AGENDA EAST GOSHEN TOWNSHIP BOARD OF SUPERVISORS

Thursday, June 22, 2017

7:00 PM Public Meeting

- 1. Call to Order
- 2. Pledge of Allegiance
- 3. Moment of Silence Supervisor Carmen Battavio
- 4. Ask if anyone is recording the meeting
- 5. Chairman's Report
 - a. Announce the Board will meet on June 27th at Fugett Middle School for Emergency Services Response to a Pipeline Incident
 - e. Announce that the Chester County Planning Commission is soliciting public opinion for the new Comprehensive Plan Landscapes 3 at http://chescoplanning.org/survey.cfm
- 6. Public Hearing none
- 7. Emergency Services Reports

WEGO - none

Goshen Fire Co – none

Malvern Fire Co – none

Fire Marshal – none

- 8. Financial Report none
- 9. Old Business none
- 10. New Business
 - a. Consider Hershey's Mill Dam Park Plan.
 - b. Consider Proposal for Design of Reservoir Enhancements at Hershey's Mill Dam.
 - c. Presentation on the Paoli Pike Corridor Master Plan.
 - d. Consider Resolution 2017-163 Recognizing Michael Broennle's Service to East Goshen Township in Support of the Paoli Pike Trail.
- 11. Any Other Matter
- 12. Approval of Minutes none
- 13. Treasurer's Report none
- 14. Liaison Reports
- 15. Correspondence, Reports of Interest
- 16. Public Comment Hearing of Residents
- 17. Adjournment

The Chairperson, in his or her sole discretion, shall have the authority to rearrange the agenda in order to accommodate the needs of other board members, the public or an applicant.

Dates of Importance:

Jun 20, 2017	Board of Supervisors/Milltown	07:00pm
	Dam Committee	
Jun 22, 2017	Paoli Pike Corridor Master Plan	06:00pm
Jun 22, 2017	Board of Supervisors/Hershey's	07:00pm
	Mill Dam Committee/Paoli Pike	-
	Corridor Master Plan	
Jun 27, 2017	Board of Supervisors (Sunoco)	06:00pm
Jul 04, 2017	Independence Day-Office Closed	
Jul 06, 2017	Park and Rec Commission	07:00pm
Jul 10, 2017	Municipal Authority	07:00pm
Jul 11, 2017	Board of Supervisors	07:00pm

Newsletter Deadlines for Fall of 2017: August 1st

BOARD OF SUPERVISORS

EAST GOSHEN TOWNSHIP

CHESTER COUNTY 1580 PAOLI PIKE, WEST CHESTER, PA 19380-6199

June 6, 2017

Board of Supervisors East Goshen Township 1580 Paoli Pike West Chester PA, 19380

Re:

Hershey Mill Dam Park Master Plan

Dated May 24, 2017

Dear Board Members:

At their meeting on May 24, 2017 the Hershey Mill Dam Committee unanimously approved a motion to have Chairman Wayne Hall approach the Hershey Mill Estates HOA about the possibility of using the swimming pool parking area in lieu of the parking area on Hershey Mill Road, with the understanding that if the HOA was amenable to exploring the concept, that the Committee would reconvene.

However, if the HOA was opposed, the Committee recommendation would be for the Board of Supervisors to approve the draft plan as presented at the May 24, 2017 meeting with the following conditions:

- The parking area on Hershey Mill Road would be revised to have a single access point.
- The optional path on the north side of the pond would be installed.
- There should be a boardwalk over the wet area at the south end of the sewer line footpath.

If we utilized the HOA property for public parking the sewer line foot path would have to be upgraded to comply with ADA standards. On June 5, 2017 Peter Simone, our consultant inspected the sewer line foot path. The lower half of this foot path is located in wetlands, which would necessitate the construction of a 1,000 foot long boardwalk, which makes this alternative cost prohibitive. Attached is the memo from Peter Simone.

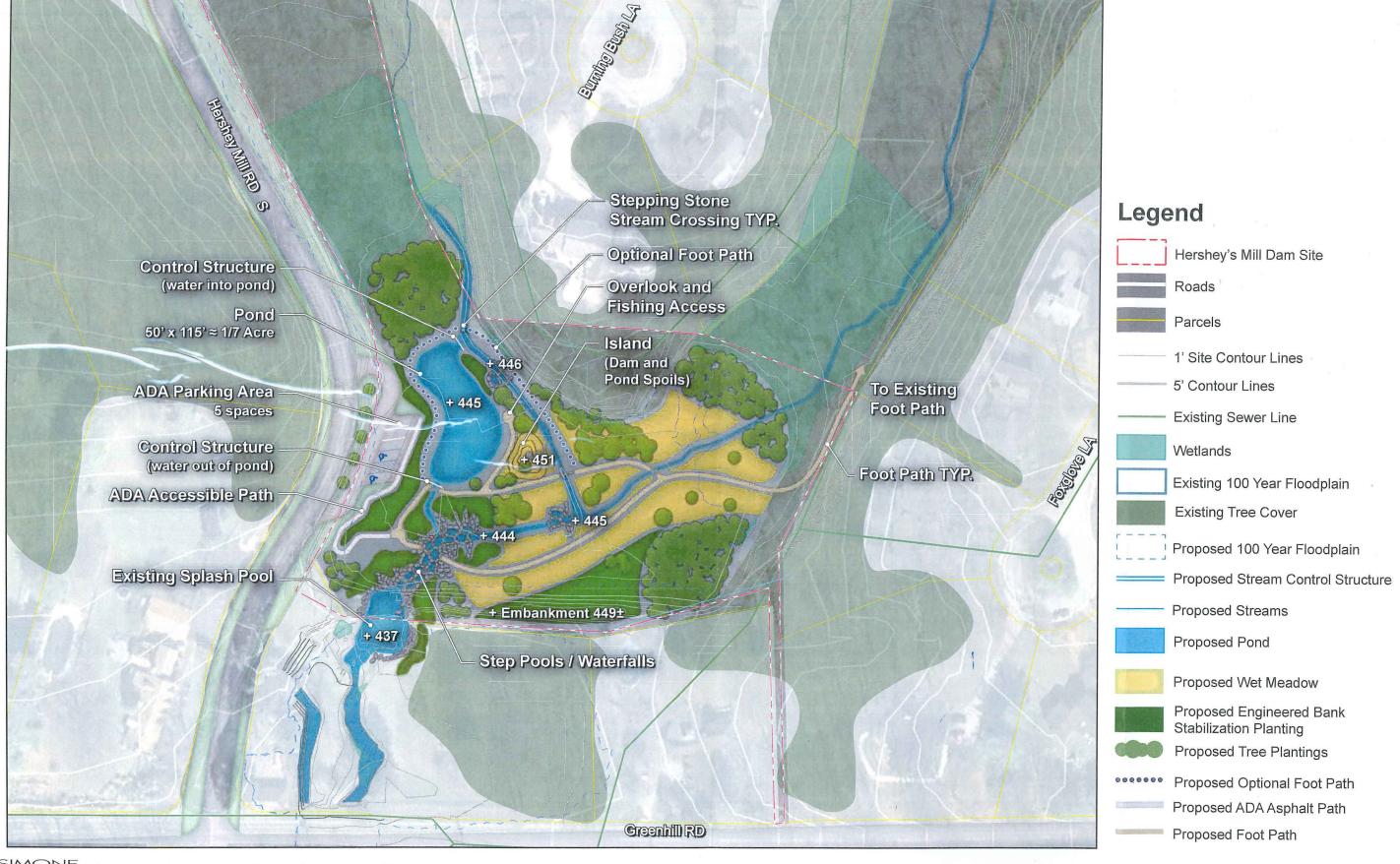
Sincerely,

Louis F. Smith, Jr.
Township Manager

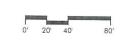
Enclosure

Cc: Hershey Mill Dam Committee

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Memo East Goshen Township

Date: June 13, 2017

To: Board of Supervisors

From: Rick Smith, Township Manager

Re: Design of Reservoir Enhancements at Hershey Mill Dam

If the Board approves the Draft Hershey Mill Park Master Plan, we will need to design those improvements, so that they can be permitted and constructed. The most cost effective way to accomplish this would be to have Simone Collins work with Gannet Fleming to incorporate their design into the plans Gannet Fleming is preparing for breaching the dam.

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Attached is a proposal from Gannet Fleming. Under this proposal Simone Collins is a subcontractor to Gannet Fleming.

Suggested Motion: I move that we accept the June 12, 2017 proposal from Gannet Fleming for the Design of Reservoir Enhancements at Hershey's Mill Dam.

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Excellence Delivered As Promised

June 12, 2017

Mr. Rick Smith, Jr., Township Manager East Goshen Township 1580 Paoli Pike West Chester, PA 19380-6199

Dear Mr. Smith,

Subject: Dam Related Engineering Services for East Goshen Township

Design of Reservoir Enhancements at Hershey's Mill Dam

As requested by East Goshen Township (Township), we are pleased to provide the enclosed scope and fee proposal for professional engineering/landscape architecture services needed to design and submit applicable permit application(s) for various enhancements located throughout the Hershey's Mill Dam (DEP ID No. D15-125) reservoir. The following provides our understanding of the project and presents our detailed scope of work and assumptions for the project.

UNDERSTANDING OF THE PROJECT

East Goshen Township has secured the services of Simone Collins Landscape Architecture to provide a collaborative effort between the Township and the community to develop a master plan for the dewatered Hershey's Mill Reservoir. This study culminated in the development of a final Master Plan which was presented to the Township on March 23, 2017. This Master Plan recommended various enhancements throughout the reservoir which include, but are not limited to, establishment of a step pool system to overcome the elevation difference between the downstream toe of the dam and the floor of the reservoir, stream channel adjustments, an open water pond, a parking area along Hersheys Mill Road, various footpaths, and vegetative landscaping. The scope and fee provided herein is intended to advance the concepts shown on the final Master Plan through final design and permitting. The final Master Plan for which this proposal is based is included as Attachment 1. This scope and fee proposal assumes that Gannett Fleming will be the prime consultant and Simone Collins Landscape Architecture will serve as a subconsultant to Gannett Fleming. The work to be performed by Simone Collins Landscape Architecture is detailed in their proposal dated June 7, 2017, which is provided within Attachment 2.

Gannett Fleming, Inc.

SCOPE OF SERVICES

The following provides our understanding of the scope of services and our proposed work plan for advancing the concepts shown within the final Master Plan through final design and permitting. It is anticipated that this work will be a collaborative effort between Gannett Fleming and Simone Collins Landscape Architecture. In general, Gannett Fleming will provide survey services, hydrologic and hydraulic analysis, stream channel design and permitting services. Simone Collins Landscape Architecture will support Gannett Fleming on the design of the stream channel and open water features and take the lead on planning plans and hardscape features such as boardwalks, signage, site furnishings, etc.

Task 1 Topographic Survey of Dewatered Reservoir: To support the layout and design of the various reservoir enhancements, specifically the channel and open water improvements, a detailed topographic survey of the reservoir will be completed by Gannett Fleming's in-house surveyors. The survey will encompass those portions of the reservoir located below the top of dam elevation extending from the dam embankment to the wooded tree line in the upper reaches of the reservoir, the dam embankment and spillway, and the downstream receiving channels from the downstream toe of the dam to Greenhill Road. The survey will also extend approximately 150-feet up the eastern tributary to capture the area where a boardwalk is proposed. Refer to Figure 1 for the approximate limits of the topographic survey.



Figure 1 Limits of Topographic Survey

Based on the topographic survey, a detailed base map will be prepared from which the design of the reservoir enhancements will be based.

- Task 2 Layout and Design of Stream Channel and Open Water Features: It is anticipated that the layout and design of the reservoir enhancements will be a collaborative effort between Gannett Fleming and Simone Collins Landscape Architecture, with Gannett Fleming taking the lead on the design of the stream channel and open water features. Work under Task 2 will be performed by Gannett Fleming (refer to Task 4 and Attachment 2 for work to be performed by Simone Collins Landscape Architecture).
 - a) We will conduct an assessment of the stream channel within a stable section upstream or downstream of the dam. We will conduct a Rosgen Level II classification, which includes fluvial geomorphological assessments of stream dimension, pattern, and profile characteristics through collecting and evaluating field data. The geomorphic work will be performed and/or supervised by experienced Level IV Rosgen-trained stream restoration staff. Results will be summarized in a Technical Memo Report. This assumes a suitable reference reach can be located to characterize the design reach.
 - b) We will review H&H modeling of the drainage area and as appropriate for stream restoration. We will work internally to determine a suitable discharge for the bypass channel and the amount of water required to maintain pond stability. Initially, discharge estimates (Q) will be based on TR-20 modeling in conjunction with field channel measurements and other methodologies. The TR-20 Q values will be compared with regional curves available from the literature. Next, Q will be computed using resistance equations and relative roughness values derived from channel material sampling. Then, we will perform a comparative analysis using the H&H model to document the final design discharge needed to maintain a stream channel and to replenish the proposed pond. Refer to Task 3 for additional hydrologic and hydraulic modeling to support the design of the stream channel and open water features.
 - c) We will evaluate the geomorphic data collected during the assessment to determine the channel type, size and shape. We will design the proposed geomorphic shape (i.e., typical sections) and layout of the channel based on reference reach geomorphic parameters or other methods to minimize/eliminate instability. The proposed layout will consider avoidance and minimization of sensitive environmental features, such as wetlands and specimen trees, as well as infrastructure and floodplain limitations (i.e., no increase in 100-year flood level in areas of a FEMA delineated floodway). We will also design the proposed profile for the stream invert. Sediment transport will be evaluated to calibrate the optimum shape of the channel needed to move sediment. In addition, bed degradation and aggradation analyses will be conducted to determine suitable features needed for a stable channel configuration.
 - d) Produce preliminary design plans (i.e., 50% drawings). It is anticipated that the reservoir enhancement drawings will be incorporated with the drawings for the

Hershey's Mill Dam Decommissioning project, as previously authorized by the Township under Service Authorization No. 6, to form a single drawing set. The following drawings are anticipated to layout and detail the stream channel and open water features:

- An overall site plan showing the proposed conditions.
- Geometry plan sheet showing the proposed stream baseline stakeout coordinate information.
- Typical cross sections.
- Grading plan sheets. Grading plans will show: existing and proposed topography, proposed baseline (centerline) plan and alignment, locations of cross sections measured during the simplified assessment, general locations of restoration measures, utilities, proposed access and staging areas, property lines/owner information, key environmental features (e.g. specimen trees, wetlands, etc.), limits of the 100 year flood plain as determined by H&H analyses and other key environmental areas for avoidance. Development of grading plans will be a combined effort between Gannett Fleming and Simone Collins Landscape Architecture.
- Channel profile(s).
- Details for proposed treatments and revetments.
- Quantity and cost estimate for proposed stream work.
- e) We will prepare a final design submission. This submission will include a revised Report and Plan submission that will further present the methods, data summaries and interpretive results pertaining to the development of stream restoration or retrofit design variables. This report will be an update from the preliminary report and will include:
 - A comment response cover letter detailing our responses to significant comments on the preliminary design submission;
 - Updated report text and plans based on comments from the preliminary submission and progression of the design;
 - Prepare sequence of construction in conjunction with others;
 - Update computations if design revisions changed inputs;
 - Updated H&H computations if input parameters change;
 - Coordinate with Simone on special provisions and specifications. In addition to our "off the shelf" special provisions, we anticipate having to develop several new special provisions; and
 - Updated cost estimate with revised quantities.
- Task 3 Hydrologic and Hydraulic Analyses: In support of Task 2, Gannett Fleming will complete hydrologic and hydraulic analyses to support the design and permitting of the reservoir enhancements and to finalize the evaluation of floodplain management considerations. Engineering services under this item will include:

- a) Hydrologic analysis to develop representative low-flow or average flow streamflow statistics for the watershed to inform the design of the pond diversion weirs and temporary construction diversion(s), if required. Gannett Fleming will provide Simone Collins with recommended weir dimensions for detailing by Simone Collins.
- b) Development of a 2D hydraulic model of the reservoir area based on updated survey. The model will be used to evaluate low flows as well as flood flows for existing and several iterations of proposed conditions to support the design of the reservoir enhancements as well as revetments.
- c) Evaluation of extent and size of erosion protection within the reservoir enhancement.
- d) Updating of 1D hydraulic model developed under previous authorizations to represent the proposed reservoir enhancements. The model will be used to confirm the consistency of the full project (dam modifications and reservoir enhancements) with floodplain management regulations.
- e) Documentation of analyses. A report will be prepared to document the hydrologic and hydraulic analyses.
- Task 4 Layout and Design of Reservoir Enhancements: Work of Task 4 will primarily be performed by Simone Collins Landscape Architecture with engineering support by Gannett Fleming (refer to Task 6). Work includes development of preliminary grading plans, layout and detailing of park improvements such as walkways, trails, parking areas and boardwalks, development of planting plans, site signage and site furnishings. The work to be performed by Simone Collins Landscape Architecture is detailed in their proposal dated June 7, 2017, which is provided as Attachment 2. An allocation of ten percent has been applied to support Gannett Fleming's management and oversight of the work by Simone Collins Landscape Architecture.

Anticipated drawings in support of the layout and design of the reservoir enhancements include layout and dimensioning plans, grading plans, planting plans and details, and miscellaneous site details.

- Task 5 Environmental and Permitting Services: It is anticipated that the reservoir enhancements will be permitted through the Pennsylvania Department of Environmental Protection (DEP), Division of Dam Safety as part of the dam removal permit application which is being prepared by Gannett Fleming under Service Authorization No. 6. The scope and fee provided herein represents the effort needed to incorporate the reservoir enhancements into the dam removal/erosion control permit applications.
 - a) Assessment of Environmental Impacts. Gannett Fleming will incorporate the reservoir enhancement features which occur within the jurisdictional limits of regulated waters and wetlands into the dam removal permit application to be

submitted to DEP, Division of Dam Safety. This scope and fee assumes that a separate General Permit or Individual Permit will not be required for individual structures and project features to be placed within the reservoir footprint area.

b) Erosion and Sediment Control Plan. Erosion and Sediment Control (E&S) Plan approval will be required from the Chester County Conservation District for the reservoir enhancements. Gannett Fleming will prepare an E&S Plan for the reservoir enhancements and merge this plan with the E&S Plan for the dam decommissioning previously authorized by the Township under Service Authorization No. 6. It is anticipated that the majority, if not all of the project site will be permitted under Chapter 105 by DEP Division of Dam Safety and the remaining area (if any) to be permitted under Chapter 102 will be less than one acre. Consequently, it is assumed that a NPDES Permit for Stormwater Discharges Associated with Construction Activities will not be required.

Following development of the preliminary design for the reservoir enhancements (50% drawings), a pre-application meeting will be held with DEP, Division of Dam Safety, to review the entire project and obtain feedback on the permitting process. Please note that preparation for and attendance of a pre-application meeting was previously authorized by the Township under Service Authorization No. 6 (see Assumption No. 5). The attached scope and fee assumes that the project will be self-mitigating. Should the reviewing agencies require additional mitigation, a separate scope and fee will be prepared for this work activity.

- Task 6 Engineering Support Services: It is anticipated that Gannett Fleming will provide engineering services to support the design of the various site enhancements proposed by Simone Collins Landscape Architecture. These activities include structural design of the pond control weirs and boardwalk foundations. Technical specifications will be prepared for the work described on the drawings. Specification will either be placed on the drawings or provided in CSI format.
- **Task 7 Meetings:** The scope and fee provided herein assumes the Gannett Fleming/Simone Collins Landscape Architecture design team will attend the following:
 - Pre-application meeting with the reviewing agencies (refer to Assumption No. 5).
 - Simone Collins will facilitate one public meeting which will be attended by Gannett Fleming.
 - Up to two project development meetings will be attended by the Gannett Fleming/Simone Collins Landscape Architecture design team.

ASSUMPTIONS

The following assumptions were made in the preparation of this scope and fee proposal:

1. It is assumed that detailed hydraulic analysis of temporary construction phasing is not needed.

- 2. FEMA regulatory floodways currently exist upstream and downstream of the reservoir, but a regulatory floodway is not defined within the reservoir area. Floodplain encroachment analyses and development of an application for a FEMA Letter of Map Revision are not included in the current proposal, but could be included in a future authorization if requested by the Township.
- 3. It is assumed that hydraulic sizing of footbridges/boardwalks/etc. is not required.
- 4. It is assumed that the environmental investigations previously prepared under Gannett Fleming Service Authorization No. 6, including the PNDI Search, Phase I Bog Turtle Study, PHMC coordination, and Environmental Assessment are applicable for the reservoir enhancements and no additional field work, agency coordination or report preparation/revision is required.
- 5. Gannett Fleming's fee for the pre-application meeting was previously authorized under Service Authorization No. 6. No additional fee for Gannett Fleming is included within this proposal for the pre-application meeting. The scope and fee for Simone Collins Landscape Architecture assumes that they will attend this meeting.
- 6. It is assumed that the project is self-mitigating. The enclosed scope and fee proposal does not include preparation of mitigation plan(s) for impacts associated with wetlands, waterways, etc. Should mitigation be required, a separate scope and fee will be provided to the Township.
- 7. GF assumes that permit application and impact fees would be waived for a municipality or will be paid by the Township and are not included within the fee estimate.
- 8. Gannett Fleming does not guarantee approval of permit applications.
- 9. It is anticipated that construction access to the work area will be from Hersheys Mill Road (Township Highway) and not be from a State highway. Consequently, a Township and/or PennDOT Highway Occupancy Permit will not be required.
- 10. The attached scope and fee does not include subsurface geotechnical exploration or soil testing. Geotechnical parameters needed for structural design, if any, will be based on conservative assumptions.
- 11. It is assumed that the project will not require relocation of existing utilities or extensions of existing/new utilities to the site.
- 12. This scope and fee estimate does not include preparation of bid documents or bidding and construction phase services.

COMPENSATION

Our proposed lump sum fee for Tasks 1 through 7, as described within this proposal letter, is as follows:

Task 1:	Topographic Survey:	\$9,290
Task 2:	Layout & Design of Stream Channel and Open Water Features:	\$89,990
Task 3:	Hydrologic and Hydraulic Analysis:	\$18,790
Task 4:	Layout and Design of Reservoir Enhancements	\$44,971
	Gannett Fleming Management and Oversight (10%):	\$4,497
Task 5:	Environmental and Permitting Services:	\$10,840
Task 6:	Engineering Support Services:	\$6,600
<u>Task 7:</u>	Meetings:	\$4,614
	Total Lump Sum Fee (Tasks 1 through 7):	\$189,592

SCHEDULE

GF is prepared to begin work on this assignment as soon as notice to proceed is issued by the Township. Our anticipated schedule is as follows:

- Notice to proceed from the Township is anticipated in June/July 2017.
- Perform topographic survey (Task 1) of the dewatered reservoir within four weeks of receiving Notice to Proceed. Survey data will be processed and a base map developed within four weeks from completing field survey.
- Layout and design of the stream channel and open water features will be developed to 50% within three months following the development of the survey base map. Plans will be developed to a point where regulated activities can be assessed.
- Upon completion of the preliminary design (50% drawings), a pre-application meeting will be held with the regulatory agencies. Note that Gannett Fleming's fee for this meeting was previously authorized under Service Authorization No. 6. Additional fee has been included herein (i.e., within Task 2) to allow Simone Collins Landscape Architecture to attend this meeting. Scheduling of the pre-application meeting will be dependent upon the schedules of the reviewing agencies.
- Within two months following the pre-application meeting, the drawings, specifications and permit applications will be finalized for review by the Township and submission to the reviewing agencies. If mitigation is required by the reviewing agencies, a separate scope, fee and schedule will be prepared.
- Pending comments by the Township, the drawings, specifications and permit applications will be finalized and submitted to the reviewing agencies.

Mr. Rick Smith East Goshen Township

9 June 12, 2017 Hershey's Mill Dam Reservoir Enhancements

These services can be provided under our current Master Services Agreement. Should the Township choose to secure our services to for the work as described within this proposal, we will provide you with a Service Authorization under a separate cover letter to amend our Master Services Agreement for this work activity. If you have any questions about the proposed services or need additional information, please do not hesitate to call me or Mr. Paul Schweiger of our office at 717-763-7212, extensions 2828 and 2504, respectively. We thank you for the opportunity to provide this proposal and look forward to continuing our relationship with the Township.

Sincerely,

GANNETT FLEMING, INC. Environmental Resources Division

ERIC C. NEAST, P.E.
Project Manager
Dams and Hydraulics Section

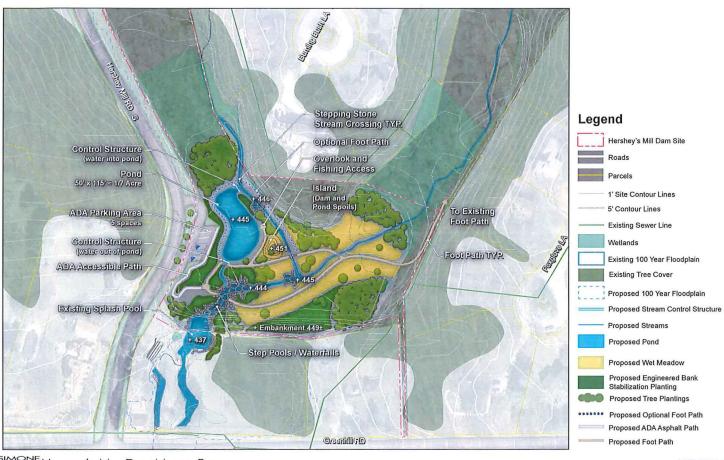
Gannett Fleming Mr. Rick Smith

East Goshen Township

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June 12, 2017 Hershey's Mill Dam Reservoir Enhancements

ATTACHMENT 1 HERSHEY'S MILL DAM MASTER PLAN



HERSHEY'S MILL DAM MASTER PLAN
EAST GOSHEN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA

LANDSCAPE



Gannett Fleming Mr. Rick Smith East Goshen Township

June 12, 2017 12 Hershey's Mill Dam Reservoir Enhancements

ATTACHMENT 2 PROPOSAL FROM SIMONE COLLINS LANDSCAPE ARCTITECTURE



May 26, 2017 Revised May 31, 2017 Revised June 7, 2017

Eric C. Neast, P.E. Project Manager Gannett Fleming Inc. Environmental Resources Division PO Box 67100 Harrisburg, PA 17106-7100 eneast@GFNET.com 717.636.7211

Hershey's Mill Park SC No.: 17030.10

Re: Proposal for Construction Documentation Services

Dear Mr. Neast:

Enclosed you will find SC's project understanding, scope of work, and task fee schedule for the development Hershey's Mill Park Construction Documents.

Due to the importance to have a streamlined design and permitting process Gannett Fleming (GF) will act as prime consultant and SC will serve as a sub consultant to GF.

SC has retained the services of Princeton Hydro to advise us on issues relating to habitat creation for both flora and fauna. Princeton Hydro will provide SC with advice and consultation on plant species selection, habitat and site maintenance practices during establishment and stabilization of all plantings, details of creek step pools and fish habitat creation, detailed creek and pond stabilization techniques and other project detailing related to natural systems in the park. Princeton Hydro will also provide SC advice on alternative approaches for planting, species selection, and animal habitat creation based on their other related project experience.

Sincerely,

SIMONE COLLINS, INC. LANDSCAPE ARCHITECTURE

Peter M. Simone, RLA, FASLA

President

Project Understanding

East Goshen Township will be decommissioning the Hershey's Mill Dam with a full breach of the dam at the current spillway location. Gannett Fleming (GF) has been retained by the Township to perform the necessary engineering and obtain the necessary permits to affect this work.

Simone Collins (SC) has reviewed the GF proposal as the basis of understanding of GF work. SC understands that the GF proposal does not include "preparation of bid documents or bidding and construction phase services"; and GF and SC will need to submit to the Township a contract addendum to include this work, at a later date.

During the fall, winter and spring of 2016/2017, the Township with the assistance of Simone Collins Landscape Architecture (SC), conducted a master plan process to determine a "post dam" site development plan for the passive recreational open space. The master plan has determined the basic parameter for the new park. This SC proposal is to perform final design for the proposed park improvements; that include preparation of construction documents and specifications for the construction of proposed park improvements. Bidding and construction term services will be addressed under a separate contract at a later date. It is SC's understanding that all proposed improvements for the entire park will be documented in their entirety, but it is the intent of the Township to construct improvements in two or more phases.

The primary phase, at a minimum, would include the removal of the dam; the construction of the dam breach step pools waterfalls and pond; all earth moving activities; installation select pathways and a temporary stabilization of the site. Later phases would include paving of parking facilities; additional pathways; boardwalk structures; and habitat restoration plantings.

At this time, the impoundment has been drawn down; Ridley Creek has set its course through the site; and the former reservoir ground has dried out, stabilized and volunteer vegetation has established on site. The time frame for dam breach is set for summer 2018.

It is SC's understanding that all construction work will be completed under the permits received by GF for the breach of the dam structure. It is also our understanding that GF will provide all necessary engineering services to support the work performed by SC. GF will serve as the project prime and will incorporate SC work into a final project drawing set.

Scope of Services

Based on our current understanding of the work to be completed our proposed scope of services is as follows:

 DESIGN / ENGINEERING FOR CONSTRUCTION – This professional services contract is for design / engineering / documentation of park improvements for construction of the Hershey's Mill Park. Designs will comply with applicable State, County, and Local regulations.

Design and documentation of park improvements will include:

- Grading: Preliminary and pre-final grading for the breach step pools, pond, trails, parking areas and other areas to be improved in the park.
 (GF to complete grading and cross sections for stream) SC will take primary responsibility of this task. We will use AutoCAD Civil 3D to complete preliminary cut and fill and pre-final cut and fill analysis to obtain a balanced site. Final grading plans and final cut and fill analysis will be finalized by GF and for incorporated into the permit set by SC.
- Layout Plans: Layout and detailing of all proposed park improvements including but not limited to dam breach step pools; walkways and trails; parking areas; boardwalks; pond layout; and all other proposed site and park amenities. (GF to complete grading and cross sections for stream improvements including habitat features).
- 3. Breach / Step Pool Design: Design and detailing of the breach step pools will be performed in conjunction with GF. The successful design of this area will both meet the engineering requirements of DEP and consider the aesthetics of creating a natural looking transition from the upper reservoir area to the lower stream channel. Key design feature will include the specification of boulder color and sizing, incorporation of plantings, and the grading of step pools.(GF to be lead designer of these features with assistance from SC).
- 4. Pond Design: Design and detailing of the pond area to include pond control structures; forebay for silt deposition and cleaning; in consultation with GF.
- 5. Planting Design: Layout and detailing of planting design for all areas of the park. It is SC's understanding that the planting most serve to both enhance the natural environment while considering the close proximity of the site to neighboring residential properties and the desire of those neighbors for a beautiful, well managed planting. Types of planting will include:
 - a. Parking Area Plantings
 - b. Shade Tree Plantings
 - c. Warm Season Wet Meadow Areas

- d. Reforestation Areas
- e. Evergreen Buffers
- f. Embankment Stabilization and Riparian Planting Areas
- g. Habitat Specific Plantings
- 6. Regulatory Signage and Pavement Markings: Layout and Detailing of regulatory and informational signage to include the following:
 - a. Park Rules Signs (1)
 - b. Site Map Information Kiosk (1)
 - c. DCNR and project partners funding plaque
- 7. Interpretive signage: Development of interpretative signage will include research; written text preparation; development of original graphics; possible acquisitions or release for use of proprietary artworks; and final layout of sign graphics, detailing of sign structures, and location plans. SC assumes three (3) interpretive signs:
 - a. One (1) Historic
 - b. One (1) Animal Habitat / Plant Habitat
 - c. One (1) MS4 Public Education
- 8. Site Furnishings: Layout and detailing of park site furniture to include but not limited to the following:
 - a. Trash receptacles
 - b. Boulder Seating
- 9. Cost Estimates: The master plan Cost estimates will be updated as the design progresses at the 50% complete and 95% complete phases to inform necessary revisions to future bid documents and project phasing.
- II. PUBLIC INVOLVEMENT SC services include one public meeting.

SC will facilitate one general public meeting. The design team will provide all materials needed to conduct the meeting including, color plan sheets mounted for display purposes. The SC Team will prepare meeting minutes within ten (10) working days after the meeting for approval and distribution by the Township. This task will be completed before Final Engineering plans are completed to allow for public input.

Exclusions

- PROJECT BIDDING SC services do not included the preparation of drawings and specification into a bid package for bidding by the Township. Bid documents will be prepared according to DCNR requirements. Services to prepare construction documents and specifications will be addressed under a separate contract at a later date.
- II. CONSTRUCTION SERVICES –SC services do not include attendance of Pre-Construction meeting, review and approval of submittals, tree tagging, boulder selection at quarry and periodic site visits to review layout. Construction term services will be addressed under a separate contract at a later date.
- III. TOPOGRAPHICAL SURVEY Additional site topographic and boundary survey will be performed by GF.
- IV. SOIL TESTING Soil tests, if necessary, to be completed by appropriate testing agency and evaluated by soil scientists to determine if on-site soil is of appropriate composition to use as fill to create site features; or for potential MS-4 features. We assume the soil is suitable to hold water and a pond liner will not be necessary. Coordination of any soil testing if needed will be performed by GF.
- V. STRUCTURAL ENGINEERING REVIEW Structural engineering review of pond control structure, boardwalks, and embankment construction are not included within SC design fees. SC will document the design of these features and coordinate the structural review and seal by GF.
- VI. PERMITTING SC services do not included permitting. SC will work with GF to coordinate all necessary design items for the submission of necessary site permits.
- VII. E&S CONTROL PLANS SC services do not included E&S Control Plans. SC will work with GF to coordinate all necessary work to address any E&S Control needs for the site work.
- VIII. MS-4 STORMWATER PLAN SC understands it is a goal of the Township to address its MS4 requirements of the Ridley Creek watershed at the Hershey's Mill Site. SC scope does not include the design and permitting of the Township MS4 plan. SC will coordinate with the Township's MS-4 engineer to design proposed features so that they conform to the goals of the MS-4 Plan.
- IX. PROJECT MANUAL FRONT END BOILER PLATE SC will prepare the technical specification in CSI format for the project manual. It is the Township's responsibility to provide legal specifications for the future bidding phase.

- X. UTILITY RELOCATION PLANS It is SC's intent to work within the confines of the existing utilities locations. Utility Relocation Plans are excluded.
- XI. TRAFFIC CONTROL PLANS The development of traffic control plans are excluded.
- XII. LIGHTING PLANS It is SC's understanding that lighting is not to be included within the park. The development of lighting plans are excluded.
- XIII. ELECTRICAL SERVICE It is SC's understanding that electrical service is not to be included within the park. The development of electrical service is excluded.
- XIV. TRAFFIC STUDY / HOP PERMIT— The addition of parking along Hershey Mill Road will conform to applicable State, County, and Local regulations. A PADOT High Occupancy Permit (HOP) is not required for the Township Road. A traffic study to determine effects of the new driveway entrance on local roads is excluded.

Project Development Meetings

The SC Team will attend scheduled project meetings held with the design team and Township and project stakeholder throughout the term of the project. A total of three (3) meetings are included in this proposal.

Project Management

Mr. Peter M. Simone, RLA, FASLA, President, will oversee the project management of this SC Team. Mr. Simone will be available to the Township and with outside agencies and groups. Mr. Simone will be assisted by:

Ms. Sarah R. Leeper, RLA, Project Manager (SC), will coordinate the SC Team in-house design assignments. Ms. Leeper will be the primary liaison and contact and, as such, all questions related to design activities will be channeled through her. Ms. Leeper will be responsible for establishing and meeting all in-house project deadlines.

Fee

SC Team Fees are summarized as follows: (please see attached detailed fee/ task list)

PROJECT PHASE	TOTAL	
Preliminary Design	\$	14,528
Final Plans and Technical Specifications	\$	22,110
Subtotal	\$	36,638
Princeton Hydro	\$	7,500
Estimated Expenses*	\$	833
TOTAL FEE	\$	44,971

^{*}Estimate Only – see attached fee schedule for reimbursable cost.

Preliminary Project Schedule

As per GF proposed schedule

Future Contract Phases

- Prepare Bid Documents
- Bid Project
- Approve Construction Contract
- Construction Term Services

Contract Conditions

GF will forward to SC their standard sub-consultant agreement for review by SC and incorporation into this agreement.

Thank you very much for working with SC on this assignment.

Sincerely,

Simone Collins

Landscape Architecture

Peter M. Simone, RLA, FASLA

President

Presentation to the East Goshen Township Board of Supervisors *June* 22, 2017











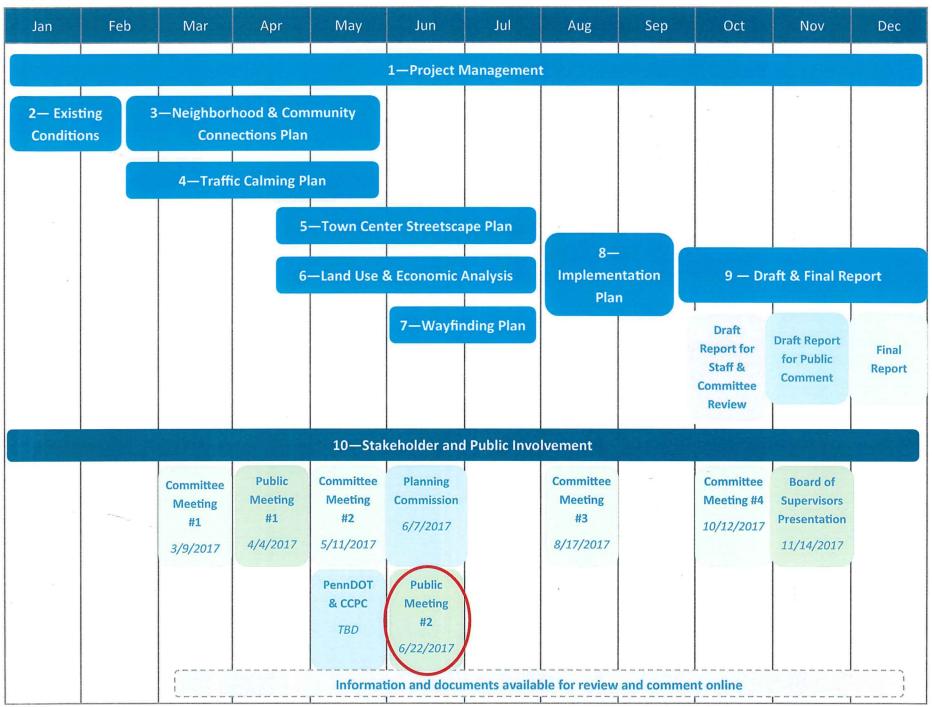












MAKE PAOLI PIKE A DESTINATION

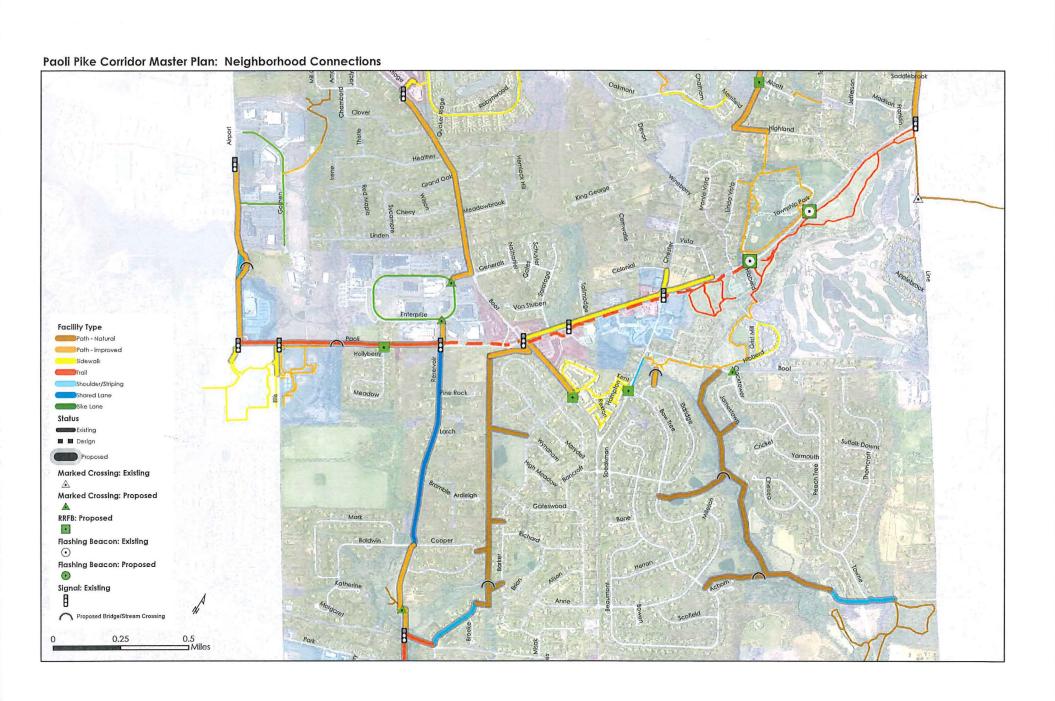
- Connect people to the Paoli Pike Trail and other places along the
 Corridor to support alternative modes of transportation and expand opportunities for recreation
- Calm traffic along the Paoli Pike Corridor to create a safe and comfortable environmental for walking, biking, and driving
- Enhance Goshenville to support commerce and promote compact, mixed-use, walkable development with appropriate amenities
- Activate the corridor through programs and community events to encourage people to walk, bike, eat, shop, and play along Paoli Pike



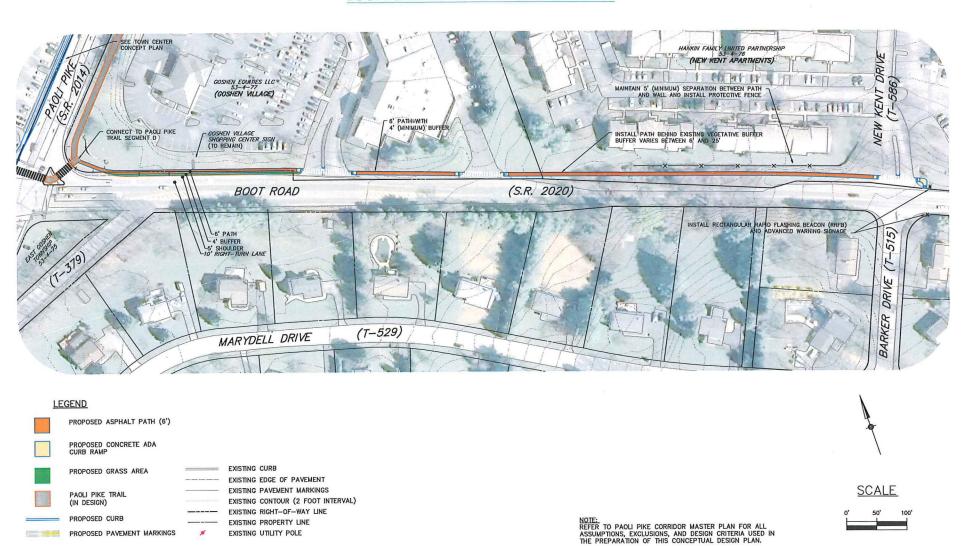






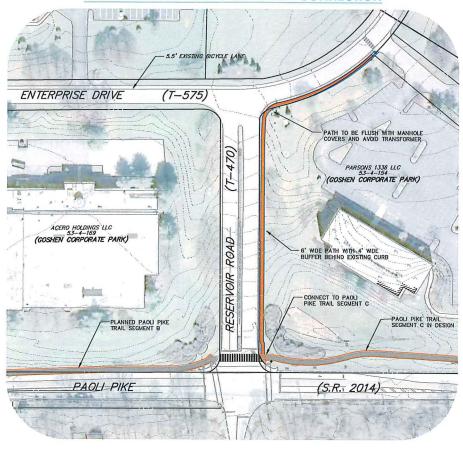


BOOT ROAD PEDESTRIAN PATH CONNECTION



PROPOSED PROTECTIVE FENCE

RESERVOIR ROAD PEDESTRIAN PATH CONNECTION



LEGEND

PROPOSED ASPHALT PATH (6') EXISTING CURB

EXISTING EDGE OF PAVEMENT

EXISTING PAVEMENT MARKINGS

EXISTING PAVEMENT MARKINGS

EXISTING CONTOUR (2 FOOT INTERVAL)

EXISTING RIGHT—OF—WAY LINE

EXISTING RIGHT—OF—WAY LINE

NOTE: REFER TO PAOLI PIKE CORRIDOR MASTER PLAN FOR ALL ASSUMPTIONS, EXCLUSIONS, AND DESIGN CRITERIA USED IN THE PREPARATION OF THIS CONCEPTUAL DESIGN PLAN.



RESERVOIR ROAD SHARED LANE: PAOLI PIKE TO BALDWIN DRIVE/COOPER CIRCLE



An on-road shared lane bicycle facility on Reservoir Road between Paoli Pike and Baldwin Drive/Cooper Circle can be designated with the installation of specific pavement markings and signs. The pavement markings, signs, roadway surface, and clearing of roadside vegetation should be regularly maintained to provide a smooth and unobstructed travel way for bicyclists. Education and enforcement of the speed limit can also help to create a safe and comfortable environment for biking.

Shared Lane Markings (Sharrows)

Purpose

- · Alert motorists to the potential presence of bicyclists
- Recommend proper lateral position for bicyclists in lanes that are too narrow for a motor vehicle and bicycle to travel side by side
- · Encourage safe passing of bicyclists by motorists
- · Reduce the incidence of wrong-way bicycling
- · Provide wayfinding

Application

- Appropriate for roadways with a speed limit of 35 mph or less.
- · Install with centers at least 4 feet from the edge of pavement
- Place immediately after intersections and at intervals not greater than 250 feet thereafter



Bicycle May Use Full Lane Sign (R4-11)

Purpose

- Used in combination with Shared Lane Markings to inform users that bicyclists might occupy the travel lane
- Used on roadways without bicycle lanes or shoulders usable by bicyclists

Application

- Downstream of intersecting streets and aligned (approximately) with shared lane markings
- Post-mounted on side of road with dimensions of 30" x 30"

MAY USE FULL LANE

Additional Recommendations

- · Routine clearing of roadside vegetation and roadway surface sweeping
- 35 mph speed limit signs near Cooper Circle (NB) and Larch Lane in both directions
- Speed enforcement
- · Education for motorists and cyclists

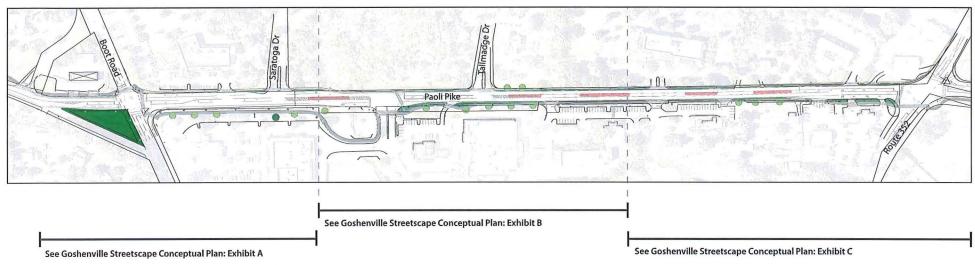
Sources: Manual on Uniform Traffic Control Devices (MUTCD), FHWA, 2009
Small Town and Rural Design Guide, FHWA, 2016
Urban Bikeway Design Guide by National Association of City Transportation Officials (NACTO), 2014

Street Trees	Street Lights	Vertical Banners
Street Trees will be located at least 2 feet behind the Sidewalk, and out of the buffer area along Paoli Pike. The Street Trees will help to create a Sense of Place. The Canopy will have a calming effect on traffic with the increased sense of enclosure.	The Street Lights, 10 to 12 feet in height, will help provide security along the Sidewalk, as well as help to create aesthetic appeal to the Streetscape. "Traditional Style" Street Lights will help to create an identity for Goshenville.	Vertical Banners may be attached to the Street Light poles, or may be freestanding Poles with Mounted Banners. The Banners will help to announce and publicize special events, as well as help to create an identity and Sense of Place in Goshenville.
2' Paoli Pike		

Barrier Materials Hardscape Paving Hardscape Paving will be utilized in the Hardscape Median, Flush Stamped Asphalt Median, and the Pedestrian Retaining Walls will enable the Trail in narrow areas within the Streetscape. Utilizing material for the Pre-Cast Stone Wall which are referential to Historic Goshenville will provide an increased Sense of Place within the Village. Gathering Spaces. Paving Material with a similar Brick "look", will promote uniformity and continuity within the Goshenville Ornamental Black Steel Fencing will be utilized on the Pedestrian Bridge to provide safety, and to enhance the Streetscape. Streetscape aesthetics.

Goshenville Streetscape Conceptual Overview Plan

Paoli Pike: Boot Road to Route 352

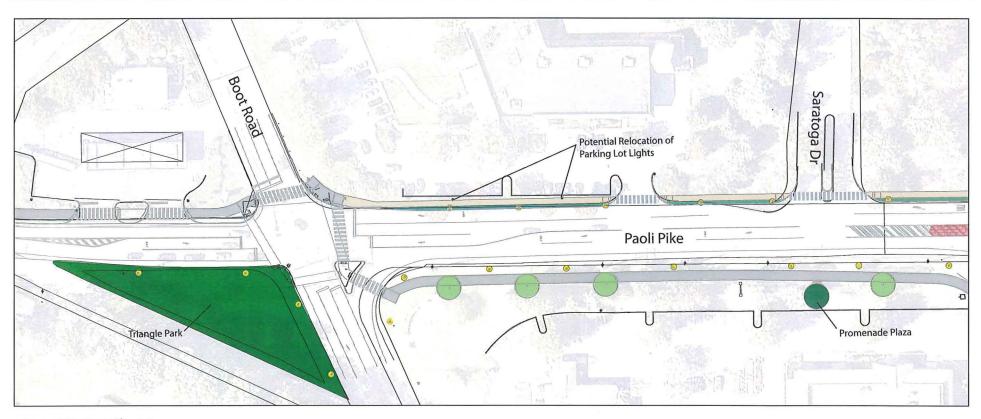


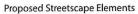
Proposed Streetscape Elements



May 11, 2017; Revised May 31, 2017

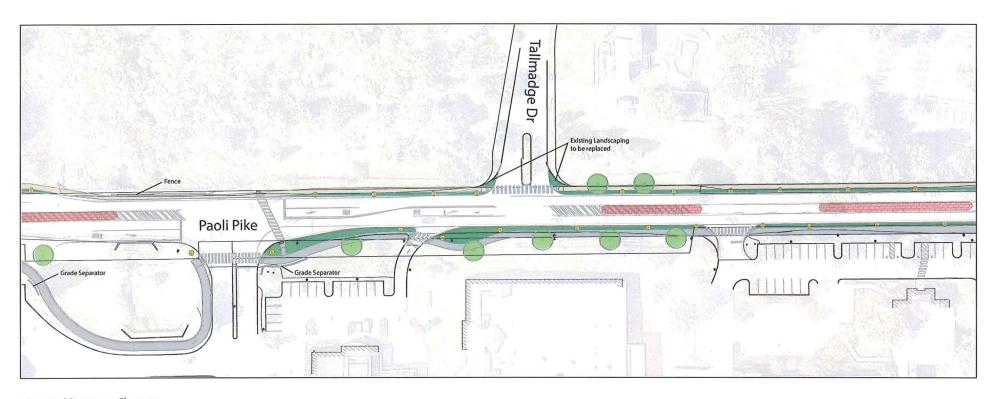
Goshenville Streetscape Conceptual Plan: Exhibit A







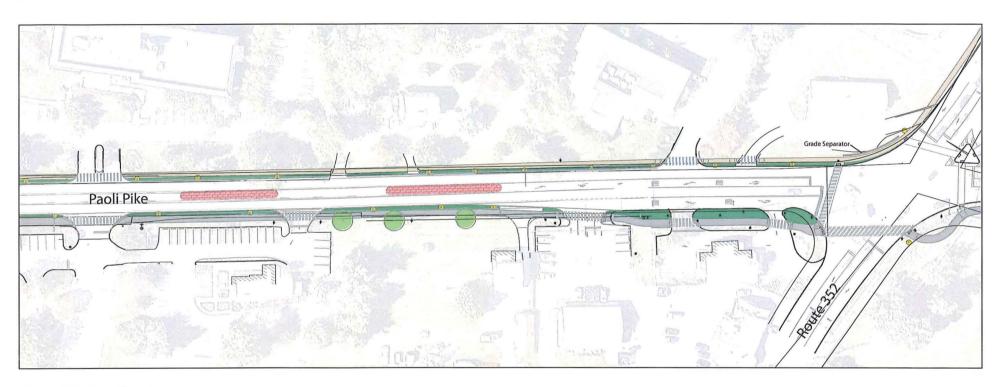
Goshenville Streetscape Conceptual Plan: Exhibit B

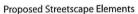


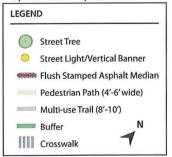
Proposed Streetscape Elements

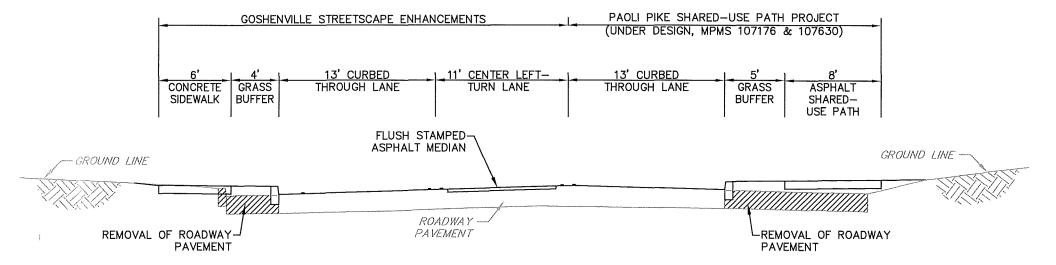


Goshenville Streetscape Conceptual Plan: Exhibit C



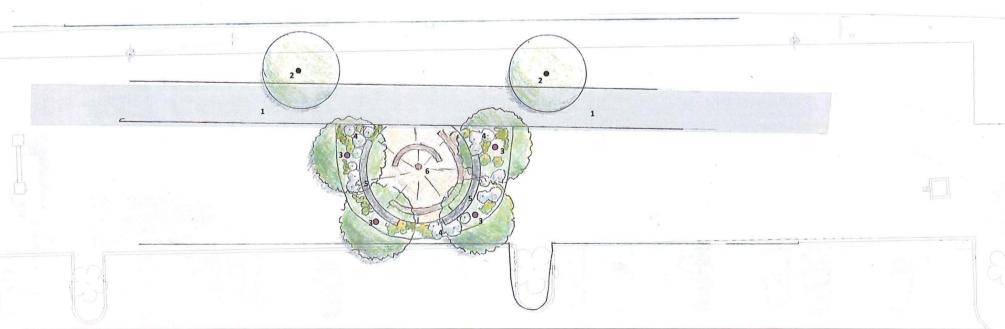






PAOLI PIKE (SR 2014)
BETWEEN BOOT ROAD AND N. CHESTER ROAD
(REFER TO PLANS FOR IMPROVEMENT LIMITS)
NOT TO SCALE





Promenade Plaza Concept Plan

Paoli Pike Corridor Master Plan East Goshen Township - Chester County, PA

LEGEND:

Proposed Features

1 Paoli Pike Trail

2 Street Tree

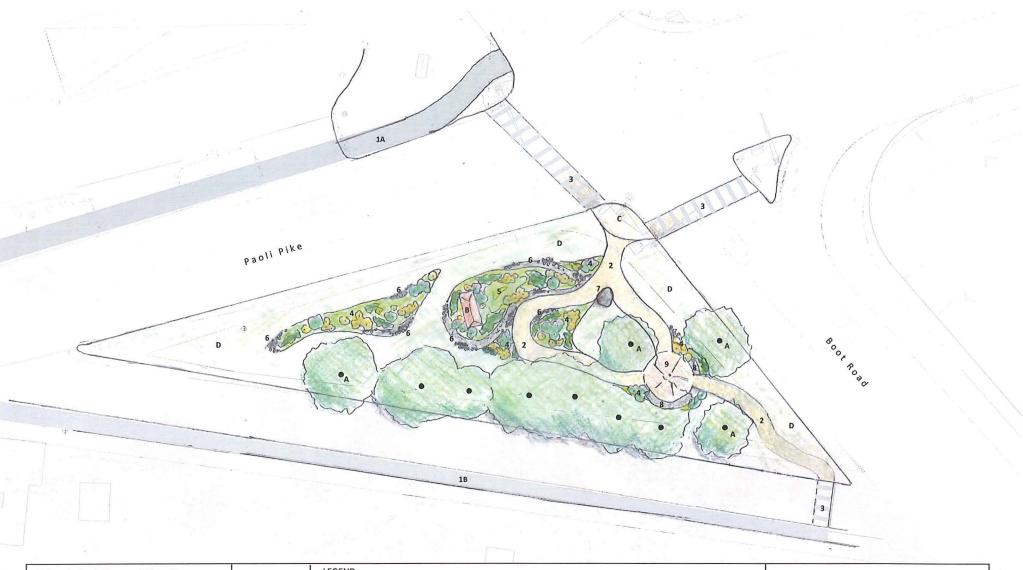
3 O Flowering Ornamental Tree

4 Shrubs/Groundcover Planting
5 Sitting Wall (18")
6 Unit Paver Plaza (with Grist Stone Detail)





5-11-2017



Triangle Park Concept Plan #1

Paoli Pike Corridor Master Plan East Goshen Township - Chester County, PA

Scale: 1" = 25'

LEGEND:

Existing Features

A • Tree

Township Sign Tactile Curb Ramp

Lawn/Grass

Proposed Features

1A Paoli Pike Trail
1B Neighborhood Connection Trail

Triangle Park Pathway

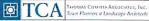
Crosswalk

4 Shrub/Groundcover Planing 5 Rain Garden 6 River Jack "River Bed"

7 Boulder

8 Sitting Wall (18")
9 Unit Paver Plaza (with Grist Stone Detail)





5-11-2017

<u>Paoli Pike Corridor Master Plan</u> <u>East Goshen Township – Chester County, PA</u>

ALTERNATIVE FUTURES FOR GOSHENVILLE

June 22, 2017

Generally speaking, we need to focus on both sides of Paoli Pike from Boot Road to Route 352. However, we could extend our thinking about Goshenville in the context of the Blacksmith Shop, the Plank House, and the Goshen Corporate Center.

Assuming that the Paoli Pike Trail is built in the locations contemplated, how do we see Goshenville transforming over the next 20 years? Should we consider minor changes, moderate changes, or major changes (in addition the Traffic Calming Enhancements made within the Cartway of Paoli Pike)?

1. Minor Changes

- 1.1. 8 foot to 10 foot wide Trail where space permits (south side)
- 1.2. Upgraded Crosswalks
- 1.3. Street Trees



2. Moderate Changes

- 2.1. 4 foot to 6 foot wide concrete sidewalk (north side)
- 2.2. Street Lights & Banners
- 2.3. Piers, Fencing & Low Hedges in selected areas
- 2.4. Adaptive re-use of Existing Buildings for Retail Use



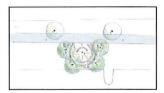


3. Major Changes

- 3.1. New Buildings closer to the Trail, to replace certain existing Buildings
- 3.2. Triangle Park & Promenade Plaza







We will further address the possible transformation of Goshenville Village at further Committee Meetings. This exercise is intended to initiate the discussion.

<u>Paoli Pike Corridor Master Plan</u> East Goshen Township – Chester County, PA

EXISTING LAND USE AND PROPERTIES WITH ENHANCEMENT POTENTIAL

June 22, 2017

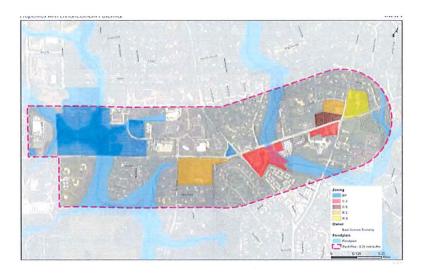
Relative to the attached map, we could analyze enhancement potential relative to two (2) valueadded considerations:

- 1. Will the enhancement contribute to adding new opportunities for <u>walking</u>, <u>shopping</u>, <u>living</u>, <u>working</u>, <u>and/or recreating</u> along Paoli Pike and, therefore, add <u>High Value</u> to the Corridor?
- 2. Will the enhancement contribute to <u>transforming a vacant building</u>, <u>vacant lot</u>, <u>or underperforming building</u> into a new use and, therefore, add <u>Moderate Value</u> to the Corridor?

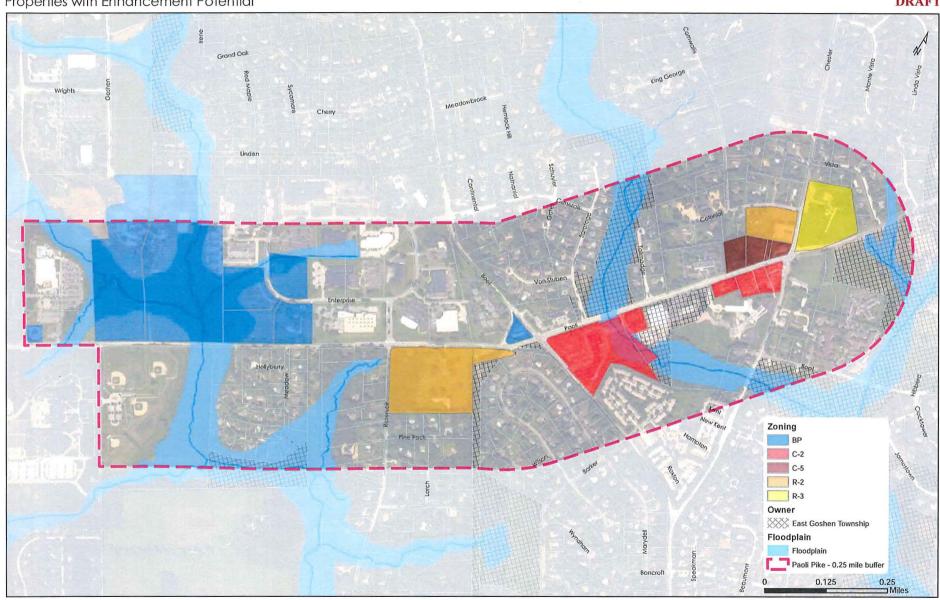
High and Moderate Value Enhancements could include:

- a. New Buildings closer to the Trail (and more accessible to the Trail Users);
- b. Adaptive Re-Use of Existing Buildings;
- c. Expanded Use of a Single Use Building; and
- d. Buildings and/or Uses accessible to the general public (typically without the need for an appointment to enter the building).

The attached map, titled: "Existing Land Use and Properties with Enhancement Potential" includes outlines for properties with "Enhancement Opportunities". After these properties are Enhanced, they will contribute positive economic value to the Corridor, as more people would be able to walk, shop, or recreate.



Existing Land Use and Properties with Enhancement Potential



Future Land Use Toolbox

June 22, 2017

Temporary Uses	Outdoor Gathering Spaces	Adaptive Reuse/Ir	nfill Development
Temporary Uses would help to "jump start" the transformation of Goshenville, and promote a more Pedestrian-oriented retail environment. Examples of viable Temporary Uses could include: Pop-up Markets, Pop-up Festivals/Events, Food Trucks/Vendors, and related Pop-up Uses such as an Art Show.	Outdoor Gathering Spaces will help to attract Pedestrians to linger in Goshenville, and to rest along the Paoli Pike Trail. Outdoor Gathering Spaces in the Triangle, and at Promenade Plaza will complement adjoining retails/commercial uses and be accessible to nearby neighborhoods.	Curb Cuts New Curb Cuts should be limited in number and width, to better enable uninterrupted Pedestrian Circulation. Existing Curb Cuts should be reduced in width and number in order to maintain a continuous trail surface.	Shared Parking Shared Parking should be implemented to link parking areas on adjoining properties. Shared Parking could be implemented with cross- easement vehicular connections between properties.
	And the state of t		Parking Behind Building Side Street Access

1

Adaptive Reuse /Infill Development

Specialty Retail Shops

Goshenville could achieve greater notoriety by having Specialty Retail Shops.

Such Shops would provide goods and products not typically available in other more conventional retail establishments.

Outdoor Dining

Outdoor Dining venues, including: Ice Cream Shops, Tapas Restaurants, and Cafes would provide useful and attractive opportunities to enhance and expand the Pedestrian experience.

Building Location

New Buildings could be located close to the trail to enable more convient use.

Existing Buildings located at deep setbacks could have building additions such as Pergolas and Porches to serve as a transitional feature along the Streetscape.

Parking Location

Parking located to the side and/or rear of buildings would enable more direct access to buildings.

Parking located to the side and/or rear of buildings would promote a more context-sensitive Village character, whereby buildings are the primary Streetscape feature.

















Ancillary Land Uses

Vertical Mixed Use

Residential above commercial/office use would economize on building footprints, provide the opportunity for Multi-family residential, and retain more green space on a site.

Commercial

A commercial use that involve the adaptation of existing buildings for office, research, business, and/or laboratory use would be an appropriate compliment to more retail-oriented uses in Goshenville.

Institutional

A Day Care Center or health care facility would serve as a land use that is complementary to Goshenville.

Residential

Clusters of smaller Multi-family, carriage home buildings would provide an opportunity for more attainable housing.

















EAST GOSHEN TOWNSHIP CHESTER COUNTY, PENNSYLVANIA

RESOLUTION NO. 2017-163

A RESOLUTION RECOGNIZING MICHAEL BROENNLE'S SERVICE TO EAST GOSHEN TOWNSHIP IN SUPPORT OF THE PAOLI PIKE TRAIL

WHEREAS, Michael Broennle is a long-time resident of Wyllpen Farms in East Goshen Township.

WHEREAS, Michael has served with great distinction on and made substantial contributions to East Goshen Township's Paoli Pike Trail Committee and Paoli Pike Master Plan Committee.

WHEREAS, Michael has emerged as a thoughtful and perceptive advocate for making East Goshen Township safe and accessible for pedestrians and bicyclists.

BE IT RESOLVED THAT this Thursday, June 22, 2017, the East Goshen Township Board of Supervisors hereby acknowledges and thanks Michael Broennle for his dedicated service to East Goshen Township in support of the Paoli Pike Trail and the Paoli Pike Master Plan.

ADOPTED, this 22nd day of June 2017.

ATTEST:	EAST GOSHEN TOWNSHIP BOARD OF SUPERVISORS
Secretary	