

Garden Proposal Review Form

Over \$150? Yes ▾
Submit Date: Jun 14, 2026
Project Review Date: Jun 18, 2026

Interior Perimeter Water Lines

Proposal Overview

Project/Program Name: Interior Perimeter Water Lines

Description:

Install UV Stabilized High Density Polyethylene (HPDE) tubing connected to the high pressure water hookup along the full perimeter of the garden with periodic valve controlled access points. This will provide all garden beds with easy access to high pressure water with minimal hose spooling. This will also help to reduce the amount of hosing needed to be maintained and water waste due to pin holes and faulty connections as there will be less dragging of hoses and will eliminate the need to daisy chain hoses.

Benefits/Goal:

Help our gardens flourish by making access to water more readily available, providing easier access to those with various abilities, and increasing sustainability through use of more durable materials and reducing water waste.

Problem Statement:

Our garden has three primary water sources, each with their own set of problems. The net result is that gardens along the Northern side and central corridors of the garden are difficult to water and there is wasted water.

Rain Capture

We have several rain barrels, however due to the small footprint of the shed they are supplied by the water they provide is insufficient for our 54 bed community garden. Even with plans to utilize the pavilion as another rain capture system, we will still require supplemental water from an external source.

Low Pressure Hookup

The low pressure water hookup, located in the South East corner of the garden is quite limited in range due to the lack of pressure and can really only service the Eastern side and South East corner of the garden. However it is our only always-on water source. This makes it convenient for things like ensuring the proper moisture in our compost bins. That said the current hose setup falls just shy of reaching the compost bins.



Garden Proposal Review Form

Over \$150? Yes ▾

Submit Date: Jun 14, 2026

Project Review Date: Jun 18, 2026

High Pressure Hookup

The high pressure water hookup has two access points, one in the South West corner and one in the South East (via a series of daisy chained hoses). The pressure is high enough that it can service the full garden, however given the limited access points it requires unspooling of large amounts of daisy chained hoses to access most beds – over 200 feet of hosing for beds along the North side. This also requires dragging the hose long distances across the blacktop which can be physically challenging for those with various abilities, and also leads to a significant amount of wear and tear on the hoses themselves. Even more physically demanding is re-spooling the hoses after use, and often is simply not done, leading to tripping hazards.



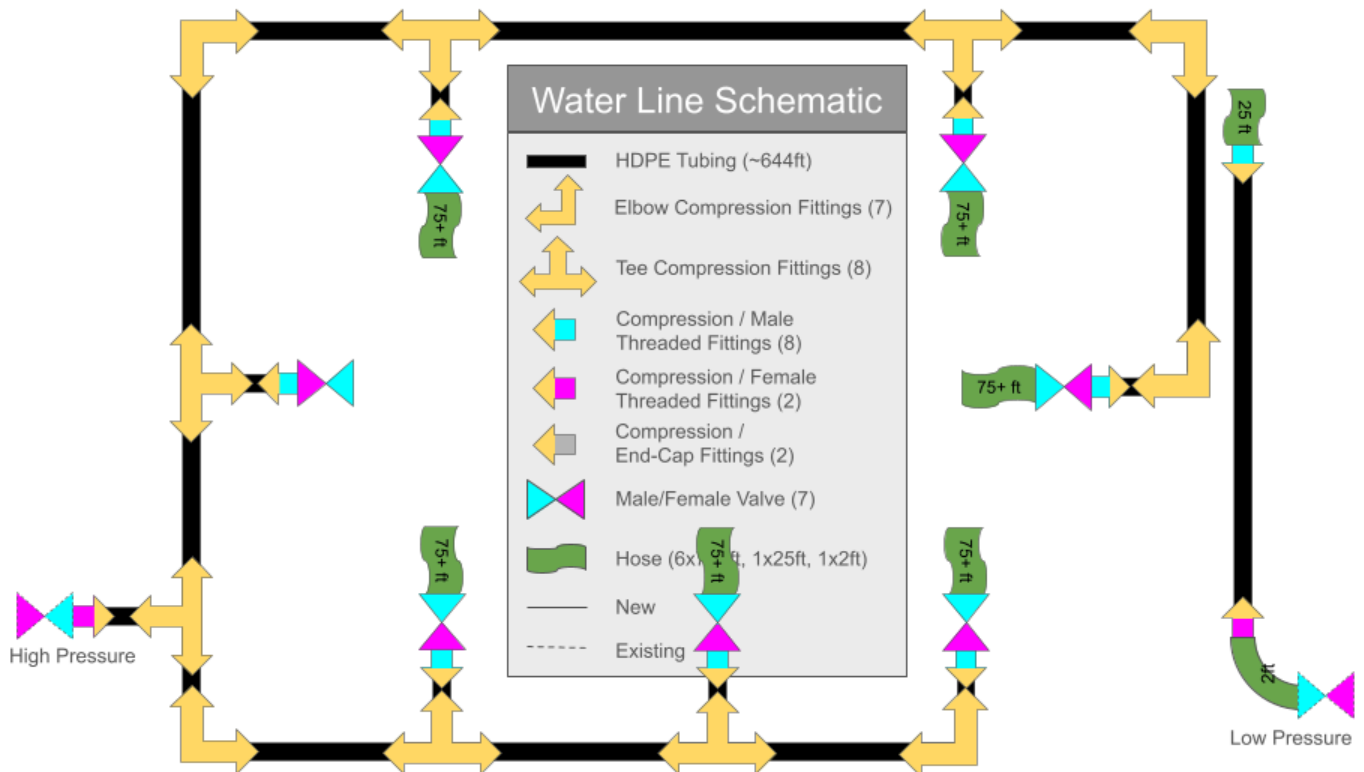
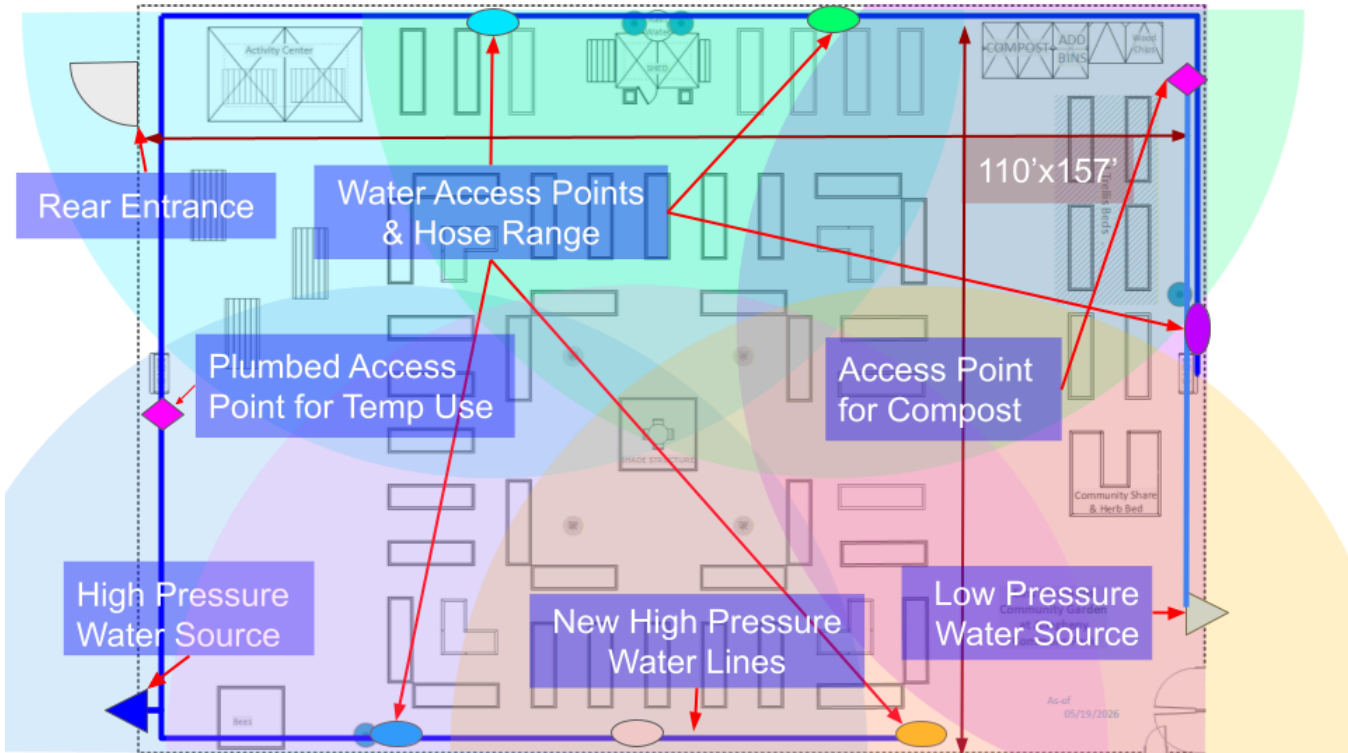
Solution Details

High and Low Pressure Hookup Expansion

Starting at the high pressure hookup, UV stabilized $\frac{3}{4}$ inch HPDE tubing will run along the perimeter of the garden fence in both directions. HDPE tubing is an agricultural industry standard for irrigation systems that is built to last over 50 years, representing a long term investment in reducing future environmental impact of the garden. We will need to measure the pressure (PSI) and flow rate (GPH) to ensure fittings are sufficient for the application. Tubing will be hung at the top of the fence to bypass the rear North West entrance. Access locations will be positioned at the center West side, center East side, two on the North side, and three on the south side. Each access point will drop down and have an independent shutoff valve at ~3ft high. Lightweight 75ft+ commercial grade hose, commercial grade hose wand/nozzle, and a hose hanger zip tied to the fence will be positioned at all but the West side access point. The West side access point will serve for future purposes but does not warrant the additional expenses for garden bed watering accessories at this time. To simplify the process of maintaining proper compost moisture, the low pressure water line will also be extended with HDPE tubing along the East side of the garden. See below diagrams for the access point locations, hose coverage, and approximate plumbing schematic.

Garden Proposal Review Form

Over \$150? ☒ Yes ☐ No
Submit Date: Jun 14, 2026
Project Review Date: Jun 18, 2026



Garden Proposal Review Form

Over \$150? Yes ▾
Submit Date: Jun 14, 2026
Project Review Date: Jun 18, 2026

Project Team/Support

Coordinator: TBD

Team Members: TBD

Supporting Gardener/Community Signatures:

(at least 12 required prior to submission. The Review Board may request additional. May use attachment)

Budget

(include initial estimates for submittal – review board may request budget/project updates)

Required Materials and Cost:

Water Lines and Additional Supplies			
500ft UV Stabilized ### psi ¾" IPS HPDE Tubing (example)	\$175	2	\$350
100 Count 14 inch UV Resistant Black Zip Ties (example)	\$5	1	\$5
Stainless Steel Hanger Tape (example)	\$10	1	\$10
1" UV-black polyethylene split loom protective sleeving			
Nuts and bolts to secure hanger tape			
Subtotal			\$365
High Pressure Fittings and Hoses			
¾" IPS Insert Stiffeners (example)	\$2	43	\$86
¾" IPS 90° Elbow Compression Fitting (example)	\$13	5	\$65
¾" IPS Compression x Compression x Compression Tee Fitting (example)	\$19	6	\$114
¾" IPS Male NPT x Compression Fitting (example)	\$12	7	\$84

Garden Proposal Review Form

Over \$150? Yes ▾
Submit Date: Jun 14, 2026
Project Review Date: Jun 18, 2026

¾" IPS Valve Female NPT x Male GHT (example)	\$19	7	\$133
¾" IPS Female NPT x Compression Fitting (example)	\$15	1	\$15
Commercial Grade 75ft+ UV Resistant Potable Water Hose (example)	\$75	6	\$450
Commercial Grade Watering Wand (example)	\$37	6	\$222
Hose Hanger (example)	\$10	6	\$60
Winterization Air Inlet			
square-cutting poly tubing cutter			
deburring/chamfer tool			
Subtotal			\$1229
Low Pressure Fittings and Hoses			
¾" Male Threaded x Compression Fitting (example)	\$12	1	\$12
¾" Female Threaded x Compression Fitting (example)	\$15	1	\$15
¾" 2ft Hose (example)	\$15	1	\$15
Commercial Grade 25ft UV Resistant Potable Water Hose (example)	\$33	1	\$33
Subtotal			\$75
Total			\$1666

Fundraising Plan and Goals:

We will self fund the water line improvements.

Post Approval Schedule

(if approved, what are the major steps and how long they take)

Project Steps and Timeline:

- 1-2 days - Install tubing and fixtures for high and low pressure water lines and hoses

Garden Proposal Review Form

Over \$150? Yes ▾
Submit Date: Jun 14, 2026
Project Review Date: Jun 18, 2026

Ongoing/Post Build Management

(if approved, ongoing maintenance steps, frequency & cost estimates)

Maintenance and Management Requirements/Plan/Budget:

- Blow out lines with all valves open to winterize them for freezing temperatures
- Disconnect interconnection lines from rain barrels for winter
- HDPE tubing themselves should last 50+ years
- Periodically check compression fittings for leaks
- Periodically check hoses for pin holes or bad gasket

Required Approvals/Reviews

(Review Board may advise on subsequent required approvals)

Person/Group/Agency	Required	Approved	Date	Approved Via	Priority/Notes
Garden Review Board *	Y	Y	Jun 18, 2026	Email	
Dept. Public Works	N	N/A			
Allegheny Commons Init.	N	N/A			
Pgh. Parks Conservancy	N	N/A			
Art Commission	N	N/A			
PLI (Permits, License & Inspection)	N	N/A			
Feedback:					

* Consisting of Garden Coordinator(s), Treasurer, EACC Board Representative, At Large Garden Member. The review meeting will be scheduled with the Review Board and Project Coordinator/Team to discuss the project prior to approval.

