

Marydell Pond Committee  
October 29, 2018 at 7pm; East Goshen Township Building  
**Agenda**

- 1) Call to order/pledge of allegiance/moment of silence
- 2) Approval of minutes of September 20, 2018
- 3) Update on Permitting & Dredging
- 4) Discussion of Pennoni Landscaping Proposal
- 5) Select date for next meeting
- 6) Any Other Matter
- 7) Public Comment
- 8) Adjournment

**EAST GOSHEN TOWNSHIP  
MARYDELL POND COMMITTEE MEETING  
1580 PAOLI PIKE  
THURSDAY, SEPTEMBER 20, 2018  
DRAFT MINUTES**

**Present:** Chairman Jim Williams; Vice Chair Russ Miller; Members Jay Gagliardi, Scott Greene, Michelle Guinan, Dianne Haley, Mary Ellen Miller, Kate Minshall, Jeff O'Donnell and Scott Rainsford; Erich Meyer (Chairman, Conservancy Board); Andy Tyler (Conservancy Board); Nate Cline (Township Engineer) and Assistant Township Manager Jon Altshul.

**Call to Order & Pledge of Allegiance**

Jon called the meeting to order at 7:00 p.m. and led the pledge of allegiance.

**Moment of Silence**

Jon called for a moment of silence to honor our troops and the victims of last night's tragedy at Bellingham.

**Update on Pond Committee Purpose & Membership**

The members of the Pond Committee highlighted the following issues that they would like to see incorporated into a final landscaping plan for Marydell Pond:

- Concern about leaves getting into the pond
- Having an aerator and potentially turning it off in the winter to allow the pond to freeze (*note: currently the Township turns off the aerator in the Bow Tree Pond during the winter*)
- Place for fishing and skating (Jon observed that technically skating is not allowed on Township ponds)
- Taking down existing shrubs and trees
- Concern about neighborhood kids not playing on or around pond and heavy equipment during construction (Jon indicated that the Township could put up more signage about this during the construction period)
- Location of mowed pathways
- Benches
- A dock area where residents could fish from and/or using natural boulders alongside the pond as a natural fishing point.
- Bat houses and other natural forms of pest control
- Developing a clear maintenance plan for the Township
- Having a continuing role for the Pond Committee after the project is complete by, for example, ensuring that the maintenance plan is being followed and/or should be altered.
- Using meadows and native species to ensure the long-term viability of the pond.
- Deterring kids from going into spring house
- Maintaining sledding hill

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- Having a pond that works for all four seasons
- Discouraging parking on grass along Barker Drive by, for example, planting bushes or placing boulders along grass at edge of roadway.

#### **Update on Work**

Jon and Nate provided an update on the work at the pond. Jon noted that the recent heavy rains had caused mud blow outs through the 48" line that had washed away the stone that had been laid, which had delayed the project somewhat. Nate added that the Township has now applied for its NPDES and Dam Safety Permits. Depending on how long those permits take will dictate when the dredging can occur.

#### **Brainstorm draft landscaping plan**

The Committee reviewed Pennoni's powerpoint slides. Jim raised concerns about one bullet point in particular—"Shade the southern exposure of pond to reduce thermal warming". He stated that ensuring a clear line of site to the pond is one of the Committee's top priorities and that the landscaping plan should consider how any planted trees will impact views of the water. Mary Ellen asked if Pennoni could provide renderings of a landscaping plan from a street view, so that committee members could get a better understanding of what the pond views might look like. Andy raised concerns about project costs. Jon provided an overview of the project budget and asked Nate that any landscaping plans include cost estimates.

Nate indicated that his landscape architect would be visiting the pond soon and would revise the proposed landscaping plan accordingly.

#### **Next meeting**

The committee agreed to meet next on Monday, October 29<sup>th</sup> at 7pm, pending Nate's confirmation that his landscape architect would be able to attend.

#### **Adjournment**

There being no further business, the meeting was adjourned at 8:20pm.

Respectfully submitted,

*Jon Altshul*

*Recording Secretary*



# MARY DELL POND REHABILITATION

East Goshen Township

October 29, 2018



## Goals

- ◆ Preserve existing natural vegetation where possible
- ◆ Encourage native species
- ◆ Filter run-off
- ◆ Nutrient reduction
- ◆ Goose control
- ◆ Long term maintenance considerations
- ◆ Decrease mown turf areas
- ◆ Shade the southern exposure of pond to reduce thermal warming
- ◆ Establish Community resource - give families a place to fish and increase home values
- ◆ Optimize views from Barker Drive
- ◆ Provide multi season interest plantings
- ◆ Provide planting to attract birds and provide habitat
- ◆ Remove invasive species from site

# LANDSCAPE CONCEPT



## Mission

- ◆ Township Motto: "Preserving the Past, Serving the Present, Protecting the Future"





# INVASIVE SPECIES REMOVAL



## Trees



## Vines

- ♦ Mimosa (Albizia julibrissin)



- ♦ Oriental bittersweet (Celastrus orbiculatus)



- ♦ Porcelain berry (Ampelopsis brevipedunculata)



# INVASIVE SPECIES REMOVAL



## Shrubs



♦ Tartarian honeysuckle (*Lonicera tatarica*)



♦ Multiflora Rose (*Rosa multiflora*)



# LANDSCAPE CONCEPT



- ◆ Preserve views of pond
- ◆ Provide access to pond
- ◆ Low native wildflower & grasses meadow
- ◆ Zone vegetative buffer approach surrounding pond
- ◆ NO wetland disturbance
- ◆ Informal mown lawn paths
- ◆ Street trees along Barker Dr.





# LANDSCAPE CONCEPT



## Section A

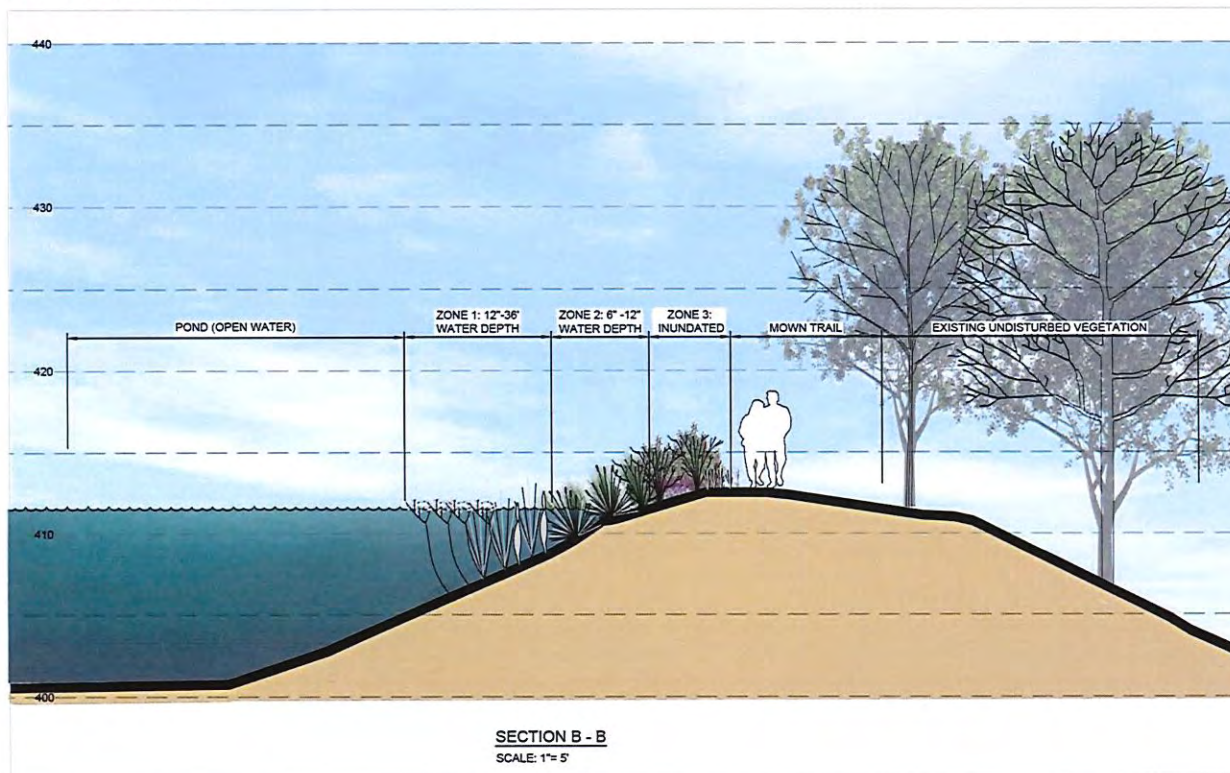




# LANDSCAPE CONCEPT



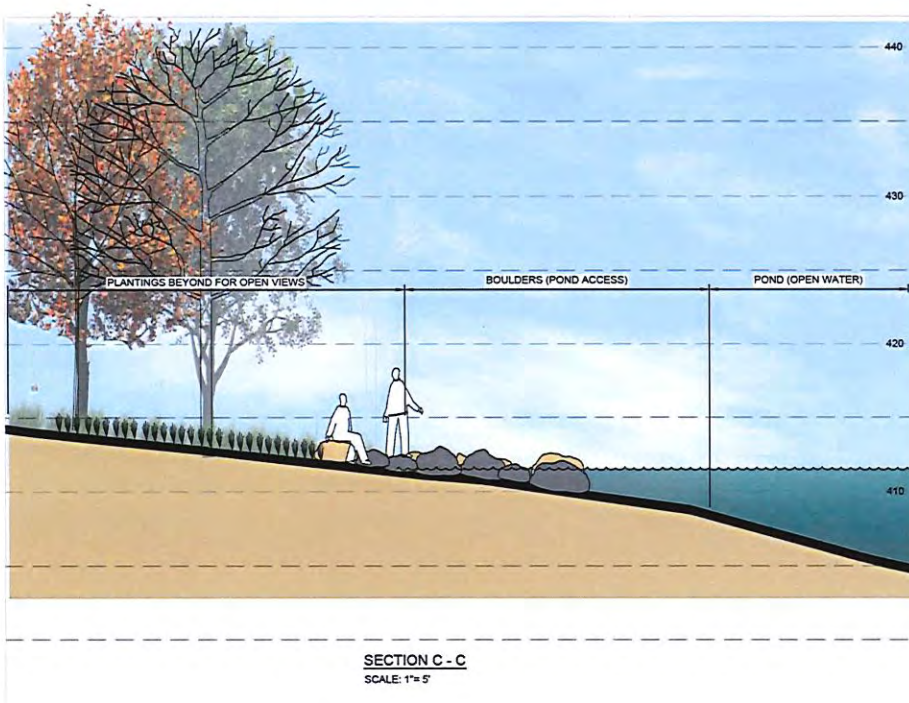
## Section B



# LANDSCAPE CONCEPT



## Section C





## EXISTING CONDITIONS PRIOR TO DREDGING



### Existing Photos – Barker Road views





## EXISTING CONDITIONS PRIOR TO DREDGING



### Existing Photos – Barker Road views



# PRELIMINARY MATERIAL COSTS



	BOTANICAL NAME	COMMON NAME	SF/AREA	TOTAL QTY.	SEED	2" PLUG	#2 CONT.	2.5-3" cal.	EST. COST	Unit Cost	Unit	Nursery Source
<b>ZONE 1 12,000 SF TOTAL AREA</b>												
<b>AQUATIC PLANTS 12" - 36" WATER DEPTH</b>			12,000									
	Nymphaea odorata	Water lily	3,000	330		330				\$1.50	EA	Pinelands
	Lemna minor	Duckweed	3,000	330		330					EA	
	Potamogeton pectinatus	Sago Pondweed	3,000	330		330					EA	
	Potamogeton perfoliatus	Redhead Grass	3,000	330		330					EA	
				1,320		1,320			\$1,980			
<b>ZONE 2 6,000 SF TOTAL AREA</b>												
<b>AQUATIC PLANTS 6" - 12" WATER DEPTH</b>			6,000									
	Alisma plantago-aquatica	Water plantain	600	150		150				\$1.50	EA	Pinelands
	Dulichium arundinaceum	Three-sided sedge	600	150		150					EA	
	Glyceria canadensis	Rattlesnake Grass	600	150		150				\$1.50	EA	Pinelands
	Glyceria striata	Fowl Mannagrass	600	150		150				\$1.50	EA	Pinelands
	Juncus effusus	Soft Rush	600	150		150				\$1.50	EA	Pinelands
	Peltandra virginica	Arrow arum	600	150		150				\$1.50	EA	Pinelands
	Polygonum spp	Smartweeds	600	150		150					EA	
	Pontederia cordata	Pickereelweed	600	150		150				\$1.50	EA	Pinelands
	Scirpus spp	Bulrushes	600	150		150				\$1.50	EA	Pinelands
	Sparganium eurycarpum	Giant bur-reed	600	150		150				\$1.50	EA	Pinelands
				1,500		1,500			\$2,250			
<b>ZONE 3 20,000 SF TOTAL AREA</b>												
<b>Regularly Inundated</b>												
<b>SEED MIX</b>												
	Floodplain Mix (ERNMX-154)		20,000		9					\$51.00	LB	Ernst
	cover crop of grain rye		20,000		14					\$50.25	LB	Ernst
									\$1,160			
<b>SHRUBS</b>												
	Clethra alnifolia	Sweet pepperbush	800	32		32				\$15.00	EA	Octoraro
	Cornus stolonifera	Red osier Dogwood	1200	48		48				\$15.00	EA	Octoraro
	Cornus amomum	Silky Dogwood	800	32		32				\$15.00	EA	Octoraro
	Cornus racemosa	Grey dogwood	400	16		16				\$15.00	EA	Octoraro
	Lindera Benzoin	Spicebush	800	32		32				\$15.00	EA	Octoraro
	Ilex glabra	Inkberry holly	400	16		16				\$15.00	EA	Tuckahoe
	Ilex verticillata	Winterberry	1200	48		48				\$15.00	EA	Octoraro
	Vaccinium corymbosum	Highbush blueberry	1200	48		48				\$15.00	EA	Tuckahoe
	Viburnum dentatum	Arrowwood	1200	48		48				\$15.00	EA	Octoraro
				320		320			\$4,800			



# PRELIMINARY MATERIAL COSTS



Cont.

<b>SHADE TREES</b>						
Betula nigra	River Birch			4		\$170.00 EA Tuckahoe
Liquidambar styraciflua	Sweetgum			8		\$170.00 EA Tuckahoe
Platanus occidentalis	American sycamore			6		EA
Salix nigra	Black Willow			5		EA
Quercus bicolor	Swamp White Oak			10		\$170.00 EA Tuckahoe
				33	\$5,610	
<b>UNDERSTORY TREES</b>						
Amelanchier canadensis	Serviceberry			12		\$125.00 EA Tuckahoe
Magnolia virginiana	Sweetbay Magnolia			8		\$125.00 EA Tuckahoe
				20	\$2,500	
<b>ZONE 4</b>						
<b>MEADOW (SEED MIX)</b>						
Low Growing Wildflower & Grass Mix (ERNMX-156)		270,000	248		\$2,975	\$12.00 LB Ernst
<b>FOREBAY (SEED MIX)</b>						
Native Detention Area Mix (ERNMX-183)		3,800	2		\$105	\$60.00 LB Ernst
<b>MOWN PATH</b>						
Commercial Conservation Mix (ERNMX-113)		31,000	107		\$1,000	\$9.37 LB Ernst
<b>SPRAY EXISTING VEGETATION</b>						
		300,000			\$3,444	\$500 AC Estimate
<b>OTHER LANDSCAPE IMPROVEMENTS</b>						
<b>BOULDERS</b>						
12"-36" River Jack Boulders		2,500	125		\$25,000	\$200.00 ton
<b>RELOCATE TREES</b>						
Existing Trees				4	\$600	\$150.00
<b>STREET TREES</b>						
Quercus imbricaria	Shingle Oak			5	\$850	\$170.00 EA Tuckahoe
<b>ESTIMATED TOTAL</b>					<b>\$52,274</b>	

\*Estimate is for material only and doesn't include installation costs



## LANDSCAPE CONCEPT



### Zone 1: 12" – 36" water depth

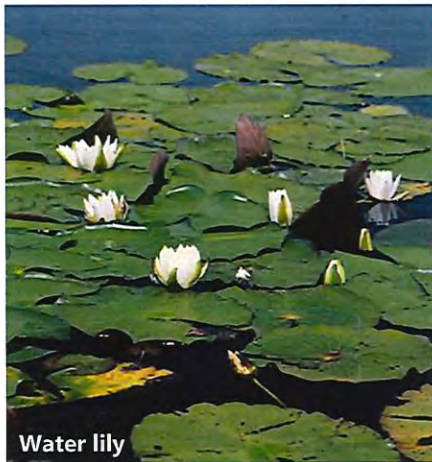
- ◆ water lily (*Nymphaea odorata*)
- ◆ duckweed (*Lemna* spp.)
- ◆ duck potato (*Sagittaria latifolia*)
- ◆ sago pondweed (*Potamogeton pectinatus*)
- ◆ redhead grass (*Potamogeton perfoliatus*).

### Zone 2: 6" – 12" water depth

- ◆ water plantain (*Alisma plantago-aquatica*)
- ◆ three-sided sedge (*Dulichium arundinaceum*)
- ◆ managrasses (*Glyceria* spp.)
- ◆ soft rush (*Juncus effusus*)
- ◆ arrow arum (*Peltandra virginica*)
- ◆ smartweeds (*Polygonum* spp.)
- ◆ pickerelweed (*Pontederia cordata*)
- ◆ many bulrushes (*Scirpus* spp.)
- ◆ giant bur-reed (*Sparganium eurycarpum*)



# LANDSCAPE CONCEPT





## Zone 3: Regularly Inundated

- ◆ river birch (*Betula nigra*)
- ◆ willow oak (*Quercus phellos*)
- ◆ swamp white oak (*Quercus bicolor*)
- ◆ sweetgum (*Liquidambar styraciflua*)
- ◆ American sycamore (*Platanus occidentalis*)
- ◆ serviceberry (*Amelanchier* spp.)
- ◆ sweet bay magnolia (*Magnolia virginiana*)
- ◆ highbush blueberry (*Vaccinium* spp.)
- ◆ red osier/silky dogwood (*Cornus stolonifera/amomum*)
- ◆ grey dogwood (*Cornus racemosa*),
- ◆ arrowwood (*Viburnum dentatum*)
- ◆ spicebush (*Lindera Benzoin*)
- ◆ sweet pepperbush (*Clethra alnifolia*)
- ◆ winterberry (*Ilex verticillata*)
- ◆ inkberry holly (*Ilex glabra*)



# LANDSCAPE CONCEPT



River birch



Willow oak



Serviceberry



High bush blueberry



Spice bush



Inkberry holly



Winterberry holly







