

TOWNSHIP OF ABINGTON

(1) PUBLIC WORKS COMMITTEE

**June 1, 2016
7:00 P.M.**

CALL TO ORDER

ROLL CALL: HECKER – FARREN – KLINE – MYERS – ROTHMAN

**Township Manager LEFEVRE
Assistant Township Manager WEHMEYER
Township Solicitor CLARKE
Township Engineer POWERS
Director of Code Enforcement MATTEO
Director of Public Works MICCIOLO
Director of W.W.T.P. WRIGLEY**

MINUTES:

Motion to approve the minutes of the May 2, 2016 Public Works Committee Meeting.

PW1. Commonwealth of PA – 2015 Growing Greener Watershed Protection Grant

Motion to authorize Township officials to accept a grant award from the Commonwealth of PA; a 2015 Growing Greener Watershed Protection Grant, in the amount of \$186,000, with the Township matching portion of \$27,900; to be funded from MS4 funds under the 2015 Capital Budget.

PW2. Highland Avenue Storm Sewer Project

Motion to approve and enter into contract with N. Abbonizio Contractors, Inc. for the Highland Avenue Storm Sewer Project in the amount of \$320,240.00; to be funded as follows:

- 1) 2014 Bond - \$ 95,000.00**
- 2) Fund Balance - \$225,240.00**

PW3. 2014 Capital Improvement Program

Motion to approve final payment for the 2014 Bond Issue Phase I Storm Sewer Project to Almeida & Hudak Contractors, LLC, in the amount of \$69,805.64; to be funded from 2014 Bond Issue.

PW4. Delaware Valley Regional Planning Commission (DVRPC) Transportation & Community Development Initiative (TCDI) Grant Program

Motion to approve final payment to Simone Collins Architecture (in association with Traffic, Planning & Design) for the Township Master Bicycle Plan in the amount of \$898.23; to be funded from Account No. 06-07-301-5305.

PW5. Award Bid for Grit Collection System Replacement

Motion to accept the lowest responsive and responsible bid and to enter into a contract with Derstein Company, LLC for the Grit Collection System for WWTP in the amount of \$265,500.00 to be funded from Capital Account No. 02-00-000-7459.

PW6. Discussion of Future Treatment Plant Effluent Limits Agreement with the EPA & PaDEP

Discussion of recent negotiations with the EPA and PaDEP regarding the forthcoming agreement establishing lower Treatment Plant effluent limits for Total Phosphorous.

PW7. Intergovernmental Agreement – Alternative TMDL–Wissahickon Creek Watershed

Motion to approve the Intergovernmental Agreement between the Wissahickon Watershed Municipalities and Wastewater Treatment Plants to work together in developing an alternative TMDL plan for the watershed.

PW8. U.S. Army Corp of Engineers – Section 566 Funding – Sandy Run Environmental Improvements

Motion to accept the Federal Fund appropriation of \$200,000 through the U.S. Army Corp of Engineers Section 566 Program for design and project development assistance to facilitate environmental infrastructure improvements to the Sandy Run Watershed and to approve a Township match of \$50,000 payable from MS4 Funds contained in the Engineering Capital Budget.

PW9. CMAQ Grant Application

Motion to apply for a CMAQ Grant in the amount of \$975,245.75 for improvements to the Easton Road corridor, including new signal equipment and interconnection with the Easton Road corridor and Susquehanna Road corridor.

PW10. Green Light Go Grant Award

Motion to accept a Green Light Go Grant award in the amount of \$25,308. The grant award will be for LED light improvements to our traffic signals. The \$5,608.00 match will be taken from Contingency Fund No. 01-01-002-5299.

PW11. ARLE Grant Award

Motion to accept an ARLE Grant in the amount of \$314,400.00 for safety improvements to the intersection of Mr. Carmel Avenue and North Hills Avenue.

PUBLIC WORKS

BOARD ACTION REQUEST

June 1, 2016

DATE

PW1

AGENDA ITEM NUMBER

**DEPARTMENT
MANAGER**

AGENDA ITEM

**TOWNSHIP
MANAGER**

Engineering

M.E.P.

Commonwealth of PA
2015 Growing Greener
Watershed Protection Grant

Michael LeFevre

MLF

PREVIOUS ACTIONS

None.

RECOMMENDED BOARD ACTION

Motion to authorize Township officials to accept a grant award from the Commonwealth of PA; a 2015 Growing Greener Watershed Protection Grant, in the amount of \$186,000, with the Township matching portion of \$27,900; to be funded from MS4 funds under the 2015 Capital Budget.

COMMENTS

The 2015 Growing Greener Watershed Protection Grant covers projects required to meet the MS4 Sandy Run TMDL. See attached.

The Township received \$186,000 from the State. The minimum match is \$27,900 for a total of \$213,900. The match is covered in the 2015 Capital Budget under MS4 requirements.

Celeste Tompkins

From: Mike Filmyer <mike.filmyer@atcassociates.com>
Sent: Tuesday, May 03, 2016 12:36 PM
To: Michael LeFevre
Cc: Michael Powers; Celeste Tompkins
Subject: Growing Greener Grant Summary
Attachments: Abington Growing Greener Grant Application 2015.pdf; Project Description Report Text.pdf

Michael,

Celeste asked me to send you a summary of the scope of the Growing Greener Grant that was just awarded to the township. See the attached files for a description of the grant and a copy of the application.

Title of the Grant: Sandy Run TMDL Projects

Work Description:

As a condition of Abington Township's NPDES Permit No. PAG-130012, which commenced on March 16, 2013, the Township is obligated to implement their TMDL Strategy Plan to meet Waste Load Allocations established in the Wissahickon TMDL (October, 2003). The Township proposed to construct five (5) storm water BMPs that will be located in the drainage area of the Sandy Run, which is a tributary of the Wissahickon Creek. The Wissahickon Creek is a priority watershed in the Southeast Region and has an approved TMDL for Siltation and Nutrients. BMP projects proposed to be constructed by this grant are listed below:

1. Roychester Park Rain Garden
2. Roychester Park Riparian Buffer Restoration
3. Roychester Park Bioretention/Infiltration Trench
4. Roychester Park Infiltration Berms
5. Evergreen Manor Park Infiltration Basin

The projects selected to be constructed were identified and developed by the Temple University Center for Sustainable Communities per the direction of the William Penn Foundation. The Center coordinated with the Township to define and prioritize projects that would be supported by the community and be ready for implementation. The Center provided the Township with several projects and the Township chose to submit project located at two (2) township parks for consideration for Growing Greener funding. The parks were Roychester Park, which is located at the headwaters of the Sandy Run, and Evergreen Manor Park, which is located in the Willow Grove section of the Township. Stormwater flows from this area flow through this wooded park prior to entering the Sandy Run.

The Township of Abington has a 15% match required for these projects, which I understand is already budgeted. The township must complete the construction of the project prior to the June 30, 2019 date required by the grant agreement. Abington submitted a grant request for \$256,000 and had an anticipated township match of \$38,500 comes to a total budget of \$294,500.

The township received \$186,000 from the state. The minimum township match would then be \$27,900. (Total Project: \$213,900). We need to review the estimate for each of the projects.

Let me know if you need anything further at this time.

PUBLIC WORKS

BOARD ACTION REQUEST

June 1, 2016

DATE

PW2

AGENDA ITEM NUMBER

**DEPARTMENT
MANAGER**

AGENDA ITEM

**TOWNSHIP
MANAGER**

Engineering

M.E.P.

Highland Avenue
Storm Sewer Project

Michael LeFevre

[Signature]

PREVIOUS ACTIONS

December 17, 2015 – Board approved 2016 Capital Program which included the following projects to be funded from a Bond in 2016:

- 1) 1020 Highland Ave. – Replace existing stone wall
- 2) 1000 block Highland Ave. – Replace culvert

May 12, 2016 – Board approved the advertisement of bids for Highland Avenue Storm Sewer Projects in the amount of \$195,000; to be funded as follows:

- 1) 2014 Bond - \$95,000
- 2) Fund Balance - \$100,000

RECOMMENDED BOARD ACTION

Motion to approve and enter into contract with N. Abbonizio Contractors, Inc. for the Highland Avenue Storm Sewer Project in the amount of \$320,240.00; to be funded as follows:

- 1) 2014 Bond - \$95,000.00
- 2) Fund Balance \$225,240.00

COMMENTS

Received two (2) bids ranging from \$320,240.00 to 349,425.00 (see attached).

Budget for the project is \$195,000.

N. Abbonizio Contractors, Inc. has satisfactorily completed work in the Township in the past.

The project needs to be completed over this summer and cannot be delayed until the summer of 2017.

**2014 BOND ISSUE – PHASE IV
STORM SEWER PROJECTS
(HIGHLAND AVENUE CULVERT)
TUESDAY, MAY 31, 2016
BIDS DUE BY 1:30 P.M.
BIDS OPENED AT 2:30 P.M.
UNOFFICIAL RESULTS**

COMPANY NAME	BID
N. Abbonizio Contractors, Inc.	\$320,240.00
Almeida & Hudak Contractors, LLC	\$349,425.00

***CORRECTED CALCULATION**

PUBLIC WORKS

BOARD ACTION REQUEST

June 1, 2016

DATE

PW3

AGENDA ITEM NUMBER

**DEPARTMENT
MANAGER**

AGENDA ITEM

**TOWNSHIP
MANAGER**

Engineering

M. E. P.

2014 Capital Improvement
Program

Michael LeFevre

ML

PREVIOUS ACTIONS

December 19, 2013 – Board approved the 2014 Capital Improvement Program that includes 35 projects at a cost of \$3,460,000.

February 13, 2014 – Board approved to include the replacement of the existing storm sewer behind the homes on Senak Road, to the 2014 Capital Improvement Program. No additional cost is necessary for the Bond Issue.

May 8, 2014 – Board approved the removal of four (4) projects in the amount of \$80,000 from the Bond portion of the 2014 Capital Program, and four (4) projects to be added in the amount \$80,000 to the 2014 Capital Program. The \$80,000 will be funded from Fund Balance.

July 10, 2014 – Board approved and entered into contract with Almeida & Hudak Contractors, LLC for the 25 projects in the 2014 Bond Issue Phase I Storm Sewer Projects, in the amount of \$1,189,733.75; to be funded from the 2014 Bond Issue.

July 10, 2014 – Board approved and entered into contract with Cardno-BCM for 20 projects for the 2014 Phase II-Engineering requirements, in the amount of \$240,000; to be funded from the 2014 Bond Issue.

RECOMMENDED BOARD ACTION

Motion to approve final payment for the 2014 Bond Issue Phase I Storm Sewer Project to Almeida & Hudak Contractors, LLC, in the amount of \$69,805.64; to be funded from 2014 Bond Issue.

COMMENTS

Total contract budget \$1,401,741.13 and amount spent \$1,396,112.70, savings \$5,628.43. Almeida & Hudak Contractors, LLC has satisfactorily completed the work in the 2014 Bond Issue Phase I Storm Sewer Project. A one-year maintenance bond was received.

PUBLIC WORKS

BOARD ACTION REQUEST

June 1, 2016

DATE

PW4

AGENDA ITEM NUMBER

DEPARTMENT
MANAGER

AGENDA ITEM

TOWNSHIP
MANAGER

Engineering

M. EP.

Delaware Valley Regional Planning
Commission (DVRPC) Transportation & Community
Development Initiative (TCDI) Grant Program

Michael LeFevre

ML

PREVIOUS ACTIONS

May 8, 2014 - Board approved the attached Resolution No. 14-010, authorizing the Board of Commissioners to submit an application to the Delaware Valley Regional Planning Commission (DVRPC) Transportation & Community Development Initiative (TCDI) Grant Program.

November 13, 2014 – Board approved authorization of Township officials to accept a grant award from the Delaware Valley Regional Planning Commission (DVRPC); a Transportation & Community Development Initiative (TCDI) Grant, in the amount of \$60,000, with the Township’s matching portion of \$15,000; to be funded from Contingency.

February 12, 2015 – Board approved authorization of Township officials to enter into contract with Simone Collins Landscape Architecture (in association with Traffic, Planning & Design) in an amount not to exceed \$75,000.00 (\$60,000 to be reimbursed by the Transportation & Community Development Initiative (TCDI) Master Bicycle Plan Grant and \$15,000 from contingency fund) to develop and provide the Abington Township Master Bicycle Plan; to be funded from account #06-07-301-5305.

February 11, 2016 – Board approved Final Township Master Bicycle Plan. The plan was prepared by Simone-Collins Landscape Architecture (in association with Traffic, Planning & Design).

RECOMMENDED BOARD ACTION

Motion to approve final payment to Simone Collins Architecture (in association with Traffic, Planning & Design) for the Township Master Bicycle Plan in the amount of \$898.23; to be funded from account #06-07-301-5305.

COMMENTS

The total cost of the project cost is \$74,655.40 (80% DVRPC: \$59724.30; Township 20%: \$14,931.10); which was \$344.60 under budget. Simone-Collins is currently working on another Bike/Trail Grant for the Township.

PUBLIC WORKS COMMITTEE

BOARD ACTION REQUEST

June 1, 2016
DATE

PW5
AGENDA ITEM NUMBER

DEPARTMENT

AGENDA ITEM

TOWNSHIP MANAGER

Wastewater Utilities

Award bid for Grit
Collection System Replacement

Michael LeFevre

S.R.W.

ML

PREVIOUS ACTIONS

Capital funding was allocated for the replacement of the existing 1979 Grit Collection System at the Wastewater Treatment Plant (WWTP) in the 2015 budget.

RECOMMENDED BOARD ACTION

Motion to accept the lowest responsive and responsible bid and to enter into a contract with _____ for the Grit Collection System for WWTP in the amount of \$ _____ to be funded from Capital Account No. 02-00-000-7459.

COMMENTS

The existing 1979 Grit Collection System has increasingly experienced chain, bucket and shaft failures over the past two years. Parts for the equipment are no longer available, therefore, an upgraded replacement system consisting of a pump and cyclone dissipator will be installed along with state of the art PLC controls and alarm monitors. The grit conveyor drive and grit slurry pump will be located outside of the tank for increased reliability and easier maintenance.

Maria Wyrsta

From: George Wrigley
Sent: Tuesday, May 31, 2016 6:32 PM
To: Maria Wyrsta
Subject: Wastewater Grit Bid results

Hi Maria,

For PW 5:

The apparent low bidder is: Derstein Company, LLC \$265,500.00

George

PUBLIC WORKS COMMITTEE

BOARD ACTION REQUEST

June 1, 2016

DATE

PW6

AGENDA ITEM NUMBER

DEPARTMENT

AGENDA ITEM

TOWNSHIP MANAGER

Wastewater Utilities

Discussion of Future
Treatment Plant Effluent Limits
Agreement with the EPA & PaDEP

Michael LeFevre

A.R.W.

ML

PREVIOUS ACTIONS

On June 29, 2015 a summary of the EPA and PaDEP proposals to lower the Total Phosphorous limits for all Wastewater Treatment Plants (WWTP) and all municipal storm water MS4 stream loadings into the creeks within the Wissahickon Watershed was presented to the Board of Commissioners. On January 14, 2016 Resolution No. 16-006 was approved for the Alternative Plan for the Wissahickon Total Phosphorous TMDL.

RECOMMENDED BOARD ACTION

Discussion of recent negotiations with the EPA and PaDEP regarding the forthcoming agreement establishing lower Treatment Plant effluent limits for Total Phosphorous.

COMMENTS

We have participated in several meetings and submitted proposals detailing the future Total Phosphorous concentrations that EPA and PaDEP will eventually formally permit in the effluent discharge from our wastewater treatment plant as well as the other three Treatment plants located within the Wissahickon Creek Watershed. The municipalities include Ambler Borough, Upper Gwynedd Township, Upper Dublin Township, (sanitary sewers owned and operated by the Bucks County Water and Sewer Authority) and Abington. These four plant operators have met on numerous occasions to discuss the mutual aspects of the proposed EPA Total Phosphorous TMDL and the implications for the treatment plants. EPA and PaDEP have initially focused their demands on these four operators to significantly lower the Total Phosphorous limits discharging from the plants. The negotiations have reached a point where each treatment plant will need to respond with their respective final plans for specific numerical limits and the preliminary plant upgrades to achieve these lower limits. All four plants have determined that a 0.5 milligram per liter (mg/L) concentration could be attained within 3 years. Beyond the next three years a longer term limit range of 0.3 mg/L to 0.1 mg/L would be planned to be reached depending on if the technology is available in the future. It is anticipated that a formal agreement will be prepared for execution by each of the four plant operators within the next two to three months. We have already been conducting studies of our plant operations to maximize the efficiency of our treatment processes to biologically reduce the phosphorous and also to optimize our chemical dosing. The future very low limit range of 0.3 mg/L to 0.1 mg/L would probably require a future capital project to modify the plant. At this time it is impossible to know exactly what modifications would be required, however, the necessity to expand of one of our smaller tanks has been identified at this time. The potential future cost for this tank expansion is in the range of \$250,000 to \$500,000.

BOARD ACTION REQUEST

PUBLIC WORKS COMMITTEE

June 1, 2016

DATE

PW 7

AGENDA ITEM NUMBER

DEPARTMENT

AGENDA ITEM

TOWNSHIP MANAGER

Administration

Intergovernmental Agreement
Alternative TMDL
Wissahickon Creek Watershed

[Signature]

PREVIOUS ACTIONS

June 29, 2015 – Summary of EPA and DEP Proposal to lower total phosphorous limits for all treatment plants and municipal storm water loading within the Wissahickon Watershed was presented to the Board.

January 14, 2016 – Resolution No. 16-006 was approved supporting an Alternative Plan for the Wissahickon TMDL.

RECOMMENDED BOARD ACTION

Motion to approve the Intergovernmental Agreement between the Wissahickon Watershed Municipalities and Wastewater Treatment Plants to work together in developing an Alternative TMDL Plan for the Watershed.

COMMENTS

The proposed agreement provides for a three-year term and an annual contribution of \$6,250 from each participating municipality and treatment plant.

A majority of the cost associated with the development of the Alternative TMDL Plan is being underwritten through a grant of \$1.3 million from the William Penn Foundation.

BOARD ACTION REQUEST

PUBLIC WORKS COMMITTEE

June 1, 2016

DATE

PW 8

AGENDA ITEM NUMBER

DEPARTMENT

AGENDA ITEM

TOWNSHIP MANAGER

Administration

U.S. Army Corp of Engineers
Section 566 Funding
Sandy Run Environmental Improvements

net

PREVIOUS ACTIONS

None

RECOMMENDED BOARD ACTION

Motion to accept the Federal Fund appropriation of \$200,000 through the U.S. Army Corp of Engineers Section 566 Program for design and project development assistance to facilitate environmental infrastructure improvements to the Sandy Run Watershed and to approve a Township match of \$50,000 payable from MS4 Funds contained in the Engineering Capital Budget.

COMMENTS

As part of this Federal funding, Township and Army Corp of Engineers representatives are considering ecological improvements at Roychester, Grove, Roslyn and Deal Park, as well as the Ardsley Wildlife Sanctuary.

PUBLIC WORKS COMMITTEE

BOARD ACTION REQUEST

PW9

AGENDA ITEM NUMBER

June 1, 2016
DATE

DEPARTMENT

Public Works



AGENDA ITEM

CMAQ Grant
Application

TOWNSHIP MANAGER



PREVIOUS ACTIONS

None

RECOMMENDED BOARD ACTION

Motion to apply for a CMAQ Grant in the amount of \$975,245.75 for improvements to the Easton Road corridor, including new signal equipment and interconnection with the Easton Road corridor and Susquehanna Road corridor.

COMMENTS

- 1.) The project will include an interconnect system similar to the ones we currently have on York Road and on Huntingdon Pike. It will also include new traffic signal poles where needed. All new wiring, signal heads, and anything else necessary to get the signal equipment up to current standards.
- 2.) The Easton Road Corridor signals are in need of an upgrade as the equipment is now in need of replacement. This project will bring us close to 70% of our intersections having been upgraded in the last 6 years.
- 3.) The match will be 20% of the cost for the project.
- 4.) We anticipate that if we are awarded the grant, that the project start up would take another year to begin.

DVRPC 2016 Competitive CMAQ Program: Project Abstract

Project Name: Easton Road Traffic Signal System Project

Project Abstract: In the space below, provide a brief project abstract that accurately and concisely summarizes the candidate project or program.

The Township has identified the potential for expanding the existing traffic signal system which is located along Susquehanna Road to include eight (8) additional intersections along Easton Road. The Easton Road corridor is an arterial within Abington Township and serves as an alternate to Route 611, which is a major arterial. Easton Road is limited to future roadway improvements due to available right-of-way.

In order to address the future traffic demands on this corridor, as well as provide for incident management, a traffic signal system consistent with current Township system is necessary to provide the best management and operation of the existing traffic signals along the corridor which include:

1. Easton Road and Hamilton Avenue
2. Easton Road and Woodland Road
3. Easton Road and Bradfield Road
4. Easton Road and Susquehanna Road (S.R. 2017)
5. Easton Road and Edge Hill Road
6. Easton Road and Castlewood Road\Copper Beach Elementary
7. Easton Road and Jenkintown Road
8. Easton Road and Keswick Avenue
9. Easton Road and Mt. Carmel Avenue

The project intersections would be connected with the existing Eagle Marks system located along Susquehanna Road. The Susquehanna Road system is currently monitored at a central computer with a dial connection to the master controller located at the intersection of Susquehanna Road and Easton Road. The existing system would be expanded to include the Easton Road intersections and would communicate via spread spectrum radio. Additionally, minor traffic signal improvements at the intersections are included in the project, including traffic signal controller upgrades, battery back-up, video detection, and pedestrian signal upgrades.

Easton Road Traffic Signal System, Abington Township

1. Easton Road and Hamilton Avenue
 - Install new controller assembly, with battery back-up
 - Replace pedestrian signals with countdown timers
 - Install Spread Spectrum Radio Assembly
2. Easton Road and Woodland Road
 - Install new controller assembly, with battery back-up
 - Install video detection
 - Replace pedestrian signals with countdown timers
 - Install Spread Spectrum Radio Assembly
3. Easton Road and Bradfield Road
 - Install new controller assembly, with battery back-up
 - Replace pedestrian signals with countdown timers
 - Install Spread Spectrum Radio Assembly
4. Easton Road and Susquehanna Road (S.R. 2017)
 - Update controller assembly
 - Install video detection
 - Install Spread Spectrum Radio Assembly
5. Easton Road and Edge Hill Road
 - Install new controller assembly, with battery back-up
 - Install new mastarms and signal heads
 - Install video detection
 - Install Spread Spectrum Radio Assembly
6. Easton Road and Castlewood Road \ Copper Beach Elementary
 - Install new controller assembly, with battery back-up
 - Replace pedestrian signals with countdown timers
 - Install Spread Spectrum Radio Assembly
7. Easton Road and Jenkintown Road
 - Install new controller assembly, with battery back-up
 - Install video detection
 - Install Spread Spectrum Radio Assembly
8. Easton Road and Keswick Avenue
 - Install new controller assembly, with battery back-up
 - Install emergency pre-emption
 - Replace pedestrian signals with countdown timers
 - Install Spread Spectrum Radio Assembly
9. Easton Road and Mt. Carmel Avenue
 - Install new controller assembly, with battery back-up
 - Install video detection
 - Install emergency pre-emption
 - Replace pedestrian signals with countdown timers
 - Install Spread Spectrum Radio Assembly

ENGINEER'S PRELIMINARY OPINION OF COST FOR CONSTRUCTION

DISCLAIMER: McM prepared this preliminary cost estimate based on the above-referenced improvements and in no way should this estimate be considered a final cost estimate. The estimated costs are subject to change based on final engineering design, field conditions, local or regional differences, changes to the plans and/or changes to the unit costs. Final costs are dependant on actual bids from contractors. McM will not be held responsible for any discrepancies between this cost estimate and bid costs. This estimate includes only approximate quantities and costs for utility relocations and right-of-way acquisition.

DESCRIPTION	UNIT	TOTAL
Easton Road and Hamilton Avenue	LS	\$ 45,087.50
Easton Road and Woodland Avenue	LS	\$ 88,787.50
Easton Road and Bradfield Road	LS	\$ 31,087.50
Easton Road and Susquehanna Road	LS	\$ 43,250.00
Easton Road and Edge Hill Road	LS	\$ 174,232.50
Easton Road and Castlewood Road\Copper Beach Elementary	LS	\$ 42,487.50
Easton Road and Jenkintown Road	LS	\$ 63,687.50
Easton Road and Keswick Road	LS	\$ 55,737.50
Easton Road and Mt. Carmel Avenue	LS	\$ 73,737.50
Software, Setup	LS	\$ 37,500.00
CONSTRUCTION SUBTOTAL		\$ 655,595.00
MOBILIZATION	4%	\$ 26,200.00
MAINTENANCE & PROTECTION OF TRAFFIC	5%	\$ 32,800.00
CONTINGENCY	10%	\$ 65,600.00
CONSTRUCTION TOTAL		\$ 780,195.00
PRE-CONSTRUCTION ACTIVITIES	10%	\$ 78,019.50
CONSTRUCTION INSPECTION	15%	\$ 117,029.25
PROJECT TOTAL		\$ 975,243.75

PUBLIC WORKS COMMITTEE

BOARD ACTION REQUEST

PW 10

June 1, 2016

AGENDA ITEM NUMBER

DATE

DEPARTMENT

Public Works



AGENDA ITEM

Green Light Go
Grant Award

TOWNSHIP MANAGER



PREVIOUS ACTIONS

None

RECOMMENDED BOARD ACTION

Motion to accept A Green Light Go Grant award in the amount of \$25,308.00. The grant award will be for LED light improvements to our traffic signals. The \$5608.00 match will be taken from contingency fund 01-01-002-5299.

COMMENTS

1. We originally converted all of our traffic signal bulbs to LED in 1999. The expected life expectancy of the LED bulb was 10 years. We have started a program in which we will be replacing all of the LED bulbs in our traffic signs over the next few years. This grant will be used in the replacement process.
2. The grant has a 50% match to it. . We are using our manpower to install them as part of our match. \$9,700.00 and we had budgeted \$10,000.00 in Capital as part of the replacement process. The remaining match is \$5,299.00.

Mount Carmel Avenue (S.R. 2027) and North Hills Avenue
 Abington Township
 Montgomery County, Pennsylvania
 McMahon # 811393.3A

**ENGINEER'S PRELIMINARY OPINION OF COST FOR CONSTRUCTION
 WITHIN THE PUBLIC STREETS, HIGHWAYS, AND RIGHT-OF-WAY**

DISCLAIMER: McMahon Associates, Inc. prepared this preliminary cost estimate based on conceptual plans and in no way should this estimate be considered a final cost estimate. The estimated costs are subject to change based on field conditions, local or regional differences, changes to the plan and/or changes to the unit costs. Final costs are dependant on actual bids from contractors. McMahon Associates, Inc. will **not** be held responsible for any discrepancies between this cost estimate and bid costs. This estimate does **not** include right-of-way acquisition.

DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL
ARLE GRANT REQUEST				
Mobilization	LS	1	\$2,000.00	\$2,000
Maintenance and Protection of Traffic	LS	1	\$2,500.00	\$2,500
Class 1B Excavation (Material only)	CY	160	\$5.00	\$800
Reinforced Concrete Pipe (Material only)	LF	40	\$70.00	\$2,800
Type M Stormwater Inlet (Material only)	EA	2	\$3,750.00	\$7,500
Cap Existing Inlet (Material only)	EA	1	\$1,900.00	\$1,900
Plain Cement Concrete Sidewalk	SY	411	\$105.00	\$43,155
Concrete Curb, 8" Reveal	LF	350	\$70.00	\$24,500
Subbase (No. 2A), 8" Depth (Material only)	SY	62	\$12.50	\$775
Bituminous Pavement, Full Depth (Material only)	SY	62	\$25.00	\$1,550
Detectable Warning Surfaces	SF	80	\$20.00	\$1,600
Traffic Signal Support, 14' Pedestal	EA	3	\$4,000.00	\$12,000
Traffic Signal Support, 25' Mast Arm	EA	3	\$13,500.00	\$40,500
Traffic Signal Support, 30' Mast Arm	EA	1	\$14,000.00	\$14,000
Controller Assembly, Type I Mounting	EA	1	\$18,000.00	\$18,000
2" Conduit (PVC)	LF	69	\$2.50	\$173
3" Conduit (PVC)	LF	201	\$2.75	\$553
Trench and Backfill, Type II	LF	120	\$2.00	\$240
Trench and Backfill, Type III	LF	150	\$5.00	\$750
Signal Cable, 14 AWG, 3 conductor (Material only)	LF	704	\$0.15	\$106
Signal Cable, 14 AWG, 5 conductor (Material only)	LF	1,738	\$0.20	\$348
Signal Cable, 14 AWG, 7 conductor (Material only)	LF	561	\$0.30	\$168
Junction Box, JB-27	EA	3	\$550.00	\$1,650
Junction Box, 17"x30"	EA	1	\$700.00	\$700
Electrical Service, Type C	EA	1	\$1,200.00	\$1,200
Vehicular Signal Head, Three 12" Sections (LED) (Material only)	EA	10	\$400.00	\$4,000
Pedestrian Signal Head, Type B (LED) [Countdown] (Material only)	EA	8	\$350.00	\$2,800
Pedestrian Push Button, w/Indication Light (Material only)	EA	8	\$100.00	\$800
Video Detection System [Four Cameras] (Material only)	LS	1	\$13,500.00	\$13,500
Battery Back-Up System, UPS (Material only)	LS	1	\$5,000.00	\$5,000
Emergency Preemption System (Four Approaches) (Material only)	LS	1	\$2,200.00	\$2,200
Signage (Material only)	SF	50	\$15.00	\$750
Pavement Marking Removal	SF	376	\$1.00	\$376
Pavement Marking Removal (Legends and Arrow)	EA	4	\$50.00	\$200
Yellow 4" Pavement Markings	LF	109	\$1.00	\$109
White 4" Pavement Markings	LF	317	\$1.00	\$317
White 6" Pavement Markings	LF	354	\$1.00	\$354

Mount Carmel Avenue (S.R. 2027) and North Hills Avenue
 Abington Township
 Montgomery County, Pennsylvania
 McMahon # 811393.3A

**ENGINEER'S PRELIMINARY OPINION OF COST FOR CONSTRUCTION
 WITHIN THE PUBLIC STREETS, HIGHWAYS, AND RIGHT-OF-WAY**

DISCLAIMER: McMahon Associates, Inc. prepared this preliminary cost estimate based on conceptual plans and in no way should this estimate be considered a final cost estimate. The estimated costs are subject to change based on field conditions, local or regional differences, changes to the plan and/or changes to the unit costs. Final costs are dependant on actual bids from contractors. McMahon Associates, Inc. will not be held responsible for any discrepancies between this cost estimate and bid costs. This estimate does not include right-of-way acquisition.

DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL
White 24" Pavement Markings	LF	128	\$2.40	\$307
"ONLY" Legend Pavement Markings	EA	2	\$150.00	\$300
ARROW Legend Pavement Markings	EA	2	\$150.00	\$300
			SUBTOTAL=	\$210,780
			10% CONTINGENCY	\$21,078
Engineering and Permitting				
			TOTAL=	\$231,858

TOWNSHIP SHARE

Construction with Public Works forces	estimated	\$	50,000.00
		TOTAL \$	50,000.00

PUBLIC WORKS COMMITTEE

BOARD ACTION REQUEST

PW11

June 1, 20 16
DATE

AGENDA ITEM NUMBER

DEPARTMENT
Public Works

AGENDA ITEM
ARLE Grant
Award

TOWNSHIP MANAGER



PREVIOUS ACTIONS

We have applied several times for grants to improve this intersection.

RECOMMENDED BOARD ACTION

Motion to accept an ARLE Grant in the amount of \$314,400.00 for safety improvements to the intersection of Mt. Carmel Avenue and North Hills Avenue.

COMMENTS

1. This intersection is extremely hazardous due to the overall configuration of the intersection. The improvements will consist of installation of a channelized island on the North West corner, bump out on South East corner, pavement markings, pedestrian crossings with A.D.A ramps, along with new traffic signal equipment.
2. We believe the improvements will make the intersection much safer for motorists as well as pedestrians.
3. Our match will be that we will do some of the work in house.

Abington Township (ARLE-2015-46101-0172)

District / County 06 - Montgomery County

Project Title Mt. Carmel and North Hills Safety Improvements

Applicant Contact Information

First Name

Ed

Last Name

Micciolo

Title

Public Works Director

Street Address

1176 Old York Road

City

Abington

Zip Code

19001

Phone Number

267-5361033

Alternative Phone Number

E-mail Address

emicciolo@abington.org

Consultant Contact Information

First Name

Anton

Last Name

Kuhner

Company Name

McMahon Associates Inc.

Street Address

425 Commerce Drive, Suite 200

City

Fort Washington

Zip Code

19034

Phone Number

215283-9444

Alternative Phone Number

E-mail Address

akuhner@mcmahonassociates.com

Project Summary

Project Title

Mt. Carmel and North Hills Safety Improvements

Project Type

Safety Improvements - Various

Description of Proposed Project

The Township has identified this intersection in the past for an upgrade to improve the traffic signal equipment while addressing the pedestrian accommodations and has developed a conceptual improvement plan (attached). The improvement plan consists of the following:

- Installation of a channelization island on the NW corner of the intersection.
- Installation of a Bump-out on the SE corner of the intersection
- Installation of pavement markings within the intersection to guide motorists along Mt. Carmel Avenue.
- Installation of pedestrian crossings and ADA compliant curb ramps
- Installation of new traffic equipment, including video detection and overhead street name signs.

Is this a multi municipality application? No

Location

Location Description

The project is located at the intersection of Mt. Carmel Avenue (S.R. 2027) and North Hills Avenue within 150' of the intersection on all approaches. Within the intersection are commercial properties, with residential properties in the surrounding area. Additionally within 500' of the intersection is the SEPTA North Hills Station which is part of the Regional Rail network. The AADT for S.R. 2027 is 12950. Mt. Carmel Avenue and North Hills Avenue are two lane roadways, with a separate right turn lane along Mt. Carmel Avenue at the intersection. Mt. Carmel Avenue is posted at 35 MPH. North Hills Avenue is posted at 35 MPH west of the intersection and 25 MPH east of the intersection. The adjoining land uses will benefit from the improved pedestrian access, as well as, increased safety due to the geometric and signal improvements.

Does this project involve traffic signals? Yes

Pennshare Map ID	Corridor Designation	Intersection Description
461012784	Critical	Mt. Carmel Avenue (S.R. 2027) and North Hills Avenue

Project Location Map Attachments

18218-Abington Map.pdf

Project Justification

Description of Existing Problem(s) to be Addressed:

This intersection is in need of an improvement project to upgrade the traffic signal equipment, address the intersection geometry, and provide for the existing pedestrians at the intersection. The primary accidents at the intersection are rear-end and turning violations. These accidents may be attributed to the visibility of the existing signal heads, as well as, skewed approaches on Mt. Carmel Avenue and the location of the stopbar on the southbound approach of Mt. Carmel Avenue. Additionally, pedestrian accommodations are not provided for (currently banned) at the intersection while pedestrians have been observed.

Description of the Anticipated Benefits:

Safety, congestion reduction, modernization, energy efficiency, reduction of long-term operation and maintenance, etc.

The Township has identified this intersection in the past for an upgrade to improve the traffic signal equipment while

addressing the pedestrian accommodations and has developed a conceptual improvement plan (attached). The improvement plan consists of the following:

- Installation of a channelization island on the NW corner of the intersection.
- Installation of a Bump-out on the SE corner of the intersection
- Installation of pavement markings within the intersection to guide motorists along Mt. Carmel Avenue.
- Installation of pedestrian crossings and ADA compliant curb ramps
- Installation of new traffic equipment, including video detection and overhead street name signs.

Based upon the improvements identified above, the following benefits are anticipated:

- Pedestrian access throughout the intersection, with connections to commercial properties and the SEPTA Regional Rail Station.
- Improved traffic signal operation with a fully actuated traffic signal.
- Improved signal head visibility approaching the intersection.
- Improved alignment along Mt. Carmel Avenue with installation of island and bump-out and guide marks through the intersection.
- Shortened pedestrian crossings with installation of bump-out and island.
- Access control with the installation of the island, restricting access to westbound North Hills Avenue.

How does this Impact the Region:

Describe the Consistency with any Regional (MPO/RPO), County, Local Plans, Official Maps, etc.

The project meets the region's goal by providing improved intersection capacity, improved intersection safety, and maintenance of the transportation infrastructure. Additionally, the improved pedestrian access at the intersection aids in the access to the Regional Rail Train Station.

Describe Current and Past Maintenance and Operations Plan:

The Township currently maintains the traffic signals with current Public Works staff. the Township will maintain the new installation in accordance with PennDOT Publication 191. Also, the Township utilizes PennDOT Form TE 973 as a guidance to preventative maintenance

Maintenance and Operation Plan Attachments

16610-A-Sample Maintenance Plan (TE-973).pdf

Explain how the project is innovative in improving safety and mobility:

The project will improve the safety at this intersection for both vehicular and pedestrian traffic. As described above the improvements will improve safety by:

- Improving pedestrian access throughout the intersection, with connections to commercial properties and the SEPTA Regional Rail Station.
- Improved traffic signal operation with a fully actuated traffic signal.
- Improved signal head visibility approaching the intersection.
- Improved alignment along Mt. Carmel Avenue with installation of island and bump-out and guide marks through the intersection.
- Shortened pedestrian crossings with installation of bump-out and island.
- Access control with the installation of the island, restricting access to westbound North Hills Avenue.

Explain how the project is cost affective:

In addition to the benefits of the proposed improvements, a benefit is anticipated with the proposed cost sharing of this project. As noted in the application, the Township will provide matching in-kind services in the form of the construction for the majority of the improvements with current Township Public Works forces. Based upon the conceptual plan, it was anticipated that the construction costs for the project through a public bid process would exceed \$350,000. Understanding the funding issues that all municipalities and DOT's are experiencing and the importance these improvements have to the Township and their residents, the Township is requesting funding for material procurement, engineering, and subcontracting of some construction work (i.e., traffic signal work, underground electrical distribution system and curb ramps). This approach provides the most impact for the funds being requested. Additionally the Township public work forces are capable of completing traffic signal installations since they conduct their own maintenance, and can complete the concrete work required for the project

Explain the proposed project schedule:

It is anticipated that the project will be completed within 10 months of commencing design of the project.

Project Schedule Attachments

16614-Abington Project Schedule.pdf

Project Funding

Project Budget

Activity	Requested Amount	Matched Amount
Preliminary Engineering	\$0.00	\$0.00
Final Budget Cost	\$32,500.00	\$0.00
Utilities Cost	\$0.00	\$0.00
Right-of-Way Costs	\$0.00	\$0.00
Construction Cost	\$231,900.00	\$50,000.00
Miscellaneous Services	\$0.00	\$0.00
Total	\$264,400.00	\$50,000.00

Total Project Cost	\$314,400.00
Matched Percentage	15.90 %

Matched Funding Sources

- None
- Monetary
- In-Kind Services
- Other

Cost Estimate Attachments

18001-Cost Estimate 2015-06-11.pdf

Supporting Documents

- 16605-Mount Carmel and North Hills 2011-07-26.pdf
- 16615-Letters of Support.pdf
- 16616-Mt Carmel_North Hills Pictures.pdf

Terms & Conditions

- This is a grant program that utilizes invoicing and reimbursement with no initial money up front.
- Failure to comply with any and all of these requirements may result in the disapproval or termination of a previously approved project and if the project is already underway, we will be obligated to refund all funding disbursed on the project date.
- Applicant is responsible for advancing the project, not PennDOT. However, PennDOT is available to assist with these processes.
- All of the individuals and entities listed on the application are aware that they are being included in the project listed on the application and agree to their assigned roles, as required.

- We agree to enter into an agreement prepared by PennDOT that, among other things, sets forth the terms and conditions governing the performance of the project, inspection of the work, disbursement of funding, recordkeeping and auditing requirements, and our financial obligations as sponsor and provides for maintenance of the completed project improvements.

- We certify that the affirmations contained in this application are true and correct to the best of the applicant's knowledge, information and belief, and that this verification is made subject to the penalties of 16 PA C.S.4904, relating to unsworn falsification to authorities.

I agree to these Terms & Conditions as the applicant

Application Submitted Date 6/30/2015 11:20:28AM



SCALE
25' 0 25'

LEGEND

	MAST ARM		CURB RAMP
	VEHICULAR SIGNAL HEAD/ BACKPLATE		STORMWATER INLET
	PEDESTRIAN SIGNAL HEAD		STORMWATER MANHOLE
	CONCRETE SIDEWALK/ CURB RAMP/ISLAND/ DRIVEWAY APRON		REMOVAL OF EXISTING PAVEMENT

CONCEPTUAL PLAN

NOTES:

1. THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. BASED ON AN AERIAL PHOTOGRAPH. NO SURVEY HAS BEEN PERFORMED AT THIS TIME.

425 COMMERCE DRIVE
SUITE 200
FORT WASHINGTON, PA, 19034
TEL: (215)-283-9444
FAX: (215)-283-9447

DESIGN BY: DES
DRAWN BY: DES
CHECKED BY: AKK

JOB NO: 611393.3A
DWG: 393CPT01
DATE: 7/22/2011

**MOUNT CARMEL AVENUE (S.R. 2027) AND
NORTH HILLS AVENUE**
ABINGTON TOWNSHIP MONTGOMERY COUNTY

