

**Transportation Capital Improvement Plan
Upper Saucon Township, Lehigh County**

Final Report

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TABLE OF CONTENTS

	<u>PAGE</u>
I. Introduction.	1
II. Intersection Improvements and Costs	2
III. Source of Funds	56
IV. Budget Estimates and Timetables	58
V. Impact Fee Calculations	58

LIST OF FIGURES

INTERSECTION IMPROVEMENT SKETCHES

<u>FIGURE</u>	<u>INTERSECTION</u>	<u>PAGE</u>
1 -	Vera Cruz Road at Lanark Road	4
2 -	Limeport Pike at Saucon Valley Road	7
3 -	Lanark Road at Saucon Valley Road	10
4 -	Blue Church Road at Lanark Road	13
5 -	Route 309 and Saucon Valley Road.	16
6 -	Route 309 Off - Ramp at Saucon Valley Road.	20
7 -	Route 309 at Chestnut Drive	23
8 -	Route 309 at Lanark Road and Camp Meeting Road.	27
9 -	Main Street at Mill Road	31
10-	Route 309 at Passer Road.	35
11-	Route 378 at Preston Lane	39
12-	Route 378 at Saucon Creek Road.	43
13-	Route 378 at Saucon Valley Road	46
14-	Camp Meeting Road at Preston Lane	50
15-	Old Bethlehem Pike at Saucon Valley Road.	53

LIST OF TABLES

INTERSECTION IMPROVEMENT COST ESTIMATES

<u>TABLE</u>	<u>INTERSECTION</u>	<u>PAGE</u>
1	- Vera Cruz Road at Lanark Road - Impact.	5
2	- Limeport Pike at Saucon Valley Road - Non-Impact.	8
3	- Lanark Road at Saucon Valley Road - Impact.	10
4	- Blue Church Road at Lanark Road - Impact.	14
5	- Route 309 and Saucon Valley Road- Non-Impact	17
6	- Route 309 at Saucon Valley Road - Impact.	18
7	- Route 309 Off-Ramp at Saucon Valley Road - Impact	21
8	- Route 309 at Chestnut Drive - Non-Impact.	24
9	- Route 309 at Chestnut Drive - Impact.	25
10-	Route 309 at Lanark Road and Camp Meeting Road - Non-Impact	28
11-	Route 309 at Lanark Road and Camp Meeting Road - Impact.	29
12-	Main Street at Mill Road - Non-Impact	32
13-	Main street at Mill Road - Impact	33
14-	Route 309 at Passer Road - Non-Impact	36
15-	Route 309 at Passer Road - Impact	37
16-	Route 378 at Preston Lane - Non-Impact.	40
17-	Route 378 at Preston Lane - Impact.	41
18-	Route 378 at Saucon Creek Road - Impact	44
19-	Route 378 at Saucon Valley Road - Non-Impact.	47
20-	Route 378 at Saucon Valley Road - Impact.	48
21-	Camp Meeting Road at Preston Lane - Impact.	51

LIST OF TABLES (CONTINUED)

22- Old Bethlehem Pike at Saucon Valley Road	
Non-Impact.	54
23- Old Bethlehem Pike at Saucon Valley Road - Impact	55
24- Capital Improvement Plan Cost Breakdown	59
25- Capital Improvement Plan	
Budget Estimates and Timetable.	60
26- Impact Fee Zone Breakdown	61

I. INTRODUCTION

This report outlines the Capital Improvement Plan for roadway and intersection improvements as part of the Upper Saucon Township, Lehigh County Transportation Impact Fee Ordinance Study. The improvements were determined from the Land Use Assumption Report and the Roadway Sufficiency Analysis. Cost estimates, schedules and funding sources are presented in this report for the improvements required to the Township's roadway system. These improvements do not include maintenance or safety projects. The improvements identified in this report will remedy existing deficiencies and accommodate future projected traffic volumes. The future improvements are separated into those required by development generated traffic and those required, due to background or development growth outside of an intersection's transportation study area. Those required by development generated traffic are to be funded with Transportation Impact Fees, while the others are to be funded by the Township or other sources. The improvements are presented this way so that the funding sources can be clearly identified. The actual construction may or may not be phased, as indicated in this report.

II. INTERSECTION IMPROVEMENTS AND COSTS

The Roadway Sufficiency Analysis identified fifteen (15) intersections which require improvements for the 2003 study year. These intersections are listed below:

1. Vera Cruz Road at Lanark Road
2. Limeport Pike at Saucon Valley Road
3. Lanark Road at Saucon Valley Road
5. Blue Church Road at Lanark Road
- 6A. Route 309 at Saucon Valley Road
- 6B. Route 309 Off-Ramp at Saucon Valley Road
8. Route 309 at Chestnut Drive
9. Route 309 at Lanark Road and Camp Meeting Road
10. Main Street at Mill Road
11. Route 309 at Passer Road
13. Route 378 at Preston Lane
15. Route 378 at Saucon Creek Road
16. Route 378 at Saucon Valley Road
17. Camp Meeting Road at Preston Lane
20. Old Bethlehem Pike at Saucon Valley Road

As the list indicates, the majority of the improvements are required on Route 309 and Route 378. This report does not address the costs for improvements to this roadway outside of Upper Saucon Township. These improvements, as well as other corridor improvements, should be considered on a regional level.

Each of the intersections are addressed in the following sections. The required improvements, estimated cost and time frame for construction is indicated in the figure included for each intersection.

The corresponding table also outlines the costs of the Capital Improvement Plan. The improvements schedule is included in Section IV.

1. VERA CRUZ ROAD AT LANARK ROAD

Existing Conditions

This T-intersection presently operates at an acceptable level of service. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

This intersection will operate at an acceptable level of service in the future without development condition. No improvements are required.

Future Conditions - Impact Fee Funded Improvements

The following improvements are required to provide an acceptable level of service in the future with development condition. Widen Lanark Road to provide for a left turn lane controlled by a stop sign and a right turn lane controlled by a yield sign. Remove stop sign on the eastbound approach of Vera Cruz Road. Reconstruct approximately 200 ft. on all approaches to meet grade at the intersection. The estimated cost for these improvements is \$104,350.

FIGURE 1
1. VERA CRUZ ROAD AT LANARK ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS	
	<u>IMPROVEMENTS</u> 1. No improvements required 2. 3. 4.
	<u>COST SUMMARY</u> R.O.W. \$ _____ CONSTRUCTION \$ \$ _____ CONTINGENCIES \$ \$ _____ TOTAL COST \$ _____

FUTURE CONDITIONS	
NON-IMPACT FEE FUNDED IMPROVEMENT NO IMPROVEMENTS REQUIRED	<u>IMPROVEMENTS</u> 1. No improvements required 2. 3. 4.
	<u>COST SUMMARY</u> R.O.W. \$ _____ CONSTRUCTION \$ \$ _____ CONTINGENCIES \$ \$ _____ TOTAL COST \$ _____

IMPACT FEE FUNDED IMPROVEMENTS 	<u>IMPROVEMENTS</u> 1. Widen Lanark Road 2. Install yield and stop sign on NB approach, remove EB stop sign 3. Reconstruct approx. 200' of all approaches
	<u>COST SUMMARY</u> R.O.W. \$ 19,200 CONSTRUCTION \$ 75,664 CONTINGENCIES \$ 9,486 TOTAL COST \$ 104,350

TOTAL IMPROVEMENT COST \$ 104,350

TABLE 1

1. VERA CRUZ ROAD AT LANARK ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$16,000	\$16,000
Right-of Way Administration	Lump Sum	\$3,200	\$3,200
TOTAL RIGHT-OF-WAY			\$19,200
Utility Relocation	Lump Sum	\$12,000	\$12,000
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	44 CY	\$10	\$440
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	1,049 SY	\$25	\$26,225
1 1/2" Wearing Course ID-2	1,466 SY	\$3	\$4,398
Storm RCCP	30 LF	\$30	\$900
Inlets	Units	\$1,400	\$0
Endwalls	2 Units	\$1,000	\$2,000
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,500	\$1,500
Signs	Lump Sum	\$500	\$500
Traffic Control	Lump Sum	\$4,671	\$4,671
Soil Erosion Control	Lump Sum	\$6,250	\$6,250
Restoration	Lump Sum		\$0
Shoulders	417 SY	\$10	\$4,170
Misc.	Lump Sum		\$0
SUBTOTAL CONSTRUCTION			\$63,054
Engineering Design	Lump Sum	\$6,305	\$6,305
Engineering Inspection	Lump Sum	\$3,153	\$3,153
Legal/Administrative Costs	Lump Sum	\$3,153	\$3,153
TOTAL CONSTRUCTION			\$75,664
TOTAL BASIC ESTIMATED COST			\$94,864
10% Contingencies			\$9,486
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$104,350

2. LIMEPORT PIKE AT SAUCON VALLEY ROAD

Existing Conditions

This T-intersection, controlled by a stop sign on the Saucon Valley Road approach, presently operates at an acceptable level of service. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

This condition requires the installation of a traffic signal to provide an acceptable level of service. The estimated cost for these improvements is **\$60,588**.

Future Conditions - Impact Fee Funded Improvements

No improvements are required in this condition.

FIGURE 2
2. LIMEPORT PIKE AT SAUCON VALLEY ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS		
	<p><u>IMPROVEMENTS</u></p> <p>1.No improvement required 2. 3. 4.</p> <p><u>COST SUMMARY</u></p> <p>R.O.W. \$ _____ CONSTRUCTION \$\$\$ _____ CONTINGENCIES \$\$\$ _____ TOTAL COST \$ _____</p>	
	FUTURE CONDITIONS	
	<p><u>NON-IMPACT FEE FUNDED IMPROVEMENT</u></p>	<p><u>IMPROVEMENTS</u></p> <p>1.Install signal 2. 3. 4.</p> <p><u>COST SUMMARY</u></p> <p>R.O.W. \$ 0 CONSTRUCTION \$\$\$ 55,080 CONTINGENCIES \$\$\$ 5,508 TOTAL COST \$ 60,588</p>
	<p><u>IMPACT FEE FUNDED IMPROVEMENTS</u></p> <p>NO IMPROVEMENTS REQUIRED</p>	<p><u>IMPROVEMENTS</u></p> <p>1.No improvements required 2. 3. 4.</p> <p><u>COST SUMMARY</u></p> <p>R.O.W. \$ _____ CONSTRUCTION \$\$\$ _____ CONTINGENCIES \$\$\$ _____ TOTAL COST \$ _____</p>
	<p>TOTAL IMPROVEMENT COST \$ <u>60,588</u></p>	

TABLE 2

2. LIMEPORT PIKE AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,000	\$1,000
Signs	Lump Sum	\$1,000	\$1,000
Traffic Control	Lump Sum	\$3,400	\$3,400
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$40,500	\$40,500
SUBTOTAL CONSTRUCTION			\$45,900
Engineering Design	Lump Sum	\$4,590	\$4,590
Engineering Inspection	Lump Sum	\$2,295	\$2,295
Legal/Administrative Costs	Lump Sum	\$2,295	\$2,295
TOTAL CONSTRUCTION			\$55,080
TOTAL BASIC ESTIMATED COST			\$55,080
10% Contingencies			\$5,508
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$60,588

3. LANARK ROAD AT SAUCON VALLEY ROAD

Existing Conditions

This intersection has one lane on each approach and is controlled by stop signs on the Saucon Valley Road approaches. No improvements are required under this condition.

Future Conditions - Non Impact Fee Funded Improvements

This intersection continues to operate at an acceptable level of service under this condition. No improvements are required.

Future Conditions - Impact Fee Funded Improvements

In this condition, traffic signals should be erected and the turning radii should be improved. The estimated cost of this improvement is \$78,078.

FIGURE 3
3. LANARK ROAD AT SAUCON VALLEY ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS													
	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; width: 50px;"></td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	R.O.W.	\$		CONSTRUCTION	\$		CONTINGENCIES	\$		TOTAL COST	\$	
R.O.W.	\$												
CONSTRUCTION	\$												
CONTINGENCIES	\$												
TOTAL COST	\$												

FUTURE CONDITIONS													
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p> <p>NO IMPROVEMENTS REQUIRED</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; width: 50px;"></td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	R.O.W.	\$		CONSTRUCTION	\$		CONTINGENCIES	\$		TOTAL COST	\$	
R.O.W.	\$												
CONSTRUCTION	\$												
CONTINGENCIES	\$												
TOTAL COST	\$												

<p>IMPACT FEE FUNDED IMPROVEMENTS</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. Install signal 2. Improve turning radii 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; width: 50px;">2,064</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;">68,916</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;">7,098</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;">78,078</td> </tr> </table>	R.O.W.	\$	2,064	CONSTRUCTION	\$	68,916	CONTINGENCIES	\$	7,098	TOTAL COST	\$	78,078
R.O.W.	\$	2,064											
CONSTRUCTION	\$	68,916											
CONTINGENCIES	\$	7,098											
TOTAL COST	\$	78,078											

TOTAL IMPROVEMENT COST \$ 78,078

TABLE 3

3. LANARK ROAD AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$1,720	\$1,720
Right-of Way Administration	Lump Sum	\$344	\$344
TOTAL RIGHT-OF-WAY			\$2,064
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	42 SY	\$25	\$1,050
1 1/2" Wearing Course ID-2	42 SY	\$3	\$126
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,000	\$1,000
Signs	Lump Sum	\$500	\$500
Traffic Control	Lump Sum	\$4,254	\$4,254
Soil Erosion Control	Lump Sum	\$500	\$500
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$50,000	\$50,000
SUBTOTAL CONSTRUCTION			\$57,430
Engineering Design	Lump Sum	\$5,743	\$5,743
Engineering Inspection	Lump Sum	\$2,872	\$2,872
Legal/Administrative Costs	Lump Sum	\$2,872	\$2,872
TOTAL CONSTRUCTION			\$68,916
TOTAL BASIC ESTIMATED COST			\$70,980
10% Contingencies			\$7,098
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$78,078

5. BLUE CHURCH ROAD AT LANARK ROAD

Existing Conditions

This T-intersection presently has one lane on each approach and is controlled by a stop sign on the Blue Church Street approach. No improvements are required at this intersection.

Future Conditions - Non Impact Fee Funded Improvements

This intersection does not require improvements in this condition.

Future Conditions - Impact Fee Funded Improvements

This installation of a traffic signal is required to maintain an acceptable level of service. The estimated cost for this improvements is \$55,598.

FIGURE 4
5. BLUE CHURCH ROAD AT LANARK ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS													
<p>LANARK RD.</p> <p>STOP BLUE CHURCH ROAD</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; width: 50px;"></td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	R.O.W.	\$		CONSTRUCTION	\$		CONTINGENCIES	\$		TOTAL COST	\$	
R.O.W.	\$												
CONSTRUCTION	\$												
CONTINGENCIES	\$												
TOTAL COST	\$												

FUTURE CONDITIONS													
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p> <p style="text-align: center; font-size: 2em;">NO IMPROVEMENTS REQUIRED</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; width: 50px;"></td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	R.O.W.	\$		CONSTRUCTION	\$		CONTINGENCIES	\$		TOTAL COST	\$	
R.O.W.	\$												
CONSTRUCTION	\$												
CONTINGENCIES	\$												
TOTAL COST	\$												

<p>IMPACT FEE FUNDED IMPROVEMENTS</p> <p>LANARK RD.</p> <p>BLUE CHURCH ROAD</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.Install signal 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; width: 50px; text-align: center;">0</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; text-align: center;">50,544</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; text-align: center;">5,054</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black; text-align: center;">55,598</td> </tr> </table>	R.O.W.	\$	0	CONSTRUCTION	\$	50,544	CONTINGENCIES	\$	5,054	TOTAL COST	\$	55,598
R.O.W.	\$	0											
CONSTRUCTION	\$	50,544											
CONTINGENCIES	\$	5,054											
TOTAL COST	\$	55,598											

TOTAL IMPROVEMENT COST \$ 55,598

TABLE 4

5. BLUE CHURCH ROAD AT LANARK ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,000	\$1,000
Signs	Lump Sum	\$500	\$500
Traffic Control	Lump Sum	\$3,120	\$3,120
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$37,500	\$37,500
SUBTOTAL CONSTRUCTION			\$42,120
Engineering Design	Lump Sum	\$4,212	\$4,212
Engineering Inspection	Lump Sum	\$2,106	\$2,106
Legal/Administrative Costs	Lump Sum	\$2,106	\$2,106
TOTAL CONSTRUCTION			\$50,544
TOTAL BASIC ESTIMATED COST			\$50,544
10% Contingencies			\$5,054
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$55,598

6A. ROUTE 309 AT SAUCON VALLEY ROAD

Existing Conditions

This intersection is presently signalized and operates at an acceptable level of service. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

Modification of the signal timing is required to continue to provide an acceptable level of service under this condition. The estimated cost of this improvement is \$34,214.

Future Conditions - Impact Fee Funded Improvements

The following improvements are required to provide acceptable operation; modification of the signal timing and the widening of Saucon Valley Road. Widening will provide two left turn, two through and one right turn lane on the eastbound approach in addition to providing two left turn and two through lanes on the westbound approach. The estimated cost of these improvements is \$284,871.

FIGURE 5
6A. ROUTE 309 AT SAUCON VALLEY ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS	
	<u>IMPROVEMENTS</u> 1.No improvements required 2. 3. 4.
	<u>COST SUMMARY</u> R.O.W. \$ _____ CONSTRUCTION \$ _____ CONTINGENCIES \$ _____ TOTAL COST \$ _____

FUTURE CONDITIONS	
<u>NON-IMPACT FEE FUNDED IMPROVEMENT</u> 	<u>IMPROVEMENTS</u> 1.Modify signal timing 2. 3. 4.
	<u>COST SUMMARY</u> R.O.W. \$ 0 CONSTRUCTION \$ 31,104 CONTINGENCIES \$ 3,110 TOTAL COST \$ 34,214

<u>IMPACT FEE FUNDED IMPROVEMENTS</u> 	<u>IMPROVEMENTS</u> 1.Widen EB and WB approach of Saucon Valley Road 2.Modify signal timing 3.
	<u>COST SUMMARY</u> R.O.W. \$ 17,400 CONSTRUCTION \$ 241,574 CONTINGENCIES \$ 25,897 TOTAL COST \$ 284,871

TOTAL IMPROVEMENT COST \$ 319,085

TABLE 5

**6A ROUTE 309 AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum		\$0
Signs	Lump Sum		\$0
Traffic Control	Lump Sum	\$1,920	\$1,920
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Modify signal)	Lump Sum	\$24,000	\$24,000
SUBTOTAL CONSTRUCTION			\$25,920
Engineering Design	Lump Sum	\$2,592	\$2,592
Engineering Inspection	Lump Sum	\$1,296	\$1,296
Legal/Administrative Costs	Lump Sum	\$1,296	\$1,296
TOTAL CONSTRUCTION			\$31,104
TOTAL BASIC ESTIMATED COST			\$31,104
10% Contingencies			\$3,110
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$34,214

TABLE 6

**6A ROUTE 309 AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$14,500	\$14,500
Right-of Way Administration	Lump Sum	\$2,900	\$2,900
TOTAL RIGHT-OF-WAY			\$17,400
Utility Relocation	Lump Sum	\$9,000	\$9,000
Clear and Grub	Lump Sum	\$5,000	\$5,000
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	1,900 SY	\$25	\$47,500
1 1/2" Wearing Course ID-2	4,900 SY	\$3	\$14,700
Drainage Misc.	1 LS	\$20,000	\$20,000
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$5,000	\$5,000
Signs	Lump Sum	\$8,500	\$8,500
Traffic Control	Lump Sum	\$14,912	\$14,912
Soil Erosion Control	Lump Sum	\$10,200	\$10,200
Restoration	Lump Sum	\$0	\$0
Shoulders	650 SY	\$10	\$6,500
Misc. (Modify signal)	Lump Sum	\$60,000	\$60,000
SUBTOTAL CONSTRUCTION			\$201,312
Engineering Design	Lump Sum	\$20,131	\$20,131
Engineering Inspection	Lump Sum	\$10,066	\$10,066
Legal/Administrative Costs	Lump Sum	\$10,066	\$10,066
TOTAL CONSTRUCTION			\$241,574
TOTAL BASIC ESTIMATED COST			\$258,974
10% Contingencies			\$25,897
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$284,871

6B. ROUTE 309 OFF-RAMP AT SAUCON VALLEY ROAD

Existing Conditions

This signalized intersection presently operates at an acceptable level of service. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

In the future without development condition, the signalized intersection continues to operate at an acceptable level of service. No improvements are required in this condition.

Future Conditions - Impact Fee Funded Improvements

This signalized intersection requires the following improvements in the future with development condition; widening of Saucon Valley Road to accommodate the required improvements at the Route 309/Saucon Valley Road intersection and the modification of the signal timing. The estimated cost of these improvements is **\$663,611**.

FIGURE 6
6B. ROUTE 309 OFF-RAMP AT SAUCON VALLEY ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS									
	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								

FUTURE CONDITIONS									
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p> <p style="text-align: center; font-size: 2em;">NO IMPROVEMENTS REQUIRED</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								

<p>IMPACT FEE FUNDED IMPROVEMENTS</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.Widen EB approach of Saucon Valley Road 2.Modify signal timing 3. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ 312,720</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ 290,563</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ 60,328</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ 663,611</td> </tr> </table>	R.O.W.	\$ 312,720	CONSTRUCTION	\$ 290,563	CONTINGENCIES	\$ 60,328	TOTAL COST	\$ 663,611
R.O.W.	\$ 312,720								
CONSTRUCTION	\$ 290,563								
CONTINGENCIES	\$ 60,328								
TOTAL COST	\$ 663,611								

TOTAL IMPROVEMENT COST \$ 663,611

TABLE 7

**6B ROUTE 309 OFF-RAMP AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$260,600	\$260,600
Right-of Way Administration	Lump Sum	\$52,120	\$52,120
TOTAL RIGHT-OF-WAY			\$312,720
Utility Relocation	Lump Sum	\$37,000	\$37,000
Clear and Grub	Lump Sum	\$8,000	\$8,000
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	3,300 SY	\$25	\$82,500
1 1/2" Wearing Course ID-2	7,700 SY	\$3	\$23,100
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$4,000	\$4,000
Signs	Lump Sum	\$5,000	\$5,000
Traffic Control	Lump Sum	\$17,936	\$17,936
Soil Erosion Control	Lump Sum	\$12,600	\$12,600
Restoration	Lump Sum	\$0	\$0
Shoulders	2,800 SY	\$10	\$28,000
Misc. (Modify signal)	Lump Sum	\$24,000	\$24,000
SUBTOTAL CONSTRUCTION			\$242,136
Engineering Design	Lump Sum	\$24,214	\$24,214
Engineering Inspection	Lump Sum	\$12,107	\$12,107
Legal/Administrative Costs	Lump Sum	\$12,107	\$12,107
TOTAL CONSTRUCTION			\$290,563
TOTAL BASIC ESTIMATED COST			\$603,283
10% Contingencies			\$60,328
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$663,611

8. ROUTE 309 AT CHESTNUT DRIVE

Existing Conditions

This intersection presently operates at an unacceptable level of service. The improvements required at this intersection are included in the future conditions section below. This T-intersection is controlled by a stop sign on the Chestnut Drive approach.

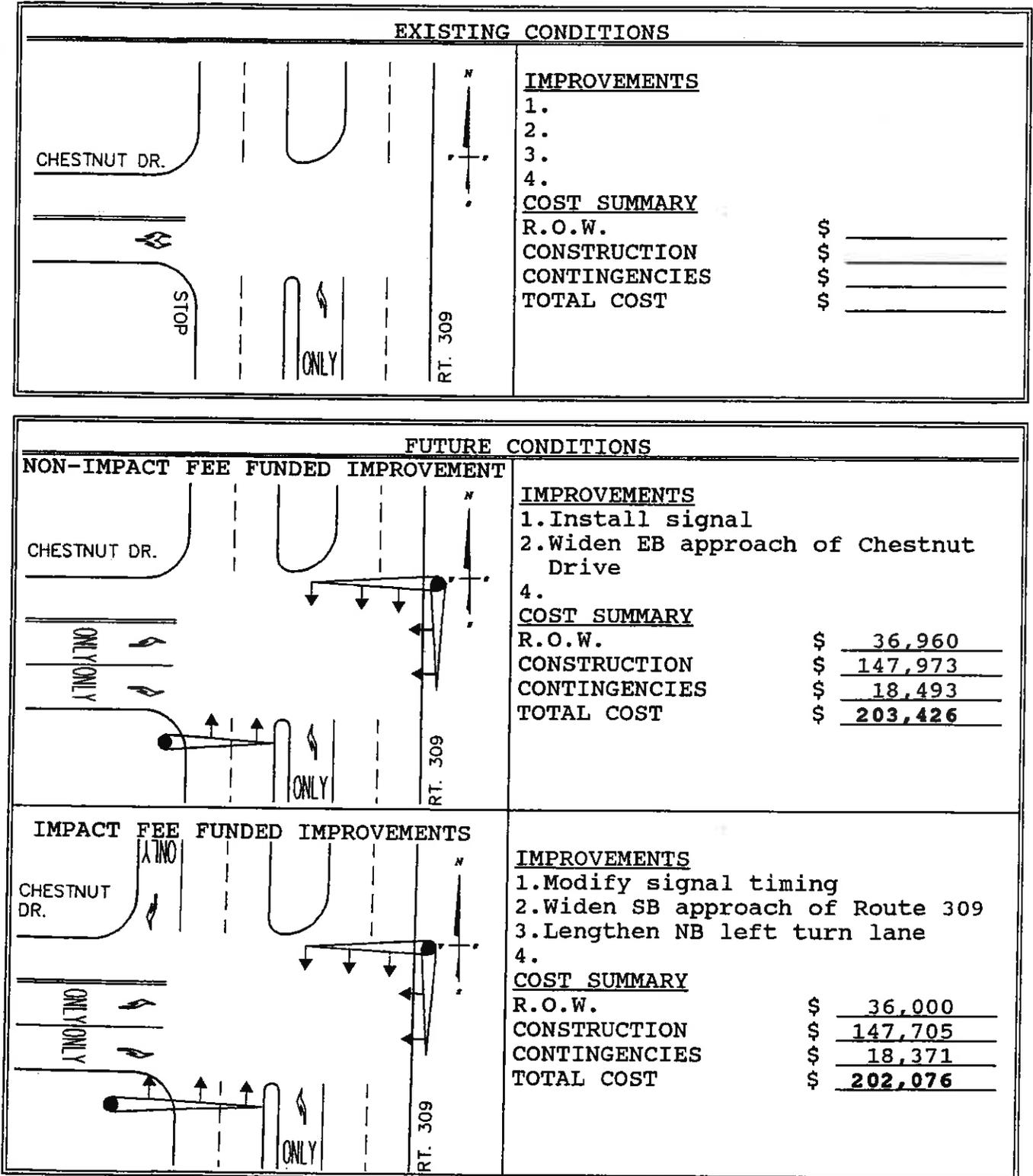
Future Conditions - Non Impact Fee Funded Improvements

This intersection will require the installation of a traffic signal and the widening of Chestnut Drive to provide an acceptable level of service. Chestnut Drive should be widened to provide a separate left and right turn lane. The estimated cost for these improvements is \$203,426.

Future Conditions - Impact Fee Funded Improvements

Acceptable operation under this condition requires the widening of Route 309 to provide two southbound through lanes and a right turn lane, the lengthening of the northbound left turn lane, as well as the modification of the signal timing. The estimated cost for these improvements is \$202,076.

FIGURE 7
8. ROUTE 309 AT CHESTNUT DRIVE
IMPROVEMENT SKETCH



TOTAL IMPROVEMENT COST \$ 405,502

TABLE 8

8. ROUTE 309 AT CHESTNUT DRIVE
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$30,800	\$30,800
Right-of Way Administration	Lump Sum	\$6,160	\$6,160
TOTAL RIGHT-OF-WAY			\$36,960
Utility Relocation	Lump Sum	\$9,000	\$9,000
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	328 SY	\$25	\$8,200
1 1/2" Wearing Course ID-2	1,639 SY	\$3	\$4,917
Storm RCCP	135 LF	\$30	\$4,050
Inlets	4 Units	\$1,400	\$5,600
Manholes	1 Units	\$2,000	\$2,000
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$3,000	\$3,000
Signs	Lump Sum	\$2,500	\$2,500
Traffic Control	Lump Sum	\$9,134	\$9,134
Soil Erosion Control	Lump Sum	\$3,050	\$3,050
Restoration	Lump Sum		\$0
Shoulders	186 SY	\$10	\$1,860
Misc. (Install signal)	Lump Sum	\$70,000	\$70,000
SUBTOTAL CONSTRUCTION			\$123,311
Engineering Design	Lump Sum	\$12,331	\$12,331
Engineering Inspection	Lump Sum	\$6,166	\$6,166
Legal/Administrative Costs	Lump Sum	\$6,166	\$6,166
TOTAL CONSTRUCTION			\$147,973
TOTAL BASIC ESTIMATED COST			\$184,933
10% Contingencies			\$18,493
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$203,426

TABLE 9

8. ROUTE 309 AT CHESTNUT DRIVE
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$30,000	\$30,000
Right-of Way Administration	Lump Sum	\$6,000	\$6,000
TOTAL RIGHT-OF-WAY			\$36,000
Utility Relocation	Lump Sum	\$12,000	\$12,000
Clear and Grub	Lump Sum	\$1,000	\$1,000
Class 1 Excavation	CY	\$10	\$0
Concrete Mountable Curb	145 LF	\$14	\$2,030
4" Plain Cement Concrete	77 SY	\$22	\$1,694
2A Modified Subbase 10" B.C.B.C. 2" Binder Course ID-2	924 SY	\$33	\$30,492
1 1/2" Wearing Course ID-2	4,048 SY	\$3	\$12,144
Storm RCCP	100 LF	\$30	\$3,000
Inlets	3 Units	\$1,400	\$4,200
Manholes	2 Units	\$2,000	\$4,000
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$4,000	\$4,000
Signs	Lump Sum	\$3,000	\$3,000
Traffic Control	Lump Sum	\$9,118	\$9,118
Soil Erosion Control	Lump Sum	\$6,500	\$6,500
Restoration	Lump Sum		\$0
Shoulders	591 SY	\$10	\$5,910
Misc. (Modify signal)	Lump Sum	\$24,000	\$24,000
SUBTOTAL CONSTRUCTION			\$123,088
Engineering Design	Lump Sum	\$12,309	\$12,309
Engineering Inspection	Lump Sum	\$6,154	\$6,154
Legal/Administrative Costs	Lump Sum	\$6,154	\$6,154
TOTAL CONSTRUCTION			\$147,705
TOTAL BASIC ESTIMATED COST			\$183,705
10% Contingencies			\$18,371
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$202,076

9. ROUTE 309 AT LANARK ROAD AND CAMP MEETING ROAD

Existing Conditions

This signalized intersection presently operates at an acceptable level of service. No improvements are required.

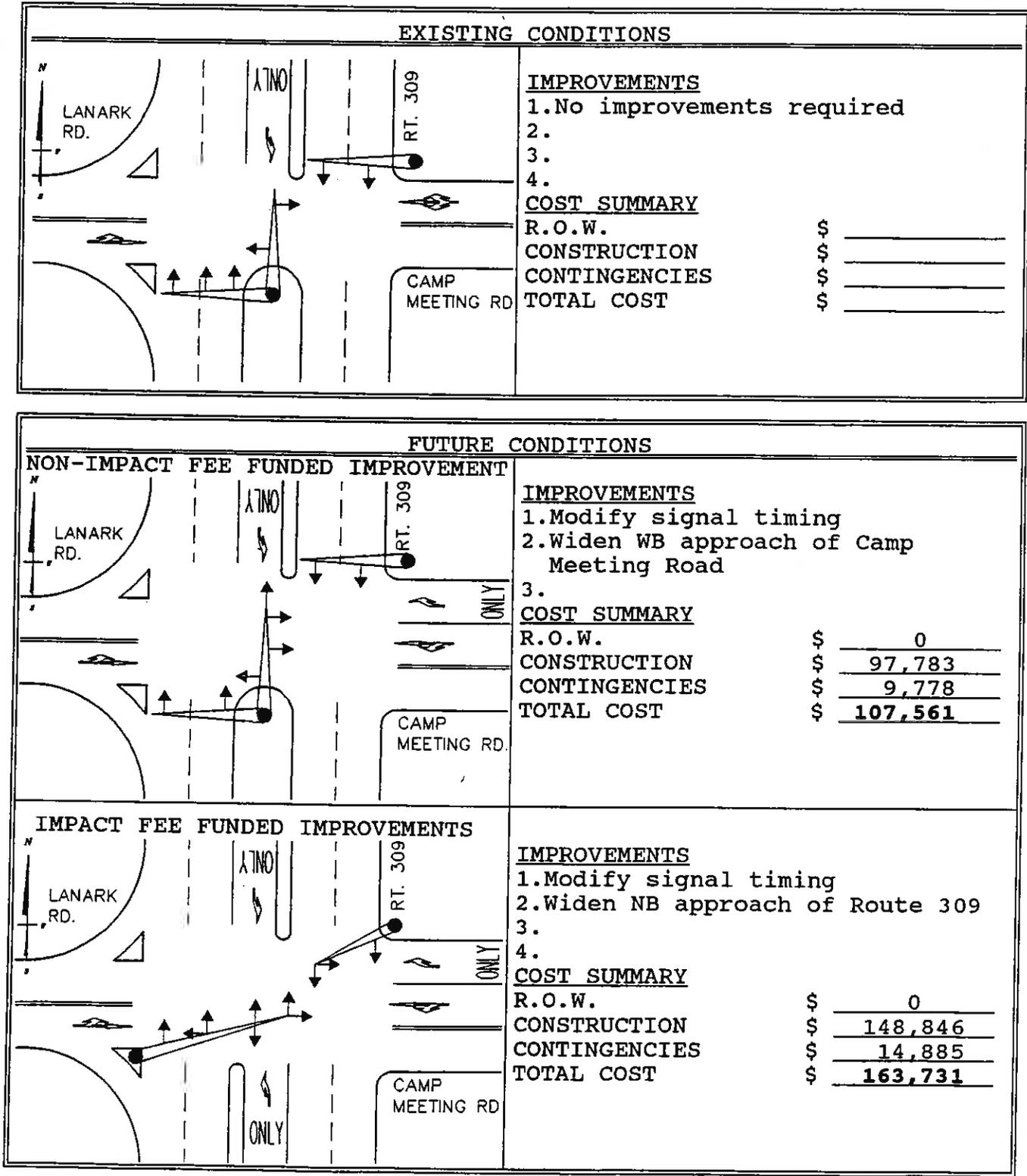
Future Conditions - Non Impact Fee Funded Improvements

Acceptable operation under this condition requires the widening of Camp Meeting Road to provide a westbound shared left turn - through lane and a right turn lane, as well as the modifications of the signal timing. The estimated cost for these improvements is **\$107,561.**

Future Conditions - Impact Fee Funded Improvements

This intersection will require the widening of Route 309 to provide a northbound left turn lane to accommodate the proposed development of the western portion of the Township. Modification of the signal timing is also required in this condition. The estimated cost for these improvements is **\$163,731.**

FIGURE 8
9. ROUTE 309 AT LANARK ROAD AND CAMP MEETING ROAD
IMPROVEMENT SKETCH



TOTAL IMPROVEMENT COST \$ 271,292

TABLE 10

9. ROUTE 309 AT LANARK ROAD AND CAMP MEETING ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$0	\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum	\$0	\$0
Clear and Grub	Lump Sum	\$2,500	\$2,500
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	450 SY	\$25	\$11,250
1 1/2" Wearing Course ID-2	1,400 SY	\$3	\$4,200
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$3,000	\$3,000
Signs	Lump Sum	\$5,000	\$5,000
Traffic Control	Lump Sum	\$6,036	\$6,036
Soil Erosion Control	Lump Sum	\$3,500	\$3,500
Restoration	Lump Sum	\$0	\$0
Shoulders	800 SY	\$10	\$8,000
Misc. (Modify signal)	Lump Sum	\$38,000	\$38,000
SUBTOTAL CONSTRUCTION			\$81,486
Engineering Design	Lump Sum	\$8,149	\$8,149
Engineering Inspection	Lump Sum	\$4,074	\$4,074
Legal/Administrative Costs	Lump Sum	\$4,074	\$4,074
TOTAL CONSTRUCTION			\$97,783
TOTAL BASIC ESTIMATED COST			\$97,783
10% Contingencies			\$9,778
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$107,561

TABLE 11

**9. ROUTE 309 AT LANARK ROAD AND CAMP MEETING ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$0	\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum	\$3,000	\$3,000
Clear and Grub	Lump Sum	\$2,500	\$2,500
Class 1 Excavation	200 CY	\$10	\$2,000
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	350 SY	\$25	\$8,750
1 1/2" Wearing Course ID-2	1,100 SY	\$3	\$3,300
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$4,000	\$4,000
Signs	Lump Sum	\$5,000	\$5,000
Traffic Control	Lump Sum	\$9,188	\$9,188
Soil Erosion Control	Lump Sum	\$2,800	\$2,800
Restoration	Lump Sum	\$0	\$0
Shoulders	350 SY	\$10	\$3,500
Misc. (Modify signal)	Lump Sum	\$80,000	\$80,000
SUBTOTAL CONSTRUCTION			\$124,038
Engineering Design	Lump Sum	\$12,404	\$12,404
Engineering Inspection	Lump Sum	\$6,202	\$6,202
Legal/Administrative Costs	Lump Sum	\$6,202	\$6,202
TOTAL CONSTRUCTION			\$148,846
TOTAL BASIC ESTIMATED COST			\$148,846
10% Contingencies			\$14,885
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$163,731

10. MAIN STREET AT MILL ROAD

Existing Conditions

This T-intersection presently operates at the lower limit of acceptable operation. Mill Road is controlled by a stop sign, while Main Street has the right-of-way. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

This condition requires the installation of a traffic signal in order to provide an acceptable level of service in the future without development condition. The estimated cost for these improvements is **\$55,598.**

Future Conditions - Impact Fee Funded Improvements

The southbound approach of Main Street must be widened to provide an exclusive through and right turn lane. The intersection's traffic signal timing also requires modification. The estimated cost for these improvements is **\$66,618.**

FIGURE 9
10. MAIN STREET AT MILL ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS													
	<p><u>IMPROVEMENTS</u></p> <p>1.No improvements required 2. 3. 4.</p> <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>TOTAL COST</td> <td>\$</td> <td>_____</td> </tr> </table>	R.O.W.	\$	_____	CONSTRUCTION	\$	_____	CONTINGENCIES	\$	_____	TOTAL COST	\$	_____
R.O.W.	\$	_____											
CONSTRUCTION	\$	_____											
CONTINGENCIES	\$	_____											
TOTAL COST	\$	_____											

FUTURE CONDITIONS													
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p>	<p><u>IMPROVEMENTS</u></p> <p>1.Install signal 2. 3. 4.</p> <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$</td> <td>0</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$</td> <td>50,544</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$</td> <td>5,054</td> </tr> <tr> <td>TOTAL COST</td> <td>\$</td> <td>55,598</td> </tr> </table>	R.O.W.	\$	0	CONSTRUCTION	\$	50,544	CONTINGENCIES	\$	5,054	TOTAL COST	\$	55,598
R.O.W.	\$	0											
CONSTRUCTION	\$	50,544											
CONTINGENCIES	\$	5,054											
TOTAL COST	\$	55,598											

<p>IMPACT FEE FUNDED IMPROVEMENTS</p>	<p><u>IMPROVEMENTS</u></p> <p>1.Modify signal timing 2.Widen SB approach of Main Street 3. 4.</p> <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$</td> <td>11,520</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$</td> <td>49,042</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$</td> <td>6,056</td> </tr> <tr> <td>TOTAL COST</td> <td>\$</td> <td>66,618</td> </tr> </table>	R.O.W.	\$	11,520	CONSTRUCTION	\$	49,042	CONTINGENCIES	\$	6,056	TOTAL COST	\$	66,618
R.O.W.	\$	11,520											
CONSTRUCTION	\$	49,042											
CONTINGENCIES	\$	6,056											
TOTAL COST	\$	66,618											

TOTAL IMPROVEMENT COST \$ 122,216

TABLE 12

10 MAIN STREET AT MILL ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,000	\$1,000
Signs	Lump Sum	\$500	\$500
Traffic Control	Lump Sum	\$3,120	\$3,120
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$37,500	\$37,500
SUBTOTAL CONSTRUCTION			\$42,120
Engineering Design	Lump Sum	\$4,212	\$4,212
Engineering Inspection	Lump Sum	\$2,106	\$2,106
Legal/Administrative Costs	Lump Sum	\$2,106	\$2,106
TOTAL CONSTRUCTION			\$50,544
TOTAL BASIC ESTIMATED COST			\$50,544
10% Contingencies			\$5,054
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$55,598

TABLE 13

10 MAIN STREET AT MILL ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$9,600	\$9,600
Right-of Way Administration	Lump Sum	\$1,920	\$1,920
TOTAL RIGHT-OF-WAY			\$11,520
Utility Relocation	Lump Sum	\$15,000	\$15,000
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	282 SY	\$25	\$7,050
1 1/2" Wearing Course ID-2	407 SY	\$3	\$1,221
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,500	\$1,500
Signs	Lump Sum	\$1,000	\$1,000
Traffic Control	Lump Sum	\$3,027	\$3,027
Soil Erosion Control	Lump Sum	\$2,800	\$2,800
Restoration	Lump Sum		\$0
Shoulders	127 SY	\$10	\$1,270
Misc. (Modify signal)	Lump Sum	\$8,000	\$8,000
SUBTOTAL CONSTRUCTION			\$40,868
Engineering Design	Lump Sum	\$4,087	\$4,087
Engineering Inspection	Lump Sum	\$2,043	\$2,043
Legal/Administrative Costs	Lump Sum	\$2,043	\$2,043
TOTAL CONSTRUCTION			\$49,042
TOTAL BASIC ESTIMATED COST			\$60,562
10% Contingencies			\$6,056
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$66,618

11. ROUTE 309 AT PASSER ROAD

Existing Conditions

This signalized intersection presently operates at an unacceptable level of service. The improvements required at this intersection are included in the Future Conditions section below.

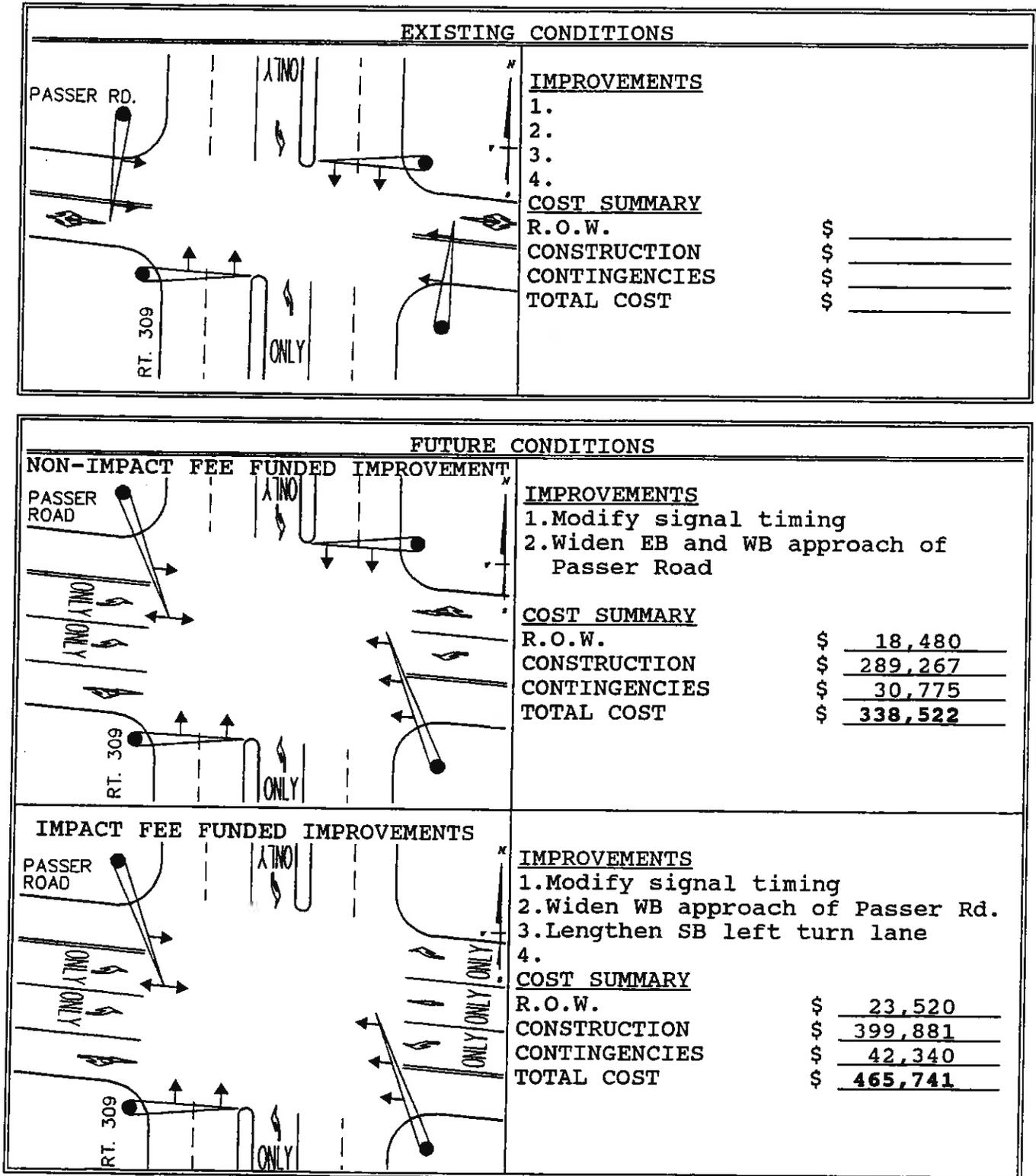
Future Conditions - Non Impact Fee Funded Improvements

Widening of Passer Road to provide two left turn and one shared through-right turn lane on the eastbound approach and one left turn and one shared through-right turn lane on the westbound approach and modification of the signal timing is required to provide an acceptable level of service in both the existing and future without development conditions. The estimated cost of these improvements is \$338,522.

Future Conditions - Impact Fee Funded Improvements

Acceptable operation in the future with development condition required the following improvements; widening of Passer Road to provide an exclusive westbound left, through and right turn lane and the modification of the signal timing. The estimated cost for these improvements is \$465,741. In addition to these physical improvements, diversion of eastbound left turn trips to the Route 309 and Main Street intersection is required to provide an acceptable level of service under this condition.

FIGURE 10
11. ROUTE 309 AT PASSER ROAD
IMPROVEMENT SKETCH



TOTAL IMPROVEMENT COST \$ 804,263

TABLE 14

11 ROUTE 309 AT PASSER ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$15,400	\$15,400
Right-of Way Administration	Lump Sum	\$3,080	\$3,080
TOTAL RIGHT-OF-WAY			\$18,480
Utility Relocation	Lump Sum	\$2,000	\$2,000
Clear and Grub	Lump Sum	\$2,500	\$2,500
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	4,300 SY	\$25	\$107,500
1 1/2" Wearing Course ID-2	9,600 SY	\$3	\$28,800
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$5,000	\$5,000
Signs	Lump Sum	\$3,000	\$3,000
Traffic Control	Lump Sum	\$17,856	\$17,856
Soil Erosion Control	Lump Sum	\$22,400	\$22,400
Restoration	Lump Sum	\$0	\$0
Shoulders	2,000 SY	\$10	\$20,000
Misc. (Modify signal)	Lump Sum	\$32,000	\$32,000
SUBTOTAL CONSTRUCTION			\$241,056
Engineering Design	Lump Sum	\$24,106	\$24,106
Engineering Inspection	Lump Sum	\$12,053	\$12,053
Legal/Administrative Costs	Lump Sum	\$12,053	\$12,053
TOTAL CONSTRUCTION			\$289,267
TOTAL BASIC ESTIMATED COST			\$307,747
10% Contingencies			\$30,775
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$338,522

TABLE 15

11 ROUTE 309 AT PASSER ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$19,600	\$19,600
Right-of-Way Administration	Lump Sum	\$3,920	\$3,920
TOTAL RIGHT-OF-WAY			\$23,520
Utility Relocation	Lump Sum	\$3,000	\$3,000
Clear and Grub	Lump Sum	\$4,000	\$4,000
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	6,300 SY	\$25	\$157,500
1 1/2" Wearing Course ID-2	12,500 SY	\$3	\$37,500
Storm RCCP	55 LF	\$30	\$1,650
Inlets	2 Units	\$1,400	\$2,800
Manholes	1 Units	\$2,000	\$2,000
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$7,500	\$7,500
Signs	Lump Sum	\$4,000	\$4,000
Traffic Control	Lump Sum	\$24,684	\$24,684
Soil Erosion Control	Lump Sum	\$29,600	\$29,600
Restoration	Lump Sum	\$0	\$0
Shoulders	2,700 SY	\$10	\$27,000
Misc. (Modify signal)	Lump Sum	\$32,000	\$32,000
SUBTOTAL CONSTRUCTION			\$333,234
Engineering Design	Lump Sum	\$33,323	\$33,323
Engineering Inspection	Lump Sum	\$16,662	\$16,662
Legal/Administrative Costs	Lump Sum	\$16,662	\$16,662
TOTAL CONSTRUCTION			\$399,881
TOTAL BASIC ESTIMATED COST			\$423,401
10% Contingencies			\$42,340
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$465,741

13. ROUTE 378 AT PRESTON LANE

Existing Conditions

This intersection presently operates at an unacceptable level of service. Preston Lane is controlled by stop signs, while Route 378 has the right-of-way. The improvements required at this intersection are included in the Future Conditions section below.

Future Conditions - Non Impact Fee Funded Improvements

Acceptable operation in the existing and future without development conditions can be maintained by widening Route 378 to add a northbound exclusive right turn lane and by erecting a traffic signal. The estimated cost for these improvements is \$163,704.

Future Conditions - Impact Fee Funded Improvements

Acceptable operation under this condition requires the widening of Preston Lane to provide a left turn and shared through-right-turn lane on both of its approaches. The modification of the signal timing is also required. The estimated cost for these improvements is \$134,615. As a joint effort between the Township and PennDot, Preston Lane will be constructed east to intersect Landis Mill Road as part of the Constitution Bridge project.

FIGURE 11
13. ROUTE 378 AT PRESTON LANE
IMPROVEMENT SKETCH

EXISTING CONDITIONS									
	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. 2. 3. 4. <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td>\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								
FUTURE CONDITIONS									
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. Install signal 2. Widen NB approach of Rt. 378 3. 4. <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$ 0</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$ 148,822</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$ 14,882</td> </tr> <tr> <td>TOTAL COST</td> <td>\$ 163,704</td> </tr> </table>	R.O.W.	\$ 0	CONSTRUCTION	\$ 148,822	CONTINGENCIES	\$ 14,882	TOTAL COST	\$ 163,704
R.O.W.	\$ 0								
CONSTRUCTION	\$ 148,822								
CONTINGENCIES	\$ 14,882								
TOTAL COST	\$ 163,704								
<p>IMPACT FEE FUNDED IMPROVEMENTS</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. Modify signal timing 2. Widen EB & WB approaches of Preston Lane 3. <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$ 21,210</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$ 101,167</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$ 12,238</td> </tr> <tr> <td>TOTAL COST</td> <td>\$ 134,615</td> </tr> </table>	R.O.W.	\$ 21,210	CONSTRUCTION	\$ 101,167	CONTINGENCIES	\$ 12,238	TOTAL COST	\$ 134,615
R.O.W.	\$ 21,210								
CONSTRUCTION	\$ 101,167								
CONTINGENCIES	\$ 12,238								
TOTAL COST	\$ 134,615								
<p>TOTAL IMPROVEMENT COST \$ <u>298,319</u></p>									

TABLE 16

13 ROUTE 378 AT PRESTON LANE
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum	\$3,000	\$3,000
Clear and Grub	Lump Sum	\$500	\$500
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 10" B.C.B.C. 2" Binder Course ID-2	846 SY	\$33	\$27,918
1 1/2" Wearing Course ID-2	1,148 SY	\$3	\$3,444
Storm RCCP	25 LF	\$30	\$750
Inlets	1 Units	\$1,400	\$1,400
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,000	\$1,000
Signs	Lump Sum	\$1,000	\$1,000
Traffic Control	Lump Sum	\$9,187	\$9,187
Soil Erosion Control	Lump Sum	\$2,800	\$2,800
Restoration	Lump Sum		\$0
Shoulders	302 SY	\$10	\$3,020
Misc. (Install signal)	Lump Sum	\$70,000	\$70,000
SUBTOTAL CONSTRUCTION			\$124,019
Engineering Design	Lump Sum	\$12,402	\$12,402
Engineering Inspection	Lump Sum	\$6,201	\$6,201
Legal/Administrative Costs	Lump Sum	\$6,201	\$6,201
TOTAL CONSTRUCTION			\$148,822
TOTAL BASIC ESTIMATED COST			\$148,822
10% Contingencies			\$14,882
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$163,704

TABLE 17

**13 ROUTE 378 AT PRESTON LANE
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$17,675	\$17,675
Right-of Way Administration	Lump Sum	\$3,535	\$3,535
TOTAL RIGHT-OF-WAY			\$21,210
Utility Relocation	Lump Sum	\$9,000	\$9,000
Clear and Grub	Lump Sum	\$1,000	\$1,000
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	699 SY	\$25	\$17,475
1 1/2" Wearing Course ID-2	3,412 SY	\$3	\$10,236
Storm RCCP	165 LF	\$30	\$4,950
Inlets	4 Units	\$1,400	\$5,600
Manholes	1 Units	\$2,000	\$2,000
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$2,000	\$2,000
Signs	Lump Sum	\$500	\$500
Traffic Control	Lump Sum	\$6,245	\$6,245
Soil Erosion Control	Lump Sum	\$9,300	\$9,300
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Modify signal)	Lump Sum	\$16,000	\$16,000
SUBTOTAL CONSTRUCTION			\$84,306
Engineering Design	Lump Sum	\$8,431	\$8,431
Engineering Inspection	Lump Sum	\$4,215	\$4,215
Legal/Administrative Costs	Lump Sum	\$4,215	\$4,215
TOTAL CONSTRUCTION			\$101,167
TOTAL BASIC ESTIMATED COST			\$122,377
10% Contingencies			\$12,238
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$134,615

15. ROUTE 378 AT SAUCON CREEK ROAD

Existing Conditions

This intersection did not exist at the time of the roadway inventory but is expected to be completed by the end of 1993.

Future Conditions - Non Impact Fee Funded Improvements

Construction of Saucon Creek Road will have been completed prior to this condition and will provide one lane on the eastbound approach. No improvements are required under this condition.

Future Conditions - Impact Fee Funded Improvements

This intersection required the installation of a traffic signal to provide acceptable operation in the future with development condition. The widening of the eastbound approach to provide a left and right turn lane is also required under this condition. The estimated cost for these improvements is \$132,332. In addition, this intersection will handle additional eastbound left turn trips diverted from the Saucon Valley Road and Route 378 intersection.

FIGURE 12
15. ROUTE 378 AT SAUCON CREEK ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS									
	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. This intersection will be constructed by Spring, 1994. 2. 3. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								
FUTURE CONDITIONS									
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p> <p>NO IMPROVEMENTS REQUIRED</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. No Improvements required. 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								
<p>IMPACT FEE FUNDED IMPROVEMENTS</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. Widen Saucon Creek Road approach 2. Install signal 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ 0</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ 120,302</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ 12,030</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ 132,332</td> </tr> </table>	R.O.W.	\$ 0	CONSTRUCTION	\$ 120,302	CONTINGENCIES	\$ 12,030	TOTAL COST	\$ 132,332
R.O.W.	\$ 0								
CONSTRUCTION	\$ 120,302								
CONTINGENCIES	\$ 12,030								
TOTAL COST	\$ 132,332								

TOTAL IMPROVEMENT COST \$ 132,332

TABLE 18

**15 ROUTE 378 AT SAUCON CREEK ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	273 SY	\$25	\$6,825
1 1/2" Wearing Course ID-2	1,637 SY	\$3	\$4,911
Storm RCCP	10 LF	\$30	\$300
Inlets	1 Units	\$1,400	\$1,400
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,500	\$1,500
Signs	Lump Sum	\$500	\$500
Traffic Control	Lump Sum	\$7,426	\$7,426
Soil Erosion Control	Lump Sum	\$3,750	\$3,750
Restoration	Lump Sum		\$0
Shoulders	364 SY	\$10	\$3,640
Misc. (Install signal)	Lump Sum	\$70,000	\$70,000
SUBTOTAL CONSTRUCTION			\$100,252
Engineering Design	Lump Sum	\$10,025	\$10,025
Engineering Inspection	Lump Sum	\$5,013	\$5,013
Legal/Administrative Costs	Lump Sum	\$5,013	\$5,013
TOTAL CONSTRUCTION			\$120,302
TOTAL BASIC ESTIMATED COST			\$120,302
10% Contingencies			\$12,030
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$132,332

16. ROUTE 378 AT SAUCON VALLEY ROAD

Existing Conditions

This unsignalized intersection presently operates at an unacceptable level of service. The improvements required at this intersection are included in the Future conditions section below.

Future Conditions - Non Impact Fee Funded Improvements

The installation of a traffic signal is required to provide an acceptable level of service in both the existing and future without development conditions. The estimated cost of this improvement is \$104,782.

Future Conditions - Impact Fee Funded Improvements

The widening of Route 378 to add an exclusive southbound right turn lane, widening of Saucon Valley Road to add an exclusive left turn lane and the modification of the signal timing is required to maintain an acceptable level of service under this condition. The estimated cost for these improvements is \$322,114. In order to continue to provide an acceptable level of service at this intersection, diversion of eastbound left turn trips is required. Diversion of these trips to the Route 378 and Saucon Creek Road intersection has been taken into account in this study.

FIGURE 13
16. ROUTE 378 AT SAUCON VALLEY ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS													
	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">R.O.W.</td> <td style="width: 10%; text-align: right;">\$</td> <td style="width: 10%; border-bottom: 1px solid black;"></td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	R.O.W.	\$		CONSTRUCTION	\$		CONTINGENCIES	\$		TOTAL COST	\$	
R.O.W.	\$												
CONSTRUCTION	\$												
CONTINGENCIES	\$												
TOTAL COST	\$												
FUTURE CONDITIONS													
<p><u>NON-IMPACT FEE FUNDED IMPROVEMENT</u></p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. Install signal 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">R.O.W.</td> <td style="width: 10%; text-align: right;">\$</td> <td style="width: 10%; text-align: center;">0</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="text-align: right;">95,256</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="text-align: right;">9,526</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">104,782</td> </tr> </table>	R.O.W.	\$	0	CONSTRUCTION	\$	95,256	CONTINGENCIES	\$	9,526	TOTAL COST	\$	104,782
R.O.W.	\$	0											
CONSTRUCTION	\$	95,256											
CONTINGENCIES	\$	9,526											
TOTAL COST	\$	104,782											
<p><u>IMPACT FEE FUNDED IMPROVEMENTS</u></p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1. Modify signal timing 2. Widen SB approach of Rt. 378 3. Widen EB approach of Saucon Valley Road <p><u>COST SUMMARY</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">R.O.W.</td> <td style="width: 10%; text-align: right;">\$</td> <td style="width: 10%; text-align: right;">88,200</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$</td> <td style="text-align: right;">204,631</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$</td> <td style="text-align: right;">29,283</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 1px solid black;">322,114</td> </tr> </table>	R.O.W.	\$	88,200	CONSTRUCTION	\$	204,631	CONTINGENCIES	\$	29,283	TOTAL COST	\$	322,114
R.O.W.	\$	88,200											
CONSTRUCTION	\$	204,631											
CONTINGENCIES	\$	29,283											
TOTAL COST	\$	322,114											
<p>TOTAL IMPROVEMENT COST \$ <u>426,896</u></p>													

TABLE 19

16 ROUTE 378 AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$2,000	\$2,000
Signs	Lump Sum	\$1,500	\$1,500
Traffic Control	Lump Sum	\$5,880	\$5,880
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$70,000	\$70,000
SUBTOTAL CONSTRUCTION			\$79,380
Engineering Design	Lump Sum	\$7,938	\$7,938
Engineering Inspection	Lump Sum	\$3,969	\$3,969
Legal/Administrative Costs	Lump Sum	\$3,969	\$3,969
TOTAL CONSTRUCTION			\$95,256
TOTAL BASIC ESTIMATED COST			\$95,256
10% Contingencies			\$9,526
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$104,782

TABLE 20

16 ROUTE 378 AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum	\$73,500	\$73,500
Right-of Way Administration	Lump Sum	\$14,700	\$14,700
TOTAL RIGHT-OF-WAY			\$88,200
Utility Relocation	Lump Sum	\$32,000	\$32,000
Clear and Grub	Lump Sum	\$1,000	\$1,000
Class 1 Excavation	200 CY	\$10	\$2,000
Concrete Curb	730 LF	\$14	\$10,220
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" & 10" B.C.B.C.	1,437 SY 6"	\$25	\$35,925
2" Binder Course ID-2	846 SY 10"	\$33	\$27,918
1 1/2" Wearing Course ID-2	3,127 SY	\$3	\$9,381
Storm RCCP	55 LF	\$30	\$1,650
Endwalls	1 Units	\$1,000	\$1,000
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$3,000	\$3,000
Signs	Lump Sum	\$2,000	\$2,000
Traffic Control	Lump Sum	\$12,632	\$12,632
Soil Erosion Control	Lump Sum	\$15,800	\$15,800
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Modify signal)	Lump Sum	\$16,000	\$16,000
SUBTOTAL CONSTRUCTION			\$170,526
Engineering Design	Lump Sum	\$17,053	\$17,053
Engineering Inspection	Lump Sum	\$8,526	\$8,526
Legal/Administrative Costs	Lump Sum	\$8,526	\$8,526
TOTAL CONSTRUCTION			\$204,631
TOTAL BASIC ESTIMATED COST			\$292,831
10% Contingencies			\$29,283
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$322,114

17. CAMP MEETING ROAD AT PRESTON LANE

Existing Conditions

This T-intersection presently operates at an acceptable level of service. Preston Lane is controlled by a stop sign, while Camp Meeting Road has the right-of-way. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

No improvements are required under this condition.

Future Conditions - Impact Fee Funded Improvements

This intersection will require signalization in the future with development condition. The estimated cost of this improvement is \$73,418.

FIGURE 14
17. CAMP MEETING ROAD AT PRESTON LANE
IMPROVEMENT SKETCH

EXISTING CONDITIONS									
	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								

FUTURE CONDITIONS									
<p>NON-IMPACT FEE FUNDED IMPROVEMENT</p> <p style="text-align: center; font-size: 2em;">NO IMPROVEMENTS REQUIRED</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ _____</td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ _____</td> </tr> </table>	R.O.W.	\$ _____	CONSTRUCTION	\$ _____	CONTINGENCIES	\$ _____	TOTAL COST	\$ _____
R.O.W.	\$ _____								
CONSTRUCTION	\$ _____								
CONTINGENCIES	\$ _____								
TOTAL COST	\$ _____								

<p>IMPACT FEE FUNDED IMPROVEMENTS</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.Install signal 2. 3. 4. <p><u>COST SUMMARY</u></p> <table style="width: 100%;"> <tr> <td>R.O.W.</td> <td style="text-align: right;">\$ <u>0</u></td> </tr> <tr> <td>CONSTRUCTION</td> <td style="text-align: right;">\$ <u>66,744</u></td> </tr> <tr> <td>CONTINGENCIES</td> <td style="text-align: right;">\$ <u>6,674</u></td> </tr> <tr> <td>TOTAL COST</td> <td style="text-align: right;">\$ <u>73,418</u></td> </tr> </table>	R.O.W.	\$ <u>0</u>	CONSTRUCTION	\$ <u>66,744</u>	CONTINGENCIES	\$ <u>6,674</u>	TOTAL COST	\$ <u>73,418</u>
R.O.W.	\$ <u>0</u>								
CONSTRUCTION	\$ <u>66,744</u>								
CONTINGENCIES	\$ <u>6,674</u>								
TOTAL COST	\$ <u>73,418</u>								

TOTAL IMPROVEMENT COST \$ 73,418

TABLE 21

**17 CAMP MEETING ROAD AT PRESTON LANE
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$500	\$500
Signs	Lump Sum	\$1,000	\$1,000
Traffic Control	Lump Sum	\$4,120	\$4,120
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$50,000	\$50,000
SUBTOTAL CONSTRUCTION			\$55,620
Engineering Design	Lump Sum	\$5,562	\$5,562
Engineering Inspection	Lump Sum	\$2,781	\$2,781
Legal/Administrative Costs	Lump Sum	\$2,781	\$2,781
TOTAL CONSTRUCTION			\$66,744
TOTAL BASIC ESTIMATED COST			\$66,744
10% Contingencies			\$6,674
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$73,418

20. OLD BETHLEHEM PIKE AT SAUCON VALLEY ROAD

Existing Conditions

This three way multi-stop intersection presently operates at an acceptable level of service. No improvements are required.

Future Conditions - Non Impact Fee Funded Improvements

Although the existing traffic controls allow the intersection to operate at an adequate level of service, this intersection can be more efficient if the following improvements are made. Remove the stop signs on the Saucon Valley Road approaches and install a stop sign on the southbound approach of Old Bethlehem Pike. The estimated cost for these improvements is \$784.

Future Conditions - Impact Fee Funded Improvements

This intersection will require signalization in the future with development condition. The estimated cost for this improvement is \$82,971.

FIGURE 15
20. OLD BETHLEHEM PIKE AT SAUCON VALLEY ROAD
IMPROVEMENT SKETCH

EXISTING CONDITIONS													
<p>SAUCON VALLEY RD. STOP STOP OLD BETHLEHEM PIKE</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.No improvements required 2. 3. 4. <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$</td> <td>_____</td> </tr> <tr> <td>TOTAL COST</td> <td>\$</td> <td>_____</td> </tr> </table>	R.O.W.	\$	_____	CONSTRUCTION	\$	_____	CONTINGENCIES	\$	_____	TOTAL COST	\$	_____
R.O.W.	\$	_____											
CONSTRUCTION	\$	_____											
CONTINGENCIES	\$	_____											
TOTAL COST	\$	_____											
FUTURE CONDITIONS													
<p><u>NON-IMPACT FEE FUNDED IMPROVEMENT</u></p> <p>SAUCON VALLEY RD. STOP STOP OLD BETHLEHEM PIKE</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.Remove stop signs on EB and WB approach of Saucon Valley Road 2.Install stop sign on SB approach of Old Bethlehem Pike <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$</td> <td>0</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$</td> <td>713</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$</td> <td>71</td> </tr> <tr> <td>TOTAL COST</td> <td>\$</td> <td>784</td> </tr> </table>	R.O.W.	\$	0	CONSTRUCTION	\$	713	CONTINGENCIES	\$	71	TOTAL COST	\$	784
R.O.W.	\$	0											
CONSTRUCTION	\$	713											
CONTINGENCIES	\$	71											
TOTAL COST	\$	784											
<p><u>IMPACT FEE FUNDED IMPROVEMENTS</u></p> <p>SAUCON VALLEY RD. OLD BETHLEHEM PIKE</p>	<p><u>IMPROVEMENTS</u></p> <ol style="list-style-type: none"> 1.Install signal 2. 3. 4. <p><u>COST SUMMARY</u></p> <table> <tr> <td>R.O.W.</td> <td>\$</td> <td>0</td> </tr> <tr> <td>CONSTRUCTION</td> <td>\$</td> <td>75,428</td> </tr> <tr> <td>CONTINGENCIES</td> <td>\$</td> <td>7,543</td> </tr> <tr> <td>TOTAL COST</td> <td>\$</td> <td>82,971</td> </tr> </table>	R.O.W.	\$	0	CONSTRUCTION	\$	75,428	CONTINGENCIES	\$	7,543	TOTAL COST	\$	82,971
R.O.W.	\$	0											
CONSTRUCTION	\$	75,428											
CONTINGENCIES	\$	7,543											
TOTAL COST	\$	82,971											

TOTAL IMPROVEMENT COST \$ 83,755

TABLE 22

**20 OLD BETHLEHEM PIKE AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 NON-IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	SY	\$3	\$0
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum		\$0
Signs	Lump Sum	\$550	\$550
Traffic Control	Lump Sum	\$44	\$44
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Modify signal)	Lump Sum		\$0
SUBTOTAL CONSTRUCTION			\$594
Engineering Design	Lump Sum	\$59	\$59
Engineering Inspection	Lump Sum	\$30	\$30
Legal/Administrative Costs	Lump Sum	\$30	\$30
TOTAL CONSTRUCTION			\$713
TOTAL BASIC ESTIMATED COST			\$713
10% Contingencies			\$71
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$784

TABLE 23

**20 OLD BETHLEHEM PIKE AT SAUCON VALLEY ROAD
 ESTIMATE OF COSTS - INTERSECTION IMPROVEMENTS
 IMPACT FEE FUNDED IMPROVEMENT**

DESCRIPTION	UNITS	UNIT PRICE	COST
Right-of-Way Acquisition	Lump Sum		\$0
Right-of Way Administration	Lump Sum	\$0	\$0
TOTAL RIGHT-OF-WAY			\$0
Utility Relocation	Lump Sum		\$0
Clear and Grub	Lump Sum		\$0
Class 1 Excavation	CY	\$10	\$0
Concrete Curb	LF	\$14	\$0
Concrete Sidewalk	LF	\$17	\$0
2A Modified Subbase 6" B.C.B.C. 2" Binder Course ID-2	SY	\$25	\$0
1 1/2" Wearing Course ID-2	2,067 SY	\$3	\$6,201
Storm RCCP	LF	\$30	\$0
Inlets	Units	\$1,400	\$0
Manholes	Units	\$2,000	\$0
2A Aggregate	CY	\$25	\$0
Striping	Lump Sum	\$1,000	\$1,000
Signs	Lump Sum	\$1,000	\$1,000
Traffic Control	Lump Sum	\$4,656	\$4,656
Soil Erosion Control	Lump Sum		\$0
Restoration	Lump Sum		\$0
Shoulders	SY	\$10	\$0
Misc. (Install signal)	Lump Sum	\$50,000	\$50,000
SUBTOTAL CONSTRUCTION			\$62,857
Engineering Design	Lump Sum	\$6,286	\$6,286
Engineering Inspection	Lump Sum	\$3,143	\$3,143
Legal/Administrative Costs	Lump Sum	\$3,143	\$3,143
TOTAL CONSTRUCTION			\$75,428
TOTAL BASIC ESTIMATED COST			\$75,428
10% Contingencies			\$7,543
TOTAL ESTIMATED COST	(Based on January 1, 1993 prices)		\$82,971

III. SOURCE OF FUNDS

As required by Pennsylvania Act 209 this portion of the report identifies the funding sources which will be utilized to implement this Roadway Capital Improvement Plan. **Table 24** indicates the basic category for the funding of the required improvements. The Table indicates three categories of funding. They include the following:

1. Township Sources
2. PennDOT
3. Impact Fees

Each of these is discussed below.

TOWNSHIP SOURCES

Table 24 identifies \$534,590 will be made available from this source. This commitment will be satisfied through use of the following funds:

1. Existing funds presently on account.
2. Real value of contributions of right-of-way and improvements by adjacent property owners as required by future ordinances. For example, on-site improvements requiring adjacent property owners to install curbing per a curb ordinance.
3. Pennsylvania Liquid Fuel Funds.
4. Township General Funds.
5. Additional source of funds to be considered should be a partnership with Lehigh County, and local industries, commercial entities and property owners.

PENNDOT

Each of the intersections and roadways which require improvements are part of the State Roadway system. Because of this, a portion of the financial burden for improvement of these roadways should fall on PennDOT and the Federal Highway Administration. The Township will apply for a fifty percent total project cost participation from PennDot. The Township will lobby to have these improvements on PennDOT's Twelve Year Improvement Plan. The total amount of PennDOT contributions during this ten year capital improvement plan is estimated at \$1,949,651.

IMPACT FEES

Through the assessment of the impact fee legislation a total of \$1,415,062 is anticipated to be collected through the impact fees. This study assumes a constant rate of development and that these fees will be available when the projects are being constructed. The Township may have to post a bond or secure other funding sources to insure that construction of the improvements can proceed as planned. The impact fee should also be re-evaluated each year to take into account the effects of inflation on the value of fees collected.

IV. BUDGET ESTIMATES AND TIMETABLES

The following table identifies each of the improvements and their priority for funding. This table includes estimates and the projects timetable (**Table 25**).

V. IMPACT FEE CALCULATIONS

Table 26 contains the Impact Fee calculations. Impact fees were calculated for Zone 1 based on the total trips in the zone, as determined in the Roadway Sufficiency Report Table 1 and the total cost estimates for intersections within each zone. Based on this a **\$312** fee was determined for Zone 1.

TABLE 24
CAPITAL IMPROVEMENT PLAN
COST BREAKDOWN

INTERSECTION	ZONE 1 TOTAL COST	FUTURE CONDITIONS WITHOUT DEVELOPMENT NON-IMPACT FEE FUNDED		FUTURE CONDITIONS WITH DEVELOPMENT	
		TOWNSHIP FUNDED	STATE & FED FUNDED	STATE & FED FUNDED	TOTAL IMPACT FEES
1. Vera Cruz Road at Lanark Road	\$104,350			\$52,175	\$52,175
2. Limeport Pike at Saucon Valley Road	\$60,588	\$30,294	\$30,294		
3. Lanark Road at Saucon Valley Road	\$78,078			\$39,039	\$39,039
5. Blue Church Road at Lanark Road	\$55,598			\$27,799	\$27,799
6A. Route 309 at Saucon Valley Road	\$319,085	\$17,107	\$17,107	\$142,436	\$142,435
6B. Route 309 Off-Ramp at Saucon Valley Road	\$663,611			\$331,805	\$331,806
8. Route 309 at Chestnut Drive	\$405,502	\$101,713	\$101,713	\$101,038	\$101,038
9. Route 309 at Lanark Rd. & Camp Meeting Rd.	\$271,292	\$53,781	\$53,780	\$81,866	\$81,865
10. Main Street at Mill Road	\$122,216	\$27,799	\$27,799	\$33,309	\$33,309
11. Route 309 at Passer Road	\$804,263	\$169,261	\$169,261	\$232,870	\$232,871
13. Route 378 at Preston Lane	\$298,319	\$81,852	\$81,852	\$67,308	\$67,307
15. Route 378 at Saucon Creek Road	\$132,332			\$66,166	\$66,166
16. Route 378 at Saucon Valley Road	\$426,896	\$52,391	\$52,391	\$161,057	\$161,057
17. Camp Meeting Road at Preston Lane	\$73,418			\$36,709	\$36,709
20. Old Bethlehem Pike at Saucon Valley Road	\$83,755	\$392	\$392	\$41,485	\$41,486
GRAND TOTAL	\$3,899,303	\$534,590	\$534,589	\$1,415,062	\$1,415,062

TABLE 25
CAPITAL IMPROVEMENT PLAN
BUDGET ESTIMATES AND TIMETABLE

INTERSECTION	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1. Vera Cruz Road at Lanark Road			\$104,350 Table 1										
2. Limeport Pike at Saucon Valley Road									\$60,588 Table 2				
3. Lanark Road at Saucon Valley Road									\$78,078 Table 3				
5. Blue Church Road at Lanark Road						\$55,598 Table 4							
6A. Route 309 at Saucon Valley Road									\$319,085 Table 5 & 6				
6B. Route 309 Off-Ramp at Saucon Valley Road									\$663,611 Table 7				
8. Route 309 at Chestnut Drive							\$405,502 Table 8 & 9						
9. Route 309 at Lanark Road and Camp Meeting Road							\$271,292 Table 10 & 11						
10. Main Street at Mill Road				\$55,598 Table 12							\$66,618 Table 13		
11. Route 309 at Passer Road			\$338,522 Table 14							\$485,741 Table 15			
13. Route 378 at Preston Lane		\$100,000 Table 16			\$198,319 Table 16 & 17								
15. Route 378 at Saucon Creek Road								\$132,332 Table 18					
16. Route 378 at Saucon Valley Road				\$104,782 Table 19		\$322,114 Table 20							
17. Camp Meeting Road at Preston Lane													\$73,418 Table 21
20. Old Bethlehem Pike at Saucon Valley Road	\$784 Table 22												\$82,971 Table 23
TOTALS	\$784	\$100,000	\$442,872	\$160,380	\$198,319	\$377,712	\$676,794	\$132,332	\$1,121,362	\$465,741	\$66,618	\$0	\$156,389

**TABLE 26
IMPACT FEE BREAKDOWN**

INTERSECTION	TOTAL COST	ZONE 1 IMPACT FEES
1. Vera Cruz Road at Lanark Road	\$104,350	\$52,175
2. Limeport Pike at Saucon Valley Road	\$60,588	\$0
3. Lanark Road at Saucon Valley Road	\$78,078	\$39,039
5. Blue Church Road at Lanark Road	\$55,598	\$27,799
6A. Route 309 at Saucon Valley Road	\$319,085	\$142,435
6B. Route 309 Off-Ramp at Saucon Valley Road	\$663,611	\$331,806
8. Route 309 at Chestnut Drive	\$405,502	\$101,038
9. Route 309 at Lanark Rd. & Camp Meeting Rd.	\$271,292	\$81,865
10. Main Street at Mill Road	\$122,216	\$33,309
11. Route 309 at Passer Road	\$804,263	\$232,871
13. Route 378 at Preston Lane	\$298,319	\$67,307
15. Route 378 at Saucon Creek Road	\$132,332	\$66,166
16. Route 378 at Saucon Valley Road	\$426,896	\$161,057
17. Camp Meeting Road at Preston Lane	\$73,418	\$36,709
20. Old Bethlehem Pike at Saucon Valley Road	\$83,755	\$41,486
GRAND TOTAL	\$3,899,303	\$1,415,062

	<u>ZONE 1</u>
IMPACT FEE	\$1,415,062
TOTAL TRIPS	4,530
IMPACT FEE PER TRIP	\$312