



HISTORIC  
FRANKLIN  
TENNESSEE

ITEM #11  
WRKS 03/23/2010

MEMORANDUM

March 12, 2010

**TO:** Board of Mayor and Aldermen

**FROM:** David Parker, City Engineer/CIP Executive  
Eric Stuckey, City Administrator

**SUBJECT:** **Clovercroft Road at Oxford Glen Drive Intersection Improvements**

**Purpose**

The purpose of this memorandum is to provide the Board of Mayor and Aldermen (BOMA) with additional information regarding intersection improvements at Clovercroft Road and Oxford Glen Drive.

**Background**

Williamson County had requested that the City of Franklin help fund improvements to the intersection of Clovercroft Road and Oxford Glen Drive due to sight distance problems. The County requested that the City fund twenty-five percent (25%) of the cost to grade the hill to the west of the intersection to provide the required sight distance and 25% of the cost of the signalization of the intersection for a strain pole installation plus any additional cost to provide the signalization to City standards (mast arms and poles). The City agreed (see attached letter to Rogers Anderson) to the funding of only 25% of the grading (\$51,875) with the desire to hold off on the signalization until it could be determined after the completion of the grading if the signalization of the intersection was actually needed.

The City has recently learned that the County has decided, however, to pursue both of the improvements to the intersection of Clovercroft and Oxford Glen, grading and installation of signalization. The cost (estimated at \$327,105) of the installation of the signalization will be borne entirely by the County and will be installed utilizing strain poles and wires for the signal head installations. It is our understanding that the County is continuing with the efforts to signalize the intersection is because of their being placed on notice of the need, recommendation from their consultant.

As you may recall, staff previously recommended that if the signalization was to be installed at this intersection that it be done to City standards and that the City own and maintain the signalization. The estimated cost for the signalization to meet City standards has been provided as a cost of \$371,090.

**Financial Impact**

The budget amendment providing for the City's funding commitment of \$51,875 is in process with the third and final reading scheduled for the March 23<sup>rd</sup> BOMA meeting.

**Recommendation**

Based on concerns identified in a recent traffic study, Williamson County has under its own authority determined that making that signalization a part of the intersection improvement at Clovercroft and Oxford Glen Drive. The County is not requiring additional financial participation by the City at this time. Proceeding with the City's previous commitment to improving the intersection is recommended.



# MEMORANDUM

November 2, 2009

**TO:** Board of Mayor and Aldermen

**FROM:** Eric Stuckey, City Administrator  
David Parker, City Engineer/CIP Executive

**SUBJECT:** **Clovercroft Road at Oxford Glen Drive Intersection Improvements  
Consideration of Agreement with Williamson County for Funding**

### Purpose

The purpose of this memorandum is to present to the Board of Mayor and Aldermen (BOMA) information to consider a cost-sharing arrangement with Williamson County for intersection improvements at Clovercroft Road and Oxford Glen Drive.

### Background

Williamson County (County) has requested that the City of Franklin (City) help fund improvements to the intersection of Clovercroft Road and Oxford Glen Drive due to sight distance problems. The County is requesting the City fund twenty-five percent (25%) of the cost to grade the hill and to install traffic signalization. For the signalization, the County is requesting the City to fund twenty-five percent (25%) of the cost for a strain pole installation and any additional cost to provide a signal installation to City standards.

Earlier this year, the City agreed to help fund a traffic study of the intersection of Clovercroft Road at Oxford Glen Drive at twenty-five percent (25%) of the cost. The funding allocation is based on the fact that the intersection is a 4-legged intersection with 3-legs being in the County (75%) and 1-leg in the City (25%). Upon completion of the traffic study and an Advanced Planning Report that provided costs to grade the hill to the west of the intersection to provide the required sight distance for speeds up to 50 miles per hour (MPH), the County requested twenty-five percent (25%) funding for the grading work. On September 22, 2009, the Franklin Board of Mayor and Aldermen approved the expenditure of up to \$51,875 (25% of estimated cost for grading) for this project. Subsequently (see letter of October 8, 2009 from County mayor Rogers Anderson attached), it was determined that the County actually wanted to request 25% funding for the signalization of the intersection as well as the grading work.

The installation of signalization at the intersection of Clovercroft Road at Oxford Glen Drive is estimated (RPM Associates) at \$119,605 for a steel strain pole support installation. In order to install the signalization as per the City's standards, the estimated cost is \$163,590. City staff has also indicated to the County Highway Commission that the City would probably want to take over ownership and maintenance responsibilities for any signalization installed at this intersection. The City has the ability to maintain the installation in-house.

### Options

Based on the dialog with the County to date the following option can be considered:



1. Do nothing and let the County fund the entire cost – may mean the project is not accomplished and there remain a traffic safety issue.
2. Fund 25% of the cost to grade the hill to provide adequate sight distance (previous BOMA direction).
3. Fund 25% of the cost to grade the hill and to install the traffic signalization;
  - a. Using steel strain poles
  - b. Using City's standard mast arm supports
4. Fund 25% of the cost to grade the hill and estimated cost of signal installation using steel strain poles, and any additional cost to install signalization at City standard.

### **Financial Impact**

Option 1 – No cost to the City.

Option 2 - The estimated cost for the grading work to cut the hill down to allow for proper sight distance is \$207,500. At 25% of the estimated cost, the City's share would be \$51,875.

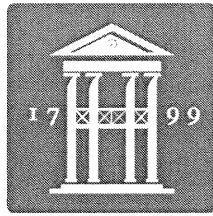
Option 3 a. – The estimated cost for the grading and signalization using strain poles is \$327,105. At 25% of the estimated cost, the City's share would be \$81,776.

Option 3 b. – The estimated cost for the grading and signalization using mast arm supports is \$371,090. At 25% of the estimated cost, the City's share would be \$92,773.

Option 4 – The estimated cost for the grading and signalization using mast arm supports is \$371,090. At 25% of the estimated cost of grading and strain poles, plus the additional cost to meet City standards, the City's share would be \$125,761.

### **Recommendation**

Staff recommends entering into an agreement with the County for Option 2; fund 25% of the cost to grade the hill west of the intersection of Clovercroft Road and Oxford Glen Drive to provide the sight distance needed to bring this intersection into compliance with roadway safety standards. Until there is a known need for signalization after the sight distance is adequately improved, staff does not feel that additional money should be spent for signalization. If after the hill is graded to provide adequate sight distances there is a demonstrated need for signalization to correct reported crashes, then the installation of signalization at this intersection can be revisited. Should signalization be installed, it is still staff's recommendation that it be installed to City standards and that the City own and maintain the signals.



November 23, 2009

HISTORIC  
FRANKLIN  
TENNESSEE

Honorable Rogers Anderson  
Williamson County Mayor  
1320 West Main Street  
Suite 125  
Franklin, Tennessee 37064

Re: Clovercroft Road and Oxford Glen Drive Intersection

Dear Rogers:

On November 10, 2009, the Franklin Board of Mayor and Aldermen considered your request for Franklin's participation in the proposed improvements to the intersection of Clovercroft Road and Oxford Glen Drive. Your proposal was for Franklin to agree to fund twenty-five (25%) of the cost of lowering the hill on Clovercroft and the installation of signalization at the intersection of Clovercroft Road and Oxford Glen Drive. The Board of Mayor and Aldermen voted to continue with the partnership previously approved by agreeing to pay for twenty-five percent (25%) of the cost to grade the hill on Clovercroft Road to allow for the proper sight distance needed to bring the intersection into compliance with roadway safety standards. The Board of Mayor and Aldermen further indicated that after this work was accomplished and if there a demonstrated need for signalization to correct reported crashes, then they could revisit helping with the signalization of the intersection.

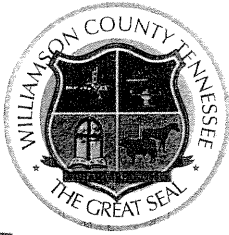
In light of the Franklin Board of Mayor and Aldermen vote, the City of Franklin will fund up to twenty-five percent (25%) of the cost for the lowering (grading) of the hill to the west of Oxford Glen Drive on Clovercroft Road at a cost to the City of approximately \$52,000.00. I would propose that there be an agreement or memorandum of understanding prepared and executed by Williamson County and the City of Franklin to specify the terms of this mutual participation for the approved improvements.

Please feel free to contact me should you have any questions concerning this matter.

Sincerely,

David Parker  
City Engineer/CIP Executive

C: John Schroer, City of Franklin Mayor  
Eric Stuckey, City Administrator



## WILLIAMSON COUNTY

Rogers C. Anderson, County Mayor  
1320 West Main Street, Suite 125  
Franklin, Tennessee 37064  
(615) 790-5700, Fax (615) 790-5818

# COPY

August 12, 2009

Honorable Mayor John Schroer  
City of Franklin  
109 Third Avenue, South  
Franklin, TN 37064

RE: Traffic Study - Clovercroft Road and Oxford Glen Drive Intersection

Dear Mayor Schroer:

This correspondence is in response to a request made by the Williamson County Highway Commission during their meeting on August 5, 2009 regarding the traffic study conducted for the intersection at Clovercroft Road and Oxford Glen Drive. The City of Franklin (the "City") and Williamson County have previously agreed to share in the cost of obtaining a traffic study and to cooperate in addressing any possible safety issues should the study identify same.

The traffic study has been completed by RPM Transportation Consultants, Inc. and copies were provided to the City. RPM concluded that the most desirable solution would be to grade the hillcrest to the west of the intersection to provide for minimum sight distance for speeds up to 50 miles per hour. Additionally, RPM concluded that the installation of a traffic signal would help to alleviate the traffic concerns. As a result of the findings contained in RPM's report, the Highway Commission directed Collier Engineering to provide an advanced planning report as to what the improvements would entail and the cost of the improvements. A copy of Collier Engineering's report is being provided for your convenience.

The advanced planning report concluded that the estimated cost of grading the hill, as recommended by RPM, to approximately \$207,500. Should it be determined that a signal light is also needed, the cost of installation of the signal would be in addition to the quote provided above.

In light of the foregoing, the Williamson County Highway Commission requests that the City assist Williamson County with the cost of the recommended improvements. As with the cost of the traffic study, the County request that the City pay 25% of the cost for the improvements.

Thank you for your continued spirit of cooperation with Williamson County as we work together towards the benefit of all our citizens. Please feel free to contact me should you have any questions.

Sincerely,

Rogers Anderson  
Williamson County Mayor

**COLLIER**  
ENGINEERING CO., INC.  
CONSULTING ■ DESIGN ■ CONSTRUCTION

7105 Crossroad Blvd., Suite 107  
Brentwood, TN 37027  
Phone: (615) 331-1441  
Fax: (615) 331-1050

# ***ADVANCE PLANNING REPORT***

## ***ROADWAY IMPROVEMENTS***

***CLOVERCROFT ROAD  
ROADWAY IMPROVEMENTS AT  
INTERSECTION OF OXFORD GLEN DRIVE  
WILLIAMSON COUNTY***

*Prepared by  
Collier Engineering Co., Inc.*

*FOR THE  
WILLIAMSON COUNTY HIGHWAY DEPARTMENT  
WILLIAMSON COUNTY, TENNESSEE*

CLOVERCROFT ROAD  
ROADWAY IMPROVEMENTS AT  
INTERSECTION OF OXFORD GLEN DRIVE  
WILLIAMSON COUNTY, TENNESSEE

PAGE 1

TABLE OF CONTENTS

(NOT TO SCALE)

**COLLIER**  
ENGINEERING CO., INC.  
CONSULTING • DESIGN • CONSTRUCTION

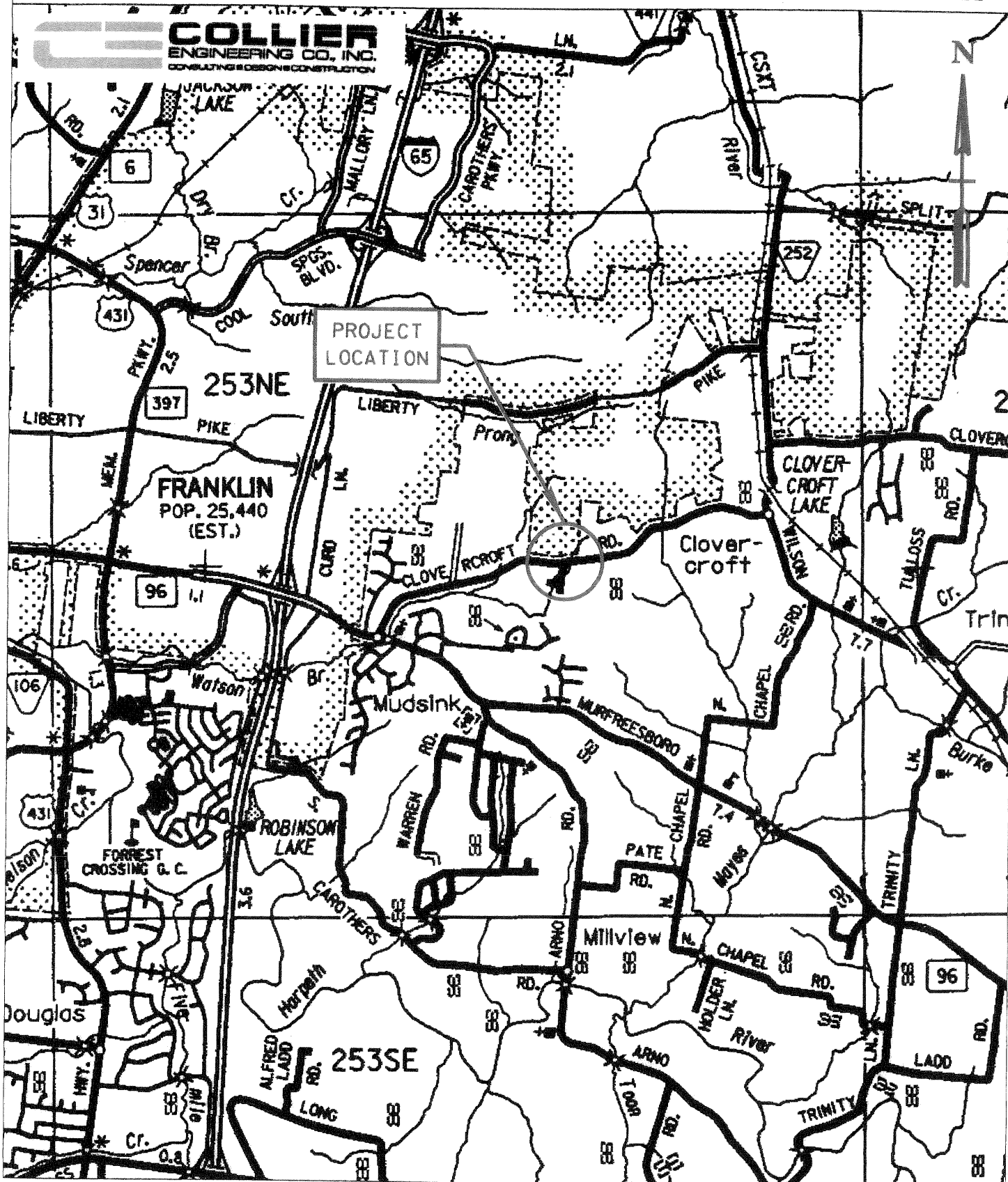
TABLE OF CONTENTS - PLANNING REPORT		
ITEM NO.	DESCRIPTION	PAGE NUMBERS
1	REPORT COVER SHEET	0
2	TABLE OF CONTENTS	1
3	LOCATION MAP	2
4	DETOUR MAP	3
5	TOPOGRAPHICAL LOCATION MAP - U.S.G.S. QUAD	4
6	ADVANCE PLANNING WORKSHEET	5
7	COST ESTIMATE	6
8	CHECK LIST OF DETERMINANTS FOR LOCATION STUDY	7
9	CLOVERCROFT ROAD - MEMORANDUM	8-9
10	PHOTOGRAPHS - LOCATION MAP	10
11	CLOVERCROFT ROAD - PHOTO LOG	11-12
12	TYPICAL SECTIONS	13

ROADWAY IMPROVEMENTS AT  
INTERSECTION OF OXFORD GLEN DRIVE  
WILLIAMSON COUNTY, TENNESSEE

LOCATION MAP

(NOT TO SCALE)

**COLLIER**  
ENGINEERING CO., INC.  
CONSULTING ENGINEERS & CONSTRUCTORS

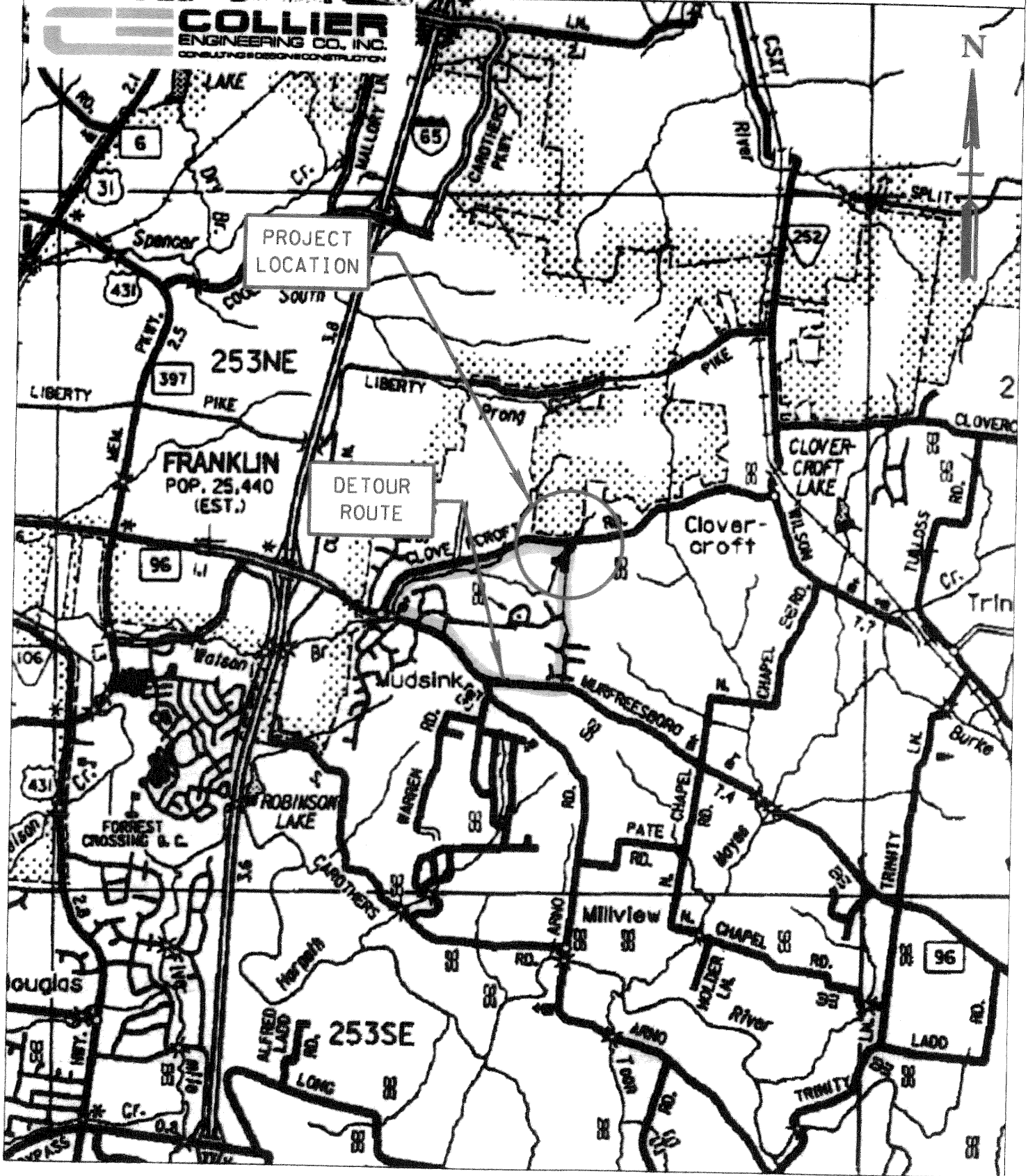




CLOVERCROFT ROAD  
ROADWAY IMPROVEMENTS AT  
INTERSECTION OF OXFORD GLEN DRIVE  
WILLIAMSON COUNTY, TENNESSEE

DETOUR MAP

(NOT TO SCALE)



CLOVERCROFT ROAD  
ROADWAY IMPROVEMENTS AT  
INTERSECTION OF OXFORD GLEN DRIVE  
WILLIAMSON COUNTY, TENNESSEE

PAGE 1

TABLE OF CONTENTS

(NOT TO SCALE)



TABLE OF CONTENTS - PLANNING REPORT		
ITEM NO.	DESCRIPTION	PAGE NUMBERS
1	REPORT COVER SHEET	0
2	TABLE OF CONTENTS	1
3	LOCATION MAP	2
4	DETOUR MAP	3
5	TOPOGRAPHICAL LOCATION MAP - U.S.G.S. QUAD	4
6	ADVANCE PLANNING WORKSHEET	5
7	COST ESTIMATE	6
8	CHECK LIST OF DETERMINANTS FOR LOCATION STUDY	7
9	CLOVERCROFT ROAD - MEMORANDUM	8-9
10	PHOTOGRAPHS - LOCATION MAP	10
11	CLOVERCROFT ROAD - PHOTO LOG	11-12
12	TYPICAL SECTIONS	13

## ADVANCE PLANNING WORKSHEET

## ROADWAY IMPROVEMENT ANALYSIS, NEEDS, AND COSTS

County Williamson Route Clovercroft Road @ Oxford Glen Drive Road Mileage 0.23  
 Stream Feature Crossed None System Local  
 Functional Classification Rural / Local Road

EXISTING CONDITIONS

2008 ADT 3090 App. Cross Section Varies 35'-42' (50' R.O.W.) No. Lanes 2-3  
 Roadway Alignment 1 Curve Section; 2 Tangent Sections Year Approved 1979  
 Width (edge to edge) 35.0'-42.0' Sidewalks: Right N/A Left N/A  
 Road Surface Type Hot Mix Asphalt Surface Classification Class 2 (Roadbed 35'-42' Wide)

Other: The project runs from the west to east along Clovercroft Road through the intersection of Oxford Glen Drive. This intersection is located in a residential area with subdivisions on the north and south side of the intersection. There are fence lines along Clovercroft Road. Car accidents have been documented along this stretch of roadway. Existing utilities along the project include power lines, telephone lines, water lines, gas lines and cable. There are turn lanes along Clovercroft Road at the intersection for Oxford Glen Drive. Sight distance to the west from Oxford Glen Drive is limited due to a hill in the roadway grade of Clovercroft Road.

PROPOSED IMPROVEMENTS - STANDARDS FROM RD01-TS- 1

Type of Work Grade/Resurface Design Year 2028 ADT 4,330  
 Length of Project 1,230' Design Speed 40 mph  
 Approach Width 36'/42'/50' R.O.W. No. Lanes 3  
 Right-of-Way Required No Temporary Detour Yes. (Williamson Co. agrees to detour.)

Alternate Route: Traveling west on Clovercroft Road; Turn left onto Oxford Glen Drive; Traveling south on Oxford Glen Drive; Turn right onto Highway 96; Traveling west on Highway 96; Turn right back onto Clovercroft Road.

ESTIMATED COST

Easement	<u>\$20,000</u>	Engineering	<u>\$29,000</u>	Roadway	<u>\$124,000</u>
Sub-Total	<u>\$173,000</u>	Contingency	<u>\$34,500</u>	Total	<u>\$207,500</u>

Remarks The proposed roadway will be constructed to allow for 3 twelve foot lanes with three foot shoulders on each side. It will also include the necessary roadway ditches on either side of the road as needed for storm water. The proposed plan will utilize the existing road to the fullest extent. The final road surface will be hot mix asphalt.

Field Investigation By: Chad Collier, Randy Carroll, Jeffrey D. Stevens

**CLOVERCROFT ROAD @ OXFORD GLEN DRIVE - COST ESTIMATE**

ASSUMPTIONS FOR THIS ESTIMATE:						
1. T.DOT AVERAGE UNIT PRICES WERE USED						
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTIT Y	UNIT PRICE	AMOUNT	
201-01	CLEARING & GRUBBING	L.S.	1	\$10,000.00	\$10,000.00	
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	2950	\$10.00	\$29,500.00	
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	150	\$15.00	\$2,250.00	
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	1,200	\$4.00	\$4,800.00	
303-01	MINERAL AGGREGATE, TYPE "A", GRADING D	TON	1210	\$15.00	\$18,150.00	
307-01.08	ASPHALT CONCRETE MIX (PG 64-22) (BPMB-HM) GRADING B-M2	TON	380	\$75.00	\$28,500.00	
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	4	\$500.00	\$2,000.00	
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	16	\$20.00	\$320.00	
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1	\$500.00	\$500.00	
403-02	ASPHALT CEMENT FOR TACK COAT (TC)	TON	1	\$500.00	\$500.00	
411-01.10	ACS MIX, GRADING "D"	TON	180	\$100.00	\$18,000.00	
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	100	\$25.00	\$2,500.00	
712-01	TRAFFIC CONTROL	L.S.	1	\$5,000.00	\$5,000.00	
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	1	\$475.00	\$593.75	
801-01	SEEDING (WITH MULCH)	UNITS	32	\$45.00	\$1,440.00	
<b>ESTIMATED ROADWAY CONSTRUCTION COST</b>					<b>\$124,053.75</b>	
<b>TEMPORARY SLOPE AND CONSTRUCTION EASEMENT COST</b>					<b>\$20,000.00</b>	
<b>ENGINEERING DESIGN COST @ 20%</b>					<b>\$28,810.75</b>	
<b>ESTIMATED PROJECT SUB-TOTAL</b>					<b>\$172,864.50</b>	
<b>PROJECT CONTINGENCY COST @ 20%</b>					<b>\$34,572.90</b>	
<b>TOTAL ESTIMATED PROJECT COST</b>					<b>\$207,437.40</b>	

## CHECK LIST OF DETERMINANTS FOR LOCATION STUDY

## Clovercroft Road

If preliminary field reviews indicate the presence of any of the following facilities or ESE categories, place an "x" in the blank opposite the item. Where more than one alternate is to be considered, place its letter designation in the blank.

1. Agricultural land usage \_\_\_\_\_
2. Airport (existing or proposed) \_\_\_\_\_
3. Commercial area, shopping center \_\_\_\_\_
4. Floodplains \_\_\_\_\_
5. Forested land \_\_\_\_\_ **X**
6. Historical, archaeological, cultural, or natural  
landmark, or cemeteries \_\_\_\_\_ **X**
7. Industrial park, factory \_\_\_\_\_
8. Institutional usages
  - a) School or other educational institution \_\_\_\_\_
  - b) Church or other religious institution \_\_\_\_\_ **X**
  - c) Hospital or other medical facility \_\_\_\_\_
  - d) Public building, e.g., fire station \_\_\_\_\_
  - e) Defense installation \_\_\_\_\_
9. Recreational usages
  - a) Park or recreational area, State Natural Area \_\_\_\_\_
  - b) Wildlife refuge or wildlife management area \_\_\_\_\_
10. Residential establishment \_\_\_\_\_ **X**
11. Urban area, town, city, or community **(Clovercroft)** \_\_\_\_\_ **X**
12. Waterway, lake, pond, river, stream, spring, wetland \_\_\_\_\_  
 (Permit required: Coast Guard \_\_\_\_\_ Section 404 **X**  
 Section 10 \_\_\_\_\_ TVA Section 26a review \_\_\_\_\_  
 NPDES \_\_\_\_\_ Aquatic Resource Alteration Permit **X**  
 Class V Injection Wells \_\_\_\_\_)
13. Location coordinated with local officials \_\_\_\_\_ **X**
14. Railroad Crossings \_\_\_\_\_
15. Hazardous Material Site \_\_\_\_\_
16. Other \_\_\_\_\_

MEMORANDUM

Date: 07/22/2009  
To: Special Road Study Committee  
From: Collier Engineering Co., Inc.  
Subject: Clovercroft Road at Oxford Glen Drive - Roadway Improvements  
Williamson County, Tennessee

An Advanced Planning Report field review was conducted for the subject project.

The recommendation for maintaining traffic at this site is to make use of several local roads near the project site to detour traffic around the road construction. Williamson County has agreed to close, sign and maintain an appropriate detour route during the construction of the new road. The proposed detour route would be: Traveling west on Clovercroft Road; Turn left onto Oxford Glen Drive; Traveling south on Oxford Glen Drive; Turn right onto Highway 96; Traveling west on Highway 96; Turn right back onto Clovercroft Road.

The ecological study has identified no wetlands at this site. The study also discovered no threatened or endangered species at this site.

The archeological and historical assessment of the site found no evidence of significant cultural resources.

Length and Width of Clovercroft Road along project in Williamson County:

- West to East along Clovercroft Road Thru Intersection of Oxford Glen Drive

0.230 mi / 35'-40' total width

This project pertains only to the portion of Clovercroft Road from the west side of the Oxford Glen Drive intersection to the east side of the same intersection. This road will be constructed to allow for three twelve foot lanes with three-foot shoulders on each side. It will also include the necessary roadway ditches on either side of the road as needed for storm water. The final surface of the road will be hot mix asphalt. The proposed plan utilizes the existing road fullest extent. There are fence lines along Clovercroft Road. Car accidents have been documented along this stretch of roadway. Existing utilities along the project include power lines, telephone lines, water lines, gas lines and cable. There are turn lanes along Clovercroft Road at the intersection for Oxford Glen Drive. Sight distance to the west from Oxford Glen Drive is limited due to a hill in the roadway grade of Clovercroft Road.

The project cost estimate for roadway construction is approximately \$207,500, which includes construction/slope easements, engineering fees and project contingency costs. These costs do not include the cost of purchasing any right of way. The cost of land in this area would run around \$40,000/acre for any right of way acquisition and the easement acquisition should cost approximately half of that figure.

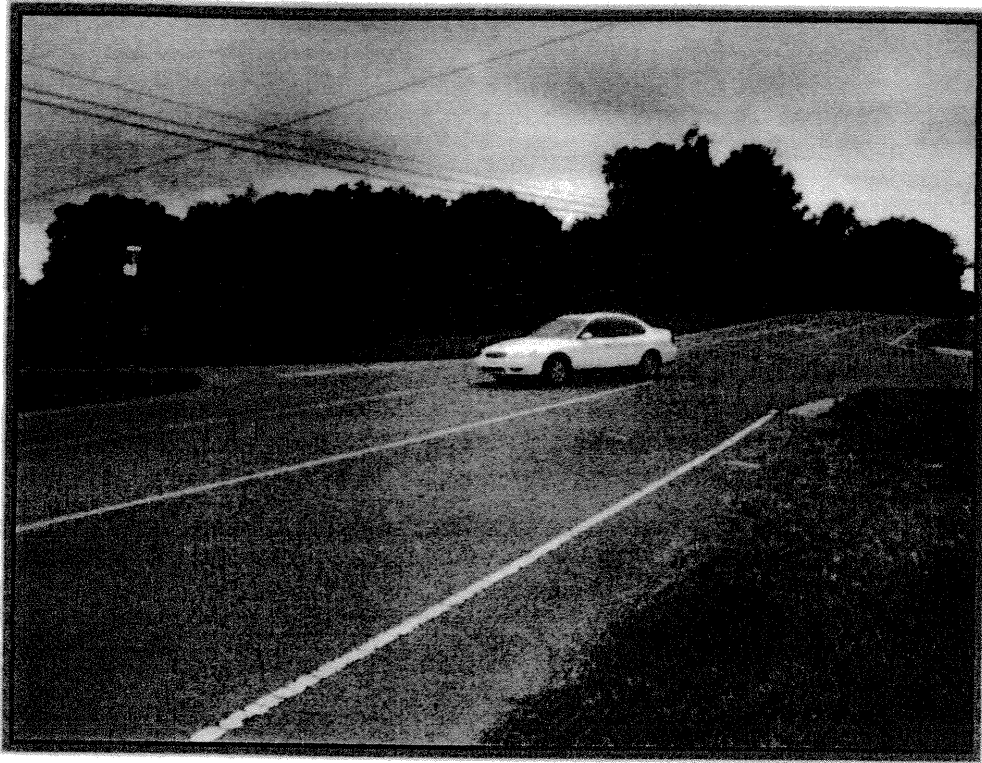


Photo No. 1 – Looking West at Intersection

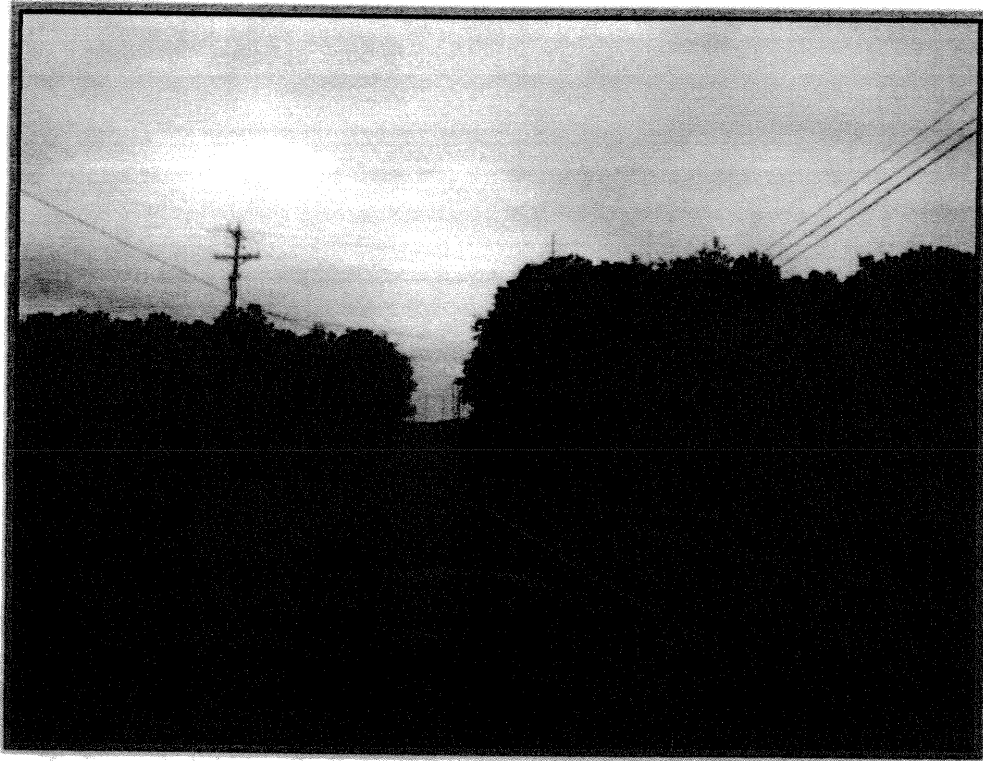


Photo No. 2 – Looking East at Intersection



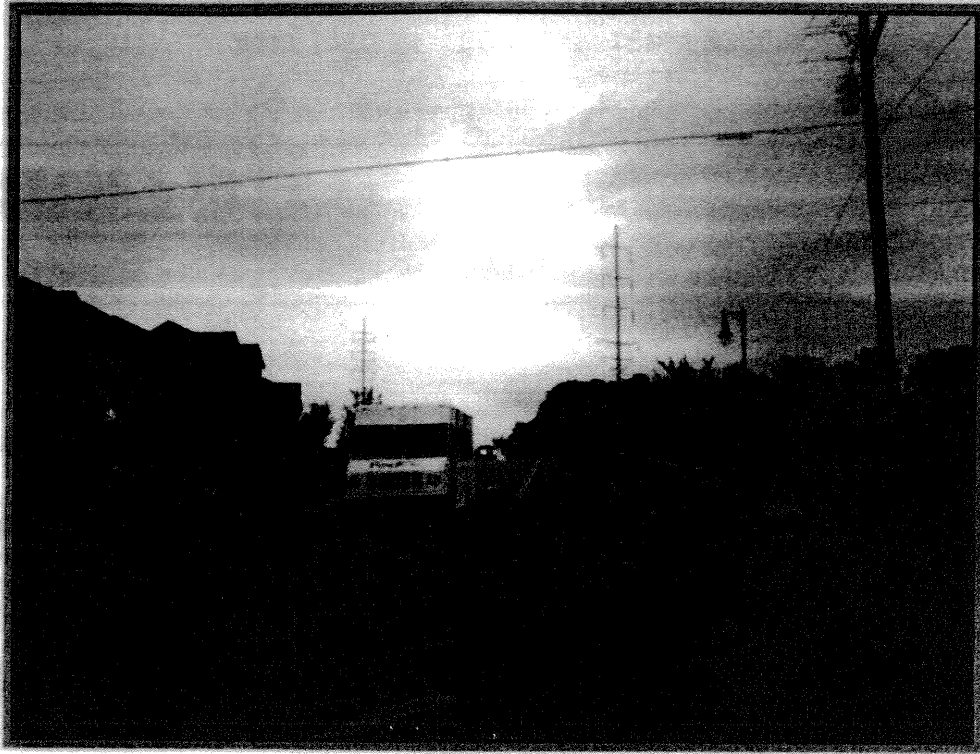


Photo No. 3 – Looking North at Intersection



Photo No. 4 – Looking South at Intersection

CLOVERCROFT ROAD  
 ROADWAY IMPROVEMENTS AT  
 INTERSECTION OF OXFORD GLEN DRIVE  
 WILLIAMSON COUNTY, TENNESSEE

TYPICAL SECTIONS

(NOT TO SCALE)

