



TRANSPORTATION
Impact**Fee**Program**2015**

Capital Improvements Plan
March 2015 Update

Acknowledgments

Transportation Impact Fee Committee members:

*James Colella
Susan Rusnak
John T. Morgan
William Thompson
Sharon Beck
David Donley
Gary Sipple
Philip Bishop
Matthew Sperenza*

Cranberry Township Board of Supervisors:

*Bruce Mazzonei, Chairman
Mike Manipole, Vice-Chairman
Richard Hadley
Bruce Hezlop
John Skorupan*

Consultants:

Herbert, Rowland & Grubic, Inc. (HRG)

Cranberry Township Staff:

*Jason Kratsas, Director of Engineering
Kelly Maurer, Project Engineer*



CRANBERRY TOWNSHIP
TRANSPORTATION IMPACT FEE PROGRAM
CAPITAL IMPROVEMENTS PLAN

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
PURPOSE	1
COST ESTIMATE.....	2
PROJECT SUMMARY SHEETS	2
SELECTED PROJECTS OF THE CAPITAL IMPROVEMENT PLAN	3
TRANSPORTATION IMPACT FEE CALCULATIONS	8

LIST OF TABLES

	TABLE
IMPACT FEE PROGRAM – SELECTED CAPITAL IMPROVEMENTS LIST.....	1

LIST OF APPENDICES

	APPENDIX
SELECTED PROJECT COST SUMMARIES AND DRAWINGS.....	A
CANDIDATE PROJECT COST SUMMARIES AND DRAWINGS	B
CAPITAL IMPROVEMENTS PLAN ADJUSTMENTS.....	C

I. Introduction

On December 19, 1990, Pennsylvania Act 209 was effectively signed into law. Under this Act, municipalities are able to assess impact fees to new development within their communities. Impact fees are clearly defined in Act 209 as “a fee imposed by a municipality against new development to generate revenue for funding the cost of transportation capital improvements necessitated by and attributable to new development.” In order to institute the Act, a four component Transportation Impact Fee Program must be developed and implemented by the municipality. The Transportation Impact Fee Program consists of a *Land Use Assumptions Report*, a *Roadway Sufficiency Analysis*, a *Capital Improvement Plan* and an *Adopting Ordinance*. This process is directed by a Transportation Impact Fee Advisory Committee, which is established by the Board of Supervisors. The Cranberry Township Board of Supervisors made public its intention to update the impact fee program and established the Impact Fee Advisory Committee by Resolution No. 2014-82 on December 11, 2014. The following *Capital Improvements Plan* (CIP) update has been prepared on behalf of Cranberry Township, Butler County, Pennsylvania and has been completed in accordance with Pennsylvania Act 209 of 1990 and subsequent updates.

The results of the *Roadway Sufficiency Analysis* served as the basis for the *Capital Improvements Plan* for Cranberry Township. As part of the *Roadway Sufficiency Analysis*, the existing transportation system was analyzed to identify existing deficiencies and to determine the preferred level of service. A travel demand model was used to project future traffic volumes, which were used to determine roadway and intersection deficiencies caused by projected growth within the Township. Mitigation improvements were developed for each deficient intersection and roadway segment. This *Capital Improvements Plan* thoroughly investigates the eligibility and feasibility of each improvement identified in the *Roadway Sufficiency Analysis*. This study also determines the appropriate impact fee per PM peak hour site development trip for Cranberry Township’s Transportation Service Areas (hereafter referred to as Transportation Districts).

II. Purpose

The primary objective of the *Capital Improvements Plan* is to select projects from the list of eligible transportation improvement projects developed during the *Roadway Sufficiency Analysis* that efficiently and safely accommodate anticipated future traffic within the Township. Major tasks were performed in cooperation with the Impact Fee Advisory Committee and Township Staff using generally accepted engineering and planning practices. These tasks included:

- Development of cost estimates for all identified improvements (in accordance with Act 209);

- Distinguish improvements as to whether they are needed to correct existing deficiencies, future base deficiencies and/or new site development traffic;
- Selection of candidate transportation improvement projects that will be included as impact fee projects on the Capital Improvements Plan; and
- Provide a time schedule for when the improvements are to be implemented as part of the CIP.

The following summarizes the process and results of the *Capital Improvements Plan* for Cranberry Township.

III. Cost Estimate

Cost estimates were calculated for each improvement proposed in the *Roadway Sufficiency Analysis*. The estimates were completed using the most current (2014) construction costs. In order for the cost estimates to reflect actual costs in any given year, an inflation rate per year was applied. The inflation rate of 3% was used and was based on Turner Building Cost Index over the past 12 years. Therefore, if a project is anticipated to be constructed in 2016, it would reflect a cost 3% higher than the cost if the project was constructed in 2015.



Cost estimates for each proposed project were determined by developing conceptual designs of the improvements. Aerial mapping was used to conceptually design each transportation improvement. Estimated quantities for pavement, earthwork, drainage systems, pavement markings, structures, required right-of-way and various other pay items were determined from the conceptual designs. Utility relocations were estimated based upon visible utilities such as gas valves and utility poles. Lastly, the cost estimates for each pay item were determined by referencing the PennDOT Electronic Contract Management Software (ECMS) website master list of construction items. The conceptual drawings for each applicable improvement project can be viewed in Appendix A and B.

IV. Project Summary Sheets

A detailed summary sheet has been provided for each improvement. The sheets are arranged in ascending order based on the intersection or roadway segment nomenclature defined in the *Roadway Sufficiency Analysis*. Each summary sheet identifies the project location, type of deficiency, and proposed improvement. A suggested project schedule and project-funding scheme has also been provided for each project.

The travel demand model used throughout the *Roadway Sufficiency Analysis* determined anticipated 2030 Base traffic volumes as a result of background growth. The travel demand model also determined anticipated 2030 Development traffic volumes which were based on the projected land use assumptions found in the adopted *Land Use Assumptions Report*. The following five (5) possible funding source classifications were assumed for implementing the identified transportation improvements:

- State and/or Federal;
- Local and/or Other; and
- Cranberry Township Impact Fee.

Each project sheet summarizes the estimated cost of each project according to six quantities. The anticipated costs are documented as follows:

- Construction;
- Utility Relocation;
- Right-of-Way Acquisition;
- Engineering;
- Inspection; and
- Admin and Planning*.

*Admin and Planning cost estimates include legal and planning costs for impact fee eligible projects. Also includes consulting costs to secure State and Federal funding related to the non-impact fee share of the projects.

Appendix A includes the project summary sheets and applicable improvement drawings for the projects that were selected for inclusion in the Township's *Capital Improvements Plan*. Appendix B contains (for informational purposes only) other candidate projects from the *Roadway Sufficiency Analysis* that were not selected to be included in the *Capital Improvements Plan*.

V. Selected Projects of the Capital Improvement Plan

The *Roadway Sufficiency Analysis*, which was completed prior to the *Capital Improvements Plan*, is a comprehensive planning study projecting traffic conditions over a 20-year horizon based on the Township's adopted *Land Use Assumptions Report*, as well as many other variables. The transportation recommendations developed in the *Roadway Sufficiency Analysis* were suggested as mitigations for projected deficiencies anticipated within the next 20-year period to provide a preferred operational Level of Service "D" for all intersections and roadway segments (as determined by Cranberry Township). Township Staff and the Impact Fee Advisory

Capital Improvements Plan 2015 Update

Committee reviewed improvement projects during various work sessions to arrive at the list of 53 transportation projects that are incorporated into the *Capital Improvements Plan*. Furthermore, as part of this process, projects were prioritized to arrive at the anticipated



construction year for each, as well as adjustments made to the amount of participation by type of funding source. Suggested transportation projects not selected for the *Capital Improvements Plan* are listed in Appendix B as “candidate projects” and include cost summary sheets with conceptual improvement sketches provided where applicable. Although these projects are not included in this *Capital Improvements Plan*, these projects may be incorporated into future updates in

accordance with Act 209 of 1990 and subsequent updates.

A detailed summary of transportation improvement projects included as part of the *Capital Improvements Plan* for Cranberry Township are shown in the table on the following pages. The improvements are sorted by district with the intersection or roadway segment location, project description, anticipated year of construction and total project cost with desired funding sources for each project.

The following list notes the information about the 53 selected transportation improvement projects:

- Twenty-one (21) transportation projects involved improvements at various study intersections as a result of 2030 deficiencies.
- Thirty (30) transportation projects involved improvements along various study segments as a result of 2030 deficiencies.
- Two (2) transportation projects mitigate deficiencies as a result of existing traffic volumes.

TABLE 3 - Impact Fee Program - Candidate Capital Improvements List (Sorted By District/Project Number)										
Map Number	Project Number	Intersection or Roadway Segment	Improvement Project Description	Construction Year	Total Project Cost (dollars)	State/ Federal Funding* (dollars)	Other Funding** (dollars)	Western District Impact Fee (dollars)	Eastern District Impact Fee (dollars)	District
Eastern District										
10	I-10	The intersection of Franklin Road (SR 3021) and North Boundary Road (T-311).	Signalize the intersection and add a northbound left-turn lane on Franklin Road.	2018	1,110,258	555,129	0	0	555,129	East
19	I-19A	Intersection of Marshall Road (T-305) and North Boundary Road (T-311).	Construct a roundabout.	2018	1,152,440	299,634	276,586	0	576,220	East
20	I-20	The intersection of Marshall Road (T-305) and Rowan Road (SR 3018).	Signalize the intersection and add an eastbound left-turn lane, a southbound right-turn lane and a westbound right-turn lane.	2018	1,386,357	693,178	0	0	693,178	East
42	I-42B	The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).	Construct a roundabout.	2018	1,501,058	750,529	0	0	750,529	East
S-D1	S-D1	New connection from Wisconsin Avenue to American Way	Construct 2 Lane Commercial Collector Roadway	2018	690,374	0	151,882	0	538,492	East
S-D4	S-D4	Dutihl Road from Route 228 north to Brandt Drive.	Revise existing Dutihl Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway	2018	1,484,096	0	326,501	0	1,157,595	East
S-H1	S-H1	Route 228 to local road network north of Route 228 east of I-79.	Construct new loop ramp and flyover from Route 228 to local road network north of Route 228 east of I-79 and EB lane on 228 from flyover to Cranberry Woods Drive	2018	6,120,951	0	306,048	0	5,814,903	East
S-H5	S-H5	Local road network north of Route 228. North-South connection from flyover to roundabout.	Construct 3 Lane Commercial Collector Roadway	2018	299,352	0	14,968	0	284,384	East
12	I-12	The intersection of Franklin Road (SR 3021), Hope Road (T-309) and Rowan Road (SR 3018).	Realign Rowan Road opposite of Hope Road. Signalize the intersection and add an eastbound left.	2020	1,185,315	0	592,658	0	592,658	East
22	I-22	The intersection of US Route 19 (SR 0019), North Boundary Road (T-311) and Glen Eden Road (SR 3024).	Add a westbound left-turn lane to create dual lefts on North Boundary Road.	2020	490,623	0	107,937	0	382,686	East
9	I-09A	The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).	Realign Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout.	2025	1,526,604	0	763,302	0	763,302	East
13	I-13	The intersection of Franklin Road (SR 3021) and Peters Road (T-307).	Add a westbound left turn lane on Peters Road.	2025	532,556	0	266,278	0	266,278	East
40	I-40	The intersection of Franklin Road (SR 3021) and PA Route 228.	Add EBL, WBL, SB Dual Lefts, NBT.	2025	4,274,267	2,564,560	0	0	1,709,707	East
S-20	S-20	North Boundary Road from Marshall Road to Franklin Road	Add left turn lanes at key intersections to maintain thru traffic flow.	2025	2,279,735	0	1,823,788	0	455,947	East
S-25	S-25	Rowan Road (SR 3018) from Marshall Road to Peters Rd/Canterbury Trail.	Widen to five-lane Residential Collector.	2025	7,429,523	4,457,714	2,228,857	0	742,952	East
S-27	S-27	Goehring Road (T-316) from Marshall Road to Franklin Road.	Widen and Realign to two-lane Residential Collector Standards.	2025	8,072,084	3,793,880	3,470,996	0	807,208	East
S-40	S-40A	S.R. 228 from Route 19 to Franklin Road	Widen to 6 Lane Arterial	2025	15,514,180	0	13,962,762	0	1,551,418	East
S-43	S-43A	Franklin Road (SR 3021) from Route 228 to Old Mars Crider Road.	Widen to four-lane Residential Collector.	2025	4,561,963	2,737,178	0	0	638,675	East
S-43	S-43B	Franklin Road (SR 3021) from Old Mars Crider Road to Peters road.	Widen to four-lane Residential Collector.	2025	13,180,778	10,544,622	1,318,078	0	1,318,078	East
S-D2	S-D2	New connection from American Way to North Side of Existing Home Depot Parcel.	Construct 2 Lane Commercial Collector Roadway	2025	1,519,220	0	334,228	0	1,184,992	East
S-D3	S-D3	New connection from South Side of Existing Home Depot Parcel to Near 228.	Construct 2 Lane Commercial Collector Roadway	2025	2,661,087	0	585,439	0	2,075,648	East
S-H6	S-H6	Local road network south of Route 228. Connection from MSA thruway to Cranberry Woods Drive	Construct 2 Lane Commercial Collector Roadway	2025	1,193,335	59,667	537,001	0	596,667	East
				Totals	78,166,155	26,456,090	27,067,309	0	23,456,646	

*- This is desired funding Cranberry Township is Anticipating to be provided by the State or Federal Government. This project is not necessarily on any State or Federal Transportation Improvement Plan.

** - Other funding sources to be provided by Municipal revenue, developer contributions and other non state, federal or municipal sources.

*** - See Adjustment Table for Adjustments made to Impact Fee Program dollar and trip totals based on current balances and approved trips.

	West	East
Total for Impact Fee Program By District***	11,830,911	18,831,308
Adjusted Total of New Trip Ends	7,569	12,069
Actual Fee Per Trip	1,563	1,560

TABLE 3 - Impact Fee Program - Candidate Capital Improvements List (Sorted By District/Project Number)											
Map Number	Project Number	Intersection or Roadway Segment	Improvement Project Description	Construction Year	Total Project Cost (dollars)	State/ Federal Funding* (dollars)	Other Funding** (dollars)	Western District Impact Fee (dollars)	Eastern District Impact Fee (dollars)	District	
Shared Eastern/ Western District (Route 19)											
23	I-23A	The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).	<i>Signalize the Intersection (Existing Deficiency).</i>	2018	328,638	0	328,638	0	0	East/West	
23	I-23B	The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).	Construct an eastbound left-turn lane on Progress Avenue.	2018	353,471	0	176,735	159,062	17,674	East/West	
S-44	S-44B	Route 19 (SR 0019) from Marshall Township to Route 228.	Adaptive Control System.	2018	125,664	0	69,115	28,274	28,274	East/West	
S-45	S-45C	Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.	Adaptive Control System.	2018	109,273	0	54,636	27,318	27,318	East/West	
36	I-36	The intersection of US Route 19 and Short Street/ Wal-Mart Driveway	Add an eastbound left turn lane, westbound right, southbound left and appropriate receiving lanes.	2020	3,168,314	2,851,482	0	221,782	95,049	East/West	
37	I-37	The intersection of US Route 19 and St. Francis Way/ Mall Driveway	Add an Eastbound Left Turn Lane and receiving lane on Mall Drive, Add NB Left to form Dual Lefts on 19 and add a WB right turn lane on St. Francis Way.	2020	4,337,735	1,604,962	2,515,886	214,718	2,169	East/West	
24	I-24A	The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).	Add EBL, EBT, EBR, WBL, WBT, SBR. Add NB and SB left to form dual lefts.	2025	6,431,380	0	5,016,476	707,452	707,452	East/West	
S-44	S-44A	Route 19 (SR 0019) from Marshall Township to Route 228.	Widen to six-lane Minor Arterial.	2025	12,909,116	11,618,205	0	645,456	645,456	East/West	
S-45	S-45A	Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.	Widen to six-lane Minor Arterial.	2025	21,534,882	19,381,394	0	1,076,744	1,076,744	East/West	
					Totals	146,019,046	72,516,422	38,003,541	14,920,849	50,077,104	

* - This is desired funding Cranberry Township is Anticipating to be provided by the State or Federal Government. This project is not necessarily on any State or Federal Transportation Improvement Plan.

** - Other funding sources to be provided by Municipal revenue, developer contributions and other non state, federal or municipal sources.

*** - See Adjustment Table for Adjustments made to Impact Fee Program dollar and trip totals based on current balances and approved trips.

	West	East
Total for Impact Fee Program By District***	11,830,911	18,831,308
Adjusted Total of New Trip Ends	7,569	12,069
Actual Fee Per Trip	1,563	1,560

TABLE 3 - Impact Fee Program - Candidate Capital Improvements List (Sorted By District/Project Number)										
Map Number	Project Number	Intersection or Roadway Segment	Improvement Project Description	Construction Year	Total Project Cost (dollars)	State/ Federal Funding* (dollars)	Other Funding** (dollars)	Western District Impact Fee (dollars)	Eastern District Impact Fee (dollars)	District
Western District										
6	I-06	The intersection of Unionville Road (T-328) and Ogle View Road (T-322).	Construct a roundabout.	2018	901,177	0	450,588	450,588	0	West
28	I-28	The intersection of Haine School Road (T-302), LaPorte Drive (T-652) and Freedom Road (SR 3020).	Add northbound left-turn lane on LaPorte Drive (Existing Deficiency).	2018	372,774	0	372,774	0	0	West
34	I-34	The intersection of Rolling Road and Freedom Road.	Install traffic signal.	2018	272,587	0	136,294	136,294	0	West
35	I-35	The intersection of US Route 19, Dutihl Road (T-326) and Brandt Drive (Private).	Add an exclusive eastbound auxiliary turn lane on Brandt Drive.	2018	378,695	0	117,395	261,299	0	West
S-10	S-10	Ogle View Road (T-322) from Unionville Road to Route 19.	Widen to three-lane Commercial Collector Standards.	2018	1,201,797	0	600,898	600,898	0	West
S-30	S-30B	Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.	Adaptive Control System.	2018	71,574	0	35,787	35,787	0	West
S-31	S-31B	Freedom Road (SR 3020) from Haine School Road to Commonwealth Drive.	Adaptive Control System.	2018	114,190	0	57,095	57,095	0	West
S-37	S-37B	Rochester Road (SR 3022) from Graham School Road to western St. Ferdinand Church Driveway.	Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).	2018	4,063,187	2,031,594	1,625,275	406,319	0	West
S-37	S-37C	Rochester Road (SR 3022) from western St. Ferdinand Church Driveway to Route 19.	Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).	2018	4,475,077	3,580,062	447,508	447,508	0	West
S-37	S-37D	Rochester Road (SR 3022) from Haines School Road to Route 19.	Adaptive Control System	2018	125,664	0	62,832	62,832	0	West
S-E1	S-E1	New connection Thomson Park Drive to Brandt Drive including widening of existing Brandt Drive.	Construct 2 Lane Commercial Collector Roadway	2018	1,623,229	0	811,614	811,614	0	West
S-E2	S-E2	Intersection improvements including signal and turning lanes associated with Brandt Drive at Thomson Park Drive.	Construct Signal and Intersection improvements at Thomson Park Drive to accommodate new connector Road	2018	493,915	0	246,958	246,958	0	West
S-F1	S-F1	New north-south connection from existing Unionville Road south to Rochester Road.	Construct 3 Lane Commercial Collector Roadway	2018	2,666,078	0	1,333,039	1,333,039	0	West
S-F2	S-F2	New connection from proposed Unionville North-South Road east to Route 19.	Construct 3 Lane Commercial Collector Roadway	2018	833,850	0	375,233	458,618	0	West
2	I-02	The intersection of Unionville Road (T-328) and Glen Eden Road (SR 3024).	Signalize the intersection and add a northbound left-turn lane on Unionville Road.	2020	613,577	306,788	0	306,788	0	West
3	I-03A	The intersection of Unionville Road (T-328) and Graham School Road (T-304).	Construct a roundabout.	2020	1,711,813	0	855,907	855,907	0	West
5	I-05A	The intersection of Unionville Road (T-328) and Progress Avenue (T-651).	Construct a roundabout.	2020	1,592,445	47,773	748,449	796,223	0	West
30	I-30	The intersection of Graham School Road (T-304) and Rochester Road (SR 3022).	Signalize the intersection and add a southbound right-turn lane and extend eastbound left-turn lane.	2020	722,365	361,183	0	361,183	0	West
46	I-46	Heights Drive and Route 19.	Signalize new intersection. Add a southbound right-turn lane to Route 19.	2020	734,427	0	367,213	367,213	0	West
S-30	S-30A	Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.	Widen to four-lane Minor Arterial from Powell to Haines School Road.	2025	14,815,381	5,777,999	7,555,844	1,481,538	0	West
S-31	S-31A	Freedom Road (SR 3020) from Haine School Road to Commonwealth Drive.	Widen to four-lane Minor Arterial with left-turn lanes.	2025	15,561,440	4,201,589	9,803,707	1,556,144	0	West
S-37	S-37A	Rochester Road (SR 3022) from Haines School Road to Graham School Road.	Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).	2025	8,156,030	7,748,228	0	407,801	0	West
					Totals	61,501,271	24,055,216	26,004,410	11,441,645	0

*- This is desired funding Cranberry Township is Anticipating to be provided by the State or Federal Government. This project is not necessarily on any State or Federal Transportation Improvement Plan.

** - Other funding sources to be provided by Municipal revenue, developer contributions and other non state, federal or municipal sources.

*** - See Adjustment Table for Adjustments made to Impact Fee Program dollar and trip totals based on current balances and approved trips.

	West	East
Total for Impact Fee Program By District***	11,830,911	18,831,308
Adjusted Total of New Trip Ends	7,569	12,069
Actual Fee Per Trip	\$1,563	\$1,560

VI. Transportation Impact Fee Calculations

The transportation impact fee was calculated by dividing the total cost attributable to impact fees for all identified *Capital Improvements Plan* projects by the number of new development trips generated between 2010 and 2030 in the applicable transportation districts. The total number of development trips determined during the *Roadway Sufficiency Analysis* was based on the approved *Land Use Assumptions Report*. In addition, adjustments in the calculation of the fee for the updated TCIP were necessary for trips from developments that have been approved but are not yet built. Those trips are locked into the impact fee rate that was in effect at the time of approval. Furthermore, the calculation of the fee must recognize the fees that have been collected but have not been appropriated for construction, which are currently in the impact fee accounts of the Township. A list of the trip adjustments is included in Appendix C. The following list represents each Transportation District along with the respective anticipated number of new trip ends over the 20-year horizon and the Impact Fee that was calculated per PM peak hour development trip:

- Eastern District: Anticipate 12,069 new PM peak hour trips at \$1,560 per trip.
- Western District: Anticipate 7,569 new PM peak hour trips at \$1,563 per trip.

This page intentionally left blank.

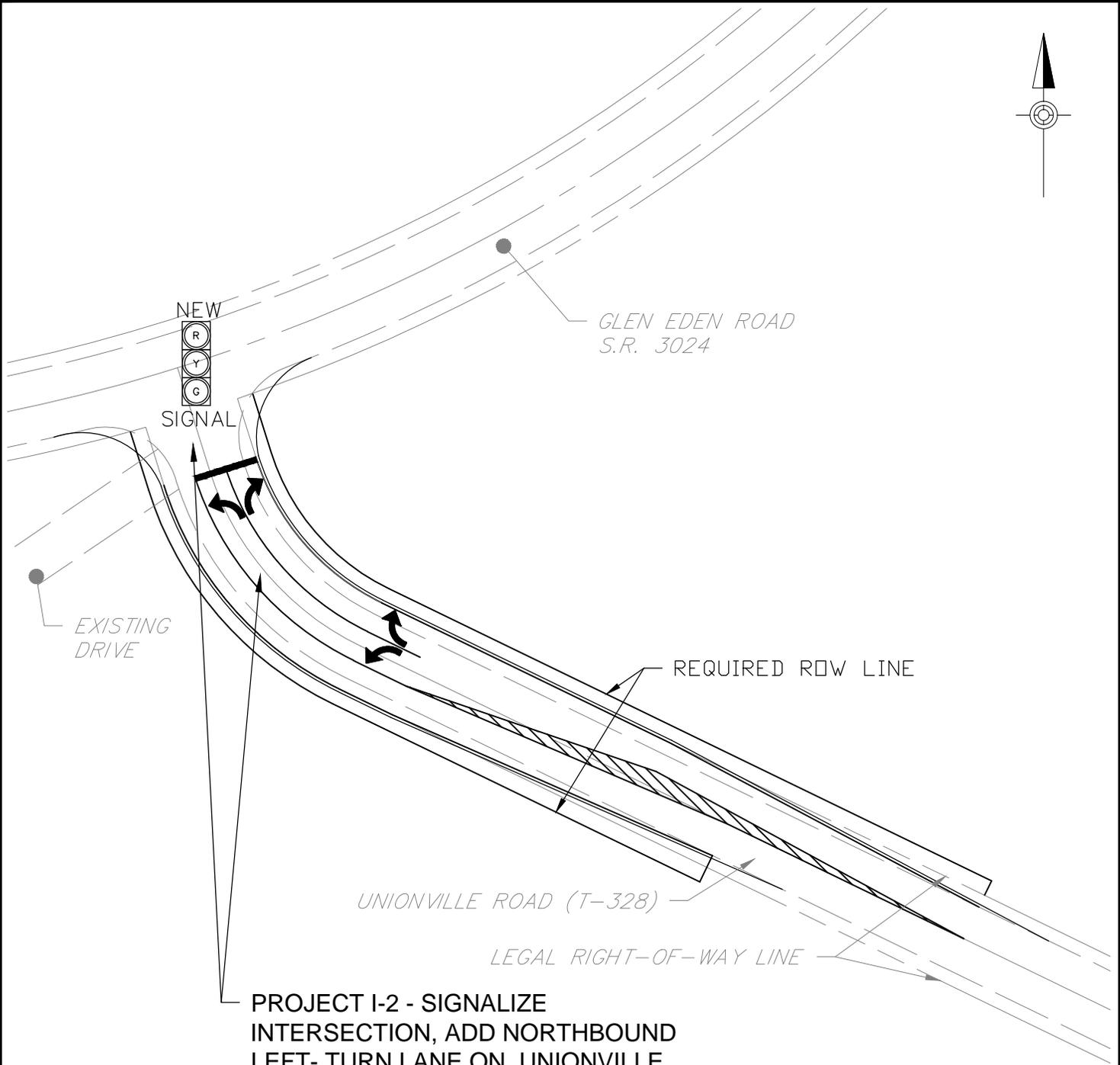
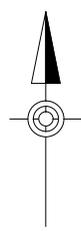


CRANBERRY
• TOWNSHIP •

APPENDIX A

SELECTED PROJECT COST SUMMARIES AND DRAWINGS

This page intentionally left blank.



PROJECT I-2 - SIGNALIZE INTERSECTION, ADD NORTHBOUND LEFT- TURN LANE ON UNIONVILLE ROAD



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-2:38pm jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE					DESIGN DSM
CAPITAL IMPROVEMENTS DRAWING #2 UNIONVILLE AND GLEN EDEN ROADS PROJECT I-2					DRAWN DSM
SHEET: 1	OF: 1	DATE: 06/15/2011			SCALE 1"=50'
					PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 2

PROJECT NUMBER: I-02

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Glen Eden Road (SR 3024).

DEFICIENCY:

The current one-way stop-controlled intersection is projected to become deficient with the forecast year 2030 traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a northbound left-turn lane on Unionville Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	358,766
Utility Relocation	5,000
Right-of Way	52,500
Engineering	71,753
Inspection	35,877
Admin & Planning	5,381
TOTAL	\$529,277

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 23%*

*New Development Traffic /
Anticipated Traffic Growth = 77%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$482,566
Projected Soft Cost	\$131,011
Projected Total Cost	\$613,577

New Pass Thru Trips	\$141,305
New Development Trips	\$472,271

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$306,788
Other	0%	\$0
Impact Fees	50%	\$306,788

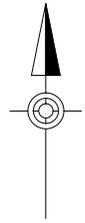
Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$306,788
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 3 for a plan sketch of the proposed improvement.



PROJECT I-3A CONSTRUCT
ROUNDBABOUT

LEGAL RIGHT-OF-WAY LINE

UNIONVILLE ROAD (T-328)

GRAHAM SCHOOL
ROAD (T-304)



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #3A
UNIONVILLE AND GRAHAM SCHOOL ROADS
PROJECT I-3A

SHEET: 1 OF: 1 DATE: 06/15/2011



DESIGN
DSM
DRAWN
DSM
SCALE
1"=100'
PROJECT
R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 3

PROJECT NUMBER: I-03A

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Graham School Road (T-304).

DEFICIENCY:

The one-way stop controlled intersection is projected to be deficient with forecast year 2030 volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	981,774
Utility Relocation	32,050
Right-of Way	75,000
Engineering	294,532
Inspection	78,542
Admin & Planning	14,727
TOTAL	\$1,476,625

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 20%*

*New Development Traffic /
Anticipated Traffic Growth = 80%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$1,262,246
Projected Soft Cost	\$449,567
Projected Total Cost	\$1,711,813

New Pass Thru Trips	\$342,363
New Development Trips	\$1,369,450

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$855,907
Impact Fees	50%	\$855,907

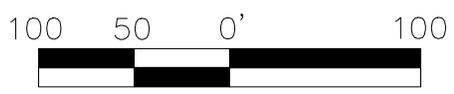
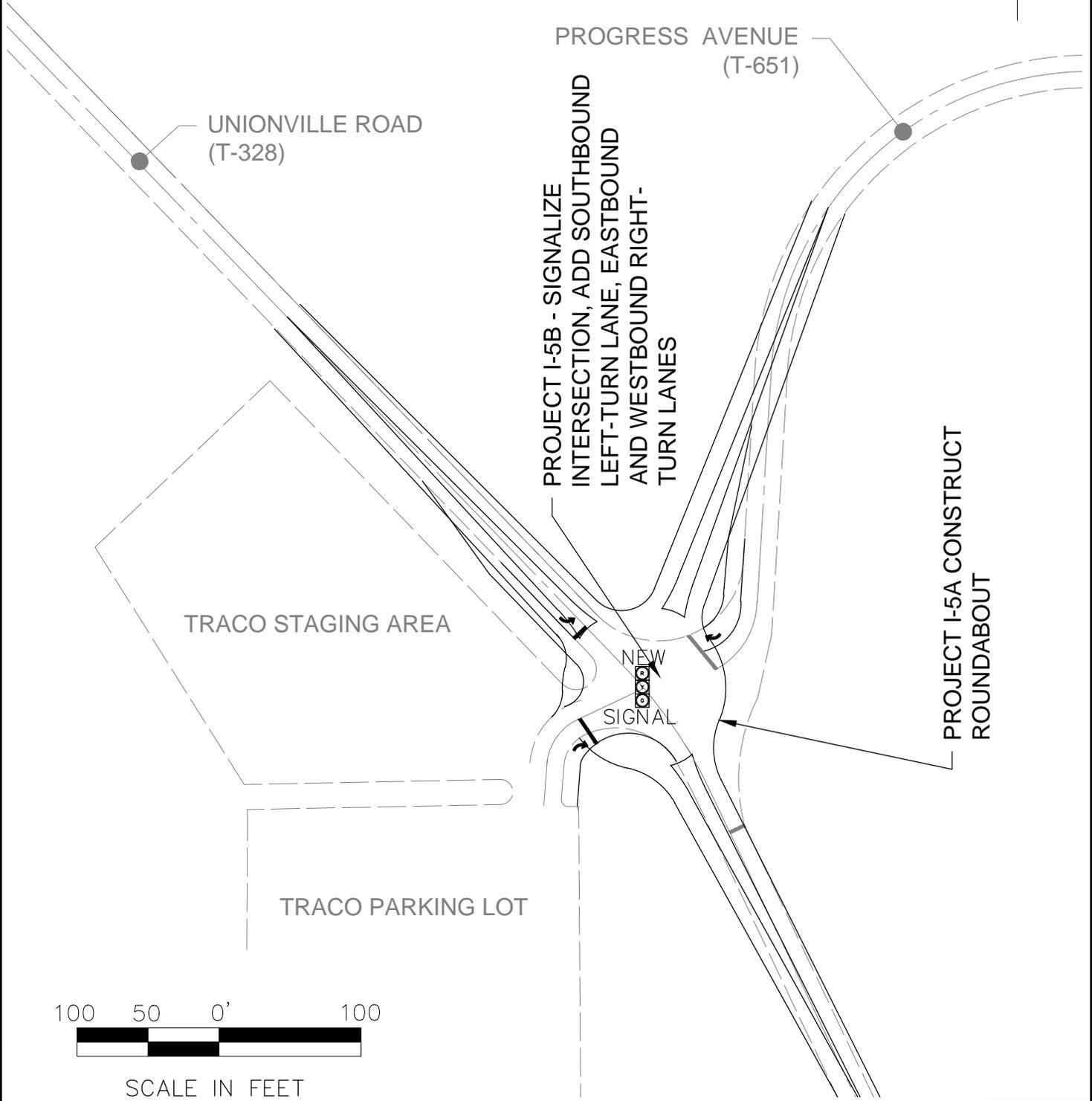
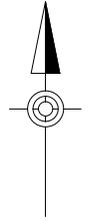
Secure Funding	Year
Acquire ROW	2019
Complete Engineering	2018
Begin Construction	2020

Transportation District Cost:

West District	\$855,907
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 3 for a plan sketch of the proposed improvement.



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #5
UNIONVILLE AND PROGRESS AVENUE
PROJECTS I-5A & I-5B



DESIGN	DSM
DRAWN	DSM
SCALE	1"=100'
PROJECT	R0012610447

SHEET:	OF:	DATE:
1	1	06/15/2011

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-3:05pm jstrejcek

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 5

PROJECT NUMBER: I-05A

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Progress Avenue (T-651).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	963,326
Utility Relocation	30,050
Right-of Way	125,000
Engineering	144,499
Inspection	96,333
Admin & Planning	14,450
TOTAL	\$1,373,657

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$1,296,504
Projected Soft Cost	\$295,941
Projected Total Cost	\$1,592,445

New Pass Thru Trips	\$270,716
New Development Trips	\$1,321,730

PROJECT SCHEDULE:

PROPOSED FUNDING:

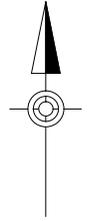
State/Federal	3%	\$47,773
Other	47%	\$748,449
Impact Fees	50%	\$796,223

Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$796,223
East District	\$0
Southeast District	\$0

REMARKS:

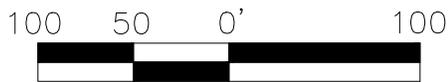


UNIONVILLE ROAD
(T-328)

OGLEVIEW ROAD
(T-322)

PROJECT I-6 CONSTRUCT
ROUNDBABOUT

MAIN STREET

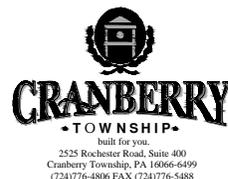


SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #6
UNIONVILLE AND OGLEVIEW ROADS
PROJECTS I-6

SHEET: 1 OF: 1 DATE: 06/15/2011



DESIGN
DSM
DRAWN
DSM
SCALE
1"=100'
PROJECT
R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 6

PROJECT NUMBER: I-06

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Ogle View Road (T-322).

DEFICIENCY:

The current intersection control and geometry are projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	530,952
Utility Relocation	28,050
Right-of Way	125,000
Engineering	79,643
Inspection	53,095
Admin & Planning	7,964
TOTAL	\$824,705

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 14%*

*New Development Traffic /
Anticipated Traffic Growth = 86%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$747,428
Projected Soft Cost	\$153,749
Projected Total Cost	\$901,177

New Pass Thru Trips	\$126,165
New Development Trips	\$775,012

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$450,588
Impact Fees	50%	\$450,588

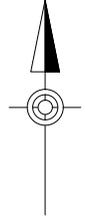
Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$450,588
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 6 for a plan sketch of the proposed improvement.



FRANKLIN ROAD
S.R. 3021

LEGAL ROW LINE

CALLERY ROAD
S.R. 3014

LEGAL ROW LINE

GARVIN ROAD
(T-313)

PROJECT I-9A CONSTRUCT
ROUNDAABOUT

LEGAL RIGHT-OF-WAY LINE



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #9A
FRANKLIN AND CALLERY/GARVIN ROADS
PROJECT I-9A

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=150'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 9

PROJECT NUMBER: I-09A

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).

DEFICIENCY:

The two offset intersections will not operate as safely or efficiently as a single realigned intersection as traffic volumes increase.

PROPOSED IMPROVEMENTS:

Realign Callery Road with Garvin Road to form a four-way "plus" intersection and construct a roundabout.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	720,063
Utility Relocation	28,050
Right-of Way	125,000
Engineering	180,016
Inspection	72,006
Admin & Planning	10,801
TOTAL	\$1,135,936

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 29%*

*New Development Traffic /
Anticipated Traffic Growth = 71%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$1,173,391
Projected Soft Cost	\$353,212
Projected Total Cost	\$1,526,604

New Pass Thru Trips	\$442,715
New Development Trips	\$1,083,889

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$763,302
Impact Fees	50%	\$763,302

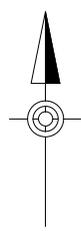
Secure Funding	Year
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$0
East District	\$763,302
Southeast District	\$0

REMARKS:

See Improvement Drawing number 13 for a plan sketch of the proposed improvement.



LEGAL RIGHT-OF-WAY

NORTH BOUNDARY ROAD
(T-311)

FRANKLIN ROAD
S.R. 3021

NEW
SIGNAL

REQUIRED ROW LINE

PROJECT I-10- SIGNALIZE INTERSECTION,
ADD NORTHBOUND LEFT-TURN LANE
TO FRANKLIN ROAD



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #10
FRANKLIN ROAD AND NORTH BOUNDARY ROAD
PROJECT I-10

SHEET: 1 OF: 1 DATE: 06/15/2011



DESIGN
DSM
DRAWN
DSM
SCALE
1"=100'
PROJECT
R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 10

PROJECT NUMBER: I-10

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and North Boundary Road (T-311).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a northbound left-turn lane on Franklin Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	637,578
Utility Relocation	31,000
Right-of Way	127,500
Engineering	159,395
Inspection	51,006
Admin & Planning	9,564
TOTAL	\$1,016,043

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 38%*

*New Development Traffic /
Anticipated Traffic Growth = 62%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$869,896
Projected Soft Cost	\$240,361
Projected Total Cost	\$1,110,258

New Pass Thru Trips	\$421,898
New Development Trips	\$688,360

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$555,129
Other	0%	\$0
Impact Fees	50%	\$555,129

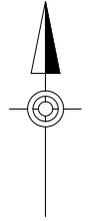
Secure Funding	2016
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$0
East District	\$555,129
Southeast District	\$0

REMARKS:

See Improvement Drawing number 10 for a plan sketch of the proposed improvement.



LEGAL ROW LINE

FRANKLIN ROAD
S.R. 3021

PROJECT I-12 - REALIGN
ROWAN ROAD OPPOSITE
HOPE ROAD AND ADD
EASTBOUND LEFT-TURN
ON ROWAN ROAD,
SIGNALIZE INTERSECTION

HOPE ROAD (T-309)

HOUSE

NEW
SIGNAL

LEGAL ROW LINE

ROWAN ROAD
S.R. 3018

35'

HOUSE

HOUSE

HOUSE

LEGAL RIGHT-OF-WAY LINE



SCALE IN FEET

File name: P:\0012\001261_0447\CranMap_imp1.1NEW\0605.dwg Layout:Layout1 Sep 06, 2011-3:25pm jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #12
FRANKLIN ROAD AND HOPE/ROWAN ROADS
PROJECT I-12

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 12

PROJECT NUMBER: I-12

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021), Hope Road (T-309) and Rowan Road (SR 3018).

DEFICIENCY:

The two offset intersections will not operate as safely as a single realigned intersection as traffic volumes increase.

PROPOSED IMPROVEMENTS:

Realign Rowan Road opposite of Hope Road. Signalize the intersection and add an eastbound left.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	685,533
Utility Relocation	10,000
Right-of Way	63,000
Engineering	171,383
Inspection	82,264
Admin & Planning	10,283
TOTAL	\$1,022,463

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 37%*

*New Development Traffic /
Anticipated Traffic Growth = 63%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$879,348
Projected Soft Cost	\$305,968
Projected Total Cost	\$1,185,315

New Pass Thru Trips	\$438,567
New Development Trips	\$746,749

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$592,658
Impact Fees	50%	\$592,658

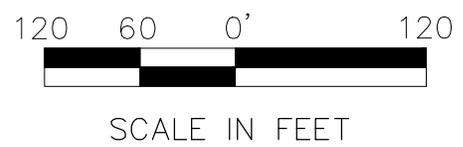
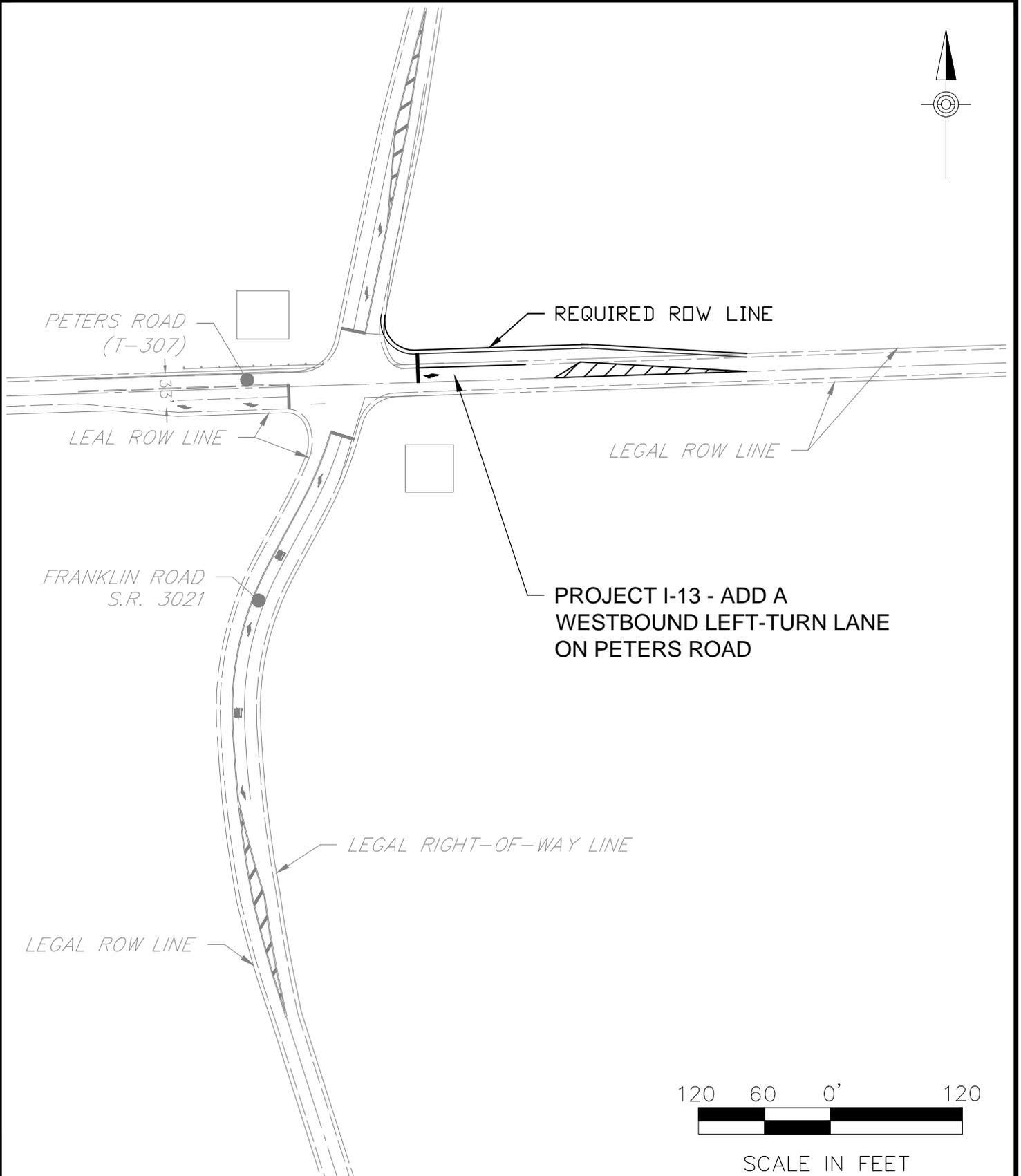
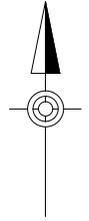
Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$0
East District	\$592,658
Southeast District	\$0

REMARKS:

See Improvement Drawing number 12 for a plan sketch of the proposed improvement.



File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEWLOGOS.dwg Layout:Layout1 Sep 06, 2011--3:26pm_jstrejek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE		
CAPITAL IMPROVEMENTS DRAWING #13 FRANKLIN ROAD AND PETERS ROAD PROJECT I-13		
SHEET: 1	OF: 1	DATE: 06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=120'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 13

PROJECT NUMBER: I-13

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and Peters Road (T-307).

DEFICIENCY:

The intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add a westbound left turn lane on Peters Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	236,328
Utility Relocation	40,500
Right-of Way	45,000
Engineering	47,266
Inspection	23,633
Admin & Planning	3,545
TOTAL	\$396,272

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 24%*

*New Development Traffic /
Anticipated Traffic Growth = 76%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$432,510
Projected Soft Cost	\$100,046
Projected Total Cost	\$532,556

New Pass Thru Trips	\$127,542
New Development Trips	\$405,014

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$266,278
Impact Fees	50%	\$266,278

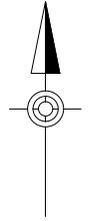
Secure Funding	Year
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$0
East District	\$266,278
Southeast District	\$0

REMARKS:

See Improvement Drawing number 13 for a plan sketch of the proposed improvement.



LEGAL RIGHT-OF-WAY LINE

NORTH BOUNDARY ROAD
(T-311)

MARSHALL ROAD (T-305)

PROJECT I-19A CONSTRUCT
ROUNDBOUT



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #19A
MARSHALL ROAD AND NORTH BOUNDARY ROAD
PROJECT I-19A

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN
DSM
DRAWN
DSM
SCALE
1"=100'
PROJECT
R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 19

PROJECT NUMBER: I-19A

LOCATION:

TRANSPORTATION DISTRICT: East

Intersection of Marshall Road (T-305) and North Boundary Road (T-311).

DEFICIENCY:

The current intersection traffic control is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	689,022
Utility Relocation	25,350
Right-of Way	75,000
Engineering	172,256
Inspection	82,683
Admin & Planning	10,335
TOTAL	\$1,054,646

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 26%*

*New Development Traffic /
Anticipated Traffic Growth = 74%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$862,568
Projected Soft Cost	\$289,871
Projected Total Cost	\$1,152,440

New Pass Thru Trips	\$299,634
New Development Trips	\$852,805

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	26%	\$299,634
Other	24%	\$276,586
Impact Fees	50%	\$576,220

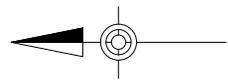
Secure Funding	2016
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$0
East District	\$576,220
Southeast District	\$0

REMARKS:

See Improvement Drawing number 19 for a plan sketch of the proposed improvement.



ROWAN ROAD S.R. 3018

PROJECT I-20 ADD WESTBOUND
RIGHT-TURN LANE ON ROWAN
ROAD

LEGAL RIGHT-OF-WAY LINE

68' 6"

NEW

SIGNAL

MARSHALL ROAD (T-305)

PROJECT I-20 - ADD SOUTHBOUND
RIGHT-TURN LANE ON MARSHALL
ROAD

PROJECT I-20 SIGNALIZE
INTERSECTION AND ADD
EASTBOUND LEFT-TURN
LANE ON ROWAN ROAD

REQUIRED ROW LINE

60'

60'



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #20
MARSHALL ROAD AND ROWAN ROAD
PROJECT I-20



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

SHEET: 1	OF: 1	DATE: 06/15/2011
-------------	----------	---------------------

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-1:54pm jstrejcek

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 20

PROJECT NUMBER: I-20

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Marshall Road (T-305) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add an eastbound left-turn lane, a southbound right-turn lane and a westbound right-turn lane.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	866,152
Utility Relocation	25,000
Right-of Way	200,000
Engineering	95,277
Inspection	69,292
Admin & Planning	12,992
TOTAL	\$1,268,713

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 26%*

*New Development Traffic /
Anticipated Traffic Growth = 74%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$1,192,331
Projected Soft Cost	\$194,026
Projected Total Cost	\$1,386,357

New Pass Thru Trips	\$360,453
New Development Trips	\$1,025,904

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$693,178
Other	0%	\$0
Impact Fees	50%	\$693,178

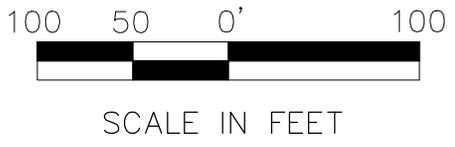
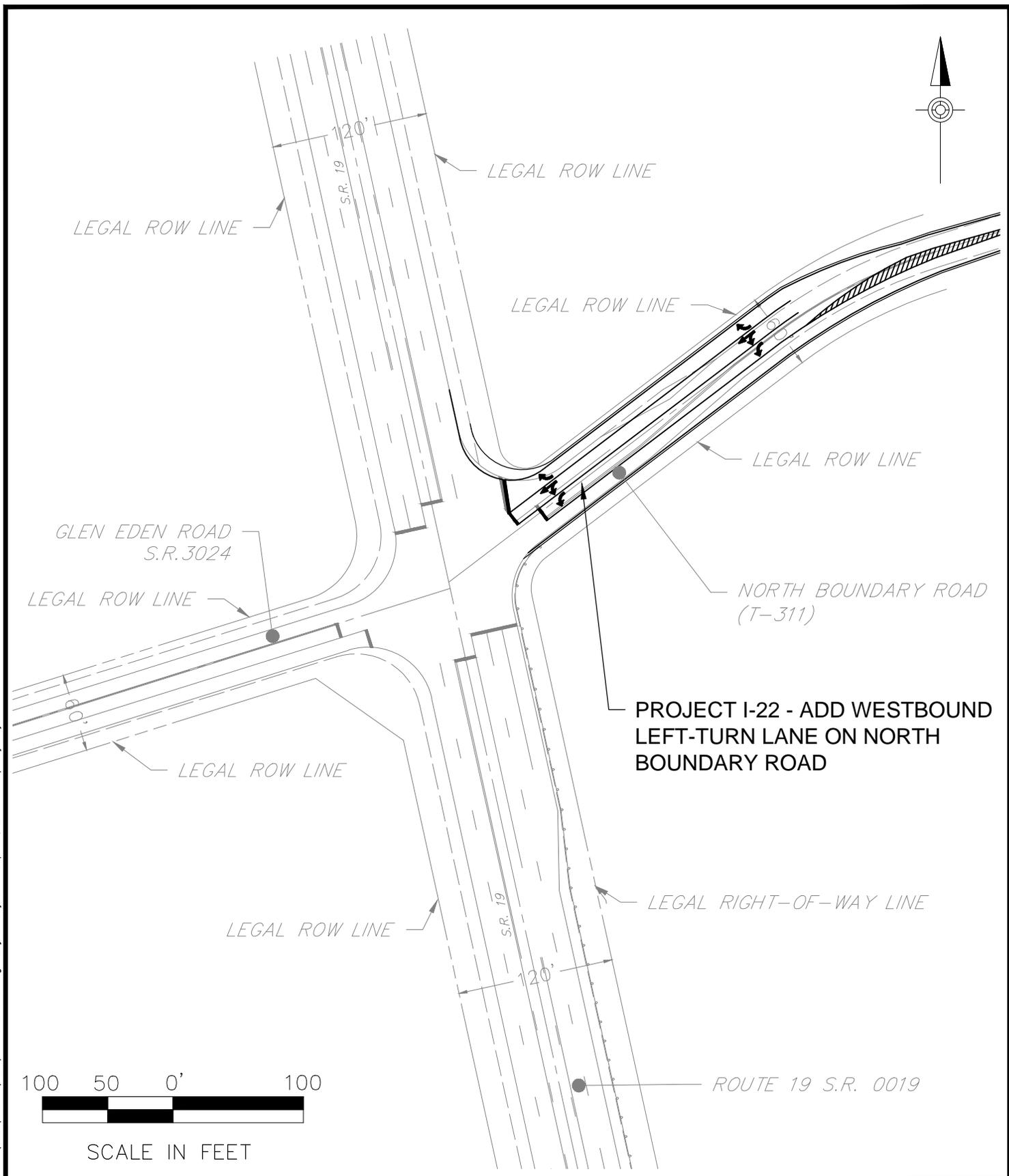
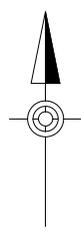
Secure Funding	2016
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$0
East District	\$693,178
Southeast District	\$0

REMARKS:

See Improvement Drawing number 20 for a plan sketch of the proposed improvement.



File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEWLOGOS.dwg Layout:Layout1 Sep 06, 2011-3:51pm_jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE		
CAPITAL IMPROVEMENTS DRAWING #22		
ROUTE 19 AND NORTH BOUNDARY/GLEN EDEN ROADS		
PROJECT I-22		
SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN	DSM
DRAWN	DSM
SCALE	1"=100'
PROJECT	R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 22

PROJECT NUMBER: I-22

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of US Route 19 (SR 0019), North Boundary Road (T-311) and Glen Eden Road (SR 3024).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add a westbound left-turn lane to create dual lefts on North Boundary Road.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	324,091
Utility Relocation	10,000
Right-of Way	0
Engineering	58,336
Inspection	25,927
Admin & Planning	4,861
TOTAL	\$423,216

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$387,303
Projected Soft Cost	\$103,320
Projected Total Cost	\$490,623

New Pass Thru Trips	\$103,031
New Development Trips	\$387,592

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	22%	\$107,937
Impact Fees	78%	\$382,686

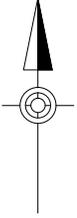
Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$0
East District	\$382,686
Southeast District	\$0

REMARKS:

See Improvement Drawing number 22 for a plan sketch of the proposed improvement.



LEGAL ROW LINE

S.R. 0019

PROGRESS AVENUE
(T-651)

PROJECT I-23B - ADD
EASTBOUND LEFT-TURN
LANE ON PROGRESS AVENUE

LEGAL ROW LINE

LEGAL ROW LINE

REQUIRED ROW LINE

50

NEW
SIGNAL

LEGAL RIGHT-OF-WAY LINE

PROJECT I-23A - SIGNALIZE INTERSECTION
(EXISTING DEFICIENCY)

LEGAL ROW LINE

S.R. 0019



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #23
ROUTE 19 AND PROGRESS AVENUE
PROJECTS I-23A AND I-23B

SHEET: 1 OF: 1 DATE: 06/15/2011



DESIGN
DSM
DRAWN
DSM
SCALE
1"=100'
PROJECT
R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 23

PROJECT NUMBER: I-23A

LOCATION:

The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:

The intersection currently warrants a traffic signal.

PROPOSED IMPROVEMENTS:

Signalize the Intersection (Existing Deficiency).

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	250,000
Utility Relocation	4,500
Right-of Way	0
Engineering	30,000
Inspection	12,500
Admin & Planning	3,750
TOTAL	\$300,750

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 23%*

*New Development Traffic /
Anticipated Traffic Growth = 77%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$278,099
Projected Soft Cost	\$50,539
Projected Total Cost	\$328,638

New Pass Thru Trips	\$75,587
New Development Trips	\$253,051

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	100%	\$328,638
Impact Fees	0%	\$0

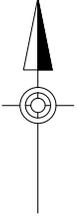
Secure Funding	2016
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 23 for a plan sketch of the proposed improvement.



LEGAL ROW LINE

S.R. 0019

PROGRESS AVENUE
(T-651)

PROJECT I-23B - ADD
EASTBOUND LEFT-TURN
LANE ON PROGRESS AVENUE

LEGAL ROW LINE

LEGAL ROW LINE

REQUIRED ROW LINE

50

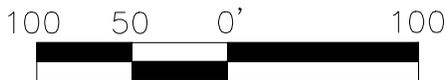
NEW
SIGNAL

LEGAL RIGHT-OF-WAY LINE

PROJECT I-23A - SIGNALIZE INTERSECTION
(EXISTING DEFICIENCY)

LEGAL ROW LINE

S.R. 0019



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #23
ROUTE 19 AND PROGRESS AVENUE
PROJECTS I-23A AND I-23B

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 23

PROJECT NUMBER: I-23B

LOCATION:

The intersection of US Route 19 (SR 0019) and Progress Avenue (T-651).

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:

Side Street Capacity becomes deficient.

PROPOSED IMPROVEMENTS:

Construct an eastbound left-turn lane on Progress Avenue.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	141,748
Utility Relocation	17,000
Right-of Way	130,000
Engineering	25,515
Inspection	7,087
Admin & Planning	2,126
TOTAL	\$323,476

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 23%*

*New Development Traffic /
Anticipated Traffic Growth = 77%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$315,522
Projected Soft Cost	\$37,948
Projected Total Cost	\$353,471

New Pass Thru Trips	\$81,298
New Development Trips	\$272,172

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$176,735
Impact Fees	50%	\$176,735

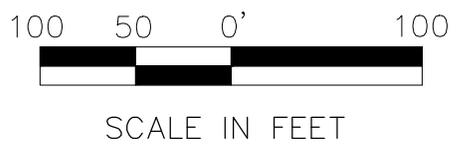
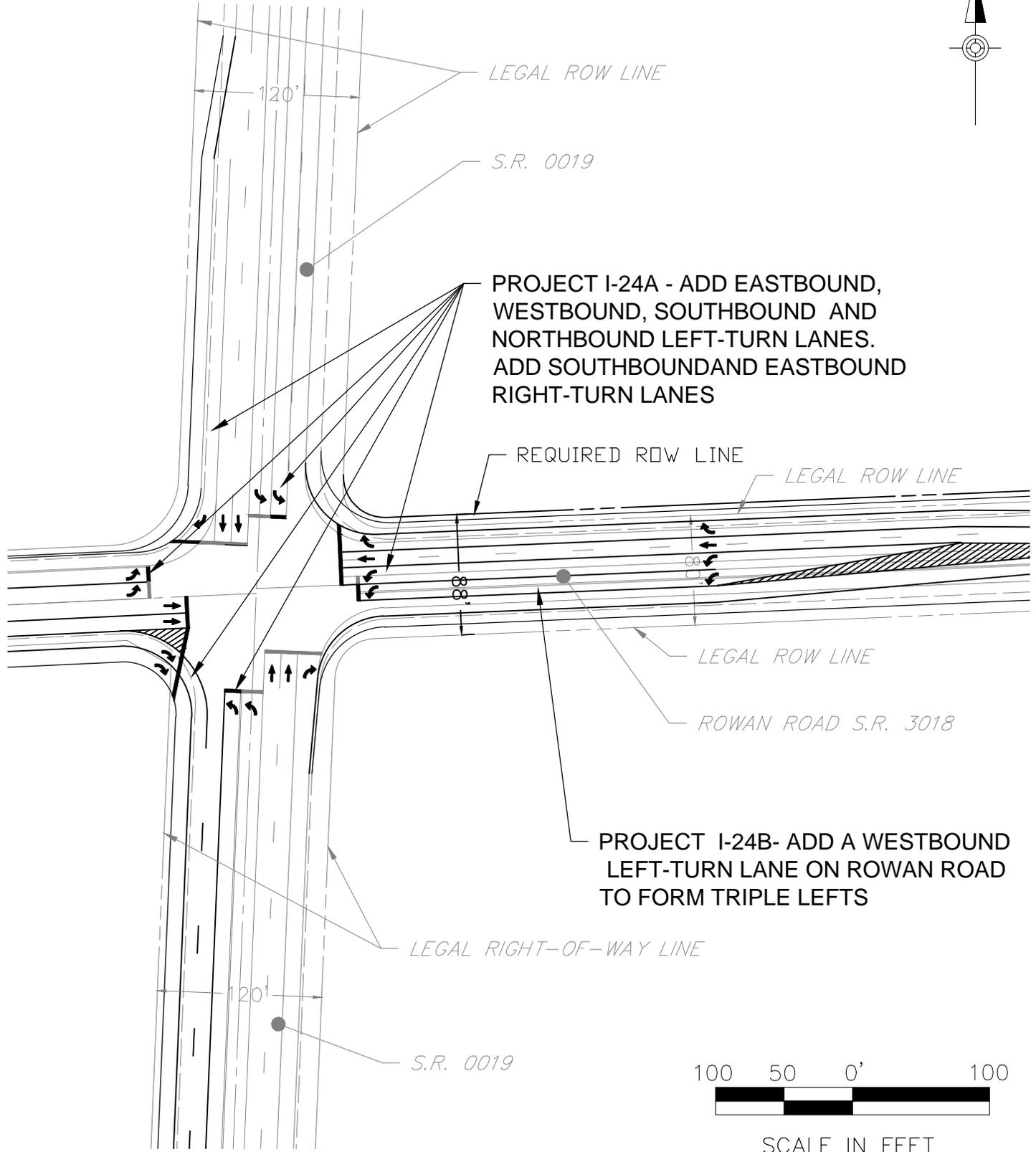
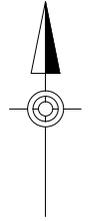
Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$159,062
East District	\$17,674
Southeast District	\$0

REMARKS:

See Improvement Drawing number 23 for a plan sketch of the proposed improvement.



File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEW.0605.dwg Layout:Layout1 Sep 07, 2011--7:11am jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE		
CAPITAL IMPROVEMENTS DRAWING #24 ROUTE 19 AND OGLE VIEW/ROWAN ROADS PROJECTS I-24A AND I-24B		
SHEET: 1	OF: 1	DATE: 06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 24

PROJECT NUMBER: I-24A

LOCATION:

The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add EBL, EBT, EBR, WBL, WBT, SBR. Add NB and SB left to form dual lefts.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	2,382,700
Utility Relocation	202,300
Right-of Way	1,450,000
Engineering	428,886
Inspection	285,924
Admin & Planning	35,741
TOTAL	\$4,785,551

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 30%*

*New Development Traffic /
Anticipated Traffic Growth = 70%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$5,422,703
Projected Soft Cost	\$1,008,677
Projected Total Cost	\$6,431,380

New Pass Thru Trips	\$1,929,414
New Development Trips	\$4,501,966

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	78%	\$5,016,476
Impact Fees	22%	\$1,414,904

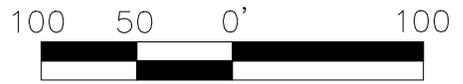
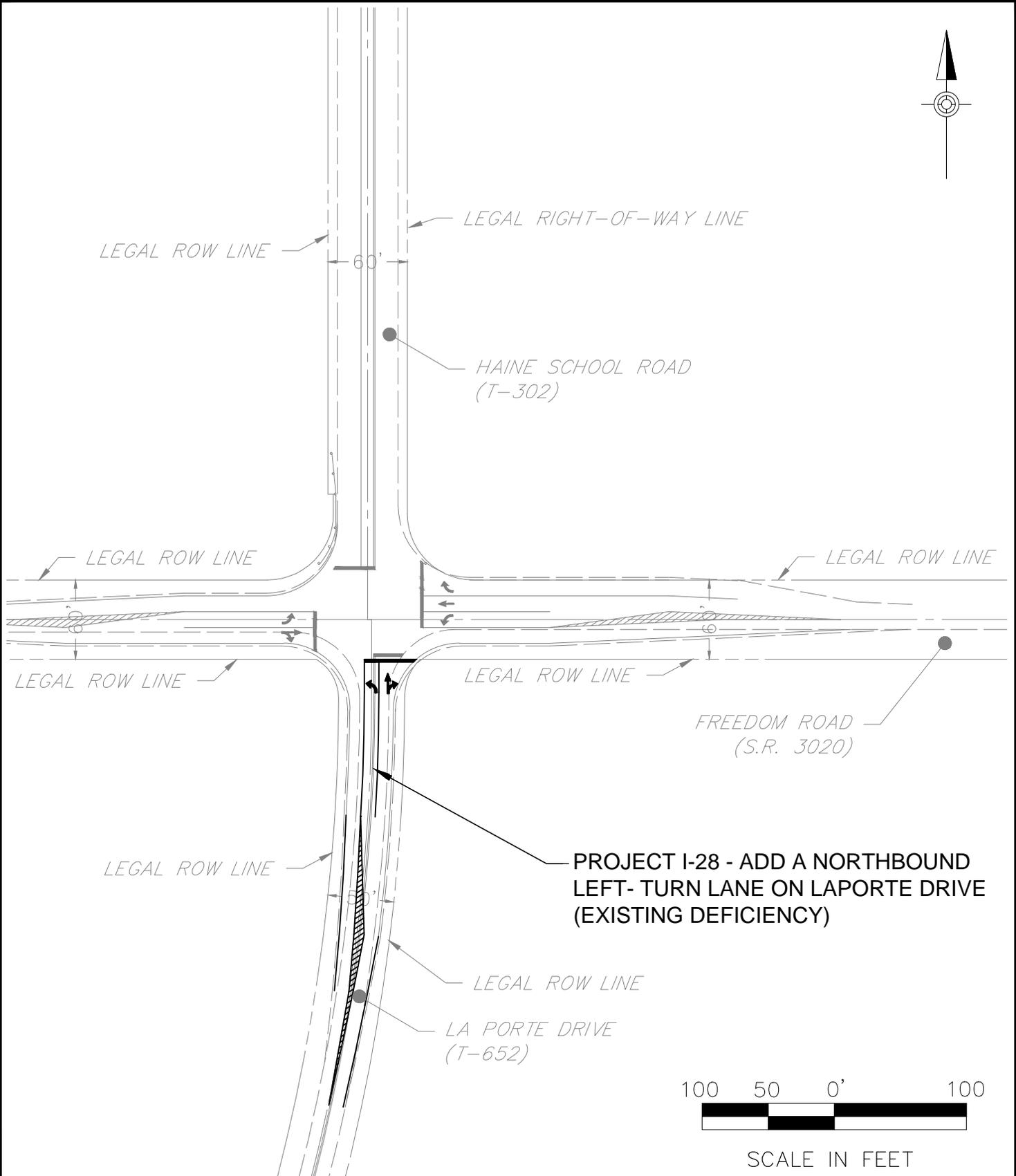
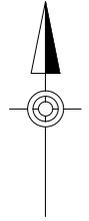
Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$707,452
East District	\$707,452
Southeast District	\$0

REMARKS:

See Improvement Drawing number 24 for a plan sketch of the proposed improvement.



SCALE IN FEET

File name: P:\0012\001261_0447\c3d\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-3:54pm jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE
CAPITAL IMPROVEMENTS DRAWING #28
HAINES SCHOOL/LAPORTE DRIVE AND FREEDOM ROAD
PROJECT I-28

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 28

PROJECT NUMBER: I-28

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Haine School Road (T-302), LaPorte Drive (T-652) and Freedom Road (SR 3020).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add northbound left-turn lane on LaPorte Drive (Existing Deficiency).

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	221,800
Utility Relocation	5,000
Right-of Way	60,000
Engineering	33,270
Inspection	17,744
Admin & Planning	3,327
TOTAL	\$341,141

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 31%*

*New Development Traffic /
Anticipated Traffic Growth = 69%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$313,394
Projected Soft Cost	\$59,380
Projected Total Cost	\$372,774

New Pass Thru Trips	\$114,782
New Development Trips	\$257,992

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	100%	\$372,774
Impact Fees	0%	\$0

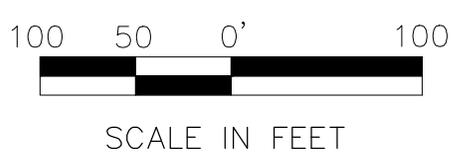
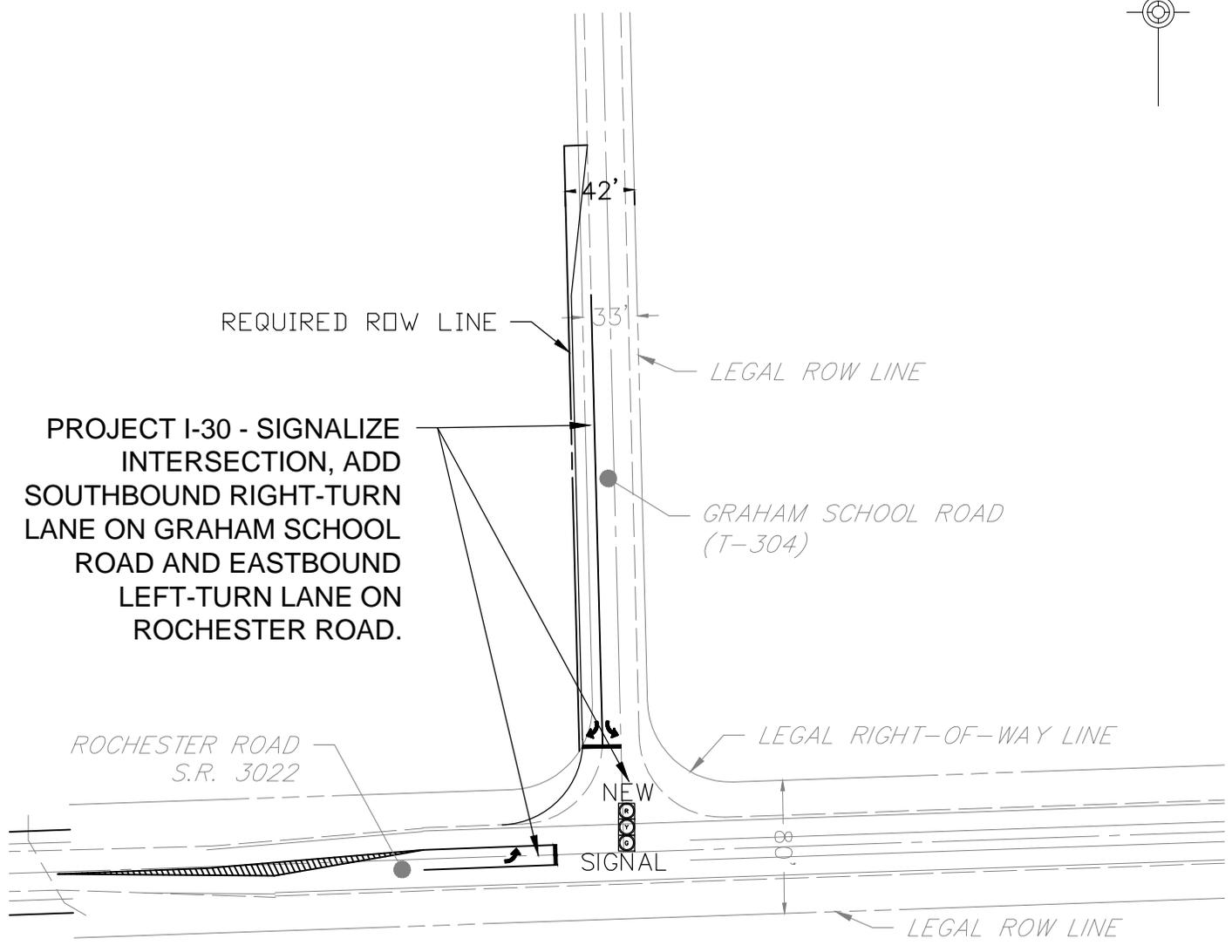
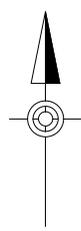
Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 28 for a plan sketch of the proposed improvement.



File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEW\0605.dwg Layout:Layout1 Sep 06, 2011-3:56pm jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE					DESIGN DSM
CAPITAL IMPROVEMENTS DRAWING #30 GRAHAM SCHOOL ROAD AND ROCHESTER ROAD PROJECT I-30					DRAWN DSM
SHEET: 1	OF: 1	DATE: 06/15/2011			SCALE 1"=100'
					PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 30

PROJECT NUMBER: I-30

LOCATION:

The intersection of Graham School Road (T-304) and Rochester Road (SR 3022).

TRANSPORTATION DISTRICT: West

DEFICIENCY:

The current intersection one-way stop control is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a southbound right-turn lane and extend eastbound left-turn lane.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	436,793
Utility Relocation	10,000
Right-of Way	30,000
Engineering	87,359
Inspection	52,415
Admin & Planning	6,552
TOTAL	\$623,119

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 19%*

*New Development Traffic /
Anticipated Traffic Growth = 81%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$552,734
Projected Soft Cost	\$169,632
Projected Total Cost	\$722,365

New Pass Thru Trips	\$137,249
New Development Trips	\$585,116

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$361,183
Other	0%	\$0
Impact Fees	50%	\$361,183

Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$361,183
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 30 for a plan sketch of the proposed improvement.

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 34

PROJECT NUMBER: I-34

LOCATION:

The intersection of Rolling Road and Freedom Road.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

The intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Install traffic signal.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	196,350
Utility Relocation	5,000
Right-of Way	0
Engineering	35,343
Inspection	9,818
Admin & Planning	2,945
TOTAL	\$249,456

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 32%*

*New Development Traffic /
Anticipated Traffic Growth = 68%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$220,021
Projected Soft Cost	\$52,566
Projected Total Cost	\$272,587

New Pass Thru Trips	\$87,682
New Development Trips	\$184,905

PROJECT SCHEDULE:

PROPOSED FUNDING:

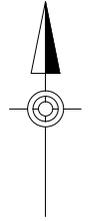
State/Federal	0%	\$0
Other	50%	\$136,294
Impact Fees	50%	\$136,294

Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$136,294
East District	\$0
Southeast District	\$0

REMARKS:



S.R. 0019

LEGAL ROW LINE

LEGAL ROW LINE

PROJECT I-35 ADD EASTBOUND LEFT-TURN LANE ON BRANDT DRIVE

DUTILH ROAD (T-326)

REQUIRED ROW LINE

BRANDT DRIVE

60'

S.R. 0019

LEGAL ROW LINE

LEGAL RIGHT-OF-WAY LINE

120'



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEWLOGOS.dwg Layout:Layout1 Sep 06, 2011--3:59pm jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #35
ROUTE 19 AND DUTILH ROAD/BRANDT DRIVE
PROJECT I-35



DESIGN	DSM
DRAWN	DSM
SCALE	1"=100'
PROJECT	R0012610447

SHEET:	OF:	DATE:
1	1	06/15/2011

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 35

PROJECT NUMBER: I-35

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of US Route 19, Dutihl Road (T-326) and Brandt Drive (Private).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add an exclusive eastbound auxiliary turn lane on Brandt Drive.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	222,538
Utility Relocation	4,500
Right-of Way	65,000
Engineering	33,381
Inspection	17,803
Admin & Planning	3,338
TOTAL	\$346,559

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 31%*

*New Development Traffic /
Anticipated Traffic Growth = 69%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$319,117
Projected Soft Cost	\$59,577
Projected Total Cost	\$378,695

New Pass Thru Trips	\$115,973
New Development Trips	\$262,722

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	31%	\$117,395
Impact Fees	69%	\$261,299

Secure Funding	2016
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

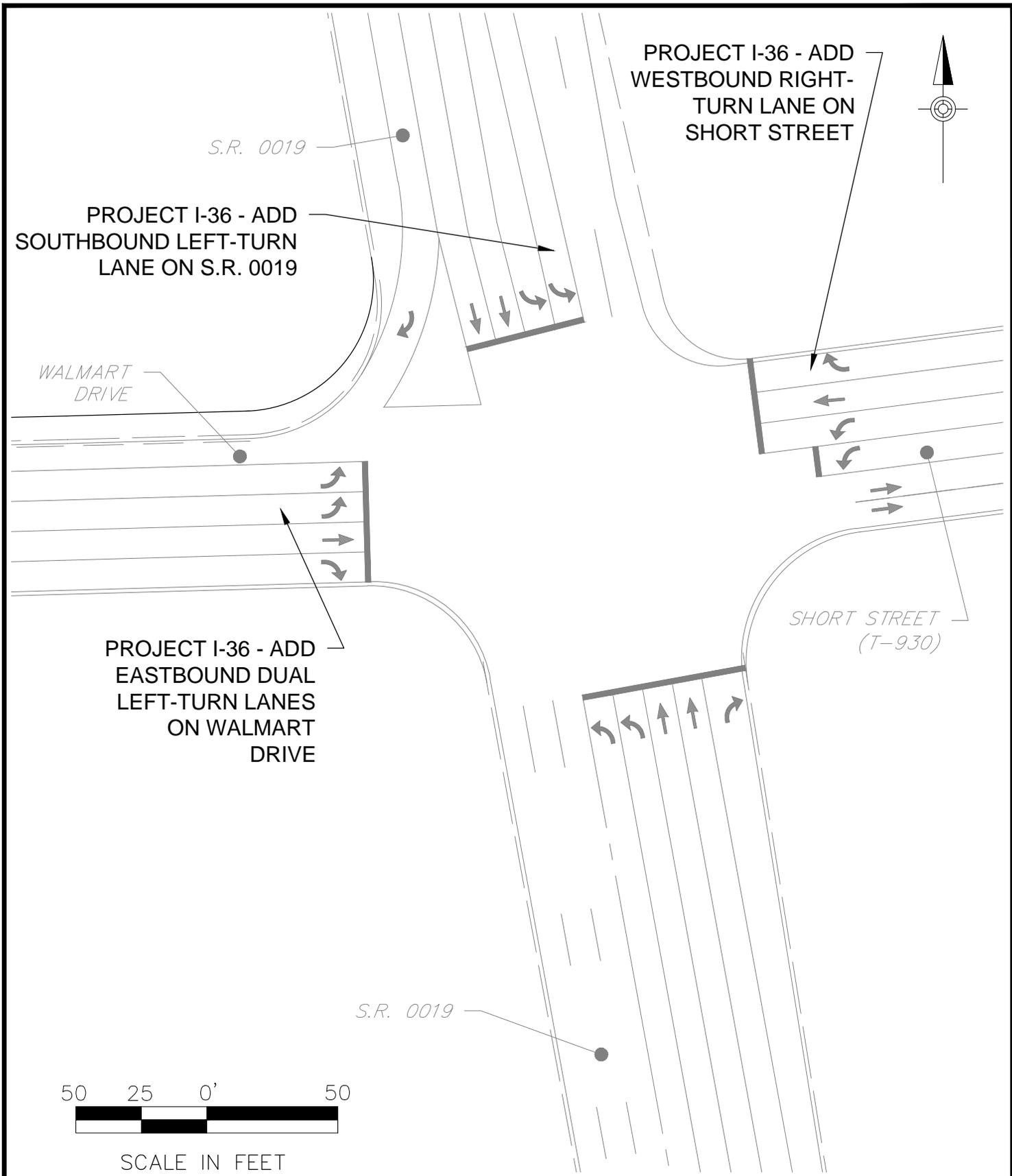
Transportation District Cost:

West District	\$261,299
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 35 for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-2:32pm jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #36
S.R. 0019 AND SHORT STREET/WALMART
PROJECT I-36

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN	DSM
DRAWN	DSM
SCALE	1"=50'
PROJECT	R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 36

PROJECT NUMBER: I-36

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19 and Short Street/ Wal-Mart Driveway

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add an eastbound left turn lane, westbound right, southbound left and appropriate receiving lanes.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	1,871,172
Utility Relocation	50,000
Right-of Way	185,000
Engineering	374,234
Inspection	224,541
Admin & Planning	28,068
TOTAL	\$2,733,015

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 41%*

*New Development Traffic /
Anticipated Traffic Growth = 59%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$2,441,631
Projected Soft Cost	\$726,683
Projected Total Cost	\$3,168,314

New Pass Thru Trips	\$1,286,248
New Development Trips	\$1,882,065

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	90%	\$2,851,482
Other	0%	\$0
Impact Fees	10%	\$316,831

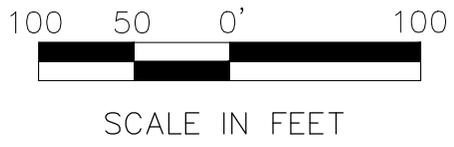
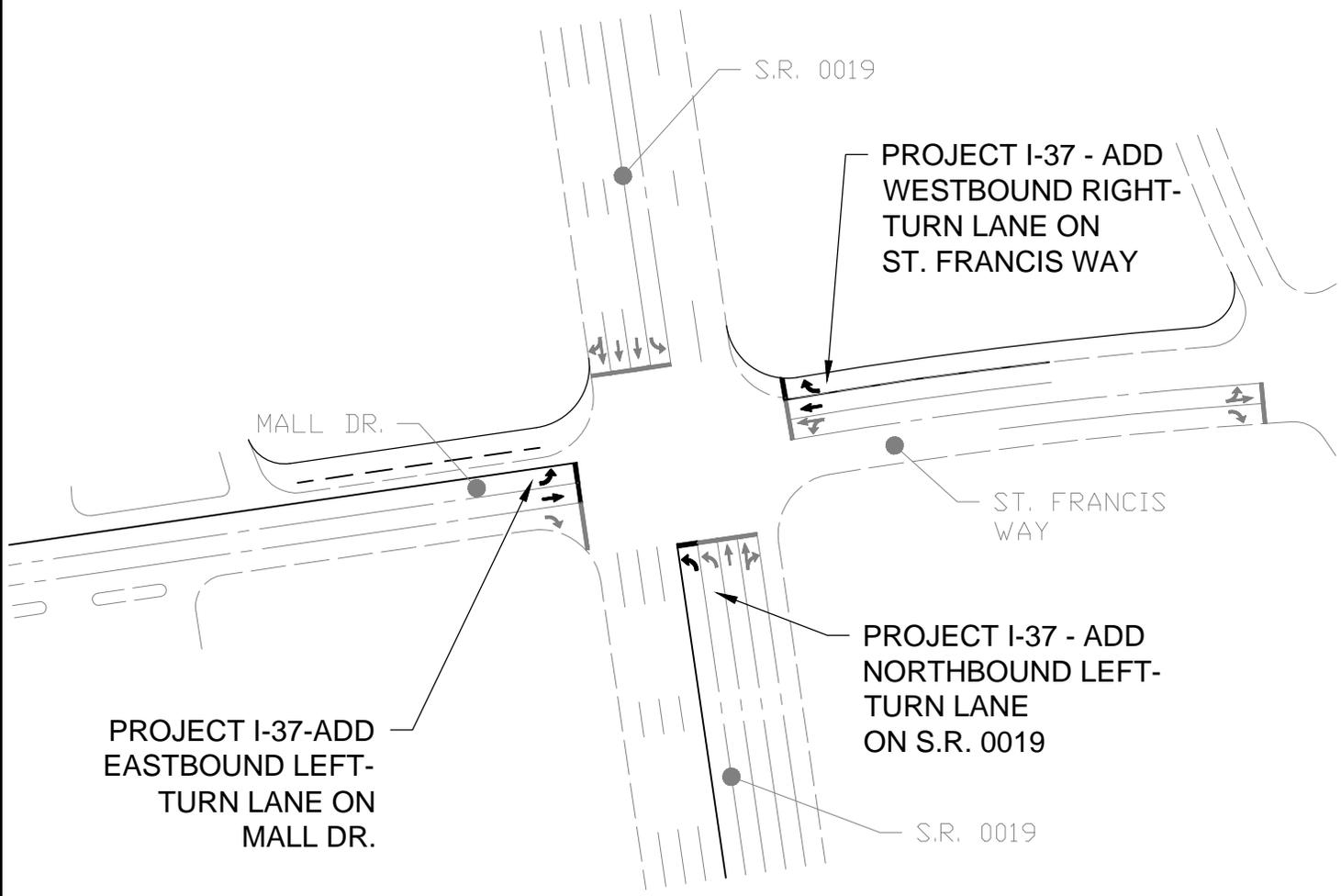
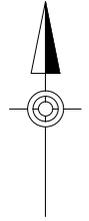
Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$221,782
East District	\$95,049
Southeast District	\$0

REMARKS:

See Improvement Drawing number 36 for a plan sketch of the proposed improvement.



File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 08, 2011-7:18am jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE					DESIGN DSM
CAPITAL IMPROVEMENTS DRAWING #37 S.R. 0019 AND ST. FRANCIS WAY PROJECT I-37					DRAWN DSM
SHEET: 1	OF: 1	DATE: 06/15/2011	SCALE 1"=100'		
			PROJECT R0012610447		

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 37

PROJECT NUMBER: I-37

LOCATION:

TRANSPORTATION DISTRICT: East/West

The intersection of US Route 19 and St. Francis Way/ Mall Driveway

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add an Eastbound Left Turn Lane and receiving lane on Mall Drive, Add NB Left to form Dual Lefts on 19 and add a WB right turn lane on St. Francis Way.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	1,903,946
Utility Relocation	0
Right-of Way	1,200,000
Engineering	380,789
Inspection	228,474
Admin & Planning	28,559
TOTAL	\$3,741,768

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 37%*

*New Development Traffic /
Anticipated Traffic Growth = 63%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$3,598,324
Projected Soft Cost	\$739,410
Projected Total Cost	\$4,337,735

New Pass Thru Trips	\$1,597,495
New Development Trips	\$2,740,240

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	37%	\$1,604,962
Other	58%	\$2,515,886
Impact Fees	5%	\$216,887

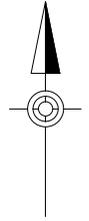
Secure Funding	2018
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

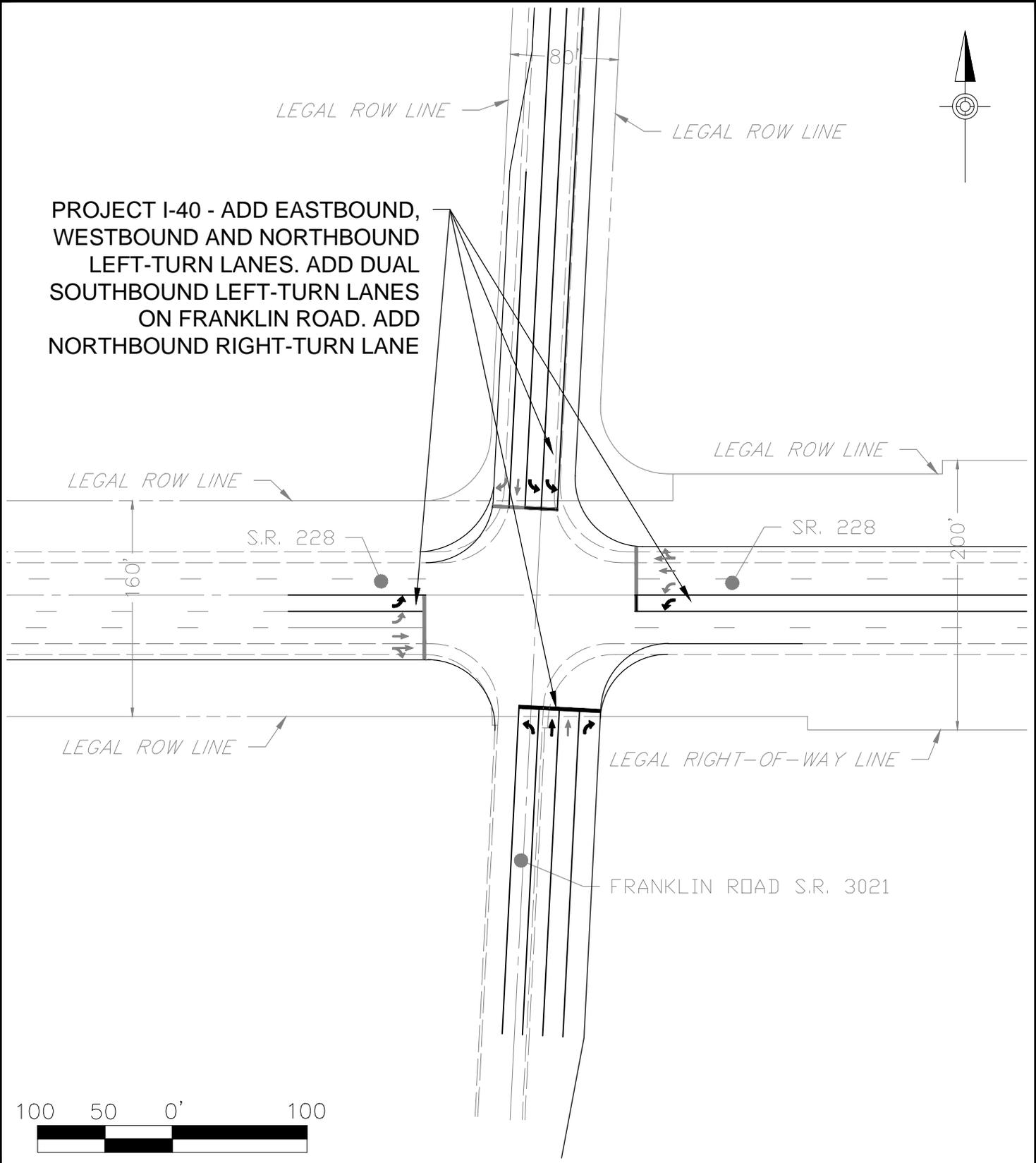
West District	\$214,718
East District	\$2,169
Southeast District	\$0

REMARKS:

See Improvement Drawing number 37 for a plan sketch of the proposed improvement.



PROJECT I-40 - ADD EASTBOUND, WESTBOUND AND NORTHBOUND LEFT-TURN LANES. ADD DUAL SOUTHBOUND LEFT-TURN LANES ON FRANKLIN ROAD. ADD NORTHBOUND RIGHT-TURN LANE



File name: P:\0012\001261_0447\CAD\CranMap_Imo1\NEW\CGCS.dwg Layout: Layout11 Sep 07 2011 7:14am istraieck

CRANBERRY TOWNSHIP IMPACT FEE UPDATE		
CAPITAL IMPROVEMENTS DRAWING #40 FRANKLIN ROAD AND S.R. 228 PROJECT I-40		
SHEET: 1	OF: 1	DATE: 06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 40

PROJECT NUMBER: I-40

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and PA Route 228.

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add EBL, WBL, SB Dual Lefts, NBT.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	2,039,510
Utility Relocation	98,500
Right-of Way	400,000
Engineering	367,112
Inspection	244,741
Admin & Planning	30,593
TOTAL	\$3,180,456

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 55%*

*New Development Traffic /
Anticipated Traffic Growth = 45%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$3,410,874
Projected Soft Cost	\$863,393
Projected Total Cost	\$4,274,267

New Pass Thru Trips	\$2,336,510
New Development Trips	\$1,937,757

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	60%	\$2,564,560
Other	0%	\$0
Impact Fees	40%	\$1,709,707

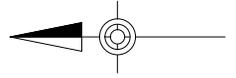
Secure Funding	Year
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$0
East District	\$1,709,707
Southeast District	\$0

REMARKS:

See Improvement Drawing number 40 for a plan sketch of the proposed improvement.



PETERS ROAD
(T-307)

LEGAL RIGHT-OF-WAY LINE

ROWAN ROAD
S.R. 3018

LEGAL ROW LINE

**PROJECT I-42 - SIGNALIZE
INTERSECTION, ADD SOUTHBOUND
RIGHT AND EASTBOUND LEFT-TURN
LANE ON ROWAN ROAD**

REQUIRED ROW LINE

ROWAN ROAD
S.R. 3018

100 50 0' 100



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #42
PETERS ROAD/CANTERBURY TRAIL AND ROWAN ROAD
PROJECT I-42

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 42

PROJECT NUMBER: I-42B

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Construct a roundabout.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	907,979
Utility Relocation	32,050
Right-of Way	75,000
Engineering	272,394
Inspection	72,638
Admin & Planning	13,620
TOTAL	\$1,373,680

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 19%*

*New Development Traffic /
Anticipated Traffic Growth = 81%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$1,109,149
Projected Soft Cost	\$391,908
Projected Total Cost	\$1,501,058

New Pass Thru Trips	\$281,047
New Development Trips	\$1,220,011

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$750,529
Other	0%	\$0
Impact Fees	50%	\$750,529

Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

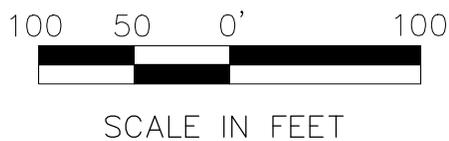
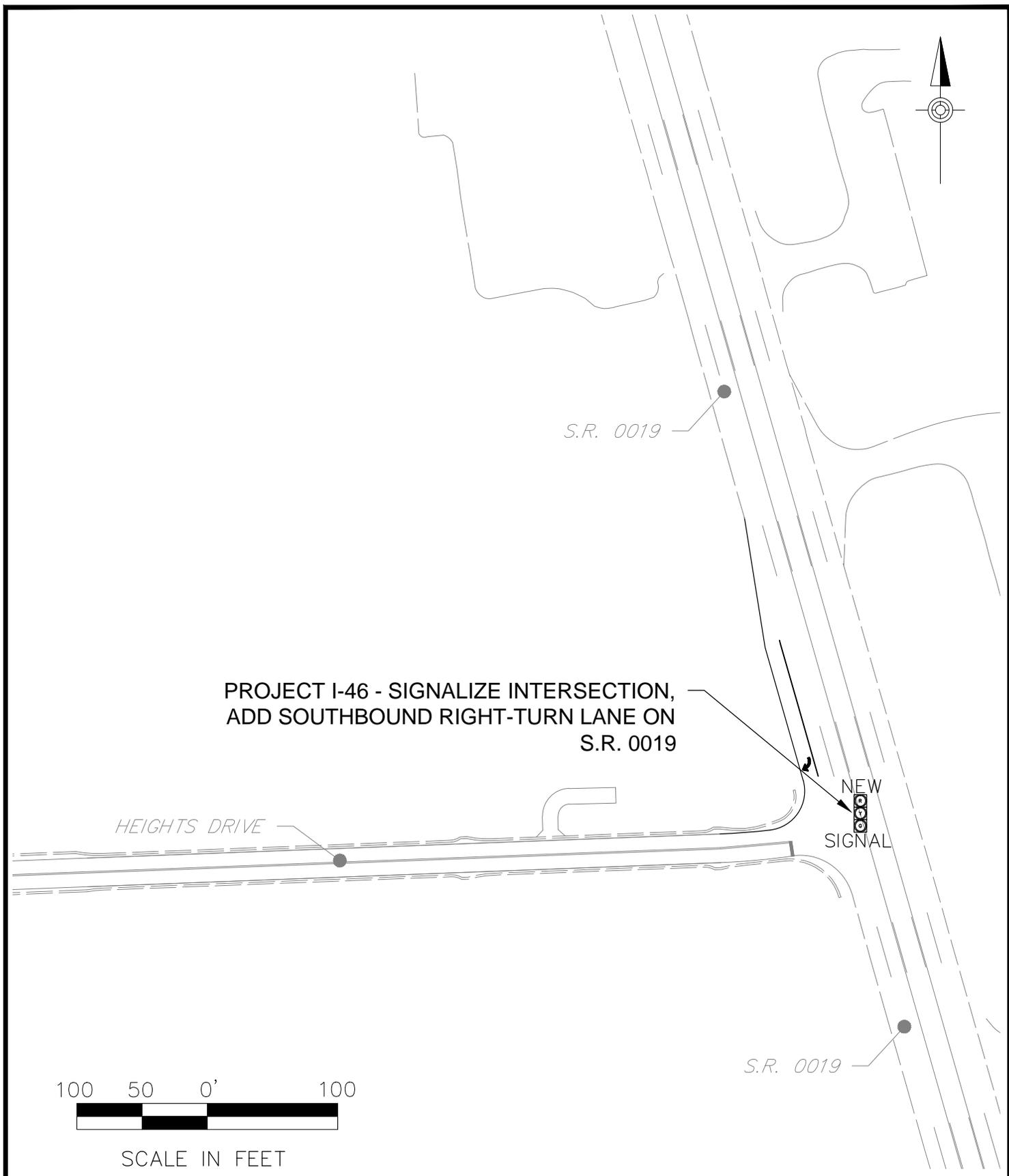
Transportation District Cost:

West District	\$0
East District	\$750,529
Southeast District	\$0

REMARKS:

See Improvement Drawing number 42 for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\C3D\CranMap_imp1.NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-1:56pm jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #46
S.R. 0019 AND HEIGHTS DRIVE
PROJECT I-46

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN	DSM
DRAWN	DSM
SCALE	1"=100'
PROJECT	R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 46

PROJECT NUMBER: I-46

LOCATION:
Heights Drive and Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:
The proposed unsignalized intersection is anticipated to be deficient with 2030 traffic volumes.

PROPOSED IMPROVEMENTS:
Signalize new intersection. Add a southbound right-turn lane to Route 19.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	477,093
Utility Relocation	5,000
Right-of Way	25,000
Engineering	95,419
Inspection	23,855
Admin & Planning	7,156
TOTAL	\$633,523

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 23%*

*New Development Traffic /
Anticipated Traffic Growth = 77%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2020
Projected Construction Cost	\$587,860
Projected Soft Cost	\$146,567
Projected Total Cost	\$734,427

New Pass Thru Trips	\$168,918
New Development Trips	\$565,508

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$367,213
Impact Fees	50%	\$367,213

Secure Funding	Year
Acquire ROW	2018
Complete Engineering	2019
Begin Construction	2020

Transportation District Cost:

West District	\$367,213
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 46 for a plan sketch of the proposed improvement.

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-10

PROJECT NUMBER: S-10

LOCATION:

Ogle View Road (T-322) from Unionville Road to Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Shoulders need to be widened. Drainage structures should be added.

PROPOSED IMPROVEMENTS:

Widen to three-lane Commercial Collector Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	748,837
Utility Relocation	0
Right-of Way	175,000
Engineering	89,860
Inspection	74,884
Admin & Planning	11,233
TOTAL	\$1,099,814

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 11%*

*New Development Traffic /
Anticipated Traffic Growth = 89%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$1,009,502
Projected Soft Cost	\$192,295
Projected Total Cost	\$1,201,797

New Pass Thru Trips	\$132,198
New Development Trips	\$1,069,599

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$600,898
Impact Fees	50%	\$600,898

Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$600,898
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-20

PROJECT NUMBER: S-20

LOCATION:
North Boundary Road from Marshall Road to Franklin Road

TRANSPORTATION DISTRICT: East

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Add left turn lanes at key intersections to maintain thru traffic flow.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	1,262,401
Utility Relocation	24,400
Right-of Way	75,000
Engineering	189,360
Inspection	126,240
Admin & Planning	18,936
TOTAL	\$1,696,337

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$1,830,147
Projected Soft Cost	\$449,589
Projected Total Cost	\$2,279,735

New Pass Thru Trips	\$478,744
New Development Trips	\$1,800,991

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	80%	\$1,823,788
Impact Fees	20%	\$455,947

Secure Funding	Year
Acquire ROW	2021
Complete Engineering	2022
Begin Construction	2024
	2025

Transportation District Cost:

West District	\$0
East District	\$455,947
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-25

PROJECT NUMBER: S-25

LOCATION:

TRANSPORTATION DISTRICT: East

Rowan Road (SR 3018) from Marshall Road to Peters Rd/Canterbury Trail.

DEFICIENCY:

An additional thru-lane in each direction is projected to be needed along this roadway segment.

PROPOSED IMPROVEMENTS:

Widen to five-lane Residential Collector.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	3,456,705
Utility Relocation	47,500
Right-of Way	1,350,000
Engineering	345,671
Inspection	276,536
Admin & Planning	51,851
TOTAL	\$5,528,263

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 60%*

*New Development Traffic /
Anticipated Traffic Growth = 40%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$6,523,646
Projected Soft Cost	\$905,877
Projected Total Cost	\$7,429,523

New Pass Thru Trips	\$4,457,714
New Development Trips	\$2,971,809

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	60%	\$4,457,714
Other	30%	\$2,228,857
Impact Fees	10%	\$742,952

Secure Funding	2023
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$0
East District	\$742,952
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-27

PROJECT NUMBER: S-27

LOCATION:

TRANSPORTATION DISTRICT: East

Goehring Road (T-316) from Marshall Road to Franklin Road.

DEFICIENCY:

Roadway does not conform to the Township's Residential Collector Standards.

PROPOSED IMPROVEMENTS:

Widen and Realign to two-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	4,098,209
Utility Relocation	75,100
Right-of Way	870,000
Engineering	491,785
Inspection	409,821
Admin & Planning	61,473
TOTAL	\$6,006,389

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 47%*

*New Development Traffic /
Anticipated Traffic Growth = 53%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$6,777,786
Projected Soft Cost	\$1,294,298
Projected Total Cost	\$8,072,084

New Pass Thru Trips	\$3,793,880
New Development Trips	\$4,278,205

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	47%	\$3,793,880
Other	43%	\$3,470,996
Impact Fees	10%	\$807,208

Secure Funding	Year
Acquire ROW	2022
Complete Engineering	2023
Begin Construction	2024
	2025

Transportation District Cost:

West District	\$0
East District	\$807,208
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-30

PROJECT NUMBER: S-30A

LOCATION:

Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

An additional travel lane should be added in each direction along Freedom Road east of Powell Road.

PROPOSED IMPROVEMENTS:

Widen to four-lane Minor Arterial from Powell to Haines School Road.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	6,180,595
Utility Relocation	141,000
Right-of Way	3,250,000
Engineering	741,671
Inspection	618,060
Admin & Planning	92,709
TOTAL	\$11,024,035

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 39%*

*New Development Traffic /
Anticipated Traffic Growth = 61%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$12,863,424
Projected Soft Cost	\$1,951,958
Projected Total Cost	\$14,815,381

New Pass Thru Trips	\$5,753,607
New Development Trips	\$9,061,774

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	39%	\$5,777,999
Other	51%	\$7,555,844
Impact Fees	10%	\$1,481,538

Secure Funding	2022
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$1,481,538
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-30

PROJECT NUMBER: S-30B

LOCATION:

Freedom Road (SR 3020) from New Sewickly Township to Haine School Road.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Signal timing needs to adapt to traffic demands.

PROPOSED IMPROVEMENTS:

Adaptive Control System.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	65,500
Utility Relocation	0
Right-of Way	0
Engineering	0
Inspection	0
Admin & Planning	0
TOTAL	\$65,500

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 39%*

*New Development Traffic /
Anticipated Traffic Growth = 61%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$71,574
Projected Soft Cost	\$0
Projected Total Cost	\$71,574

New Pass Thru Trips	\$27,796
New Development Trips	\$43,778

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$35,787
Impact Fees	50%	\$35,787

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$35,787
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-31

PROJECT NUMBER: S-31A

LOCATION:

Freedom Road (SR 3020) from Haine School Road to Commonwealth Drive.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

At additional travel lane should be added in each direction along Freedom Road.

PROPOSED IMPROVEMENTS:

Widen to four-lane Minor Arterial with left-turn lanes.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	7,771,800
Utility Relocation	81,000
Right-of Way	1,900,000
Engineering	932,616
Inspection	777,180
Admin & Planning	116,577
TOTAL	\$11,579,173

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 27%*

*New Development Traffic /
Anticipated Traffic Growth = 73%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$13,106,948
Projected Soft Cost	\$2,454,493
Projected Total Cost	\$15,561,440

New Pass Thru Trips	\$4,263,068
New Development Trips	\$11,298,372

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	27%	\$4,201,589
Other	63%	\$9,803,707
Impact Fees	10%	\$1,556,144

Secure Funding	Year
Acquire ROW	2022
Complete Engineering	2023
Begin Construction	2024
	2025

Transportation District Cost:

West District	\$1,556,144
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-31

PROJECT NUMBER: S-31B

LOCATION:

Freedom Road (SR 3020) from Haine School Road to Commonwealth Drive.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Signal timing needs to adapt to traffic demands.

PROPOSED IMPROVEMENTS:

Adaptive Control System.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	104,500
Utility Relocation	0
Right-of Way	0
Engineering	0
Inspection	0
Admin & Planning	0
TOTAL	\$104,500

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 27%*

*New Development Traffic /
Anticipated Traffic Growth = 73%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$114,190
Projected Soft Cost	\$0
Projected Total Cost	\$114,190

New Pass Thru Trips	\$31,282
New Development Trips	\$82,908

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$57,095
Impact Fees	50%	\$57,095

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$57,095
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-37

PROJECT NUMBER: S-37A

LOCATION:

Rochester Road (SR 3022) from Haines School Road to Graham School Road.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Additional thru lanes are anticipated to be needed by the year 2030.

PROPOSED IMPROVEMENTS:

Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	3,887,856
Utility Relocation	17,350
Right-of Way	1,250,000
Engineering	466,543
Inspection	388,786
Admin & Planning	58,318
TOTAL	\$6,068,852

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$6,928,166
Projected Soft Cost	\$1,227,864
Projected Total Cost	\$8,156,030

New Pass Thru Trips	\$1,373,038
New Development Trips	\$6,782,991

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	95%	\$7,748,228
Other	0%	\$0
Impact Fees	5%	\$407,801

Secure Funding	Year
Acquire ROW	2022
Complete Engineering	2023
Begin Construction	2024
	2025

Transportation District Cost:

West District	\$407,801
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-37

PROJECT NUMBER: S-37B

LOCATION:

TRANSPORTATION DISTRICT: West

Rochester Road (SR 3022) from Graham School Road to western St. Ferdinand Church Driveway.

DEFICIENCY:

Additional thru lanes are anticipated to be needed by the year 2030.

PROPOSED IMPROVEMENTS:

Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	2,557,929
Utility Relocation	9,350
Right-of Way	550,000
Engineering	306,951
Inspection	255,793
Admin & Planning	38,369
TOTAL	\$3,718,392

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$3,406,335
Projected Soft Cost	\$656,853
Projected Total Cost	\$4,063,187

New Pass Thru Trips	\$684,023
New Development Trips	\$3,379,164

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$2,031,594
Other	40%	\$1,625,275
Impact Fees	10%	\$406,319

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$406,319
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-37

PROJECT NUMBER: S-37C

LOCATION:

Rochester Road (SR 3022) from western St. Ferdinand Church Driveway to Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Additional thru lanes are anticipated to be needed by the year 2030.

PROPOSED IMPROVEMENTS:

Widen to four-lane Urban Collector with left-turn lanes (See Township Boulevard Design Standards).

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	2,741,967
Utility Relocation	9,000
Right-of Way	700,000
Engineering	329,036
Inspection	274,197
Admin & Planning	41,130
TOTAL	\$4,095,330

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$3,770,965
Projected Soft Cost	\$704,112
Projected Total Cost	\$4,475,077

New Pass Thru Trips	\$753,363
New Development Trips	\$3,721,714

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	80%	\$3,580,062
Other	10%	\$447,508
Impact Fees	10%	\$447,508

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$447,508
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-37

PROJECT NUMBER: S-37D

LOCATION:

Rochester Road (SR 3022) from Haines School Road to Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Signal timing needs to adapt to traffic demands.

PROPOSED IMPROVEMENTS:

Adaptive Control System

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	115,000
Utility Relocation	0
Right-of Way	0
Engineering	0
Inspection	0
Admin & Planning	0
TOTAL	\$115,000

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$125,664
Projected Soft Cost	\$0
Projected Total Cost	\$125,664

New Pass Thru Trips	\$21,155
New Development Trips	\$104,509

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$62,832
Impact Fees	50%	\$62,832

Secure Funding	2015
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$62,832
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-40

PROJECT NUMBER: S-40A

LOCATION:
S.R. 228 from Route 19 to Franklin Road

TRANSPORTATION DISTRICT: East

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Widen to 6 Lane Arterial

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	9,055,562
Utility Relocation	116,500
Right-of Way	425,000
Engineering	905,556
Inspection	905,556
Admin & Planning	135,833
TOTAL	\$11,544,007

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 33%*

*New Development Traffic /
Anticipated Traffic Growth = 67%*

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$12,897,648
Projected Soft Cost	\$2,616,532
Projected Total Cost	\$15,514,180

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$5,135,270
New Development Trips	\$10,378,910

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	90%	\$13,962,762
Impact Fees	10%	\$1,551,418

Secure Funding	Year
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$0
East District	\$1,551,418
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-43

PROJECT NUMBER: S-43A

LOCATION:

TRANSPORTATION DISTRICT: East

Franklin Road (SR 3021) from Route 228 to Old Mars Crider Road.

DEFICIENCY:

Additional thru-lanes are anticipated to be needed by the year 2030 along this segment of Franklin Road to maintain an acceptable Level of Service.

PROPOSED IMPROVEMENTS:

Widen to four-lane Residential Collector.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,946,339
Utility Relocation	90,800
Right-of Way	900,000
Engineering	233,561
Inspection	194,634
Admin & Planning	29,195
TOTAL	\$3,394,529

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 45%*

*New Development Traffic /
Anticipated Traffic Growth = 55%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$3,947,269
Projected Soft Cost	\$614,693
Projected Total Cost	\$4,561,963

New Pass Thru Trips	\$2,032,737
New Development Trips	\$2,529,226

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	60%	\$2,737,178
Other	0%	\$0
Impact Fees	40%	\$1,824,785

Secure Funding	Year
Acquire ROW	2021
Complete Engineering	2022
Begin Construction	2023
	2025

Transportation District Cost:

West District	\$0
East District	\$638,675
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-43

PROJECT NUMBER: S-43B

LOCATION:

TRANSPORTATION DISTRICT: East

Franklin Road (SR 3021) from Old Mars Crider Road to Peters road.

DEFICIENCY:

Additional thru-lanes are anticipated to be needed by the year 2030 along this segment of Franklin Road to maintain an acceptable Level of Service.

PROPOSED IMPROVEMENTS:

Widen to four-lane Residential Collector.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	5,793,147
Utility Relocation	253,200
Right-of Way	2,400,000
Engineering	695,178
Inspection	579,315
Admin & Planning	86,897
TOTAL	\$9,807,736

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 45%*

*New Development Traffic /
Anticipated Traffic Growth = 55%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$11,351,184
Projected Soft Cost	\$1,829,594
Projected Total Cost	\$13,180,778

New Pass Thru Trips	\$5,873,141
New Development Trips	\$7,307,637

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	80%	\$10,544,622
Other	10%	\$1,318,078
Impact Fees	10%	\$1,318,078

Secure Funding	Year
Acquire ROW	2021
Complete Engineering	2022
Begin Construction	2023
	2025

Transportation District Cost:

West District	\$0
East District	\$1,318,078
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-44

PROJECT NUMBER: S-44A

LOCATION:

Route 19 (SR 0019) from Marshall Township to Route 228.

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:

Thru lanes will need to be added to the roadway to maintain an acceptable Level of Service in the study year 2030.

PROPOSED IMPROVEMENTS:

Widen to six-lane Minor Arterial.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	6,705,745
Utility Relocation	324,000
Right-of Way	1,000,000
Engineering	804,689
Inspection	670,574
Admin & Planning	100,586
TOTAL	\$9,605,595

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 55%*

*New Development Traffic /
Anticipated Traffic Growth = 45%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$10,791,306
Projected Soft Cost	\$2,117,811
Projected Total Cost	\$12,909,116

New Pass Thru Trips	\$7,159,171
New Development Trips	\$5,749,946

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	90%	\$11,618,205
Other	0%	\$0
Impact Fees	10%	\$1,290,912

Secure Funding	2020
Acquire ROW	2022
Complete Engineering	2023
Begin Construction	2025

Transportation District Cost:

West District	\$645,456
East District	\$645,456
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-44

PROJECT NUMBER: S-44B

LOCATION:
Route 19 (SR 0019) from Marshall Township to Route 228.

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:
Signal timing needs to adapt to traffic demands.

PROPOSED IMPROVEMENTS:
Adaptive Control System.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	115,000
Utility Relocation	0
Right-of Way	0
Engineering	0
Inspection	0
Admin & Planning	0
TOTAL	\$115,000

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 55%*

*New Development Traffic /
Anticipated Traffic Growth = 45%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$125,664
Projected Soft Cost	\$0
Projected Total Cost	\$125,664

New Pass Thru Trips	\$69,691
New Development Trips	\$55,973

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	55%	\$69,115
Impact Fees	45%	\$56,549

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$28,274
East District	\$28,274
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-45

PROJECT NUMBER: S-45A

LOCATION:

TRANSPORTATION DISTRICT: East/West

Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.

DEFICIENCY:

Thru lanes will need to be added to the roadway to maintain an acceptable Level Of Service in the study year 2030.

PROPOSED IMPROVEMENTS:

Widen to six-lane Minor Arterial.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	11,255,040
Utility Relocation	474,000
Right-of Way	1,650,000
Engineering	1,350,605
Inspection	1,125,504
Admin & Planning	168,826
TOTAL	\$16,023,975

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 48%*

*New Development Traffic /
Anticipated Traffic Growth = 52%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$17,980,311
Projected Soft Cost	\$3,554,571
Projected Total Cost	\$21,534,882

New Pass Thru Trips	\$10,390,644
New Development Trips	\$11,144,238

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	90%	\$19,381,394
Other	0%	\$0
Impact Fees	10%	\$2,153,488

Secure Funding	2020
Acquire ROW	2021
Complete Engineering	2023
Begin Construction	2025

Transportation District Cost:

West District	\$1,076,744
East District	\$1,076,744
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-45

PROJECT NUMBER: S-45C

LOCATION:

Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:

Signal timing needs to adapt to traffic demands.

PROPOSED IMPROVEMENTS:

Adaptive Control System.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	100,000
Utility Relocation	0
Right-of Way	0
Engineering	0
Inspection	0
Admin & Planning	0
TOTAL	\$100,000

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 48%*

*New Development Traffic /
Anticipated Traffic Growth = 52%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$109,273
Projected Soft Cost	\$0
Projected Total Cost	\$109,273

New Pass Thru Trips	\$52,724
New Development Trips	\$56,548

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$54,636
Impact Fees	50%	\$54,636

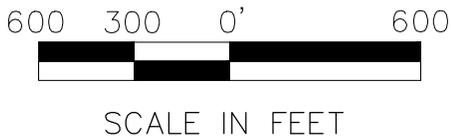
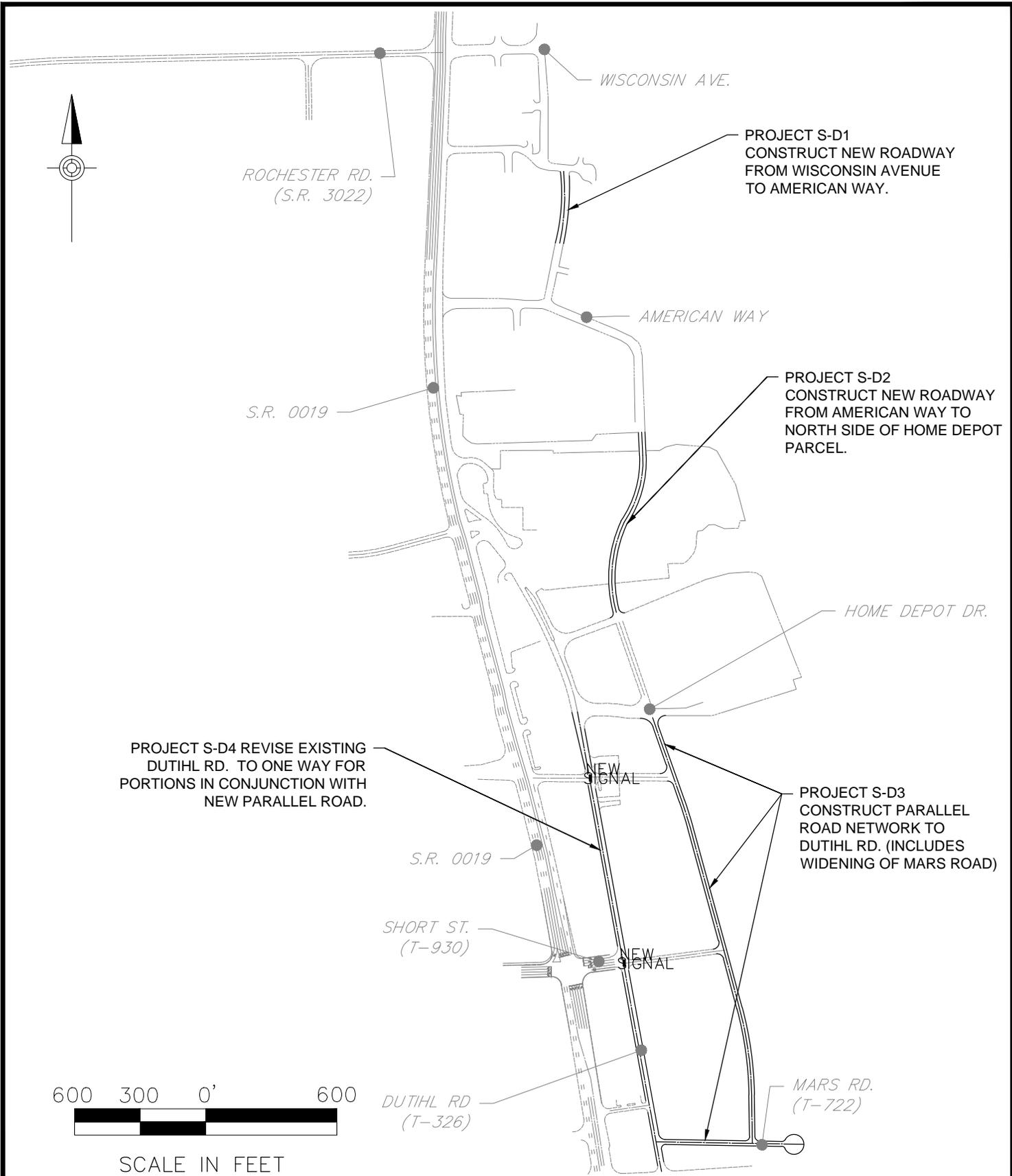
Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$27,318
East District	\$27,318
Southeast District	\$0

REMARKS:

File name: P:\0012\001261_0447\c3d\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:44am jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-D
DUTIHL ROAD PARALLEL NETWORK
PROJECTS S-D1 THRU S-D4

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=600'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-D1

PROJECT NUMBER: S-D1

LOCATION:

New connection from Wisconsin Avenue to American Way

TRANSPORTATION DISTRICT: East

DEFICIENCY:

A roadway network parallel to Route 19 should be constructed to allow for the efficient flow of traffic between adjacent developments without having to access Route 19.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	367,728
Utility Relocation	5,000
Right-of Way	180,000
Engineering	44,127
Inspection	29,418
Admin & Planning	5,516
TOTAL	\$631,790

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 0%*

*New Development Traffic /
Anticipated Traffic Growth = 100%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$603,981
Projected Soft Cost	\$86,393
Projected Total Cost	\$690,374

New Pass Thru Trips	\$0
New Development Trips	\$690,374

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	22%	\$151,882
Impact Fees	78%	\$538,492

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

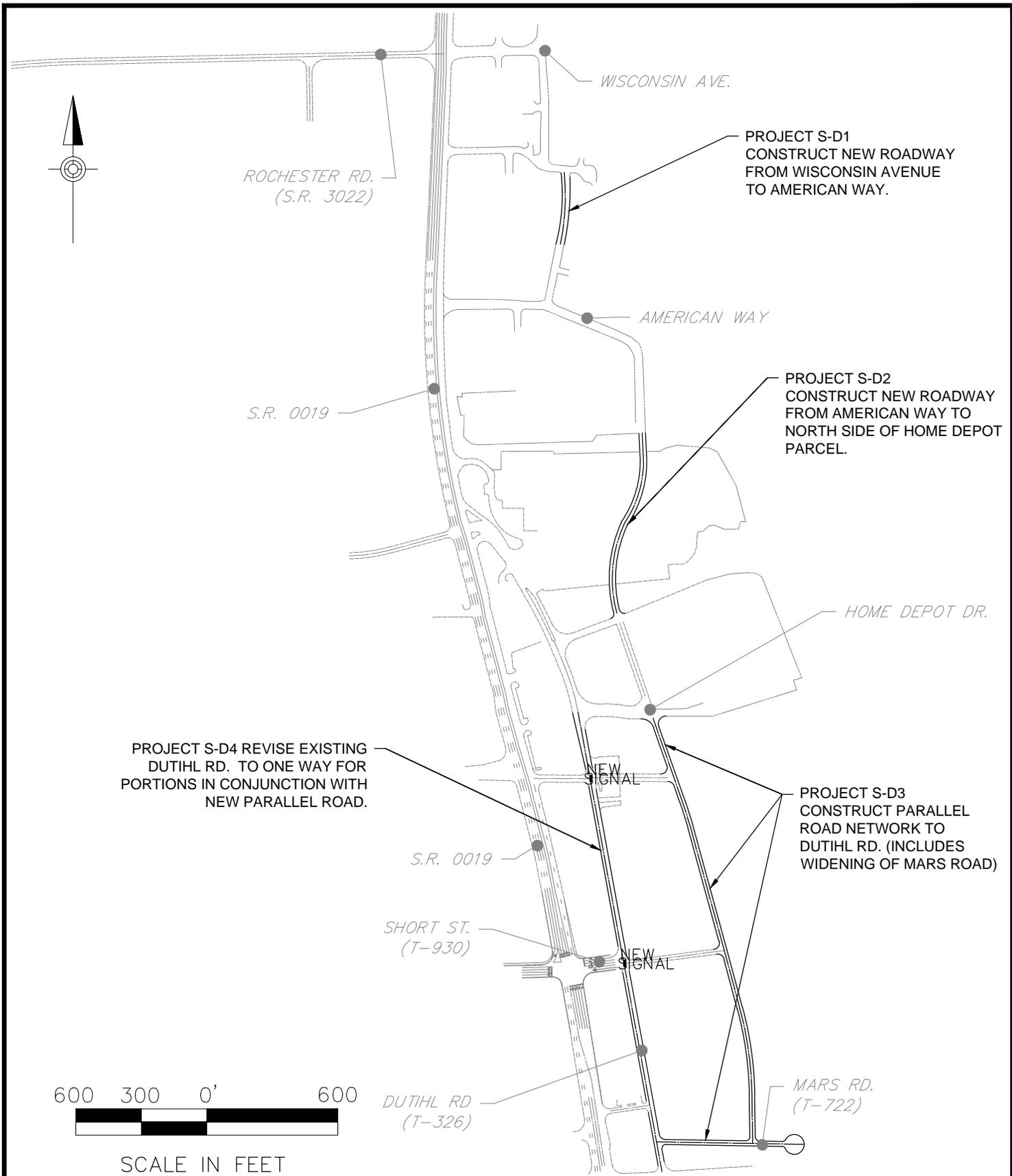
Transportation District Cost:

West District	\$0
East District	\$538,492
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\c3d\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:44am jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-D
DUTIHL ROAD PARALLEL NETWORK
PROJECTS S-D1 THRU S-D4

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=600'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-D2

PROJECT NUMBER: S-D2

LOCATION:

TRANSPORTATION DISTRICT: East

New connection from American Way to North Side of Existing Home Depot Parcel.

DEFICIENCY:

A roadway network parallel to Route 19 should be constructed to allow for the efficient flow of traffic between adjacent developments without having to access Route 19.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	715,851
Utility Relocation	5,000
Right-of Way	270,000
Engineering	71,585
Inspection	57,268
Admin & Planning	10,738
TOTAL	\$1,130,442

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 0%*

*New Development Traffic /
Anticipated Traffic Growth = 100%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$1,331,621
Projected Soft Cost	\$187,599
Projected Total Cost	\$1,519,220

New Pass Thru Trips	\$0
New Development Trips	\$1,519,220

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	22%	\$334,228
Impact Fees	78%	\$1,184,992

Secure Funding	2022
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

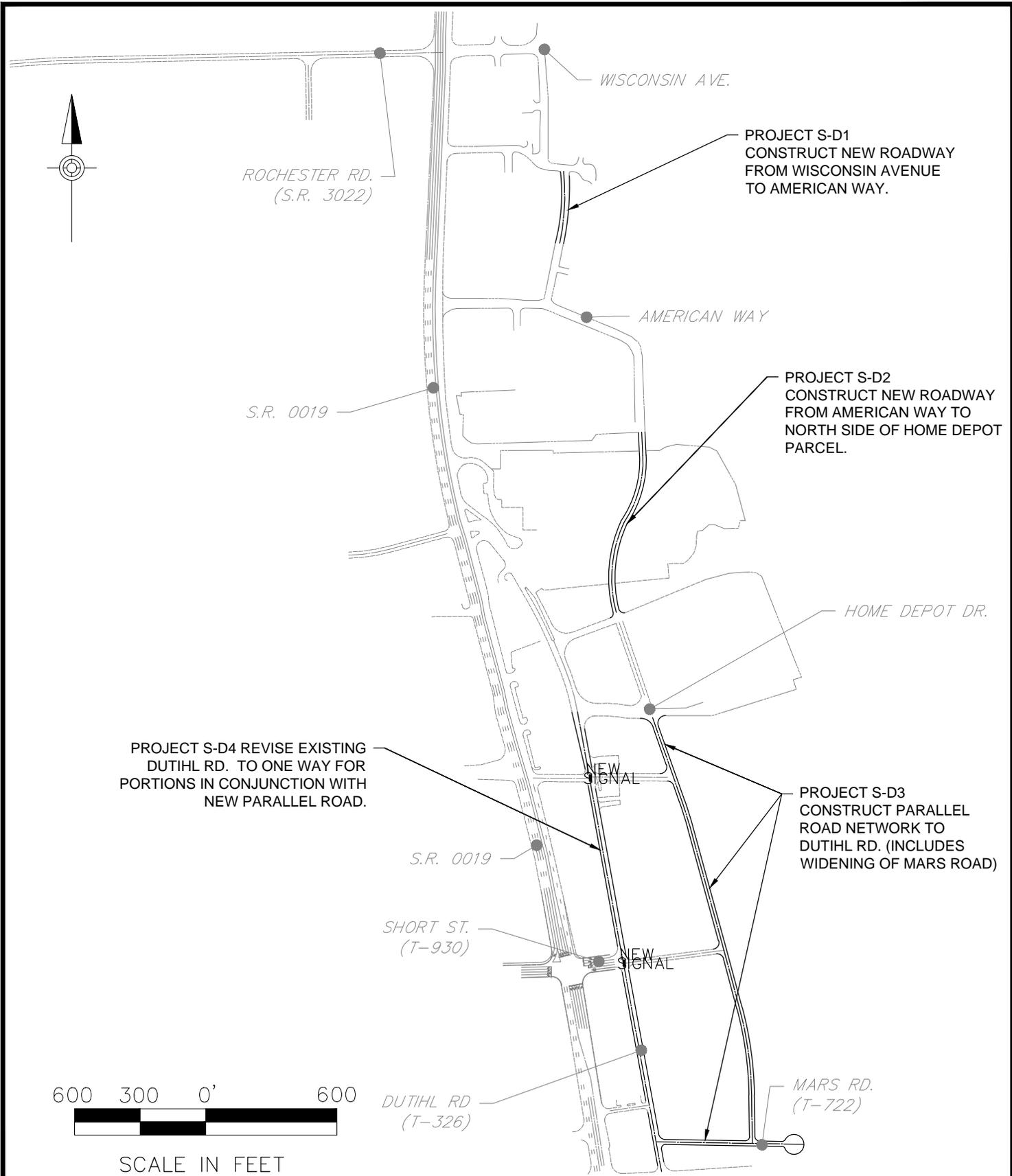
Transportation District Cost:

West District	\$0
East District	\$1,184,992
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\c3d\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:44am jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-D
 DUTIHL ROAD PARALLEL NETWORK
 PROJECTS S-D1 THRU S-D4

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=600'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-D3

PROJECT NUMBER: S-D3

LOCATION:

TRANSPORTATION DISTRICT: East

New connection from South Side of Existing Home Depot Parcel to Near 228.

DEFICIENCY:

A roadway network parallel to Route 19 should be constructed to allow for the efficient flow of traffic between adjacent developments without having to access Route 19.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,133,974
Utility Relocation	25,000
Right-of Way	600,000
Engineering	113,397
Inspection	90,718
Admin & Planning	17,010
TOTAL	\$1,980,099

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 0%*

*New Development Traffic /
Anticipated Traffic Growth = 100%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$2,363,914
Projected Soft Cost	\$297,173
Projected Total Cost	\$2,661,087

New Pass Thru Trips	\$0
New Development Trips	\$2,661,087

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	22%	\$585,439
Impact Fees	78%	\$2,075,648

Secure Funding	Year
Acquire ROW	2022
Complete Engineering	2023
Begin Construction	2024
	2025

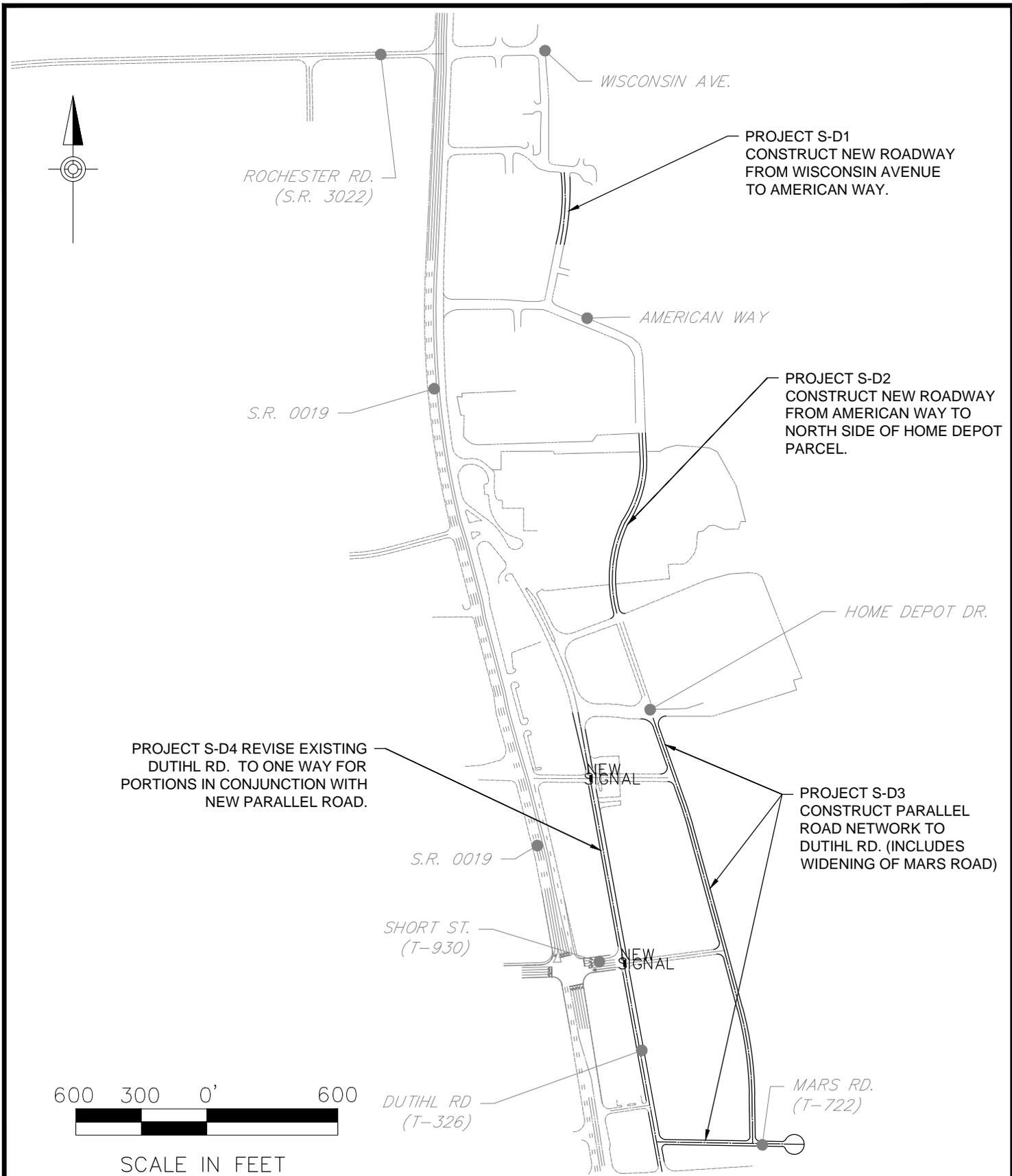
Transportation District Cost:

West District	\$0
East District	\$2,075,648
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\c3d\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:44am jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-D
 DUTIHL ROAD PARALLEL NETWORK
 PROJECTS S-D1 THRU S-D4

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=600'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-D4

PROJECT NUMBER: S-D4

LOCATION:
Dutihl Road from Route 228 north to Brandt Drive.

TRANSPORTATION DISTRICT: East

DEFICIENCY:
Insufficient north-south roadway capacity within the Township.

PROPOSED IMPROVEMENTS:
Revise existing Dutihl Road to one way for portions in conjunction with construction of parallel 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	1,035,279
Utility Relocation	10,000
Right-of Way	111,000
Engineering	103,528
Inspection	82,822
Admin & Planning	15,529
TOTAL	\$1,358,158

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 20%*

*New Development Traffic /
Anticipated Traffic Growth = 80%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$1,263,497
Projected Soft Cost	\$220,599
Projected Total Cost	\$1,484,096

New Pass Thru Trips	\$296,819
New Development Trips	\$1,187,277

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	22%	\$326,501
Impact Fees	78%	\$1,157,595

Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

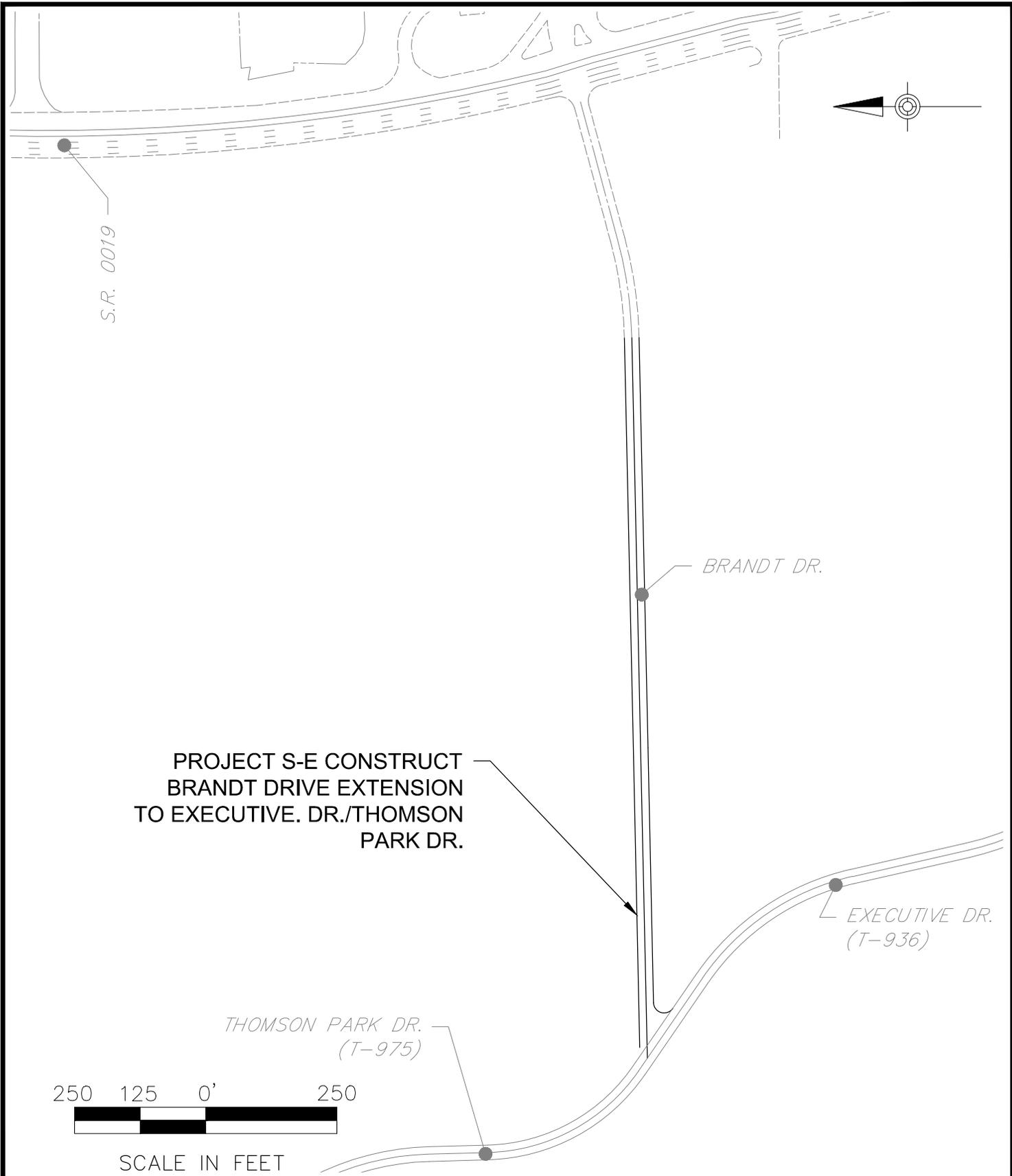
Transportation District Cost:

West District	\$0
East District	\$1,157,595
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-D for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:46am jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-E
BRANDT DRIVE EXTENSION
PROJECT S-E

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=250'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-E1

PROJECT NUMBER: S-E1

LOCATION:

TRANSPORTATION DISTRICT: West

New connection Thomson Park Drive to Brandt Drive including widening of existing Brandt Drive.

DEFICIENCY:

Insufficient east-west roadway capacity within the Township.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	799,586
Utility Relocation	10,000
Right-of Way	480,000
Engineering	119,938
Inspection	63,967
Admin & Planning	11,994
TOTAL	\$1,485,484

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 0%*

*New Development Traffic /
Anticipated Traffic Growth = 100%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$1,409,165
Projected Soft Cost	\$214,064
Projected Total Cost	\$1,623,229

New Pass Thru Trips	\$0
New Development Trips	\$1,623,229

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$811,614
Impact Fees	50%	\$811,614

Secure Funding	2015
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

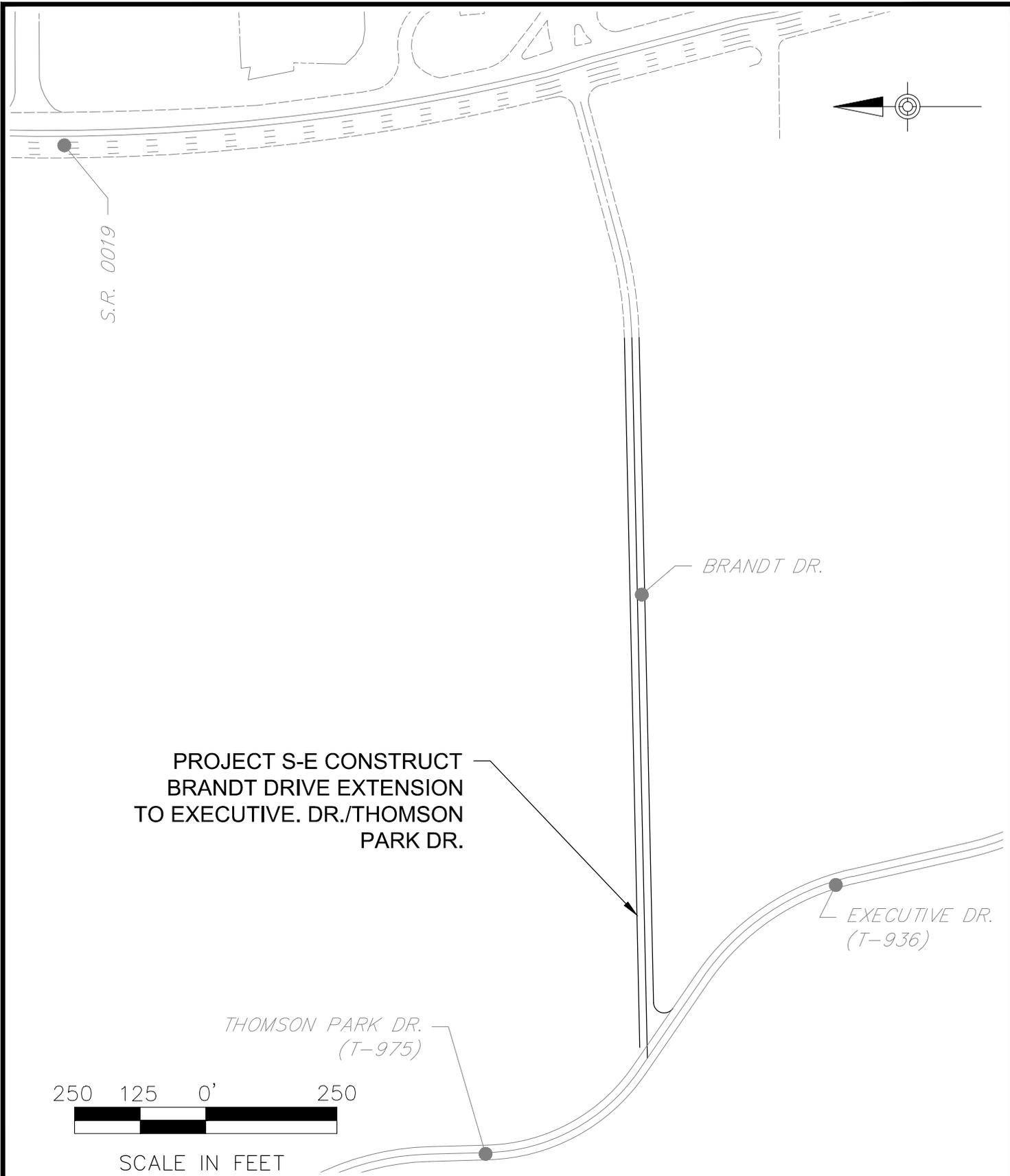
Transportation District Cost:

West District	\$811,614
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-E for a plan sketch of the proposed improvement.

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:46am jstrejcek



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-E
BRANDT DRIVE EXTENSION
PROJECT S-E

SHEET: 1	OF: 1	DATE: 06/15/2011
----------	-------	------------------



DESIGN DSM
DRAWN DSM
SCALE 1"=250'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-E2

PROJECT NUMBER: S-E2

LOCATION:

TRANSPORTATION DISTRICT: West

Intersection improvements including signal and turning lanes associated with Brandt Drive at Thomson Park Drive.

DEFICIENCY:

Insufficient east-west roadway capacity within the Township.

PROPOSED IMPROVEMENTS:

Construct Signal and Intersection improvements at Thomson Park Drive to accommodate new connector Road

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	367,903
Utility Relocation	5,000
Right-of Way	0
Engineering	44,148
Inspection	29,432
Admin & Planning	5,519
TOTAL	\$452,002

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 0%*

*New Development Traffic /
Anticipated Traffic Growth = 100%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$407,481
Projected Soft Cost	\$86,434
Projected Total Cost	\$493,915

New Pass Thru Trips	\$0
New Development Trips	\$493,915

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$246,958
Impact Fees	50%	\$246,958

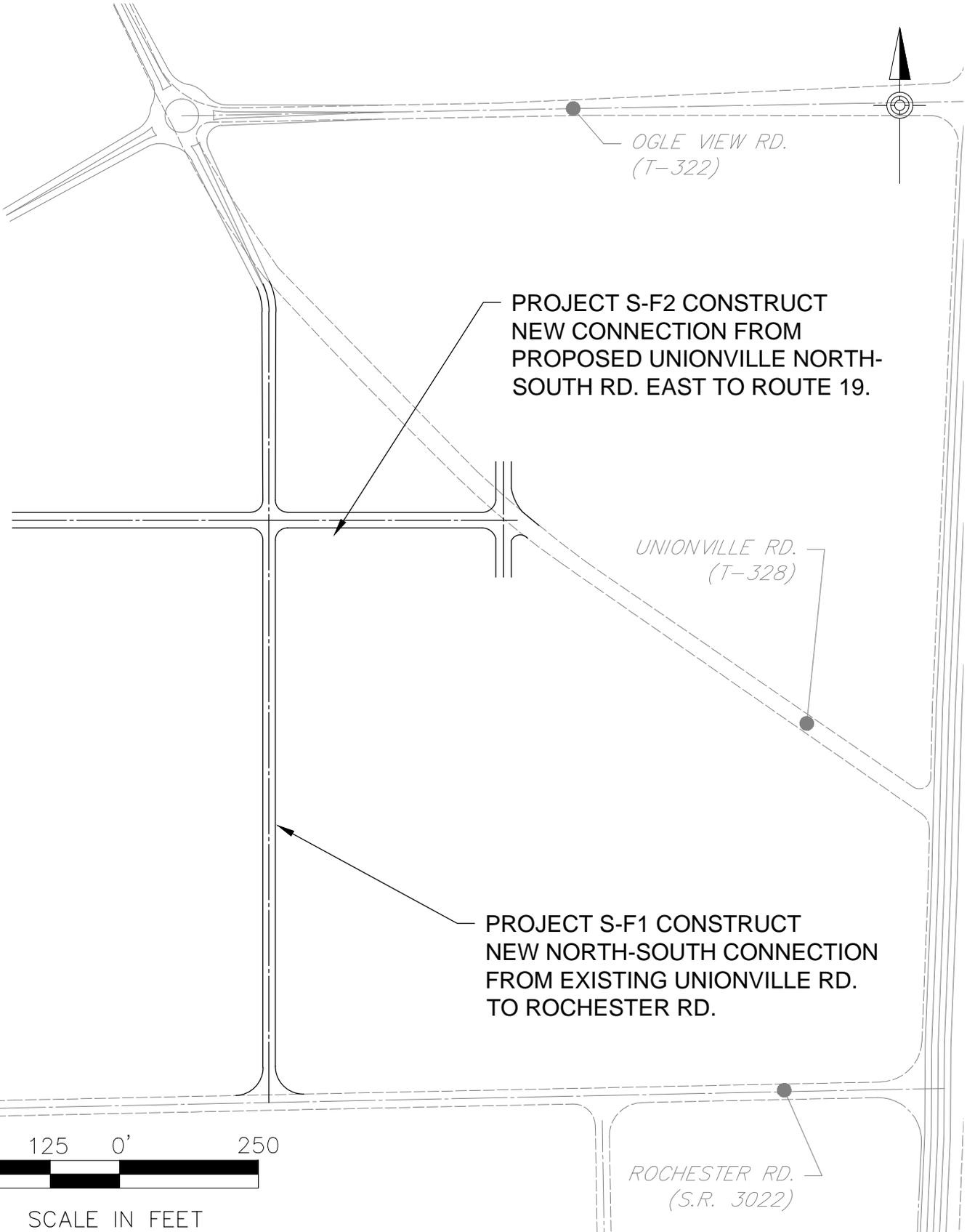
Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$246,958
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-E for a plan sketch of the proposed improvement.



OGLE VIEW RD.
(T-322)

PROJECT S-F2 CONSTRUCT
NEW CONNECTION FROM
PROPOSED UNIONVILLE NORTH-
SOUTH RD. EAST TO ROUTE 19.

UNIONVILLE RD.
(T-328)

PROJECT S-F1 CONSTRUCT
NEW NORTH-SOUTH CONNECTION
FROM EXISTING UNIONVILLE RD.
TO ROCHESTER RD.

ROCHESTER RD.
(S.R. 3022)



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOGOS.dwg Layout:Layout1 Sep 07, 2011-7:53am jstrejsek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-F
OGLE VIEW AND ROCHESTER ROADS
PROJECTS S-F1 & S-F2



DESIGN DSM
DRAWN DSM
SCALE 1"=250'
PROJECT R0012610447

SHEET: 1	OF: 1	DATE: 06/15/2011
-------------	----------	---------------------

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-F1

PROJECT NUMBER: S-F1

LOCATION:

New north-south connection from existing Unionville Road south to Rochester Road.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Insufficient north-south roadway capacity within the Township.

PROPOSED IMPROVEMENTS:

Construct 3 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	1,390,814
Utility Relocation	0
Right-of Way	750,000
Engineering	166,898
Inspection	111,265
Admin & Planning	20,862
TOTAL	\$2,439,839

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 10%*

*New Development Traffic /
Anticipated Traffic Growth = 90%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$2,339,325
Projected Soft Cost	\$326,753
Projected Total Cost	\$2,666,078

New Pass Thru Trips	\$266,608
New Development Trips	\$2,399,470

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	50%	\$1,333,039
Impact Fees	50%	\$1,333,039

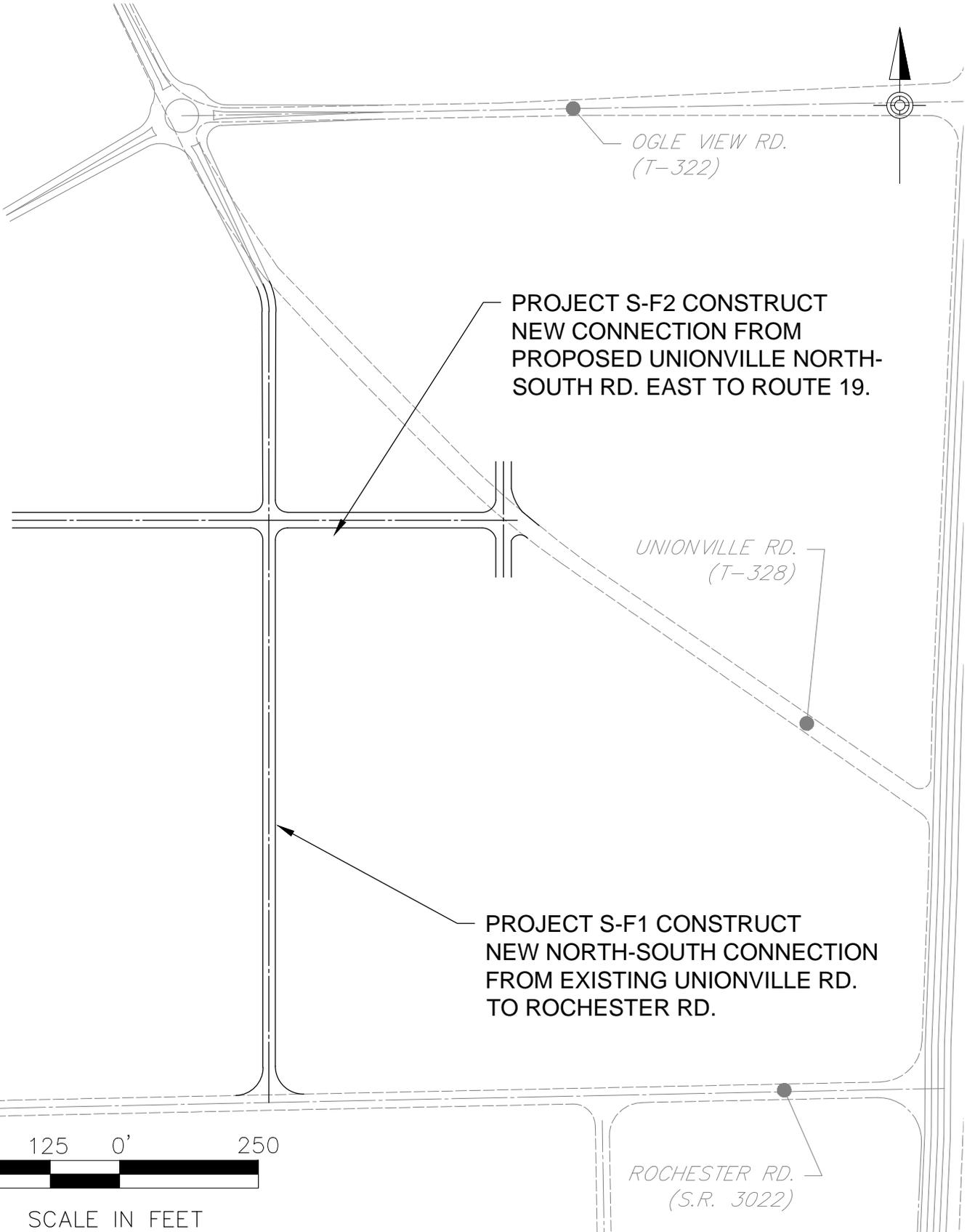
Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$1,333,039
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-F for a plan sketch of the proposed improvement.



OGLE VIEW RD.
(T-322)

PROJECT S-F2 CONSTRUCT
NEW CONNECTION FROM
PROPOSED UNIONVILLE NORTH-
SOUTH RD. EAST TO ROUTE 19.

UNIONVILLE RD.
(T-328)

PROJECT S-F1 CONSTRUCT
NEW NORTH-SOUTH CONNECTION
FROM EXISTING UNIONVILLE RD.
TO ROCHESTER RD.



SCALE IN FEET

ROCHESTER RD.
(S.R. 3022)

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 07, 2011-7:53am jstrejsek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-F
OGLE VIEW AND ROCHESTER ROADS
PROJECTS S-F1 & S-F2



DESIGN DSM
DRAWN DSM
SCALE 1"=250'
PROJECT R0012610447

SHEET: 1	OF: 1	DATE: 06/15/2011
-------------	----------	---------------------

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-F2

PROJECT NUMBER: S-F2

LOCATION:

New connection from proposed Unionville North-South Road east to Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Lack of Roadway network capacity from I-79 to north of Route 228.

PROPOSED IMPROVEMENTS:

Construct 3 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	437,733
Utility Relocation	0
Right-of Way	240,000
Engineering	43,773
Inspection	35,019
Admin & Planning	6,566
TOTAL	\$763,091

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 0%*

*New Development Traffic /
Anticipated Traffic Growth = 100%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$740,577
Projected Soft Cost	\$93,273
Projected Total Cost	\$833,850

New Pass Thru Trips	\$0
New Development Trips	\$833,850

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	45%	\$375,233
Impact Fees	55%	\$458,618

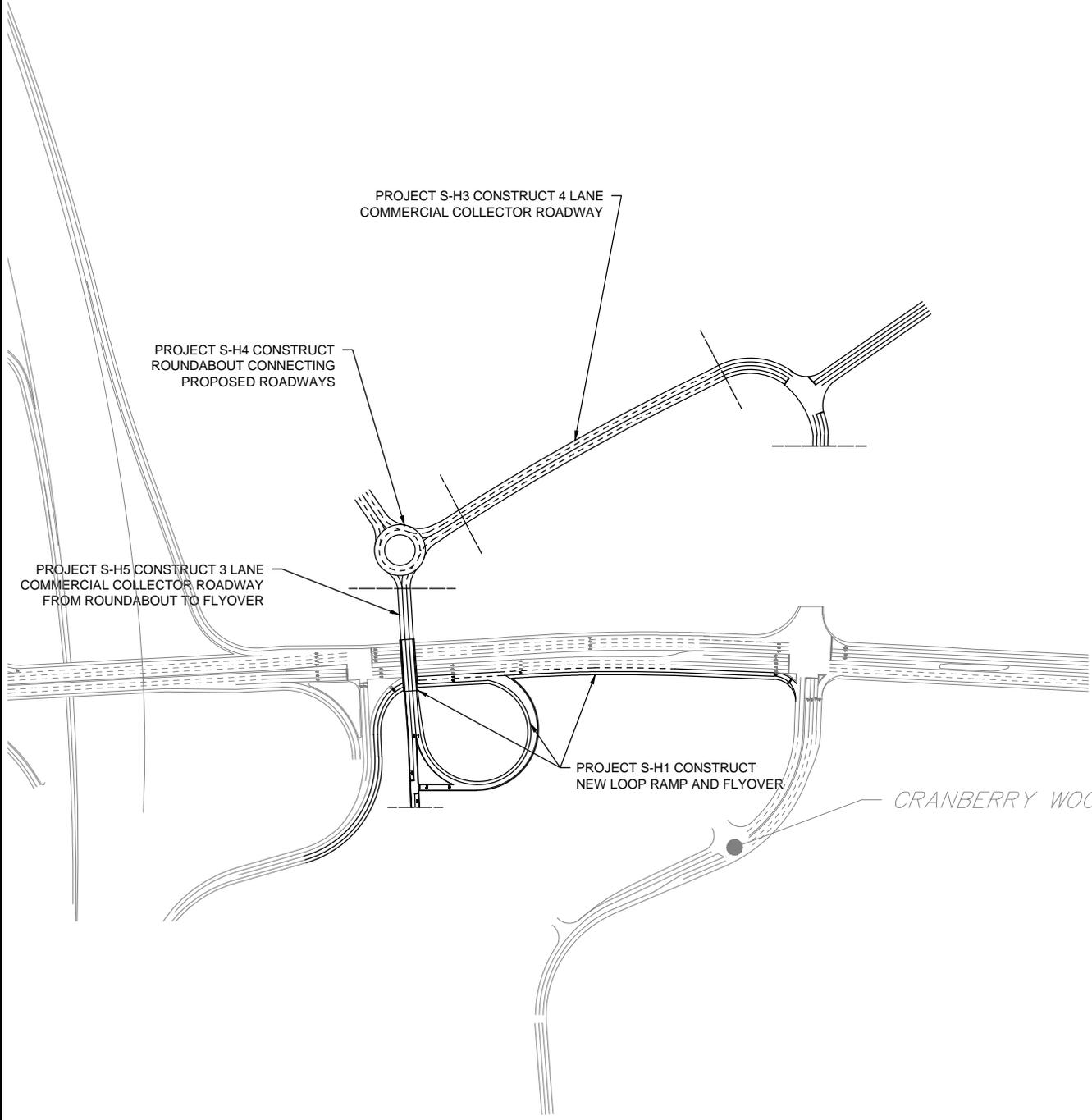
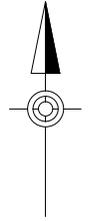
Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$458,618
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-F for a plan sketch of the proposed improvement.



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOGOS.dwg Layout:Layout1 Sep 07, 2011-7:37am jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-H
DUTILH ROAD PARALLEL NETWORK
PROJECTS S-H1 THRU S-H6



DESIGN	DSM
DRAWN	DSM
SCALE	1"=500'
PROJECT	R0012610447

SHEET:	OF:	DATE:
1	1	06/15/2011

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-H1

PROJECT NUMBER: S-H1

LOCATION:

Route 228 to local road network north of Route 228 east of I-79.

TRANSPORTATION DISTRICT: East

DEFICIENCY:

Lack of Roadway network capacity from I-79 to north of Route 228.

PROPOSED IMPROVEMENTS:

Construct New loop ramp and flyover from Route 228 to local road network north of Route 228 east of I-79 and EB lane on 228 from flyover to Cranberry Woods Drive.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	5,023,800
Utility Relocation	0
Right-of Way	0
Engineering	502,380
Inspection	0
Admin & Planning	75,357
TOTAL	\$5,601,537

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 5%*

*New Development Traffic /
Anticipated Traffic Growth = 95%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$5,489,642
Projected Soft Cost	\$631,309
Projected Total Cost	\$6,120,951

New Pass Thru Trips	\$306,010
New Development Trips	\$5,814,941

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	5%	\$306,048
Impact Fees	95%	\$5,814,903

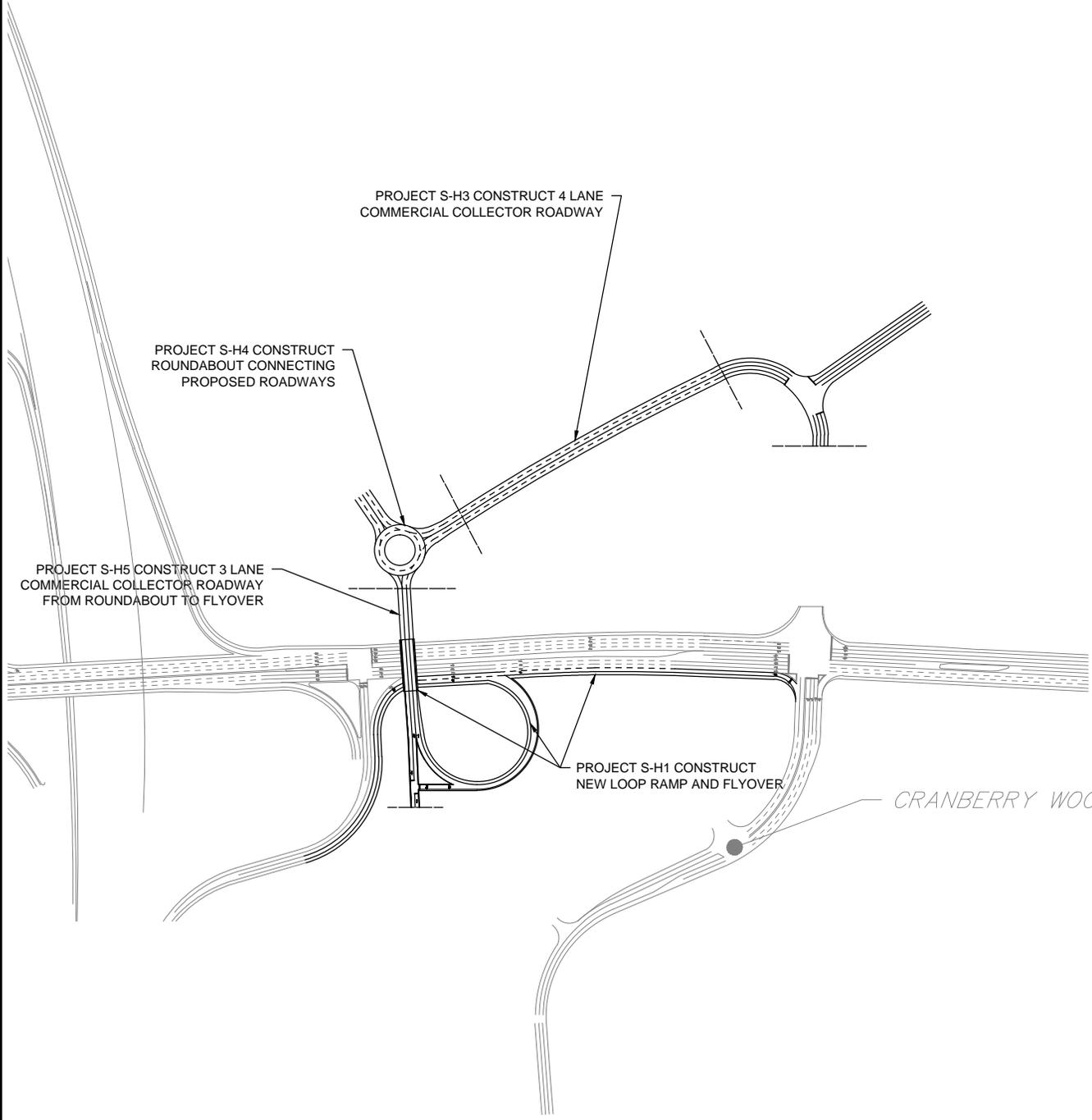
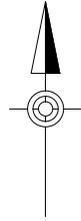
Secure Funding	Year
Acquire ROW	2015
Complete Engineering	2016
Begin Construction	2017
	2018

Transportation District Cost:

West District	\$0
East District	\$5,814,903
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-H for a plan sketch of the proposed improvement.



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOGOS.dwg Layout:Layout1 Sep 07, 2011-7:37am jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-H
DUTILH ROAD PARALLEL NETWORK
PROJECTS S-H1 THRU S-H6



DESIGN	DSM
DRAWN	DSM
SCALE	1"=500'
PROJECT	R0012610447

SHEET:	OF:	DATE:
1	1	06/15/2011

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-H5

PROJECT NUMBER: S-H5

LOCATION:

TRANSPORTATION DISTRICT: East

Local road network north of Route 228. North-South connection from flyover to roundabout.

DEFICIENCY:

Lack of Roadway network capacity from I-79 to north of Route 228.

PROPOSED IMPROVEMENTS:

Construct 3 Lane Commercial Collector Roadway

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	229,246
Utility Relocation	0
Right-of Way	0
Engineering	22,925
Inspection	18,340
Admin & Planning	3,439
TOTAL	\$273,949

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 5%*

*New Development Traffic /
Anticipated Traffic Growth = 95%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2018
Projected Construction Cost	\$250,504
Projected Soft Cost	\$48,848
Projected Total Cost	\$299,352

New Pass Thru Trips	\$14,966
New Development Trips	\$284,386

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	5%	\$14,968
Impact Fees	95%	\$284,384

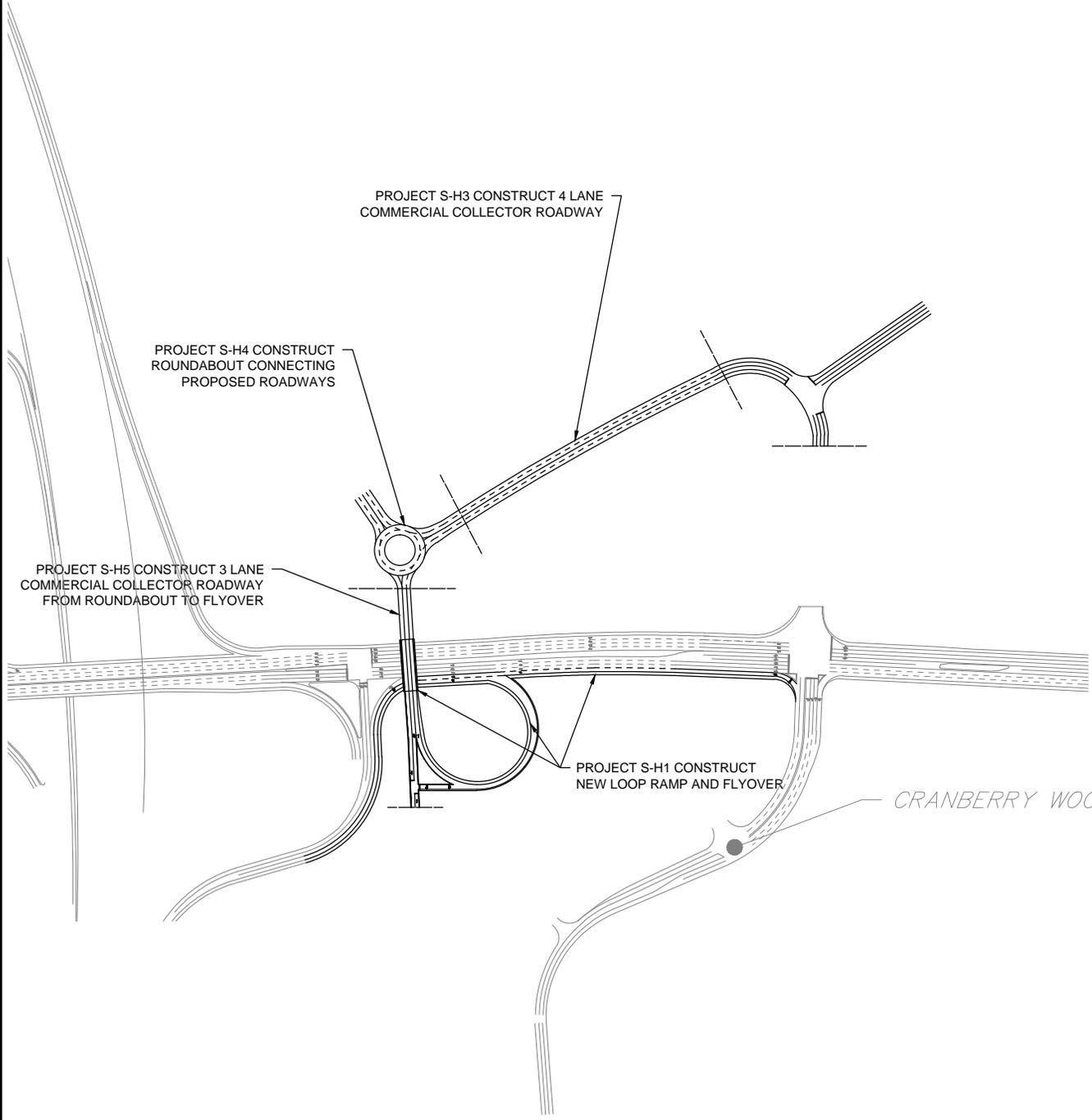
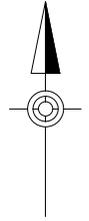
Secure Funding	Year
Acquire ROW	2016
Complete Engineering	2017
Begin Construction	2018

Transportation District Cost:

West District	\$0
East District	\$284,384
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-H for a plan sketch of the proposed improvement.



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOGOS.dwg Layout:Layout1 Sep 07, 2011-7:37am jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-H
DUTILH ROAD PARALLEL NETWORK
PROJECTS S-H1 THRU S-H6



DESIGN	DSM
DRAWN	DSM
SCALE	1"=500'
PROJECT	R0012610447

SHEET:	OF:	DATE:
1	1	06/15/2011

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-H6

PROJECT NUMBER: S-H6

LOCATION:

TRANSPORTATION DISTRICT: East

Local road network south of Route 228. Connection from MSA thruway to Cranberry Woods Drive

DEFICIENCY:

Lack of Roadway network capacity from I-79 to south of Route 228.

PROPOSED IMPROVEMENTS:

Construct 2 Lane Commercial Collector Roadway

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	743,057
Utility Relocation	0
Right-of Way	0
Engineering	74,306
Inspection	59,445
Admin & Planning	11,146
TOTAL	\$887,953

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 5%*

*New Development Traffic /
Anticipated Traffic Growth = 95%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2025
Projected Construction Cost	\$998,607
Projected Soft Cost	\$194,728
Projected Total Cost	\$1,193,335

New Pass Thru Trips	\$59,659
New Development Trips	\$1,133,675

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	5%	\$59,667
Other	45%	\$537,001
Impact Fees	50%	\$596,667

Secure Funding	Year
Acquire ROW	2023
Complete Engineering	2024
Begin Construction	2025

Transportation District Cost:

West District	\$0
East District	\$596,667
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-H for a plan sketch of the proposed improvement.

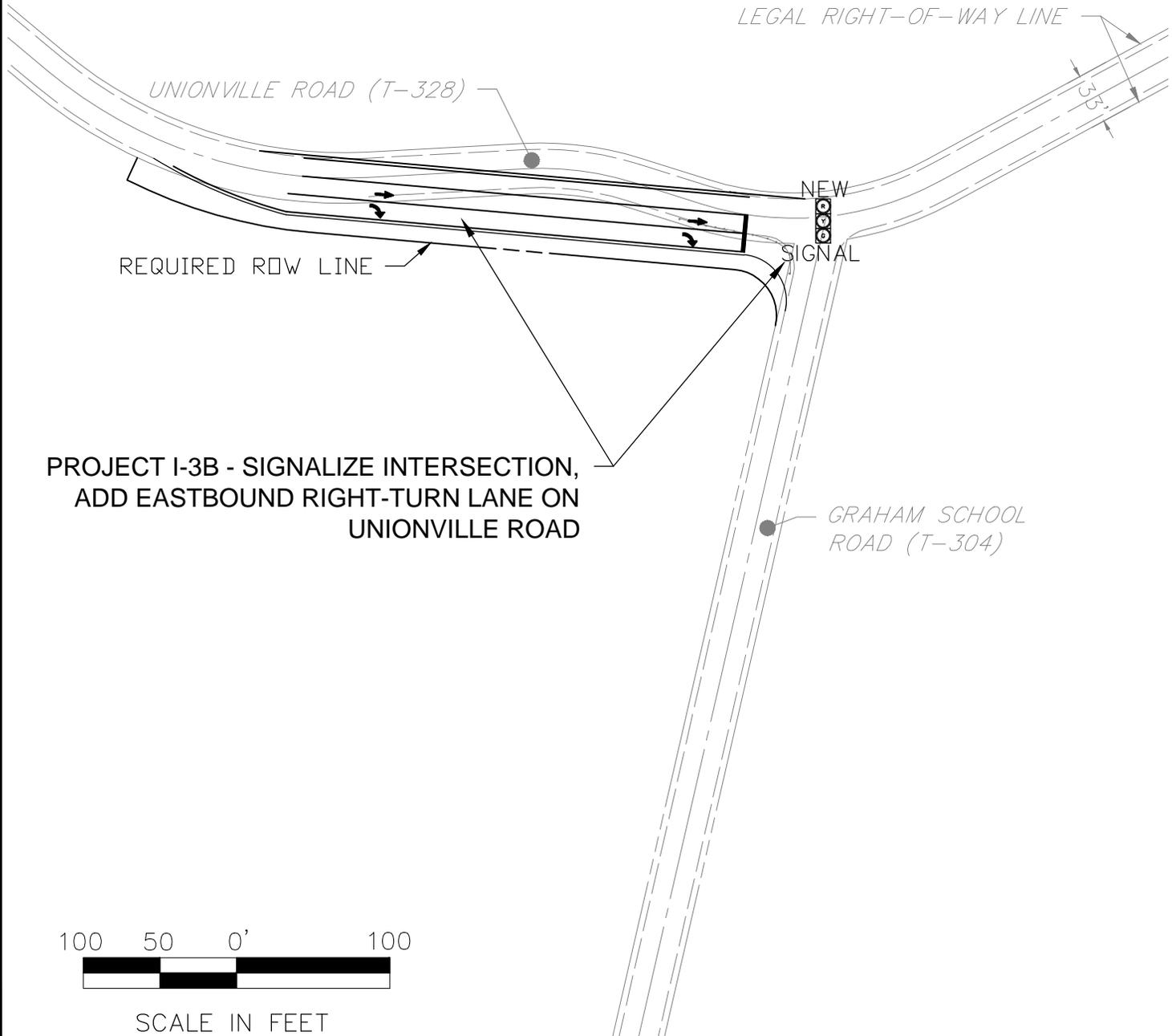
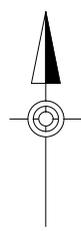


CRANBERRY
• TOWNSHIP •

APPENDIX B

UNSELECTED CANDIDATE PROJECT COST SUMMARIES AND DRAWINGS

This page intentionally left blank.



**PROJECT I-3B - SIGNALIZE INTERSECTION,
ADD EASTBOUND RIGHT-TURN LANE ON
UNIONVILLE ROAD**

File name: P:\0012\001261_0447\C3D\CranMap_imp1.1\NEW\0605.dwg Layout: Layout1 Sep 06, 2011--2:54pm jstrejpek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE					DESIGN DSM
CAPITAL IMPROVEMENTS DRAWING #3B UNIONVILLE AND GRAHAM SCHOOL ROADS PROJECT I-3B					DRAWN DSM
SHEET: 1	OF: 1	DATE: 06/15/2011	SCALE 1"=100'		
			PROJECT R0012610447		

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 3

PROJECT NUMBER: I-03B

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Graham School Road (T-304).

DEFICIENCY:

The one-way stop controlled intersection is projected to be deficient with forecast year 2030 volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add an eastbound right-turn lane on Unionville Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	357,639
Utility Relocation	5,000
Right-of Way	78,000
Engineering	71,528
Inspection	28,611
Admin & Planning	5,365
TOTAL	\$546,143

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 20%*

*New Development Traffic /
Anticipated Traffic Growth = 80%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$5,277,276
Projected Soft Cost	\$1,263,554
Projected Total Cost	\$6,540,830

New Pass Thru Trips	\$1,308,166
New Development Trips	\$5,232,664

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

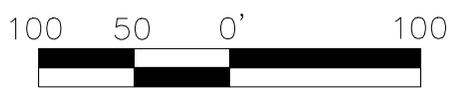
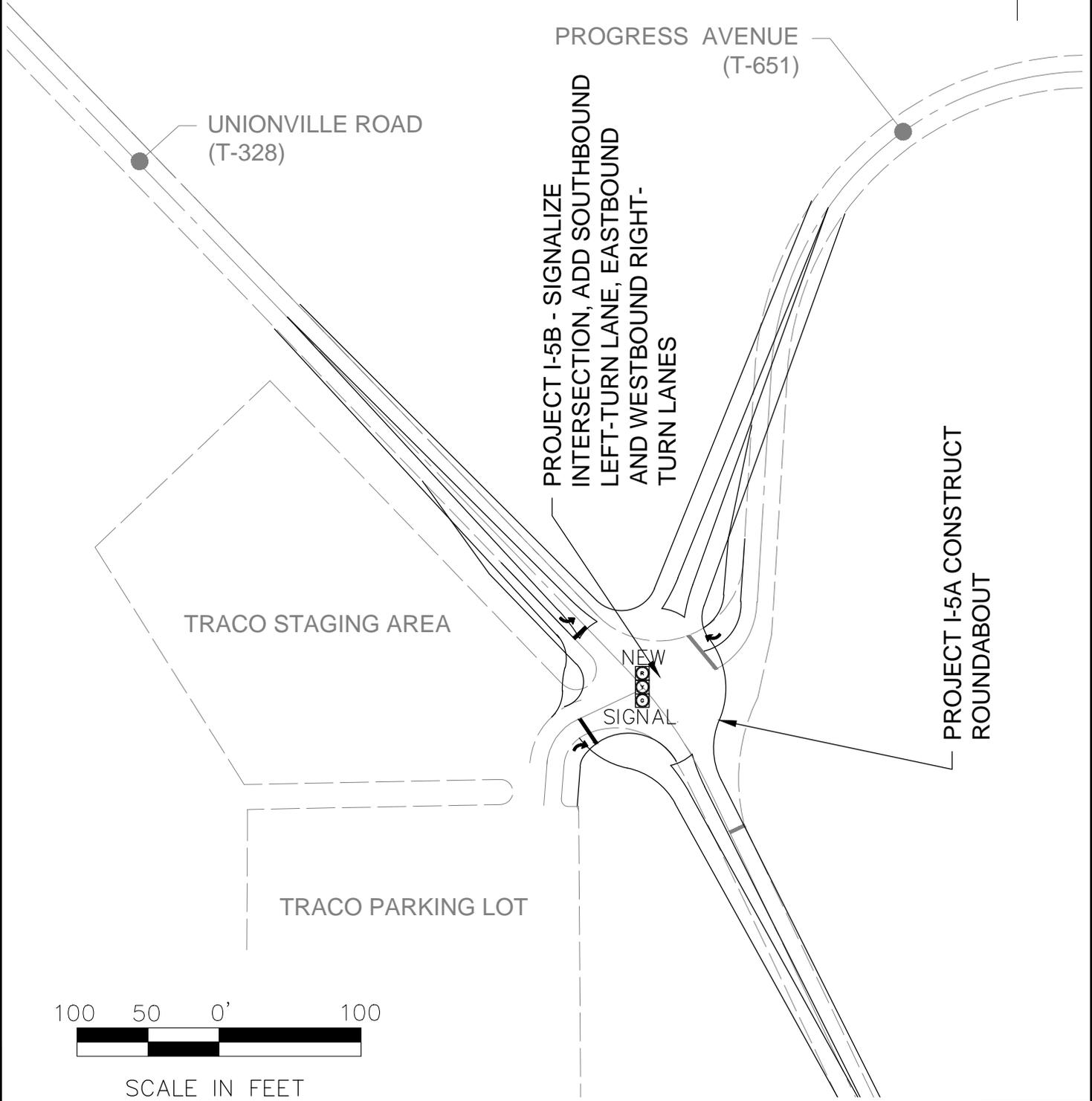
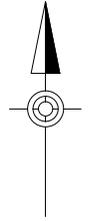
Secure Funding	Year
Acquire ROW	2098
Complete Engineering	2099
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 3 for a plan sketch of the proposed improvement.



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-3:05pm jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE		
CAPITAL IMPROVEMENTS DRAWING #5 UNIONVILLE AND PROGRESS AVENUE PROJECTS I-5A & I-5B		
SHEET: 1	OF: 1	DATE: 06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 5

PROJECT NUMBER: I-05B

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Unionville Road (T-328) and Progress Avenue (T-651).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a southbound left, and an eastbound and westbound right.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	880,110
Utility Relocation	13,500
Right-of Way	125,000
Engineering	132,017
Inspection	88,011
Admin & Planning	13,202
TOTAL	\$1,251,839

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$12,199,297
Projected Soft Cost	\$2,793,249
Projected Total Cost	\$14,992,547

New Pass Thru Trips	\$2,548,733
New Development Trips	\$12,443,814

PROJECT SCHEDULE:

PROPOSED FUNDING:

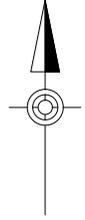
State/Federal	3%	\$449,776
Other	47%	\$7,046,497
Impact Fees	50%	\$7,496,273

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$7,496,273
East District	\$0
Southeast District	\$0

REMARKS:



FRANKLIN ROAD
S.R. 3021

LEGAL ROW LINE

CALLERY ROAD
S.R. 3014

LEGAL ROW LINE

REQUIRED ROW LINE

NEW
SIGNAL

700'

GARVIN ROAD
(T-313)

PROJECT I-9B REALIGN CALLERY ROAD WITH
GARVIN ROAD TO FORM A "PLUS"
INTERSECTION AND SIGNALIZE
INTERSECTION

LEGAL RIGHT-OF-WAY LINE



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #9B
FRANKLIN AND CALLERY/GARVIN ROADS
PROJECT I-9B

SHEET: 1 OF: 1 DATE: 06/15/2011



DESIGN
DSM
DRAWN
DSM
SCALE
1"=150'
PROJECT
R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 9

PROJECT NUMBER: I-09B

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021), Garvin Road (T-313) and Callery Road (SR 3014).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Realign Callery Road with Garvin Road to form a four-way "plus" intersection and install a traffic signal.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	813,807
Utility Relocation	9,000
Right-of Way	192,000
Engineering	122,071
Inspection	65,105
Admin & Planning	12,207
TOTAL	\$1,214,189

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 33%*

*New Development Traffic /
Anticipated Traffic Growth = 67%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$12,153,747
Projected Soft Cost	\$2,387,889
Projected Total Cost	\$14,541,637

New Pass Thru Trips	\$4,863,235
New Development Trips	\$9,678,402

PROJECT SCHEDULE:

PROPOSED FUNDING:

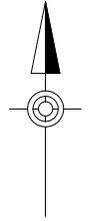
State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2099
Complete Engineering	2099
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

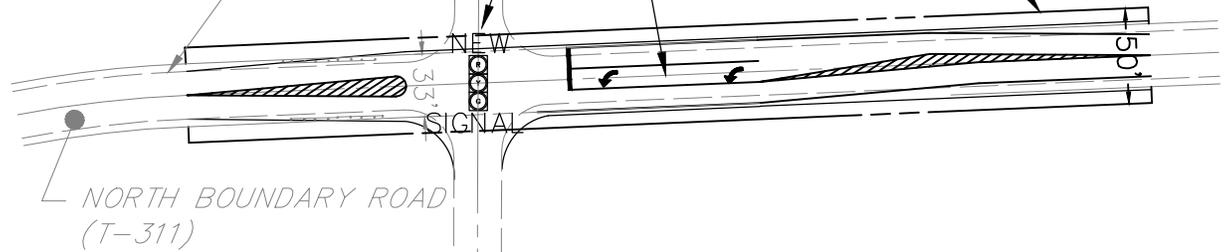
REMARKS:



PROJECT I-19B - SIGNALIZE INTERSECTION, ADD WESTBOUND LEFT-TURN LANE ON NORTH BOUNDARY ROAD

LEGAL RIGHT-OF-WAY LINE

REQUIRED ROW LINE



NORTH BOUNDARY ROAD (T-311)

MARSHALL ROAD (T-305)



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #19B
MARSHALL ROAD AND NORTH BOUNDARY ROAD
PROJECT I-19B



DESIGN	DSM
DRAWN	DSM
SCALE	1"=100'
PROJECT	R0012610447

SHEET:	OF:	DATE:
1	1	06/15/2011

File name: P:\0012\001261_0447\C3D\CranMap_imp1-NEWLOGOS.dwg Layout:Layout1 Sep 06, 2011-3:41pm jstrejcek

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 19

PROJECT NUMBER: I-19B

LOCATION:

TRANSPORTATION DISTRICT: East

Intersection of Marshall Road (T-305) and North Boundary Road (T-311).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add a westbound left-turn lane on North Boundary Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	523,439
Utility Relocation	5,000
Right-of Way	60,000
Engineering	60,195
Inspection	41,875
Admin & Planning	7,852
TOTAL	\$698,361

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 26%*

*New Development Traffic /
Anticipated Traffic Growth = 74%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$7,047,385
Projected Soft Cost	\$1,316,473
Projected Total Cost	\$8,363,857

New Pass Thru Trips	\$2,174,603
New Development Trips	\$6,189,254

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

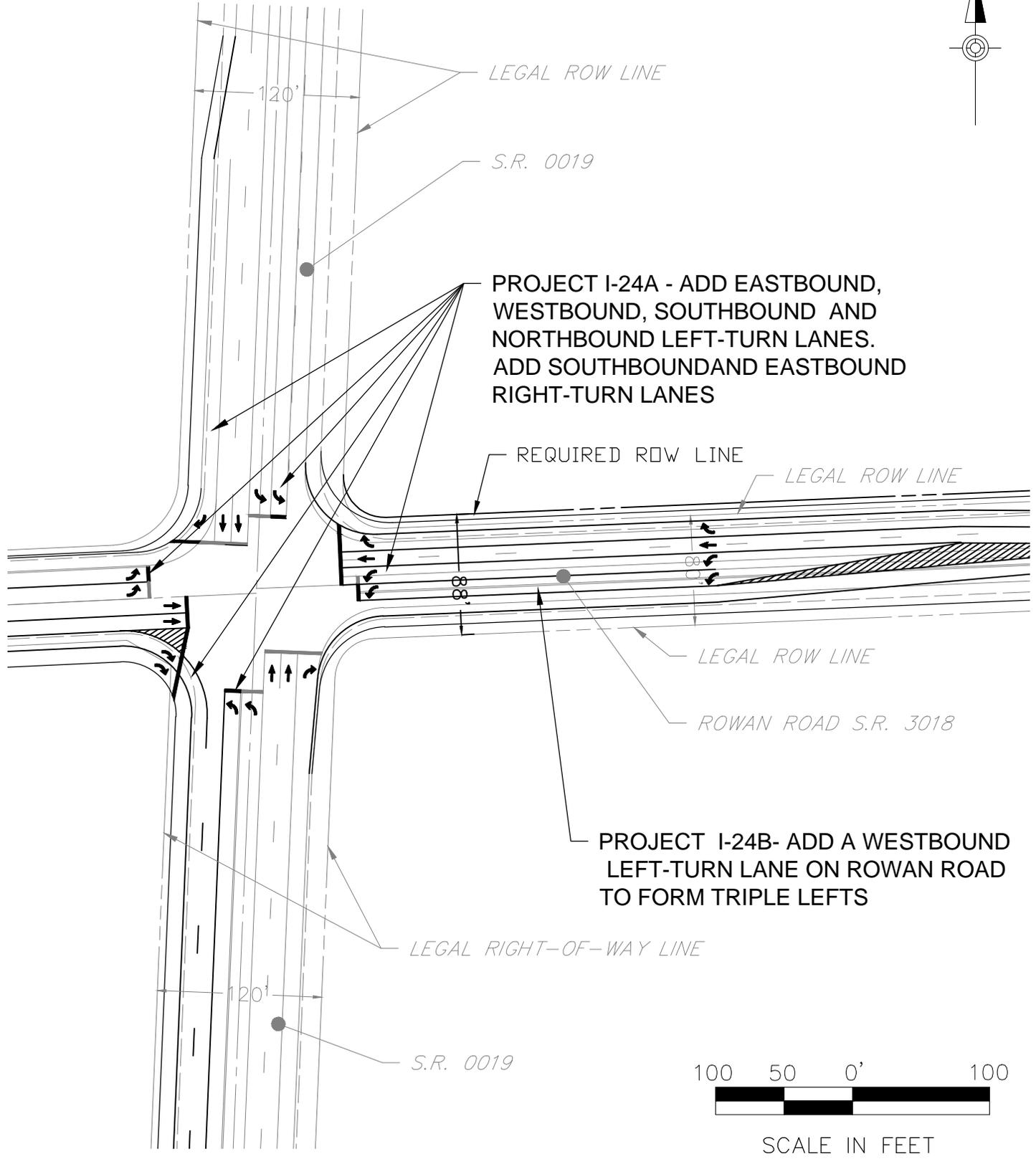
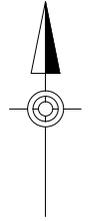
Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 19 for a plan sketch of the proposed improvement.



LEGAL ROW LINE

120'

S.R. 0019

PROJECT I-24A - ADD EASTBOUND, WESTBOUND, SOUTHBOUND AND NORTHBOUND LEFT-TURN LANES. ADD SOUTHBOUND AND EASTBOUND RIGHT-TURN LANES

REQUIRED ROW LINE

LEGAL ROW LINE

80'

LEGAL ROW LINE

ROWAN ROAD S.R. 3018

PROJECT I-24B- ADD A WESTBOUND LEFT-TURN LANE ON ROWAN ROAD TO FORM TRIPLE LEFTS

LEGAL RIGHT-OF-WAY LINE

120'

S.R. 0019



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #24
ROUTE 19 AND OGLE VIEW/ROWAN ROADS
PROJECTS I-24A AND I-24B



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

SHEET: 1	OF: 1	DATE: 06/15/2011
-------------	----------	---------------------

File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEW.0605.dwg Layout:Layout1 Sep 07, 2011--7:11am jstrejcek

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 24

PROJECT NUMBER: I-24B

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of US Route 19, Ogle View Road (T-322) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add a westbound left turn lane to form triple lefts along Rowan Road.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	788,314
Utility Relocation	20,000
Right-of Way	700,000
Engineering	118,247
Inspection	94,598
Admin & Planning	11,825
TOTAL	\$1,732,983

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 30%*

*New Development Traffic /
Anticipated Traffic Growth = 70%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$18,064,191
Projected Soft Cost	\$2,690,734
Projected Total Cost	\$20,754,925

New Pass Thru Trips	\$6,226,478
New Development Trips	\$14,528,448

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 24 for a plan sketch of the proposed improvement.

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 29

PROJECT NUMBER: I-29

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Robinhood Drive (T-330) and Rochester Road (SR 3022).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	192,500
Utility Relocation	0
Right-of Way	0
Engineering	28,875
Inspection	15,400
Admin & Planning	2,888
TOTAL	\$239,663

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 16%*

*New Development Traffic /
Anticipated Traffic Growth = 84%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$2,305,460
Projected Soft Cost	\$564,838
Projected Total Cost	\$2,870,298

New Pass Thru Trips	\$456,773
New Development Trips	\$2,413,524

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

PROJECT I-31B ADD NORTH
BOUND LEFT-TURN LANE ON
THOMSON PARK DRIVE AND
ADD A SOUTHBOUND LEFT
TURN LANE ON NORMAN DRIVE

NORMAN DRIVE
(T-830)

ROCHESTER ROAD
S.R. 3022

LEGAL ROW LINE

LEGAL RIGHT-OF-WAY LINE

PROJECT I-31A - ADD AN
EASTBOUND RIGHT-TURN
LANE ON ROCHESTER ROAD

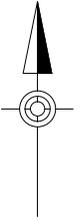
THOMSON PARK DRIVE
(T-975)

LEGAL ROW LINE

LEGAL ROW LINE



SCALE IN FEET



CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #31
NORMAN/THOMSON PK DRIVES AND ROCHESTER RD
PROJECTS I-31A AND I-31B

SHEET:	OF:	DATE:
1	1	06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 31

PROJECT NUMBER: I-31B

LOCATION:

TRANSPORTATION DISTRICT: West

The intersection of Norman Drive (T-830), Thomson Park Drive (T-830) and Rochester Road (SR 3022).

DEFICIENCY:

The current intersection geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Add a southbound left-turn lane on Norman Drive.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	150,997
Utility Relocation	5,000
Right-of Way	50,000
Engineering	17,365
Inspection	12,080
Admin & Planning	2,265
TOTAL	\$237,706

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 14%*

*New Development Traffic /
Anticipated Traffic Growth = 86%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$2,467,101
Projected Soft Cost	\$379,764
Projected Total Cost	\$2,846,864

New Pass Thru Trips	\$409,189
New Development Trips	\$2,437,675

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

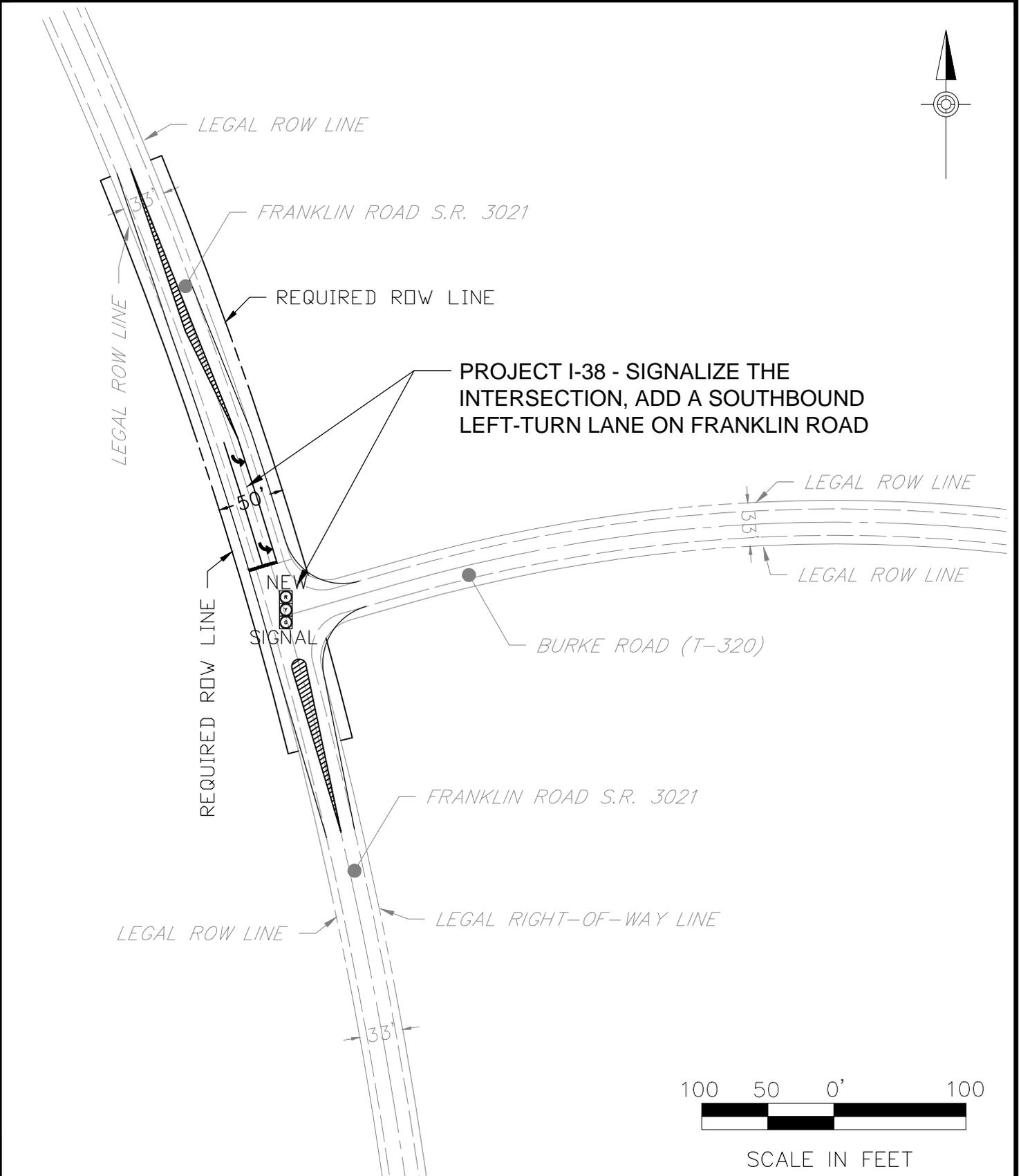
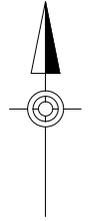
Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 31 for a plan sketch of the proposed improvement.



File name: P:\0012\001261_0447\C3D\CranMap_imp1\NEWLOCOS.dwg Layout:Layout1 Sep 06, 2011-4:00pm jstrejsek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE					DESIGN DSM
CAPITAL IMPROVEMENTS DRAWING #38 FRANKLIN ROAD AND BURKE ROAD PROJECT I-38					DRAWN DSM
SHEET: 1	OF: 1	DATE: 06/15/2011	SCALE 1"=100'		
			PROJECT R0012610447		

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 38

PROJECT NUMBER: I-38

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Franklin Road (SR 3021) and Burke Road (T-320).

DEFICIENCY:

The intersection control and geometry is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection. Add a southbound left-turn lane on Franklin Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	417,724
Utility Relocation	13,500
Right-of Way	100,000
Engineering	62,659
Inspection	33,418
Admin & Planning	6,266
TOTAL	\$633,566

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 29%*

*New Development Traffic /
Anticipated Traffic Growth = 71%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$6,362,156
Projected Soft Cost	\$1,225,694
Projected Total Cost	\$7,587,850

New Pass Thru Trips	\$2,233,533
New Development Trips	\$5,354,317

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

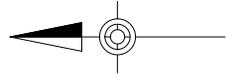
Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number 38 for a plan sketch of the proposed improvement.



PETERS ROAD
(T-307)

LEGAL RIGHT-OF-WAY LINE

ROWAN ROAD
S.R. 3018

LEGAL ROW LINE

**PROJECT I-42 - SIGNALIZE
INTERSECTION, ADD SOUTHBOUND
RIGHT AND EASTBOUND LEFT-TURN
LANE ON ROWAN ROAD**

REQUIRED ROW LINE

ROWAN ROAD
S.R. 3018

100 50 0' 100



SCALE IN FEET

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #42
PETERS ROAD/CANTERBURY TRAIL AND ROWAN ROAD
PROJECT I-42

SHEET: 1 OF: 1 DATE: 06/15/2011



DESIGN DSM
DRAWN DSM
SCALE 1"=100'
PROJECT R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

INTERSECTION NUMBER: 42

PROJECT NUMBER: I-42A

LOCATION:

TRANSPORTATION DISTRICT: East

The intersection of Peters Road (T-307), Canterbury Trail (T-726) and Rowan Road (SR 3018).

DEFICIENCY:

The current intersection is projected to become deficient with 2030 forecast traffic volumes.

PROPOSED IMPROVEMENTS:

Signalize the intersection and add an eastbound left-turn lane and a channelized southbound right-turn lane on Rowan Road.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	651,870
Utility Relocation	33,500
Right-of Way	110,000
Engineering	97,780
Inspection	52,150
Admin & Planning	9,778
TOTAL	\$955,078

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 19%*

*New Development Traffic /
Anticipated Traffic Growth = 81%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$9,525,681
Projected Soft Cost	\$1,912,731
Projected Total Cost	\$11,438,412

New Pass Thru Trips	\$2,141,643
New Development Trips	\$9,296,769

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	50%	\$5,719,206
Other	0%	\$0
Impact Fees	50%	\$5,719,206

Secure Funding	2097
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$5,719,206
Southeast District	\$0

REMARKS:

See Improvement Drawing number 42 for a plan sketch of the proposed improvement.

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-3

PROJECT NUMBER: S-03

LOCATION:

Glen Eden Road (SR 3024) from Freshcorn Road to Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

There are currently several areas of poor horizontal/vertical geometry.

PROPOSED IMPROVEMENTS:

Widen and realign to two-lane Residential Collector Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	5,171,976
Utility Relocation	190,250
Right-of Way	600,000
Engineering	620,637
Inspection	517,198
Admin & Planning	77,580
TOTAL	\$7,177,640

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$71,406,099
Projected Soft Cost	\$14,556,308
Projected Total Cost	\$85,962,407

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$18,052,106
New Development Trips	\$67,910,302

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-6

PROJECT NUMBER: S-06

LOCATION:
Unionville Road from Route 19 to Ogle View Road

TRANSPORTATION DISTRICT: West

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Add left turn lanes at key intersections to maintain thru traffic flow.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	741,669
Utility Relocation	24,400
Right-of Way	75,000
Engineering	111,250
Inspection	74,167
Admin & Planning	11,125
TOTAL	\$1,037,611

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$10,072,989
Projected Soft Cost	\$2,353,871
Projected Total Cost	\$12,426,860

New Pass Thru Trips	\$2,609,641
New Development Trips	\$9,817,220

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2098
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-7

PROJECT NUMBER: S-07

LOCATION: Unionville Road from Ogle View Road to Kensinger Drive.
TRANSPORTATION DISTRICT: West

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Widen to three lane commercial collector standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	898,705
Utility Relocation	0
Right-of Way	90,000
Engineering	107,845
Inspection	89,871
Admin & Planning	13,481
TOTAL	\$1,199,901

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 24%*

*New Development Traffic /
Anticipated Traffic Growth = 76%*

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$11,841,143
Projected Soft Cost	\$2,529,368
Projected Total Cost	\$14,370,511

COST ATTRIBUTABLE TO:

New Pass Thru Trips	\$3,449,616
New Development Trips	\$10,920,895

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-8

PROJECT NUMBER: S-08

LOCATION: Unionville Road (T-328) from Kensinger Drive to Glen Eden Road.
TRANSPORTATION DISTRICT: West

DEFICIENCY:
 The northern section of the roadway does not conform to the Township's roadway design standards.

PROPOSED IMPROVEMENTS:
 Widen and Realign to two-lane Residential Collector Standards west of Aberdeen Drive.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,732,706
Utility Relocation	53,100
Right-of Way	90,000
Engineering	173,271
Inspection	138,616
Admin & Planning	25,991
TOTAL	\$2,213,683

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 17%*

*New Development Traffic /
Anticipated Traffic Growth = 83%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$22,465,429
Projected Soft Cost	\$4,046,563
Projected Total Cost	\$26,511,992

New Pass Thru Trips	\$4,507,039
New Development Trips	\$22,004,954

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-12

PROJECT NUMBER: S-12

LOCATION:

Old Route 19 (T-310) from Glen Eden Road to Route 19.

TRANSPORTATION DISTRICT: West

DEFICIENCY:

Roadway does not conform to the Township's Residential Collector Standards.

PROPOSED IMPROVEMENTS:

Widen to two-lane Residential Collector Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	2,262,119
Utility Relocation	5,700
Right-of Way	300,000
Engineering	271,454
Inspection	226,212
Admin & Planning	33,932
TOTAL	\$3,099,417

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 14%*

*New Development Traffic /
Anticipated Traffic Growth = 86%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$30,753,269
Projected Soft Cost	\$6,366,638
Projected Total Cost	\$37,119,907

New Pass Thru Trips	\$5,196,787
New Development Trips	\$31,923,120

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-13

PROJECT NUMBER: S-13

LOCATION:
Route 19 (SR 0019) from Ogle View Road to Glen Eden Road.

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Widen to a six-lane Minor Arterial to North of Ogle View Road.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	11,148,720
Utility Relocation	239,750
Right-of Way	2,500,000
Engineering	1,337,846
Inspection	1,114,872
Admin & Planning	167,231
TOTAL	\$16,508,419

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 37%*

*New Development Traffic /
Anticipated Traffic Growth = 63%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$166,334,095
Projected Soft Cost	\$31,377,602
Projected Total Cost	\$197,711,697

New Pass Thru Trips	\$73,105,886
New Development Trips	\$124,605,811

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-15

PROJECT NUMBER: S-15

LOCATION:
Franklin Road (SR 3021) from Peters Road to Garvin Road.

TRANSPORTATION DISTRICT: East

DEFICIENCY:
The roadway horizontal/vertical geometry and cross section is substandard for a two-lane urban collector.

PROPOSED IMPROVEMENTS:
Widen and Realign to two-lane Residential Collector Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	7,831,985
Utility Relocation	383,850
Right-of Way	1,987,500
Engineering	939,838
Inspection	783,198
Admin & Planning	117,480
TOTAL	\$12,043,851

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 29%*

*New Development Traffic /
Anticipated Traffic Growth = 71%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$122,199,384
Projected Soft Cost	\$22,042,791
Projected Total Cost	\$144,242,175

New Pass Thru Trips	\$42,424,169
New Development Trips	\$101,818,006

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-17

PROJECT NUMBER: S-17

LOCATION:

TRANSPORTATION DISTRICT: East

Marshall Road (T-305) from Rowan Road to North Boundary Road.

DEFICIENCY:

Shoulders need to be widened to conform to Township Standards.

PROPOSED IMPROVEMENTS:

Widen to three-lane Commercial Collector Standards.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	3,429,240
Utility Relocation	5,000
Right-of Way	870,000
Engineering	411,509
Inspection	342,924
Admin & Planning	51,439
TOTAL	\$5,110,111

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 26%*

*New Development Traffic /
Anticipated Traffic Growth = 74%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$51,549,365
Projected Soft Cost	\$9,651,450
Projected Total Cost	\$61,200,815

New Pass Thru Trips	\$15,912,212
New Development Trips	\$45,288,603

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-19

PROJECT NUMBER: S-19

LOCATION:

TRANSPORTATION DISTRICT: East

North Boundary Road (T-311) from Route 19 to Marshall Road.

DEFICIENCY:

The year 2020 forecast traffic demands are anticipated to warrant an additional travel lane in each direction along this segment of North Boundary Road.

PROPOSED IMPROVEMENTS:

Widen to three-lane Residential Collector Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	945,294
Utility Relocation	47,900
Right-of Way	225,000
Engineering	113,435
Inspection	94,529
Admin & Planning	14,179
TOTAL	\$1,440,338

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$14,589,599
Projected Soft Cost	\$2,660,490
Projected Total Cost	\$17,250,090

New Pass Thru Trips	\$3,622,519
New Development Trips	\$13,627,571

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-22

PROJECT NUMBER: S-22

LOCATION:

Garvin Road (T-313) from New Connection to Franklin Road.

TRANSPORTATION DISTRICT: East

DEFICIENCY:

Roadway does not conform to the Township's Residential Collector Standards.

PROPOSED IMPROVEMENTS:

Widen to two-lane Residential Collector Standards

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	2,019,425
Utility Relocation	22,350
Right-of Way	435,000
Engineering	242,331
Inspection	201,943
Admin & Planning	30,291
TOTAL	\$2,951,340

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 18%*

*New Development Traffic /
Anticipated Traffic Growth = 82%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$29,662,891
Projected Soft Cost	\$5,683,587
Projected Total Cost	\$35,346,479

New Pass Thru Trips	\$6,362,366
New Development Trips	\$28,984,113

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-23

PROJECT NUMBER: S-23

LOCATION:
Ehrman Road from Route 19 to Roadway end.

TRANSPORTATION DISTRICT: West

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Add left turn lanes at key intersections to maintain thru traffic flow.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,240,446
Utility Relocation	51,100
Right-of Way	75,000
Engineering	148,854
Inspection	124,045
Admin & Planning	18,607
TOTAL	\$1,658,051

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$16,366,326
Projected Soft Cost	\$3,491,183
Projected Total Cost	\$19,857,509

New Pass Thru Trips	\$4,170,077
New Development Trips	\$15,687,432

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-24

PROJECT NUMBER: S-24

LOCATION:

Rowan Road (SR 3018) from Route 19 to Marshall Road.

TRANSPORTATION DISTRICT: East

DEFICIENCY:

Traffic is projected to more than double by the year 2020. The current roadway will not accommodate this volume of traffic with only one travel lane in each direction, at an acceptable Level Of Service.

PROPOSED IMPROVEMENTS:

Widen to five-lane Commercial Collector Roadway Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	7,779,199
Utility Relocation	20,100
Right-of Way	750,000
Engineering	1,166,880
Inspection	777,920
Admin & Planning	116,688
TOTAL	\$10,610,787

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 11%*

*New Development Traffic /
Anticipated Traffic Growth = 89%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$102,389,964
Projected Soft Cost	\$24,689,235
Projected Total Cost	\$127,079,200

New Pass Thru Trips	\$14,102,786
New Development Trips	\$112,976,414

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-26

PROJECT NUMBER: S-26

LOCATION:
Peters Road from Rowan Road to Franklin Road

TRANSPORTATION DISTRICT: East

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Add left turn lanes at key intersections to maintain thru traffic flow.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,240,446
Utility Relocation	47,100
Right-of Way	350,000
Engineering	148,854
Inspection	124,045
Admin & Planning	18,607
TOTAL	\$1,929,051

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 28%*

*New Development Traffic /
Anticipated Traffic Growth = 72%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$19,611,935
Projected Soft Cost	\$3,491,183
Projected Total Cost	\$23,103,118

New Pass Thru Trips	\$6,467,131
New Development Trips	\$16,635,987

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-29

PROJECT NUMBER: S-29

LOCATION:
Powell Road from Freedom Road to Rochester Road

TRANSPORTATION DISTRICT: West

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Add left turn lanes at key intersections to maintain thru traffic flow.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	2,424,957
Utility Relocation	88,100
Right-of Way	650,000
Engineering	290,995
Inspection	242,496
Admin & Planning	36,374
TOTAL	\$3,732,922

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$37,882,091
Projected Soft Cost	\$6,824,940
Projected Total Cost	\$44,707,032

New Pass Thru Trips	\$9,388,477
New Development Trips	\$35,318,555

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2095
Complete Engineering	2096
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-32

PROJECT NUMBER: S-32

LOCATION:

TRANSPORTATION DISTRICT: West

Freedom Road (SR 3020) from Commonwealth Dr to Turnpike Bridge.

DEFICIENCY:

At additional travel lane should be added in each direction along Freedom Road.

PROPOSED IMPROVEMENTS:

Widen to five-lane Minor Arterial with left-turn lanes.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,928,182
Utility Relocation	222,500
Right-of Way	1,750,000
Engineering	231,382
Inspection	192,818
Admin & Planning	28,923
TOTAL	\$4,353,804

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 32%*

*New Development Traffic /
Anticipated Traffic Growth = 68%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$46,716,186
Projected Soft Cost	\$5,426,786
Projected Total Cost	\$52,142,971

New Pass Thru Trips	\$16,685,751
New Development Trips	\$35,457,221

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-33

PROJECT NUMBER: S-33

LOCATION:

TRANSPORTATION DISTRICT: West

Freedom Road (SR 3020) from Turnpike Bridge to Route 19.

DEFICIENCY:

Add additional travel lane should be added in each direction along Freedom Road.

PROPOSED IMPROVEMENTS:

Widen to five-lane Commercial Collector with left-turn lanes.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	3,968,803
Utility Relocation	341,500
Right-of Way	2,750,000
Engineering	476,256
Inspection	396,880
Admin & Planning	59,532
TOTAL	\$7,992,972

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 33%*

*New Development Traffic /
Anticipated Traffic Growth = 67%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$84,557,129
Projected Soft Cost	\$11,170,029
Projected Total Cost	\$95,727,158

New Pass Thru Trips	\$31,589,962
New Development Trips	\$64,137,196

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-34

PROJECT NUMBER: S-34

LOCATION: Executive Drive (T-936) and Thomson Park Drive (T-975) from Freedom Road to Rochester Road.
TRANSPORTATION DISTRICT: West

DEFICIENCY:
To maintain an acceptable Level of Service in the year 2020, the roadway segment should have an auxiliary left-turn lane along the entire length of the roadways.

PROPOSED IMPROVEMENTS:
Widen to three-lane Commercial Collector Standards.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	3,264,411
Utility Relocation	222,500
Right-of Way	500,000
Engineering	391,729
Inspection	326,441
Admin & Planning	48,966
TOTAL	\$4,754,047

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 7%*

*New Development Traffic /
Anticipated Traffic Growth = 93%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$47,748,902
Projected Soft Cost	\$9,187,546
Projected Total Cost	\$56,936,449

New Pass Thru Trips	\$3,985,551
New Development Trips	\$52,950,897

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-38

PROJECT NUMBER: S-38

LOCATION:
Haine School Road from Freedom Road to Rochester Road

TRANSPORTATION DISTRICT: West

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Add left turn lanes at key intersections to maintain thru traffic flow.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	2,718,881
Utility Relocation	79,100
Right-of Way	590,000
Engineering	326,266
Inspection	271,888
Admin & Planning	40,783
TOTAL	\$4,026,918

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 21%*

*New Development Traffic /
Anticipated Traffic Growth = 79%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$40,575,865
Projected Soft Cost	\$7,652,175
Projected Total Cost	\$48,228,040

New Pass Thru Trips	\$10,133,132
New Development Trips	\$38,094,908

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-40

PROJECT NUMBER: S-40B

LOCATION:
S.R. 228 from Route 19 to Franklin Road

TRANSPORTATION DISTRICT: East

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Widen to 8 Lane Arterial

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	12,357,543
Utility Relocation	116,500
Right-of Way	3,100,000
Engineering	1,235,754
Inspection	1,235,754
Admin & Planning	185,363
TOTAL	\$18,230,914

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 33%*

*New Development Traffic /
Anticipated Traffic Growth = 67%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$186,521,216
Projected Soft Cost	\$31,819,801
Projected Total Cost	\$218,341,017

New Pass Thru Trips	\$72,271,957
New Development Trips	\$146,069,061

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-41

PROJECT NUMBER: S-41

LOCATION:
S.R. 228 from Franklin Road to Seven Fields Borough.

TRANSPORTATION DISTRICT: East

DEFICIENCY:
The 2030 traffic projects are anticipated to be higher than the current roadway can accommodate.

PROPOSED IMPROVEMENTS:
Widen to 4 Lane Arterial Roadway.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	3,779,819
Utility Relocation	33,100
Right-of Way	0
Engineering	377,982
Inspection	377,982
Admin & Planning	56,697
TOTAL	\$4,625,580

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 57%*

*New Development Traffic /
Anticipated Traffic Growth = 43%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$45,665,106
Projected Soft Cost	\$9,732,768
Projected Total Cost	\$55,397,874

New Pass Thru Trips	\$31,466,446
New Development Trips	\$23,931,428

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-42

PROJECT NUMBER: S-42

LOCATION:

Franklin Road (SR 3021) from Seven Fields Borough to Route 228.

TRANSPORTATION DISTRICT: East

DEFICIENCY:

Shoulders and drainage structures are substandard.

PROPOSED IMPROVEMENTS:

Widen and Realign to two-lane Residential Collector Standards.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	1,115,744
Utility Relocation	59,400
Right-of Way	330,000
Engineering	133,889
Inspection	111,574
Admin & Planning	16,736
TOTAL	\$1,767,344

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 58%*

*New Development Traffic /
Anticipated Traffic Growth = 42%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$18,026,232
Projected Soft Cost	\$3,140,215
Projected Total Cost	\$21,166,446

New Pass Thru Trips	\$12,365,238
New Development Trips	\$8,801,208

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-45

PROJECT NUMBER: S-45B

LOCATION:

TRANSPORTATION DISTRICT: East/West

Route 19 (SR 0019) from Route 228 to Ogle View/Rowan Roads.

DEFICIENCY:

Thru lanes will need to be added to the roadway to maintain an acceptable Level Of Service in the study year 2030.

PROPOSED IMPROVEMENTS:

Widen to eight-lane Minor Arterial.

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	13,357,564
Utility Relocation	3,149,000
Right-of Way	4,900,000
Engineering	1,602,908
Inspection	1,335,756
Admin & Planning	200,363
TOTAL	\$24,545,592

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 48%*

*New Development Traffic /
Anticipated Traffic Growth = 52%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$256,373,921
Projected Soft Cost	\$37,594,301
Projected Total Cost	\$293,968,222

New Pass Thru Trips	\$141,840,539
New Development Trips	\$152,127,683

PROJECT SCHEDULE:

PROPOSED FUNDING:

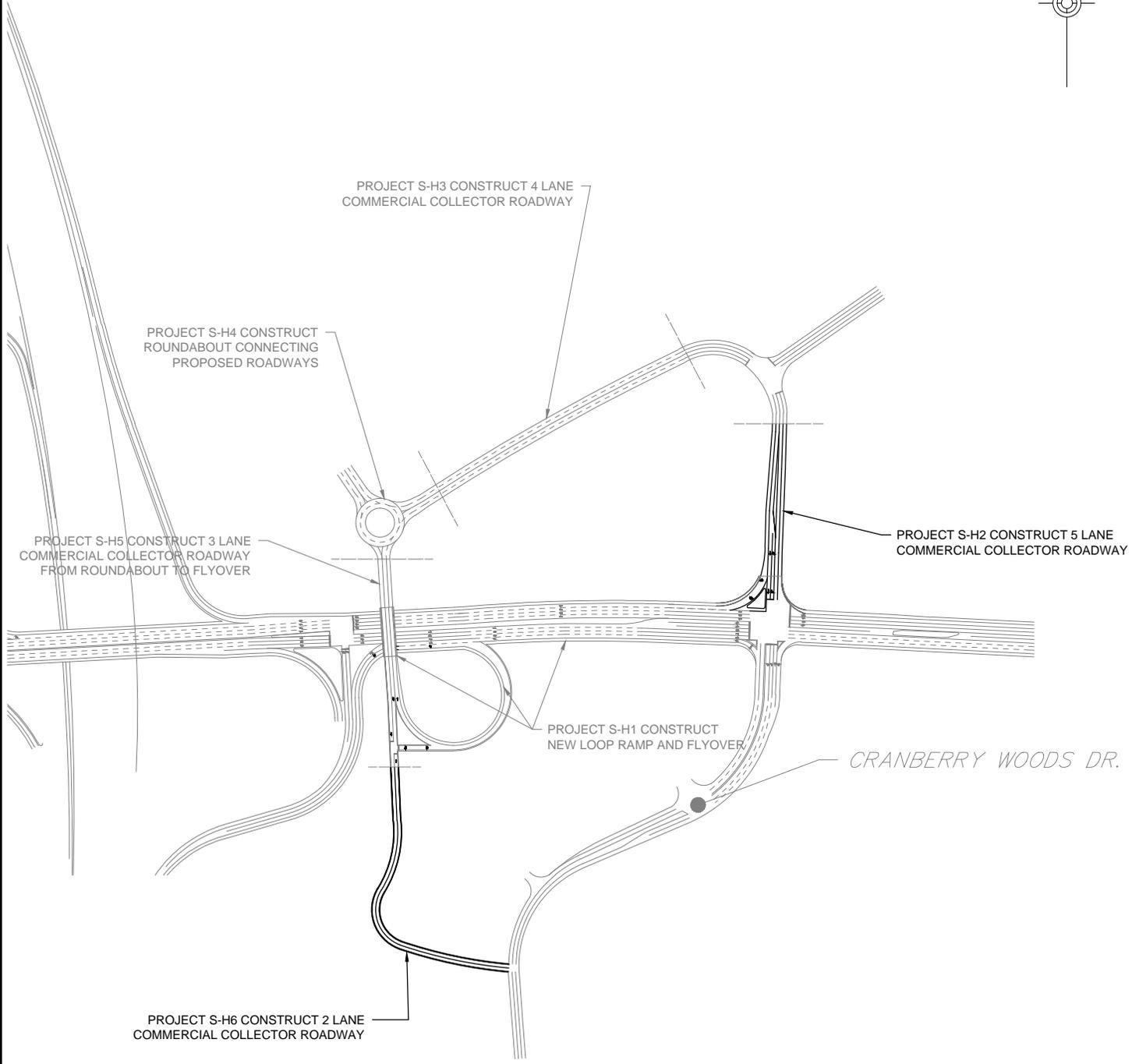
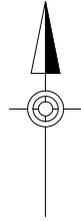
State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2094
Complete Engineering	2095
Begin Construction	2097
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:



SCALE IN FEET

File name: P:\0012\001261_0447\C3D\CranMap_imp1.1NEWLOGOS.dwg Layout:Layout1 Sep 08, 2011-9:28am jstrejcek

CRANBERRY TOWNSHIP IMPACT FEE UPDATE

CAPITAL IMPROVEMENTS DRAWING #S-H
DUTILH ROAD PARALLEL NETWORK
PROJECTS S-H1 THRU S-H6



SHEET:	OF:	DATE:
1	1	06/15/2011

DESIGN	DSM
DRAWN	DSM
SCALE	1"=500'
PROJECT	R0012610447

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-H2

PROJECT NUMBER: S-H2

LOCATION:

Local road network north of Route 228. North-South segment (New McElroy) opposite of Cranberry Woods Drive.

TRANSPORTATION DISTRICT: East

DEFICIENCY:

Lack of Roadway network capacity from I-79 to north of Route 228.

PROPOSED IMPROVEMENTS:

Construct 5 Lane Commercial Collector Roadway

**ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)**

Construction	1,974,040
Utility Relocation	0
Right-of Way	0
Engineering	197,404
Inspection	157,923
Admin & Planning	29,611
TOTAL	\$2,358,977

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 5%*

*New Development Traffic /
Anticipated Traffic Growth = 95%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$23,641,919
Projected Soft Cost	\$4,610,174
Projected Total Cost	\$28,252,093

New Pass Thru Trips	\$1,412,432
New Development Trips	\$26,839,661

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2097
Complete Engineering	2098
Begin Construction	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:

See Improvement Drawing number S-H for a plan sketch of the proposed improvement.

This page intentionally left blank.

**TRANSPORTATION CAPITAL IMPROVEMENTS FOR
CRANBERRY TOWNSHIP
PROJECT SUMMARY SHEET**

SEGMENT NUMBER: S-Int

PROJECT NUMBER: S-Int

LOCATION:

I-79 Interchange at location to be determined north of Route 228.

TRANSPORTATION DISTRICT: East/West

DEFICIENCY:

U.S. Route 19 projected to be over capacity.

PROPOSED IMPROVEMENTS:

Provide additional interchange to alleviate thru traffic on Route 19.

ESTIMATED COST SUMMARY:
(Current Year 2015 Dollars)

Construction	10,754,520
Utility Relocation	125,000
Right-of Way	1,500,000
Engineering	1,613,178
Inspection	1,075,452
Admin & Planning	161,318
TOTAL	\$15,229,468

**PROPORTIONAL SPLIT OF FUTURE
PEAK HOUR TRAFFIC VOLUMES:**

*New Pass Thru Traffic /
Anticipated Traffic Growth = 50%*

*New Development Traffic /
Anticipated Traffic Growth = 50%*

COST ATTRIBUTABLE TO:

CONSTRUCTION YEAR AND PROJECTED COST:

Construction Year	2099
Projected Construction Cost	\$148,262,282
Projected Soft Cost	\$34,132,161
Projected Total Cost	\$182,394,443

New Pass Thru Trips	\$91,197,221
New Development Trips	\$91,197,221

PROJECT SCHEDULE:

PROPOSED FUNDING:

State/Federal	0%	\$0
Other	0%	\$0
Impact Fees	0%	\$0

Secure Funding	Year
Acquire ROW	2096
Complete Engineering	2097
Begin Construction	2098
	2099

Transportation District Cost:

West District	\$0
East District	\$0
Southeast District	\$0

REMARKS:



CRANBERRY
• TOWNSHIP •

APPENDIX C

**CAPITAL IMPROVEMENTS PLAN
ADJUSTMENTS**

This page intentionally left blank.

Capital Improvements Plan Adjustments		
Transportation Service District:	WEST	EAST
New Trip Ends (from traffic model)	9,544	13,126
Total Construction Cost Estimate	\$14,522,451	\$26,056,782
Trips At Previous Fees (Approved but not Collected by January 30, 2015)*	1,975	1,057
Dollar Value of Previously Approved Trips - fees not collected	\$2,938,010	\$1,525,296
Current Impact Fee Account Balance (As of December 31, 2014)*	\$316,906	\$6,596,907
Preliminary Adjusted Total Fee	\$11,267,535	\$17,934,579
5% Contingency	\$563,377	\$896,729
Subtotal	\$11,830,911	\$18,831,308
Final Adjusted Trip Ends	7,569	12,069
Adjusted Fee	\$1,563	\$1,560

Note: The above adjustments are made to compensate for the existing impact fee account balance and site developments that the Township has already given approval for but have yet to be constructed.

*Provided by Cranberry Township