

**RESOLUTION #17-0501-08**

**Approve Resurfacing Contract through Delaware County Engineer's Office**

**WHEREAS**, Liberty Township received bids for resurfacing of streets as approved in Resolution #17-0117-10 from the Delaware County Engineer's Office, and

**WHEREAS**, the Delaware County Engineer's Office has submitted its bids and contracts to be approved by the Board of Trustees in order that work may begin by the county's designated vendor, The Shelly Company, and,

**WHEREAS**, the attached documents show the total cost for the 2017 resurfacing project to be \$1,016,848.81, which includes \$92,440.80 in contingency and the Road Department has an adequate funding available in the approved budget for the 2017 road improvements, and

**WHEREAS**, the contract between the Township and The Shelly Company and the Memorandum of Understanding between the Township and the Delaware County Engineer must be approved by the Board of Trustees, and

**NOW, THEREFORE BE IT RESOLVED, BY THE LIBERTY TOWNSHIP BOARD OF TRUSTEES, DELAWARE COUNTY, OHIO**, that the contract with The Shelly Company for the 2017 resurfacing project awarded for the amount of \$1,016,848.84 be approved, and **BE IT FURTHER RESOLVED** that the Memorandum of Understanding between the Township and the Delaware County Engineer regarding the 2017 resurfacing project be approved.

Motion made by Melanie Leneghan and seconded by Shyra Eichhorn.

Vote: Yes Mrs. Eichhorn Yes Mrs. Leneghan N/P Dr. Mitchell

This Resolution shall be in force and become effective immediately upon its execution.

5-1-2017

Date

Melanie Leneghan  
Melanie Leneghan, Trustee

CERTIFIED BY:

Nancy Denutte  
Nancy Denutte, Fiscal Officer

Shyra Eichhorn  
Shyra Eichhorn, Trustee

**CONTRACT**

**AGREEMENT**, made and entered into this 15 day of May 2017 by and between the **LIBERTY TOWNSHIP TRUSTEES**, Delaware County, Ohio, and hereinafter designated as **FIRST PARTY**, and **THE SHELLY COMPANY**, hereinafter designated as **SECOND PARTY**.

**WITNESSETH**, that said **SECOND PARTY**, for and in consideration of the sum of **ONE MILLION SIXTEEN THOUSAND EIGHT HUNDRED FORTY-EIGHT DOLLARS AND EIGHTY-ONE CENTS (\$1,016,848.81)**, based on unit prices on the attached Bid Blank, to be paid as hereinafter specified, hereby agrees to furnish unto said **FIRST PARTY**, all necessary material, labor and equipment required to complete the project known as **2017 DEL-COUNTY ROAD IMPROVEMENT PROGRAM, Delaware County, Ohio**, in accordance with plans, drawings, general specifications, Invitation to Bid for same hereto attached; which plans, drawings, general specifications and Invitation to Bid are hereby declared to be a part of this **Contract**.

**SAID SECOND PARTY** further agrees to furnish said materials and to do the said work and labor promptly, in a good, substantial and workmanship manner, under the direction of the **Liberty Township Trustees**. Work is to be completed on or before **September 8, 2017**.

**THE SECOND PARTY** hereby agrees to hold **Liberty Township** free and harmless from any and all claims for damages, costs, expenses, judgments or decrees, resulting from any operations of said **SECOND PARTY**, his sub-contractors, agents or employees.

**SECOND PARTY** further agrees to pay the **Prevailing Wage Rate** in accordance with **Section 4115 of the Ohio Revised Code** and to furnish the **Liberty Township Trustees** a certified copy of the Contractor's payroll. Contractor is also responsible for providing any changes in the **Prevailing Wage rates** as furnished by the **Delaware County Engineer** during the course of this project to any and all Subcontractors employed by the Contractor.

**WITNESS**, our hands the day and year first above written.

**SIGNED IN DUPLICATE IN THE PRESENCE OF:**

Mark Calfee  
Melanie Reigher  
Thomas Mitchell - not present  
LIBERTY TOWNSHIP TRUSTEES

WITNESS

CONTRACTOR

ADDRESS

CONTRACT

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**SECOND PARTY** further agrees to pay the Prevailing Wage Rate in accordance with Section 4115 of the Ohio Revised Code and to furnish the Liberty Township Trustees a certified copy of the Contractor's payroll. Contractor is also responsible for providing any changes in the Prevailing Wage rates as furnished by the Delaware County Engineer during the course of this project to any and all Subcontractors employed by the Contractor.

**WITNESS**, our hands the day and year first above written.

**SIGNED IN DUPLICATE IN THE PRESENCE OF:**

Shirley Kinahan  
Melanie Renegar  
Thomas Mitchell - not present  
**LIBERTY TOWNSHIP TRUSTEES**

**WITNESS**

**CONTRACTOR**

**ADDRESS**

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
LIBERTY TOWNSHIP - 2

APRIL 17, 2017

ROAD	FROM	TO	MILES	ESTIMATE	AWARDED	WIP
DURHAM PLACE (TWP 552)	STRATFORD RD	CUL DE SAC	0.083	\$50,550.43	\$49,392.64	
ABBINGTON PLACE (TWP 550)	STRATFORD RD	CUL DE SAC	0.083	\$50,550.43	\$49,392.64	
RUTHERFORD RD LIBERTY			0.500	\$50,756.90	\$49,602.60	
RUTHERFORD RD CITY			0.500	\$74,014.90	\$71,079.60	
			<b>TOTAL(S)</b>	<b>1.167</b>	<b>\$225,872.66</b>	<b>\$219,467.48</b>
			PROJECT CONTINGENC	10%	\$22,587.27	<b>\$21,946.75</b>
			PROJECT TOTAL COST:		\$248,459.93	<b>\$241,414.23</b>

Estimate reviewed and approved in the amount of total listed above:

Melanie Fenegren 5-1-2017  
X, Township Trustee date

John Kunkle 5-1-2017  
X, Township Trustee date

Thomas Mitchell - not present 5-1-2017 CB  
X, Township Trustee date

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
DURHAM PLACE

APRIL 17, 2017

**DURHAM PLACE (TWP 552)**

ROAD DATA	
BEGIN LIMIT	STRATFORD RD
END LIMIT	CUL DE SAC
LENGTH	440 FEET
EXISTING WIDTH	24.0 FEET
PROPOSED WIDTH	24.0 FEET
TOTAL SY IMPROVED	1,173 SF
TOTAL SF IMPROVED	10,560 SF
TOTAL MILES IMPROVED	0.083 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.50	5.0%
448 LEVELING	1.50	5.0%
448 INTERMEDIATE		
301 BASE	3.00	5.0%

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	2
STOP LINE (# OF INTS)	1	644S
CENTERLINE		644C
EDGELINE		644E
Maintaining Traffic	per mile	

**FULL DEPTH 7"**

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
ABBINGTON PLACE

APRIL 17, 2017

ABBINGTON PLACE (TWP 550)

ROAD DATA	
BEGIN LIMIT	STRATFORD RD
END LIMIT	CUL DE SAC
LENGTH	440 FEET
EXISTING WIDTH	24.0 FEET
PROPOSED WIDTH	24.0 FEET
TOTAL SY IMPROVED	1,123 SY
TOTAL SF IMPROVED	10,560 SF
TOTAL MILES IMPROVED	0.083 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.50	5.0%
448 LEVELING	1.50	5.0%
448 INTERMEDIATE		
301 BASE	3.00	5.0%

<b>OPTIONS</b>		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	2
STOP LINE (# OF INTS)	1	644S
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC		per mile

**TOTAL(S)**

**\$50,550.43**

**\$49,392.64**

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
RUTHERFORD RD CITY

APRIL 17, 2017

RUTHERFORD RD CITY

ROAD DATA	
BEGIN LIMIT	
END LIMIT	
LENGTH	FEET
EXISTING WIDTH	FEET
PROPOSED WIDTH	FEET
TOTAL SY IMPROVED	5,000 SY
TOTAL SF IMPROVED	45,000 SF
TOTAL MILES IMPROVED	0.500 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)	2.00	1
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE	X	644C
EDGELINE	X	644E
Maintaining Traffic	X	per mile

2020-2021年第二

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
RUTHERFORD RD TWP EXTRA

APRIL 17, 2017

RUTHERFORD RD LIBERTY

ROAD DATA		
BEGIN LIMIT		
END LIMIT		
LENGTH	FEET	
EXISTING WIDTH	FEET	
PROPOSED WIDTH	FEET	
TOTAL SY IMPROVED	3,700	SY
TOTAL SF IMPROVED	33,300	SF
TOTAL MILES IMPROVED	0.500	MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)	2.00	1
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE	X	644C
EDGELINE	X	644E
Maintaining Traffic	X	per mile

ITEM	DESCRIPTION	UNIT	QTY	ESTIMATE		AWARDED		WORK IN PLACE	
				UNIT \$	EXTENDED \$	UNIT \$	EXTENDED \$	QTY	EXTENDED \$
301B	ASPHALT CONCRETE BASE, AS PER PLAN	TON		\$60.00					
4462I	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	TON		\$60.00					
4481I	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	TON	162.00	\$73.00	\$11,826.00	\$68.00	\$11,016.00		
4481S	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	TON	270.00	\$68.00	\$18,360.00	\$67.00	\$18,090.00		
407	TACK COAT	GAL	296.00	\$2.00	\$592.00	\$1.85	\$547.60		
644L	ONE LANE CLOSURE ON TWO LANE HIGHWAY	MI	0.50	\$4,000.00	\$2,000.00	\$5,000.00	\$2,500.00		
617	COMPACTED AGGREGATE, TYPE A	TON	50.00	\$30.00	\$1,500.00	\$30.00	\$1,500.00		
644C	CENTERLINE	MI	0.26	\$4,990.00	\$1,297.40	\$4,240.00	\$1,102.40		
644E	EDGELINE	MI	0.37	\$2,400.00	\$888.00	\$2,280.00	\$843.60		
644S	STOP LINE	LF		\$7.00		\$6.00			
422I	SINGLE CHIP SEAL W/O POLYMER BINDER, INTERMEDIATE	SY	3700.00	\$1.50	\$5,550.00	\$1.65	\$6,105.00		
254	PAVEMENT PLANING, AS PER PLAN	SY	400.00	\$4.00	\$1,600.00	\$2.05	\$820.00		
253	PAVEMENT REPAIR, AS PER PLAN	CY	20.00	\$300.00	\$6,000.00	\$300.00	\$6,000.00		
644CH	CHANNELIZING	LF	230.00	\$1.45	\$333.50	\$1.50	\$345.00		
644A	LANE ARROW	EA	1.00	\$100.00	\$100.00	\$99.00	\$99.00		
644W	WORD ON PAVEMENT	EA	1.00	\$135.00	\$135.00	\$99.00	\$99.00		
644CW	CROSS WALK LINE	LF		\$3.00					
644RR	R/R SYMBOL MARKING	EA	1.00	\$575.00	\$575.00	\$535.00	\$535.00		

TOTAL(S)

\$50,756.90

\$49,602.60

TOWNSHIP

4370 SQYARDS

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
LIBERTY TOWNSHIP

APRIL 17, 2017

ROAD	FROM	TO	MILES	ESTIMATE	AWARDED	WIP
BIG BEAR AVE (TWP 676)	SAWMILL PKWY	POWELL RD	0.890	\$7,480.00	\$7,947.50	
WAYNE BROWN DR (TWP 680)	SELDOM SEEN RD	BIG BEAR AVE	0.483	\$3,960.00	\$4,207.50	
WAYNE BROWN DR - 2 (TWP 68)	BIG BEAR AVE	BIG BEAR AVE	0.254	\$2,640.00	\$2,805.00	
HAMPSHIRE AVE (TWP 681)	BIG BEAR AVE	WAYNE BROWN DR	0.360	\$2,240.00	\$2,380.00	
FARMINGTON AVE (TWP 784)	HAMPSHIRE AVE	POWELL RD	0.193	\$1,280.00	\$1,360.00	
STOCKTON CT (TWP 555)	STRATFORD RD	CUL DE SAC	0.145	\$33,813.40	\$30,191.22	
BRADFORD CT (TWP 607)	SAWMILL PKWY	SAWMILL RD	0.076	\$19,668.92	\$18,448.83	
RUTHERFORD RD (TWP 122)	LIBERTY RD	RR TRACKS	0.511	\$100,325.25	\$98,253.20	
RUTHERFORD RD - 2 (TWP 122)	900' W OF SAWMILL	ST RT 257	1.383	\$268,265.38	\$262,404.27	
DAVENTRY LN (TWP 684)	ST RT 315	CUL DE SAC	0.663	\$83,599.02	\$82,604.52	
BRITTINGHAM LN (TWP 687)	DAVENTRY LN	DAVENTRY LN	0.218	\$26,100.89	\$25,905.62	
CLARINGTON CT (TWP 686)	DAVENTRY LN	CUL DE SAC	0.133	\$16,586.68	\$16,456.48	
BERKLEY CT (TWP 868)	CLARINGTON CT	CUL DE SAC	0.189	\$22,622.56	\$22,461.19	
DAVENTRY CT (TWP 685)	DAVENTRY LN	CUL DE SAC	0.119	\$14,270.00	\$14,165.20	
BACIRCAY LN (TWP 1274)	END OF CORP	RUTHERFORD RD	0.405	\$34,404.68	\$34,194.20	
MENDERES DR (TWP 1354)	BACIRCAY LN	THE PRESERVE	0.398	\$31,626.00	\$31,528.20	
FELIZ LN (TWP 472)	MENDERES DR	GEDIZ DR	0.398	\$31,626.00	\$31,528.20	
GEDIZ DR (TWP 1273)	BACIRCAY LN	FELIZ LN	0.227	\$18,168.00	\$18,099.40	
Special Items						
			<b>TOTAL(S)</b>	<b>7.045</b>	<b>\$718,676.78</b>	<b>\$704,940.53</b>
			<b>PROJECT CONTINGENC</b>	<b>10%</b>	<b>\$71,867.68</b>	<b>\$70,494.05</b>
			<b>PROJECT TOTAL COST:</b>		<b>\$790,544.46</b>	<b>\$775,434.58</b>

Estimate reviewed and approved in the amount of total listed above:

Melanie Heneghan 5-1-2017  
X, Township Trustee date

Shirley Stankew 5-1-2017  
X, Township Trustee date

Thomas Mitchell - not present - 5-1-2017 CB  
X, Township Trustee date

LIBERTY

**2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
BIG BEAR AVE**

APRIL 17, 2017

BIG BEAR AVE (TWP 676)

ROAD DATA	
BEGIN LIMIT	SAWMILL PKWY
END LIMIT	POWELL RD
LENGTH	4700 FEET
EXISTING WIDTH	34.0 FEET
PROPOSED WIDTH	34.0 FEET
TOTAL SY IMPROVED	17,756 SY
TOTAL SF IMPROVED	159,800 SF
TOTAL MILES IMPROVED	0.890 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE		
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

<b>OPTIONS</b>	
BERM (DEPTH/WIDTH)	
TACK (RATE/COURSES)	
STOP LINE (# OF INTS)	644S
CENTERLINE	644C
EDGELINE	644E
Maintaining Traffic	per mile

## LIBERTY

**2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
WAYNE BROWN DR**

APRIL 17, 2017

WAYNE BROWN DR (TWP 680)

ROAD DATA	
BEGIN LIMIT	SELDOM SEEN RD
END LIMIT	BIG BEAR AVE
LENGTH	2550 FEET
EXISTING WIDTH	30.0 FEET
PROPOSED WIDTH	30.0 FEET
TOTAL SY IMPROVED	8,500 SY
TOTAL SF IMPROVED	76,500 SF
TOTAL MILES IMPROVED	0.483 MILE

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE		
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

OPTIONS	
BERM (DEPTH/WIDTH)	
TACK (RATE/COURSES)	
STOP LINE (# OF INTS)	644S
CENTERLINE	644C
EDGELINE	644E
MAINTAINING TRAFFIC	per mile

## LIBERTY

**2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
WAYNE BROWN DR - 2**

APRIL 17, 2017

WAYNE BROWN DR - 2 (TWP 689)

ROAD DATA	
BEGIN LIMIT	BIG BEAR AVE
END LIMIT	BIG BEAR AVE
LENGTH	1340 FEET
EXISTING WIDTH	30.0 FEET
PROPOSED WIDTH	30.0 FEET
TOTAL SY IMPROVED	4,467 SY
TOTAL SF IMPROVED	40,200 SF
TOTAL MILES IMPROVED	0.254 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE		
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

<b>OPTIONS</b>	
BERM (DEPTH/WIDTH)	
TACK (RATE/COURSES)	
STOP LINE (# OF INTS)	644S
CENTERLINE	644C
EDGELINE	644E
MAINTAINING TRAFFIC	per mile

**TOTAL(S)**

**\$2,640.00**

**\$2,805.00**

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
HAMPSHIRE AVE

APRIL 17, 2017

HAMPSHIRE AVE (TWP 681)

ROAD DATA	
BEGIN LIMIT	BIG BEAR AVE
END LIMIT	WAYNE BROWN DR
LENGTH	1900 FEET
EXISTING WIDTH	28.0 FEET
PROPOSED WIDTH	28.0 FEET
TOTAL SY IMPROVED	5,911 SY
TOTAL SF IMPROVED	53,200 SF
TOTAL MILES IMPROVED	0.360 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE		
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

<b>OPTIONS</b>	
BERM (DEPTH/WIDTH)	
TACK (RATE/COURSES)	
STOP LINE (# OF INTS)	644S
CENTERLINE	644C
EDGELINE	644E
Maintaining Traffic	per mile

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
FARMINGTON AVE

APRIL 17, 2017

FARMINGTON AVE (TWP 784)

ROAD DATA	
BEGIN LIMIT	HAMPSHIRE AVE
END LIMIT	POWELL RD
LENGTH	1020 FEET
EXISTING WIDTH	32.0 FEET
PROPOSED WIDTH	32.0 FEET
TOTAL SY IMPROVED	3,627 SY
TOTAL SF IMPROVED	32,640 SF
TOTAL MILES IMPROVED	0.193 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE		
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

OPTIONS	
BERM (DEPTH/WIDTH)	
TACK (RATE/COURSES)	
STOP LINE (# OF INTS)	644S
CENTERLINE	644C
EDGELINE	644E
MAINTAINING TRAFFIC	per mile

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
STOCKTON CT

APRIL 17, 2017

STOCKTON CT (TWP 555)

ROAD DATA	
BEGIN LIMIT	STRATFORD RD
END LIMIT	CUL DE SAC
LENGTH	765 FEET
EXISTING WIDTH	24.0 FEET
PROPOSED WIDTH	24.0 FEET
TOTAL SY IMPROVED	2,540 SY
TOTAL SF IMPROVED	18,360 SF
TOTAL MILES IMPROVED	0.145 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

**TOTAL(S)**

**\$33,813.40**

**\$30,191.22**

## EDGE MILL

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
BRADFORD CT

APRIL 17, 2017

BRADFORD CT (TWP 607)

ROAD DATA	
BEGIN LIMIT	SAWMILL PKWY
END LIMIT	SAWMILL RD
LENGTH	400 FEET
EXISTING WIDTH	35.0 FEET
PROPOSED WIDTH	35.0 FEET
TOTAL SY IMPROVED	1,556 SY
TOTAL SF IMPROVED	14,000 SF
TOTAL MILES IMPROVED	0.076 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE	X	644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

**TOTALS**

**\$19,668.92**

**\$18,448.83**

## EDGEMILL AND BUTT JOINTS

**POLLYFILL**

## CHIP SEAL LEVEL AND OVERLAY

LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
EMPTY1

APRIL 17, 2017

ROAD DATA		PLAN			ESTIMATE		AWARDED		WORK IN PLACE	
ITEM	DESCRIPTION	UNIT	QTY	UNIT \$	EXTENDED \$	UNIT \$	EXTENDED \$	QTY	EXTENDED \$	
BEGIN LIMIT										
END LIMIT										
LENGTH	FEET									
EXISTING WIDTH	FEET									
PROPOSED WIDTH	FEET									
TOTAL SY IMPROVED	SY									
TOTAL SF IMPROVED	SF									
TOTAL MILES IMPROVED	MILES									
ASPHALT		INCHES	YLD %							
446 SURFACE (DENSITY)										
448 SURFACE										
449 LEVELING										
448 INTERMEDIATE										
301 BASE										
OPTIONS										
BERM (DEPTH/WIDTH)										
TACK (RATE/COURSES)										
STOP LINE (# OF INTS)	644S									
CENTERLINE		644C								
EDGELINE		644E								
Maintaining Traffic	per mile									
<b>TOTAL(S)</b>										

SR 315 EAST 300' SUPERPAVE

LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
RUTHERFORD RD

APRIL 17, 2017

RUTHERFORD RD (TWP 122)

ROAD DATA	
BEGIN LIMIT	LIBERTY RD
END LIMIT	RR TRACKS
LENGTH	2700 FEET
EXISTING WIDTH	23.0 FEET
PROPOSED WIDTH	23.0 FEET
TOTAL SY IMPROVED	6,900 SY
TOTAL SF IMPROVED	62,100 SF
TOTAL MILES IMPROVED	0.511 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

<b>OPTIONS</b>		
BERM (DEPTH/WIDTH)	2.00	1
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE	X	644C
EDGELINE	X	644E
Maintaining Traffic	X	per mile

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
RUTHERFORD RD - 2

APRIL 17, 2017

RUTHERFORD RD - 2 (TWP 122)

ROAD DATA	
BEGIN LIMIT	900' W OF SAWMILL
END LIMIT	ST RT 257
LENGTH	7,300 FEET
EXISTING WIDTH	20.0 FEET
PROPOSED WIDTH	20.0 FEET
TOTAL SY IMPROVED	16,222 SY
TOTAL SF IMPROVED	146,000 SF
TOTAL MILES IMPROVED	1.383 MILES

OPTIONS		
BERM (DEPTH/WIDTH)	2.00	1
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		6445
CENTERLINE	X	644C
EDGELINE	X	644E
MAINTAINING TRAFFIC	X	per mile

**TOTAL(S)**

**\$268,265.38**

**\$262,404.27**

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
DAVENTRY LN

APRIL 17, 2017

DAVENTRY LN (TWP 684)

ROAD DATA	
BEGIN LIMIT	ST RT 315
END LIMIT	CUL DE SAC
LENGTH	3500 FEET
EXISTING WIDTH	21.0 FEET
PROPOSED WIDTH	21.0 FEET
TOTAL SY IMPROVED	8,167 SY
TOTAL SF IMPROVED	73,500 SF
TOTAL MILES IMPROVED	0.663 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)	1	644S
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

LIBERTY

**2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
BRITTINGHAM LN**

APRIL 17, 2017

BRITTINGHAM LN (TWP 687)

ROAD DATA	
BEGIN LIMIT	DAVENTRY LN
END LIMIT	DAVENTRY LN
LENGTH	1150 FEET
EXISTING WIDTH	20.0 FEET
PROPOSED WIDTH	20.0 FEET
TOTAL SY IMPROVED	2,556 SY
TOTAL SF IMPROVED	23,000 SF
TOTAL MILES IMPROVED	0.218 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

<b>OPTIONS</b>		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)	2	644S
CENTERLINE		644C
EDGELINE		644E
Maintaining Traffic	X	per mile

## LIBERTY

**2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
CLARINGTON CT**

APRIL 17, 2017

CLARINGTON CT (TWP 686)

ROAD DATA	
BEGIN LIMIT	DAVENTRY LN
END LIMIT	CUL DE SAC
LENGTH	700 FEET
EXISTING WIDTH	21.0 FEET
PROPOSED WIDTH	21.0 FEET
TOTAL SY IMPROVED	1,633 SY
TOTAL SF IMPROVED	14,700 SF
TOTAL MILES IMPROVED	0.133 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)	1	6445
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
BERKELEY CT

APRIL 17, 2017

BERKLEY CT (TWP 868)

ROAD DATA	
BEGIN LIMIT	CLARINGTON CT
END LIMIT	CUL DE SAC
LENGTH	1000 FEET
EXISTING WIDTH	20.0 FEET
PROPOSED WIDTH	20.0 FEET
TOTAL SY IMPROVED	2,222 SY
TOTAL SF IMPROVED	20,000 SF
TOTAL MILES IMPROVED	0.189 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.25	5.0%
448 LEVELING	0.75	5.0%
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)	1	644S
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

**TOTAL(S)**

**\$22,622.56**

**\$22,461.19**

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
DAVENTRY CT

APRIL 17, 2017

DAVENTRY CT (TWP 685)

ROAD DATA	
BEGIN LIMIT	DAVENTRY LN
END LIMIT	CUL DE SAC
LENGTH	630 FEET
EXISTING WIDTH	20.0 FEET
PROPOSED WIDTH	20.0 FEET
TOTAL SY IMPROVED	1,400 SY
TOTAL SF IMPROVED	12,600 SF
TOTAL MILES IMPROVED	0.119 MILES

**TOTAL(S)**

**\$14,270.00**

**\$14,165.20**

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
BACIRCAY LN

APRIL 17, 2017

BACIRCAY LN (TWP 1274)

ROAD DATA	
BEGIN LIMIT	END OF CORP
END LIMIT	RUTHERFORD RD
LENGTH	2140 FEET
EXISTING WIDTH	22.0 FEET
PROPOSED WIDTH	22.0 FEET
TOTAL SY IMPROVED	5,231 SY
TOTAL SF IMPROVED	47,080 SF
TOTAL MILES IMPROVED	0.405 MILES

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

**TOTAL(S)**

**\$34,404.68**

**\$34,194.20**

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
MENDERES DR

APRIL 17, 2017

MENDERES DR (TWP 1354)

ROAD DATA	
BEGIN LIMIT	BACIRCA LN
END LIMIT	THE PRESERVE
LENGTH	2100 FEET
EXISTING WIDTH	21.0 FEET
PROPOSED WIDTH	21.0 FEET
TOTAL SY IMPROVED	4,900 SY
TOTAL SF IMPROVED	44,100 SF
TOTAL MILES IMPROVED	0.398 MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.50	5.0%
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE		644C
EDGELINE		644E
Maintaining Traffic	X	per mile

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
FILIZ LN

APRIL 17, 2017

FELIZ LN (TWP 472)

ROAD DATA		
BEGIN LIMIT	MENDERES DR	
END LIMIT	GEDIZ DR	
LENGTH	2100	FEET
EXISTING WIDTH	21.0	FEET
PROPOSED WIDTH	21.0	FEET
TOTAL SY IMPROVED	1,900	SY
TOTAL SF IMPROVED	44,100	SF
TOTAL MILES IMPROVED	0.398	MILE

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.50	5.0%
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE		644C
EDGELINE		644E
MAINTAINING TRAFFIC	X	per mile

## LIBERTY

2017 ROAD IMPROVEMENT PROGRAM  
ROAD SUMMARY  
GEDIZ

APRIL 17, 2017

GEDIZ DR (TWP 1273)

ROAD DATA		
BEGIN LIMIT	BACIRAY LN	
END LIMIT	FELIZ LN	
LENGTH	1200	FEET
EXISTING WIDTH	21.0	FEET
PROPOSED WIDTH	21.0	FEET
TOTAL SY IMPROVED	2,800	SY
TOTAL SF IMPROVED	25,200	SF
TOTAL MILES IMPROVED	0.227	MILES

ASPHALT	INCHES	YLD %
446 SURFACE (DENSITY)		
448 SURFACE	1.50	5.0%
448 LEVELING		
448 INTERMEDIATE		
301 BASE		

OPTIONS		
BERM (DEPTH/WIDTH)		
TACK (RATE/COURSES)	0.08	1
STOP LINE (# OF INTS)		644S
CENTERLINE		644C
EDGELINE		644E
Maintaining Traffic	X	per mile

## LIBERTY