



DESIGN GUIDE



www.helixlifesupport.com

How to Use the Helix Design Guide

The Helix Life Support Design Guide was created to help homeowners and contractors understand the different pond construction techniques and philosophies that are standard practice in the pond industry today.

When outlining the goals and expectations of your pond before building, you can determine the type of pond construction that best fits your desires. The schematics in the following pages along with the specifications and philosophies will help you understand the different pond construction styles and maintenance requirements.

The Helix Design Guide should be used as a reference to help determine which pond meets your goals and expectations. The schematics in the following pages do not encompass all of the possibilities and pond design configurations.

Consult with your Authorized Helix Retailer or an Authorized Helix Contractor who can answer questions regarding your specific design.

Life is Short, Enjoy Koi!



COLOR INDEX



HELIX FILTRATION FLOW LINES



HELIX MAINTENANCE WASTE LINES



HELIX AIR FLOW LINES



AWARD WINNING
INNOVATIVE
DURABLE
COMPACT
FISH FRIENDLY



Floating Bio Media



Moving Bed Waterfall Filter

Self-Cleaning
Manage Huge Fish Loads
Grow Your Koi Huge

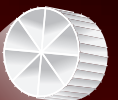


Patent Pending



Helix Pond Skimmer

Fish-Friendly
Compact Footprint
2012 Pond Product of the Year



Bio-Mech Reactor

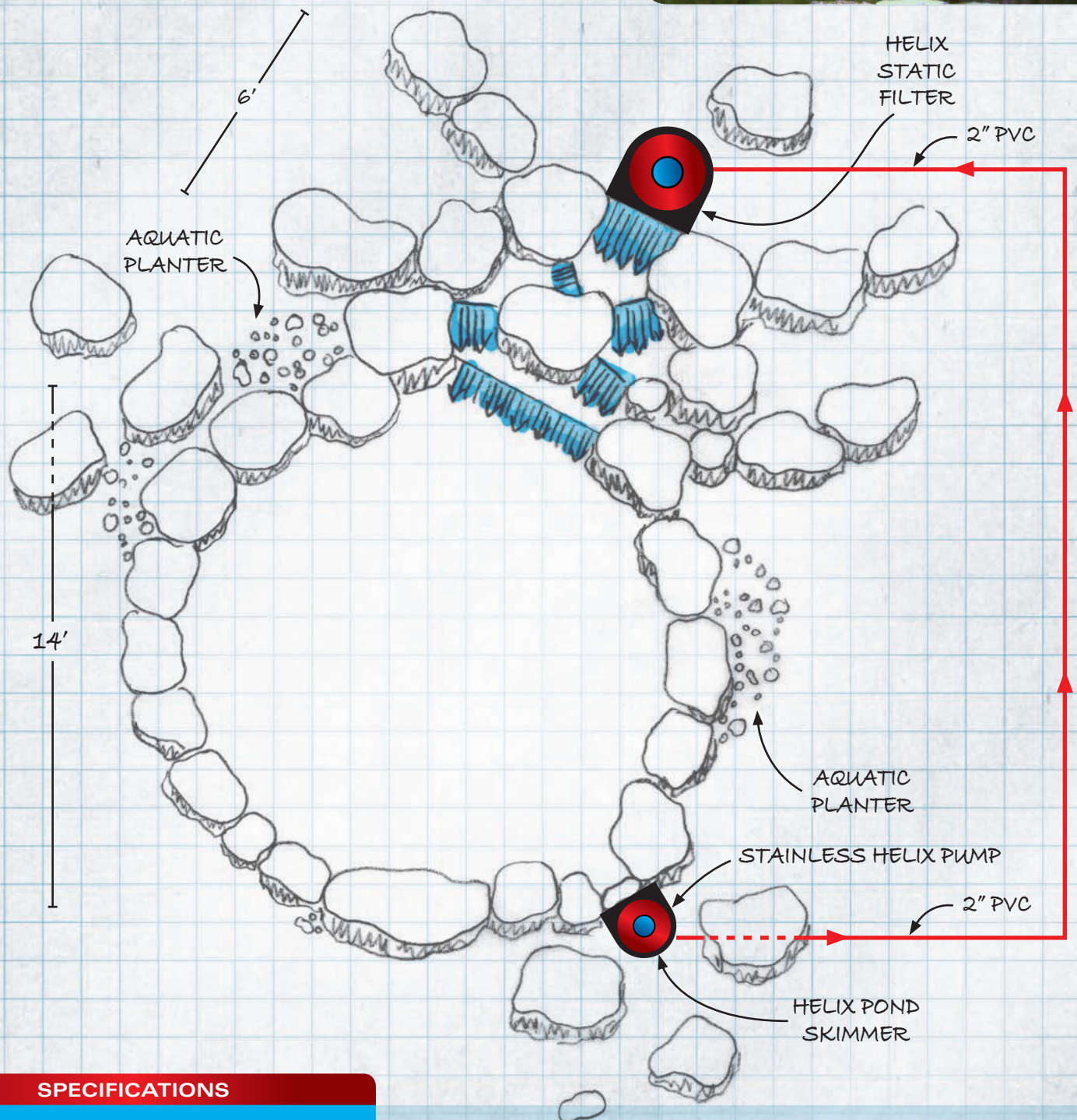
Easy to Service
Easy Installation
Air Assist Clean Cycle

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WATER GARDEN



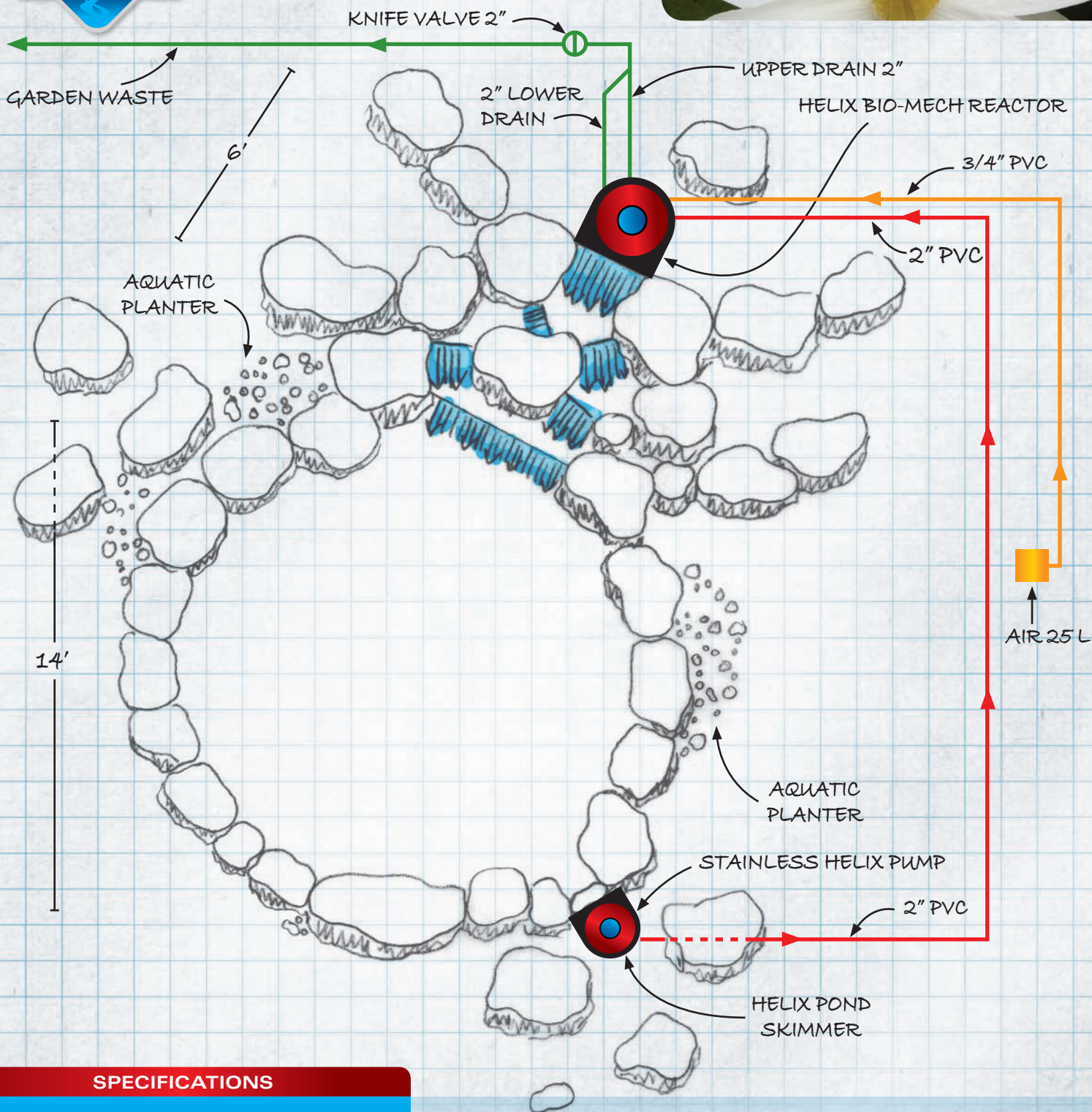
SPECIFICATIONS

- Helix Pond Skimmer
- Helix Static Filter
- Helix Submersible Pump
- Rocks & Gravel
- Aquatic Plants
- Fish

Water Garden Pond Philosophy – This is a fantastic low maintenance pond that relies on Mother Nature to help manage water quality with aquatic plants and weekly additions of beneficial bacteria. This low maintenance pond requires simple weekly maintenance and minimal quarterly maintenance. An annual drain is recommended to thin aquatic plants and thoroughly clean the gravel bed on the floor of the pond. The water garden pond is typically 18" to 24" deep. We recommend stocking the pond conservatively with goldfish and/or small koi. This pond is not suitable for large adult koi as a long-term habitat.



ADVANCED WATER GARDEN / ECOSYSTEM POND



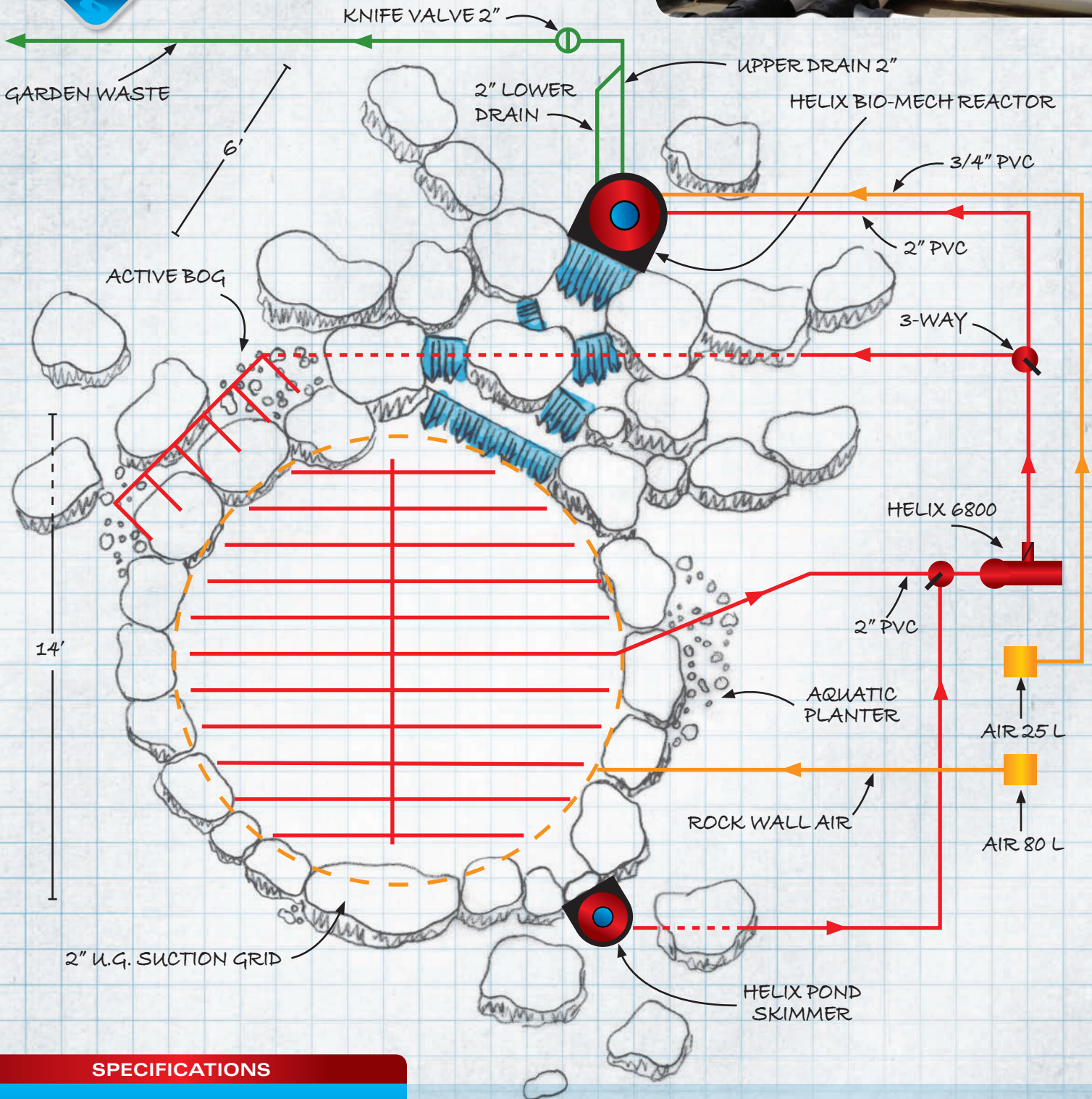
SPECIFICATIONS

- Helix Pond Skimmer
- Helix Bio-Mech Reactor
- Helix Submersible Pump
- Rocks & Gravel
- Aquatic Plants
- Fish
- Aeration

Advanced Water Garden / Ecosystem Pond Philosophy – As the water garden owner becomes more infatuated with the hobby and outdoor lifestyle, the pond owner has increased goals and expectations. By simply increasing the bio filtration and adding aeration to the pond, this creates better water quality for the inhabitants such as koi, goldfish, turtles, minnows and algae eaters. The pond maintenance will remain the same with simple weekly maintenance; minimal quarterly maintenance and an annual draining is recommended to thin aquatic plants and thoroughly clean the gravel bed.



ADVANCED UNDER GRAVEL SUCTION GRID ECOSYSTEM



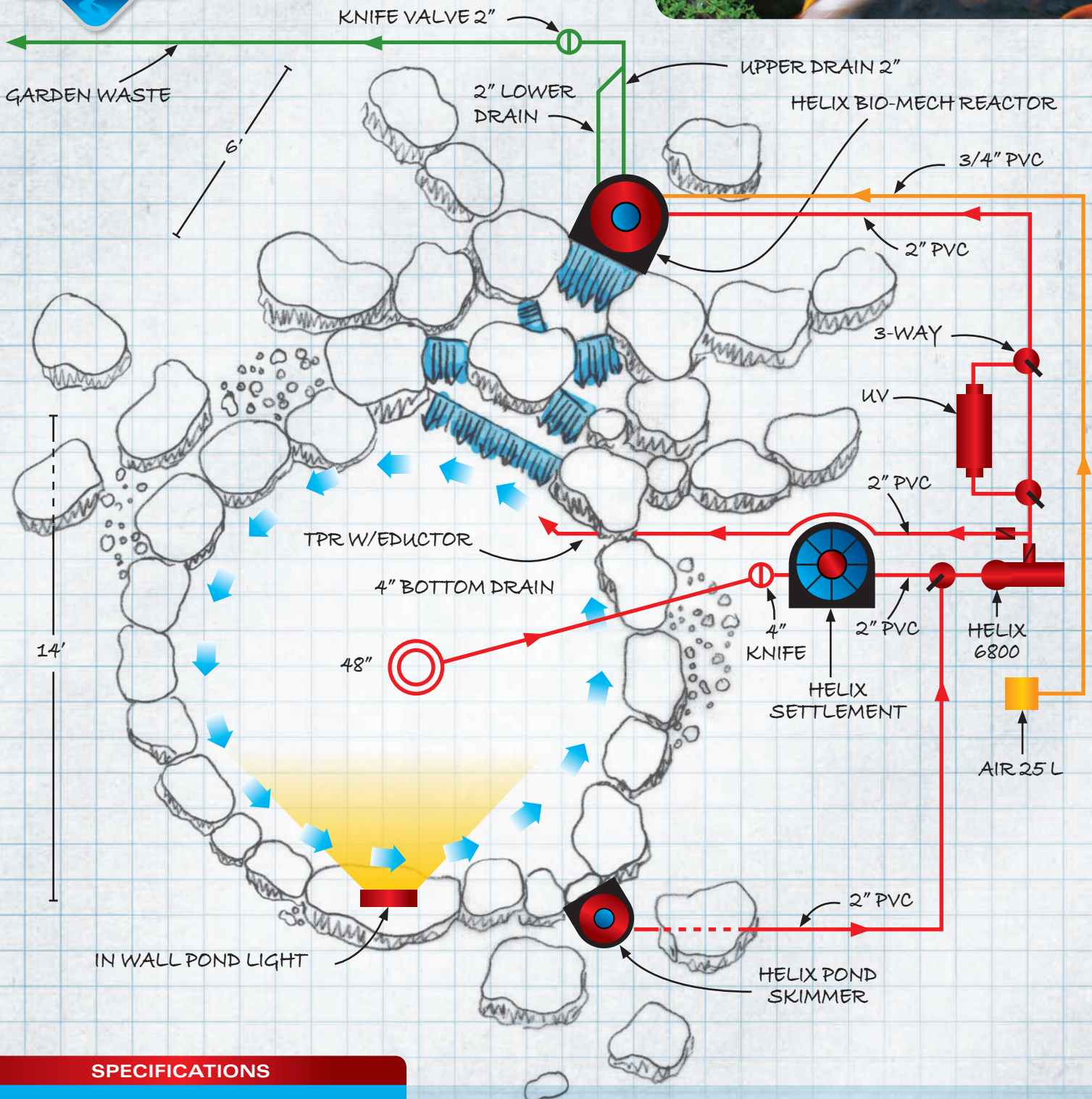
SPECIFICATIONS

- Helix Pond Skimmer
- Helix Bio-Mech Reactor
- Helix External Pump
- Rocks & Gravel
- Aquatic Plants
- Fish
- 30" to 36" minimum Depth
- Under Gravel Suction Grid
- Aeration
- Active Aquatic Bog Filter

Advanced Undergravel Suction Grid Ecosystem Pond Philosophy – The Pond with an Under Gravel Suction Grid greatly improves water clarity and water quality, reduces annual maintenance and allows the homeowner to stock the pond with larger fish populations. The entire floor of this pond becomes a living bio-filter and digests debris that settles to the bottom of the pond. This is a very low maintenance pond, requiring simple weekly maintenance and minimal quarterly maintenance including thinning out aquatic plants in the active bog filter. Annual draining is NOT required for deep cleaning. This pond is suitable for large koi as a long-term habitat.



DEDICATED KOI POND



SPECIFICATIONS

- Minimum 4' Depth
- NO Rocks
- NO Gravel
- NO Aquatic Plants
- Remote Area for Filtration
- Bottom Drain
- Helix Pond Skimmer
- Helix Settlement Tank
- Helix Bio-Mech Reactor
- Helix External Pump
- Ultra-Violet Clarifier
- Aeration

Dedicated Koi Pond Philosophy – This pond is designed with the sole purpose of showcasing koi fish without distraction and creating an environment that does not require annual draining of the pond. The Dedicated Koi pond relies on the use of technology to manage water quality. The main objective is to remove all organic waste and solids from the pond via skimmers & bottom drains. Once the solid waste is removed and separated from the water column, clear water is processed in the bio-filter, run through a UV clarifier and returned to the pond. The Dedicated Koi Pond requires 15 to 30 minutes of maintenance each week and does not require an annual draining for deep cleaning.