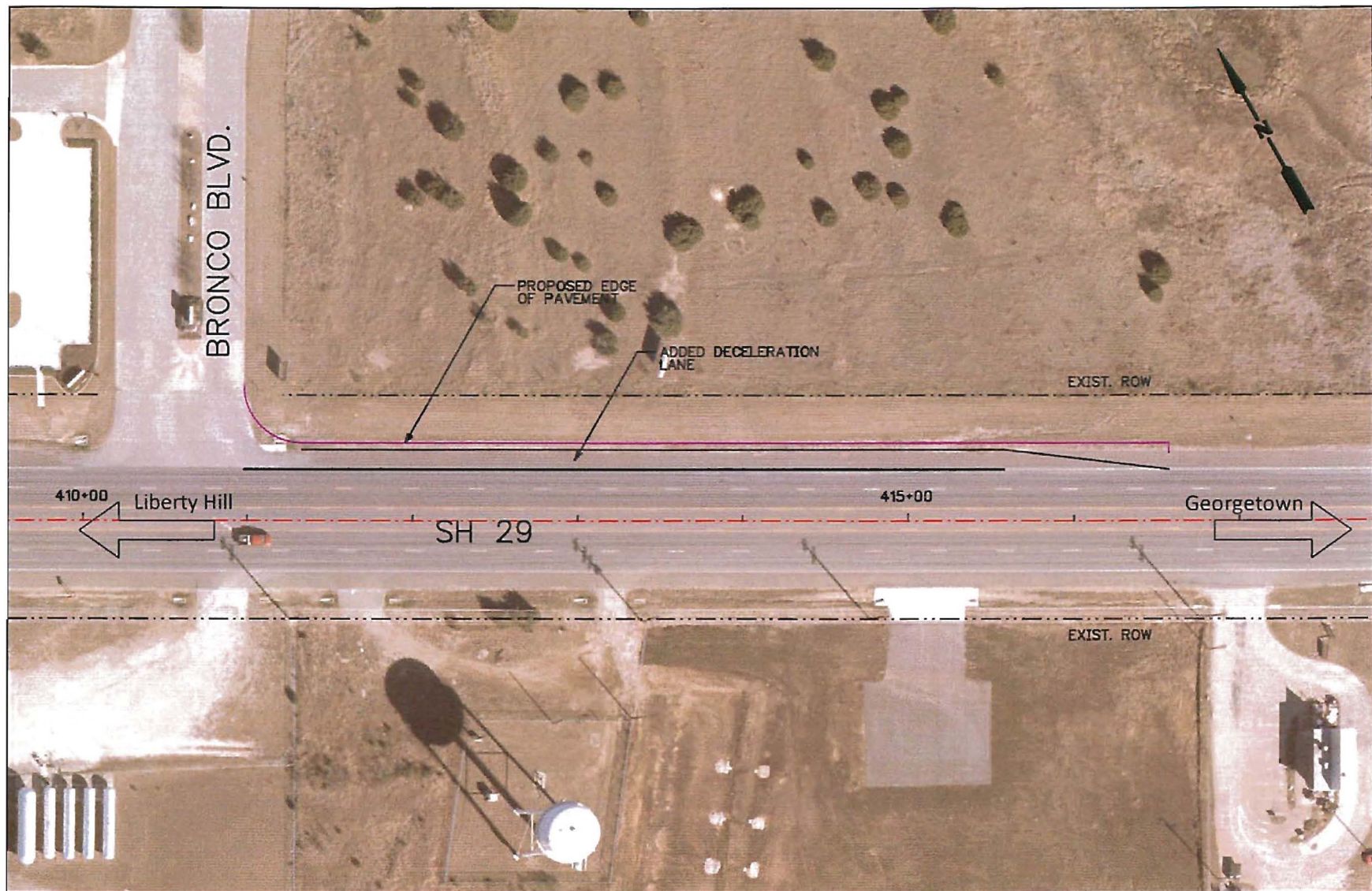


Figure 30. Bronco Blvd.: Deceleration Lane



Figure 31. Capital Aggregates: Deceleration Lane

Burnet County Line to Liberty Hill Cemetery: 10-ft Improved Shoulders

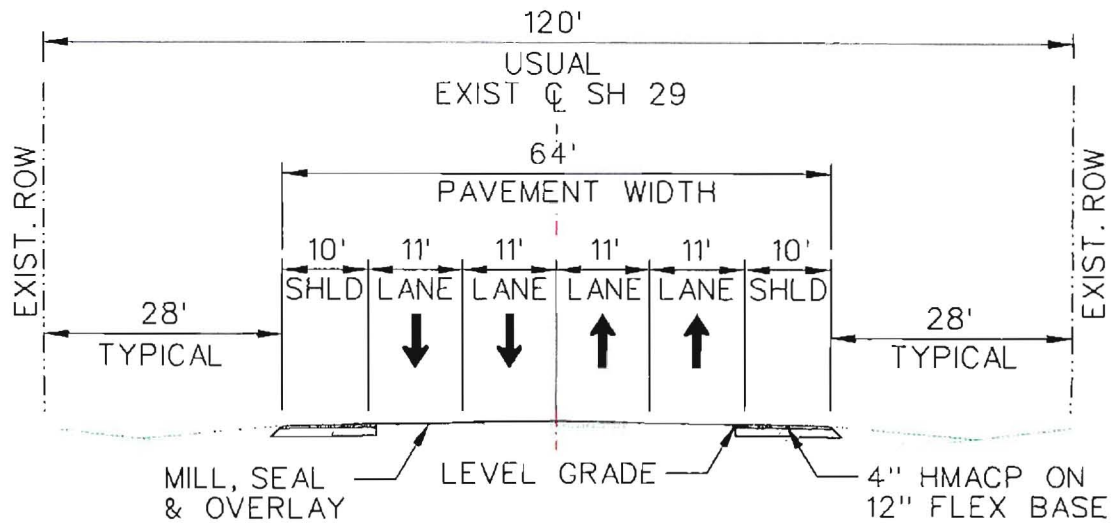
(Map ID No. 13; Estimated Cost=\$ 6,263,386; Refer to Figure 3 on page 14 for project location)

The existing roadway between the Burnet County Line to just west of CR 200 is a 4-lane section with 4-ft shoulders (refer to Typical Section 1, in Figure I in Appendix A). The edge condition (the interface between the edge of pavement and topsoil) in this section is in fair condition after many seal coats and surface treatments. When the edge condition is poor, a phenomenon known as 'scrubbing' can occur which presents potential safety concerns.



Figure 32. Existing Condition: Typical Shoulder Edge, Burnet Co. Line to Liberty Hill High School Driveway

As previously mentioned, adding paved shoulders greater than 5-ft has an HSIP reduction factor of 42-percent. In locations with culverts and existing metal-beam guardfence (mbgf), there are two options which can be implemented. First, and preferably, the shoulders are consistently 10-ft wide, providing a visually symmetric, consistent looking roadway and providing an optimal design. Although this would require extending culverts and removing and reinstalling mbgf, this is the preferred option. The second option is to provide 10-ft shoulders except at the culvert locations. This option eliminates several costly improvements that would be required to extend culverts and relocate mbgf, however, it doesn't allow for uninterrupted 10-ft shoulders.



TYP NO 9: PROPOSED SH 29
BURNET C/L TO LIBERTY HILL CEMETERY

Figure 33. Proposed Typical Section: 10-ft Shoulders



Figure 34. Burnet Co. Line to Liberty Hill Cemetery: 10-ft improved shoulders

Alternative Projects

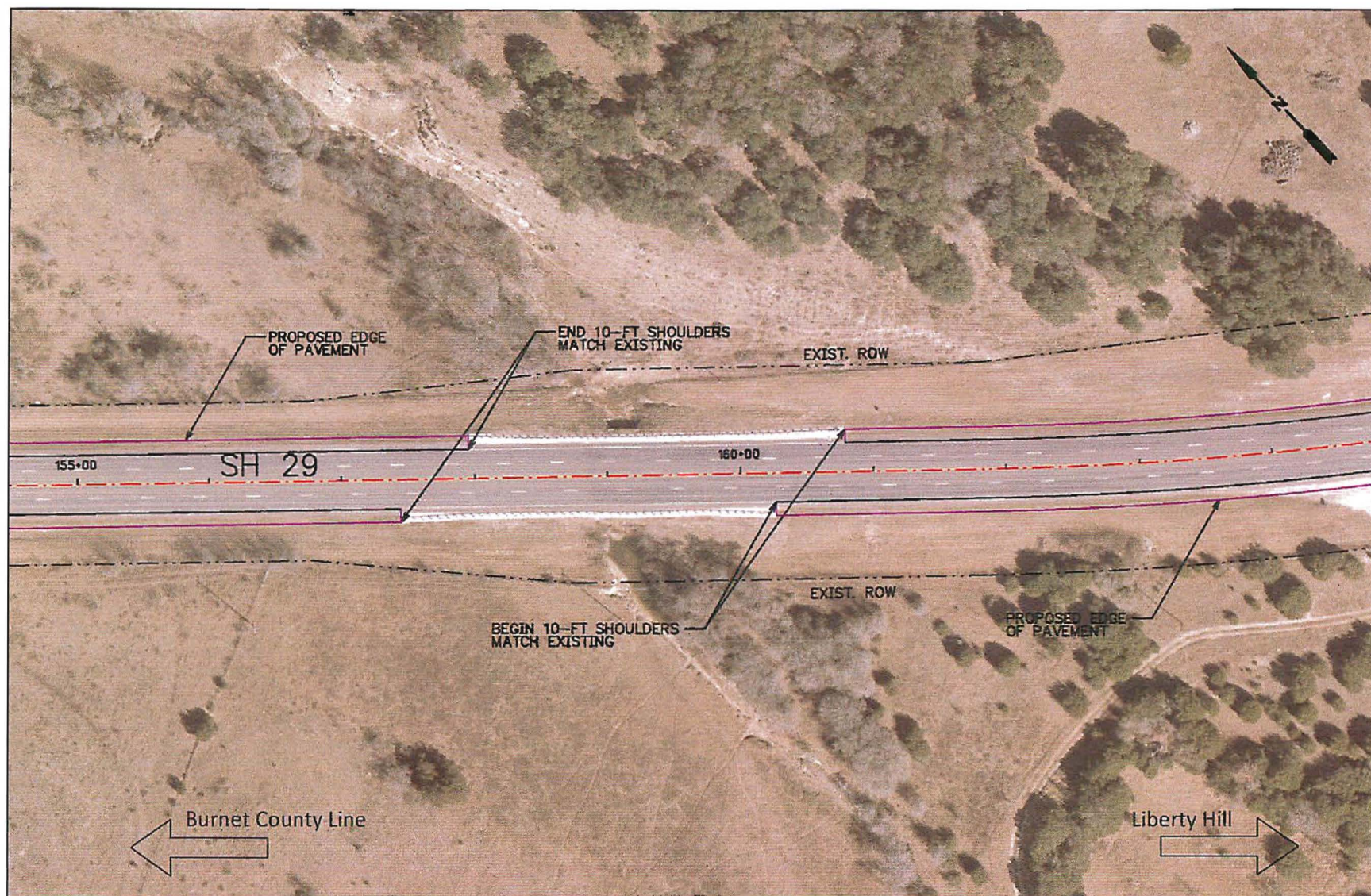
The projects listed in this section are variations of other projects that have been previously discussed with in the High, Medium or Low Priority Projects. These alternative projects would not need to be implemented in conjunction with a tiered project; rather, they are various safety improvement projects that could be chosen in lieu of a tiered project. They are shown below to give the Williamson County a range of options for projects to implement.

Table 17. Alternative Project List

Map ID	Location	Project Description	Length (mi)	Estimated Cost*	Page Number	Reference Figure
16	Burnet Co. Line to Liberty Hill Cemetery	10-ft Improved Shoulders (no culvert extensions)	3.94	\$ 5,390,097	Page-44	Figure 35
17	AUAR RR to Liberty Hill High School Driveway	10-ft Improved Shoulders	2.25	\$ 3,038,142	Page-45	Figure 36
18	CR 200	WB Deceleration/Turn Lane	0.10	\$ 95,022	Page-46	Figure 37
19	Main St. (LP 332)	EB Deceleration/Turn Lane	0.11	\$ 132,714	Page-46	Figure 37
20	CR 260 and CR 266	Intersection Improvement: Radii & Deceleration Lanes	0.29	\$ 515,953	Page-47	Figure 38
21	CR 260 and CR 266	Intersection Improvement: 15-ft shift	0.29	\$ 457,088	Page-48	Figure 39
22	CR 260 and CR 266	Intersection Improvement: Offset Intersection	0.18	\$ 302,486	Page-49	Figure 40
23	Cedar Hollow	Highway Flashing Beacon and Additional Signage	0.02	\$ 82,537	Page-32	-

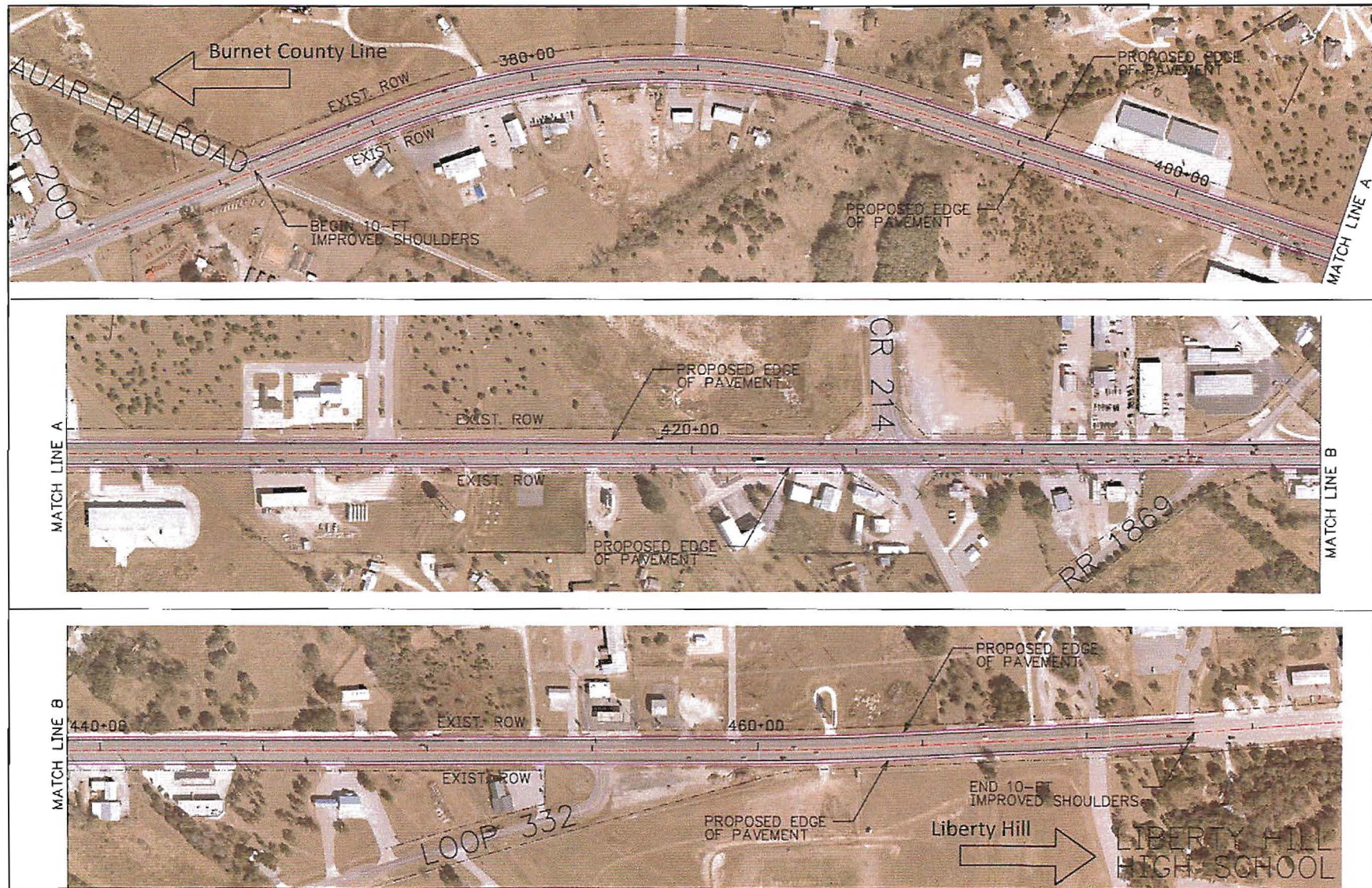
Refer to Figure 3 on page 14 for project locations. Prices based from published TxDOT bid prices from March 04, 2009.

** Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies*



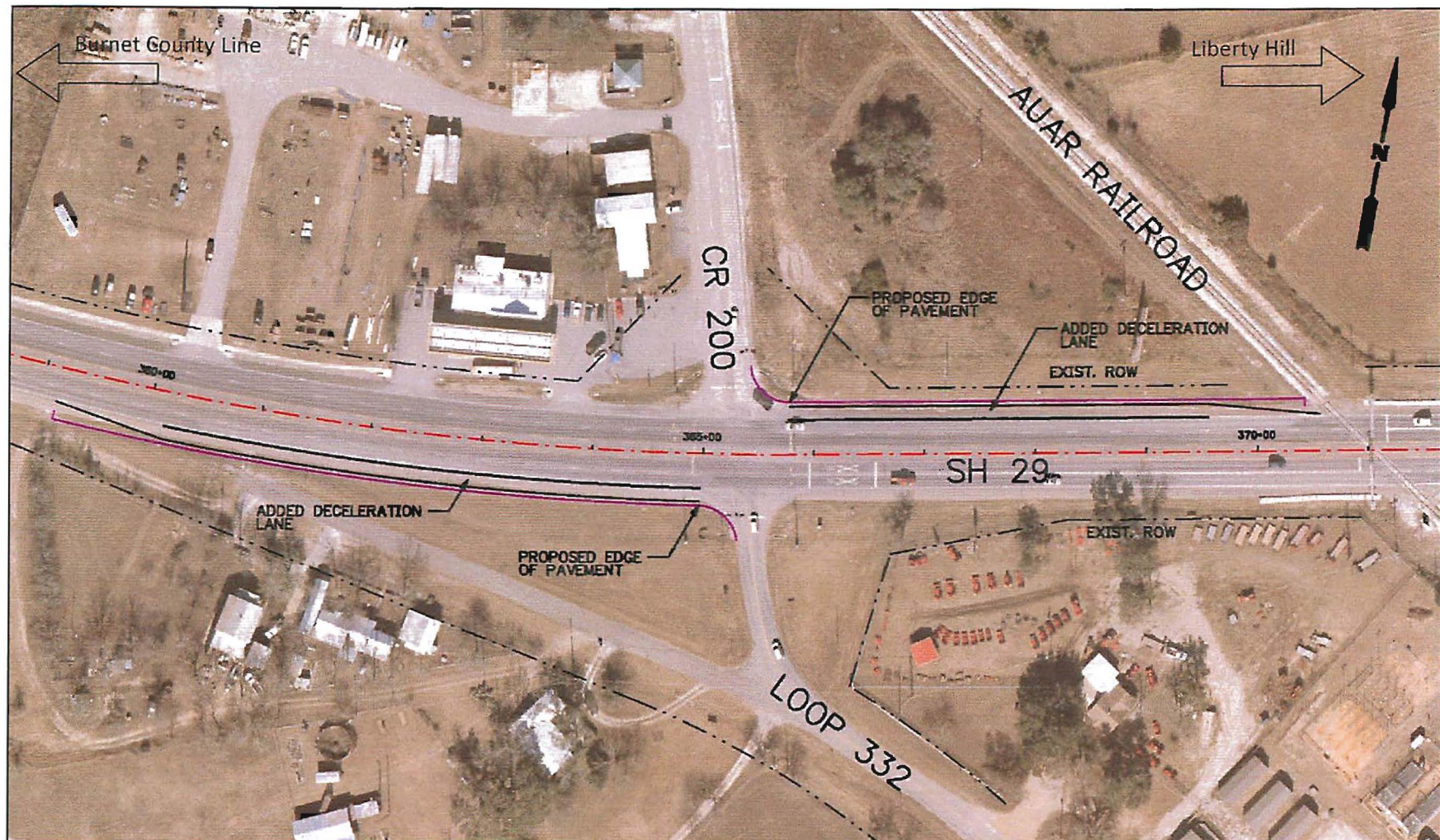
(Map ID No.16; Estimated Cost= \$ 5,390,097; Refer to Figure 3 on page 14 for project location)

Figure 35. Burnet Co. Line to Liberty Hill Cemetery: 10-ft improved shoulders (No culvert extensions)



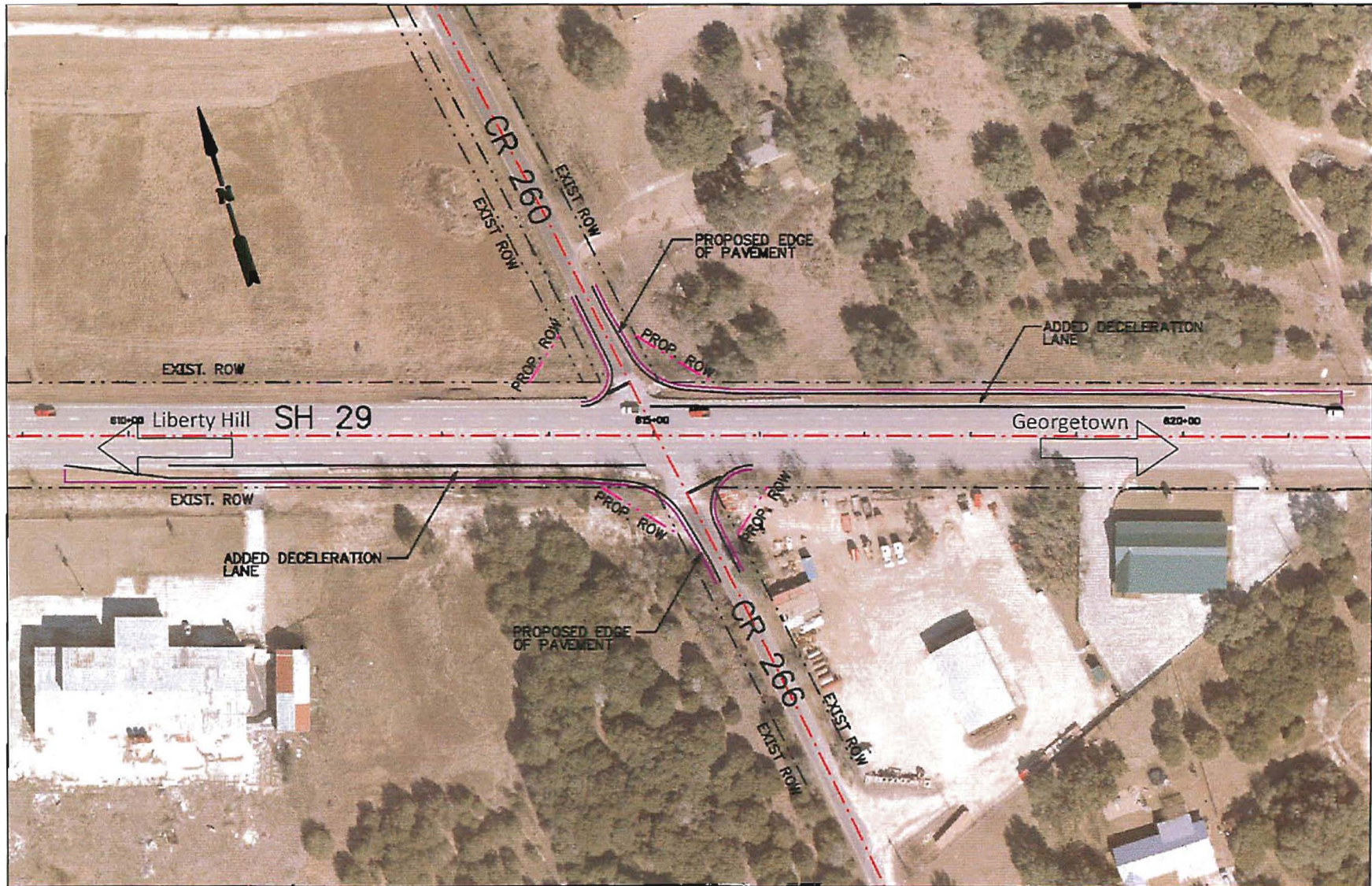
(Map ID No.17; Estimated Cost=\$ 515,953; Refer to Figure 3 on page 14 for project location)

Figure 36. AUAR Railroad to Liberty Hill High School Driveway: 10-ft Improved Shoulders



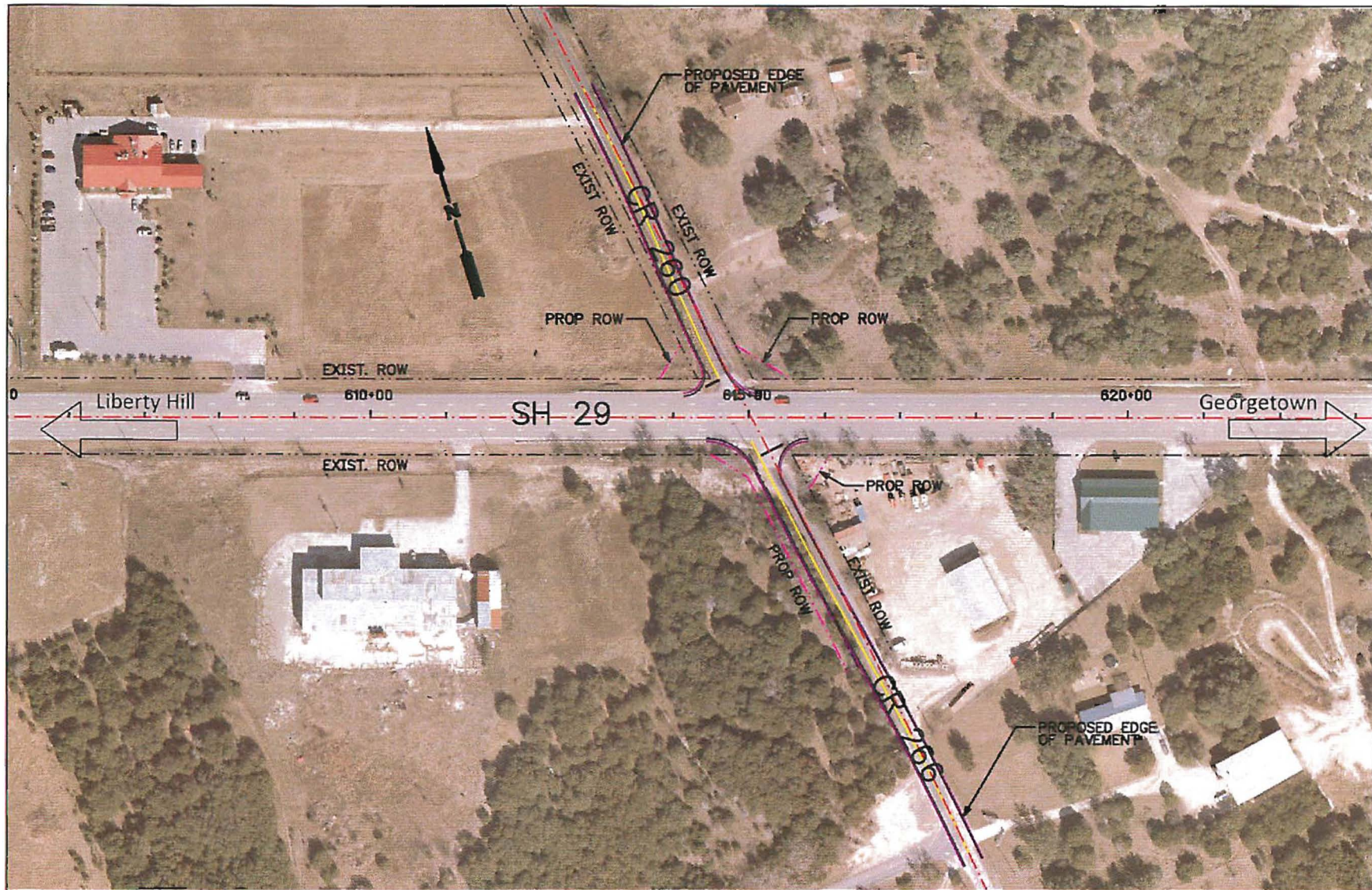
CR 200: (Map ID No.18; Estimated Cost=\$ 95,022)
 Loop 332 (Map ID No.19; Estimated Cost=\$ 132,714)
 Refer to Figure 3 on page 14 for project locations

Figure 37. CR 200 and Loop 332: Deceleration Lanes



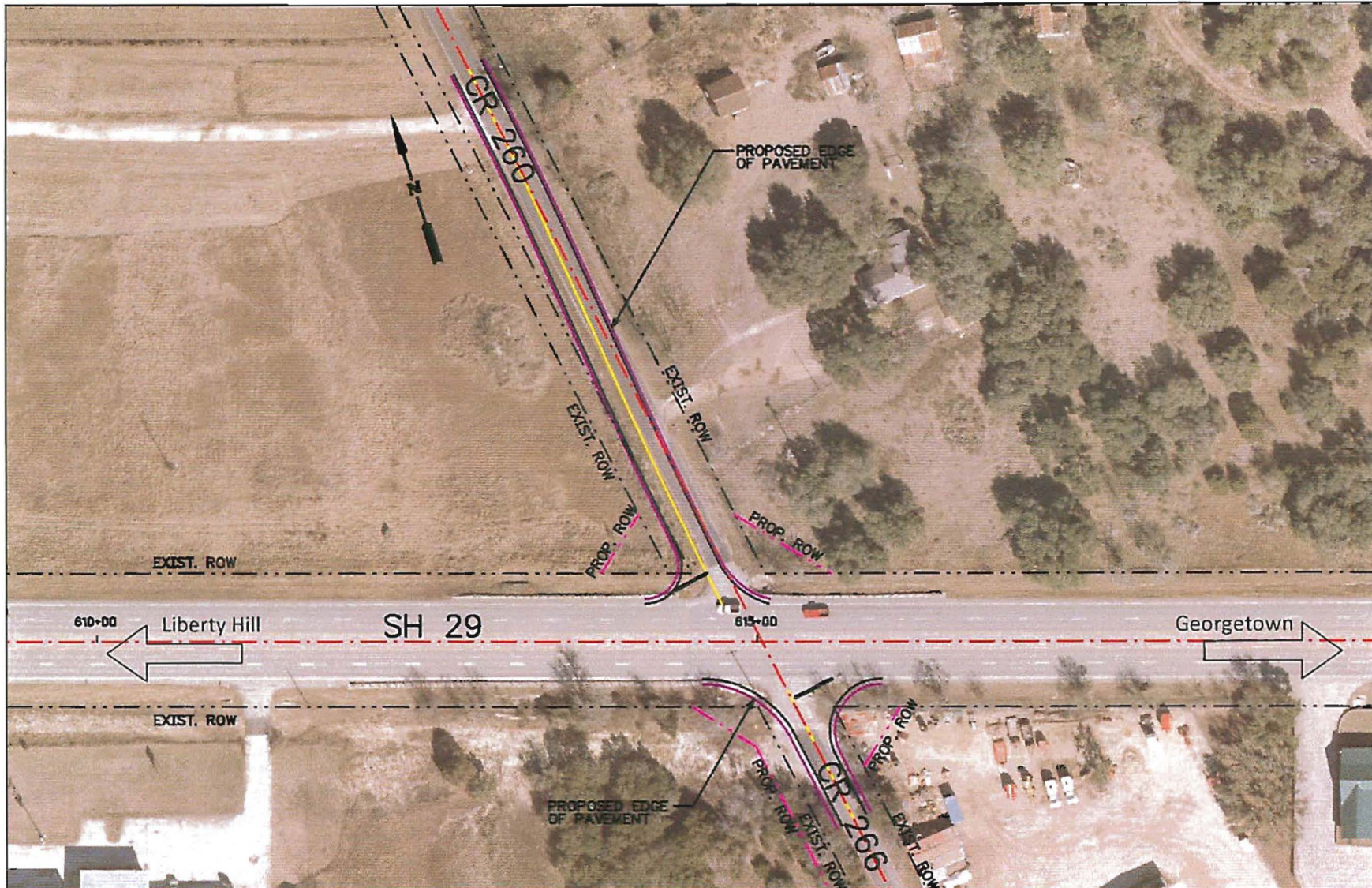
(Map ID No.20; Estimated Cost=\$ 515,953; Refer to Figure 3 on page 14 for project location)

Figure 38. CR 260 and CR 266: Deceleration lanes and radii improvement



(Map ID No.21; Estimated Cost=\$ 457,088; Refer to Figure 3 on page 14 for project location)

Figure 39. CR 260 and CR 266: 15-ft roadway shift to the west



(Map ID No.22; Estimated Cost=\$ 302,486; Refer to Figure 3 on page 14 for project location)

Figure 40. CR 260 and CR 266: Offset intersection

Potential TxDOT Maintenance and Safety Projects

The TxDOT Maintenance Projects are those projects that were identified through the course of this study that are considered general roadway maintenance that could be implemented to increase safety, or the project is outside the limits of this study. The TxDOT Maintenance Projects are not being recommended for implementation by Williamson County; rather, they are included in this report for general information only.

Table 18. TxDOT Maintenance Project List

Map ID	Location	Project Description	Length (mi)	Estimated Cost*
24	Burnet Co. Line to DB Wood Rd.	Restripe Roadway	18.88	\$ 748,954
25	Burnet Co. Line to DB Wood Rd.	Overlay-Travel Lanes only	18.88	\$ 12,248,468
26	Burnet Co. Line to DB Wood Rd.	Overlay-Edge of Pavement to Edge of Pavement	18.88	\$ 14,426,105
27	DB Wood Rd.	WB Deceleration/Turn Lane	0.10	\$ 171,367

Refer to Figure 3 on page 14 for project locations. Prices based from published TxDOT bid prices from March 04, 2009.

** Estimated Cost=Engineering Cost + Construction Cost + Inflation and Contingencies*



Conclusion

This report identified a series of interim solutions that can be implemented in the short-term by Williamson County to enhance the safety and operational efficiency of the SH 29 corridor from Burnet County Line to DB Wood Rd. The report recommendations were developed by CP&Y, in close coordination with the SH 29 Safety Task Force, Williamson County personnel, and the TxDOT Austin District, for the purpose of providing the Williamson County Commissioners' Court a planning mechanism for applying any available funding to cost-effective safety improvement projects.

Appendix A

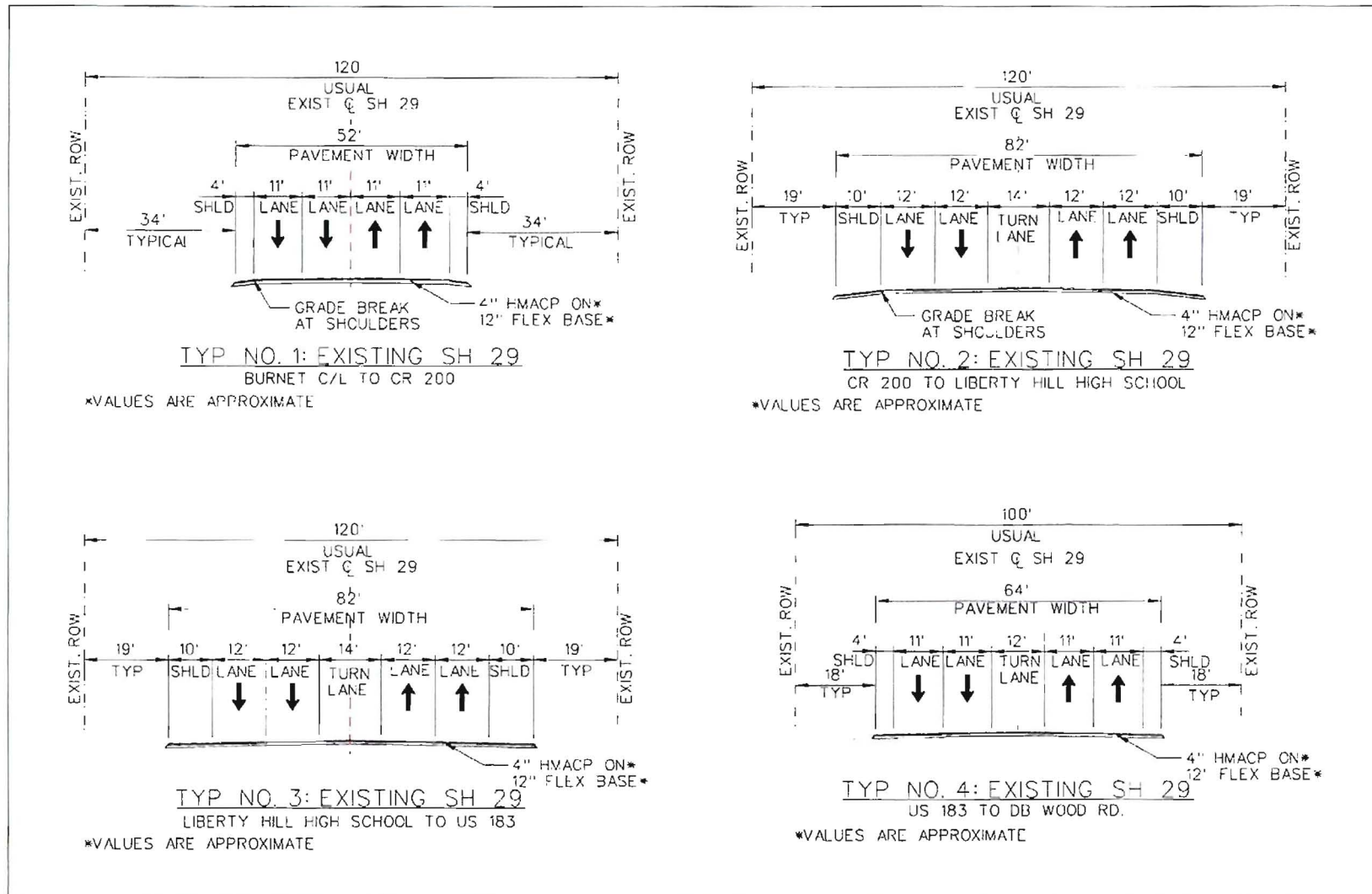


Figure I. Existing Typical Sections for SH 29



Table I. All Projects Considered

Location	Problem	Suggestion	Identified At
Entire Project Limits		Widen roadway	Mailing List
		Add deceleration lanes at all public roads	Mailing List
		Dangerous right turns	Mailing List
		Lower speed limit for trucks	Mailing List
		Add a lane in both directions	Public Meeting
		Expand existing shoulders to meeting current design standards for entire project	Kickoff Meeting
		Extend 5 lane section (TWLTL) through Liberty Hill	Kickoff Meeting
		Extend 5 lane section (TWLTL) to Burnet County line	Kickoff Meeting
		Corridor wide Illumination	Safety Meeting
		Sign Inventory at intersections	Safety Meeting
Loop 332	Dangerous for Junior High	Advanced Street Signs	Safety Meeting
		Light at intersection and proper turn lanes	Mailing List
		Bring LP 332 up to county standards	Mailing List
Bronco Blvd. (Sundance Estates)	Dangerous entering sub division	Remove incline at intersection	Mailing List
		Deceleration lane	Mailing List
Capital Aggregates	Trucks pull out onto lanes too slowly	Entrance lane/traffic light	Kickoff Meeting
		WB deceleration and acceleration lane	Mailing List
		EB acceleration lane	Mailing List
Cedar Hollow	Dangerous Poor sight distance in both directions	Right turn/deceleration lane	Kickoff Meeting
		Light or deceleration lanes	Mailing List
			Site Visit
		Highway Flashing Beacon/Signal pre-cursor	Safety Meeting
CMTA Rail Road (AUAR)	Dangerous, no gate arms		Mailing List
CR 200	Dangerous right turns Curve and Railroad are a distraction on traffic signal	Right turn lane	Mailing List
		Add "Traffic signal ahead" on WB SH 29	Public Meeting
CR 200/Loop 332	Superelevation with cross street tie-ins	Raise LP 332 to better match superelevation	Site Visit

Location	Problem	Suggestion	Identified At
	Headlights on cross streets	Adjust cross street tie-ins	Site Visit
	Hard to see traffic signal	Install additional light at a different angle	Public Meeting
		Deceleration lane	Public Meeting
CR 214	Dangerous intersection	Traffic Light	Mailing List
CR 260/CR 266	Heavy truck traffic, skewed intersection	Improve radii	Mailing List
	Dangerous	Traffic Light	Public Meeting
US 183 to DB Wood Rd.	Provide larger buffer as well as space for less frequent right turns	Widen shoulders from 4' to 10'	Mailing List
	Improve driving surface	Full depth repair and full width overlay	Mailing List
		Lower speed limit	Mailing List
DB Wood Rd.	Traffic backs up on WB SH 29 for those turning right onto DB Wood Rd.	Turn lane	Mailing List
Estancia Way	Rain water flows across road		Mailing List
Gabriel Forest Rd.	Heavy resident traffic, sag and horizontal curve impedes sight distance	Add WB deceleration and acceleration lanes	Mailing List
Jack Nicklaus Dr (Cimarron Hills)		Right turn/deceleration lane	Kickoff Meeting
	Dangerous to enter/exit due to high speeds	Turn lane or traffic light	Mailing List
		Increase radii into/out of sub division	Site Visit
Liberty Hill		Widen turn lane	Public Meeting
		Move 65mph speed limit further away from city limits	Public Meeting
Liberty Hill City Limits		Lower speed limit to 45	Mailing List
Liberty Hill High School		Right turn/deceleration lane	Kickoff Meeting
		Add deceleration lane between Loop 332 and LHHS	Public Meeting
	Hard to see traffic signal	Install additional light at a different angle	Public Meeting
Park Place (Gabriel's Overlook)		Deceleration lane or traffic signal	Mailing List
	WB traffic in TWLTL cannot discern which lanes oncoming traffic is in due to sun		Mailing List
	Dangerous	Larger shoulders	Public Meeting
		Acceleration lane	Public Meeting
		Right turn/deceleration lane	Kickoff Meeting

Location	Problem	Suggestion	Identified At
Park Place (Gabriel's Overlook) (cont'd)		Increase radii into/out of sub division	Site Visit
Ronald Reagan	Dangerous speed on approach to Ronald Reagan		Mailing List
	Inconsistent light patterns		Mailing List
FM 1869	Intersection is at angle and dangerous	Right turn lanes	Mailing List
	Hard to see traffic signal	Install additional light at a different angle	Public Meeting
Stonewall BLVD.	Hard to see traffic signal	Install additional light at a different angle	Public Meeting
US 183	Long backups at intersection	Install turning lane when heading east	Mailing List
		Widen intersection	Public Meeting
		Extend EB SH 29 to SB 183 acceleration lane	Public Meeting
		Extend WB SH 29 to NB 183 acceleration lane	Public Meeting
		Install SB 183 to WB SH 29 acceleration lane	Public Meeting
		Install NB 183 to EB SH 29 acceleration lane	Public Meeting



Table II. Other Agency Roadway Improvement Project Identifiers

Map ID	Agency	Roadway	Project Description	From	To	Status
A	Williamson County	SH 29	Improvement Study	Burnet C/L	DB Wood Rd.	Planned
B	Williamson County	County Road 200	Widening and Reconstruction	SH 29	CR 201	Completed
C	Williamson County	FM 1869	Traffic Signal	@ SH 29		Completed
D	Williamson County	CR 214	Improvements	SH 29	San Gabriel Ranch Rd	Completed
D-2	Williamson County	CR 214	4-lane divided roadway	San Gabriel Ranch Rd	US 183	Planned
E	TxDOT	RM 1869	Resurface Roadway	Loop 332	US 183	Planned
F	TxDOT	US 183	Repair Roadway	Burnet C/L	FM 970	Planned
G	TxDOT	US 183	Repair Roadway	FM 970	FM 3405	Planned
H	TxDOT	US 183	Repair Roadway	FM 3405	SH 29	Planned
I	TxDOT	US 183	Construct New road	SH 29	183A	Planned
J	Williamson County	Ronald Reagan Blvd.	4-lane divided roadway	SH 29	FM 3405	Completed
K	Williamson County	Ronald Reagan Blvd.	4-lane divided roadway	RM 2243	SH 29	Completed
L	Williamson County	Cedar Hollow	Intersection Improvements	@ SH 29		Completed
M	Williamson County	Georgetown Loop	Construct New road	SH 29	FM 2243	Planned
N	Williamson County	DB Wood Rd.	5-lane roadway	SH 29	Middle Fork	Completed
O	TxDOT	Jack Nicklaus	Traffic Signal	@ SH 29		Planned
P	Williamson County	SW 1	Construct New road	Ronald Reagan	CR 174	Planned
Q	Williamson County	SW 2	Construct New road	SH 29	CR 174	Planned
R	Williamson County	SW 3	Construct New road	DB Wood Rd.	RR Arterial	Planned
S	Williamson County	Kauffman Loop	New roadway	SH 29	US 183	In Construction

Appendix B

The quantities and prices listed below are for planning purposes only, and not for bidding or construction purposes. Quantities were developed at a planning-level stage and prices reflect published average bid prices from TxDOT as of March 04, 2009. Prices and quantities are subject to change during Plans, Specifications, and Estimates for each of the various projects.

Project Estimates- High Priority

Table A. Project Estimate-Burnet Co. Line to DB Wood Rd: Raised Profile Pavement Markers

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 39,000.00	\$ 39,000.00
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	199400	\$ 0.61	\$ 122,272.08
0666 2223	REFL PROF PAV MRK (Y)4"(SLD)(100MIL)	LF	50888	\$ 0.62	\$ 31,550.56
0500 2001	MOBILIZATION	LS	1	\$ 16,000.00	\$ 16,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	1	\$ 3,899.72	\$ 3,899.72
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 42,500.00	\$ 42,500.00
Total					\$ 255,222

Table B. Project Estimate- Liberty Hill Cemetery to West of CR 200: Two-way left turn lane (TWLTL) and 10-ft Improved Shoulders

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 393,500.00	\$ 393,500.00
0100 2002	PREPARING ROW	STA	58	\$ 500.00	\$ 28,970.00
0110 2001	EXCAVATION (ROADWAY)	CY	11035	\$ 9.49	\$ 104,743.18
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	16309	\$ 8.58	\$ 139,951.27
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	6438	\$ 1.46	\$ 9,383.19
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	3219	\$ 0.58	\$ 1,876.26
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	3219	\$ 0.58	\$ 1,876.26
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	7790	\$ 30.20	\$ 235,268.60
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	4674	\$ 4.52	\$ 21,125.68
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	3856	\$ 59.29	\$ 228,605.33
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	2571	\$ 70.92	\$ 182,311.17
0316 2008	ASPH (HFRS-2P)	GAL	12003	\$ 4.78	\$ 57,384.65
0316 2190	AGGR(TY-D GR-4 SAC-B)	CY	249	\$ 60.23	\$ 14,967.94
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	3144	\$ 70.92	\$ 222,957.20
0354 2021	PLANE ASPH CONC PAV(0" TO 2")	SY	28579	\$ 2.20	\$ 62,910.58
0432 2002	RIPRAP (CONC)(5 IN)	CY	85	\$ 373.97	\$ 31,741.30
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	140	\$ 403.52	\$ 56,667.72
0462 2029	CONC BOX CULV (10 FT X 5 FT)	LF	32	\$ 505.75	\$ 16,183.98
0462 2030	CONC BOX CULV (10 FT X 6 FT)	LF	38	\$ 572.84	\$ 21,768.10
0464 2003	RC PIPE (CL III)(18 IN)	LF	1000	\$ 54.16	\$ 54,159.31
0466 2021	WINGWALL (FW-0)(HW=5 FT)	EA	2	\$ 3,878.85	\$ 7,757.71
0466 2123	HEADWALL (CH-FW-0)(DIA= 18 IN)	EA	44	\$ 1,536.36	\$ 67,600.00
0467 2205	SET (TY I)(S= 10 FT)(HW= 6 FT)(6:1)(P)	EA	4	\$ 13,500.00	\$ 54,000.00
0496 2004	REMOV STR (SET)	EA	4	\$ 342.75	\$ 1,370.98
0496 2006	REMOV STR (HEADWALL)	EA	44	\$ 1,510.53	\$ 66,463.16
0496 2007	REMOV STR (PIPE)	LF	1000	\$ 21.36	\$ 21,364.80
0496 2008	REMOV STR (BOX CULVERT)	LF	8	\$ 205.00	\$ 1,640.00
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	11588	\$ 2.70	\$ 31,244.38
0530 2007	DRIVEWAYS (CONC)	EA	4	\$ 7,723.58	\$ 30,894.33
0530 2008	DRIVEWAYS (ACP)	EA	23	\$ 1,982.50	\$ 45,597.50
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	2000	\$ 53.75	\$ 107,500.00
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	530	\$ 2.37	\$ 1,254.18
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	12	\$ 2,307.66	\$ 27,691.94
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	4	\$ 398.44	\$ 1,593.78
0560 2001	MAILBOX INSTALLATION (SINGLE)	EA	5	\$ 300.00	\$ 1,500.00
0636 2001	ALUMINUM SIGNS (TY A)	SF	100	\$ 31.59	\$ 3,159.22
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	16	\$ 446.02	\$ 7,136.27
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	2898	\$ 0.28	\$ 823.18
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	11588	\$ 0.36	\$ 4,131.24
0666 2104	REFL PAV MRK TY I (Y) 4" (BRK)(090MIL)	LF	2898	\$ 0.24	\$ 708.24
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	11588	\$ 0.37	\$ 4,287.91
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	2898	\$ 0.22	\$ 640.52
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	11588	\$ 0.13	\$ 1,547.35
0666 2176	REF PAV MRK TY II (Y) 4" (BRK)	LF	2898	\$ 0.12	\$ 361.67
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	11588	\$ 0.47	\$ 5,460.85
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	11588	\$ 0.61	\$ 7,105.76
0672 2012	REFL PAV MRKR TY I-C	EA	146	\$ 3.33	\$ 486.89
0672 2015	REFL PAV MRKR TY II-A-A	EA	146	\$ 2.95	\$ 430.18
0672 2015	REFL PAV MRKR TY II-A-A	EA	580	\$ 2.95	\$ 1,708.92
0500 2001	MOBILIZATION	LS	1	\$ 203,500.00	\$ 203,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	9	\$ 3,899.72	\$ 35,097.44
9999 9998	CONTINGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 526,000.00	\$ 526,000.00
Total					\$ 3,156,410

Table C. Project Estimate- West of CR 200 to AUAR Railroad: 10-ft Improved Shoulders [Includes CR 200 and Loop 332 deceleration Lanes]

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 91,000.00	\$ 91,000.00
0100 2002	PREPARING ROW	STA	17	\$ 500.00	\$ 8,430.00
0110 2001	EXCAVATION (ROADWAY)	CY	2204	\$ 9.49	\$ 20,917.06
0132 2003	EMBANKMENT (FINAL){ORD COMP}{TY B}	CY	4996	\$ 8.58	\$ 42,867.91
0160 2003	FURNISHING AND PLACING TOPSOIL {4"}	SY	1873	\$ 1.46	\$ 2,730.42
0164 2041	DRILL SEEDING (TEMP) {WARM}	SY	937	\$ 0.58	\$ 545.97
0164 2043	DRILL SEEDING (TEMP) {COOL}	SY	937	\$ 0.58	\$ 545.97
0247 2044	FL BS (CMP IN PLC){TY A GR 4}{FNAL POS	CY	1556	\$ 30.20	\$ 46,982.80
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	933	\$ 4.52	\$ 4,218.77
0341 2014	D-GR HMA{QCQA} TY-B PG70-22	TON	770	\$ 59.29	\$ 45,652.15
0341 2047	D-GR HMA{QCQA} TY-C SAC-A PG70-22	TON	513	\$ 70.92	\$ 36,407.28
0316 2008	ASPH {HFRS-2P}	GAL	4716	\$ 4.78	\$ 22,544.42
0316 2190	AGGR{TY-D GR-4 SAC-B}	CY	98	\$ 60.23	\$ 5,880.38
0341 2047	D-GR HMA{QCQA} TY-C SAC-A PG70-22	TON	1235	\$ 70.92	\$ 87,592.09
0354 2021	PLANE ASPH CONC PAV{0" TO 2"}]	SY	11228	\$ 2.20	\$ 24,715.37
0432 2002	RIPRAP (CONC){5 IN}	CY	117	\$ 373.97	\$ 43,779.90
0432 2040	RIPRAP (MOW STRIP){5 IN}	CY	7	\$ 403.52	\$ 2,724.41
0464 2003	RC PIPE (CL III){18 IN}	LF	200	\$ 54.16	\$ 10,831.86
0466 2123	HEADWALL (CH-PW-0){DIA= 18 IN}	EA	10	\$ 1,536.36	\$ 15,363.64
0496 2006	REMOV STR (HEADWALL)	EA	10	\$ 1,510.53	\$ 15,105.26
0496 2007	REMOV STR (PIPE)	LF	200	\$ 21.36	\$ 4,272.96
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	3372	\$ 2.70	\$ 9,091.82
0530 2007	DRIVEWAYS (CONC)	EA	2	\$ 7,723.58	\$ 15,447.16
0530 2008	DRIVEWAYS (ACP)	EA	5	\$ 1,982.50	\$ 9,912.50
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	50	\$ 53.75	\$ 2,687.50
0540 2005	TERMINAL ANCHOR SECTION	EA	1	\$ 597.67	\$ 597.67
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	25	\$ 2.37	\$ 59.16
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	1	\$ 2,307.66	\$ 2,307.66
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	1	\$ 398.44	\$ 398.44
0666 2011	REFL PAV MRK TY I {W} 4" {SLD}{090MIL}	LF	3372	\$ 0.36	\$ 1,202.15
0666 2035	REFL PAV MRK TY I {W} 8" {SLD}{090MIL}	LF	900	\$ 1.17	\$ 1,052.07
0666 2047	REFL PAV MRK TY I {W} 24" {SLD}{090MIL}	LF	90	\$ 5.69	\$ 512.31
0666 2083	REFL PAV MRK TY I {W}{RR XING} {090MIL}	EA	2	\$ 319.13	\$ 638.27
0666 2145	REF PAV MRK TY II {W} 4" {SLD}	LF	3372	\$ 0.13	\$ 450.26
0666 2153	REF PAV MRK TY II {W} 8" {SLD}	LF	900	\$ 0.91	\$ 818.18
0666 2157	REF PAV MRK TY II {W} 24" {SLD}	LF	90	\$ 2.17	\$ 195.04
0666 2169	REF PAV MRK TY II {W} {RR XING}	EA	2	\$ 148.52	\$ 297.03
0666 2232	REFL PROF PAV MRK {W}4" {SLD}{100MIL}	LF	3372	\$ 0.61	\$ 2,067.71
0672 2012	REFL PAV MRKR TY I-C	EA	44	\$ 3.33	\$ 146.74
0672 2015	REFL PAV MRKR TY II-A-A	EA	44	\$ 2.95	\$ 129.64
0672 2015	REFL PAV MRKR TY II-A-A	EA	170	\$ 2.95	\$ 500.89
0500 2001	MOBILIZATION	LS	1	\$ 50,000.00	\$ 50,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	3	\$ 3,899.72	\$ 11,699.15
9999 9998	CONTIGENCY {INFLATION AND UNKNOWN}	LS	1	\$ 129,000.00	\$ 129,000.00
Total					\$ 772,485

Table D. Project Estimate- CR 214: EB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 34,000.00	\$ 34,000.00
0100 2002	PREPARING ROW	STA	6	\$ 500.00	\$ 2,800.00
0110 2001	EXCAVATION (ROADWAY)	CY	479	\$ 9.49	\$ 4,543.38
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	664	\$ 8.58	\$ 5,695.38
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	311	\$ 1.46	\$ 453.45
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	156	\$ 0.58	\$ 90.67
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	156	\$ 0.58	\$ 90.67
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	338	\$ 30.20	\$ 10,205.09
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	203	\$ 4.52	\$ 916.35
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	167	\$ 59.29	\$ 9,916.06
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	112	\$ 70.92	\$ 7,907.99
0432 2002	RIPRAP (CONC)(5 IN)	CY	83	\$ 373.97	\$ 31,164.18
0464 2003	RC PIPE (CL III)(18 IN)	LF	200	\$ 54.16	\$ 10,831.86
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	8	\$ 1,536.36	\$ 12,290.91
0496 2006	REMOV STR (HEADWALL)	EA	8	\$ 1,510.53	\$ 12,084.21
0496 2007	REMOV STR (PIPE)	LF	150	\$ 21.36	\$ 3,204.72
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	560	\$ 2.70	\$ 1,509.91
0530 2008	DRIVEWAYS (ACP)	EA	5	\$ 1,982.50	\$ 9,912.50
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	560	\$ 0.36	\$ 199.65
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	460	\$ 1.17	\$ 537.73
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	560	\$ 0.13	\$ 74.78
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	460	\$ 0.91	\$ 418.18
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	560	\$ 0.59	\$ 328.35
0500 2001	MOBILIZATION	LS	1	\$ 13,500.00	\$ 13,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 36,500.00	\$ 36,500.00
Total					\$ 219,244

Table E. Project Estimate- CR 214: WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 53,500.00	\$ 53,500.00
0100 2002	PREPARING ROW	STA	10	\$ 500.00	\$ 4,910.00
0110 2001	EXCAVATION (ROADWAY)	CY	826	\$ 9.49	\$ 7,841.22
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	873	\$ 8.58	\$ 7,490.44
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	546	\$ 1.46	\$ 795.16
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	273	\$ 0.58	\$ 159.00
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	273	\$ 0.58	\$ 159.00
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	583	\$ 30.20	\$ 17,612.54
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	350	\$ 4.52	\$ 1,581.50
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	289	\$ 59.29	\$ 17,113.72
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	192	\$ 70.92	\$ 13,648.07
0416 2030	DRILL SHAFT (TRF SIG POLE) (24 IN)	LF	15	\$ 154.62	\$ 2,319.37
0464 2003	RC PIPE (CL III)(18 IN)	LF	380	\$ 54.16	\$ 20,553.46
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	16	\$ 1,536.36	\$ 24,581.82
0496 2006	REMOV STR (HEADWALL)	EA	16	\$ 1,510.53	\$ 24,168.42
0496 2007	REMOV STR (PIPE)	LF	330	\$ 21.36	\$ 7,050.38
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	982	\$ 2.70	\$ 2,647.74
0530 2007	DRIVEWAYS (CONC)	EA	3	\$ 7,723.58	\$ 23,170.75
0530 2008	DRIVEWAYS (ACP)	EA	5	\$ 1,982.50	\$ 9,912.50
0620 2010	ELEC CONDR (NO. 6) INSULATED	LF	250	\$ 2.10	\$ 526.07
0620 2011	ELEC CONDR (NO. 8) BARE	LF	250	\$ 1.48	\$ 371.24
0620 2012	ELEC CONDR (NO. 8) INSULATED	LF	250	\$ 1.82	\$ 454.98
0620 2014	ELEC CONDR (NO.10) INSULATED	LF	250	\$ 1.07	\$ 267.91
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	982	\$ 0.36	\$ 350.09
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	990	\$ 1.17	\$ 1,157.28
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	982	\$ 0.13	\$ 131.13
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	990	\$ 0.91	\$ 900.00
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	982	\$ 0.59	\$ 575.79
0680 2002	INSTALL HWY TRF SIG (ISOLATED)	EA	1	\$ 11,674.16	\$ 11,674.16
0686 2018	INS TRF SIG PL AM(S) STR (TY D) LUM	EA	1	\$ 6,000.00	\$ 6,000.00
0500 2001	MOBILIZATION	LS	1	\$ 22,000.00	\$ 22,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 59,000.00	\$ 59,000.00
Total					\$ 352,692

Table F. Project Estimate- FM 1869: EB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 29,000.00	\$ 29,000.00
0100 2002	PREPARING ROW	STA	7	\$ 500.00	\$ 3,675.00
0110 2001	EXCAVATION (ROADWAY)	CY	617	\$ 9.49	\$ 5,851.66
0132 2003	EMBANKMENT (FINAL){ORD COMP}{TY 8}	CY	653	\$ 8.58	\$ 5,606.39
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	408	\$ 1.46	\$ 595.15
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	204	\$ 0.58	\$ 119.01
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	204	\$ 0.58	\$ 119.01
0247 2044	FL BS (CMP IN PLC){TY A GR 4}{FNAL POS	CY	435	\$ 30.20	\$ 13,143.68
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	261	\$ 4.52	\$ 1,180.22
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	215	\$ 59.29	\$ 12,771.43
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	144	\$ 70.92	\$ 10,185.13
0464 2003	RC PIPE (CL III){18 IN}	LF	200	\$ 54.16	\$ 10,831.86
0466 2123	HEADWALL (CH-PW-Q){DIA= 18 IN}	EA	8	\$ 1,536.36	\$ 12,290.91
0496 2006	REMOV STR (HEADWALL)	EA	8	\$ 1,510.53	\$ 12,084.21
0496 2007	REMOV STR (PIPE)	LF	175	\$ 21.36	\$ 3,738.84
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	735	\$ 2.70	\$ 1,981.76
0530 2008	DRIVEWAYS (ACP)	EA	5	\$ 1,982.50	\$ 9,912.50
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG{1} SA{P}	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD){090MIL}	LF	735	\$ 0.36	\$ 262.03
0666 2035	REFL PAV MRK TY I (W) 8" (SLD){090MIL}	LF	770	\$ 1.17	\$ 900.11
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	735	\$ 0.13	\$ 98.14
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	770	\$ 0.91	\$ 700.00
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	735	\$ 0.59	\$ 430.96
0500 2001	MOBILIZATION	LS	1	\$ 11,500.00	\$ 11,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN5)	LS	1	\$ 31,500.00	\$ 31,500.00
Total					\$ 188,546

Table G. Project Estimate- FM 1869: WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 25,500.00	\$ 25,500.00
0100 2002	PREPARING ROW	STA	6	\$ 500.00	\$ 2,845.00
0110 2001	EXCAVATION (ROADWAY)	CY	578	\$ 9.49	\$ 5,484.12
0132 2003	EMBANKMENT (FINAL){ORD COMP}{TY B}	CY	506	\$ 8.58	\$ 4,340.19
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	316	\$ 1.46	\$ 460.74
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	158	\$ 0.58	\$ 92.13
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	158	\$ 0.58	\$ 92.13
0247 2044	FL BS (CMP IN PLC){TY A GR 4}{FINAL POS	CY	408	\$ 30.20	\$ 12,318.15
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	245	\$ 4.52	\$ 1,106.09
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	202	\$ 59.29	\$ 11,969.27
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	135	\$ 70.92	\$ 9,545.41
0432 2002	RIPRAP (CONC)(5 IN)	CY	108	\$ 373.97	\$ 40,398.01
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	569	\$ 2.70	\$ 1,534.18
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	569	\$ 0.36	\$ 202.85
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	512	\$ 1.17	\$ 598.51
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	569	\$ 0.13	\$ 75.98
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	512	\$ 0.91	\$ 465.45
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	569	\$ 0.59	\$ 333.63
0500 2001	MOBILIZATION	LS	1	\$ 10,000.00	\$ 10,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 27,500.00	\$ 27,500.00
Total					\$ 164,930

Table H. Project Estimate-CR 260 and CR 266: Improve Turning Radii and Right-of-way (ROW) Clips

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 24,500.00	\$ 24,500.00
0000 0001	ADDITIONAL ROW	LS	1	\$ 48,000.00	\$ 48,000.00
0100 2002	PREPARING ROW	STA	3	\$ 2,000.00	\$ 6,100.00
0110 2001	EXCAVATION (ROADWAY)	CY	444	\$ 9.49	\$ 4,218.17
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	68	\$ 8.58	\$ 581.62
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	169	\$ 1.46	\$ 246.97
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	85	\$ 0.58	\$ 49.38
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	85	\$ 0.58	\$ 49.38
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	314	\$ 30.20	\$ 9,474.64
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	188	\$ 4.52	\$ 850.76
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	155	\$ 59.29	\$ 9,206.30
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	104	\$ 70.92	\$ 7,341.96
0432 2002	RIPRAP (CONC)(5 IN)	CY	9	\$ 373.97	\$ 3,387.66
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	9	\$ 403.52	\$ 3,814.17
0460 2007	CMP (GAL STL 36 IN)	LF	30	\$ 185.00	\$ 5,550.00
0464 2005	RC PIPE (CL III)(24 IN)	LF	110	\$ 79.70	\$ 8,767.31
0464 2009	RC PIPE (CL III)(36 IN)	LF	8	\$ 148.14	\$ 1,185.14
0465 2223	MANH (COMPL)(TY MH-M)	EA	1	\$ 4,180.00	\$ 4,180.00
0496 2007	REMOV STR (PIPE)	LF	30	\$ 21.36	\$ 640.94
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	305	\$ 2.70	\$ 822.36
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	125	\$ 53.75	\$ 6,718.75
0540 2005	TERMINAL ANCHOR SECTION	EA	2	\$ 597.67	\$ 1,195.33
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	60	\$ 2.37	\$ 141.98
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	2	\$ 164.86	\$ 329.73
0636 2001	ALUMINUM SIGNS (TY A)	SF	6	\$ 31.59	\$ 197.45
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	1	\$ 446.02	\$ 446.02
0658 2240	INSTL DEL ASSM (D-SW)SZ 1(FIX)GF2	EA	3	\$ 47.52	\$ 118.80
0658 2255	INSTL DEL ASSM (D-SW)SZ 2(WC) GNO	EA	3	\$ 48.67	\$ 146.01
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	305	\$ 0.36	\$ 108.74
0666 2047	REFL PAV MRK TY I (W) 24"(SLD)(090MIL)	LF	60	\$ 5.69	\$ 341.54
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	305	\$ 0.37	\$ 112.86
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	305	\$ 0.13	\$ 40.73
0666 2157	REF PAV MRK TY II (W) 24" (SLD)	LF	60	\$ 2.17	\$ 130.03
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	305	\$ 0.47	\$ 143.73
0500 2001	MOBILIZATION	LS	1	\$ 9,500.00	\$ 9,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	5	\$ 3,899.72	\$ 19,498.58
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 35,500.00	\$ 35,500.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 35,500.00	\$ 35,500.00
Total					\$ 249,137

Table I. Project Estimate- Park Place Dr. (Gabriel's Overlook): EB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 53,500.00	\$ 53,500.00
0100 2002	PREPARING ROW	STA	8	\$ 500.00	\$ 3,825.00
0110 2001	EXCAVATION (ROADWAY)	CY	694	\$ 9.49	\$ 6,586.23
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	1842	\$ 8.58	\$ 15,803.73
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	850	\$ 1.46	\$ 1,238.89
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	425	\$ 0.58	\$ 247.73
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	425	\$ 0.58	\$ 247.73
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	490	\$ 30.20	\$ 14,793.64
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	294	\$ 4.52	\$ 1,328.38
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	242	\$ 59.29	\$ 14,374.65
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	162	\$ 70.92	\$ 11,463.69
0432 2002	RIPRAP (CONC)(5 IN)	CY	102	\$ 373.97	\$ 38,239.60
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	57	\$ 403.52	\$ 22,885.04
0460 2004	CMP (GAL STL 24 IN)	LF	60	\$ 49.92	\$ 2,994.96
0467 2260	SET (TY II)(18 IN)(CMP)(4:1)(C)	EA	4	\$ 875.00	\$ 3,500.00
0496 2006	REMOV STR (HEADWALL)	EA	4	\$ 1,510.53	\$ 6,042.11
0496 2007	REMOV STR (PIPE)	LF	8	\$ 21.36	\$ 170.92
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	765	\$ 2.70	\$ 2,062.65
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	1025	\$ 53.75	\$ 55,093.75
0540 2005	TERMINAL ANCHOR SECTION	EA	1	\$ 597.67	\$ 597.67
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0636 2001	ALUMINUM SIGNS (TY A)	SF	19	\$ 31.59	\$ 592.35
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA[P]	EA	3	\$ 446.02	\$ 1,338.05
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	765	\$ 0.36	\$ 272.73
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	615	\$ 1.17	\$ 718.92
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	765	\$ 0.13	\$ 102.15
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	615	\$ 0.91	\$ 559.09
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	765	\$ 0.59	\$ 448.55
0500 2001	MOBILIZATION	LS	1	\$ 22,000.00	\$ 22,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	3	\$ 3,899.72	\$ 11,699.15
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 59,000.00	\$ 59,000.00
Total					\$ 352,874

Table J. Project Estimate- Jack Nicklaus (Cimarron Hills): WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 25,000.00	\$ 25,000.00
0100 2002	PREPARING ROW	STA	8	\$ 500.00	\$ 4,075.00
0110 2001	EXCAVATION (ROADWAY)	CY	565	\$ 9.49	\$ 5,360.62
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	785	\$ 8.58	\$ 6,734.66
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	453	\$ 1.46	\$ 659.93
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	226	\$ 0.58	\$ 131.96
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	226	\$ 0.58	\$ 131.96
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	399	\$ 30.20	\$ 12,040.73
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	239	\$ 4.52	\$ 1,081.18
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	197	\$ 59.29	\$ 11,699.72
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	132	\$ 70.92	\$ 9,330.44
0432 2002	RIPRAP (CONC)(5 IN)	CY	5	\$ 373.97	\$ 1,731.34
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	15	\$ 403.52	\$ 5,993.70
0462 2008	CONC BOX CULV (5 FT X 4 FT)	LF	8	\$ 206.17	\$ 1,649.40
0466 2021	WINGWALL (FW-0)(HW=5 FT)	EA	1	\$ 3,878.85	\$ 3,878.85
0496 2005	REMOV STR (WINGWALL)	EA	1	\$ 2,423.08	\$ 2,423.08
0496 2008	REMOV STR (BOX CULVERT)	LF	2	\$ 205.00	\$ 410.00
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	815	\$ 2.70	\$ 2,197.46
0530 2008	DRIVEWAYS (ACP)	EA	1	\$ 1,982.50	\$ 1,982.50
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	200	\$ 53.75	\$ 10,750.00
0540 2005	TERMINAL ANCHOR SECTION	EA	1	\$ 597.67	\$ 597.67
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	150	\$ 2.37	\$ 354.96
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	1	\$ 2,307.66	\$ 2,307.66
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	1	\$ 398.44	\$ 398.44
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0658 2243	INSTL DEL ASSM (D-SW)SZ 1(FIX)GF3	EA	4	\$ 37.17	\$ 148.69
0658 2255	INSTL DEL ASSM (D-SW)SZ 2(WC) GND	EA	3	\$ 48.67	\$ 146.01
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	815	\$ 0.36	\$ 290.56
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	665	\$ 1.17	\$ 777.37
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	815	\$ 0.13	\$ 108.83
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	665	\$ 0.91	\$ 604.54
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	815	\$ 0.59	\$ 477.87
0500 2001	MOBILIZATION	LS	1	\$ 10,000.00	\$ 10,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 27,000.00	\$ 27,000.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 27,000.00	\$ 27,000.00
Total					\$ 187,708

Table K. Project Estimate- Cedar Hollow: Advanced Highway Flashing Beacon (Solar Powered) & Additional Signage

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 6,500.00	\$ 6,500.00
0100 2002	PREPARING ROW	STA	1	\$ 500.00	\$ 500.00
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	35	\$ 1.46	\$ 50.88
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	17	\$ 0.58	\$ 10.17
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	17	\$ 0.58	\$ 10.17
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	200	\$ 2.70	\$ 539.25
0618 2012	CONDT (PVC) (SCHD 40) (1")	LF	10	\$ 4.79	\$ 47.92
0618 2026	CONDT (PVC) (SCHD 40) (6")	LF	5	\$ 24.75	\$ 123.76
0620 2010	ELEC CONDR (NO. 6) INSULATED	LF	30	\$ 2.10	\$ 63.13
0620 2011	ELEC CONDR (NO. 8) BARE	LF	30	\$ 1.48	\$ 44.55
0620 2012	ELEC CONDR (NO. 8) INSULATED	LF	30	\$ 1.82	\$ 54.60
0620 2014	ELEC CONDR (NO.10) INSULATED	LF	30	\$ 1.07	\$ 32.15
0624 2020	GROUND BOX TY BATTERY (162915) W/APRON	EA	2	\$ 1,081.67	\$ 2,163.33
0636 2001	ALUMINUM SIGNS (TY A)	SF	50	\$ 31.59	\$ 1,579.61
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0644 2025	INS SM RD SN SUP&AM TY S80(1) SA(T)	EA	2	\$ 680.00	\$ 1,360.00
0682 2018	VEH SIG SEC (12 IN) INC (VEL)	EA	4	\$ 190.02	\$ 760.08
0685 2004	INSTL RDS FLSH BEACON ASSM(SOLAR PWRD	EA	2	\$ 5,351.14	\$ 10,702.29
0500 2001	MOBILIZATION	LS	1	\$ 2,500.00	\$ 2,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	1	\$ 3,899.72	\$ 3,899.72
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 6,500.00	\$ 6,500.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 6,500.00	\$ 6,500.00
Total					\$ 44,834

Project Estimates- Medium and Low Priority

Table L. Project Estimate- Main St. [Loop 332] @ SH 29: Raise Height of Roadway

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 22,500.00	\$ 22,500.00
0100 2002	PREPARING ROW	STA	4	\$ 500.00	\$ 2,000.00
0110 2001	EXCAVATION (ROADWAY)	CY	744	\$ 9.49	\$ 7,062.83
0132 2003	EMBANKMENT {FINAL}{ORD COMP}{TY B}	CY	600	\$ 8.58	\$ 5,148.73
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	222	\$ 1.46	\$ 323.89
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	111	\$ 0.58	\$ 64.77
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	111	\$ 0.58	\$ 64.77
0247 2044	FL BS (CMP IN PLC){TY A GR 4}{FNAL PDS	CY	525	\$ 30.20	\$ 15,864.15
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	315	\$ 4.52	\$ 1,424.50
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	260	\$ 59.29	\$ 15,414.84
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	173	\$ 70.92	\$ 12,293.23
0464 2003	RC PIPE (CL III)(18 IN)	LF	100	\$ 54.16	\$ 5,415.93
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	2	\$ 1,536.36	\$ 3,072.73
0496 2006	REMOV STR (HEADWALL)	EA	2	\$ 1,510.53	\$ 3,021.05
0496 2007	REMOV STR (PIPE)	LF	42	\$ 21.36	\$ 897.32
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	800	\$ 2.70	\$ 2,157.02
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	800	\$ 2.70	\$ 2,157.02
0666 2035	REFL PAV MRK TY I (W) 8" (SLD){090MIL}	LF	400	\$ 1.17	\$ 467.59
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD){090MIL}	LF	400	\$ 0.37	\$ 148.01
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	400	\$ 0.91	\$ 363.64
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	400	\$ 0.47	\$ 188.50
0677 2001	ELIM EXT PAV MRK & MRKS { 4"}	LF	400	\$ 0.59	\$ 234.54
0500 2001	MOBILIZATION	LS	1	\$ 9,000.00	\$ 9,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	3	\$ 3,899.72	\$ 11,699.15
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 24,000.00	\$ 24,000.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 24,000.00	\$ 24,000.00
Total					\$ 168,984

Table M. Project Estimate- Liberty Hill High School Driveway: EB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 29,500.00	\$ 29,500.00
0100 2002	PREPARING ROW	STA	6	\$ 500.00	\$ 3,050.00
0110 2001	EXCAVATION (ROADWAY)	CY	520	\$ 9.49	\$ 4,940.29
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	542	\$ 8.58	\$ 4,652.92
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	339	\$ 1.46	\$ 493.94
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	169	\$ 0.58	\$ 98.77
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	169	\$ 0.58	\$ 98.77
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	367	\$ 30.20	\$ 11,096.63
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	220	\$ 4.52	\$ 996.41
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	182	\$ 59.29	\$ 10,782.35
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	121	\$ 70.92	\$ 8,598.85
0496 2008	REMOV STR (BOX CULVERT)	LF	2	\$ 205.00	\$ 410.00
0432 2002	RIPRAP (CONC)(5 IN)	CY	26	\$ 373.97	\$ 9,810.95
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	23	\$ 403.52	\$ 9,262.99
0462 2019	CONC BOX CULV (8 FT X 4 FT)	LF	8	\$ 358.66	\$ 2,869.30
0464 2003	RC PIPE (CL III)(18 IN)	LF	25	\$ 54.16	\$ 1,353.98
0466 2021	WINGWALL (FW-0)(HW=5 FT)	EA	1	\$ 3,878.85	\$ 3,878.85
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	1	\$ 1,536.36	\$ 1,536.36
0496 2006	REMOV STR (HEADWALL)	EA	1	\$ 1,510.53	\$ 1,510.53
0496 2007	REMOV STR (PIPE)	LF	2	\$ 21.36	\$ 42.73
0496 2008	REMOV STR (BOX CULVERT)	LF	2	\$ 205.00	\$ 410.00
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	610	\$ 2.70	\$ 1,644.72
0531 2005	CURB RAMPS (TY 1)	EA	2	\$ 1,569.83	\$ 3,139.67
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	350	\$ 53.75	\$ 18,812.50
0540 2005	TERMINAL ANCHOR SECTION	EA	1	\$ 597.67	\$ 597.67
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	300	\$ 2.37	\$ 709.91
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	1	\$ 2,307.66	\$ 2,307.66
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	1	\$ 398.44	\$ 398.44
0636 2001	ALUMINUM SIGNS (TY A)	SF	25	\$ 31.59	\$ 789.81
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	4	\$ 446.02	\$ 1,784.07
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	610	\$ 0.36	\$ 217.47
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	510	\$ 1.17	\$ 596.17
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	610	\$ 0.13	\$ 81.45
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	510	\$ 0.91	\$ 463.64
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	610	\$ 0.59	\$ 357.67
0500 2001	MOBILIZATION	LS	1	\$ 11,500.00	\$ 11,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN\$)	LS	1	\$ 31,500.00	\$ 31,500.00
Total					\$ 189,242

Table N. Project Estimate- Burnet Co. Line to Liberty Hill Cemetery: 10-ft Improved Shoulders

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 752,500.00	\$ 752,500.00
0100 2002	PREPARING ROW	STA	208	\$ 500.00	\$ 104,000.00
0110 2001	EXCAVATION (ROADWAY)	CY	21827	\$ 9.49	\$ 207,173.09
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	23111	\$ 8.58	\$ 198,321.30
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	23111	\$ 1.46	\$ 33,684.91
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	11556	\$ 0.58	\$ 6,735.62
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	11556	\$ 0.58	\$ 6,735.62
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	15407	\$ 30.20	\$ 465,341.26
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	9244	\$ 4.52	\$ 41,784.79
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	7627	\$ 59.29	\$ 452,161.86
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	5084	\$ 70.92	\$ 360,595.97
0316 2008	ASPH (HFRS-2P)	GAL	42709	\$ 4.78	\$ 204,182.65
0316 2190	AGGR(TY-D GR-4 SAC-B)	CY	884	\$ 60.23	\$ 53,258.02
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	11186	\$ 70.92	\$ 793,313.03
0354 2021	PLANE ASPH CONC PAV(0" TO 2")	SY	101689	\$ 2.20	\$ 223,844.70
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	248	\$ 403.52	\$ 100,258.27
0462 2004	CONC BOX CULV (4 FT X 3 FT)	LF	24	\$ 154.67	\$ 3,712.06
0462 2020	CONC BOX CULV (8 FT X 5 FT)	LF	24	\$ 385.35	\$ 9,248.37
0462 2029	CONC BOX CULV (10 FT X 5 FT)	LF	64	\$ 505.75	\$ 32,367.96
0462 2030	CONC BOX CULV (10 FT X 6 FT)	LF	16	\$ 572.84	\$ 9,165.52
0464 2003	RC PIPE (CL III)(18 IN)	LF	880	\$ 54.16	\$ 47,660.19
0466 2021	WINGWALL (FW-0)(HW=5 FT)	EA	9	\$ 3,878.85	\$ 34,909.68
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	40	\$ 1,536.36	\$ 61,454.55
0496 2004	REMOV STR (SET)	EA	2	\$ 342.75	\$ 685.49
0496 2005	REMOV STR (WINGWALL)	EA	7	\$ 2,423.08	\$ 16,961.54
0496 2006	REMOV STR (HEADWALL)	EA	40	\$ 1,510.53	\$ 60,421.05
0496 2007	REMOV STR (PIPE)	LF	800	\$ 21.36	\$ 17,091.84
0496 2008	REMOV STR (BOX CULVERT)	LF	20	\$ 205.00	\$ 4,100.00
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	41600	\$ 2.70	\$ 112,164.83
0530 2008	DRIVEWAYS (ACP)	EA	31	\$ 1,982.50	\$ 61,457.50
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	3200	\$ 53.75	\$ 172,000.00
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	1790	\$ 2.37	\$ 4,235.80
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	28	\$ 2,307.66	\$ 64,614.52
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	18	\$ 398.44	\$ 7,172.00
0636 2001	ALUMINUM SIGNS (TY A)	SF	50	\$ 31.59	\$ 1,579.61
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	8	\$ 446.02	\$ 3,568.14
0644 2060	REMOVE SM RD SN SUP & AM	EA	8	\$ 80.94	\$ 647.51
0658 2240	INSTL DEL ASSM (D-SW)SZ 1(FX)GF2	EA	64	\$ 47.52	\$ 3,041.38
0658 2255	INSTL DEL ASSM (D-SW)SZ 2(WC) GND	EA	5	\$ 48.67	\$ 243.35
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	41600	\$ 0.36	\$ 14,830.82
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	41600	\$ 0.13	\$ 5,554.85
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	41600	\$ 0.61	\$ 25,509.12
0500 2001	MOBILIZATION	LS	1	\$ 406,000.00	\$ 406,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	9	\$ 3,899.72	\$ 35,097.44
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 1,044,000.00	\$ 1,044,000.00
Total					\$ 6,263,386

Table O. Project Estimate- Bronco Blvd. (Sundance Estates): WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 18,500.00	\$ 18,500.00
0100 2002	PREPARING ROW	STA	6	\$ 500.00	\$ 2,800.00
0110 2001	EXCAVATION (ROADWAY)	CY	484	\$ 9.49	\$ 4,594.67
0132 2003	EMBANKMENT (FINAL){ORD COMP}{TY B}	CY	498	\$ 8.58	\$ 4,271.54
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	311	\$ 1.46	\$ 453.45
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	156	\$ 0.58	\$ 90.67
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	156	\$ 0.58	\$ 90.67
0247 2044	FL BS (CMP IN PLC){TY A GR 4}{FNAL POS	CY	342	\$ 30.20	\$ 10,320.31
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	205	\$ 4.52	\$ 926.70
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	169	\$ 59.29	\$ 10,028.02
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	113	\$ 70.92	\$ 7,997.27
0464 2003	RC PIPE (CL III)(18 IN)	LF	100	\$ 54.16	\$ 5,415.93
0466 2123	HEADWALL (CH-PW-Q)(DIA= 18 IN)	EA	4	\$ 1,536.36	\$ 6,145.45
0496 2006	REMOV STR (HEADWALL)	EA	4	\$ 1,510.53	\$ 6,042.11
0496 2007	REMOV STR (PIPE)	LF	10	\$ 21.36	\$ 213.65
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	560	\$ 2.70	\$ 1,509.91
0636 2001	ALUMINUM SIGNS (TY A)	SF	2	\$ 31.59	\$ 63.18
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD){090MIL}	LF	560	\$ 0.36	\$ 199.65
0666 2035	REFL PAV MRK TY I (W) 8" (SLD){090MIL}	LF	460	\$ 1.17	\$ 537.73
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	560	\$ 0.13	\$ 74.78
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	460	\$ 0.91	\$ 418.18
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	560	\$ 0.59	\$ 328.35
0500 2001	MOBILIZATION	LS	1	\$ 7,000.00	\$ 7,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 19,500.00	\$ 19,500.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 19,500.00	\$ 19,500.00
Total					\$ 136,695

Table P. Project Estimate- Capital Aggregates Quarry: WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 16,000.00	\$ 16,000.00
0100 2002	PREPARING ROW	STA	8	\$ 500.00	\$ 3,825.00
0110 2001	EXCAVATION (ROADWAY)	CY	527	\$ 9.49	\$ 4,999.06
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	737	\$ 8.58	\$ 6,321.49
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	425	\$ 1.46	\$ 619.45
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	213	\$ 0.58	\$ 123.86
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	213	\$ 0.58	\$ 123.86
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	372	\$ 30.20	\$ 11,228.62
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	223	\$ 4.52	\$ 1,008.26
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	184	\$ 59.29	\$ 10,910.61
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	123	\$ 70.92	\$ 8,701.13
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	765	\$ 2.70	\$ 2,062.65
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	765	\$ 0.36	\$ 272.73
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	615	\$ 1.17	\$ 718.92
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	765	\$ 0.13	\$ 102.15
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	615	\$ 0.91	\$ 559.09
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	765	\$ 0.59	\$ 448.55
0500 2001	MOBILIZATION	LS	1	\$ 6,000.00	\$ 6,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 17,000.00	\$ 17,000.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 17,000.00	\$ 17,000.00
Total					\$ 118,094

Project Estimates-Alternative Projects

Table Q. Project Estimate- Burnet Co. Line to Liberty Hill Cemetery: 10-ft Improved Shoulders (no culvert extensions)

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 654,500.00	\$ 654,500.00
0100 2002	PREPARING ROW	STA	181	\$ 500.00	\$ 90,370.00
0110 2001	EXCAVATION (ROADWAY)	CY	20397	\$ 9.49	\$ 193,601.72
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	20082	\$ 8.58	\$ 172,329.77
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	20082	\$ 1.46	\$ 29,270.24
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	10041	\$ 0.58	\$ 5,852.86
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	10041	\$ 0.58	\$ 5,852.86
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	14398	\$ 30.20	\$ 434,857.98
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	8639	\$ 4.52	\$ 39,047.58
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	7127	\$ 59.29	\$ 422,541.93
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	4751	\$ 70.92	\$ 336,974.27
0316 2008	ASPH (HFRS-2P)	GAL	42709	\$ 4.78	\$ 204,182.65
0316 2190	AGGR(TY-D GR-4 SAC-B)	CY	884	\$ 60.23	\$ 53,258.02
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	11186	\$ 70.92	\$ 793,313.03
0354 2021	PLANE ASPH CONC PAV(0" TO 2")	SY	101689	\$ 2.20	\$ 223,844.70
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	35	\$ 403.52	\$ 14,166.93
0462 2004	CONC BOX CULV (4 FT X 3 FT)	LF	24	\$ 154.67	\$ 3,712.06
0464 2003	RC PIPE (CL III)(18 IN)	LF	880	\$ 54.16	\$ 47,660.19
0466 2021	WINGWALL (FW-0)(HW=5 FT)	EA	2	\$ 3,878.85	\$ 7,757.71
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	40	\$ 1,536.36	\$ 61,454.55
0496 2006	REMOV STR (HEADWALL)	EA	40	\$ 1,510.53	\$ 60,421.05
0496 2004	REMOV STR (SET)	EA	2	\$ 342.75	\$ 685.49
0496 2007	REMOV STR (PIPE)	LF	800	\$ 21.36	\$ 17,091.84
0496 2008	REMOV STR (BOX CULVERT)	LF	4	\$ 205.00	\$ 820.00
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	36148	\$ 2.70	\$ 97,464.77
0530 2008	DRIVEWAYS (ACP)	EA	31	\$ 1,982.50	\$ 61,457.50
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	350	\$ 53.75	\$ 18,812.50
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	6	\$ 2,307.66	\$ 13,845.97
0636 2001	ALUMINUM SIGNS (TY A)	SF	50	\$ 31.59	\$ 1,579.61
0644 2060	REMOVE SM RD SN SUP & AM	EA	8	\$ 80.94	\$ 647.51
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	8	\$ 446.02	\$ 3,568.14
0658 2240	INSTL DEL ASSM (D-SW)SZ 1(FIX)GF2	EA	7	\$ 47.52	\$ 332.65
0658 2255	INSTL DEL ASSM (D-SW)SZ 2(WC) GND	EA	5	\$ 48.67	\$ 243.35
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	36148	\$ 0.36	\$ 12,887.12
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	36148	\$ 0.13	\$ 4,826.84
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	36148	\$ 0.61	\$ 22,165.95
0500 2001	MOBILIZATION	LS	1	\$ 349,000.00	\$ 349,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	8	\$ 3,899.72	\$ 31,297.72
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 898,500.00	\$ 898,500.00
Total					\$ 5,390,097

Table R. Project Estimate- AUAR RR to Liberty Hill High School Driveway: 10-ft Improved Shoulders

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 91,000.00	\$ 91,000.00
0100 2002	PREPARING ROW	STA	17	\$ 500.00	\$ 8,430.00
0110 2001	EXCAVATION (ROADWAY)	CY	2204	\$ 9.49	\$ 20,917.06
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	4996	\$ 8.58	\$ 42,867.91
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	1873	\$ 1.46	\$ 2,730.42
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	937	\$ 0.58	\$ 545.97
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	937	\$ 0.58	\$ 545.97
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	1556	\$ 30.20	\$ 46,982.80
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	933	\$ 4.52	\$ 4,218.77
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	FON	770	\$ 59.29	\$ 45,652.15
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	513	\$ 70.92	\$ 36,407.28
0316 2008	ASPH (HFRS-2P)	GAL	4716	\$ 4.78	\$ 22,544.42
0316 2190	AGGR(TY-D GR-4 SAC-B)	CY	98	\$ 60.23	\$ 5,880.38
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	1235	\$ 70.92	\$ 87,592.09
0354 2021	PLANE ASPH CONC PAV(0" TO 2")	SY	11228	\$ 2.20	\$ 24,715.37
0432 2002	RIPRAP (CONC)(5 IN)	CY	117	\$ 373.97	\$ 43,779.90
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	7	\$ 403.52	\$ 2,724.41
0464 2003	RC PIPE (CL III)(18 IN)	LF	200	\$ 54.16	\$ 10,831.86
0466 2123	HEADWALL (CH-PW-D)(DIA= 18 IN)	EA	10	\$ 1,536.36	\$ 15,363.64
0496 2006	REMOV STR (HEADWALL)	EA	10	\$ 1,510.53	\$ 15,105.26
0496 2007	REMOV STR (PIPE)	LF	200	\$ 21.36	\$ 4,272.96
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	3372	\$ 2.70	\$ 9,091.82
0530 2007	DRIVEWAYS (CONC)	EA	2	\$ 7,723.58	\$ 15,447.16
0530 2008	DRIVEWAYS (ACP)	EA	5	\$ 1,982.50	\$ 9,912.50
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	50	\$ 53.75	\$ 2,687.50
0540 2005	TERMINAL ANCHOR SECTION	EA	1	\$ 597.67	\$ 597.67
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	25	\$ 2.37	\$ 59.16
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	1	\$ 2,307.66	\$ 2,307.66
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	1	\$ 398.44	\$ 398.44
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	3372	\$ 0.36	\$ 1,202.15
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	900	\$ 1.17	\$ 1,052.07
0666 2047	REFL PAV MRK TY I (W) 24" (SLD)(090MIL)	LF	90	\$ 5.69	\$ 512.31
0666 2083	REFL PAV MRK TY I (W)(RR XING) (090MIL)	EA	2	\$ 319.13	\$ 638.27
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	3372	\$ 0.13	\$ 450.26
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	900	\$ 0.91	\$ 818.18
0666 2157	REF PAV MRK TY II (W) 24" (SLD)	LF	90	\$ 2.17	\$ 195.04
0666 2169	REF PAV MRK TY II (W) (RR XING)	EA	2	\$ 148.52	\$ 297.03
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	3372	\$ 0.61	\$ 2,067.71
0672 2012	REFL PAV MRKR TY I-C	EA	44	\$ 3.33	\$ 146.74
0672 2015	REFL PAV MRKR TY II-A-A	EA	44	\$ 2.95	\$ 129.64
0672 2015	REFL PAV MRKR TY II-A-A	EA	170	\$ 2.95	\$ 500.89
0500 2001	MOBILIZATION	LS	1	\$ 50,000.00	\$ 50,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	3	\$ 3,899.72	\$ 11,699.15
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 129,000.00	\$ 129,000.00
Total					\$ 772,485

Table S. Project Estimate- CR 200: WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 13,000.00	\$ 13,000.00
0100 2002	PREPARING ROW	STA	5	\$ 500.00	\$ 2,400.00
0110 2001	EXCAVATION (ROADWAY)	CY	439	\$ 9.49	\$ 4,165.88
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	427	\$ 8.58	\$ 3,661.32
0160 2003	FURNISHING AND PLACING TOPSOIL {4"}	SY	267	\$ 1.46	\$ 388.67
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	133	\$ 0.58	\$ 77.72
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	133	\$ 0.58	\$ 77.72
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	310	\$ 30.20	\$ 9,357.19
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	186	\$ 4.52	\$ 840.22
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	153	\$ 59.29	\$ 9,092.17
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	102	\$ 70.92	\$ 7,250.94
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	480	\$ 2.70	\$ 1,294.21
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	480	\$ 0.36	\$ 171.12
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	400	\$ 1.17	\$ 467.59
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	480	\$ 0.13	\$ 64.09
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	400	\$ 0.91	\$ 363.64
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	480	\$ 0.59	\$ 281.44
0500 2001	MOBILIZATION	LS	1	\$ 5,000.00	\$ 5,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 13,500.00	\$ 13,500.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 13,500.00	\$ 13,500.00
Total					\$ 95,022

Table T. Project Estimate- Main St. (Loop 332): EB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 18,000.00	\$ 18,000.00
0100 2002	PREPARING ROW	STA	6	\$ 500.00	\$ 3,050.00
0110 2001	EXCAVATION (ROADWAY)	CY	530	\$ 9.49	\$ 5,029.94
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	1807	\$ 8.58	\$ 15,509.74
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	339	\$ 1.46	\$ 493.94
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	169	\$ 0.58	\$ 98.77
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	169	\$ 0.58	\$ 98.77
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	374	\$ 30.20	\$ 11,297.98
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	224	\$ 4.52	\$ 1,014.49
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	185	\$ 59.29	\$ 10,977.99
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	123	\$ 70.92	\$ 8,754.88
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	610	\$ 2.70	\$ 1,644.72
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	610	\$ 0.36	\$ 217.47
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	490	\$ 1.17	\$ 572.80
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	610	\$ 0.13	\$ 81.45
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	490	\$ 0.91	\$ 445.45
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	610	\$ 0.59	\$ 357.67
0500 2001	MOBILIZATION	LS	1	\$ 7,000.00	\$ 7,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 19,000.00	\$ 19,000.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 19,000.00	\$ 19,000.00
Total					\$ 132,714

Table U. Project Estimate- CR 260 and CR 266: Intersection Improvement: Radii & Deceleration Lanes

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 68,000.00	\$ 68,000.00
0000 0001	ADDITIONAL ROW	LS	1	\$ 48,000.00	\$ 48,000.00
0100 2002	PREPARING ROW	STA	15	\$ 2,000.00	\$ 30,300.00
0110 2001	EXCAVATION (ROADWAY)	CY	1294	\$ 9.49	\$ 12,285.99
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	1010	\$ 8.58	\$ 8,667.02
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	842	\$ 1.46	\$ 1,226.75
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	421	\$ 0.58	\$ 245.30
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	421	\$ 0.58	\$ 245.30
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	914	\$ 30.20	\$ 27,596.15
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	548	\$ 4.52	\$ 2,477.96
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	452	\$ 59.29	\$ 26,814.57
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	302	\$ 70.92	\$ 21,384.43
0432 2002	RIPRAP (CONC)(5 IN)	CY	43	\$ 373.97	\$ 16,141.89
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	31	\$ 403.52	\$ 12,532.28
0460 2007	CMP (GAL STL 36 IN)	LF	40	\$ 185.00	\$ 7,400.00
0462 2019	CONC BOX CULV (8 FT X 4 FT)	LF	8	\$ 358.66	\$ 2,869.30
0464 2005	RC PIPE (CL III)(24 IN)	LF	110	\$ 79.70	\$ 8,767.31
0464 2009	RC PIPE (CL III)(36 IN)	LF	8	\$ 148.14	\$ 1,185.14
0465 2223	MANH (COMPL)(TY MH-M)	EA	1	\$ 4,180.00	\$ 4,180.00
0466 2021	WINGWALL (FW-0)(HW=5 FT)	EA	1	\$ 3,878.85	\$ 3,878.85
0496 2006	REMOV STR (HEADWALL)	EA	1	\$ 1,510.53	\$ 1,510.53
0496 2007	REMOV STR (PIPE)	LF	30	\$ 21.36	\$ 640.94
0496 2008	REMOV STR (BOX CULVERT)	LF	2	\$ 205.00	\$ 410.00
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	3030	\$ 2.70	\$ 8,169.70
0530 2008	DRIVEWAYS (ACP)	EA	1	\$ 1,982.50	\$ 1,982.50
0540 2002	MTL W-BEAM GD FEN (STEEL POST)	LF	275	\$ 100.72	\$ 27,698.61
0540 2003	MTL THRIE-BEAM GD FEN (TIM POST)	LF	150	\$ 53.75	\$ 8,062.50
0540 2005	TERMINAL ANCHOR SECTION	EA	2	\$ 597.67	\$ 1,195.33
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	300	\$ 2.37	\$ 709.91
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	2	\$ 164.86	\$ 329.73
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	2	\$ 2,307.66	\$ 4,615.32
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	2	\$ 398.44	\$ 796.89
0636 2001	ALUMINUM SIGNS (TY A)	SF	38	\$ 31.59	\$ 1,184.71
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	6	\$ 446.02	\$ 2,676.10
0658 2240	INSTL DEL ASSM (D-SW)SZ 1{FLX}GF2	EA	3	\$ 47.52	\$ 142.56
0658 2243	INSTL DEL ASSM (D-SW)SZ 1{FLX}GF3	EA	6	\$ 37.17	\$ 204.45
0658 2255	INSTL DEL ASSM (D-SW)SZ 2{WC} GND	EA	3	\$ 48.67	\$ 146.01
0666 2011	REFL PAV MRK TY I (W) 4" (SLD){090MIL}	LF	1515	\$ 0.36	\$ 540.11
0666 2035	REFL PAV MRK TY I (W) 8" (SLD){090MIL}	LF	970	\$ 1.17	\$ 1,133.90
0666 2047	REFL PAV MRK TY I (W) 24" (SLD){090MIL}	LF	60	\$ 5.69	\$ 341.54
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	4	\$ 165.00	\$ 660.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	4	\$ 198.00	\$ 792.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	1515	\$ 0.13	\$ 202.30
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	970	\$ 0.91	\$ 881.82
0666 2157	REF PAV MRK TY II (W) 24" (SLD)	LF	60	\$ 2.17	\$ 130.03
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	4	\$ 51.11	\$ 204.44
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	4	\$ 76.78	\$ 307.11
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	1515	\$ 0.59	\$ 888.31
0500 2001	MOBILIZATION	LS	1	\$ 28,500.00	\$ 28,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	8	\$ 3,899.72	\$ 31,197.72
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 85,500.00	\$ 85,500.00
Total					\$ 515,953

Table V. Project Estimate- CR 260 and CR 266: Intersection Improvement: 15-ft shift

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 52,000.00	\$ 52,000.00
0000 0001	ADDITIONAL ROW	LS	1	\$ 96,500.00	\$ 96,500.00
0100 2002	PREPARING ROW	STA	10	\$ 2,000.00	\$ 19,500.00
0110 2001	EXCAVATION (ROADWAY)	CY	1658	\$ 9.49	\$ 15,740.71
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	542	\$ 8.58	\$ 4,648.16
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	542	\$ 1.46	\$ 789.49
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	271	\$ 0.58	\$ 157.87
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	271	\$ 0.58	\$ 157.87
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	1171	\$ 30.20	\$ 35,355.95
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	702	\$ 4.52	\$ 3,174.75
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	579	\$ 59.29	\$ 34,354.60
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	386	\$ 70.92	\$ 27,397.56
0432 2002	RIPRAP (CONC)(5 IN)	CY	9	\$ 373.97	\$ 3,462.69
0432 2040	RIPRAP (MOW STRIP)(5 IN)	CY	14	\$ 403.52	\$ 5,448.82
0460 2004	CMP (GAL STL 24 IN)	LF	20	\$ 49.92	\$ 998.32
0464 2005	RC PIPE (CL III)(24 IN)	LF	125	\$ 79.70	\$ 9,962.85
0496 2007	REMOV STR (PIPE)	LF	30	\$ 21.36	\$ 640.94
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	1950	\$ 2.70	\$ 5,257.73
0530 2008	DRIVEWAYS (ACP)	EA	3	\$ 1,982.50	\$ 5,947.50
0540 2003	MTL THRIE-BEAM GO FEN (TIM POST)	LF	150	\$ 53.75	\$ 8,062.50
0542 2001	REMOVING METAL BEAM GUARD FENCE	LF	50	\$ 2.37	\$ 118.32
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	2	\$ 2,307.66	\$ 4,615.32
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	1	\$ 398.44	\$ 398.44
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	1950	\$ 0.36	\$ 695.19
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	975	\$ 0.37	\$ 360.78
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	1950	\$ 0.13	\$ 260.38
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	975	\$ 0.47	\$ 459.47
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	100	\$ 0.59	\$ 58.63
0500 2001	MOBILIZATION	LS	1	\$ 21,000.00	\$ 21,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	6	\$ 3,899.72	\$ 23,398.29
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 76,000.00	\$ 76,000.00
Total					\$ 457,088

Table W. Project Estimate- CR 260 and CR 266: Intersection Improvement: Offset Intersection

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 37,500.00	\$ 37,500.00
0000 0001	ADDITIONAL ROW	LS	1	\$ 48,000.00	\$ 48,000.00
0100 2002	PREPARING ROW	STA	6	\$ 2,000.00	\$ 12,300.00
0110 2001	EXCAVATION (ROADWAY)	CY	914	\$ 9.49	\$ 8,679.88
0132 2003	EMBANKMENT {FINAL}{ORD COMP}{TY B}	CY	308	\$ 8.58	\$ 2,638.72
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	342	\$ 1.46	\$ 497.99
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	171	\$ 0.58	\$ 99.58
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	171	\$ 0.58	\$ 99.58
0247 2044	FL BS (CMP IN PLC){TY A GR 4}{FNAL POS	CY	646	\$ 30.20	\$ 19,496.28
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	387	\$ 4.52	\$ 1,750.65
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	320	\$ 59.29	\$ 18,944.11
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	213	\$ 70.92	\$ 15,107.79
0432 2002	RIPRAP (CONC){5 IN}	CY	6	\$ 373.97	\$ 2,256.52
0432 2040	RIPRAP {MOW STRIP}{5 IN}	CY	16	\$ 403.52	\$ 6,538.58
0460 2007	CMP {GAL STL 36 IN}	LF	11	\$ 185.00	\$ 1,942.50
0464 2005	RC PIPE (CL III){24 IN}	LF	110	\$ 79.70	\$ 8,767.31
0464 2009	RC PIPE (CL III){36 IN}	LF	8	\$ 148.14	\$ 1,185.14
0465 2223	MANH (COMPL){TY MH-M}	EA	1	\$ 4,180.00	\$ 4,180.00
0496 2007	REMOV STR {PIPE}	LF	30	\$ 21.36	\$ 640.94
0506 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	1230	\$ 2.70	\$ 3,316.41
0530 2008	DRIVEWAYS (ACP)	EA	1	\$ 1,982.50	\$ 1,982.50
0540 2003	MTL THRIE-BEAM GD FEN {TIM POST}	LF	150	\$ 53.75	\$ 8,062.50
0540 2005	TERMINAL ANCHOR SECTION	EA	2	\$ 597.67	\$ 1,195.33
0542 2002	REMOVING TERMINAL ANCHOR SECTION	EA	1	\$ 164.86	\$ 164.86
0544 2001	GUARDRAIL END TREATMENT (INSTALL)	EA	2	\$ 2,307.66	\$ 4,615.32
0544 2003	GUARDRAIL END TREATMENT (REMOVE)	EA	1	\$ 398.44	\$ 398.44
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0658 2240	INSTL DEL ASSM (D-SW)SZ 1{FLX}GF2	EA	3	\$ 47.52	\$ 142.56
0658 2255	INSTL DEL ASSM (D-SW)SZ 2{WC} GND	EA	3	\$ 48.67	\$ 146.01
0666 2011	REFL PAV MRK TY I {W} 4" (SLD){090MIL}	LF	615	\$ 0.36	\$ 219.25
0666 2047	REFL PAV MRK TY I {W} 24"(SLD){090MIL}	LF	60	\$ 5.69	\$ 341.54
0666 2110	REFL PAV MRK TY I {Y} 4" (SLD){090MIL}	LF	615	\$ 0.37	\$ 227.57
0666 2145	REF PAV MRK TY II {W} 4" (SLD)	LF	615	\$ 0.13	\$ 82.12
0666 2157	REF PAV MRK TY II {W} 24" (SLD)	LF	60	\$ 2.17	\$ 130.03
0666 2178	REF PAV MRK TY II {Y} 4" (SLD)	LF	615	\$ 0.47	\$ 289.82
0677 2001	ELIM EXT PAV MRK & MRKS { 4"}	LF	615	\$ 0.59	\$ 360.60
0500 2001	MOBILIZATION	LS	1	\$ 15,000.00	\$ 15,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	6	\$ 3,899.72	\$ 23,398.29
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 50,500.00	\$ 50,500.00
Total					\$ 302,486

Table X. Project Estimate- Cedar Hollow: Highway Flashing Beacon and Additional Signage

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 11,500.00	\$ 11,500.00
0100 2002	PREPARING ROW	STA	1	\$ 500.00	\$ 500.00
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	35	\$ 1.46	\$ 50.88
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	17	\$ 0.58	\$ 10.17
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	17	\$ 0.58	\$ 10.17
0416 2032	DRILL SHAFT (TRF SIG POLE) (36 IN)	LF	30	\$ 194.91	\$ 5,847.30
0505 2034	TEMPORARY SEDIMENT CONTROL FENCE	LF	200	\$ 2.70	\$ 539.25
0618 2022	CONDT (PVC) (SCHD 40) (3")	LF	50	\$ 10.25	\$ 512.70
0620 2010	ELEC CONDR (NO. 6) INSULATED	LF	200	\$ 2.10	\$ 420.85
0620 2011	ELEC CONDR (NO. 8) BARE	LF	200	\$ 1.48	\$ 296.99
0620 2012	ELEC CONDR (NO. 8) INSULATED	LF	200	\$ 1.82	\$ 363.99
0620 2014	ELEC CONDR (NO.10) INSULATED	LF	200	\$ 1.07	\$ 214.33
0624 2008	GROUND BOX TY A (122311) W/APRON	EA	1	\$ 583.85	\$ 583.85
0628 2179	ELC SRV TY D 120/240 100 (NS)AL(E)SP(O	EA	1	\$ 4,290.38	\$ 4,290.38
0636 2001	ALUMINUM SIGNS (TY A)	SF	50	\$ 31.59	\$ 1,579.61
0644 2001	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0644 2025	INS SM RD SN SUP&AM TY S80(1) SA(T)	EA	2	\$ 680.00	\$ 1,360.00
0680 2001	INSTALL HWY TRF SIG (FLASH BEACON)	EA	1	\$ 3,846.67	\$ 3,846.67
0682 2018	VEH SIG SEC (12 IN) INC (YEL)	EA	4	\$ 190.02	\$ 760.08
0682 2028	BACK PLATE (12 IN) (1 SEC)	EA	4	\$ 80.00	\$ 320.00
0684 2010	TRF SIG CBL (TY A) (12 AWG) (5 CONDR)	LF	200	\$ 1.69	\$ 338.70
0686 2018	INS TRF SIG PL AM(S) STR (TY D) LUM	EA	2	\$ 6,000.00	\$ 12,000.00
0500 2001	MOBILIZATION	LS	1	\$ 4,500.00	\$ 4,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 12,000.00	\$ 12,000.00
9999 9999	CONTIGENCY (SMALL PROJECT ADJUSTMENT)	LS	1	\$ 12,000.00	\$ 12,000.00
Total					\$ 82,537



Project Estimates-TxDOT Maintenance & Safety Projects

Table Y. Project Estimate- Burnet Co. Line to DB Wood Rd.: Restripe Roadway

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 107,000.00	\$ 107,000.00
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	12722	\$ 0.28	\$ 3,613.68
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	50888	\$ 0.36	\$ 18,142.08
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	50888	\$ 0.37	\$ 18,830.09
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	12722	\$ 0.22	\$ 2,811.82
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	50888	\$ 0.13	\$ 6,795.07
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	50888	\$ 0.47	\$ 23,980.97
0672 2012	REFL PAV MRKR TY I-C	EA	638	\$ 3.33	\$ 2,127.66
0672 2015	REFL PAV MRKR TY II-A-A	EA	1274	\$ 2.95	\$ 3,753.74
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	37128	\$ 0.28	\$ 10,546.21
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	148512	\$ 0.36	\$ 52,946.01
0666 2104	REFL PAV MRK TY I (Y) 4" (BRK)(090MIL)	LF	37128	\$ 0.24	\$ 9,073.71
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	148512	\$ 0.37	\$ 54,953.90
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	37128	\$ 0.22	\$ 8,206.03
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	148512	\$ 0.13	\$ 19,830.81
0666 2176	REF PAV MRK TY II (Y) 4" (BRK)	LF	37128	\$ 0.12	\$ 4,633.57
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	148512	\$ 0.47	\$ 69,986.28
0672 2012	REFL PAV MRKR TY I-C	EA	1858	\$ 3.33	\$ 6,196.23
0672 2015	REFL PAV MRKR TY II-A-A	EA	1858	\$ 2.95	\$ 5,474.45
0672 2015	REFL PAV MRKR TY II-A-A	EA	7426	\$ 2.95	\$ 21,880.11
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	199100	\$ 0.61	\$ 122,272.08
0500 2001	MOBILIZATION	LS	1	\$ 47,000.00	\$ 47,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	1	\$ 3,899.72	\$ 3,899.72
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 125,000.00	\$ 125,000.00
Total					\$ 748,954

Table Z. Project Estimate- Burnet Co. Line to DB Wood Rd.: Overlay-Travel Lanes only

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 1,358,000.00	\$ 1,358,000.00
0316 2008	ASPH (HFRS-2P)	GAL	253206	\$ 4.78	\$ 1,210,514.84
0316 2190	AGGR(TY-D GR-4 SAC-B)	CY	5242	\$ 60.23	\$ 315,744.86
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	66316	\$ 70.92	\$ 4,703,226.36
0354 2021	PLANE ASPH CONC PAV(0" TO 2")	SY	602872	\$ 2.20	\$ 1,327,083.07
0677 2021	ELIM EXT PAV MRK&MRKR (RAIS PAV MRKR)	EA	13054	\$ 1.08	\$ 14,044.93
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	12722	\$ 0.28	\$ 3,613.68
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	50888	\$ 0.36	\$ 18,142.08
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	50888	\$ 0.37	\$ 18,830.09
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	12722	\$ 0.22	\$ 2,811.82
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	50888	\$ 0.13	\$ 6,795.07
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	50888	\$ 0.47	\$ 23,980.97
0672 2012	REFL PAV MRKR TY I-C	EA	638	\$ 3.33	\$ 2,127.66
0672 2015	REFL PAV MRKR TY II-A-A	EA	1274	\$ 2.95	\$ 3,753.74
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	37128	\$ 0.28	\$ 10,546.21
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	148512	\$ 0.36	\$ 52,946.01
0666 2104	REFL PAV MRK TY I (Y) 4" (BRK)(090MIL)	LF	37128	\$ 0.24	\$ 9,073.71
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	148512	\$ 0.37	\$ 54,953.90
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	37128	\$ 0.22	\$ 8,206.03
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	148512	\$ 0.13	\$ 19,830.81
0666 2176	REF PAV MRK TY II (Y) 4" (BRK)	LF	37128	\$ 0.12	\$ 4,633.57
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	148512	\$ 0.47	\$ 69,986.28
0672 2012	REFL PAV MRKR TY I-C	EA	1858	\$ 3.33	\$ 6,196.23
0672 2015	REFL PAV MRKR TY II-A-A	EA	1858	\$ 2.95	\$ 5,474.45
0672 2015	REFL PAV MRKR TY II-A-A	EA	7426	\$ 2.95	\$ 21,880.11
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	199400	\$ 0.61	\$ 122,272.08
0500 2001	MOBILIZATION	LS	1	\$ 804,500.00	\$ 804,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWN)	LS	1	\$ 2,041,500.00	\$ 2,041,500.00
Total					\$ 12,248,468

Table AA. Project Estimate- Burnet Co. Line to DB Wood Rd.: Overlay-Edge of Pavement to Edge of Pavement

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 1,565,000.00	\$ 1,565,000.00
0316 2008	ASPH (HFRS-2P)	GAL	301774	\$ 4.78	\$ 1,442,705.44
0316 2190	AGGR(TY-D GR-4 SAC-B)	CY	6248	\$ 60.23	\$ 376,308.33
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	79036	\$ 70.92	\$ 5,605,359.02
0354 2021	PLANE ASPH CONC PAV(0" TO 2")	SY	718509	\$ 2.20	\$ 1,581,632.80
0677 2021	ELIM EXT PAV MRK&MRKR (RAIS PAV MRKR)	EA	13054	\$ 1.08	\$ 14,044.93
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	12722	\$ 0.28	\$ 3,613.68
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	50888	\$ 0.36	\$ 18,142.08
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	50888	\$ 0.37	\$ 18,830.09
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	12722	\$ 0.22	\$ 2,811.82
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	50888	\$ 0.13	\$ 6,795.07
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	50888	\$ 0.47	\$ 23,980.97
0672 2012	REFL PAV MRKR TY I-C	EA	638	\$ 3.33	\$ 2,127.66
0672 2015	REFL PAV MRKR TY II-A-A	EA	1274	\$ 2.95	\$ 3,753.74
0666 2002	REFL PAV MRK TY I (W) 4" (BRK)(090MIL)	LF	37128	\$ 0.28	\$ 10,546.21
0666 2011	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	148512	\$ 0.36	\$ 52,946.01
0666 2104	REFL PAV MRK TY I (Y) 4" (BRK)(090MIL)	LF	37128	\$ 0.24	\$ 9,073.71
0666 2110	REFL PAV MRK TY I (Y) 4" (SLD)(090MIL)	LF	148512	\$ 0.37	\$ 54,953.90
0666 2142	REF PAV MRK TY II (W) 4" (BRK)	LF	37128	\$ 0.22	\$ 8,206.03
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	148512	\$ 0.13	\$ 19,830.81
0666 2176	REF PAV MRK TY II (Y) 4" (BRK)	LF	37128	\$ 0.12	\$ 4,633.57
0666 2178	REF PAV MRK TY II (Y) 4" (SLD)	LF	148512	\$ 0.47	\$ 69,986.28
0672 2012	REFL PAV MRKR TY I-C	EA	1858	\$ 3.33	\$ 6,196.23
0672 2015	REFL PAV MRKR TY II-A-A	EA	1858	\$ 2.95	\$ 5,474.45
0672 2015	REFL PAV MRKR TY II-A-A	EA	7426	\$ 2.95	\$ 21,880.11
0666 2232	REFL PROF PAV MRK (W)4"(SLD)(100MIL)	LF	199400	\$ 0.61	\$ 122,272.08
0500 2001	MOBILIZATION	LS	1	\$ 950,500.00	\$ 950,500.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 10,000.00	\$ 20,000.00
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 2,404,500.00	\$ 2,404,500.00
Total					\$ 14,426,105

Table BB. Project Estimate- DB Wood Rd.: WB Deceleration/Turn Lane

Item	Description	Unit	Quantity	Unit Price	Total Price
0000 0000	ENGINEERING SERVICES AND CONTIGENCIES	LS	1	\$ 23,000.00	\$ 23,000.00
0100 2002	PREPARING ROW	STA	7	\$ 500.00	\$ 3,425.00
0110 2001	EXCAVATION (ROADWAY)	CY	505	\$ 9.49	\$ 4,789.40
0132 2003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	457	\$ 8.58	\$ 3,918.75
0160 2003	FURNISHING AND PLACING TOPSOIL (4")	SY	381	\$ 1.46	\$ 554.67
0164 2041	DRILL SEEDING (TEMP) (WARM)	SY	190	\$ 0.58	\$ 110.91
0164 2043	DRILL SEEDING (TEMP) (COOL)	SY	190	\$ 0.58	\$ 110.91
0247 2044	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS	CY	356	\$ 30.20	\$ 10,757.69
0310 2005	PRIME COAT (MC-30 OR AE-P)	GAL	214	\$ 4.52	\$ 965.97
0341 2014	D-GR HMA(QCQA) TY-B PG70-22	TON	176	\$ 59.29	\$ 10,453.01
0341 2047	D-GR HMA(QCQA) TY-C SAC-A PG70-22	TON	118	\$ 70.92	\$ 8,336.20
0506 2034	TEMPDRARY SEDIMENT CONTROL FENCE	LF	685	\$ 2.70	\$ 1,846.94
0530 2008	DRIVEWAYS (ACP)	EA	1	\$ 1,982.50	\$ 1,982.50
0464 2003	RC PIPE (CL III)(18 IN)	LF	40	\$ 54.16	\$ 2,166.37
0466 2123	HEADWALL (CH-PW-0)(DIA= 18 IN)	EA	2	\$ 1,536.36	\$ 3,072.73
0496 2007	REMOV STR (PIPE)	LF	27	\$ 21.36	\$ 576.85
0496 2006	REMOV STR (HEADWALL)	EA	2	\$ 1,510.53	\$ 3,021.05
0636 2001	ALUMINUM SIGNS (TY A)	SF	13	\$ 31.59	\$ 394.90
0644 2002	INS SM RD SN SUP&AM TY 10BWG(1) SA(P)	EA	2	\$ 446.02	\$ 892.03
0666 2021	REFL PAV MRK TY I (W) 4" (SLD)(090MIL)	LF	685	\$ 0.36	\$ 244.21
0666 2035	REFL PAV MRK TY I (W) 8" (SLD)(090MIL)	LF	590	\$ 1.17	\$ 689.69
0666 2053	REFL PAV MRK TY I (W) (ARROW) (090MIL)	EA	2	\$ 165.00	\$ 330.00
0666 2095	REFL PAV MRK TY I (W) (WORD) (090MIL)	EA	2	\$ 198.00	\$ 396.00
0666 2145	REF PAV MRK TY II (W) 4" (SLD)	LF	685	\$ 0.13	\$ 91.47
0666 2153	REF PAV MRK TY II (W) 8" (SLD)	LF	590	\$ 0.91	\$ 536.36
0666 2160	REF PAV MRK TY II (W) (ARROW)	EA	2	\$ 51.11	\$ 102.22
0666 2173	REF PAV MRK TY II (W) (WORD)	EA	2	\$ 76.78	\$ 153.56
0677 2001	ELIM EXT PAV MRK & MRKS (4")	LF	685	\$ 0.59	\$ 401.64
0416 2030	DRILL SHAFT (TRF SIG POLE) (24 IN)	LF	20	\$ 154.62	\$ 3,092.49
0620 2010	ELEC CONDR (NO. 6) INSULATED	LF	125	\$ 2.10	\$ 263.03
0620 2011	ELEC CONDR (NO. 8) BARE	LF	125	\$ 1.48	\$ 185.62
0620 2012	ELEC CONDR (NO. 8) INSULATED	LF	125	\$ 1.82	\$ 227.49
0624 2008	GROUND BOX TY A (122311) W/APRON	EA	1	\$ 583.85	\$ 583.85
0680 2002	INSTALL HWY TRF SIG (ISOLATED)	EA	1	\$ 11,674.16	\$ 11,674.16
0690 2051	REMOVAL OF SIGNAL POLE ASSM	EA	2	\$ 740.00	\$ 1,480.00
0690 2025	REPLACE OF SIGNAL HEAD ASSM	EA	2	\$ 960.00	\$ 1,920.00
0684 2030	TRF SIG CBL (TY A) (14 AWG) (4 CONDR)	LF	125	\$ 1.71	\$ 213.64
0684 2031	TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	125	\$ 1.82	\$ 227.67
0684 2033	TRF SIG CBL (TY A) (14 AWG) (7 CONDR)	LF	125	\$ 2.61	\$ 325.70
0684 2049	TRF SIG CBL (TY A) (16 AWG) (3 CONDR)	LF	125	\$ 0.12	\$ 14.86
0682 2014	PED SIG SEC (12 IN) LED (2 INDICATIONS	EA	1	\$ 529.09	\$ 529.09
0618 2022	CONDT (PVC) (SCHD 40) (3")	LF	125	\$ 10.25	\$ 1,281.76
0620 2012	ELEC CONDR (NO. 8) INSULATED	LF	125	\$ 1.82	\$ 227.49
0500 2001	MOBILIZATION	LS	1	\$ 9,000.00	\$ 9,000.00
0502 2001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	2	\$ 3,899.72	\$ 7,799.43
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 24,500.00	\$ 24,500.00
9999 9998	CONTIGENCY (INFLATION AND UNKNOWNNS)	LS	1	\$ 24,500.00	\$ 24,500.00
Total					\$ 171,367