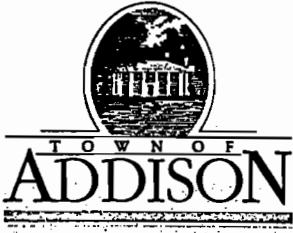


COPY



OFFICE OF THE CITY MANAGER

(972) 450-7000 • FAX (972) 450-7043

Post Office Box 9010 Addison, Texas 75001-9010

5300 Belt Line Road

January 24, 2000

Ms. Monique Johnson
Senior Public Affairs Specialist
State Farm Insurance Companies
North Texas Office
17301 Preston Road
P.O. Box 799100
Dallas, TX 75379-9100

Re: Belt Line Road and Midway Road Intersection

Dear Ms. Johnson:

Please accept this letter as receipt of your check for Thirteen Thousand Eight Hundred and No/100 (\$13,800.00) for the above-mentioned intersection Operations and Safety Study for the Town of Addison.

As requested, enclosed please find the Acknowledgement and Contribution form.

Thank you for your prompt response to this most important matter.

Sincerely,

Ron Whitehead
City Manager

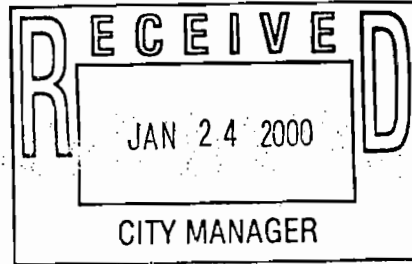
RW:mc

Enclosure: Acknowledgement and Contribution form

State Farm Insurance Companies



January 21, 2000



City of Addison
ATTN: Ron Whitehead
P.O. Box 144
Addison, TX 75001

North Texas Office
17301 Preston Road
P.O. Box 799100
Dallas, Texas 75379-9100

Keith M. Androff, CLU, ChFC, FLMI
Regional Public Affairs Manager
Phone: (972) 732-5445

Dear Ron:

Enclosed is a check for \$13,800.00 for the Beltline and Midway Intersection Operational and Safety Study. We are pleased to support your efforts and wish you success with the study.

In accordance with the 1993 Tax Act, we are required to have written confirmation that our contribution was received. In addition, statement indicating whether goods or services were provided to State Farm in consideration of this contribution is needed. Please complete and sign the enclosed acknowledgment form and return it to us in the envelope provided by February 7, 2000.

If you have additional questions, please feel free to call me at 972.732.4827.
Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Monique Johnson".

Monique Johnson
Senior Public Affairs Specialist

cc File

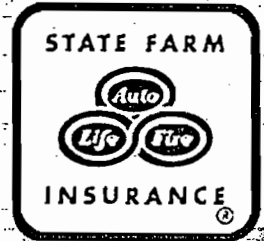
Congratulations!

State Farm Insurance Companies is pleased to offer the enclosed check in support of your efforts.

We ask that any acknowledgement of this contribution refer to State Farm Insurance Companies as the source of the grant.

Best wishes for continued success.

State Farm Insurance Companies
Company Philanthropy Programs
(309) 766-2161



COMPANY LOGO APPEARS ON BACK IF HELD AT AN ANGLE FOR VIEWING



STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY
HOME OFFICE
BLOOMINGTON, IL 61710
General Account

1 00 890060 A
56-1544/441

JANUARY 12, 2000

Pay To The
Order of:

CITY OF ADDISON

\$ ****13800.00

*****THIRTEEN THOUSAND EIGHT HUNDRED AND NO/100 DOLLARS*****

Edward B. Rust

CHAIRMAN

Roger Joslin

TREASURER

To: BANK ONE NA
CIRCLEVILLE, OH

VOID IF GREEN COLORED BACKGROUND IS MISSING

GREEN COMPANY LOGO APPEARS ON FACE OF DOCUMENT

⑈0011890060⑈ ⑆044115443⑆ 627118565⑈

ACKNOWLEDGMENT OF CONTRIBUTION

Please complete ALL sections.

Internal Use Only: (Public Affairs)

PART A.

The TOWN OF ADDISON acknowledges the (name of organization as filed, no abbreviations)

receipt of State Farm Mutual Automobile Insurance Company's charitable contribution of

\$13,800.00 which was received on 01-24-00 (amount) (date)

PART B.

Were any goods or services provided to State Farm in consideration of this contribution?

X No

Yes (if yes, on the line below, give a description and the value of the goods or services)

\$

PART C.

Please indicate whether your organization is qualified or non-qualified as described in IRC Section 501(c)(3). See note below.

Qualified Non-Qualified X N/A or Other: Specify Municipal Government Tax Exempt #

17513335558

Note: In general, an organization qualifies under section 501(c)(3) if it is organized and operated exclusively for religious, charitable, scientific, literary or educational purposes, or to foster national or international amateur sports competition, or for the prevention of cruelty to children or animals. An organization seeking recognition of exempt status under section 501(c)(3) must file Form 1023 with the district director for the IRS district in which the organization is located.

PART D.

By signing below, I hereby agree that the above statements are correct regarding the amount and receipt of the contribution, the value of goods or services provided, and the organization's status according to Section 501(c)(3).

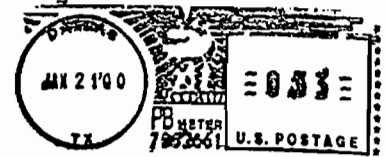
Ron Whitehead Name (printed)

City Manager Title

Ron Whitehead Signature

01-24-00 Date

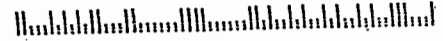
State Farm Insurance Companies
North Texas Office / 17301 Preston Road
P.O. Box 799100
Dallas, Texas 75379-9100



From:

City of Addison
ATTN: Ron Whitehead
P.O. Box 144
Addison, TX 75001

75001-0144



From RON WHITEHEAD
CITY MANAGER
TOWN OF ADDISON
P.O. BOX 9010
ADDISON, TX 75001-9010



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 3 BLOOMINGTON, ILLINOIS

POSTAGE WILL BE PAID BY ADDRESSEE

Attn Accounting Manager
State Farm Insurance Companies
Corporate Headquarters
One State Farm Plaza
BLOOMINGTON IL 61701-9972

To:

Attention:
Jan Computer
G.A.S. / 10-2



National List-Phase I

**GRANT APPLICATION
INTERSECTION SAFETY STUDY**

DUE: September 30, 1999

<p><i>For Internal use only:</i> Date Application Received _____ Application Number: _____</p>

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities up to \$20,000 for Intersection Operational and Safety Studies for specific intersections identified by State Farm pursuant to its research. Following completion of the study, additional funds (up to \$100,000) will be available under a separate grant for repair or improvements meeting the objectives of the Intersection Operational and Safety Study.

Studies performed pursuant to this grant shall include the following objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please see Attachment A for a complete description of the type of study eligible for such funding.

Please provide the following information regarding a proposed study:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT DIRECTOR:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:

Beltline and Midway

Amount of funding requested:

Name of Consultant:

Please attach a description of the proposed study for the above listed intersection. The description should contain sufficient detail to determine that the proposal meets the criteria described in Attachment A to this application. State Farm will release the funds upon its confirmation that the proposed study is consistent with the terms of reference criteria described in Attachment A.

The award of a grant shall be at the sole discretion of State Farm. Studies must be completed within six months of approval of the grant proposal by State Farm.

The City of Addison agrees that it shall provide a copy of the completed Intersection Operational and Safety Study report pursuant to this grant to be used for State Farm's research purposes.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway Intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

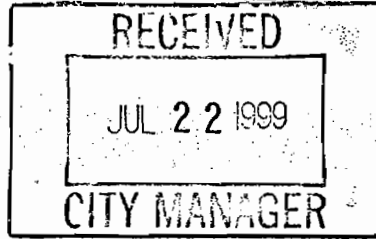
Chief Authorizing Officer

Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: September 30, 1999

COPY

State Farm Insurance Companies



North Texas Office
17301 Preston Road
P.O. Box 799100
Dallas, Texas 75379-9100

Keith M. Androff, CLU, ChFC, FLA
Regional Public Affairs Manager
Phone: (972) 732-5445

July 19, 1999

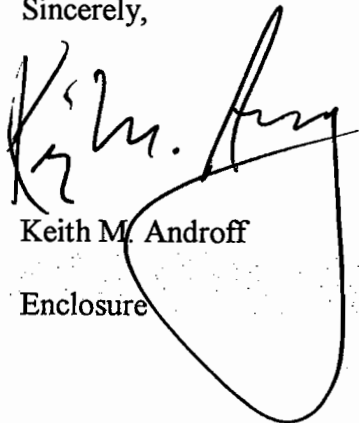
Ron Whitehead
P.O. Box 144
Addison, TX 75001

Dear Ron:

Enclosed is the State Farm grant application we discussed in our meeting for the intersection located at Beltline and Midway. If you plan to apply for financial assistance, your application must be completed and returned to John Werner at the address listed on the application by September 30, 1999.

The available funds are intended for an Intersection Operational and Safety Study. We look forward to talking with you more about this project and stand ready to assist you or any of your staff regarding this grant application. If you have any questions, please give me a call at 972-732-5445.

Sincerely,



Keith M. Androff

Enclosure

John - 8/5
Did Ron give you
the original of this letter?
If you need it, you can
use this. Chris

National List-Phase 1

**GRANT APPLICATION
INTERSECTION SAFETY STUDY**

DUE: September 30, 1999

For Internal use only:

Date Application Received _____

Application Number: _____

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities up to \$20,000 for Intersection Operational and Safety Studies for specific intersections identified by State Farm pursuant to its research. Following completion of the study, additional funds (up to \$100,000) will be available under a separate grant for repair or improvements meeting the objectives of the Intersection Operational and Safety Study.

Studies performed pursuant to this grant shall include the following objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please see Attachment A for a complete description of the type of study eligible for such funding.

Please provide the following information regarding a proposed study:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT DIRECTOR:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:
Beltline and Midway

Amount of funding requested:

Name of Consultant:

Please attach a description of the proposed study for the above listed intersection. The description should contain sufficient detail to determine that the proposal meets the criteria described in Attachment A to this application. State Farm will release the funds upon its confirmation that the proposed study is consistent with the terms of reference criteria described in Attachment A.

The award of a grant shall be at the sole discretion of State Farm. Studies must be completed within six months of approval of the grant proposal by State Farm.

The City of Addison agrees that it shall provide a copy of the completed Intersection Operational and Safety Study report pursuant to this grant to be used for State Farm's research purposes.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Chief Authorizing Officer

Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: September 30, 1999

National List-Phase 2

For Internal use only:

Date Application Received _____

Application Number: _____

**GRANT APPLICATION
INTERSECTION SAFETY IMPROVEMENTS**

DUE: July 1, 2000

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities controlling intersections specified by State Farm up to \$100,000 for engineering counter measures that will mitigate high crash and injury risk. The Intersection Operational and Safety Studies completed under Phase One will have identified engineering countermeasures that can result in significant reduction in crashes. This grant is intended to provide funds for engineering improvements which are generally low cost and immediately available identified in the Intersection Operational and Safety Study for the intersection and proposed by the government entity.

The study performed pursuant to Phase One of this grant should meet the following objectives:

1. Identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. Recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. Conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. Recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please provide the following information regarding the proposed intersection improvements:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT DIRECTOR:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:

Beltline and Midway

Amount of funding requested:

Please attach a description of the proposed improvements for the above listed intersection. The description should contain sufficient detail to determine that the proposed improvements are consistent with the findings of the report prepared pursuant to Phase One of this program.

The award of a grant shall be at the sole discretion of State Farm.

State Farm will release the funds upon the certification of a professional engineer that the improvements to the intersection have been completed.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway Intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Chief Authorizing Officer

Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: July 1, 2000

Attachment A

TERMS OF REFERENCE FOR INTERSECTION OPERATIONAL AND SAFETY STUDIES

Study Objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection.
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Required Study Procedures:

The study shall consist of the following Phases:

Phase 1: Quantitative Intersection Analysis

This phase shall consist of the following tasks:

Task 1: Geometric Analysis

Review the existing intersection geometry and check for any characteristics that may be contributing to a high crash risk. Include a check of sight distance, turn radii, horizontal and vertical alignment, signal visibility, pavement marking, clear zone, pedestrian and transit facilities, and any other relevant geometric features.

Task 2: Crash Data Analysis

Review police crash data and identify all relevant patterns, including spatial and temporal characteristics, weather, pavement, and light conditions, crash types, contributing causes, and any other crash characteristics. Analysis to include the last three years of available data.

Task 3: Traffic Conflict Analysis

Conduct a detailed traffic conflict survey. Observe, record, and analyze all conflicts using trained and qualified observers. The traffic conflict survey is to be conducted according to the Traffic Conflicts Procedures Manual, 2nd Edition (November 1996) prepared by Hamilton Associates for the Insurance Corporation of British Columbia. A copy of the manual can be obtained from State Farm or from Hamilton Associates at 604-684-4488. Analyze the conflict data to determine the causes behind the conflicts, temporal and

spatial distributions, as well as the most severe and hazardous conflict types using a numerical scale. Relate the conflict findings to the crash data analysis.

Task 4: Capacity Analysis

Conduct turning movement traffic counts for the morning, midday, and afternoon peak periods. Review the signal timing and phasing plan. Analyze the intersection capacity and levels of service per movement using the Highway Capacity Manual procedures. Include a review of bus and pedestrian operations. Review efficiency, delays and queuing, from a safety perspective to determine the interrelationship between capacity operations and safety performance.

Task 5: Human Factors Analysis

Observe and analyze driver behavior at the Intersection, and the relationship between the existing geometric characteristics and driver perceptions of the intersection. Measure approach speeds, review the visual environment (including directional and regulatory signing, landscaping, land use, and background distractions) from the perspective of the driver.

Phase 2: Identification of Deficiencies

Using the results of Phase 1, clearly identify the engineering characteristics of the Intersection that are contributing to a high crash risk. Clearly relate each identified deficiency with the measurable features that were analyzed in Phase 1. All identified deficiencies shall be supported by the quantitative analysis.

Phase 3: Development of Countermeasures

Develop a set of engineering countermeasures that will mitigate the deficiencies identified in Phase 2. Clearly relate each engineering countermeasure with the specific deficiency that will be addressed. Develop both low cost, readily implementable countermeasures as well as longer term, potentially more costly solutions. Clearly demonstrate the effectiveness of the countermeasures in addressing the identified deficiencies, by providing quantitative, empirical evidence of effectiveness.

While engineering countermeasures are the focus of this study, enforcement efforts that may be effective in reducing the crash risk should also be identified whenever possible. The need for additional enforcement should be supported by quantified driver behavior characteristics, such as speeding, red light running, and aggressive weaving /lane changing.

Phase 4: Economic Evaluation

Conduct an economic evaluation of the recommended engineering countermeasures by clearly quantifying the expected countermeasure effectiveness in terms of crash

Study Schedule

The study is to be completed to the Draft Report stage within one month of authorization being received to proceed.

Consultant's Proposal:

Consultants who are interested in submitting a proposal to complete this study should clearly demonstrate their skill and experience in conducting similar studies. The proposal should include:

- X The consultant's understanding of the study requirements (1 page or less).
- X The consultant's work plan, clearly indicating the procedures to be used to complete each of the identified phases and tasks. Indicate the key milestones, deliverables, and meetings with the stakeholders (5 to 10 pages).
- X The consultant's project team, clearly identifying the Project Manager, and the relevant experience of the team members (2 to 3 pages). Generic resumes may be included in an Appendix.
- X The consultant's recent experience on similar projects, with project descriptions and reference names and telephone numbers (2 to 3 pages). Project sheets may be included in an Appendix.
- X The consultant's schedule for completing the study (2 pages or less).
- X Summary of the advantages and special features offered by the consultant's proposal (1 page or less).

After the Table of Contents, the consultant's proposal should not exceed 20 pages, including all diagrams, figures and tables. Appendices can be additional, but may not necessarily be reviewed.

The proposals will be evaluated on the basis of:

- X Understanding of the assignment (15%).
- X Thoroughness of the Work Plan (40%).
- X Composition of the Project Team, and experience on similar projects (20%).
- X Quality and effort inherent in the proposal (15%).
- X Innovation and value-added offered by the proposal (10%).



Kimley-Horn and Associates, Inc.

12700 Park Central Suite 1800 Dallas, Texas 75251 TEL 972- 770-1300 FAX 972- 239-3820

Fax Transmittal

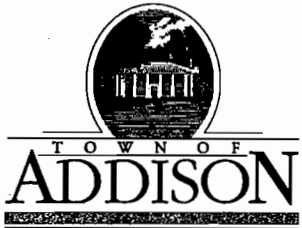
To: Mike Murphy Fax No.: 972-450-2837
Firm/Location: Down of Addison Job No.: _____
From: Brian Shewski Date: 12-18-00
Original coming by ^{courier}mail: Yes: No:

If you have any problems, please call 972-770-1300 and ask for: Sherrin

Total number of pages, including cover sheet: 3

Comments:

This facsimile is intended for the addressee named herein and may contain information that is confidential. If you are not the intended recipient or the employee or agent responsible for delivery to the addressee, you are hereby notified that any review, dissemination, disclosure, or copying of this communication is strictly prohibited. If you have received this facsimile in error, please immediately notify us by telephone, and return the original facsimile to us at the address above via the U.S. Postal Service. Thank you.



PUBLIC WORKS DEPARTMENT

(972) 450-2871

Post Office Box 9010 Addison, Texas 75001-9010

16801 Westgrove

18 December 2000

Mr. John Werner
Assistant Director
State Farm Insurance Company
One State Farm Plaza D-3
Bloomington, Illinois 61710

**SUBJECT: NOTICE OF PROJECT COMPLETION, BELT LINE ROAD
AND MIDWAY ROAD INTERSECTION, ADDISON, TX**

Dear Mr. Werner:

Please accept this letter as "Notice of Project Completion" for the intersection of Belt Line Road and Midway Road in Addison, TX.

Attached please find a copy of the original grant application (9/17/99), Summary of Work Completed in the form of a Safety Review Report prepared by Kimley-Horn and Associates, and a Notice of Completion from TXDoT.

The Town of Addison is very pleased with the intersection improvements. We look forward to the successful acquisition of the \$100,000 Grant from the State Farm Intersection Grant Program.

If there is any additional information required or, if you have any questions, please do not hesitate to contact me at (972) 450-2878.

Sincerely,

Michael E. Murphy, P.E.
Director of Public Works

cc: Ron Whitehead
Chris Terry

Attachments (As noted above)



Kimley-Horn
and Associates, Inc.

December 18, 2000

Mr. Mike Murphy
City Manager
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001

■
Suite 1800
12700 Park Central Drive
Dallas, Texas
75251

RE: Safety Review for the Belt Line Road and Midway Road Intersection

Dear Mr. Murphy:

Per State Farm Insurance requirements, we have reviewed the above referenced intersection with regards to the implementation of safety improvements. The necessary improvements, as shown in the construction documents with modifications from our March 7, 2000, technical memorandum have been implemented.

The reconstruction of this intersection improved three areas – signalization, signing, and geometrics. The signalization improvements replaced all of the traffic signal hardware. The old median mounted traffic signal poles were removed and replaced with corner poles with longer mast arms. The removal of the median mounted poles resulted in two primary safety improvements. First, the potential for hitting the median mounted poles was eliminated thus reducing the number of accidents. Second, the target value of the left-turn signage (i.e., the ability to see the signs) was greatly improved by elevating this signage to the mast arm. Finally, the number of left-turn traffic signal heads per approach were increased from one to two which resulted in better visibility.

The geometric improvements for this intersection consisted of property access modifications, and capacity improvements. The total number of driveways near the intersection was reduced thus eliminating several points of vehicle conflict. Driveway curb returns were increased from ten feet to at least fifteen feet. Overflow of the original left-turn lanes created rear-end vehicle conflicts between the left-turn vehicles queuing onto the through lanes and the through traffic. The additional storage of the dual left-turn lanes should reduce the number of these rear-end conflicts. Likewise, the right-turn traffic on three of the four approaches has been removed from the through traffic flow with the construction of right-turn lanes. This improvement should also reduce the number of rear-end accidents.

Other recommendations from our March 7, 2000 technical memorandum, which were implemented and are not already highlighted above, are as follows:

■
TEL 972 770 1300
FAX 972 239 3820



Kimley-Horn
and Associates, Inc.

Mr. Mike Murphy
December 18, 2000

- A portion of a raised curb island which obstructed southbound vehicles turning right into the driveway at 7+05 was removed to allow better access and traffic flow.
- A curve in Belt Line Road was slightly straightened to facilitate smoother traffic flow.

Straight tapers instead of curved tapers were not implemented for the left-turn lane transitions. The duration of construction might have been reduced as the result of implementing the easier to construct straight tapers. However, the curved tapers will provide better long-term safety improvements. The curved tapers allow slightly more storage length. This additional length could make the difference between a left-turn vehicle being fully protected and a vehicle that encroaches on the through lanes.

The result of these signalization, signing, and geometric improvements should be an increased level of safety and thus a reduction of accident percentages.

If you have any questions or need additional information, please contact me at 972-770-1341.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

A handwritten signature in black ink that reads "Brian K. Shewski". The signature is written in a cursive, flowing style.

Brian K. Shewski, P.E., PTOE



Kimley-Horn
and Associates, Inc.

December 18, 2000

Mr. Mike Murphy
City Manager
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001

■
Suite 1800
12700 Park Central Drive
Dallas, Texas
75251

RE: Safety Review for the Belt Line Road and Midway Road Intersection

Dear Mr. Murphy:

Per State Farm Insurance requirements, we have reviewed the above referenced intersection with regards to the implementation of safety improvements. The necessary improvements, as shown in the construction documents with modifications from our March 7, 2000, technical memorandum have been implemented.

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■
TEL 972 770 1300
FAX 972 239 3820



Kimley-Horn
and Associates, Inc.

Mr. Mike Murphy
December 18, 2000

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The result of these signalization, signing, and geometric improvements should be an increased level of safety and thus a reduction of accident percentages.

If you have any questions or need additional information, please contact me at 972-770-1341.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

A handwritten signature in cursive script that reads "Brian K. Shewski".

Brian K. Shewski, P.E., PTOE



Kimley-Horn
and Associates, Inc.

12700 Park Central
Suite 1800
Dallas, Texas 75251
TEL 972- 770-1300
FAX 972- 239-3820

Fax Transmittal

To: MIKE MURPHY Fax No.: 972-450-2837

Firm/Location: TOWN OF ADDISON Job No.: _____

From: BRIAN SHENSKI Date: _____

Original coming by mail: Yes: No:

If you have any problems, please call 972-770-1300 and ask for: BRIAN SHENSKI

Total number of pages, including cover sheet: 3

Comments:

This facsimile is intended for the addressee named herein and may contain information that is confidential. If you are not the intended recipient or the employee or agent responsible for delivery to the addressee, you are hereby notified that any review, dissemination, disclosure, or copying of this communication is strictly prohibited. If you have received this facsimile in error, please immediately notify us by telephone, and return the original facsimile to us at the address above via the U.S. Postal Service. Thank you.

State Farm Mutual Automobile Insurance Company



Corporate Headquarters
One State Farm Plaza
Bloomington, Illinois 61710-0001

September 5, 2000

Mr. Mike Murphy
City of Addison
PO Box 9010
Addison, TX 75001

Re: Intersection Grant Funds

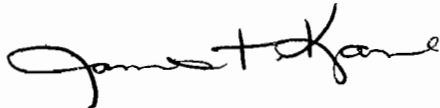
Dear Mr. Murphy:

Please find the enclosed copy of the Phase II grant application for State Farm's Dangerous Intersections Project.

A brief summary of the work completed to enhance the safety of the intersection should accompany the grant application. These safety improvements should have been outlined in the Safety Study completed by Kimley-Horn and Associates earlier this year. A licensed professional engineer on Kimley-Horn's staff should also author the summary if possible.

If you have any questions, please feel free to contact me.

Sincerely,



James T. Kane, P.E.
State Farm Insurance
Facilities Management Services
Jim.Kane.GHCU@StateFarm.com
Phone: (309) 766-2343
Fax: (309) 766-0666

c: Deb Wozniak
John Werner
John Nepomuceno
Mike Cunningham

October 17, 2000

DRAFT

Mr. Mike Murphy
City Manager
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001

RE: Safety Review for the Belt Line Road and Midway Road Intersection

Dear Mr. Murphy:

Per State Farm Insurance requirements, we have reviewed the above referenced intersection with regards to the implementation of safety improvements. The necessary improvements, as shown in the construction documents with modifications from our March 7, 2000, technical memorandum have been implemented.

The reconstruction of this intersection improved three areas – signalization, signing, and geometrics. The signalization improvements replaced all of the traffic signal hardware. The old median mounted traffic signal poles were removed and replaced with corner poles with longer mast arms. The removal of the median mounted poles resulted in two primary safety improvements. The potential for hitting the median mounted poles was eliminated thus reducing the number of accidents. The target value of the left-turn signage (i.e., the ability to see the signs) was greatly improved by elevating this signage to the mast arm. Finally, the number of left-turn traffic signal heads per approach were increased from one to two which resulted in better visibility.

The geometric improvements for this intersection consisted of property access and capacity improvements. The total number of driveways near the intersection was reduced thus eliminating several points of vehicle conflict. Driveway curb returns were increased from ten feet to at least fifteen feet. Overflow of the original left-turn lanes created rear-end vehicle conflicts between the left-turn vehicles queuing onto the through lanes and the through traffic. The dual left-turn lanes should reduce the number of these rear-end conflicts. Likewise, the right-turn traffic on three of the four approaches has been removed from the through traffic flow with the construction of right-turn lanes. This improvement should also reduce the number of rear-end accidents.

Other recommendations from our March 7, 2000 technical memorandum, which were implemented and are not already highlighted above, are as follows:

- A portion of a raised curb island which obstructed southbound vehicles turning right into the driveway at 7+05 was removed to allow better access and traffic flow.
- A curve in Belt Line Road was slightly straightened to facilitate smoother traffic flow.

Straight tapers instead of curved tapers were not implemented for the left-turn lane transitions. The duration of construction might have been reduced as the result of implementing the easier to construct straight tapers. However, the curved tapers will provide better long-term safety improvements. The curved tapers allow slightly more storage length. This additional length could make the difference between a left-turn vehicle being fully protected and a vehicle that encroaches on the through lanes.

The result of these signalization, signing, and geometric improvements should be an increased level of safety and thus a reduction of accident percentages.

If you have any questions or need additional information, please contact me at 972-770-1341.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Brian K. Shewski, P.E., PTOE

National List-Phase 2 - Revised

**GRANT APPLICATION
INTERSECTION SAFETY IMPROVEMENTS**

DUE: November 3, 2000

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities controlling intersections specified by State Farm up to \$100,000 for engineering counter measures that will mitigate high crash and injury risk. The Intersection Operational and Safety Studies completed under Phase One will have identified engineering countermeasures that can result in significant reduction in crashes. This grant is intended to provide funds for engineering improvements which are generally low cost and immediately available identified in the Intersection Operational and Safety Study for the intersection and proposed by the government entity.

The study performed pursuant to Phase One of this grant should meet the following objectives:

1. Identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. Recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. Conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. Recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please provide the following information regarding the proposed intersection improvements:

APPLICANT INFORMATION

Local Government (Name) TOWN OF ADDISON

CHIEF AUTHORIZING OFFICIAL:

Name Ron Whitehead Title City Manager

Telephone Number 972-450-7027 Facsimile Number 972-450-7043

Address (street, city, state, zip code): 5300 Belt Line Rd.

Addison, TX 75240

PROJECT DIRECTOR:

Name Michael E. Murphy P.E. Title Director of Public Works

Telephone Number 972-450-2878 Facsimile Number 972-450-2837

Address (street, city, state, zip code): 16801 Westgrove Rd.

Addison, TX 75001

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:
Belt Line Road and Midway Road, Addison TX

Amount of funding requested: \$100,000.00

Please attach a description of the proposed improvements for the above listed intersection. The description should contain sufficient detail to determine that the proposed improvements are consistent with the findings of the report prepared pursuant to Phase One of this program.

The award of a grant shall be at the sole discretion of State Farm.

State Farm will release the funds upon the certification of a professional engineer that the improvements to the intersection have been completed.

The Town of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions which arise concerning the intersection design or performance, or concerning the construction, maintenance or management related to the repair or improvements to the Belt Line Rd. and Midway Rd. Intersection.

The Town of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Chief Authorizing Officer

Date

Please send complete
John Werner
Assistant Director
State Farm Insurance
One State Farm Plaza
Bloomington Illinois

*Wait,
sent a copy
of the original
grant application*



Texas Department of Transportation

P.O. BOX 133067 • DALLAS, TEXAS 75313-3607 • (214) 320-6100

12000 N. Greenville Ave

Dallas, Texas 75243

October 13, 2000

cc Chris
Mike
Robin

Control: 8050-18-034
Project: CM 97 (449)
Highway: MH (Beltline RD)
County: Dallas

Ali Rabiee:
Project Manager
1401 Pacific Avenue
Dallas, Texas 75266-7212

Dear Mr. Rabiee:

This letter is a written "Notification of Completion" for the above referenced project. The project was completed on October 13, 2000. The Contractor has been relieved of any further responsibilities. Therefore, as of the date of this letter, this roadway is removed from the State Highway System and will revert back to the jurisdiction of the responsible local entity which is the Town of Addison. Please forward this information to the Town of Addison so they are aware that they now assume responsibility for the maintenance of this completed facility.

If you have any questions concerning this matter, please contact Pete Garza, P.E., at (972) 479-9747.

Sincerely,

Larry D. Tegtmeyer, P.E.
Dallas County
Northwest Area Engineer

State Farm Insurance Companies



North Texas Office
17301 Preston Road
P.O. Box 799100
Dallas, Texas 75379-9100

August 29, 2000

City of Addison
ATTN: Mike Murphy, Director of Public Works
16801 Westgrove
Addison, Texas 75001

Dear Mike:

Attached, please find the **\$100,000** grant application you requested. This grant application is for the Intersection Safety Improvements for the Beltline and Midway intersection. Please complete the application and send it to our Corporate Headquarters in Bloomington, Illinois.

Good luck with your safety improvements! Again, we are pleased to support your efforts.

Please feel free to call me at (972) 732-4827 if you have additional questions.

Sincerely,

Monique Johnson
Sr. Public Affairs Specialist

CC File

Capital Project Summary

May 2000

Project

Summary: These projects are intended to increase the efficiency of the Belt Line/Midway and Belt Line/Quorum intersections by adding dual left turn lanes and free right turn lanes. This is a joint Addison, DART, and TX-DOT project. DART is administrating the design and r.o.w. phase. TX-DOT will be administering the bidding and construction phase.

Funding: This project is funded with State, DART, and DART/LAP funds. The State and DART funding amounts are fixed. The Town is responsible for all cost in excess of their contributions.

Project Estimate		Funding Source
Engineering	\$ 87,500	DART
Road Construction	\$2,000,000	TX-DOT, \$500,000, Town (DART/LAP)\$100,000
Right-of-way	\$380,000	Town (DART/LAP)
Landscaping	\$ 80,000	Town (DART/LAP)
Total Project Cost	\$1,147,500	

*State Farm has committed to give the Town of Addison a grant for \$100,000 to cover a portion of Addison's share of the construction costs.

- Hurdles:**
1. Land acquisition - DART initialized the eminent domain process in order to secure the necessary right-of-way. Addison has completed the process.
 2. Relocation of the franchise utilities. On-going process has caused delay in construction progress.
 3. Extensive traffic coordination and construction phasing.

Schedule: DART's failure to acquire right-of-way has already delayed this project approximately one year. Construction started in January 2000 and has struggled to stay on schedule due to conflicts created by existing franchise utilities. The roadwork is scheduled to be complete in July 2000 pending franchise utility relocation.

1. Complete Intersection Construction: July 2000
2. Start landscape restoration design : May 2000
3. Start landscape restoration: July 2000

Design

Engineers: Parsons Transportation Group, Inc.

Contractor: J. L. Steel

Project

Manager: Jeff Markiewicz

Project

Number: None at this time.

Intersection Improvements on Belt Line Road at Midway and Quorum

February 2, 2000

Summary: This project is intended to increase the efficiency of the Belt Line/Midway and Belt Line/Quorum intersections by adding dual left turn lanes and free right turn lanes. This project is a joint effort by Addison, DART, and TxDOT. DART has administrated the design and right-of-way phase. TxDOT is administering the bidding and construction phases of the project.

Progress: Design of the project was performed by Parsons Transportation Group. The project was bid and awarded to J.L. Steel, Inc. for \$1,901,500.19 in September 1999. Extensive franchise utility relocation has been underway for months and is nearing completion. J.L. Steel has started construction in early January and is expected to be complete in July 2000.

In order to minimize traffic disruptions and public conflict during construction the project has been split into two phases.

Phase I: Started January 15 and is expected to be complete by March 31, 2000. Existing traffic lanes were re-channelized at each intersection to provide a protected work zone to widen the intersection. During Phase I construction there are no lanes of traffic removed or obstructed on Belt Line Road. The only lanes of traffic that will be obstructed by construction is the existing dedicated right turn lane on northbound Midway Road and one of the northbound lanes of Quorum at Belt Line Road. During this phase drive entrances to businesses will be rebuilt to compensate for the paving improvements. Access to each business will be maintained at all times by alternating construction if they have multiple points of access or splitting driveway construction into 2 halves. Each business has been informed in writing of the intersection improvements and plan to maintain access.

Phase II: During this phase of construction traffic will be channelized into the new outside lanes allowing medians and inside lanes to be reconstructed. Phase 2 is expected to start April 1, 2000 and be complete by July 15, 2000. During Phase 2 there will be no lanes of traffic on Belt Line Road obstructed by construction. The only lanes that will be revised from existing conditions by Phase 2 construction are on Quorum. Currently Quorum northbound has 2 lanes to handle all traffic. In Phase 2 construction there will also be 2 lanes, however one is a dedicated right turn lane. The second modification of existing lanes is Quorum southbound which is currently 3 lanes (a dedicated left and 2 straight). Phase 2 also has three lanes, but they are a dedicated right, straight, and dedicated left. The impact should be minimal.

In both phases of construction strict rules have been established to maintain traffic flow on Belt Line Road. In either phase the contractor will not remove any lanes of traffic and when work is required within Belt Line Road. Work can not be performed during the following hours:

6:00 a.m. through 10:00 p.m. Monday through Thursday
 6:00 a.m. Friday through 3:00 a.m. Saturday
 9:00 a.m. Saturday through 3:00 a.m. Sunday
 9:00 a.m. Sunday through 10:00 p.m. Sunday

In addition to letters, construction phasing and special work hours we have met with Metrocrest News to get information to the public about the improvements. The article will be printed February 4, 2000.

Following intersection improvements Addison will start a project to restore irrigation and landscaping in medians. Staff is working with Slade Strickland to acquire the services of a landscape architect to design the proposed improvements.

Project Budget:

The project is being funded by TxDOT, DART and the Town of Addison. Contributions by TxDOT and DART are fixed amounts and Addison is responsible for all excess and any change orders. TxDOT has agreed to pay \$1,500,000 for the construction improvements. DART will fund the majority of the engineering for the project. Addison is using DART/LAP funds to finance our costs. We have dedicated \$1,600,000 of DART/LAP funds to this project for right-of-way acquisition, construction and landscape improvements. At this time we have programmed approximately \$920,000 and have met all funding obligations to TxDOT and DART. In addition we have applied for a grant of \$113,800 from State Farm Insurance. The grant has been approved and will be applied to a \$13,800 safety audit and the construction/improvements for \$100,000.

Major Project Expenses	Project Budget	Funding Source	Addison Budget	Town of Addison Amt. paid to date
Engineering	\$87,500.00	DART/TOA	\$5003.09	\$5003.09
Right-of-way	\$293,600.00	TOA	\$316,576.36	\$316,576.36
Legal	\$23,543.86	TOA	\$23,543.86	\$23,543.86
Signal Equipment	\$16,148.50	TOA	\$16,148.50	\$16,148.50
Construction	\$1,901,500.00	TxDOT/TOA	\$450,000.00	\$450,000.00
Landscaping	\$100,000.00	TOA	\$100,000.00	\$0.00

**TOWN OF ADDISON
PAYMENT AUTHORIZATION MEMO**

DATE: 4/21/00 Claim # _____ Check \$ 10,350.⁰⁰

Vendor No. _____
 Vendor Name Kimley-Horn + Assoc., Inc.
 Address 12700 Park Central Drive
 Address Suite 1800
 Address Dallas, TX
 Zip Code 75251

INVOICE # OR DESCRIPTION	FUND	DEPT	OBJ	PROJ	SAC	AMOUNT
	(00)	(000)	(00000)	(00000)	(000)	(\$000,000.00)
<u>261157</u>	<u>41</u>	<u>000</u>	<u>56040</u>	<u>62301</u>		<u>10,350.⁰⁰</u>

TOTAL 0.⁰⁰
10,350.00

EXPLANATION Gov. professional services - Midway
Belt-Line analysis
State Farm Grant

[Signature]
 Authorized Signature

Finance

Alyssa Hernandez

From: Sandra Goforth
Sent: Friday, April 21, 2000 9:27 AM
To: Alyssa Hernandez
Subject: RE: Midway/Belt Line - St. Farm Grant

You should charge the study to 41-000-56040-62301.

Sandra Goforth
Accounting Manager
972-450-7064

—Original Message—

From: Alyssa Hernandez
Sent: Thursday, April 20, 2000 4:45 PM
To: Sandra Goforth
Subject: Midway/Belt Line - St. Farm Grant

Hi Sandra,
I received an invoice for the traffic study done by Kimley Horn for the referenced intersection. We are to use the grant money from state farm. How should I fill out the PAM?
Thanks for your help,

Alyssa

2871



Kimley-Horn
and Associates, Inc.

and its associated divisions: *Hutcheon Engineers*
JKH Mobility Services
Urban Resource Group

TOWN OF ADDISON
16801 WESTGROVE DRIVE
ADDISON, TX 75001

PLEASE REMIT TO:

KIMLEY-HORN AND ASSOCIATES, INC.
12700 PARK CENTRAL DRIVE
SUITE 1800
DALLAS, TX 75251

TIN 56-0885615

INV. DATE: 3/31/00
INVOICE #: 261157
PROJECT #: 063543000.1

CLIENT REF:

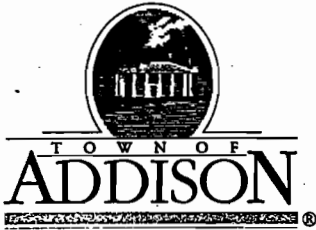
PROJECT MGR.: SHEWSKI, BRIAN K

PROJECT: BELT LINE/MIDWAY ANALYSIS

FOR PROFESSIONAL SERVICES RENDERED THROUGH 03/31/2000

TOTAL FEE AUTHORIZED	\$13,800.00
PERCENT COMPLETE AS OF 03/31/2000	75.00%

FEE EARNED TO DATE	\$10,350.00
LESS PREVIOUS BILLINGS	\$0.00
TOTAL THIS INVOICE	\$10,350.00
AMOUNT DUE THIS INVOICE	\$10,350.00



PUBLIC WORKS DEPARTMENT

Post Office Box 9010 Addison, Texas 75001-9010

(972) 450-2871

16801 Westgrove

October 18, 1999

Mr. John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington, Illinois 61710

Re: State Farm Grant Application

Dear Mr. Werner:

The Town of Addison is pleased to be given an opportunity to participate in State Farm's Intersection Grant Program to make improvements at the intersection of Midway Road and Belt Line Road. We have been working over the last few years to implement extensive improvements that are now only months away from starting. We would like to apply the available grants from State Farm to the current project and produce an immediate return on your investment.

The Town of Addison in conjunction with the Texas Department of Transportation hired the services of a traffic consultant (Barton-Aschman Associates) to study the existing intersections of Midway Road at Belt Line Road and Quorum Drive at Belt Line Road. Based on the study completed in 1989, it was determined that the greatest improvements in capacity short of a grade separated intersection would be achieved by constructing additional turn lanes on Belt Line and Midway. The proposed improvements provide dual left turn lanes, three (3) through lanes and an exclusive right turn lane at each side of the intersection except west bound Belt Line which will have no exclusive right turn lane. I have included a copy of the study and proposed intersection plan from the current construction documents. These improvements will increase the intersection capacity, reduce delays, and improve factors that have contributed to accidents in the past.

At this time, all design, right-of-way acquisition, and bidding has been completed. The construction cost for the intersection improvements determined by a competitive bid process is \$1,901,500.19. In addition, an excess of \$400,000 was invested in engineering and right-of-way acquisition. The costs for this project have nearly tripled during the last ten years. At the request of State Farm, the Town of Addison has asked Kimley-Horn and Associates to perform a safety study of the proposed improvements. The cost for this study is \$13,800 which we would ask to be covered by the State Farm Grant.

Attached is a completed grant application for \$113,800 to be applied toward the study and construction of the needed intersection improvements.

Thank you for your support of this project. Please feel free to call me at 972/450-2871 if you have any questions or need additional information.

Sincerely,

Jeff Markiewicz
Project Manager

Attachment

National List-Phase 2

**GRANT APPLICATION
INTERSECTION SAFETY IMPROVEMENTS**

For Internal use only:

Date Application Received _____

Application Number: _____

DUE: July 1, 2000

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities controlling intersections specified by State Farm up to \$100,000 for engineering counter measures that will mitigate high crash and injury risk. The Intersection Operational and Safety Studies completed under Phase One will have identified engineering countermeasures that can result in significant reduction in crashes. This grant is intended to provide funds for engineering improvements which are generally low cost and immediately available identified in the Intersection Operational and Safety Study for the intersection and proposed by the government entity.

The study performed pursuant to Phase One of this grant should meet the following objectives:

1. Identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. Recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. Conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. Recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please provide the following information regarding the proposed intersection improvements:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name Ron Whitehead Title City Manager

Telephone Number 972 | 450-7000 Facsimile Number 972 | 450-7043

Address (street, city, state, zip code): 5300 Belt Line Road

Addison, Texas 75240

PROJECT DIRECTOR:

Name John Baumgartner Title Public Works Director

Telephone Number 972 | 450-2871 Facsimile Number 972 | 450-2837

Address (street, city, state, zip code): 16801 Westgrove Dr.

Addison, Texas 75001

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:
Beltline and Midway

Amount of funding requested:
\$100,000 for construction

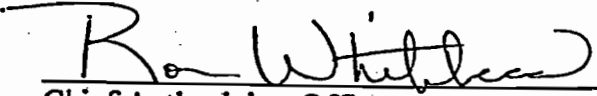
Please attach a description of the proposed improvements for the above listed intersection. The description should contain sufficient detail to determine that the proposed improvements are consistent with the findings of the report prepared pursuant to Phase One of this program.

The award of a grant shall be at the sole discretion of State Farm.

State Farm will release the funds upon the certification of a professional engineer that the improvements to the intersection have been completed.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway Intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.


Chief Authorizing Officer

9-17-99
Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: July 1, 2000

Attachment A

TERMS OF REFERENCE FOR INTERSECTION OPERATIONAL AND SAFETY STUDIES

Study Objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection.
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Required Study Procedures:

The study shall consist of the following Phases:

Phase 1: Quantitative Intersection Analysis

This phase shall consist of the following tasks:

Task 1: Geometric Analysis

Review the existing intersection geometry and check for any characteristics that may be contributing to a high crash risk. Include a check of sight distance, turn radii, horizontal and vertical alignment, signal visibility, pavement marking, clear zone, pedestrian and transit facilities, and any other relevant geometric features.

Task 2: Crash Data Analysis

Review police crash data and identify all relevant patterns, including spatial and temporal characteristics, weather, pavement, and light conditions, crash types, contributing causes, and any other crash characteristics. Analysis to include the last three years of available data.

Task 3: Traffic Conflict Analysis

Conduct a detailed traffic conflict survey. Observe, record, and analyze all conflicts using trained and qualified observers. The traffic conflict survey is to be conducted according to the Traffic Conflicts Procedures Manual, 2nd Edition (November 1996) prepared by Hamilton Associates for the Insurance Corporation of British Columbia. A copy of the manual can be obtained from State Farm or from Hamilton Associates at 604-684-4488. Analyze the conflict data to determine the causes behind the conflicts, temporal and

National List-Phase I

**GRANT APPLICATION
INTERSECTION SAFETY STUDY**

DUE: September 30, 1999

<i>For Internal use only:</i> Date Application Received _____ Application Number: _____

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities up to \$20,000 for Intersection Operational and Safety Studies for specific intersections identified by State Farm pursuant to its research. Following completion of the study, additional funds (up to \$100,000) will be available under a separate grant for repair or improvements meeting the objectives of the Intersection Operational and Safety Study.

Studies performed pursuant to this grant shall include the following objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please see Attachment A for a complete description of the type of study eligible for such funding.

Please provide the following information regarding a proposed study:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name Ron Whitehead Title City Manager

Telephone Number 972 | 450-7000 Facsimile Number 972 | 450-7043

Address (street, city, state, zip code): 5300 Belt Line Rd

Addison, Texas 75240

PROJECT DIRECTOR:

Name John Baumgartner Title Public Works Director

Telephone Number 972 | 450-2871 Facsimile Number 972 | 450-2837

Address (street, city, state, zip code): 16801 Westgrove Dr.
Addison, Texas 75001

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:
Beltline and Midway

Amount of funding requested:
\$13,800

Name of Consultant:
Kimley Horn & Assoc.

Please attach a description of the proposed study for the above listed intersection. The description should contain sufficient detail to determine that the proposal meets the criteria described in Attachment A to this application. State Farm will release the funds upon its confirmation that the proposed study is consistent with the terms of reference criteria described in Attachment A.

The award of a grant shall be at the sole discretion of State Farm. Studies must be completed within six months of approval of the grant proposal by State Farm.

The City of Addison agrees that it shall provide a copy of the completed Intersection Operational and Safety Study report pursuant to this grant to be used for State Farm's research purposes.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Ron Whitlance
Chief Authorizing Officer
9-17-99
Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: September 30, 1999

spatial distributions, as well as the most severe and hazardous conflict types using a numerical scale. Relate the conflict findings to the crash data analysis.

Task 4: Capacity Analysis

Conduct turning movement traffic counts for the morning, midday, and afternoon peak periods. Review the signal timing and phasing plan. Analyze the intersection capacity and levels of service per movement using the Highway Capacity Manual procedures. Include a review of bus and pedestrian operations. Review efficiency, delays and queuing, from a safety perspective to determine the interrelationship between capacity operations and safety performance.

Task 5: Human Factors Analysis

Observe and analyze driver behavior at the Intersection, and the relationship between the existing geometric characteristics and driver perceptions of the intersection. Measure approach speeds, review the visual environment (including directional and regulatory signing, landscaping, land use, and background distractions) from the perspective of the driver.

Phase 2: Identification of Deficiencies

Using the results of Phase 1, clearly identify the engineering characteristics of the Intersection that are contributing to a high crash risk. Clearly relate each identified deficiency with the measurable features that were analyzed in Phase 1. All identified deficiencies shall be supported by the quantitative analysis.

Phase 3: Development of Countermeasures

Develop a set of engineering countermeasures that will mitigate the deficiencies Identified in Phase 2. Clearly relate each engineering countermeasure with the specific deficiency that will be addressed. Develop both low cost, readily implementable countermeasures as well as longer term, potentially more costly solutions. Clearly demonstrate the effectiveness of the countermeasures in addressing the identified deficiencies, by providing quantitative, empirical evidence of effectiveness.

While engineering countermeasures are the focus of this study, enforcement efforts that may be effective in reducing the crash risk should also be identified whenever possible. The need for additional enforcement should be supported by quantified driver behavior characteristics, such as speeding, red light running, and aggressive weaving /lane changing.

Phase 4: Economic Evaluation

Conduct an economic evaluation of the recommended engineering countermeasures by clearly quantifying the expected countermeasure effectiveness in terms of crash

reduction; the average societal and typical insurance claim values of the saved crashes; and the countermeasure implementation cost. Account for the estimated project life of the engineering countermeasures, and apply an appropriate discount rate in the calculation of the costs and benefits. Calculate the safety benefit to cost ratio of the countermeasures, from both the average societal and typical insurance cost perspectives. Account for crash severity in this analysis, both in terms of the value of the anticipated crash reduction and the expected crash characteristics after implementation of the countermeasures.

In addition, determine and quantify whenever possible the non-safety implications of the engineering countermeasures, such as impacts on capacity, accessibility, and land use. Clearly identify the tradeoffs involved in implementing the engineering countermeasures.

Phase 5: Action Plan

Using the results of Phases 1 through 4, develop an Action Plan for the implementation of countermeasures at the intersection to reduce the crash risk. The Action Plan shall clearly identify a set of immediately implementable countermeasures that are achievable at relatively low cost, as well as a set of longer-term countermeasures that may require capital cost programming. The associated benefits and costs at every stage of the Action Plan should be clearly summarized.

Phase 6: Documentation

A Draft Report clearly documenting all the study procedures, assumptions, findings, calculations, and recommendations shall be prepared. The Draft Report shall be clearly organized according to the sequence of Phases 1 to 5 as described above. The Draft Report shall contain figures, tables, and photographs to succinctly summarize and support the key findings of the study, as well as an Executive Summary. The Draft Report contents shall be presented to the [City/County/governmental unit] at a formal project review meeting.

Upon reviewing the contents of the Draft Report, the city will provide comments on the contents. A Final Report incorporating the [City/County/governmental unit]'s comments shall then be prepared.

Stakeholder Consultation:

The stakeholders that are to be consulted during the course of this study are the road agencies that have jurisdiction over the subject intersection, and the police force that has jurisdiction to enforce traffic and record crashes at the intersection. The road agencies are to be consulted and provided with project updates at least twice prior to the Submission of the Draft Report: early in Phase One, and at the end of Phase Three. A third meeting with the road agencies will occur at the presentation of the Draft Report. The police are to be consulted during Phase One of the study.

Study Schedule

The study is to be completed to the Draft Report stage within one month of authorization being received to proceed.

Consultant's Proposal:

Consultants who are interested in submitting a proposal to complete this study should clearly demonstrate their skill and experience in conducting similar studies. The proposal should include:

- X The consultant's understanding of the study requirements (1 page or less).
- X The consultant's work plan, clearly indicating the procedures to be used to complete each of the identified phases and tasks. Indicate the key milestones, deliverables, and meetings with the stakeholders (5 to 10 pages).
- X The consultant's project team, clearly identifying the Project Manager, and the relevant experience of the team members (2 to 3 pages). Generic resumes may be included in an Appendix.
- X The consultant's recent experience on similar projects, with project descriptions and reference names and telephone numbers (2 to 3 pages). Project sheets may be included in an Appendix.
- X The consultant's schedule for completing the study (2 pages or less).
- X Summary of the advantages and special features offered by the consultant's proposal (1 page or less).

After the Table of Contents, the consultant's proposal should not exceed 20 pages, including all diagrams, figures and tables. Appendices can be additional, but may not necessarily be reviewed.

The proposals will be evaluated on the basis of:

- X Understanding of the assignment (15%).
- X Thoroughness of the Work Plan (40%).
- X Composition of the Project Team, and experience on similar projects (20%).
- X Quality and effort inherent in the proposal (15%).
- X Innovation and value-added offered by the proposal (10%).



P.O. Box 1910
Roanoke, Texas 76262
Tel. (817) 430-2410 (Metro)
Fax (817) 491-3831

October 12, 1999

TO: Mr. Pete Garza, P.E. - TxDOT Fax 972-235-8667
Mr. Mike Tanner, P.E. - MICA Fax 817-847-6831
Mr. Mike Miller - Mica Fax 817-428-0577
Mr. Jeff Bryan - Durable - Fax 972-780-7411
Mr. Jeff Markiewicz - Town of Addisson - Fax 972-450-2837
Mr. Robbie Robinson - JLSI

From: Chuck Shive - JLSI

RE: TxDOT Dallas County Beltline Rd - CM 97 (449)
Coordination of Signalization

We have scheduled a meeting to coordinate the installation of the Signals on this project. The time for the meeting is **Thursday, October 14, 1999 at 10:00 a.m.** The meeting is to be held at the Town of Addisson's conference room - **16801 Westgrove** (NE corner of Addisson airport). For directions call 972-450-2871.

If I can assist with anything, please contact me at 817-430-2410, extension 204 or mobile 817-819-4823.

Thanks.

Chuck Shive

cc: File

 * F.R. DIV.6 * TEXAS * CM 97(449) * SHEET *

 * DALLAS COUNTY * HWY BELTLINE *CONT 8050-18-34 *

GENERAL NOTES AND SPECIFICATION DATA--

ITEM 680: CONT'D

Post-It® Fax Note	7671	Date	10-5-99	# of pages	1
To	JEFF MARKIEWICZ	From	John Hicks		
Co./Dept		Co.			
Phone #		Phone #			
Fax #	972 450-2837	Fax #			

SIGN R10-5

SIGN R3-81

SIGN SR3-4

ALL SIGNAL HEAD ATTACHMENTS SHALL BE...
 HEAD SHALL SAWS FROM THE...
 BRACING OF ATTACHMENT...
 WIRING SHALL BE PERM...
 LIST OF MATERIAL
 FURNISHED BY THE TOWN OF ADDISON

DESCRIPTION	UNIT	QUANTITY
OPTICOM CABLE	LF	1280
OPTICOM DETECTORS W/MOUNTING BRACKETS	EA	8
OPTICOM MODULES (2 CHANNEL)	EA	4
OPTICOM CARD RACK AND HARNESS	EA	2
VEHICLE SIGNAL SECTION (12 IN)	EA	125
BACKPLATE (12 IN) (3 SECTION)	EA	35
BACKPLATE (12 IN) (4 SECTION)	EA	5
PEDESTRIAN SIGNAL SECTION	EA	16
CONTROLLER ASSEMBLY COMPLETE WITH CABINET AND ACCESSORIES	EA	2
TRAFFIC SIGNAL POLE ASSY WITH ANCHOR BOLTS	EA	8
PEDESTRIAN PUSH BUTTON/SIGN	EA	16

A CONTINUOUS BARE OR GREEN INSULATED COPPER WIRE NO.8 OR LARGER SHALL BE INSTALLED IN EVERY PVC,RMC, AND LTFC THROUGHOUT THE ELECTRICAL SYSTEM IN ACCORDANCE WITH, THE ELECTRICAL DETAIL SHEETS, AND THE LATEST

SPECIFICATION DATA



PUBLIC WORKS DEPARTMENT

Post Office Box 9010 Addison, Texas 75001-9010

(972) 450-2871

16801 Westgrove

September 17, 1999

Mr. John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington, Illinois 61710

Re: State Farm Grant Application

Dear Mr. Werner:

The Town of Addison is pleased to be given an opportunity to participate in State Farm's Intersection Grant Program to make improvements at the intersection of Midway Road and Belt Line Road. We have been working over the last few years to implement extensive improvements that are now only months away from starting. We would like to apply the available grants from State Farm to the current project and produce an immediate return on your investment.

The Town of Addison in conjunction with the Texas Department of Transportation hired the services of a traffic consultant (Barton-Aschman Associates) to study the existing intersections of Midway Road at Belt Line Road and Quorum Drive at Belt Line Road. Based on the study completed in 1989, it was determined that the greatest improvements in capacity short of a grade separated intersection would be achieved by constructing additional turn lanes on Belt Line and Midway. The proposed improvements provide dual left turn lanes, three (3) through lanes and an exclusive right turn lane at each side of the intersection except west bound Belt Line which will have no exclusive right turn lane. I have included a copy of the study and proposed intersection plan from the current construction documents. These improvements will increase the intersection capacity, reduce delays, and improve factors that have contributed to accidents in the past.

At this time, all design, right-of-way acquisition, and bidding has been completed. The construction cost for the intersection improvements determined by a competitive bid process is \$1,901,500.19. In addition, an excess of \$400,000 was invested in engineering and right-of-way acquisition. The costs for this project have nearly tripled during the last ten years. The Town of Addison believes that State Farm can have a productive role in implementing these improvements by applying all of the available grant monies towards the construction of these improvements. This grant would allow us to proceed with construction and eliminate any further delay.

Attached is a completed grant application for \$120,000 to be applied toward the construction of the needed intersection improvements.

Thank you for your support of this project. Please feel free to call me at 972/450-2871 if you have any questions or need additional information.

Sincerely,

Jeff Markiewicz
Project Manager

Attachment

National List-Phase 2

**GRANT APPLICATION
INTERSECTION SAFETY IMPROVEMENTS**

For Internal use only:
Date Application Received _____
Application Number: _____

DUE: July 1, 2000

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities controlling intersections specified by State Farm up to \$100,000 for engineering counter measures that will mitigate high crash and injury risk. The Intersection Operational and Safety Studies completed under Phase One will have identified engineering countermeasures that can result in significant reduction in crashes. This grant is intended to provide funds for engineering improvements which are generally low cost and immediately available identified in the Intersection Operational and Safety Study for the intersection and proposed by the government entity.

The study performed pursuant to Phase One of this grant should meet the following objectives:

1. Identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. Recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. Conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. Recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please provide the following information regarding the proposed intersection improvements:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name Ron Whitehead Title City Manager

Telephone Number 972 | 450-7000 Facsimile Number 972 | 450-7043

Address (street, city, state, zip code): 5300 Belt Line Road

Addison, Texas 75240

PROJECT DIRECTOR:

Name John Baumgartner Title Public Works Director

Telephone Number 972 | 450-2871 Facsimile Number 972 | 450-2837

Address (street, city, state, zip code): 16801 Westgrove Dr.

Addison, Texas 75001

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:
Beltline and Midway

Amount of funding requested:
\$120,000 for construction.

Please attach a description of the proposed improvements for the above listed intersection. The description should contain sufficient detail to determine that the proposed improvements are consistent with the findings of the report prepared pursuant to Phase One of this program.

The award of a grant shall be at the sole discretion of State Farm.

State Farm will release the funds upon the certification of a professional engineer that the improvements to the intersection have been completed.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway Intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Ron Whitehead
Chief Authorizing Officer

9-17-99
Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: July 1, 2000

Attachment A

TERMS OF REFERENCE FOR INTERSECTION OPERATIONAL AND SAFETY STUDIES

Study Objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection.
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Required Study Procedures:

The study shall consist of the following Phases:

Phase 1: Quantitative Intersection Analysis

This phase shall consist of the following tasks:

Task 1: Geometric Analysis

Review the existing intersection geometry and check for any characteristics that may be contributing to a high crash risk. Include a check of sight distance, turn radii, horizontal and vertical alignment, signal visibility, pavement marking, clear zone, pedestrian and transit facilities, and any other relevant geometric features.

Task 2: Crash Data Analysis

Review police crash data and identify all relevant patterns, including spatial and temporal characteristics, weather, pavement, and light conditions, crash types, contributing causes, and any other crash characteristics. Analysis to include the last three years of available data.

Task 3: Traffic Conflict Analysis

Conduct a detailed traffic conflict survey. Observe, record, and analyze all conflicts using trained and qualified observers. The traffic conflict survey is to be conducted according to the Traffic Conflicts Procedures Manual, 2nd Edition (November 1996) prepared by Hamilton Associates for the Insurance Corporation of British Columbia. A copy of the manual can be obtained from State Farm or from Hamilton Associates at 604-684-4488. Analyze the conflict data to determine the causes behind the conflicts, temporal and

National List-Phase I

GRANT APPLICATION INTERSECTION SAFETY STUDY

DUE: September 30, 1999

For Internal use only:

Date Application Received _____

Application Number: _____

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities up to \$20,000 for Intersection Operational and Safety Studies for specific intersections identified by State Farm pursuant to its research. Following completion of the study, additional funds (up to \$100,000) will be available under a separate grant for repair or improvements meeting the objectives of the Intersection Operational and Safety Study.

Studies performed pursuant to this grant shall include the following objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please see Attachment A for a complete description of the type of study eligible for such funding.

Please provide the following information regarding a proposed study:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name Ron Whitehead Title City Manager

Telephone Number 972 | 450-7000 Facsimile Number 972 | 450-7043

Address (street, city, state, zip code): 5300 Belt Line Rd

Addison, Texas 75240

PROJECT DIRECTOR:

Name John Baumgartner Title Public Works Director

Telephone Number 972 | 450-2871 Facsimile Number 972 | 450-2837

Address (street, city, state, zip code): 16801 Westgrove Dr.
Addison, Texas 75001

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:
Beltline and Midway

Amount of funding requested:
\$120,000 for construction.

Name of Consultant:
Intersection was studied by Barton-Aschman in 1989.

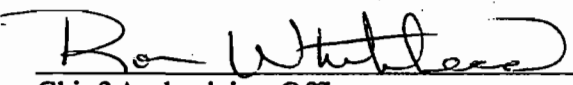
Please attach a description of the proposed study for the above listed intersection. The description should contain sufficient detail to determine that the proposal meets the criteria described in Attachment A to this application. State Farm will release the funds upon its confirmation that the proposed study is consistent with the terms of reference criteria described in Attachment A.

The award of a grant shall be at the sole discretion of State Farm. Studies must be completed within six months of approval of the grant proposal by State Farm.

The City of Addison agrees that it shall provide a copy of the completed Intersection Operational and Safety Study report pursuant to this grant to be used for State Farm's research purposes.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway Intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.


Chief Authorizing Officer
9-17-99
Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: September 30, 1999

spatial distributions, as well as the most severe and hazardous conflict types using a numerical scale. Relate the conflict findings to the crash data analysis.

Task 4: Capacity Analysis

Conduct turning movement traffic counts for the morning, midday, and afternoon peak periods. Review the signal timing and phasing plan. Analyze the intersection capacity and levels of service per movement using the Highway Capacity Manual procedures. Include a review of bus and pedestrian operations. Review efficiency, delays and queuing, from a safety perspective to determine the interrelationship between capacity operations and safety performance.

Task 5: Human Factors Analysis

Observe and analyze driver behavior at the Intersection, and the relationship between the existing geometric characteristics and driver perceptions of the intersection. Measure approach speeds, review the visual environment (including directional and regulatory signing, landscaping, land use, and background distractions) from the perspective of the driver.

Phase 2: Identification of Deficiencies

Using the results of Phase 1, clearly identify the engineering characteristics of the Intersection that are contributing to a high crash risk. Clearly relate each identified deficiency with the measurable features that were analyzed in Phase 1. All identified deficiencies shall be supported by the quantitative analysis.

Phase 3: Development of Countermeasures

Develop a set of engineering countermeasures that will mitigate the deficiencies identified in Phase 2. Clearly relate each engineering countermeasure with the specific deficiency that will be addressed. Develop both low cost, readily implementable countermeasures as well as longer term, potentially more costly solutions. Clearly demonstrate the effectiveness of the countermeasures in addressing the identified deficiencies, by providing quantitative, empirical evidence of effectiveness.

While engineering countermeasures are the focus of this study, enforcement efforts that may be effective in reducing the crash risk should also be identified whenever possible. The need for additional enforcement should be supported by quantified driver behavior characteristics, such as speeding, red light running, and aggressive weaving /lane changing.

Phase 4: Economic Evaluation

Conduct an economic evaluation of the recommended engineering countermeasures by clearly quantifying the expected countermeasure effectiveness in terms of crash

reduction; the average societal and typical insurance claim values of the saved crashes; and the countermeasure implementation cost. Account for the estimated project life of the engineering countermeasures, and apply an appropriate discount rate in the calculation of the costs and benefits. Calculate the safety benefit to cost ratio of the countermeasures, from both the average societal and typical insurance cost perspectives. Account for crash severity in this analysis, both in terms of the value of the anticipated crash reduction and the expected crash characteristics after implementation of the countermeasures.

In addition, determine and quantify whenever possible the non-safety implications of the engineering countermeasures, such as impacts on capacity, accessibility, and land use. Clearly identify the tradeoffs involved in implementing the engineering countermeasures.

Phase 5: Action Plan

Using the results of Phases 1 through 4, develop an Action Plan for the implementation of countermeasures at the intersection to reduce the crash risk. The Action Plan shall clearly identify a set of immediately implementable countermeasures that are achievable at relatively low cost, as well as a set of longer-term countermeasures that may require capital cost programming. The associated benefits and costs at every stage of the Action Plan should be clearly summarized.

Phase 6: Documentation

A Draft Report clearly documenting all the study procedures, assumptions, findings, calculations, and recommendations shall be prepared. The Draft Report shall be clearly organized according to the sequence of Phases 1 to 5 as described above. The Draft Report shall contain figures, tables, and photographs to succinctly summarize and support the key findings of the study, as well as an Executive Summary. The Draft Report contents shall be presented to the [City/County/governmental unit] at a formal project review meeting.

Upon reviewing the contents of the Draft Report, the city will provide comments on the contents. A Final Report incorporating the [City/County/governmental unit]'s comments shall then be prepared.

Stakeholder Consultation:

The stakeholders that are to be consulted during the course of this study are the road agencies that have jurisdiction over the subject intersection, and the police force that has jurisdiction to enforce traffic and record crashes at the intersection. The road agencies are to be consulted and provided with project updates at least twice prior to the Submission of the Draft Report: early in Phase One, and at the end of Phase Three. A third meeting with the road agencies will occur at the presentation of the Draft Report. The police are to be consulted during Phase One of the study.

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- X Summary of the advantages and special features offered by the consultant's proposal (1 page or less).

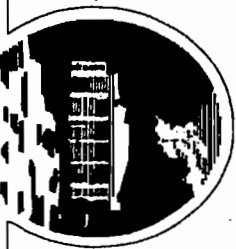
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- X Thoroughness of the Work Plan (40%).
- X Composition of the Project Team, and experience on similar projects (20%).
- X Quality and effort inherent in the proposal (15%).
- X Innovation and value-added offered by the proposal (10%).

ADDISON BOTTLENECK STUDY

Submitted to



TOWN OF
ADDISON



thoroughfare system.

This report presents the procedures, findings and conclusions of the Addison Bottleneck Study. The report is divided into two sections. Section 1 of this report presents the methodology, analysis, recommendations and conclusions of the study to alleviate traffic congestion and increase safety on Addison thoroughfares. Section 2 presents thoroughfare design guidelines and proposed thoroughfare plans to ensure that future growth in Addison can be accommodated.

INTRODUCTION

Strategically located in northern Dallas County, the Town of Addison has experienced tremendous growth over the past several years. Unlike many of its neighboring cities, however, Addison's growth has been predominantly non-residential. Despite the best efforts of the Town's planner to look forward in time to forecast what transportation facilities would be needed to support the higher trip generation intensity of this non-residential growth, the Town of Addison experiences unacceptable conditions on its roadway system during the peak traffic hours.

The movements of people and goods into, out of, through and around the Town of Addison is largely dependent upon the automobile. Recognizing the need for an efficient and safe roadway system, the Town of Addison retained Barton-Aschman Associates, Inc. to develop recommendations for maximizing the operational efficiency and safety of the town's

EXISTING CONDITIONS



Location - Belt Line/Midway

Street	Midway	Midway	Belt Line	Belt Line
Intersection Approach	Northbound	Southbound	Westbound	Eastbound
Bus Stop Location	None	South leg (262')	None	None
Approach ADT	18,113	16,457	19,834	18,448

Approach Lanes

Left Turn	1	1	1	1
Through	3	3	3	3
Right Turn	1	0	0	0

Peak Hour Approach Volumes

	Midway			Midway			Belt Line			Belt Line		
	AM	MID	PM	AM	MID	PM	AM	MID	PM	AM	MID	PM
Left Turn	113	271	314	221	372	297	296	330	252	116	158	150
Through	629	745	1391	1514	805	936	1037	1102	1262	1242	1007	1330
Right Turn	200	418	392	67	202	117	240	242	236	296	178	143

Operating Conditions

	Intersection		
	AM	MID	PM
V/C	1	.98	1.08
Average Delay	81.6	59.4	116.9
LOS	F	E	F

Accident History 1987-90

Accident Rate/MV	.76	Right Angle	13	Head On	0
Accidents/Year	20.3	Rear End	25	Pedestrian	0
		Left Turn	15	Ran Off Road	0
		Right Turn	0	Fixed Object	7
		Sideswipe	1	Other	0
		Total	61		

LOCATION: Belt Line at Midway

Barton-Aschman Associates, Inc.
PRELIMINARY CONSTRUCTION COST ESTIMATE WORKSHEET

EXISTING AND PROJECTED DEFICIENCIES:

1. High left turn volumes on all approaches.
2. High right turn volumes on east, south, and west approaches.
3. High frequency of accidents from vehicles pushing clearance interval.

Location: BELTLINE AND MIDWAY
Client: Town of Addison
Project: Addison Bottleneck Study
Job #: 1663.08.01
Date: 8/22/90

RECOMMENDED IMPROVEMENTS:

1. Widen Midway approaches to provide dual left turns, (north approach 150' storage and south approach 100' storage), three through lanes, and a right turn lane (north approach 175' storage and south approach 125' storage).
2. Widen Belt Line west approach to provide dual left turns (75' storage), three through lanes and right turn lane (150' storage).
3. Widen east approach to provide dual left, two through, and a shared right/through lane.
4. Close access driveways closest to intersection on northwest and southwest corners.

EXPECTED BENEFITS OR DISBENEFITS:

1. Better management of left and right turns.
 2. Maximize intersection capacity for at-grade intersection.
 3. Improve safety.
- Improve overall operation and traffic flow.

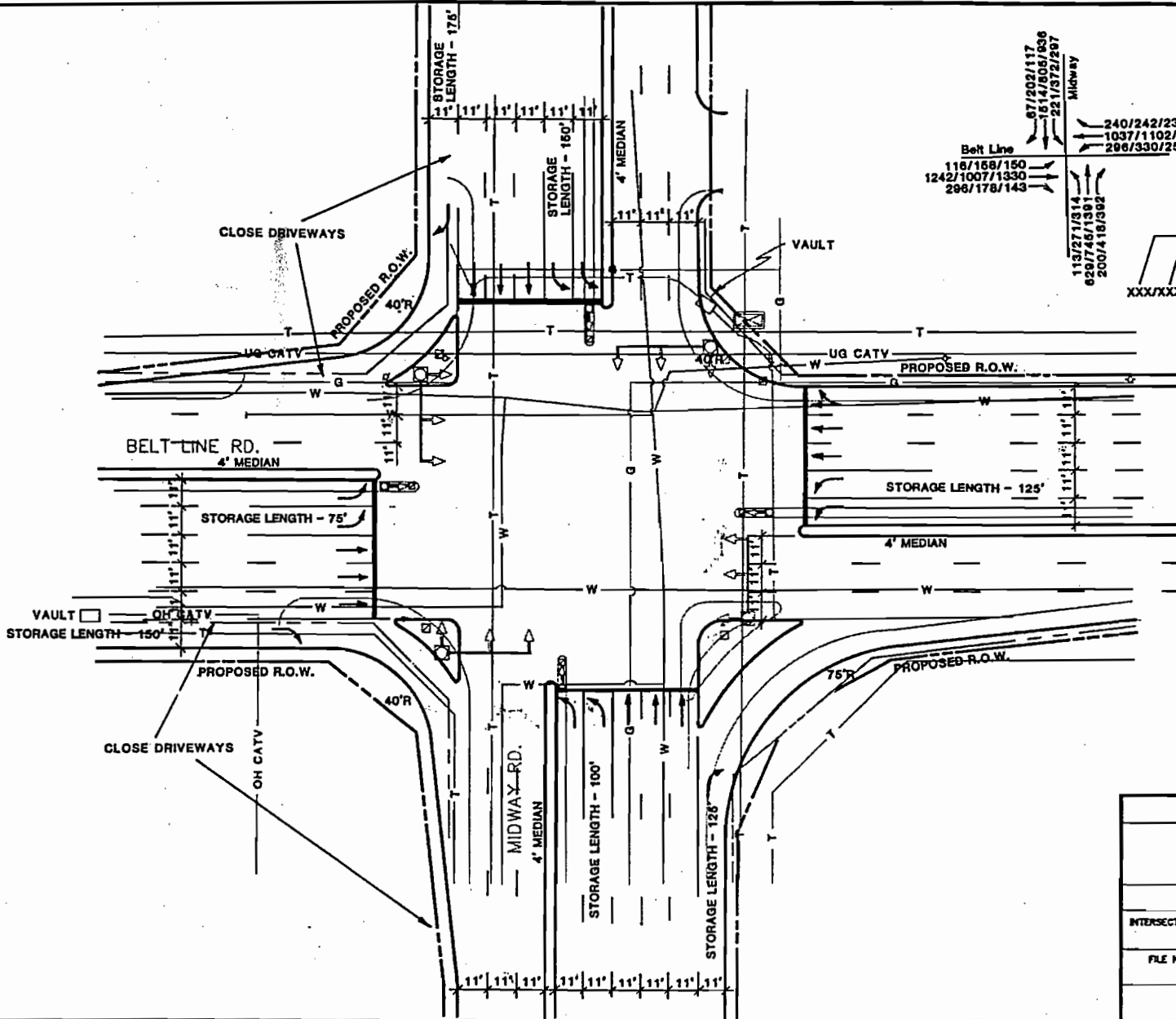
MEASURE OF EFFECTIVENESS:

	Level of Service			Average Delay (sec/veh)			Acc. Rate (Acc/MEV)
	AM	MID	PM	AM	MID	PM	
Existing	F	E	F	81.6	59.4	116.9	.76
With Recommended Improvements	D	D	E	29.2	26.3	47.3	.50

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
	3255	S.Y.	New Pavement (concrete)	24.00	78120.00
	2752	S.Y.	Rem. Exist. Pavement	8.00	22016.00
	4363	L.F.	New Curb & Gutter	8.00	34904.00
	4027	L.F.	Rem. Exist. Curb & Gutter	5.00	20135.00
	50	%	Intersection Signalization	70000.00	35000.00
	0	EA.	Rel. Controller/Fndn.	1664.00	0.00
	2	EA.	Rel. Mastarm Pole/Fndn.	3803.00	7606.00
	4	EA.	Rel. Pedstl. Pole/Fndn.	992.00	3968.00
	6	EA.	Rel. Pullbox	177.00	1062.00
	0	EA.	Rem. Pullbox	56.00	0.00
	0	EA.	Rel. Drainage Inlet	2300.00	0.00
	3	EA.	Rel. Util. Pole @ Inters'n.	6000.00	18000.00
	2	EA.	Rel. Util. Pole	2000.00	4000.00
	2	EA.	Rel. Util. Vault	10000.00	20000.00
	1	EA.	Rel. Fire Hydrant	755.00	755.00
	1	EA.	Rel. Water Meter	328.00	328.00
	1	EA.	Adjust Manhole	413.00	413.00
	0	S.F.	Add'l R-O-W (residential)	4.00	0.00
	19346	S.F.	Add'l R-O-W (comm./retail)	12.00	232152.00
			Sub-Total		478459.00
		L.S.	Engineering/Contingency Fees	0.15	71768.85

TOTAL ESTIMATE 550000.00

Note: Preliminary Cost Estimates
Do Not Include Landscaping.



Belt Line
 118/158/150
 1242/1007/1330
 298/178/143

Midway
 67/202/117
 1514/805/836
 221/372/297

240/242/236
 1037/1102/1262
 296/330/252

113/271/314
 629/746/1391
 200/418/392

LEGEND

——— A.M. Peak Hour
 - - - Noon Hour
 - - - P.M. Peak Hour
 XXX/XXX/XXX

ADDISON BOTTLENECK STUDY			
BELT LINE RD. & MIDWAY RD.			
ADDISON, TEXAS			
RECOMMENDED IMPROVEMENTS			
INTERSECTION No.	DATE: JULY, 1990	DRAWN BY: LJM	SHEET
FILE NAME	SCALE: 1"=40'	APPROVED BY: KMG	OF
Barton-Aschman Associates, Inc.			

DESIGN	FED. AID DIST. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
GRAPHIC	6	CM 97 (449)	1
STATE	STATE	COUNTY	
TEXAS	DALLAS	DALLAS	
CONTRACT	SECTION	JOB	HIGHWAY NO.
8050	18	034	BELT LINE RD.

STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

CM 97 (449)
FEDERAL AID PROJECT
CSJ : 8050-18-034

NET LENGTH OF PROJECT : ROADWAY = 1757.94 FT = 0.332 MI

BELT LINE ROAD
DALLAS COUNTY

LIMITS : AT MIDWAY ROAD
AT QUORUM DRIVE

TYPE : MISCELLANEOUS WORK
CONSISTING OF : GRADING, DRAINAGE, CONCRETE PAVEMENT,
SIDEWALK, SIGNALS, PAVEMENT MARKINGS AND SIGNS

NOTE:

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, MARCH 1, 1993, AND THE CONTRACT PROVISIONS LISTED AND DATED AS FOLLOWS SHALL GOVERN ON THIS PROJECT : REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, DECEMBER, 1993).

THE CONTRACTOR SHALL PROVIDE AND ERECT BARRICADES AND WARNING SIGNS IN ACCORDANCE WITH BC(1) THRU BC(9C)-1998 AT POINTS INDICATED AND AT OTHER POINTS AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATION AND ARRANGEMENTS FOR RAIL DELIVERY POINTS AND TRACKAGE FACILITIES.

DESIGN SPEED = 40 MPH (BELT LINE RD. & MIDWAY RD.)
30 MPH (QUORUM DR.)

FINAL PLANS

CONTRACTOR NAME: _____
DATE OF LETTING: _____
DATE CONTRACTOR BEGAN WORK : _____
DATE WORK COMPLETED AND ACCEPTED: _____
LIST OF APPROVED FIELD CHANGES: _____

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	PROJECT LAYOUT (2)
4-7	TYPICAL SECTIONS (4)
8	SEQUENCE OF CONSTRUCTION
9-10	TRAFFIC CONTROL PLAN - PHASE I (2)
11-12	TRAFFIC CONTROL PLAN - PHASE II (2)
13 - 13A	ESTIMATE AND QUANTITY SHEETS (2)
14	QUANTITY SUMMARY
15 - 15C	GENERAL NOTES AND SPECIFICATION DATA (4)
16-23	PAVING AND DRAINAGE PLAN/PROFILE SHEETS (8)
24, 24A-29	MISCELLANEOUS DETAILS SHEETS (7)
30-31	DRIVEWAY PROFILES (2)
32	DRAINAGE AREA MAP, RUNOFF & INLET COMPUTATIONS
33-34	MISCELLANEOUS DRAINAGE DETAIL SHEETS (2)
35-36	REMOVAL PLAN SHEETS (2)
37-38	PERMANENT PAVEMENT MARKINGS (2)
39-40	ROADWAY ILLUMINATION PLAN (2)
41-44	TRAFFIC SIGNAL PLANS (4)
45	TRAFFIC SIGNAL & ILLUMINATION SUMMARY SHEET
46	TRAFFIC SIGNAL DETAILS
47-49	WATER APPURTENANCE ADJUSTMENT DETAILS (3)

DALLAS DISTRICT STANDARDS

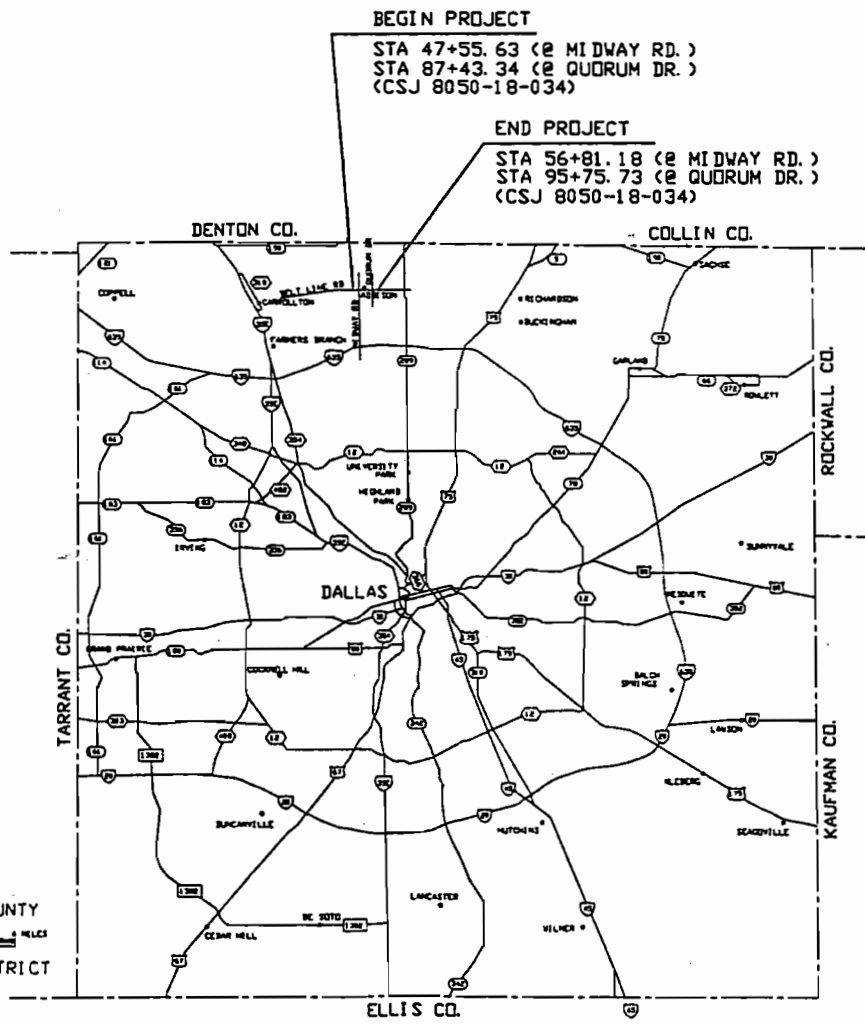
SHEET NO.	DESCRIPTION
50	TRAFFIC SIGNAL HEAD IDENTIFICATION
51	PEDESTRIAN SIGNAL HEAD IDENTIFICATION
52	SERVICE POLE DETAILS
53	LOOP DETECTOR DETAILS
54	SIGNS
55	PAVEMENT MARKING DETAILS
55A	MA-D-96 (DAL)
55B	SMA-80(1)-96 (DAL)
55C	SMA-80(2)-96 (DAL)

STANDARD SHEETS

SHEET NO.	DESCRIPTION
56	CPCD-94
57	JS-94
58-60	W(1), (2), (3)-95
61	RPM(1)-92
62-71B	BC(1), (2), (3), (4), (5), (6), (7), (8), (9), (9A), (9B), (9C)-98
72	TCP(1-4)-98
73	EC(1)-93
74	ED(1)-98
75	ED(2)-98
76	ED(3)-98
77	ED(5)-98
78	TS-FD-96 (MOD)
79	TCP NOTES-98
80	SMD(1-5)-98
81	WZ(BD)-97
82	WZ(CD)-94
83-84	WZ(BTS-1), (BTS-2)-98
85	MA-C-96
86	RI D(1)-98
87	RI D(2)-98
88	RI D(3)-98
89	RI D(4)-98
90	RW(CB)

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

_____, P. E.
R. CRAIG MISER, P. E. _____ DATE _____



NO EXCEPTIONS
NO EQUATIONS
NO RAILROAD CROSSINGS

TEXAS DEPARTMENT OF TRANSPORTATION

<p>CONCURRENCE <u>4/30/99</u> <i>[Signature]</i> CITY ENGINEER TOWN OF ADDISON</p> <p>CONCURRENCE <u>4/30/99</u> <i>[Signature]</i> PROJECT MANAGER DALLAS AREA RAPID TRANSIT</p> <p>SUBMITTED FOR LETTING <u>4/30/99</u> <i>[Signature]</i> VICE PRESIDENT BARTON-ASCHMAN ASSOCIATES, INC.</p> <p>SUBMITTED FOR LETTING _____ AREA ENGINEER</p> <p>RECOMMENDED FOR LETTING _____ DIR. OF TRANSP. PLANNING & DEVELOPMENT</p> <p>RECOMMENDED FOR LETTING _____ DISTRICT ENGINEER</p>	<p style="text-align: center;">APPROVED FOR LETTING _____ DIRECTOR, TRAFFIC OPERATIONS DIVISION</p> <p style="text-align: center;">APPROVED FOR LETTING _____ DIRECTOR, DESIGN DIVISION</p>
---	---

BENCHMARK :
 " □ " CUT ON THE RADIUS OF PARKING ISLAND IN SAM'S CLUB PARKING LOT 75' SOUTH OF BELT LINE ROAD AND 80 WEST OF THE EAST ENTRANCE OF SAM'S CLUB. (STA 47+52, 103' RT)
 ELEV. 617.39

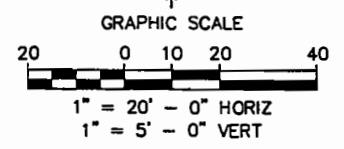
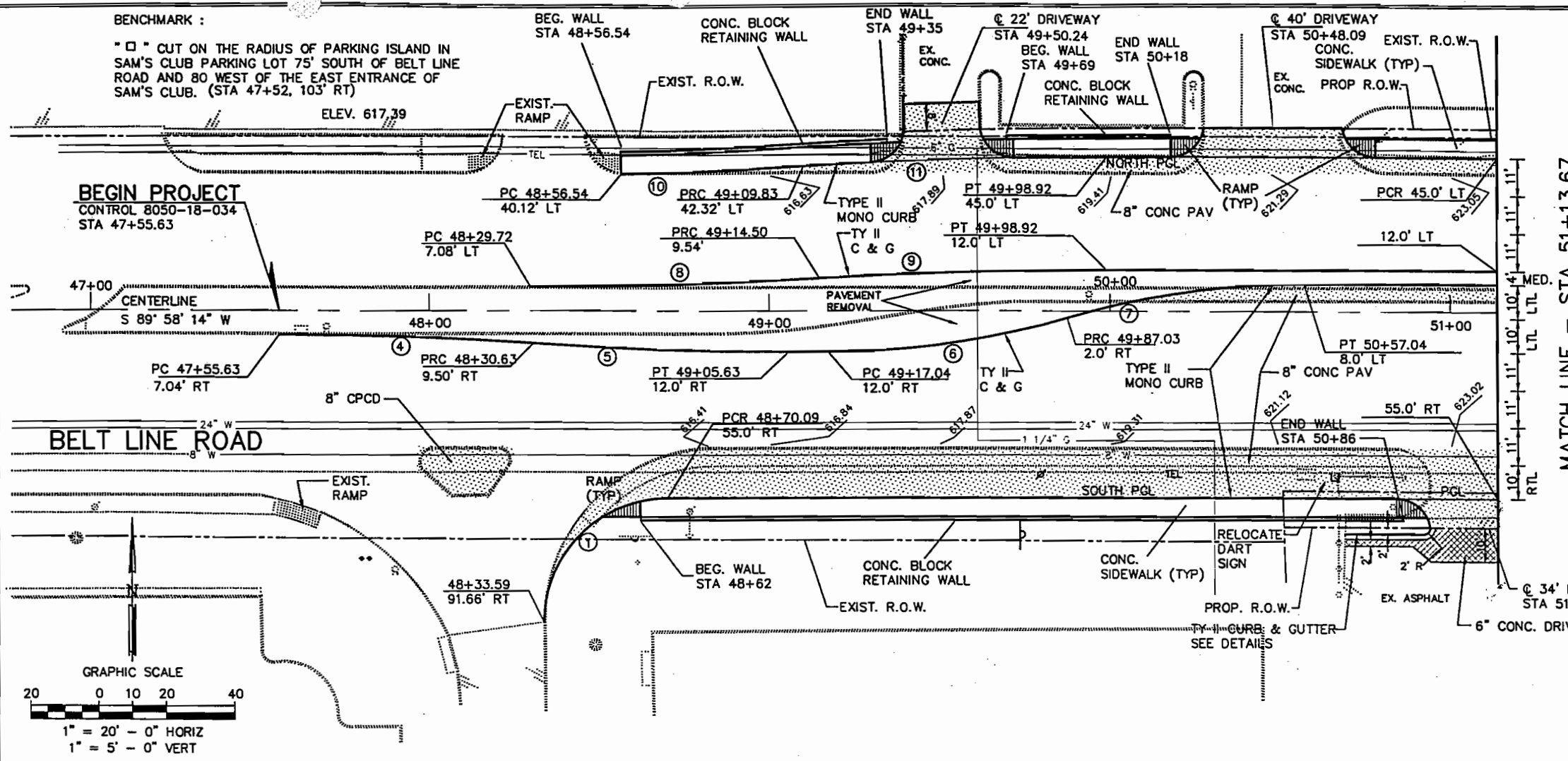
LEGEND :

- PGL PROFILE GRADE LINE
- PC POINT OF CURVATURE
- PT POINT OF TANGENCY
- PRC POINT OF REVERSE CURVE
- PCC POINT OF COMPOUND CURVE
- PCR POINT OF CURB RETURN
- EX EXISTING
- RT RIGHT
- LT LEFT

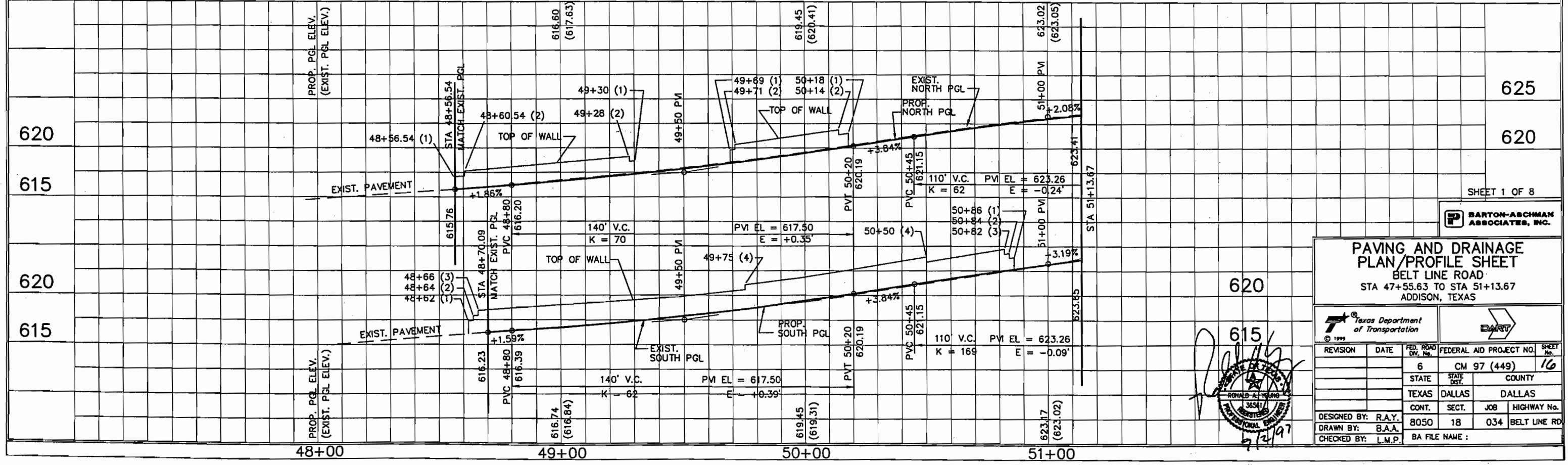
▨ BARRIER FREE RAMP
 ▨ PROP. NEW PAVEMENT
 82.3 EX. SPOT GUTTER ELEV.

CURVE TABLE

NO.	DELTA	RADIUS	LENGTH	NO.	DELTA	RADIUS	LENGTH
①	90° 14' 46"	36.5'	57.49'	7	16° 15' 37"	250.0'	70.95'
4	03° 49' 06"	1126.25'	75.06'	8	03° 21' 06"	1450.0'	84.82'
5	03° 49' 06"	1126.25'	75.06'	9	03° 20' 16"	1450.0'	84.47'
6	16° 15' 37"	250.0'	70.95'	10	02° 09' 32"	1417.0'	53.39'
				11	03° 26' 31"	1483.0'	89.09'



- NOTES :
- ALL DRIVEWAY RADII SHALL BE 15' UNLESS NOTED OTHERWISE.
 - BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAYS AND STREET INTERSECTIONS. SEE PLANS FOR LOCATIONS.
 - SEE DRIVEWAY PROFILE PLAN FOR DRIVEWAY PROFILES.
 - FINAL LOCATIONS OF DART SIGNS SHALL BE AS DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 649.



SHEET 1 OF 8
 BARTON-ABCHMAN ASSOCIATES, INC.

PAVING AND DRAINAGE PLAN/PROFILE SHEET
 BELT LINE ROAD
 STA 47+55.63 TO STA 51+13.67
 ADDISON, TEXAS

Texas Department of Transportation

DESIGNED BY: R.A.Y.	DATE:	FED. ROAD DIST. No.:	FEDERAL AID PROJECT NO.:	SHEET No.:
DRAWN BY: B.A.A.		6	CM 97 (449)	16
CHECKED BY: L.M.P.		STATE:	COUNTY:	
		TEXAS	DALLAS	
		CONT.:	SECT.:	JOB:
		8050	18	034
				HIGHWAY No.:
				BELT LINE RD.

BA FILE NAME :

615
 7/2/97

**MIDWAY ROAD
MATCHLINE STA 6+19.71**

CURVE TABLE				CURVE TABLE			
NO.	DELTA	RADIUS	LENGTH	NO.	DELTA	RADIUS	LENGTH
12	89° 36' 20"	40.0'	62.56'	19	01° 54' 33"	1965.0'	65.48'
13	90° 23' 40"	75.0'	118.33'	20	89° 29' 13"	75.0'	117.14'
14	04° 27' 20"	900.0'	69.99'	21	89° 36' 20"	40.0'	62.56'
15	08° 58' 31"	250.0'	39.16'	22	04° 25' 04"	1998.0'	154.06'
16	13° 12' 29"	250.0'	57.63'	90	02° 01' 40"	900.0'	31.85'
17	16° 03' 33"	200.0'	56.06'	91	04° 27' 20"	867.0'	67.42'
18	19° 06' 56"	250.0'	83.41'	92	03° 30' 28"	933.0'	57.12'

LEGEND :

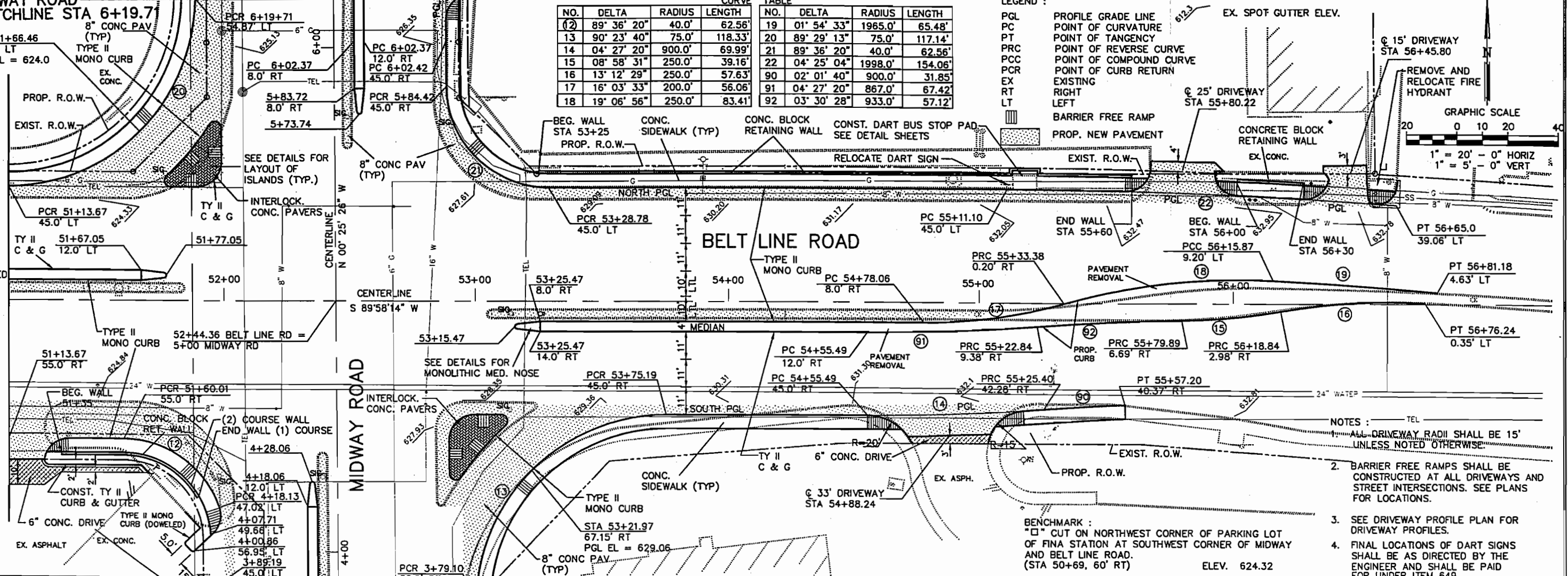
- PGL PROFILE GRADE LINE
- PC POINT OF CURVATURE
- PT POINT OF TANGENCY
- PCR POINT OF REVERSE CURVE
- PCC POINT OF COMPOUND CURVE
- PCR POINT OF CURB RETURN
- EX EXISTING
- RT RIGHT
- LT LEFT
- BARRIER FREE RAMP
- PROP. NEW PAVEMENT
- CONCRETE BLOCK RETAINING WALL
- EX. CONC.
- EX. SPOT GUTTER ELEV.

GRAPHIC SCALE
1" = 20' - 0" HORIZ
1" = 5' - 0" VERT

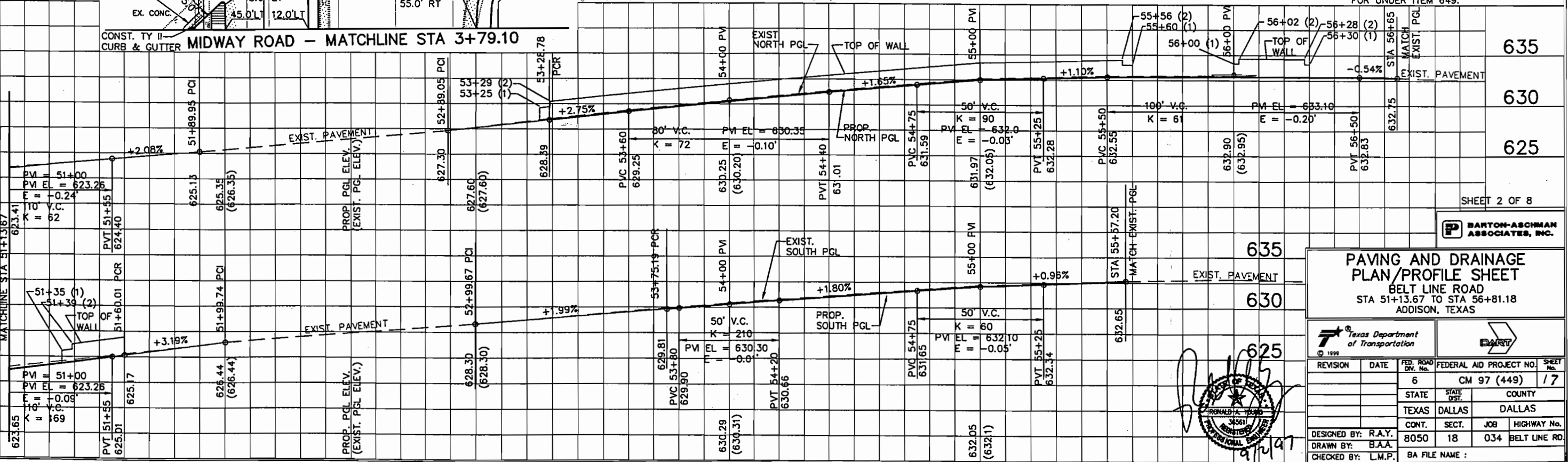
BELT LINE ROAD - MATCHLINE STA 51+13.67

BELT LINE ROAD - MATCHLINE STA 51+13.67

BELT LINE ROAD



- NOTES :**
- ALL DRIVEWAY RADII SHALL BE 15' UNLESS NOTED OTHERWISE.
 - BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAYS AND STREET INTERSECTIONS. SEE PLANS FOR LOCATIONS.
 - SEE DRIVEWAY PROFILE PLAN FOR DRIVEWAY PROFILES.
 - FINAL LOCATIONS OF DART SIGNS SHALL BE AS DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 649.
- BENCHMARK :**
"X" CUT ON NORTHWEST CORNER OF PARKING LOT OF FINA STATION AT SOUTHWEST CORNER OF MIDWAY AND BELT LINE ROAD. (STA 50+69, 60' RT) ELEV. 624.32



BARTON-ASCHMAN ASSOCIATES, INC.

PAVING AND DRAINAGE PLAN/PROFILE SHEET
BELT LINE ROAD
STA 51+13.67 TO STA 56+81.18
ADDISON, TEXAS

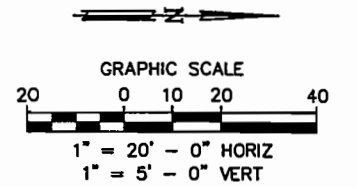
Texas Department of Transportation

REVISION	DATE	FED. ROAD DIST. No.	FEDERAL AID PROJECT NO.	SHEET No.
6			CM 97 (449)	17
DESIGNED BY: R.A.Y.		STATE: TEXAS	COUNTY: DALLAS	
DRAWN BY: B.A.A.		CONT. 8050	SECT. 18	JOB 034
CHECKED BY: L.M.P.		HIGHWAY No. BELT LINE RD.		

BA FILE NAME :

NO.	DELTA	RADIUS	LENGTH	NO.	DELTA	RADIUS	LENGTH
34	12° 50' 25"	300.0'	67.23'	40	01° 08' 12"	2000.0'	39.68'
35	12° 42' 23"	300.0'	66.53'	41	04° 12' 06"	867.0'	63.58'
36	01° 29' 50"	1251.45'	32.70'	42	04° 30' 52"	900.0'	70.91'
37	03° 53' 41"	1251.45'	85.07'	43	04° 12' 06"	900.0'	66.00'
38	18° 25' 10"	200.0'	64.30'	44	88° 01' 27"	3.0'	4.61'
39	18° 11' 28"	200.0'	63.50'				

CURVE TABLE



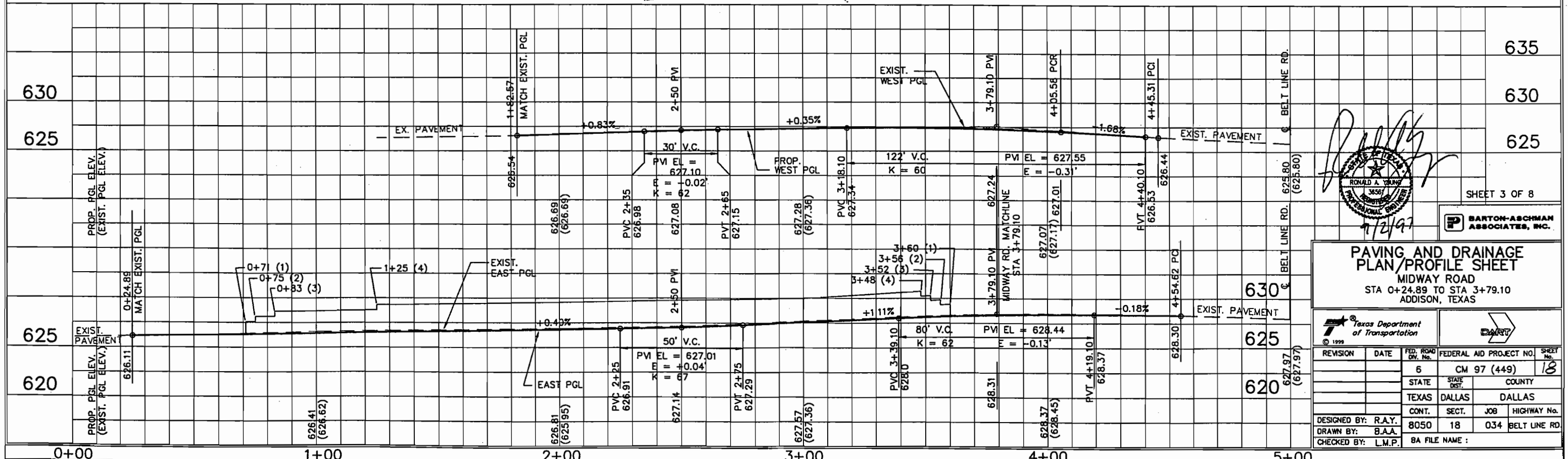
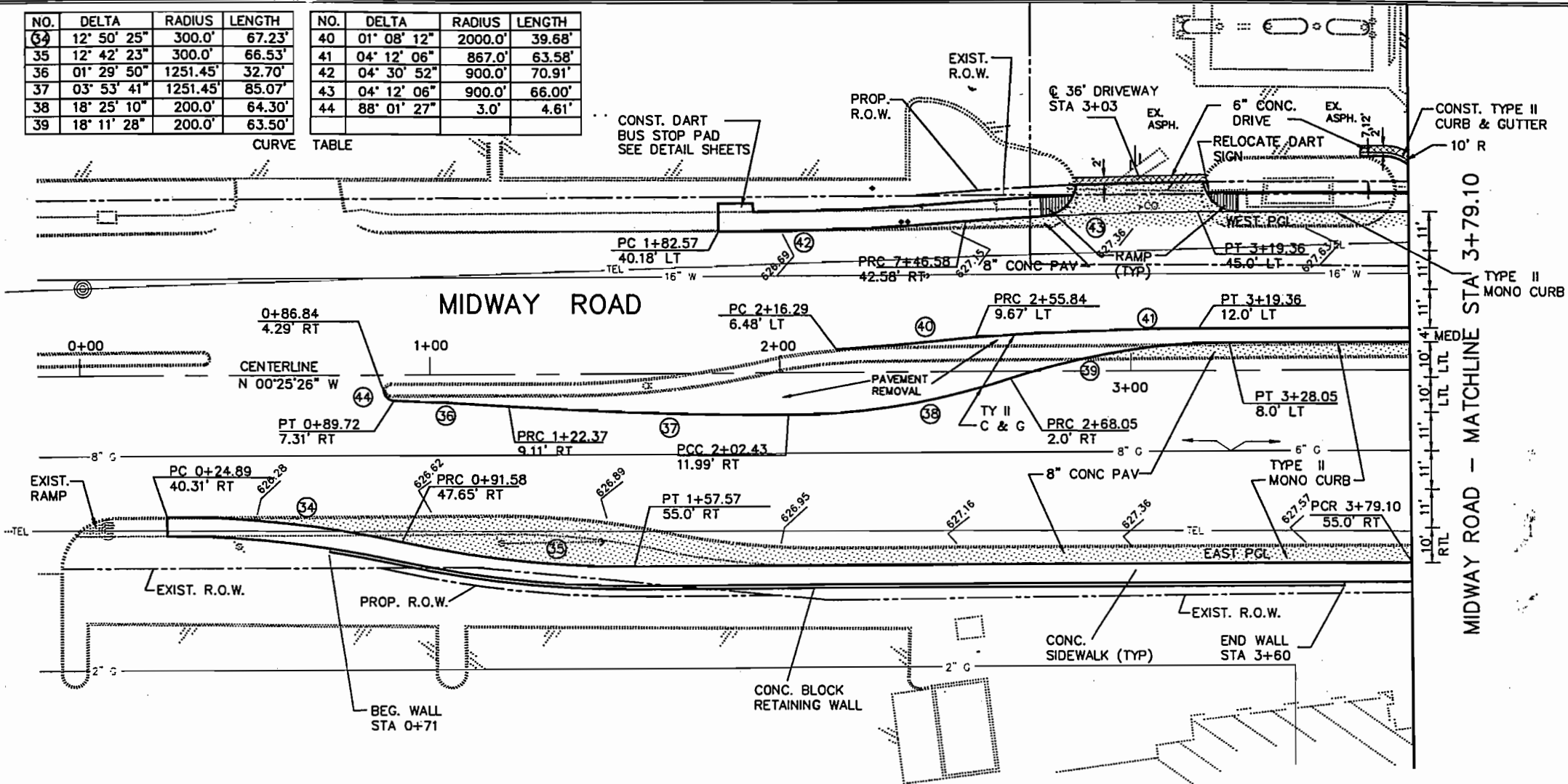
BENCHMARK :
 "□" CUT ON NORTHWEST CORNER OF PARKING LOT
 OF FINA STATION AT SOUTHWEST CORNER OF MIDWAY
 AND BELT LINE ROAD.
 ELEV. 624.32

LEGEND :

- PGL PROFILE GRADE LINE
- PC POINT OF CURVATURE
- PT POINT OF TANGENCY
- PRC POINT OF REVERSE CURVE
- PCC POINT OF COMPOUND CURVE
- PCR POINT OF CURB RETURN
- EX EXISTING
- RT RIGHT
- LT LEFT
- BARRIER FREE RAMP
- PROP. NEW PAVEMENT
- EX. SPOT GUTTER ELEV.

NOTES :

1. ALL DRIVEWAY RADII SHALL BE 15' UNLESS NOTED OTHERWISE.
2. BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAYS AND STREET INTERSECTIONS. SEE PLANS FOR LOCATIONS.
3. SEE DRIVEWAY PROFILE PLAN FOR DRIVEWAY PROFILES.
4. FINAL LOCATIONS OF DART SIGNS SHALL BE AS DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 649.



[Signature]
 RONALD A. YOUNG
 3856
 PROFESSIONAL ENGINEER
 7/2/97

SHEET 3 OF 8

BARTON-ASCHMAN ASSOCIATES, INC.

PAVING AND DRAINAGE PLAN/PROFILE SHEET
 MIDWAY ROAD
 STA 0+24.89 TO STA 3+79.10
 ADDISON, TEXAS

REVISION	DATE	FED. ROAD DIV. No.	FEDERAL AID PROJECT NO.	SHEET No.
		6	CM 97 (449)	18
DESIGNED BY: R.A.Y.		STATE	COUNTY	
DRAWN BY: B.A.A.		TEXAS	DALLAS	
CHECKED BY: L.M.P.		CONT.	SECT.	JOB
		8050	18	034
		HIGHWAY No. BELT LINE RD.		
BA FILE NAME :				

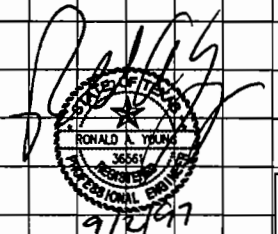
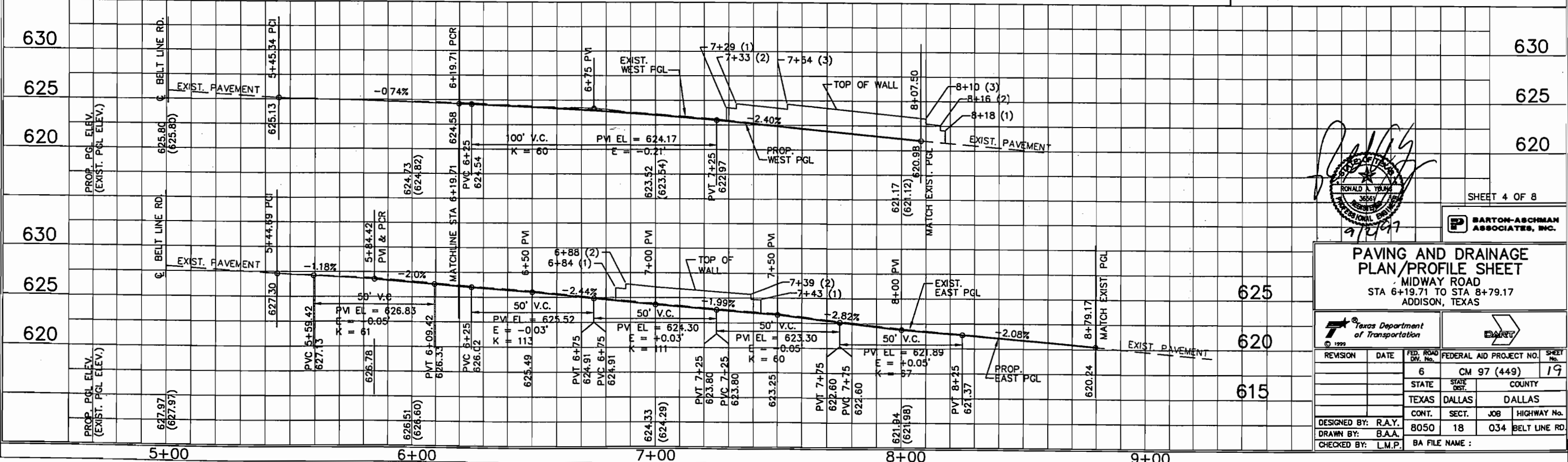
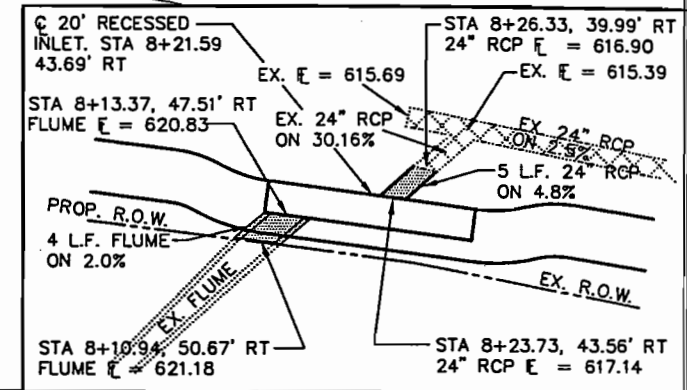
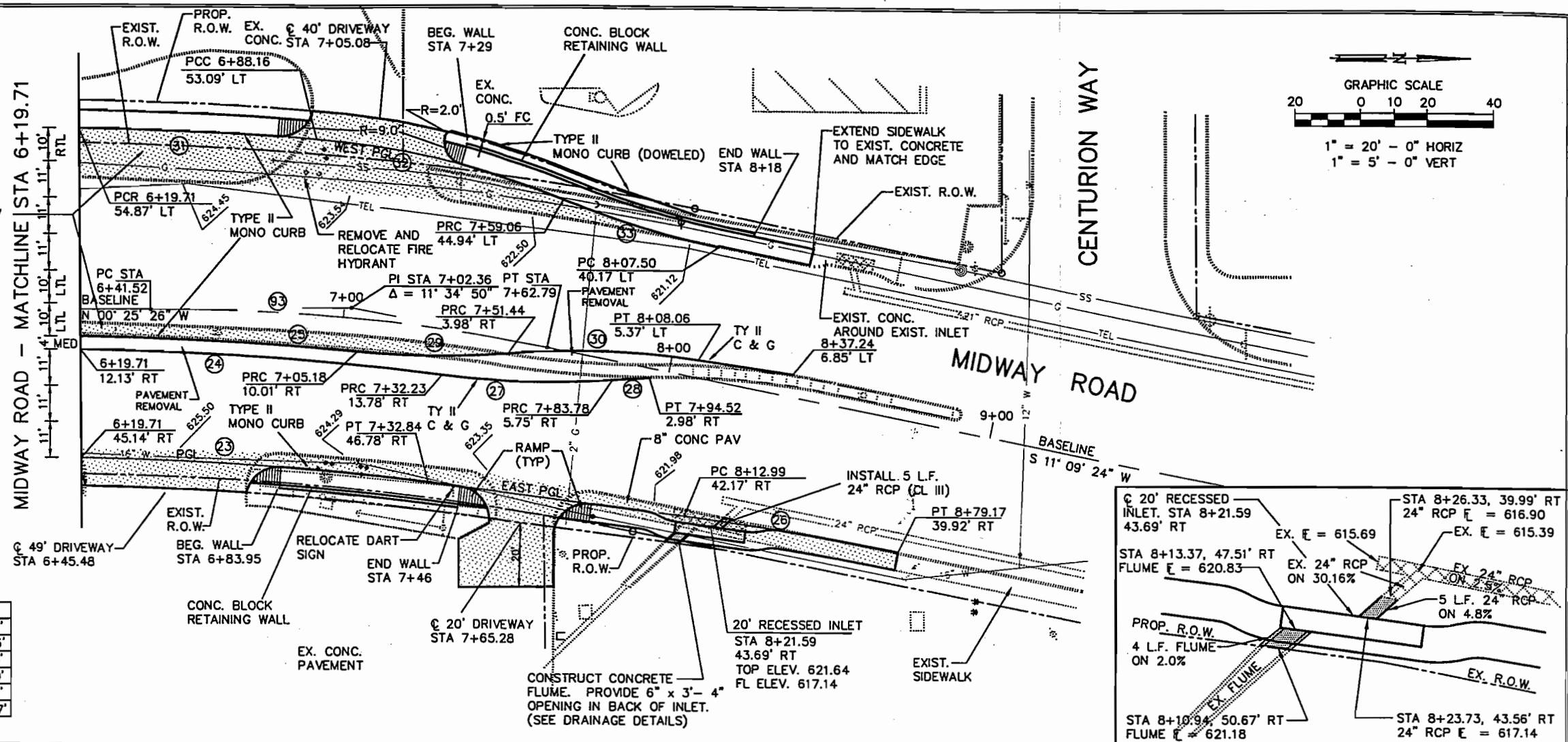
BENCHMARK :
 "□" CUT ON NORTHWEST CORNER OF PARKING LOT
 OF FINA STATION AT SOUTHWEST CORNER OF MIDWAY
 AND BELT LINE ROAD.
 (BELT LINE STA 50+69, 60' RT) ELEV. 624.32

- LEGEND :
- PI POINT OF INTERSECTION
 - PGL PROFILE GRADE LINE
 - PC POINT OF CURVATURE
 - PT POINT OF TANGENCY
 - PRC POINT OF REVERSE CURVE
 - PCC POINT OF COMPOUND CURVE
 - PCR POINT OF CURB RETURN
 - EX EXISTING
 - RT RIGHT
 - LT LEFT

- BARRIER FREE RAMP
- PROP. NEW PAVEMENT
- EX. SPOT GUTTER ELEV.

- NOTES :
1. ALL DRIVEWAY RADII SHALL BE 15' UNLESS NOTED OTHERWISE.
 2. BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAYS AND STREET INTERSECTIONS. SEE PLANS FOR LOCATIONS.
 3. SEE DRIVEWAY PROFILE PLAN FOR DRIVEWAY PROFILES.
 4. FINAL LOCATIONS OF DART SIGNS SHALL BE AS DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 649.

CURVE TABLE				CURVE TABLE			
NO.	DELTA	RADIUS	LENGTH	NO.	DELTA	RADIUS	LENGTH
23	07° 46' 17"	909.37'	123.34'	29	10° 34' 55"	250.0'	46.17'
24	07° 46' 17"	942.37'	127.82'	30	13° 10' 08"	250.0'	57.46'
25	06° 09' 52"	946.37'	101.82'	31	04° 07' 22"	1009.37'	72.63'
26	03° 53' 31"	975.0'	66.23'	32	17° 44' 17"	250.0'	77.40'
27	11° 50' 38"	250.0'	51.68'	33	11° 14' 16"	250.0'	49.03'
28	02° 32' 37"	250.0'	11.10'	93	11° 34' 50"	600.0'	121.27'

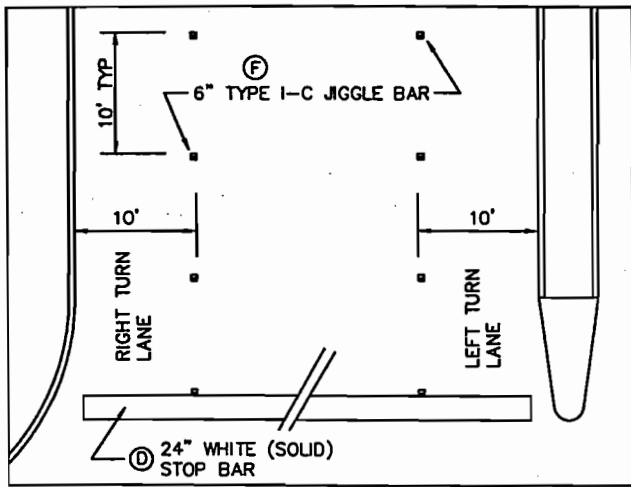


SHEET 4 OF 8
 BARTON-ACSHMAN ASSOCIATES, INC.

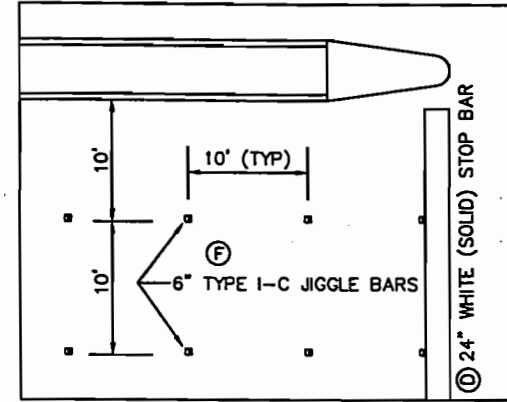
PAVING AND DRAINAGE PLAN/PROFILE SHEET
 MIDWAY ROAD
 STA 6+19.71 TO STA 8+79.17
 ADDISON, TEXAS

DESIGNED BY: R.A.Y.	STATE: TEXAS	COUNTY: DALLAS
DRAWN BY: B.A.A.	CONTRACT: 8050	SECTION: 18
CHECKED BY: L.M.P.	JOB: 034	HIGHWAY No.: BELT LINE RD.

BA FILE NAME :



MARKING DETAILS
TURN LANES



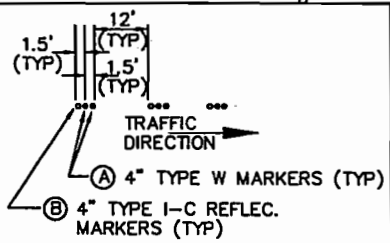
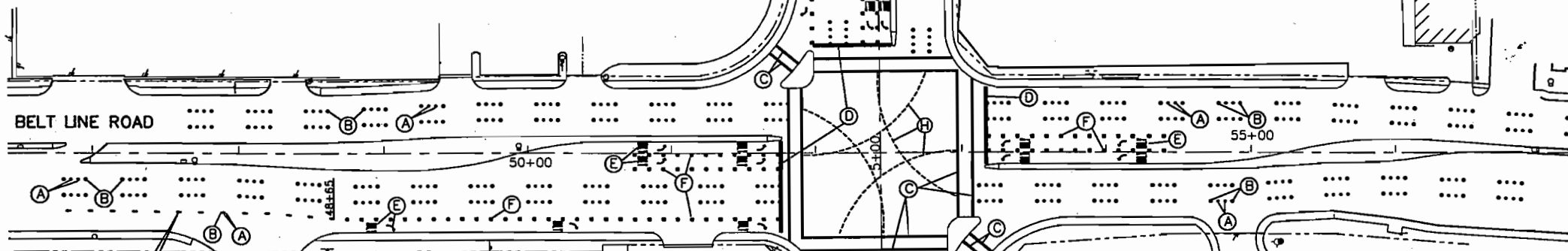
DOUBLE LEFT TURN LANE DETAIL

NOTES :

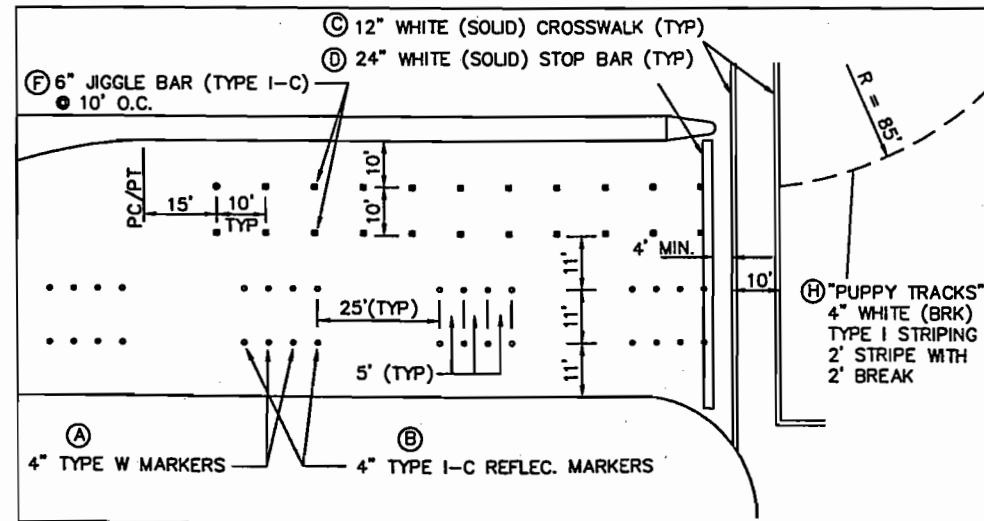
1. ALL STRIPING SHALL BE THERMOPLASTIC AND REFLECTIVE.
2. ALL MARKERS SHALL BE 4". JIGGLE BARS SHALL BE 6"
3. PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING MARKINGS AT LIMITS OF CONSTRUCTION. ALL CONFLICTING MARKINGS SHALL BE COMPLETELY REMOVED.
4. THE TOWN OF ADDISON WILL PROVIDE SMALL ROADSIDE SIGNS UPON COMPLETION OF CONSTRUCTION.

PROPOSED PERMANENT PAVEMENT MARKINGS LEGEND

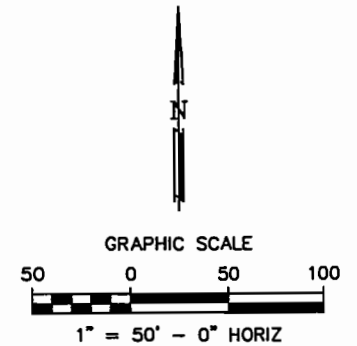
- A 4" TYPE W MARKER (WHITE NON-REFLEC)(CL C)
- B 4" TYPE I-C MARKER (WHITE REFLEC)(CL B)
- C 12" WHITE (SOLID) STRIPING (TYPE I)
- D 24" WHITE (SOLID) STRIPING (TYPE I)
- E LANE ASSIGNMENT MARKING
- F 6" TYPE I-C JIGGLE BAR (WHITE REFLEC)(CL A)
- H 4" TYPE I WHITE (BROKEN) STRIPING



LANE DROP MARKINGS



TYPICAL LANE MARKINGS



SHEET 1 OF 2

BARTON-ARCHMAN ASSOCIATES, INC.

PERMANENT PAVEMENT MARKINGS SHEET
MIDWAY ROAD AT BELT LINE ROAD
ADDISON, TEXAS

Texas Department of Transportation		DART	
REVISION	DATE	FED. ROAD DIST. No.	FEDERAL AID PROJECT NO. SHEET No.
		6	CM 97 (449) 37
		STATE	STATE DIST. COUNTY
		TEXAS	DALLAS DALLAS
		CONT.	SECT. JOB HIGHWAY No.
DESIGNED BY: R.A.Y.		8050	18 034 BELT LINE RD
DRAWN BY: B.A.A.			
CHECKED BY: L.M.P.			BA FILE NAME :

[Handwritten Signature]
RONALD A. YOUNG
36561
REGISTERED PROFESSIONAL ENGINEER
4/23/97

TxDOT SW AREA OFFICE Fax: 972-235-8667

Aug 5 1999 10:48

P.01

Handwritten initials

MIS.DCS.7202

AUGUST 3, 1999

1,037,300
CN 97(449)
DALLAS COUNTY
8050-18-034

BIDDER	ADDRESS	REGULAR BID
J.L. STEEL, INC.	ROANOKE, TX	83.33*
TISEO PAVING CO.	DALLAS, TX	1,901,500.19 - 1-LON
		2,218,830.45 - 2

3032 MB 0.333 MILES
LIMITS FROM IN ADDISON ON BELTLINE RD AT MIDWAY
TO & AT QUORUM RD
TYPE GRADING, BASE, PAVEMENT & DRAINAGE

Post-It® Fax Note	7671	Date	8-5-99	# of pages	▶
To	Jeff Markiewicz		From	R Simmelink	
Co./Dept	Town of Addison		Co.	Tx DOT	
Phone #	972/450-2860		Phone #	972/235-7797	
Fax #	-2837		Fax #	-8667	

THE ABOVE INFORMATION IS ONLY THE TOTALS OF THE BIDS AS RECEIVED
AND DOES NOT REPRESENT THAT A CONTRACT HAS BEEN OR WILL BE AWARDED.

Handwritten 'YE'

TEXAS DEPARTMENT OF TRANSPORTATION, AUSTIN

HWY BIDDER JOB CITY DIV
 MB 1 3032 57 48

COUNTY DALLAS
 PROJECT CM 97(449)
 TYPE GRADING, BASE, PAVEMENT & DRAINAGE
 TIME 105 WORKING DAYS
 LIMITS FROM: IN ADDISON ON BELTLINE RD AT MIDWAY TO: & AT QUORUM RD

CONTROL 8050-18-034
 LENGTH 0.333 MILES
 DATE 08/03/1999

CONTRACTOR J.L. STEEL, INC.
 ADDRESS ROANOKE, TX 06733
 CHECK \$50,000

A									
L	ITEM CODE							UNIT	OVER / UNDER
T	ITEM DES SP	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT BID	AMOUNT	ENG EST	DOLLARS	%
	100 502	PREP ROW	STA	17.579	10,250.000	180,184.75	1,350.00	156,453.10	659
	104 501	REMOV CONC (PAV)	SY	4,329.400	6.000	25,976.40	6.60	2,597.64	9-
	104 505	REMOV CONC (MED)	SY	49.000	15.000	735.00	11.00	196.00	36
	104 508	REMOV CONC (FND)	CY	18.000	248.000	4,464.00	80.00	3,024.00	210
	104 509	REMOV CONC (SDWLR)	SY	2,241.000	3.000	6,723.00	7.50	10,084.50	60-
	104 511	REMOV CONC (DRVWY)	SY	1,105.700	7.000	7,739.90	12.49	6,070.29	44-
	104 516	REMOV CONC (RETAIN WALL)	SY	40.000	25.500	1,020.00	33.00	300.00	23-
	104 521	REMOV CONC (CURB OR C&G)	LF	4,529.300	3.000	13,587.90	6.00	13,587.90	50-
	104 524	REMOV CONC (FLUME)	SY	1.600	38.000	60.80	13.00	40.00	192
	105 504	RMV STB BS AND/OR ASH PAV (CL 2) VAR DEP	SY	220.400	10.250	2,259.10	8.00	495.90	28
	110 501	EXCAVATION (RDWY)	CY	2,293.300	11.250	25,799.63	7.00	9,746.53	61
	132 509	EMBANK (DIENS CONT) (TY C) (CL 3)	CY	970.000	18.000	17,460.00	7.50	10,185.00	140
	160 506	FURN AND PLAC TPSL (CL 2) (4 ")	SY	4,152.600	1.750	7,267.05	2.00	1,038.15	13-
	162 502001	BLOCK SODDING	SY	1,020.300	2.500	2,550.75	3.00	510.15	17-
	168 501	VEGETATIVE WATERING	MG	2.800	205.000	574.00	75.00	364.00	173
	276 624	CEM TRT BS (STR-M) (TY A GR 1) (CL 2)	TON	2,553.300	48.000	122,558.40	19.05	73,918.03	152
	360 524028	CONC PAV (CPCD) (8")	SY	7,196.800	39.250	282,474.40	25.20	101,115.04	56
	360 526028	MONO CURB (TY II)	LF	5,850.600	6.000	35,103.60	1.70	25,157.58	253
	402 501	TRENCH EXCAV PROTECTION	LF	5.000	292.500	1,462.50	20.00	1,362.50	
	423 505	RETAINING WALL (CONC BLOCK)	SF	3,592.000	22.750	81,718.00	27.00	15,266.00	16-
	432 518	RIPRAP (CONC) (CL B) (FLUME)	CY	1.600	994.000	1,590.40	330.00	1,062.40	201
	464 505003	RC PIPE (CL III) (24 ")	LF	5.000	354.000	1,770.00	55.00	1,495.00	544
	465 914	INLET (COMPL) (CURB) (20 FT) (SPL)	EA	1.000	5,250.000	5,250.00	3,360.00	1,890.00	56
	496 502	REMOV OLD STR (SMALL)	EA	1.000	845.000	845.00	2,000.00	1,155.00	58-
	500 501	MOBILIZATION	LS	1.000	175,000.000	175,000.00	94,290.00	80,710.00	86
	502 501018	BARRICADES, SIGNS AND TRAP HANDLE	MO	7.000	7,200.000	50,400.00	4,000.00	22,400.00	80
	529 535	CONC CURB (DOWEL) (TY II)	LF	125.000	15.250	1,906.25	10.00	656.25	53
	529 554	CONC CURB AND GUTTER (TY II)	LF	3,476.700	20.000	69,534.00	10.00	34,767.00	100
	530 501	DRYWYS (CONC) (6 ")	SY	916.200	30.500	27,944.10	30.00	458.10	2
	531 503	CONCRETE SIDEWALK (WHEELCHAIR RAMP)	SY	253.500	131.250	33,271.88	47.50	21,230.63	176
	531 507	CONCRETE SIDEWALK (4 ")	SY	2,283.100	37.500	85,616.25	24.00	30,821.85	56
	536 511	CONC MEDIAN (MONO NOSE) (VAR DEPTH)	SY	44.000	106.000	4,664.00	84.00	968.00	26
	618 504	CONDUIT (RM) (1 1/2")	LF	60.000	11.000	660.00	9.75	75.00	13
	618 511	CONDUIT (PVC) (SCHD 40) (2 ")	LF	6,510.000	19.250	125,317.50	5.25	91,140.00	267
	618 513	CONDUIT (PVC) (SCHD 40) (3 ")	LF	80.000	12.500	1,000.00	6.25	500.00	100
	618 514	CONDUIT (PVC) (SCHD 40) (4 ")	LF	40.000	16.500	660.00	16.20	12.00	2
	618 535	CONDUIT (PVC) (SCHD 40) (4 ") (BORE)	LF	1,165.000	39.000	45,435.00	20.00	22,135.00	95
	618 545	CONDUIT (PVC) (SCHD 40) (1 ")	LF	320.000	4.250	1,360.00	4.55	96.00	7-
	620 504	ELEC CONDUCTOR (NO. 6) BARE	LF	1,070.000	.750	802.50	.60	160.50	25
	620 510	ELEC CONDUCTOR (NO. 6) INSULATED	LF	220.000	1.250	275.00	.89	79.20	40
	624 501	GROUND BOX TY A (122311) W/APRON	EA	18.000	892.000	16,056.00	489.00	7,254.00	82
	624 503	GROUND BOX TY C (162911) W/APRON	EA	2.000	975.500	1,951.00	707.00	537.00	38

P.02
 Aug 5 1999 10:48
 TxDDOT SW AREA OFFICE Fax:972-235-8667

TEXAS DEPARTMENT OF TRANSPORTATION, AUSTIN

HWY BIDDER JOB CITY DIV
MH 1 3032 57 48

COUNTY DALLAS CONTROL 8050-18-034
PROJECT CM 97(449) LENGTH 0.333 MILES
TYPE GRADING, BASE, PAVEMENT & DRAINAGE DATE 08/03/1999
TIME 105 WORKING DAYS
LIMITS FROM: IN ADDISON ON BELTLINE RD AT MIDWAY TO: & AT COORUM RD

Table with columns: ITEM CODE, ITEM DESCRIPTION, UNIT, QUANTITY, UNIT BID, AMOUNT, UNIT EST, OVER / UNDER. Contains detailed line items for construction work such as ELEC SERV TYS, RELOC SMALL RDS, TRAP SIG, etc.

P.03
Aug 5 1999 10:48
TXDOT SW AREA OFFICE Fax:972-235-8667

TABULATION OF BIDS
TEXAS DEPARTMENT OF TRANSPORTATION, AUSTIN

COUNTY DALLAS CONTROL 8050-18-034
PROJECT CM 97(449) LENGTH 0.333 MILES
TYPE GRADING, BASE, PAVEMENT & DRAINAGE DATE 08/03/1999
TIME 105 WORKING DAYS
LIMITS FROM: IN ADDISON ON BELTLINE RD AT MIDWAY TO: & AT QUORUM RD

A									
L	ITEM CODE	ITEM DESCRIPTION		UNIT	QUANTITY	UNIT BID	AMOUNT	UNIT	OVER / UNDER
T	ITM DES SP							BRG EST	DOLLARS %
	5249 503	TEMP SEDMT CONT FENCE (REMOV)		LF	4,950.000	1.000	4,950.00	1.00	
	5509 501	ADJ WASTEWATER LAT CLEANOUT		EA	1.000	566.000	566.00	290.00	276.00 95
	5509 502	ADJ WASTEWATER MAINLINE CLEANOUT		EA	3.000	457.250	1,371.75	290.00	501.75 58
	5510 501	ADJ CP FIRE HYDRANT		EA	6.000	2,300.000	13,800.00	900.00	8,400.00 156
	5511 501	RELOCATE EXIST METER & METER BOX		EA	17.000	336.000	5,712.00	575.00	4,063.00- 42-
	5512 501	VERT ADJ WTR VALVE COVER & VALVE STACK		EA	16.000	300.000	4,800.00	95.00	3,280.00 216
	6010 501	SALV TRAP SIGNALS		EA	2.000	10,450.000	20,900.00	2,500.00	15,900.00 318
	6031 511	COMMON CABLE (6 PAIR) (16 AWG)		LF	3,530.000	5.500	19,415.00	2.50	10,590.00 120

TOTAL BID 1,901,500.19 SUM \$ O/U 864,274.92

BID NO.	NO. BIDDERS	NO. ITEMS	JOB NO.	DIV NO.
1	2	92	3032	48

MISCELLANEOUS COST
1,000.00

TOTAL PROJECT COST
BID+MISC 1,902,500.19
EST+MISC 1,038,225.27

TOTAL OVER / UNDER
DOLLARS %
864,274.92 83.33

TXDOT SW AREA OFFICE Fax:972-235-8667 Aug 5 1999 10:49 P.04

CONTRACT NO. 00000000
 PROJECT CM 97(449)
 CONTROL 8050-18-034
 HIGHWAY MH
 COUNTY DALLAS
 DISTRICT 18

ENGINEERS
 ESTIMATE

6-11-99

PROJECT AGREEMENT ESTIMATE
 TEXAS DEPARTMENT OF TRANSPORTATION

ITEM NO.	DESC CODE	S.P. NO. ALT	DESCRIPTION	UNIT	ESTIMATED QUANTITY	PRICE PER UNIT	AMOUNT
DISTRICT 18 COUNTY DALLAS CONTROL 8050-18-034 LENGTH .333 CM 97(449)							
TYPE: GRADING, BASE, PAVEMENT & DRAINAGE							
LIMITS FROM: IN ADDISON ON BELT LINE RD AT MIDWAY RD							
TO : & AT QUORUM RD							
PREPARED MAY 1999							
ROADWAY NET LENGTH .333 MILES							
0100	0502		PREP ROW	STA	17.579	\$	1,350.000 \$ 23,731.65
0104	0501		REMOV CONC (PAV)	SY	4,329.400		6.600 28,574.04
0104	0505		REMOV CONC (MED)	SY	49.000		11.000 539.00
0104	0508		REMOV CONC (FND)	CY	18.000		80.000 1,440.00
0104	0509		REMOV CONC (SDWLK)	SY	2,241.000		7.500 16,807.50
0104	0511		REMOV CONC (DRVWY)	SY	1,105.700		12.490 13,810.19
0104	0516		REMOV CONC (RETAIN WALL)	SY	40.000		33.000 1,320.00
0104	0521		REMOV CONC (CURB OR C&G)	LF	4,529.300		6.000 27,175.80
0104	0524		REMOV CONC (FLUME)	SY	1.600		13.000 20.80
0105	0504		RMV STB BS AND/OR ASH PAV (CL 2)VAR DEP	SY	220.400		8.000 1,763.20
0110	0501		EXCAVATION (RDWY)	CY	2,293.300		7.000 16,053.10
0132	0509		EMBANK (DENS CONT) (TY C) (CL 3)	CY	970.000		7.500 7,275.00
0160	0506		FURN AND PLAC TPSL (CL 2) (4 ")	SY	4,152.600		2.000 8,305.20
0162	0502	001	BLOCK SODDING	SY	1,020.300		3.000 3,060.90
0168	0501		VEGETATIVE WATERING	MG	2.800		75.000 210.00
0276	0624		CEM TRT BS (STR-M) (TY A GR 1) (CL 2)	TON	2,553.300		19.050 48,640.37
0360	0524	028	CONC PAV (CPCD) (8")	SY	7,196.800		25.200 181,359.36
0360	0526	028	MONO CURB (TY II)	LF	5,850.600		1.700 9,946.02
0402	0501		TRENCH EXCAV PROTECTION	LF	5.000		20.000 100.00
0423	0505		RETAINING WALL (CONC BLOCK)	SF	3,592.000		27.000 96,984.00
0432	0518		RIPRAP (CONC) (CL B) (FLUME)	CY	1.600		330.000 528.00
0464	0505	003	RC PIPE (CL III) (24 ")	LF	5.000		55.000 275.00
0465	0914		INLET (COMPL) (CURB) (20 FT) (SPL)	EA	1.000		3,360.000 3,360.00
0496	0502		REMOV OLD STR (SMALL)	EA	1.000		2,000.000 2,000.00
0500	0501		MOBILIZATION	LS	1.000		94,290.000 94,290.00
0502	0501	018	BARRICADES, SIGNS AND TRAF HANDLE	MO	7.000		4,000.000 28,000.00
0529	0535		CONC CURB (DOWEL) (TY II)	LF	125.000		10.000 1,250.00

P.05
 Aug 5 1999 10:49
 TXDOT SJW AREA OFFICE Fax:972-235-8667

ITEM NO.	DESC CODE	S.P. NO.	ALT	DESCRIPTION	UNIT	ESTIMATED QUANTITY	PRICE PER UNIT	AMOUNT
0529	0554			CONC CURB AND GUTTER (TY II)	LF	3,476.700	\$ 10.000	\$ 34,767.00
0530	0501			DRVWYS (CONC) (6")	SY	916.200	30.000	27,486.00
0531	0503			CONCRETE SIDEWALK (WHEELCHAIR RAMP)	SY	253.500	47.500	12,041.25
0531	0507			CONCRETE SIDEWALK (4")	SY	2,283.100	24.000	54,794.40
0536	0511			CONC MEDIAN (MONO NOSE) (VAR DEPTH)	SY	44.000	84.000	3,696.00
0662	0511	003		WRK ZN PAV MRK REMOV (W) (24") (SLD)	LF	280.000	10.200	2,856.00
0662	0541	003		WRK ZN PAV MRK REMOV (CL B) TY I-A	EA	305.000	3.000	915.00
0662	0542	003		WRK ZN PAV MRK REMOV (CL B) TY I-C	EA	627.000	3.900	2,445.30
0662	0545	003		WRK ZN PAV MRK REMOV (CL C) TY W	EA	1,997.000	2.250	4,493.25
0662	0546	003		WRK ZN PAV MRK REMOV (CL C) TY Y	EA	914.000	2.750	2,513.50
0666	0502	018		REFL PAV MRK TY I (W) (4") (BRK)	LF	362.000	.420	152.04
0666	0509	018		REFL PAV MRK TY I (W) (12") (SLD)	LF	1,658.000	2.500	4,145.00
0666	0512	018		REFL PAV MRK TY I (W) (24") (SLD)	LF	432.000	5.600	2,419.20
0666	0513	018		REFL PAV MRK TY I (W) (ARROW)	EA	43.000	124.000	5,332.00
0666	0517	018		REFL PAV MRK TY I (W) (WORD)	EA	43.000	134.000	5,762.00
0666	0536	018		REFL PAV MRK TY II (W) (4") (BRK)	LF	362.000	.350	126.70
0666	0541	018		REFL PAV MRK TY II (W) (12") (SLD)	LF	1,658.000	2.000	3,316.00
0666	0544	018		REFL PAV MRK TY II (W) (24") (SLD)	LF	432.000	2.500	1,080.00
0666	0545	018		REFL PAV MRK TY II (W) (ARROW)	EA	43.000	40.000	1,720.00
0666	0549	018		REFL PAV MRK TY II (W) (WORD)	EA	43.000	37.500	1,612.50
0672	0502	012		RAIS PAV MRKR CL A (JIGGLE) TY I-C	EA	284.000	12.500	3,550.00
0672	0507	012		RAIS PAV MRKR CL B (REFL) TY I-C	EA	574.000	4.000	2,296.00
0672	0516	012		RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	588.000	4.500	2,646.00
0677	0506			ELIM EXT PAV MRK & MRKR (24")	LF	290.000	3.150	913.50
0677	0518			ELIM EXT PAV MRK & MRKR (RAIS PAV MRKR)	EA	1,406.000	1.000	1,406.00
0678	0501			PAV SURF PREP FOR MRKS (4")	LF	362.000	.900	325.80
0678	0504			PAV SURF PREP FOR MRKS (12")	LF	1,658.000	.750	1,243.50
0678	0506			PAV SURF PREP FOR MRKS (24")	LF	432.000	2.100	907.20
0678	0507			PAV SURF PREP FOR MRKS (ARROW)	EA	43.000	14.000	602.00
0678	0508			PAV SURF PREP FOR MRKS (WORD)	EA	43.000	15.500	666.50
5007	0501			BALED HAY FOR EROSN & SEDMT CONT	EA	32.000	15.500	496.00
5007	0502			BL HAY FOR ERSN & SED CONT (RMV & REPL)	EA	32.000	12.100	387.20
5007	0503			BALED HAY FOR EROSN & SED CONT (REMOV)	EA	32.000	6.000	192.00
5012	0501			BKHOE WORK (EROSN CONT) (CL 1)	HR	10.000	50.000	500.00
5051	0501			INTRLOCK CONC PAV STONES	SY	74.500	36.000	2,682.00
5249	0501			TEMP SEDMT CONT FENCE	LF	4,950.000	3.500	17,325.00
5249	0502			TEMP SEDMT CONT FENCE (REMOVE & REPLAC)	LF	4,950.000	2.500	12,375.00
5249	0503			TEMP SEDMT CONT FENCE (REMOV)	LF	4,950.000	1.000	4,950.00
5509	0501			ADJ WASTEWATER LAT CLEANOUT	EA	1.000	290.000	290.00
5509	0502			ADJ WASTEWATER MAINLINE CLEANOUT	EA	3.000	290.000	870.00
5510	0501			ADJ OF FIRE HYDRANT	EA	6.000	900.000	5,400.00
5511	0501			RELOCATE EXIST METER & METER BOX	EA	17.000	575.000	9,775.00
5512	0501			VERT ADJ WTR VALVE COVER & VALVE STACK	EA	16.000	95.000	1,520.00

SUBTOTAL \$ 859,810.97
 ENGINEERING AND CONTINGENCIES 143,588.43

TOTAL ROADWAY \$ 1,003,399.40

TRAFFIC AND ILLUMINATION NO PROJECT LENGTH

TxDOT SW AREA OFFICE Fax: 972-235-8667 Aug 5 1999 10:49 P.06

ITEM NO.	DESC CODE	S.P. NO. ALT	DESCRIPTION	UNIT	ESTIMATED QUANTITY	PRICE PER UNIT	AMOUNT
0618	0504		CONDUIT (RM) (1 1/2")	LF	60.000	\$ 9.750	\$ 585.00
0618	0511		CONDUIT (PVC) (SCHD. 40) (2 ")	LF	6,510.000	5.250	34,177.50
0618	0513		CONDUIT (PVC) (SCHD 40) (3 ")	LF	80.000	6.250	500.00
0618	0514		CONDUIT (PVC) (SCHD 40) (4 ")	LF	40.000	16.200	648.00
0618	0535		CONDUIT (PVC) (SCHD 40) (4 ") (BORE)	LF	1,165.000	20.000	23,300.00
0618	0545		CONDUIT (PVC) (SCHD 40) (1 ")	LF	320.000	4.550	1,456.00
0620	0504		ELEC CONDUCTOR (NO. 6) BARE	LF	1,070.000	.600	642.00
0620	0510		ELEC CONDUCTOR (NO. 6) INSULATED	LF	220.000	.890	195.80
0624	0501		GROUND BOX TY A (122311) W/APRON	EA	18.000	489.000	8,802.00
0624	0503		GROUND BOX TY C (162911) W/APRON	EA	2.000	707.000	1,414.00
0628	0622		ELEC SERV TYS (120/240) 000 (NS) GS (E) SP (U)	EA	2.000	1,500.000	3,000.00
0649	0504		RELOC SMALL RDSG SCN ASSMS	EA	7.000	365.000	2,555.00
0656	0512		FND FOR TRAF SIG (36 IN DRIL SHFT)	LF	112.000	140.000	15,680.00
0656	0518		TRAF SIG CNTRL FND	CY	2.200	900.000	1,980.00
0680	0502		INSTAL OF HWY TRAF SIG (SYSTEM)	EA	2.000	7,500.000	15,000.00
0684	0553		TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	LF	1,945.000	1.150	2,236.75
0684	0554		TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	LF	50.000	1.200	60.00
0684	0520		TRAF SIG CBL (TY A) (20 CONDR) (12 AWG)	LF	1,280.000	3.700	4,736.00
0684	0546		TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	LF	5,695.000	.750	4,271.25
0688	0511		VEH DETECT (SANCUT)	LF	8,470.000	5.000	42,350.00
6010	0501		SALV TRAF SIGNALS	EA	2.000	2,500.000	5,000.00
6031	0511		COMMON CABLE (6 PAIR) (16 AWG)	LF	3,530.000	2.500	8,825.00

SUBTOTAL \$ 177,414.30

ENGINEERING AND CONTINGENCIES 29,628.19

TOTAL TRAFFIC AND ILLUMINATION \$ 207,042.49

CONTRACTOR FORCE ACCOUNT WORK (PART)

TRANSPOTABLE CELLULAR TELEPHONE LS 1.000 \$ 1,000.00

TOTAL \$ 1,000.00

SUMMARY: CONTROL 8050-18-034 PROJECT CM 97(449)

	ESTIMATED COST	LENGTH
ROADWAY	\$ 1,003,399.40	.333
TRAFFIC AND ILLUMINATION	\$ 207,042.49	.000
CONTRACTOR FORCE ACCOUNT WORK (PART)	\$ 1,000.00	
TOTAL PROJECT	\$ 1,211,441.89	.333
TOTAL BID ITEMS	\$ 1,037,225.27	

FUNDING TOTALS

APPN-CODE	APPL-PCT	TOTAL-PROJ-COST	FED-PERCENT	FEDERAL-FUNDS	STA-PERCENT	STATE-FUNDS	LOC-PERCENT	LOCAL-FUNDS
Q40	100.0	\$ 1,081,197.05	80.0	\$ 864,957.64	20.0	\$ 216,239.41	0.0	\$ 0.00

Aug 5 1999 10:50 P.07
 TXDOT SW AREA OFFICE Fax:972-235-8667

Aug 5 1999 10:50 P.08

TxDOT SW AREA OFFICE Fax: 972-235-8667

CONTRACT SUMMARY

8050-18-034 CM 97(449)

ROADWAY
TRAFFIC AND ILLUMINATION
CONTRACTOR FORCE ACCOUNT WORK (PART)

TOTAL 8050-18-034

TOTAL BID ITEMS
ENGINEERING AND CONTINGENCIES
TOTAL MISCELLANEOUS COST

TOTAL COST

	ESTIMATED COST	LENGTH
	\$ 1,003,399.40	.333
	\$ 207,042.49	.000
	\$ 1,000.00	
	\$ 1,211,441.89	.333
	\$ 1,037,225.27	
	\$ 173,216.62	
	\$ 1,000.00	
	\$ 1,211,441.89	.333

16.7%

Actual Bid \$ 1,901,500.19
 Eng + Cont \$ 317,550.53
 Misc Cost \$ 1,000.00

Actual Total Cost = \$ 2,220,050.72

Difference \$ 1,008,608.83

MIS.DCS.9601

TEXAS DEPARTMENT OF TRANSPORTATION

CONTRACT SUMMARY

CONTRACT NUMBER	PROJECT NUMBER	COUNTY		TOTAL BID	TOTAL BID + E&C
00000000	CM 97 (449)	057	\$	1,037,225.27	\$ 1,210,441.89
TOTALS			\$	1,037,225.27	\$ 1,210,441.89

P.09

10:50

Aug 5 1999

Fax:972-235-8667

TxDOT SW AREA OFFICE

TEXAS DEPARTMENT OF TRANSPORTATION

COMBINED ESTIMATE - 00000000

DISTRICT 18 COUNTY 57 CONTROL 8050-18-034 LENGTH 0.333 MILES HIGHWAY MH CM 97(449)

ITEM	DESC	SPV	DESCRIPTION	UNIT	QUANTITY	PRICE	AMOUNT
100	0502		PREP ROW	STA	17.579	\$ 1,350.000	\$ 23,731.65
104	0501		REMOV CONC (PAV)	SY	4,329.400	6.600	28,574.04
104	0505		REMOV CONC (MED)	SY	49.000	11.000	539.00
104	0508		REMOV CONC (FND)	CY	18.000	80.000	1,440.00
104	0509		REMOV CONC (SDWLK)	SY	2,241.000	7.500	16,807.50
104	0511		REMOV CONC (DRVWY)	SY	1,105.700	12.490	13,810.19
104	0516		REMOV CONC (RETAIN WALL)	SY	40.000	33.000	1,320.00
104	0521		REMOV CONC (CURB OR C&G)	LF	4,529.300	6.000	27,175.80
104	0524		REMOV CONC (FLUME)	SY	1.600	13.000	20.80
105	0504		RMV STB BS AND/OR ASH PAV (CL 2)VAR DEP	SY	220.400	8.000	1,763.20
110	0501		EXCAVATION (RDWY)	CY	2,293.300	7.000	16,053.10
132	0509		EMBANK (DENS CONT) (TY C) (CL 3)	CY	970.000	7.500	7,275.00
160	0506		FURN AND PLAC TPSL (CL 2) (4 ")	SY	4,152.600	2.000	8,305.20
162	0502	001	BLOCK SODDING	SY	1,020.300	3.000	3,060.90
168	0501		VEGETATIVE WATERING	MG	2.800	75.000	210.00
276	0624		CEM TRT BS (STR-M) (TY A GR 1) (CL 2)	TON	2,553.300	19.050	48,640.37
360	0524	028	CONC PAV (CPCD) (8")	SY	7,196.800	25.200	181,359.36
360	0526	028	MONO CURB (TY II)	LF	5,850.600	1.700	9,946.02
402	0501		TRENCH EXCAV PROTECTION	LF	5.000	20.000	100.00
423	0505		RETAINING WALL (CONC BLOCK)	SF	3,592.000	27.000	96,984.00
432	0518		RIPRAP (CONC) (CL B) (FLUME)	CY	3.600	330.000	528.00
464	0505	003	RC PIPE (CL III) (24 ")	LF	5.000	55.000	275.00
465	0914		INLET (COMPL) (CURB) (20 FT) (SPL)	EA	1.000	3,360.000	3,360.00
496	0502		REMOV OLD STR (SMALL)	EA	1.000	2,000.000	2,000.00
500	0501		MOBILIZATION	LS	1.000	94,290.000	94,290.00
502	0501	018	BARRICADES, SIGNS AND TRAF HANDLE	MO	7.000	4,000.000	28,000.00
529	0535		CONC CURB (DOWEL) (TY II)	LF	125.000	10.000	1,250.00
529	0554		CONC CURB AND GUTTER (TY II)	LF	3,476.700	10.000	34,767.00
530	0501		DRVWYS (CONC) (6 ")	SY	916.200	30.000	27,486.00
531	0503		CONCRETE SIDEWALK (WHEELCHAIR RAMP)	SY	253.500	47.500	12,041.25
531	0507		CONCRETE SIDEWALK (4 ")	SY	2,283.100	24.000	54,794.40
536	0511		CONC MEDIAN (MONO NOSE) (VAR DEPTH)	SY	44.000	84.000	3,696.00
618	0504		CONDUIT (RM) (1 1/2")	LF	60.000	9.750	585.00
618	0511		CONDUIT (PVC) (SCHD 40) (2 ")	LF	6,510.000	5.250	34,177.50
618	0513		CONDUIT (PVC) (SCHD 40) (3 ")	LF	80.000	6.250	500.00
618	0514		CONDUIT (PVC) (SCHD 40) (4 ")	LF	40.000	16.200	648.00
618	0535		CONDUIT (PVC) (SCHD 40) (4 ") (BORE)	LF	1,165.000	20.000	23,300.00
618	0545		CONDUIT (PVC) (SCHD 40) (1 ")	LF	320.000	4.550	1,456.00
620	0504		ELEC CONDUCTOR (NO. 6) BARE	LF	1,070.000	0.600	642.00
620	0510		ELEC CONDUCTOR (NO. 6) INSULATED	LF	220.000	0.890	195.80
624	0501		GROUND BOX TY A (122311) W/APRON	EA	18.000	489.000	8,802.00
624	0503		GROUND BOX TY C (162911) W/APRON	EA	2.000	707.000	1,414.00
628	0622		ELEC SERV TYS (120/240) 000 (NS) GS (E) SP (U)	EA	2.000	1,500.000	3,000.00
649	0504		RELOC SMALL RDSG SCN ASSMS	EA	7.000	365.000	2,555.00
656	0512		FND FOR TRAF SIG (36 IN DRIL SHFT)	LF	112.000	140.000	15,680.00
656	0518		TRAF SIG CNTRL FND	CY	2.200	900.000	1,980.00
662	0511	003	WRK ZN PAV MRK REMOV (W) (24") (SLD)	LF	280.000	10.200	2,856.00
662	0541	003	WRK ZN PAV MRK REMOV (CL B) TY I-A	EA	305.000	3.000	915.00

TxDOT SW AREA OFFICE Fax: 972-235-8667 Aug 5 1999 10:50 P.11

ITEM	DESC	SPV	DESCRIPTION	UNIT	QUANTITY	PRICE	AMOUNT
662	0542	003	WRK ZN PAV MRK REMOV (CL B) TY I-C	EA	627,000	\$ 3.900	\$ 2,445.30
662	0545	003	WRK ZN PAV MRK REMOV (CL C) TY W	EA	1,997,000	2.250	4,493.25
662	0546	003	WRK ZN PAV MRK REMOV (CL C) TY Y	EA	914,000	2.750	2,513.50
666	0502	018	REFL PAV MRK TY I (W) (4") (BRK)	LF	362,000	0.420	152.04
666	0509	018	REFL PAV MRK TY I (W) (12") (SLD)	LF	1,658,000	2.500	4,145.00
666	0512	018	REFL PAV MRK TY I (W) (24") (SLD)	LF	432,000	5.600	2,419.20
666	0513	018	REFL PAV MRK TY I (W) (ARROW)	EA	43,000	124.000	5,332.00
666	0517	018	REFL PAV MRK TY I (W) (WORD)	EA	43,000	134.000	5,762.00
666	0536	018	REFL PAV MRK TY II (W) (4") (BRK)	LF	362,000	0.350	126.70
666	0541	018	REFL PAV MRK TY II (W) (12") (SLD)	LF	1,658,000	2.000	3,316.00
666	0544	018	REFL PAV MRK TY II (W) (24") (SLD)	LF	432,000	2.500	1,080.00
666	0545	018	REFL PAV MRK TY II (W) (ARROW)	EA	43,000	40.000	1,720.00
666	0549	018	REFL PAV MRK TY II (W) (WORD)	EA	43,000	37.500	1,612.50
672	0502	012	RAIS PAV MRKR CL A (JIGGLE) TY I-C	EA	284,000	12.500	3,550.00
672	0507	012	RAIS PAV MRKR CL B (REFL) TY I-C	EA	574,000	4.000	2,296.00
672	0516	012	RAIS PAV MRKR CL C (TRAF BTN) TY W	EA	588,000	4.500	2,646.00
677	0506		ELIM EXT PAV MRK & MRKR (24")	LF	290,000	3.150	913.50
677	0518		ELIM EXT PAV MRK & MRKR (RAIS PAV MRKR)	EA	1,406,000	1.000	1,406.00
678	0501		PAV SURF PREP FOR MRKS (4")	LF	362,000	0.900	325.80
678	0504		PAV SURF PREP FOR MRKS (12")	LF	1,658,000	0.750	1,243.50
678	0506		PAV SURF PREP FOR MRKS (24")	LF	432,000	2.100	907.20
678	0507		PAV SURF PREP FOR MRKS (ARROW)	EA	43,000	14.000	602.00
678	0508		PAV SURF PREP FOR MRKS (WORD)	EA	43,000	15.500	666.50
680	0502		INSTAL OF HWY TRAF SIG (SYSTEM)	EA	2,000	7,500.000	15,000.00
684	0520		TRAF SIG CBL (TY A) (20 CONDR) (12 AWG)	LF	1,280,000	3.700	4,736.00
684	0546		TRAF SIG CBL (TY C) (2 CONDR) (18 AWG)	LF	5,695,000	0.750	4,271.25
684	0553		TRAF SIG CBL (TY A) (5 CONDR) (16 AWG)	LF	1,945,000	1.150	2,236.75
684	0554		TRAF SIG CBL (TY A) (7 CONDR) (16 AWG)	LF	50,000	1.200	60.00
688	0511		VEH DETECT (SAWCUT)	LF	8,470,000	5.000	42,350.00
5007	0501		BALED HAY FOR EROSN & SEDMT CONT	EA	32,000	15.500	496.00
5007	0502		BL HAY FOR ERSN & SED CONT (RMV & REPL)	EA	32,000	12.100	387.20
5007	0503		BALED HAY FOR EROSN & SED CONT (REMOV)	EA	32,000	6.000	192.00
5012	0501		BKHOB WORK (EROSN CONT) (CL 1)	HR	10,000	50.000	500.00
5051	0501		INTRLOCK CONC PAV STONES	SY	74,500	36.000	2,682.00
5249	0501		TEMP SEDMT CONT FENCE	LF	4,950,000	3.500	17,325.00
5249	0502		TEMP SEDMT CONT FENCE (REMOVE & REPLAC)	LF	4,950,000	2.500	12,375.00
5249	0503		TEMP SEDMT CONT FENCE (REMOV)	LF	4,950,000	1.000	4,950.00
5509	0501		ADJ WASTEWATER LAT CLEANOUT	EA	1,000	290.000	290.00
5509	0502		ADJ WASTEWATER MAINLINE CLEANOUT	EA	3,000	290.000	870.00
5510	0501		ADJ OF FIRE HYDRANT	EA	6,000	900.000	5,400.00
5511	0501		RELOCATE EXIST METER & METER BOX	EA	17,000	575.000	9,775.00
5512	0501		VERT ADJ WTR VALVE COVER & VALVE STACK	EA	16,000	95.000	1,520.00
6010	0501		SALV TRAF SIGNALS	EA	2,000	2,500.000	5,000.00
6031	0511		COMMUN CABLE (6 PAIR) (16 AWG)	LF	3,530,000	2.500	8,825.00
						SUBTOTAL	\$ 1,037,225.27
						ENGINEERING AND CONTINGENCIES	173,216.62
CONTRACTOR FORCE ACCOUNT WORK (PART)							
			TRANSPOTABLE CELLULAR TELEPHONE	LS	1.000	\$	1,000.00
						MISCELLANEOUS COST	\$ 1,000.00
						TOTAL ALL ITEMS	\$ 1,211,441.89

864 over
~~1.2~~
~~1.9~~
~~7.0~~
~~\$200~~
 \$900
 \$450

FUNDING SOURCES

1.5M (DART LAP) \$750/\$750
 400? (DARTS OWN) ENG/ETC
 ? OTHER SOURCES

\$453 from DART

BRENDA?
 COG

What is left?

1. DART participation
R.O.W. Etc
2. Our LAP
\$750,000
3. State \$

Summary of Expenses to Date

Addison

\$750,000 DART LAP (went to DART)
 \$750,000 LAP (we kept)

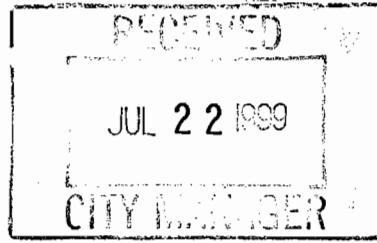
 1.5M

State Farm Insurance Companies



North Texas Office
17301 Preston Road
P.O. Box 799100
Dallas, Texas 75379-9100

Keith M. Androff, CLU, ChFC, FLMI
Regional Public Affairs Manager
Phone: (972) 732-5445



July 19, 1999

Ron Whitehead
P.O. Box 144
Addison, TX 75001

Dear Ron:

Enclosed is the State Farm grant application we discussed in our meeting for the intersection located at Beltline and Midway. If you plan to apply for financial assistance, your application must be completed and returned to John Werner at the address listed on the application by September 30, 1999.

The available funds are intended for an Intersection Operational and Safety Study. We look forward to talking with you more about this project and stand ready to assist you or any of your staff regarding this grant application. If you have any questions, please give me a call at 972-732-5445.

Sincerely,

Keith M. Androff

Enclosure

National List-Phase 2

**GRANT APPLICATION
INTERSECTION SAFETY IMPROVEMENTS**

For Internal use only:

Date Application Received _____

Application Number: _____

DUE: July 1, 2000

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities controlling intersections specified by State Farm up to \$100,000 for engineering counter measures that will mitigate high crash and injury risk. The Intersection Operational and Safety Studies completed under Phase One will have identified engineering countermeasures that can result in significant reduction in crashes. This grant is intended to provide funds for engineering improvements which are generally low cost and immediately available identified in the Intersection Operational and Safety Study for the intersection and proposed by the government entity.

The study performed pursuant to Phase One of this grant should meet the following objectives:

1. Identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. Recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. Conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. Recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please provide the following information regarding the proposed intersection improvements:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT DIRECTOR:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:

Beltline and Midway

Amount of funding requested:

Please attach a description of the proposed improvements for the above listed intersection. The description should contain sufficient detail to determine that the proposed improvements are consistent with the findings of the report prepared pursuant to Phase One of this program.

The award of a grant shall be at the sole discretion of State Farm.

State Farm will release the funds upon the certification of a professional engineer that the improvements to the intersection have been completed.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway Intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Chief Authorizing Officer

Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: July 1, 2000

Attachment A

TERMS OF REFERENCE FOR INTERSECTION OPERATIONAL AND SAFETY STUDIES

Study Objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection.
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Required Study Procedures:

The study shall consist of the following Phases:

Phase 1: Quantitative Intersection Analysis

This phase shall consist of the following tasks:

Task 1: Geometric Analysis

Review the existing intersection geometry and check for any characteristics that may be contributing to a high crash risk. Include a check of sight distance, turn radii, horizontal and vertical alignment, signal visibility, pavement marking, clear zone, pedestrian and transit facilities, and any other relevant geometric features.

Task 2: Crash Data Analysis

Review police crash data and identify all relevant patterns, including spatial and temporal characteristics, weather, pavement, and light conditions, crash types, contributing causes, and any other crash characteristics. Analysis to include the last three years of available data.

Task 3: Traffic Conflict Analysis

Conduct a detailed traffic conflict survey. Observe, record, and analyze all conflicts using trained and qualified observers. The traffic conflict survey is to be conducted according to the Traffic Conflicts Procedures Manual, 2nd Edition (November 1996) prepared by Hamilton Associates for the Insurance Corporation of British Columbia. A copy of the manual can be obtained from State Farm or from Hamilton Associates at 604-684-4488. Analyze the conflict data to determine the causes behind the conflicts, temporal and

spatial distributions, as well as the most severe and hazardous conflict types using a numerical scale. Relate the conflict findings to the crash data analysis.

Task 4: Capacity Analysis

Conduct turning movement traffic counts for the morning, midday, and afternoon peak periods. Review the signal timing and phasing plan. Analyze the intersection capacity and levels of service per movement using the Highway Capacity Manual procedures. Include a review of bus and pedestrian operations. Review efficiency, delays and queuing, from a safety perspective to determine the interrelationship between capacity operations and safety performance.

Task 5: Human Factors Analysis

Observe and analyze driver behavior at the Intersection, and the relationship between the existing geometric characteristics and driver perceptions of the intersection. Measure approach speeds, review the visual environment (including directional and regulatory signing, landscaping, land use, and background distractions) from the perspective of the driver.

Phase 2: Identification of Deficiencies

Using the results of Phase 1, clearly identify the engineering characteristics of the Intersection that are contributing to a high crash risk. Clearly relate each identified deficiency with the measurable features that were analyzed in Phase 1. All identified deficiencies shall be supported by the quantitative analysis.

Phase 3: Development of Countermeasures

Develop a set of engineering countermeasures that will mitigate the deficiencies Identified in Phase 2. Clearly relate each engineering countermeasure with the specific deficiency that will be addressed. Develop both low cost, readily implementable countermeasures as well as longer term, potentially more costly solutions. Clearly demonstrate the effectiveness of the countermeasures in addressing the identified deficiencies, by providing quantitative, empirical evidence of effectiveness.

While engineering countermeasures are the focus of this study, enforcement efforts that may be effective in reducing the crash risk should also be identified whenever possible. The need for additional enforcement should be supported by quantified driver behavior characteristics, such as speeding, red light running, and aggressive weaving /lane changing.

Phase 4: Economic Evaluation

Conduct an economic evaluation of the recommended engineering countermeasures by clearly quantifying the expected countermeasure effectiveness in terms of crash

reduction; the average societal and typical insurance claim values of the saved crashes; and the countermeasure implementation cost. Account for the estimated project life of the engineering countermeasures, and apply an appropriate discount rate in the calculation of the costs and benefits. Calculate the safety benefit to cost ratio of the countermeasures, from both the average societal and typical insurance cost perspectives. Account for crash severity in this analysis, both in terms of the value of the anticipated crash reduction and the expected crash characteristics after implementation of the countermeasures.

In addition, determine and quantify whenever possible the non-safety implications of the engineering countermeasures, such as impacts on capacity, accessibility, and land use. Clearly identify the tradeoffs involved in implementing the engineering countermeasures.

Phase 5: Action Plan

Using the results of Phases 1 through 4, develop an Action Plan for the implementation of countermeasures at the intersection to reduce the crash risk. The Action Plan shall clearly identify a set of immediately implementable countermeasures that are achievable at relatively low cost, as well as a set of longer-term countermeasures that may require capital cost programming. The associated benefits and costs at every stage of the Action Plan should be clearly summarized.

Phase 6: Documentation

A Draft Report clearly documenting all the study procedures, assumptions, findings, calculations, and recommendations shall be prepared. The Draft Report shall be clearly organized according to the sequence of Phases 1 to 5 as described above. The Draft Report shall contain figures, tables, and photographs to succinctly summarize and support the key findings of the study, as well as an Executive Summary. The Draft Report contents shall be presented to the [City/County/governmental unit] at a formal project review meeting.

Upon reviewing the contents of the Draft Report, the city will provide comments on the contents. A Final Report incorporating the [City/County/governmental unit]'s comments shall then be prepared.

Stakeholder Consultation:

The stakeholders that are to be consulted during the course of this study are the road agencies that have jurisdiction over the subject intersection, and the police force that has jurisdiction to enforce traffic and record crashes at the intersection. The road agencies are to be consulted and provided with project updates at least twice prior to the Submission of the Draft Report: early in Phase One, and at the end of Phase Three. A third meeting with the road agencies will occur at the presentation of the Draft Report. The police are to be consulted during Phase One of the study.

Study Schedule

The study is to be completed to the Draft Report stage within one month of authorization being received to proceed.

Consultant's Proposal:

Consultants who are interested in submitting a proposal to complete this study should clearly demonstrate their skill and experience in conducting similar studies. The proposal should include:

- X The consultant's understanding of the study requirements (1 page or less).
- X The consultant's work plan, clearly indicating the procedures to be used to complete each of the identified phases and tasks. Indicate the key milestones, deliverables, and meetings with the stakeholders (5 to 10 pages).
- X The consultant's project team, clearly identifying the Project Manager, and the relevant experience of the team members (2 to 3 pages). Generic resumes may be included in an Appendix.
- X The consultant's recent experience on similar projects, with project descriptions and reference names and telephone numbers (2 to 3 pages). Project sheets may be included in an Appendix.
- X The consultant's schedule for completing the study (2 pages or less).
- X Summary of the advantages and special features offered by the consultant's proposal (1 page or less).

After the Table of Contents, the consultant's proposal should not exceed 20 pages, including all diagrams, figures and tables. Appendices can be additional, but may not necessarily be reviewed.

The proposals will be evaluated on the basis of:

- X Understanding of the assignment (15%).
- X Thoroughness of the Work Plan (40%).
- X Composition of the Project Team, and experience on similar projects (20%)
- X Quality and effort inherent in the proposal (15%).
- X Innovation and value-added offered by the proposal (10%).

National List-Phase 1

**GRANT APPLICATION
INTERSECTION SAFETY STUDY**

DUE: September 30, 1999

<i>For Internal use only:</i> Date Application Received _____ Application Number: _____

State Farm Mutual Automobile Insurance Company (State Farm) is making available to governmental entities up to \$20,000 for Intersection Operational and Safety Studies for specific intersections identified by State Farm pursuant to its research. Following completion of the study, additional funds (up to \$100,000) will be available under a separate grant for repair or improvements meeting the objectives of the Intersection Operational and Safety Study.

Studies performed pursuant to this grant shall include the following objectives:

1. To identify the road engineering deficiencies that are contributing to a high crash risk at the subject intersection
2. To recommend a set of engineering countermeasure strategies that will address the identified deficiencies.
3. To conduct an economic evaluation that will identify the costs and benefits of the recommended countermeasures.
4. To recommend an immediate and long term action plan for implementing the engineering countermeasures.

Please see Attachment A for a complete description of the type of study eligible for such funding.

Please provide the following information regarding a proposed study:

APPLICANT INFORMATION

Local Government (Name) City of Addison

CHIEF AUTHORIZING OFFICIAL:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT DIRECTOR:

Name _____ Title _____

Telephone Number _____ Facsimile Number _____

Address (street, city, state, zip code): _____

PROJECT INFORMATION

Address of intersection identified by State Farm for possible eligibility for subject grant:

Beltline and Midway

Amount of funding requested:

Name of Consultant:

Please attach a description of the proposed study for the above listed intersection. The description should contain sufficient detail to determine that the proposal meets the criteria described in Attachment A to this application. State Farm will release the funds upon its confirmation that the proposed study is consistent with the terms of reference criteria described in Attachment A.

The award of a grant shall be at the sole discretion of State Farm. Studies must be completed within six months of approval of the grant proposal by State Farm.

The City of Addison agrees that it shall provide a copy of the completed Intersection Operational and Safety Study report pursuant to this grant to be used for State Farm's research purposes.

The City of Addison takes full responsibility for and agrees to indemnify State Farm for any expenses for any and all claims or actions, which arise concerning the construction, and subsequent highway usage, maintenance and management related to the Beltline and Midway intersection.

The City of Addison agrees that its acceptance of funds from State Farm will indicate its acceptance to the terms and conditions of the grant.

Chief Authorizing Officer

Date

Please send completed form to:
John Werner
Assistant Director
State Farm Insurance Companies
One State Farm Plaza D-3
Bloomington Illinois 61710
DUE: September 30, 1999