



MILLTOWN DAM PARK & OPEN SPACE MASTER PLAN

East Goshen, Chester County Pennsylvania

COMMITTEE MEETING #4: Draft Plan Review

Thursday 5.25.2017, 7-8:30 PM
East Goshen Township Building
1580 Paoli Pike West Chester, PA

Simone Collins Landscape Architecture
Princeton Hydro

Meeting Agenda

- **Committee Business / Introductions**
- **Draft Plan Review Discussion / Feedback**
- **Next Steps**

Project Schedule

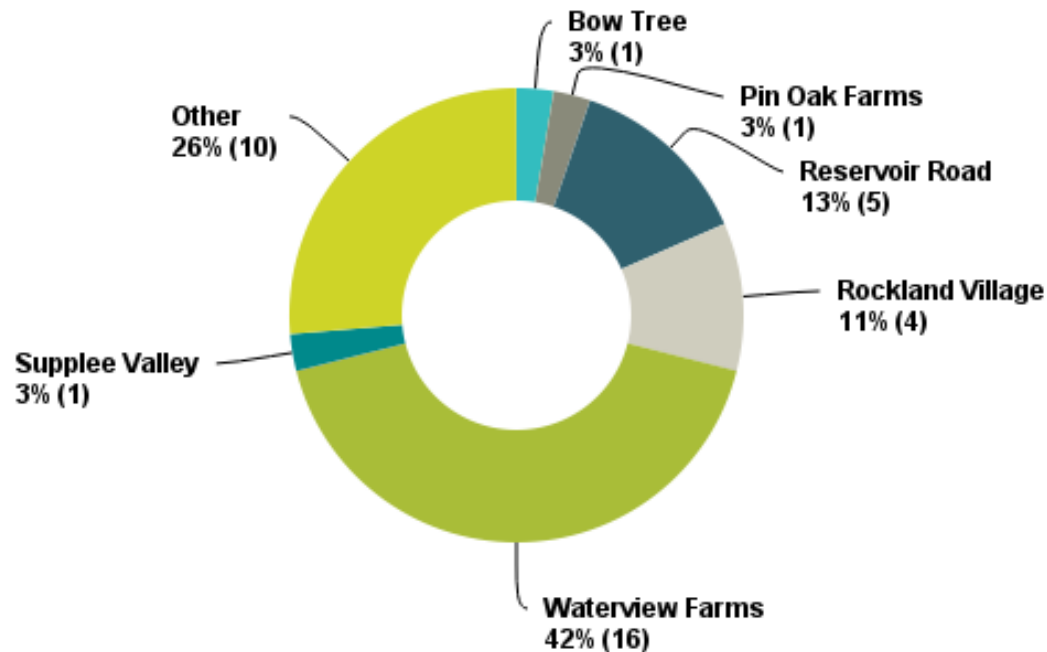
Meeting	Date & Time	Meeting Subject
Milltown Committee Meeting #1	Nov 2, 7:00 pm	Project Introduction / Brainstorming
Milltown Public Meeting #1	Dec 14, 7:00 pm Dec 15, 7:00 pm	Project Introduction / Brainstorming
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 <u>Milltown Committee Meeting #4</u>	<u>May 23, 7:00 pm</u>	<u>Final Plan Review</u>
Milltown Public Meeting #4	Jun 20, 7:00 pm	Final Plan Presentation

Public Survey #3

39 Respondents

Q2 What is the name of the street / neighborhood / development in which you live?

Answered: 38 Skipped: 1



Public Survey #3

Q5 Please specify which circulation components you like or dislike from the options below:

Answered: 36 Skipped: 3

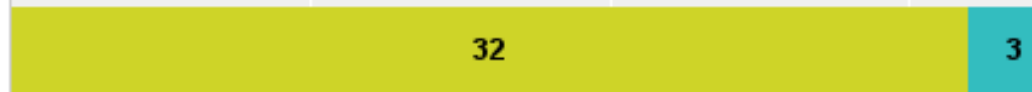
Crosswalk improvement at E. Strasburg Rd from Reservoir Rd



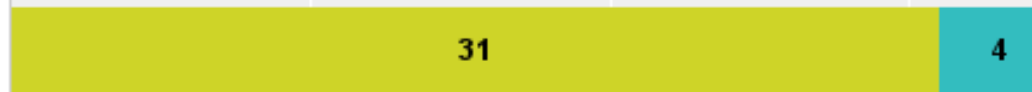
Multi-use trail along Reservoir Rd from the Dam to E. Strasburg Rd



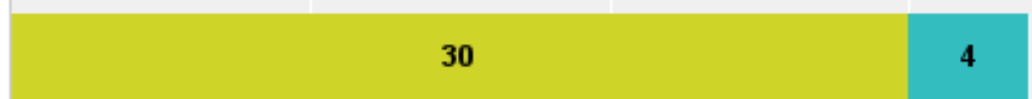
Trail from E. Strasburg Rd to existing pedestrian bridge



Stream footpath for fishing access in forest area



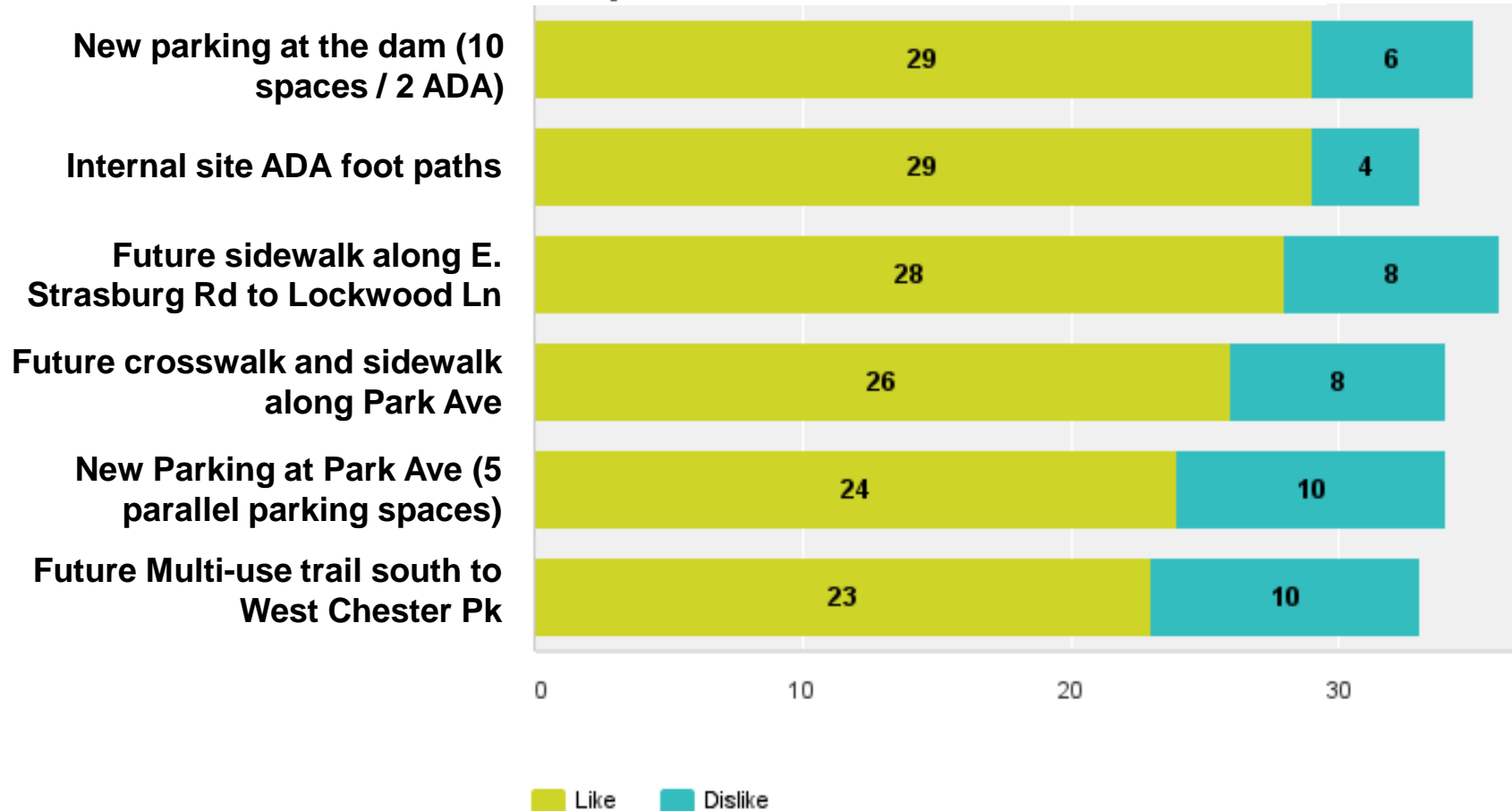
Future trail (from to E. Strasburg Rd to Suplee Open Space



Like Dislike

Public Survey #3

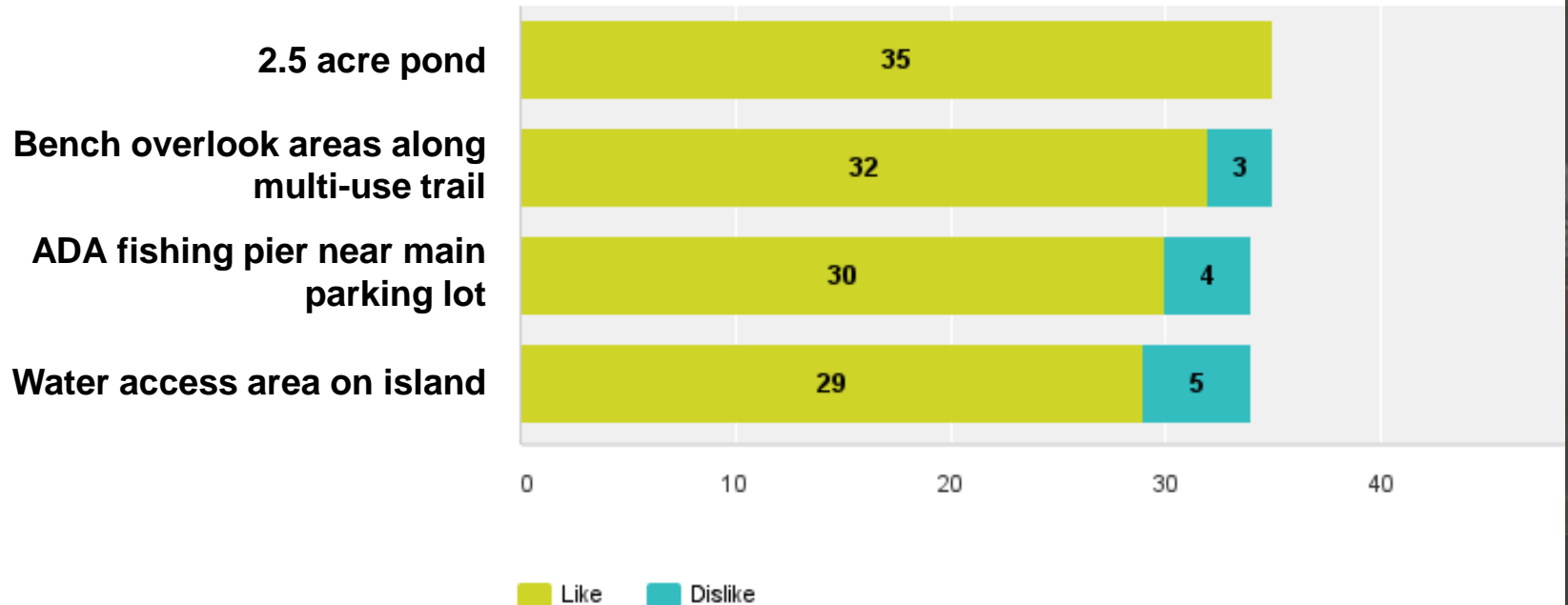
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Public Survey #3

Q6 Please specify which components you like or dislike from the options below:

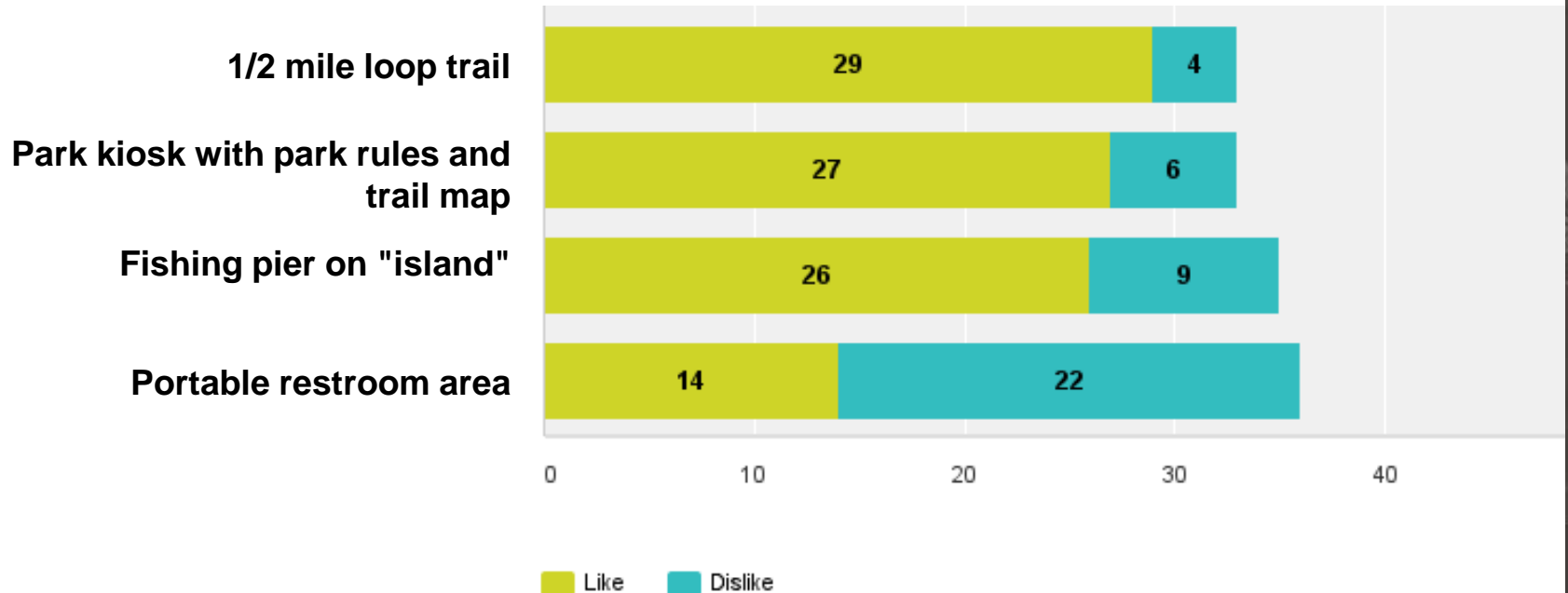
Answered: 36 Skipped: 4



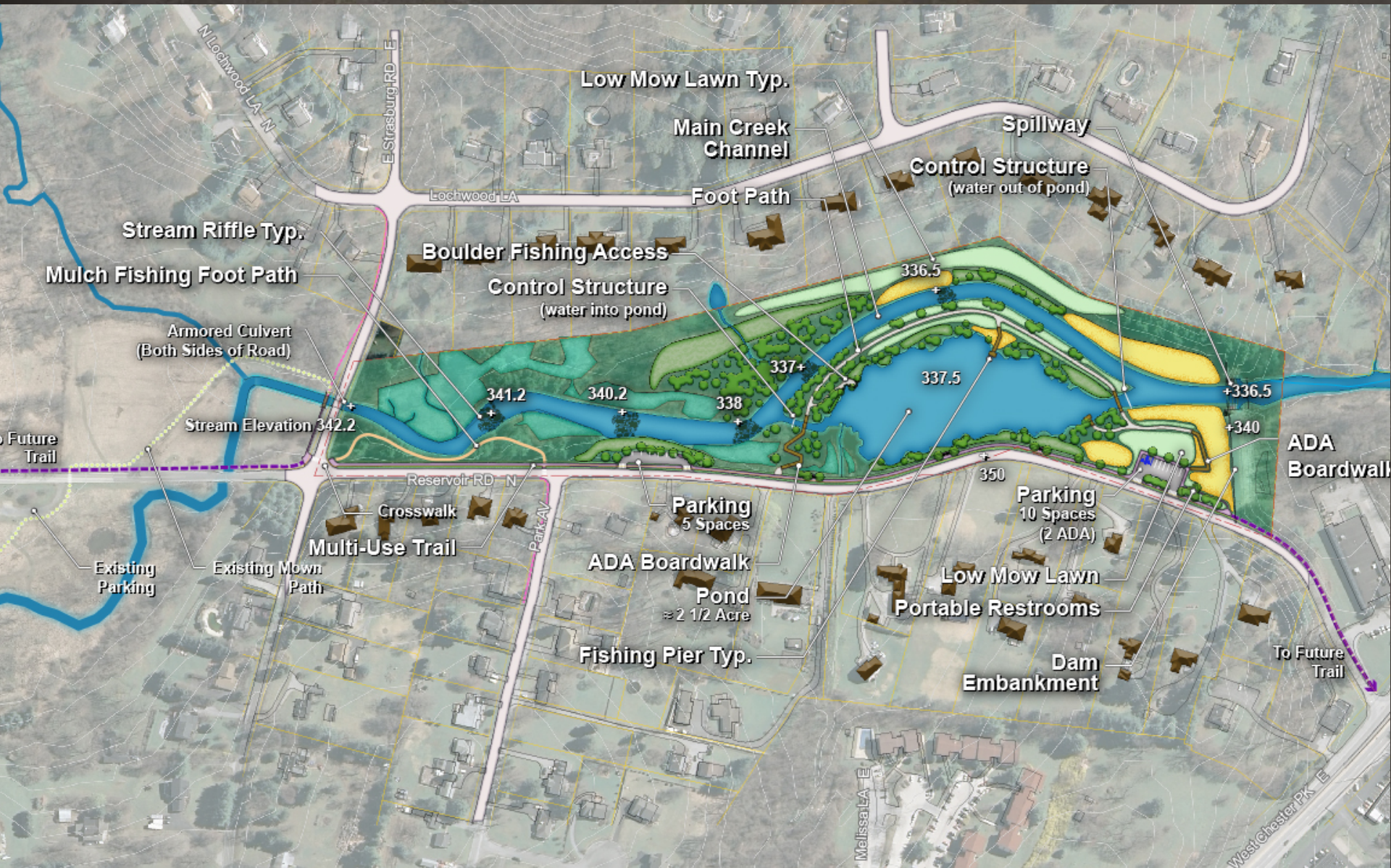
Public Survey #3

Q6 Please specify which components you like or dislike from the options below:

Answered: 36 Skipped: 4



Draft Master Plan



Draft Master Plan



Main Parking Area



Improvements:

- Parking Area
 - 8 reg. spaces
 - 2 ADA spaces
 - Driveway sight lines +250'
- Park Kiosk
 - Rules
 - Trail Map
- Fenced in Portable Restroom Area
- ADA access trail into site
- ADA fishing Pier
- Low Grow Lawn Area
- Low Meadow along Dam

Example Low Meadow



Example Low Mow Lawn



Example ADA Trail Surfaces



Example ADA Trail Surfaces



ADA Fishing Pier



Pond Area



Improvements:

- 2 ½ Acre Pond
- Pond forebay
- ½ Mile loop trail system
- Fishing pier
- Water edge access
- Riparian planting
- Low grow lawn along neighboring properties

Example Multi-Use Trail & Seating Areas



Water Edge Access



Example Pond Control Structure – Outfall Weir



Example Riparian Buffer



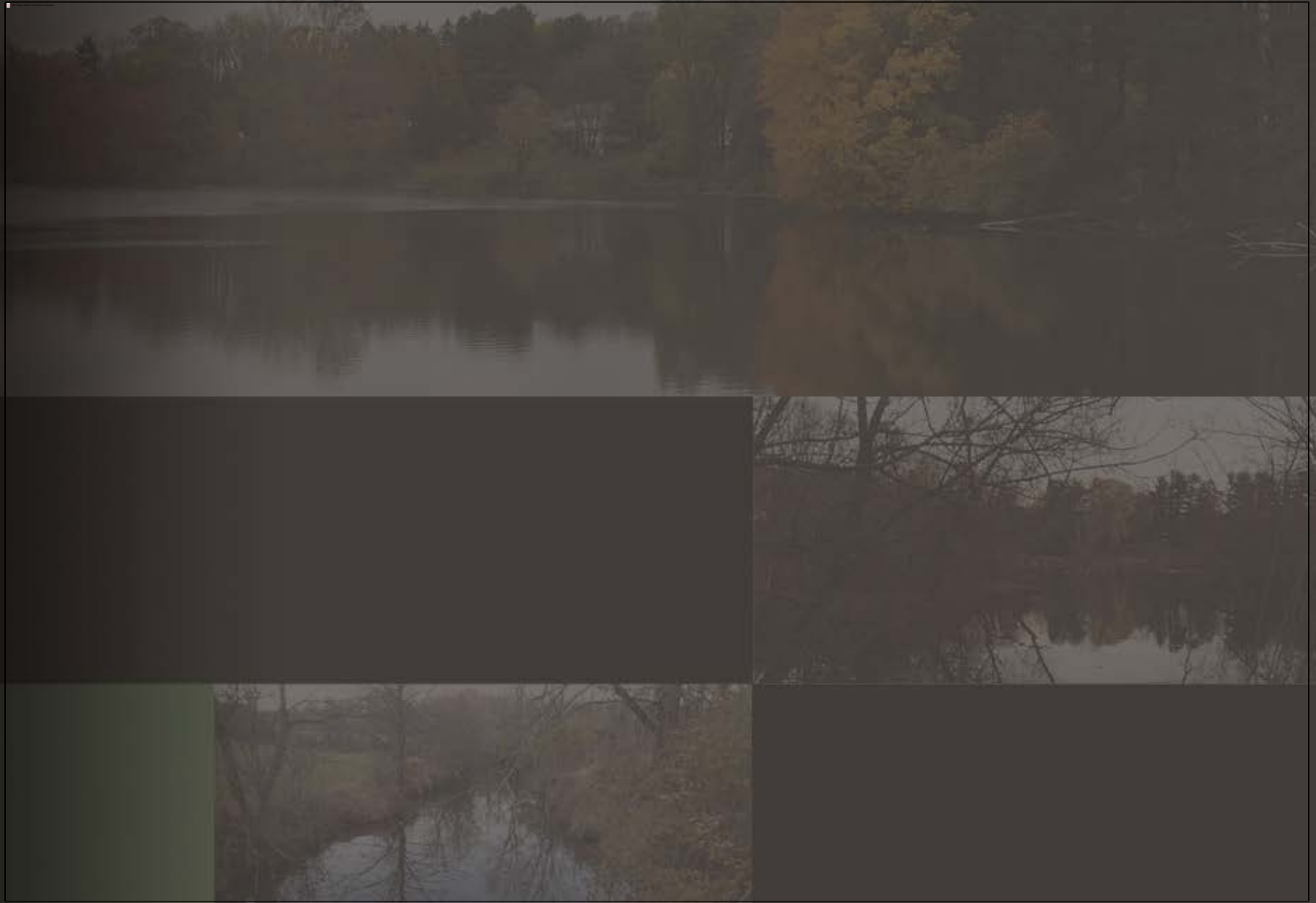
Stream Area



Improvements:

- Parking Area
- One-way
- 5 parallel spaces
- Fishing stream edge trail
- Stream Riffles
- Armor Culvert at Road

Example Stream Riffle



Earthen / Wood Chip Fishing Trail



Future Access North & East



Improvements:

- Crosswalk Improvement
- Trail Improvement to existing Bridge
- Future Sidewalk improvement to Lochwood Lane
- Future Extension of Multi Use Trail to Suplee Open Space Area

Future Access West



Improvements:

- Future Sidewalk improvement along Park Ave

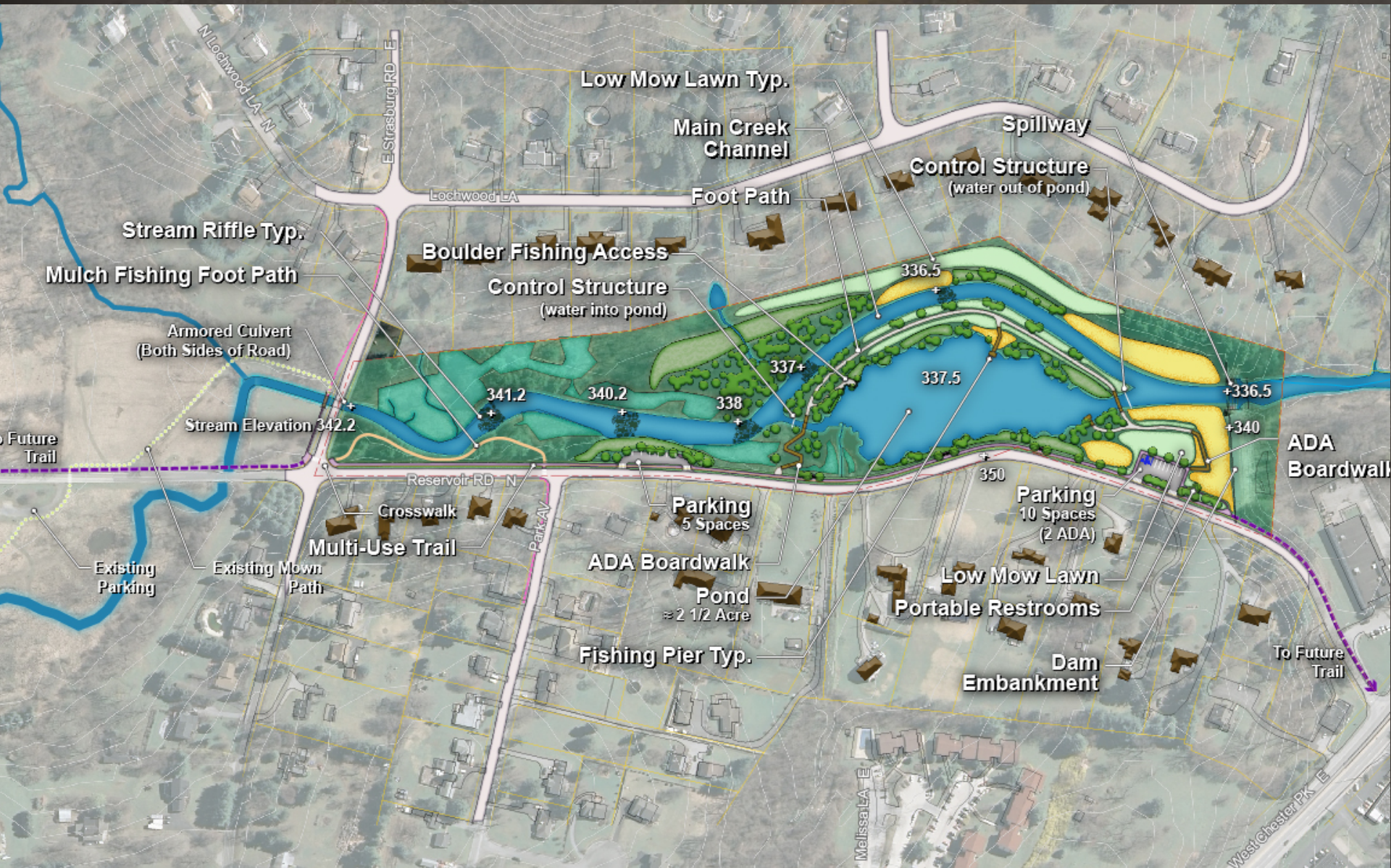
Future Access South



Improvements:

- Future Extension of Multi Use Trail to West Chester Pike

Draft Master Plan



ADA Access



Project Phasing



Phase

1

Site Preparation:

- Dam work;
- Stream riffle construction;
- Armor culvert at E Strasburg Rd;
- Site grading to create the pond, island, embankment for parking; and
- Construction of the pond.

Site Improvements:

- Construct main parking area; and
- Develop 2 boardwalks, island foot path, and a portion of the multi-use trail.

Project Phasing



Phase

2

Planting Improvements:

- Meadow establishment;
- Shrub plantings; and
- Forest restoration.

Project Phasing



Phase

3

Site Improvements:

- Construct secondary parking area;
- Extend multi-use trail to E Strasburg Rd;
- Crosswalk improvements at Reservoir Rd and E Strasburg Rd intersection;
- Construct 5 ft wide trail to existing pedestrian bridge; and
- Develop fishing access path along Chester Creek.

Project Cost

Estimated Costs of Development		
	Phase 1 Project Costs	\$ 963,771
	Phase 2 Project Costs	\$ 350,546
	Phase 3 Project Costs	\$ 76,964
	Total Costs of Development	\$ 1,391,280

Phase 1 Estimated Costs of Development		
	Work Item	Total Cost
	Demolition and Site Preparation	\$ 496,649
	Reservoir Road Mixed-Use Trail (South)	\$ 49,890
	Reservoir Road Parking Area, 10 Spaces (South)	\$ 26,170
	ADA Asphalt Walkway	\$ 2,461
	Stone Dust Foot Paths, 4"Depth	\$ 12,863
	Structures- Bridges & Boardwalks	\$ 131,200
	Phase 1	\$ 719,232
	General Project Cost (Mobilization, E&S, Construction Surveying)	\$ 50,346
	Construction Contingency (15%)	\$ 107,885
	Design and Engineering (12%)	\$ 86,308
	Phase 1 Project Costs	\$ 963,771

Project Cost

Phase 2 Estimated Costs of Development

Work Item	Total Cost
Structures- Fishing Piers	\$ 78,400
Planting	\$ 183,201
Phase 2	\$ 261,601
General Project Cost (Mobilization, E&S, Construction Surveying)	\$ 18,312
Construction Contingency (15%)	\$ 39,240
Design and Engineering (12%)	\$ 31,392
Phase 2 Project Costs	\$ 350,546

Phase 3 Estimated Costs of Development

Work Item	Total Cost
Reservoir Road Parking Area, 5 Spaces (North)	\$ 17,472
Reservoir Road Mixed-Use Trail (North)	\$ 38,436
Wood Chip Foot Paths, 5' Wide	\$ 1,528
Phase 3	\$ 57,436
General Project Cost (Mobilization, E&S, Construction Surveying)	\$ 4,020
Construction Contingency (15%)	\$ 8,615
Design and Engineering (12%)	\$ 6,892
Phase 3 Project Costs	\$ 76,964

60 day Review Period - Please submit written comment to:

Rick Smith, Manager

E-Mail: rsmith@eastgoshen.org

Township Project Website:

<https://eastgoshen.org/about-us/milltown-dam>

Tonight's Plans and Presentation:

<https://eastgoshen.org/boards/milltown-dam-committee>

Web Survey

<https://www.surveymonkey.com/r/MTDraftPlan>

**Please Share links with
Friends and Neighbors**

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Project Team

Simone Collins Landscape Architecture

Peter M. Simone, FASLA, RLA

Project Principle

Sarah Leeper, RLA

Project Manager

Melisa Barley, Landscape Architect

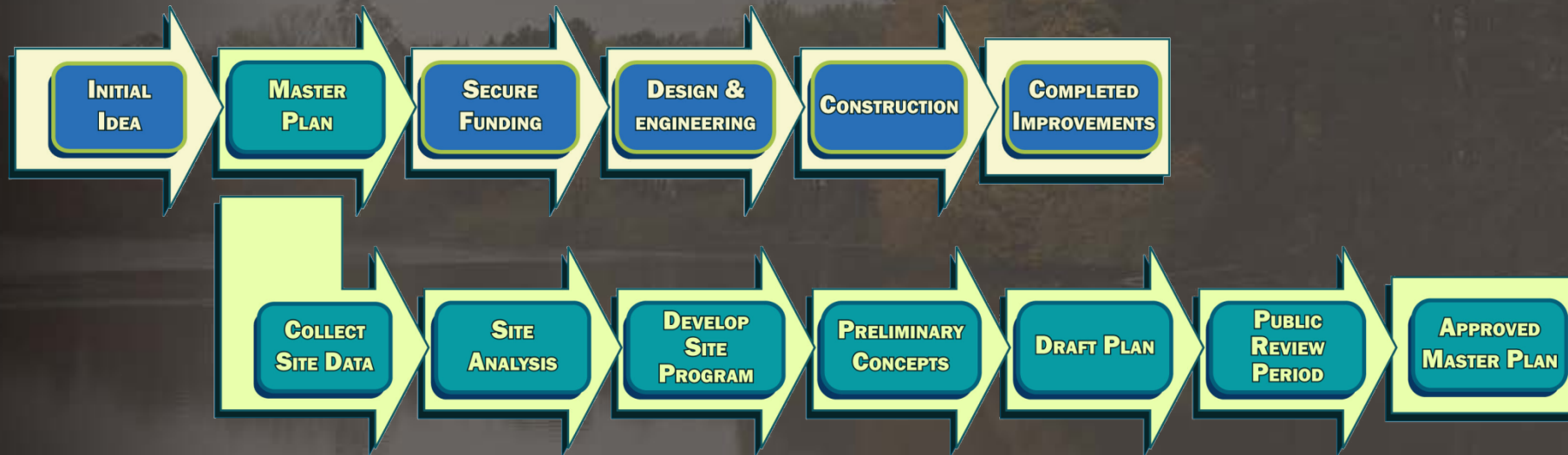
Project LA

Princeton Hydro

Geoffrey M. Goll P.E.

Civil Engineer – expertise in dam removal for dam safety compliance, fish migration, floodplain reconnection, and habitat restoration.

Master Plan Process



Transparent Public Process:

- 4 public meetings
- 4 committee meetings
- 3 Web surveys

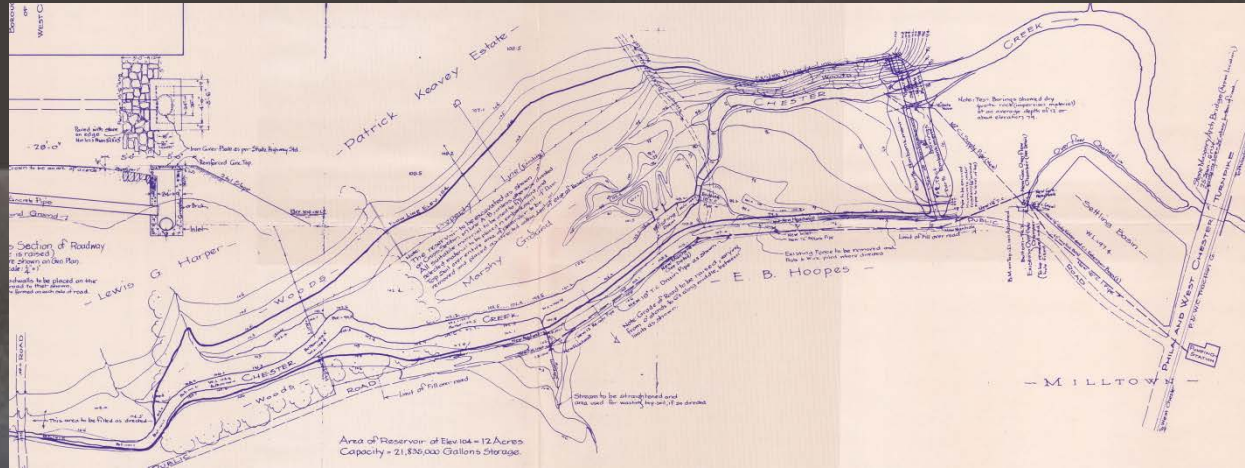
“All voices are heard and all ideas are honored”

Project Background

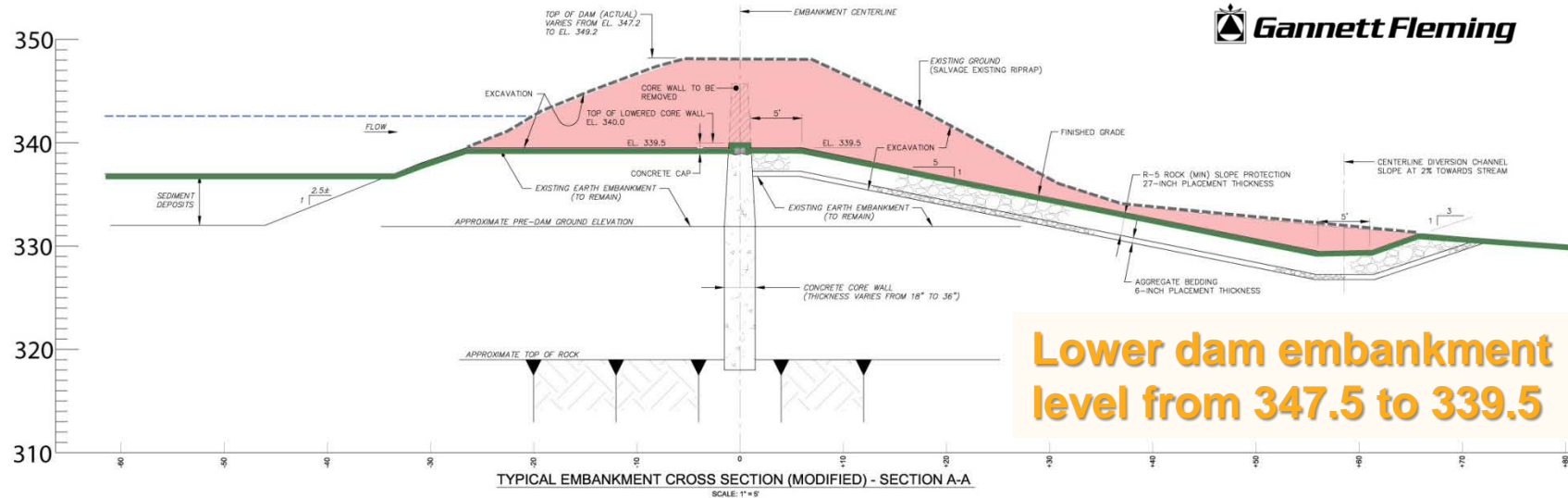
- The Milltown Reservoir is currently classified as a passive recreation area.
- The Committee has been asked to work with the consulting team to develop a park master plan and provide a park master plan recommendation to the Board of Supervisors.
- Board of Supervisors will make the final decision on the approval of the park master plan.
- The Milltown Dam site has tremendous opportunities.

Site History

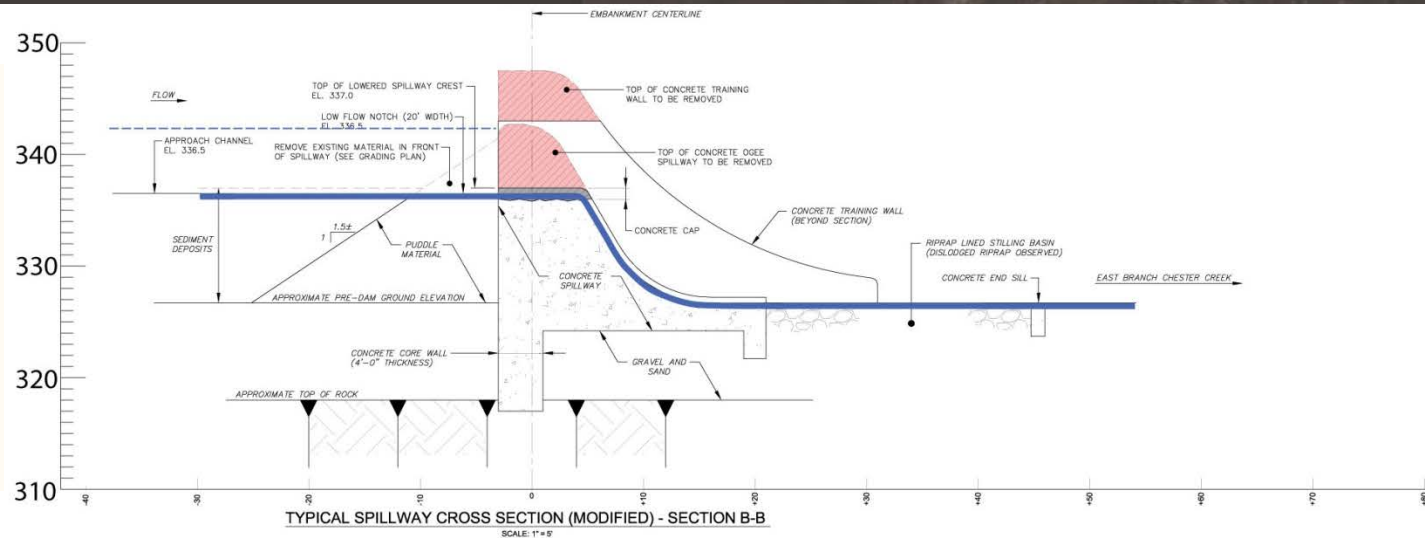
- 1920 Dam is constructed.
- 1965 Waterview Farms Subdivision constructed
- 1981-1986 Dam classified as unsafe and was repaired.
- 2011 Dam classified as unsafe under new DEP standards
- Various options for dam considered included:
 - Improving the spillway;
 - A partial breach of the dam; and
 - A full breach of the dam.
- 2016 On June 28th the Board of Supervisors voted to partially breach the dam.



Partial Dam Breach Concept



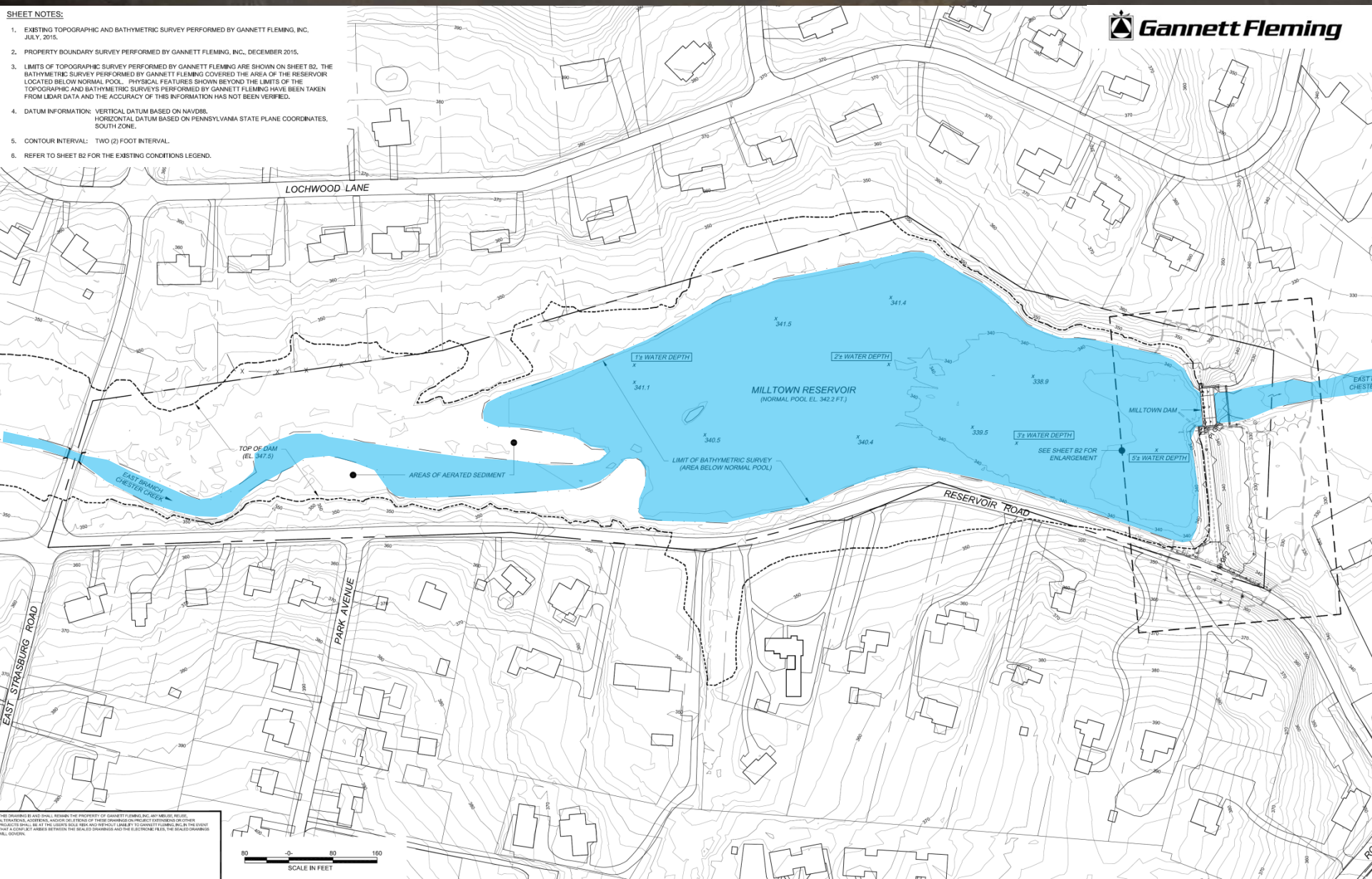
Lower spillway level from 342.2 to 337.0 with a low flow notch of 336.5



Partial Dam Breach Concept - Before

SHEET NOTES:

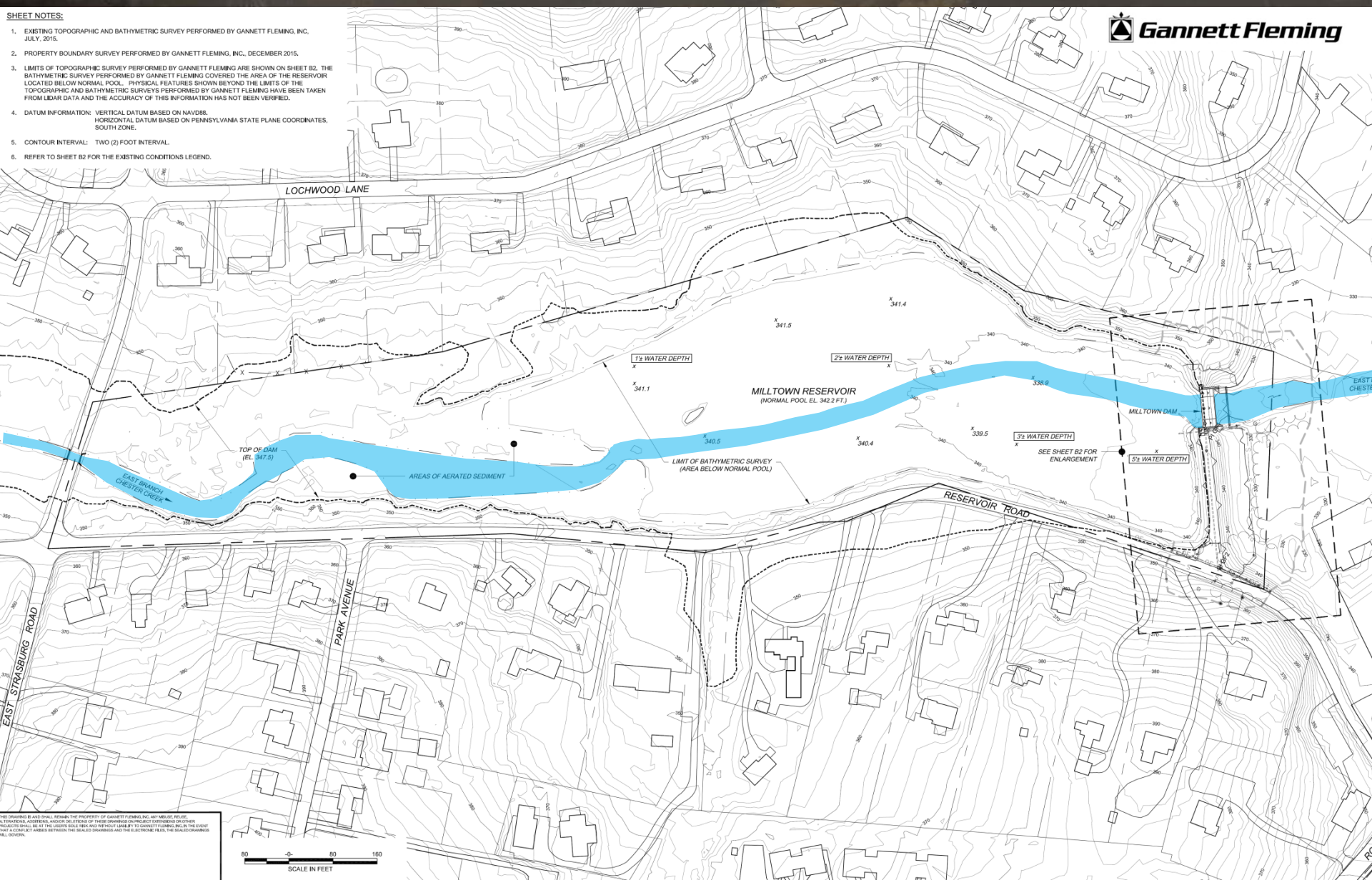
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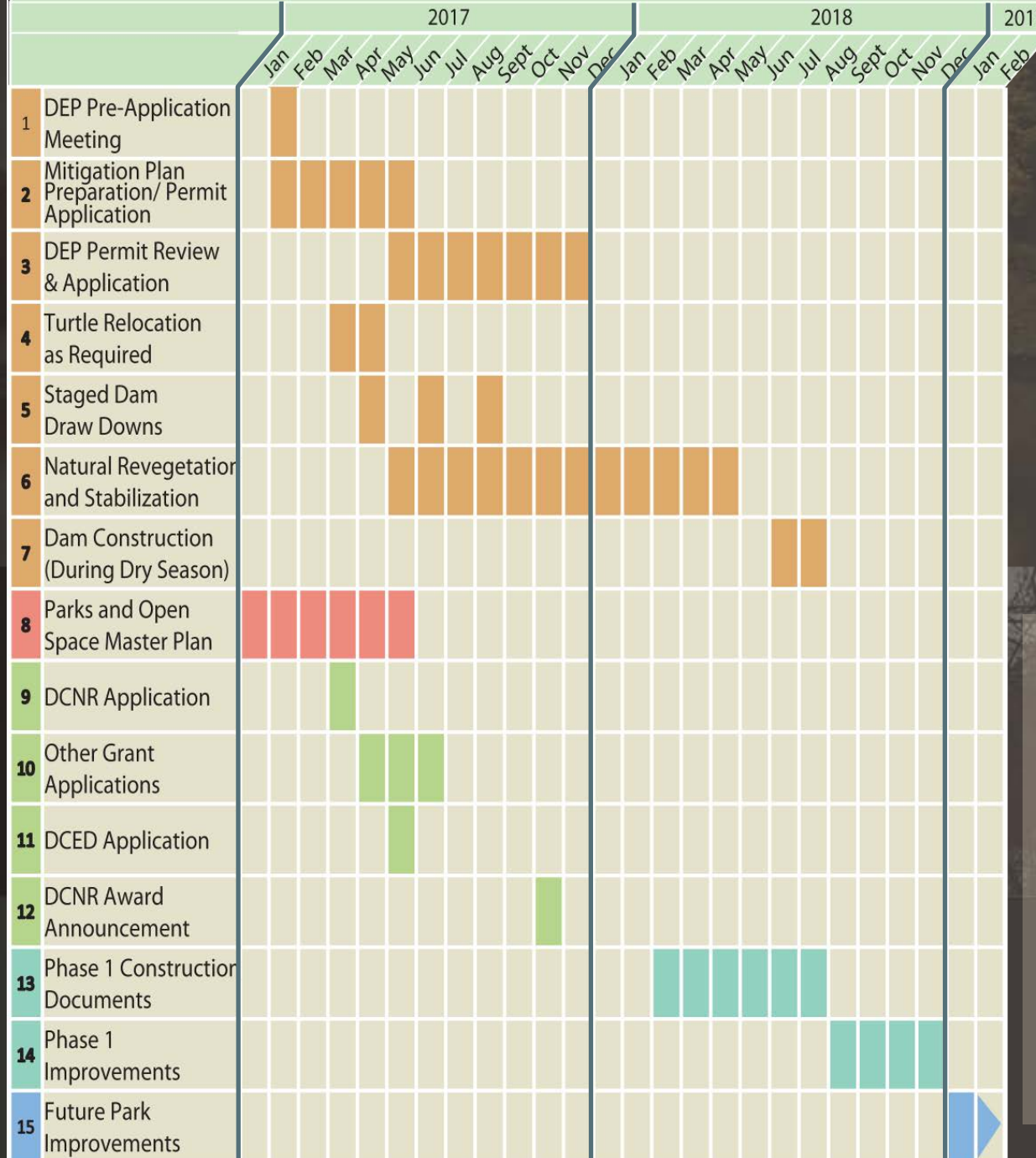
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
SITE TIMELINE




 Gannett Fleming

 Simone Collins










 Secure Matching Funds

 Possible Phase 1 Open space/ Park Improvements

 Future Open space/Park Improvements.

Open Space Plan & Central Chester Trail Plan

Existing Features

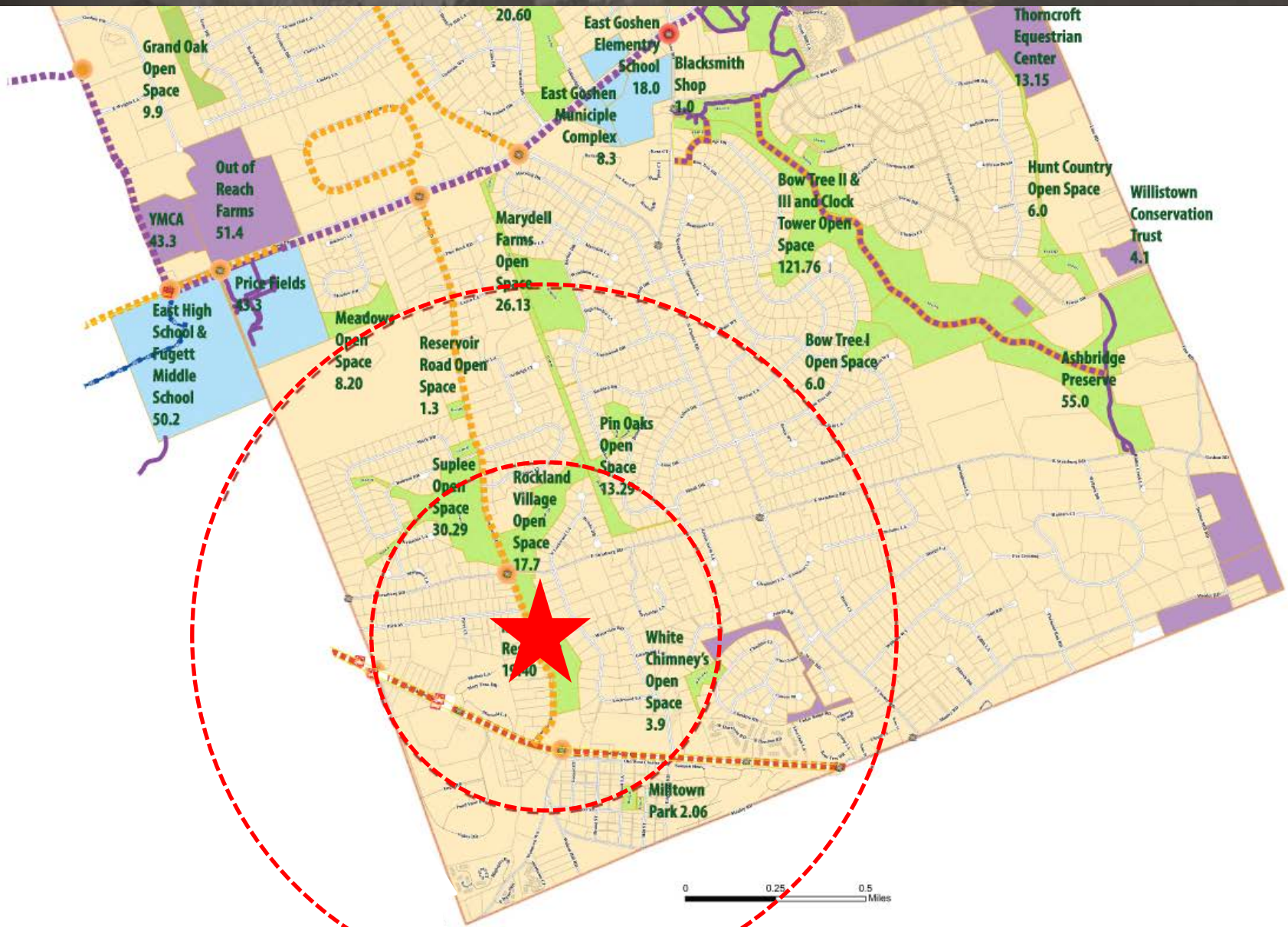
-  Existing Trails
-  PA Bike Route L
-  Existing Trailhead
-  Existing Trail Parking
-  Growth Centers
-  Intermodal Stop
-  East Goshen Open Space
-  HOA / Private Recreation
-  Schools

Proposed Features

-  Bike Lane
-  Shared Roadway
-  Multi-Use Trails
-  Restricted-Use Trails
-  Bicycle Boulevard
-  Signed Bike Route
-  Priority Corridors
-  Bike Rack
-  Trail Parking
-  Traffic Calming Table
-  Bike Signage Improvem
-  At Grade Trail Crossing
-  Signalized Crossing



Open Space Plan & Central Chester Trail Plan





Views from Strasburg Road



Views from Strasburg Road



Views from Strasburg Road



EXISTING SITE CONDITIONS

Views from Creek Edge



Views from Reservoir Road



Views from Dam Embankment



Views from Dam Embankment



Views from Lochwood Lane



Views from below Dam



GOALS

Goals and Priorities for the Project: Initially broad, then specific: “Develop a Park Master Plan” or “Bring People into the Park”

Facts: Existing land use, site conditions, outstanding natural resources, adjacent properties, existing trails, nearby open space sites, partners.

FACTS

CONCEPTS

Ideas for Attaining Project Goals: Can be basic needs “Provide Restrooms” or larger ideas “Link to key Nearby Sites”, or “Provide Memorable Play Experiences” “Create Destinations within the Park”

Goals Were expanded, revise & add new goals throughout the public participation process.

- Engage in an open and transparent exchange of ideas where all ideas are considered and where everyone's voice can be heard throughout the design process.
- Foster ecological sustainability through plant and animal diversity and by employing best practices in landscape and park design.
- Protect and preserve the privacy of adjacent and nearby residences through proper setbacks, screening and other techniques.
- Create landscapes that are low maintenance and that will create new cultural landscape values in each surrounding neighborhood.
- Develop realistic completion time frames for project benchmarks
- Maximize open water views.
- Create a world class passive recreation amenity.

Public Brainstorming

GOALS:

- Open and transparent design process
- Protect and Preserve Privacy
- Foster ecological sustainability
- Create low maintenance landscape

FACTS:

- Property
- Privacy
- Turtles
- Unobstructed peaceful large water view
- Insect Issues with wetland?

What Are We Losing?

- Wildlife
- Bald eagle
- Long views
- Fishing
- Hockey
- Ice skating

- Open water

- Joy

CONCEPTS:

- Scenic views from the road
- Water access
- Ice skating
- Fishing
- Buffer planting (Lochwood Lane)
- Open lawn
- World class facility
- Pond(s)
- Options for mowing
- Willow planting
- review DVRPC plan
- Wetland fore-bay
- Pond maintenance access
- Fencing
- 2 acre wetlands
- *Maximize water*
- Walking paths
- Natural stream banks

- Fish habitat
- Homeless
- Route 3 to Strasburg Road bike way
- Trash and litter concern
- Nuisance in park concern
- No trails
- No fencing
- Cross walks
- Mow near creek
- Please don't litter sign
- Bike trails
- Sidewalk from Strasburg Road to Lochwood Lane
- Use spoils to form trail bench
- Review Comprehensive plan requirements
- Money/ budget
- Keep trail to west
- Walking bridge on south at Strasburg Road
- Use existing bridge

Public Survey #1

55 Respondents

Question 9 – What do you value the most in the existing site:
Unobstructed scenic water views; and Habitat for plants and animals ranked most important

Question 10 – What do you want to see

#1 - Water Features such as pond(s) for fishing / scenic value

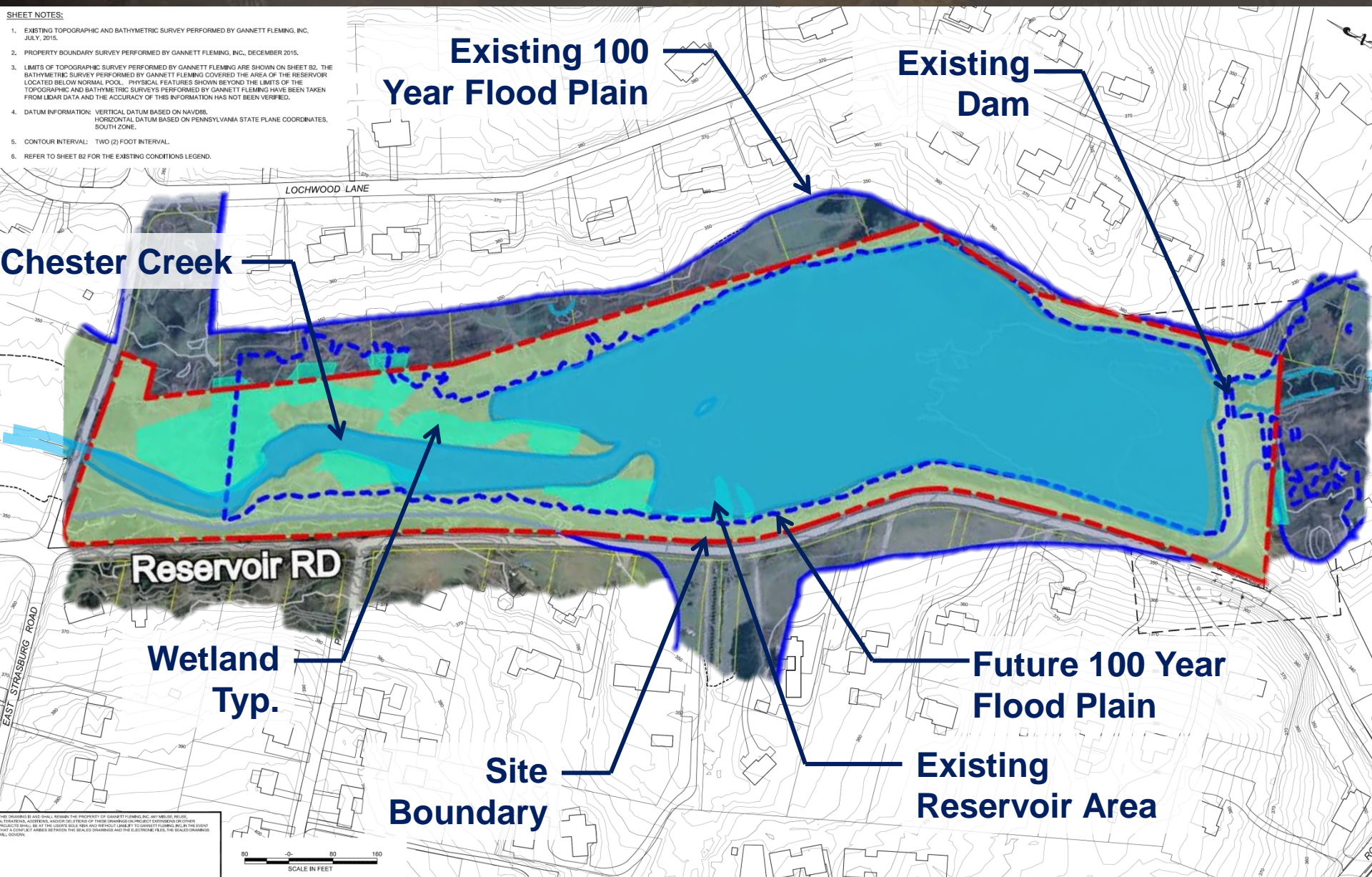
High Ranking:

- More trees in area
- Small parking area to access trails
- Walking trail(s)
- Bird houses and bat boxes
- Walking & Biking Trails

Existing Conditions Plan

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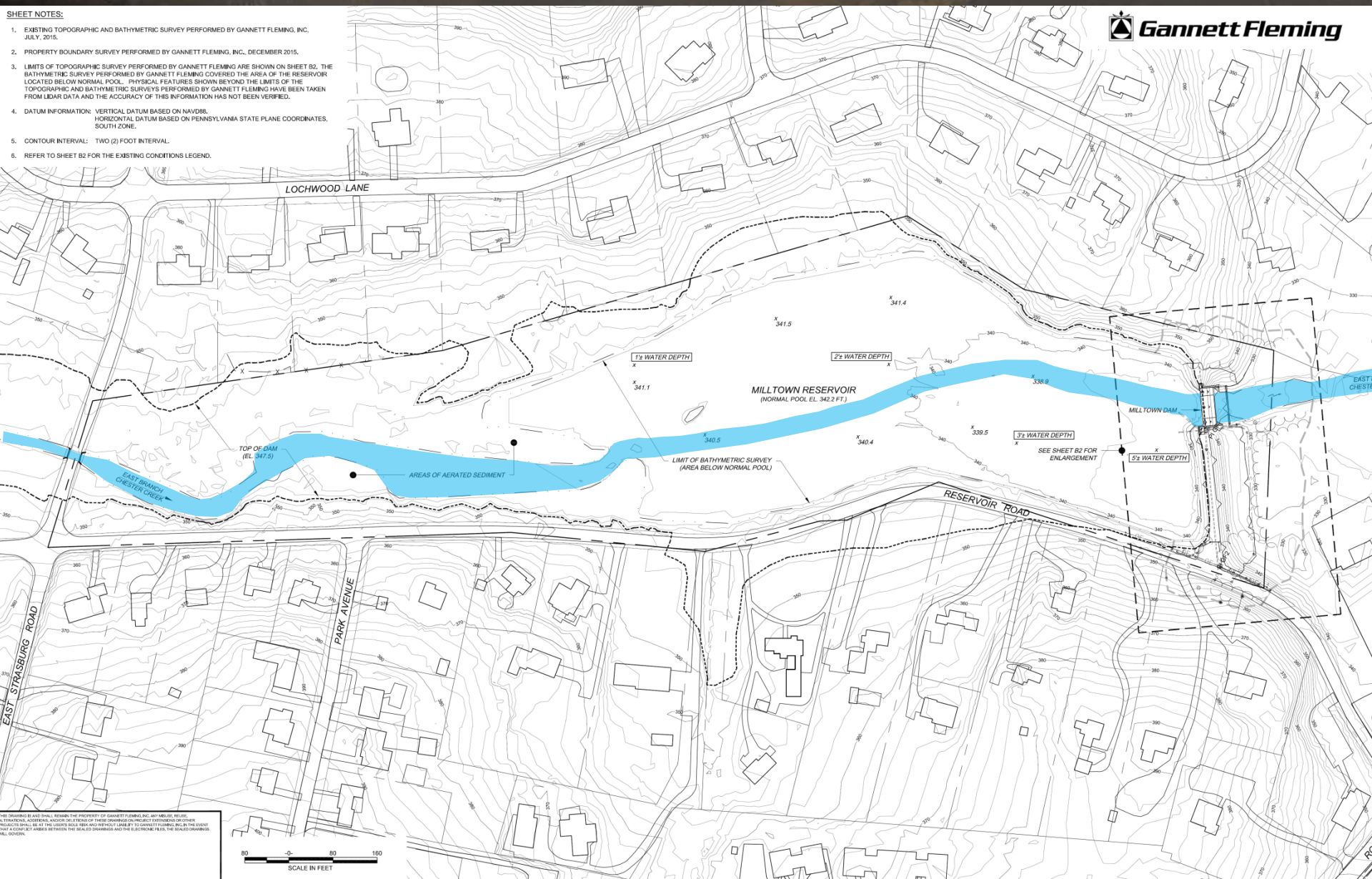
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Partial Dam Breach Concept – Stream Condition After

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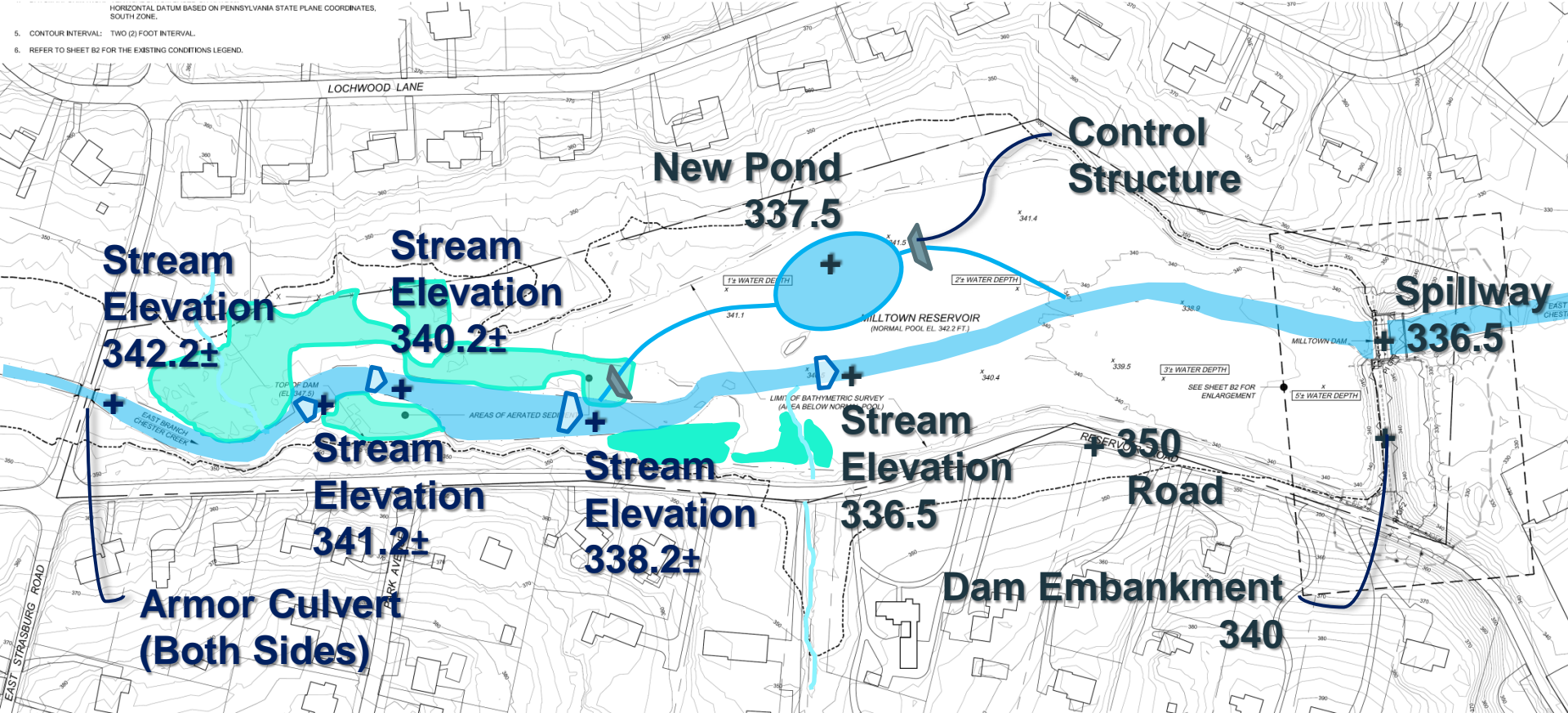
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Concept Bubble Plan

	Existing Elevation	New Elevation	Change in Elevation
Dam Spillway	342.2	336.5	5.7 ft
Dam Embankment	347.5	340	7.5 ft
Stream at Dam	342.2	336.5	5.7 ft
Stream at Strasburg Road	342.2	342.2	0 ft
Existing Wetlands	342.2 to 344	342.2 to 344	0 ft



Concept Elements:

Various design elements are incorporated into each concept. The following elements will be reviewed to understand the unique quality and benefits of each element and identify the objectives for including them in the concept plans.

- Pond
- Streams
- Riparian Buffer
- Low Mow / No Mow Lawn
- Meadow
- Wetlands

CONCEPTS Plans

Concept 1

- Small Habitat Islands
- 3 Acre Pond



Concept 2

- Large Island
- Reforestation
- 2 Acre Pond



Concept 3

- Multiple Ponds
- 1.5 Acre Ponds



CONCEPTS Plans

Concept 1: Was the most popular plan from the survey and Public Meeting Vote



Public Survey #2

79 Respondents

Question 5 - Trails:

- Overall support for trails
- Majority of respondents focused on site trails and local neighborhood access to site.

Question 6 – Current Walking / Biking trends:

- Very little use.
- Reservoir Road used the most.

Question 7 – Water Features:

- Generally positive response to all features.
- Fishing access ranking the highest

Question 8 – Types of Restoration Plantings:

- Generally positive response for all types.

Question 10 – Tradition Park Amenities:

- Generally positive response for all items.

Contact Info: Please Copy All Parties

Sarah Leeper, Project Manger
Simone Collins Landscape Architecture
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E-Mail: sleeper@simonecollins.com

Peter Simone, Project Principle
Simone Collins Landscape Architecture
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E-Mail: psimone@simonecollins.com

Rick Smith, Manager
East Goshen Township
(610) 692-7171
E-Mail: rsmith@eastgoshen.org

Draft Master Plan

