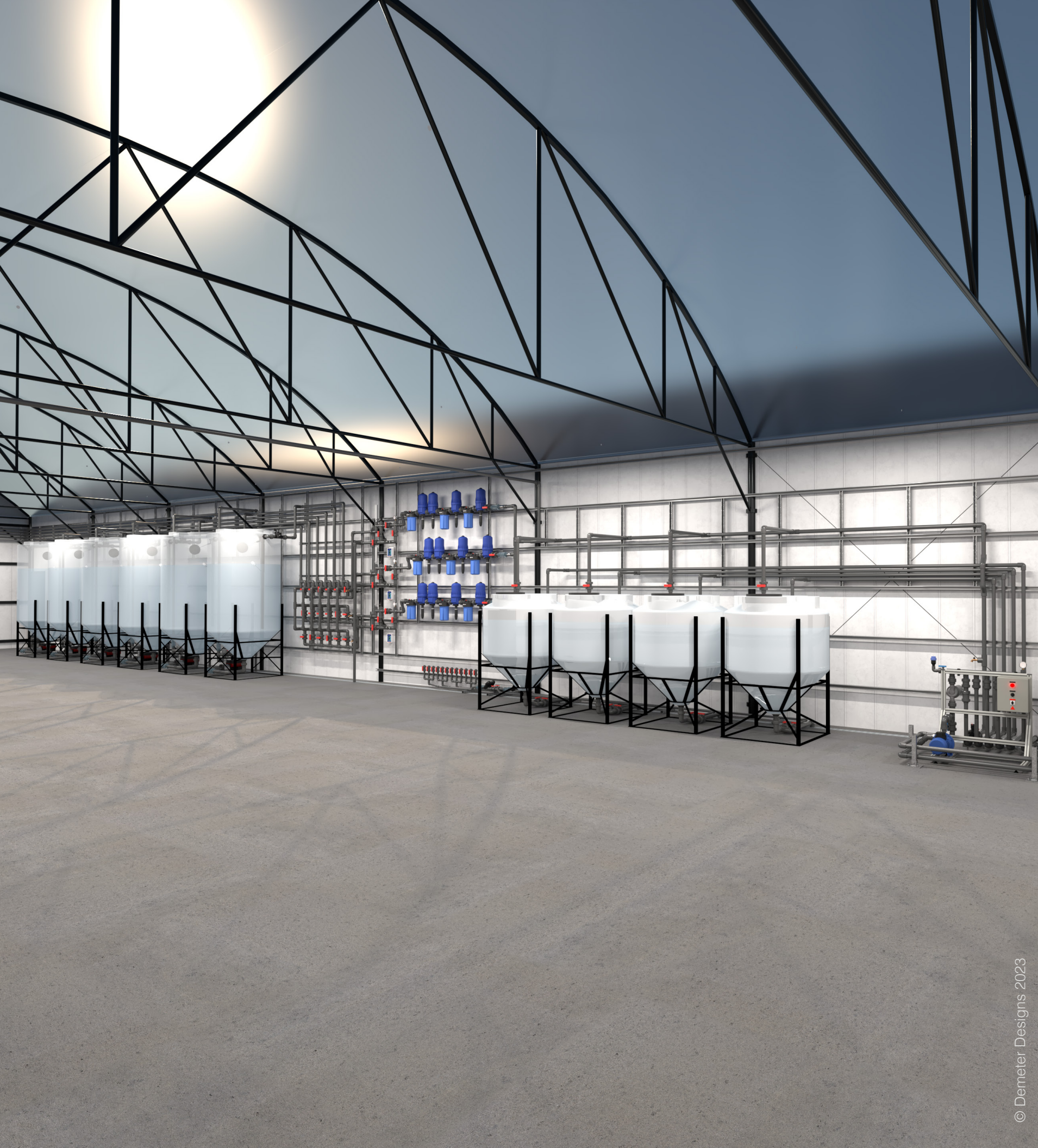


# DEMETER

DESIGNS

RENDERING SUCCESS



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## Content

- 01** About Demeter Designs
  - 02** Why Choose Demeter Designs
  - 03** Our Services
  - 04** Project Highlights
-



# About Demeter Designs

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Demeter Designs provides superior fertigation and irrigation plan sets and renderings proven to maximize efficiency when building out the heart of your facility.

Our team consists of growers with decades of experience in cannabis cultivation. While the continuous progression of automation systems may seem complex, our detailed plans provide the building blocks required for anyone to install a state of the art fertigation system.

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# Why Choose Demeter Designs for Your Facility Build?

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## Experience

Demeter Designs is made up of a team of growers whose background is building and operating advanced cultivation facilities.

## Vision

Our designs handle all of the complex needs of the fertigation and irrigation processes while remaining very simple in design and operation.

## Network

With Demeter Designs anyone has the ability to build complex fertigation and irrigation systems anywhere in the world.

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“The parts list that Demeter provided streamlined ordering parts for the buildout. Exploded diagrams of intricate manifolds and pipe sections helped tremendously with assembly.”

- @waxfaced, Jungle Boys FL



*Jungle Boys facility fertigation room design rendering*

“One of our favorite parts of this project was getting to work with Demeter Designs. I still remember getting those drawings and feeling like it was Christmas morning. From Demeter Designs, we not only got the CAD drawings, but we got a full cut sheet of every part and length of EVERY piece of PVC. Four of us with NO plumbing background were able to execute this entire facility irrigation build.”

- Chris Dyla, Tip Top Crop MI



*Tip Top Crop fertigation room design rendering*



# Our Services

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Demeter Designs will create an automated irrigation system tailored specifically for your facility no matter the size or complexity.

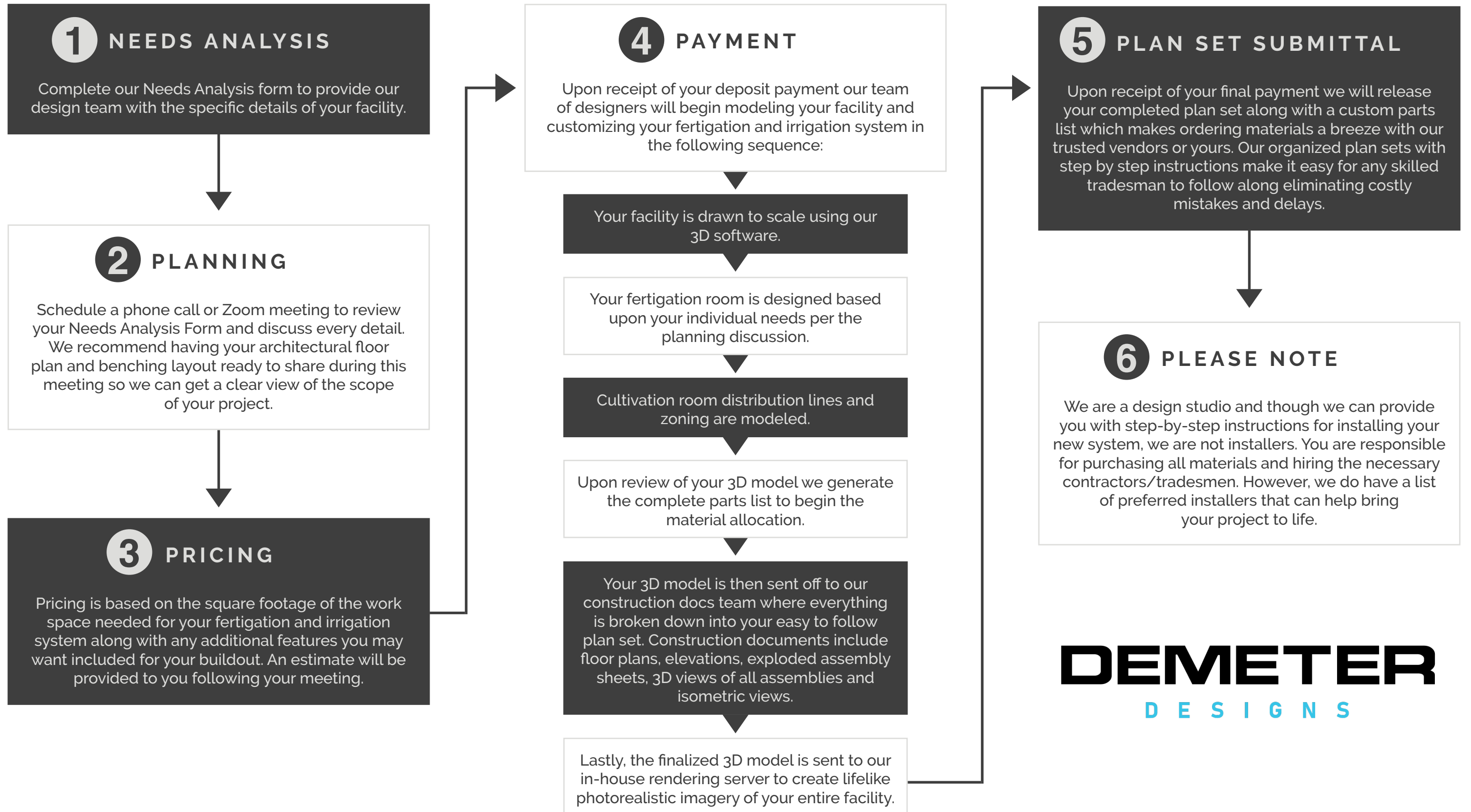
Please review this list of services that are included in one package price and familiarize yourself with the design process:

**3D Facility Modeling**

**Precision Irrigation Design**

**Personalized Plan Sets**

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**DEMETER**  
DESIGNS



# At Demeter Designs we take your two dimensional floor plan and expand it into a true to life, three-dimensional model.

This gives us the ability to conceptualize a full design and layout before a single wall is even built. This level of detail helps us overcome installation obstacles and unforeseen issues with your buildout.

The systems we design are guaranteed to fit in your given space and are modeled within a 1/16th of an inch accuracy.





# Scaling your commercial grow can be a lengthy and convoluted process...

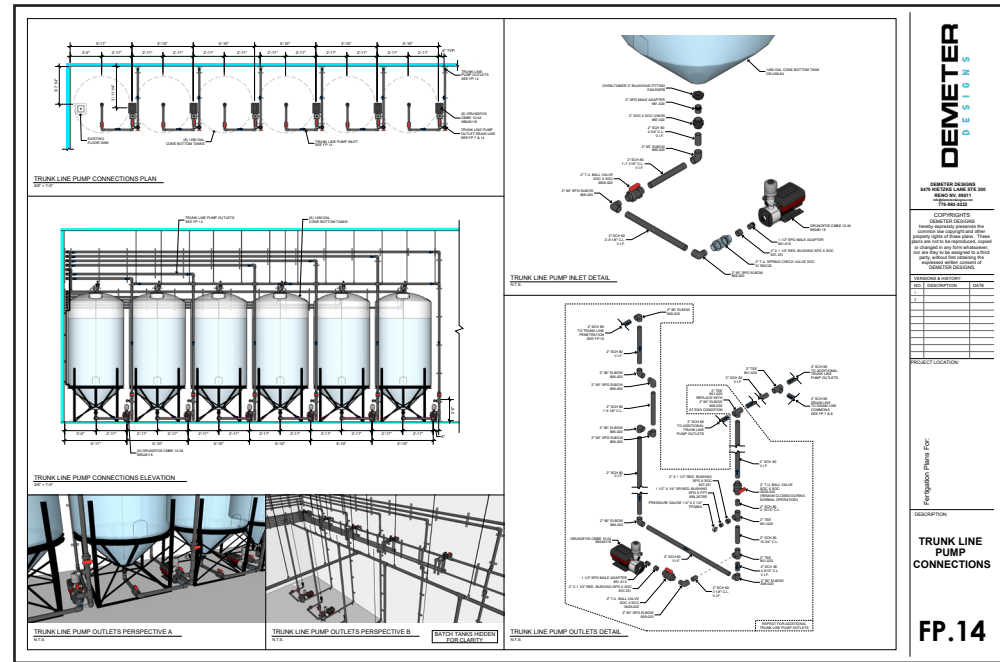
We take the complexity of fertigation and irrigation design and break it down into simplified building blocks for easy ordering and implementation that any installer can follow.

With a complete parts list and 3D facility modeling, our easy to follow plan sets will guide anyone through the installation process to ensure a successful buildout anywhere in the world.





# Each personalized plan set includes:



CONSTRUCTION DOCUMENTS

**GRUNDFOS**

Description	Value
<b>General information:</b>	
Product name:	CRNE 10-6 N-FGJ-A-E-HQQE
Product No.:	99392059
EAN:	5713828369659
<b>Technical:</b>	
Rated pump speed:	3461 rpm
Rated flow:	53.3 US gpm
Rated head:	227 ft
Maximum head:	289.4 ft
Actual impeller diameter:	3.66 in
Stages:	6
Impellers:	6
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals:	CURUS
Approvals for drinking water:	NSF/ANSI 61
Curve tolerance:	ISO9906:2012 3B
Pump version:	N

CRNE 10-6, 3\*240 V  
Pumped liquid = Water  
Liquid temperature during operation = 68 °F  
Density = 62.29 lb/ft<sup>3</sup>

EQUIPMENT SPEC SHEETS

DEMETER DESIGNS

SAMPLE PARTS LIST

QUANTITY	PART NUMBER	DESCRIPTION
26	HC16	#16 HOSE CLAMP
8	18011	ACTION 1" MALE TRANSDUCION NIPPLE
23	18013	ACTION 3/4" FEMALE ADAPTER
5	18000	ACTION CAP
5	18002	ACTION DOUBLE END MANFOLD
4	H8075-018	BANKO 3/4" MPT X 1/8" NIPPLE
4	MONGUACONIN	BLULAB GUARDIAN INLINE
1	FANZODPH	CHEM TANKER 1" BULKHEAD FITTING
2	84096018436	DAB E SYBOX
4	805893036261	DAB E SYBOX MINI 3
4	805893033802	DAB E SYBOX WALL MOUNT
1	805930301953	DAB E SYTWIN
4	38Y74	DAYTON ELECTRONIC FLOAT SWITCH
4	MD011104F-75KIT	DILUTION SOLUTIONS 3/4" LO-FLO MICRO DOSER KIT
8	C034-PH	DOSATRON 3/4" CHECK VALVE
16	HYKAC34	DOSATRON 3/4" LO-FLO MIXING CHAMBER
6	SS-750-316	DOSATRON 3/4" STAINLESS HAMMER ARRESTOR
10	D14M2V18PHV	DOSATRON D14M2 VITON
4	D14M2000A8PHV	DOSATRON D14M2000 AFLAS
16	DSJAK55	DOSATRON LO-FLO MIXING CHAMBER SUNSHADE
10	8948702	HOSE BIBB QUARTER TURN 3/4"
4	HL27025	HYDROLOGIC 3/4" BIG BOY FLOAT VALVE
10	IC7INC24V	IMPURON 3/4" BALL VALVE
780	Q1WPC11.2AW-36	NETAFIM 1" 3 GPH DRIP STATE ASSEMBLY 36"
4	61ET1GH2-320	NETAFIM 1" GLOBE VALVE 120VAC SOLENOID
13	TLSOV	NETAFIM 1.7MM SHUT OFF VALVE
26	TUCKELL	NETAFIM 1.7MM TECHLOCK ELBOW
13	TUCKTEE	NETAFIM 1.7MM TECHLOCK TEE
26	TUCKD5M8A	NETAFIM 1.7MM 3/4" TECHLOCK MALE ADAPTER
8	61ET-75GH2	NETAFIM 3/4" GLOBE VALVE 24VAC SOLENOID
4	25445-140	NETAFIM 1/4" INLINE FILTER 140 MESH
4	N-42064	NORWESCO 60 GAL INDUCTOR TANK
4	N-63397	NORWESCO 60 GAL INDUCTOR TANK STAND
1	N-44310	NORWESCO 750 GAL DOORWAY TANK
4	15082	POWER TEST SWING POWER CORD
22	PC804	PRESSURE GAUGE 1/4" X 2 1/2"
13	PR66303FM	SENINGER PRESSURE REGULATOR 3/4" 30PSI
1	806-012	SPEARS 1/4" 90° ELBOW
1	809-012	SPEARS 1/4" 90° SPG ELBOW
2	861-012	SPEARS 1/4" 90° SPG MALE ADAPTER
1	3629-012	SPEARS 1/4" TRUE UNION BALL VALVE
1	897-012	SPEARS 1/4" UNION SOC X SOC
1	899-168	SPEARS 1/4" X 1/2" REDUCING BUSHING MPT X FPT
5	816-010	SPEARS 1/2" 90° ELBOW
16	817-010	SPEARS 1/2" 45° ELBOW
26	806-010	SPEARS 1/2" 90° ELBOW

PIPE LENGTH	PIPE SIZE
760'	3/4" PVC
120'	1" PVC
20'	1 1/4" PVC
	3/4" CONTITECH FRONTIER
	200 HOSE
760'	3/4" MPT NETAFIM TUBING
60'	7/8" UNISTRUT
120'	1.5/8" UNISTRUT

COMPLETE PARTS LIST



PHOTOREALISTIC 3D RENDERINGS





# Sample Construction Documents:

**FERTIGATION ROOM - MAIN ELEVATIONS C**  
1/2" = 1'-0"

**FERTIGATION ROOM - MAIN ELEVATION D**  
1/2" = 1'-0"

**COLOR CODE LEGEND:**

- R.O. LINES
- TAP WATER LINES
- CONCENTRATE TANK NUTRIENT LINES
- BATCH TANK NUTRIENT LINES
- CONCENTRATE TANK OUTLETS
- RE-CIRC. LINES
- BATCH TANK OUTLETS
- TRUNK LINE OUTLETS
- DRAIN LINES

**VERSIONS & HISTORY:**

NO.	DESCRIPTION	DATE
1		
2		

PROJECT LOCATION:

Fertigation Plans For:

DESCRIPTION:

**FERTIGATION ELEVATIONS**

**FP.6**

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ELEVATIONS

# Sample Construction Documents:

**NUTRISOLVE CONNECTIONS & VALVE BRIDGE PLAN**  
3/4" = 1'-0"

**NUTRISOLVE CONNECTIONS & VALVE BRIDGE ELEVATION**  
3/4" = 1'-0"

**NUTRISOLVE CONNECTIONS & VALVE BRIDGE PERS. A**  
N.T.S.

**NUTRISOLVE CONNECTIONS & VALVE BRIDGE PERS. B**  
N.T.S.

**NUTRISOLVE CONNECTIONS PERSPECTIVE**  
N.T.S.

**NUTRISOLVE CONNECTIONS DETAIL**  
N.T.S.

**NUTRISOLVE VALVE BRIDGE DETAIL**  
N.T.S.

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**VERSIONS & HISTORY:**

NO.	DESCRIPTION	DATE

PROJECT LOCATION:

Fertigation Plans For:

**NUTRISOLVE CONNECTIONS & VALVE BRIDGE**

**FP.13**

ASSEMBLY SHEETS



# Sample Construction Documents:

**FERTIGATION ROOM PIPE VIEW**  
N.T.S.

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VERSIONS & HISTORY:

NO.	DESCRIPTION	DATE
1		
2		

PROJECT LOCATION:

Fertigation Plans For:

DESCRIPTION:

**FERTIGATION ROOM PIPE VIEW**

**FP.20**

ISOMETRIC VIEWS

# Project Highlights

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Tokanagan Farms

Jungle Boys

Clover Creek Cultivation

River Remedies

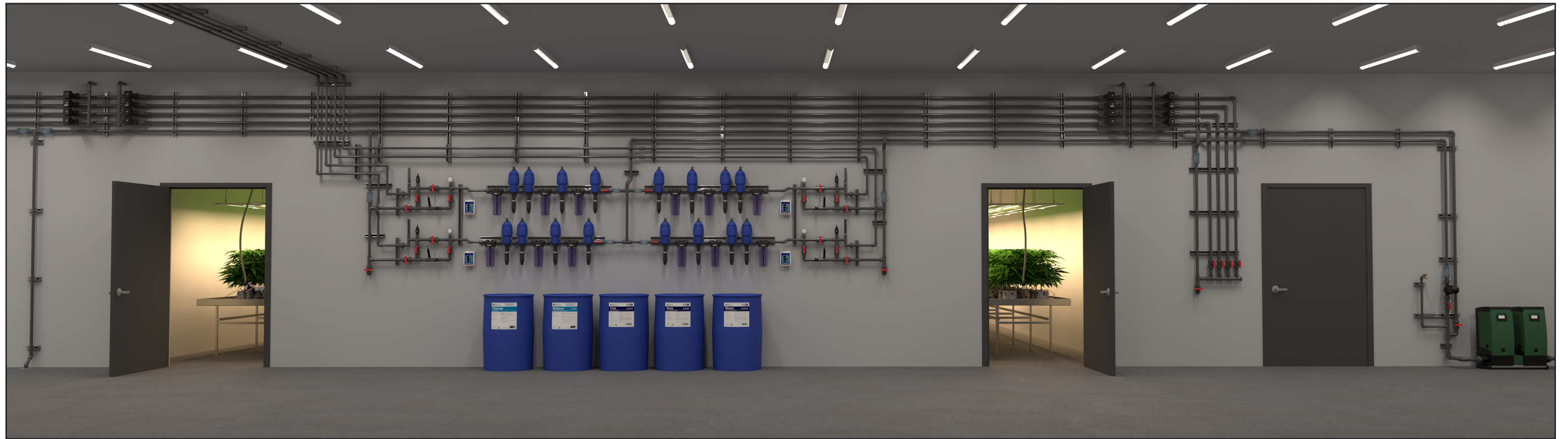
Grow Sciences

Golden Bloom Farms

HD Biotech

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*Tokanagan Farms. Penticton, British Columbia*

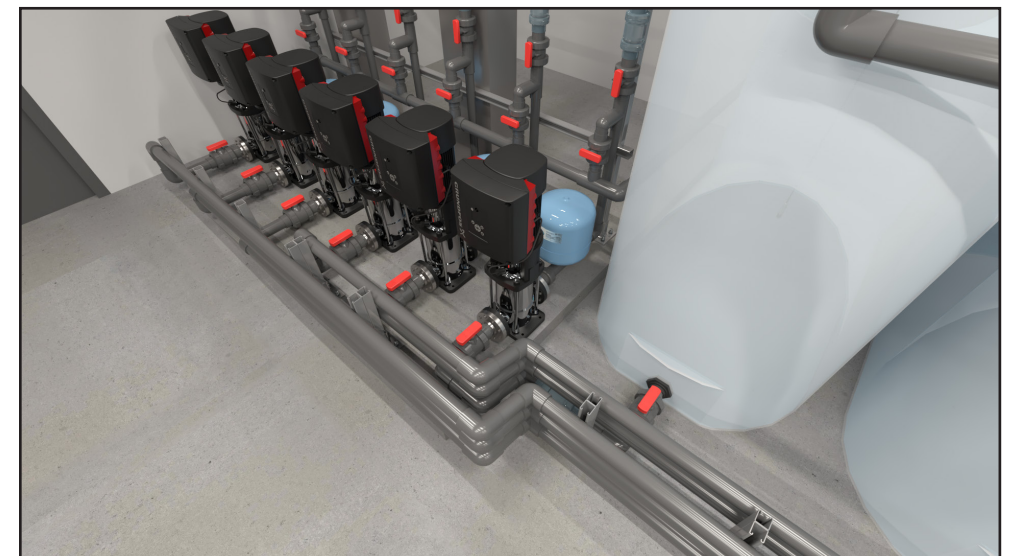
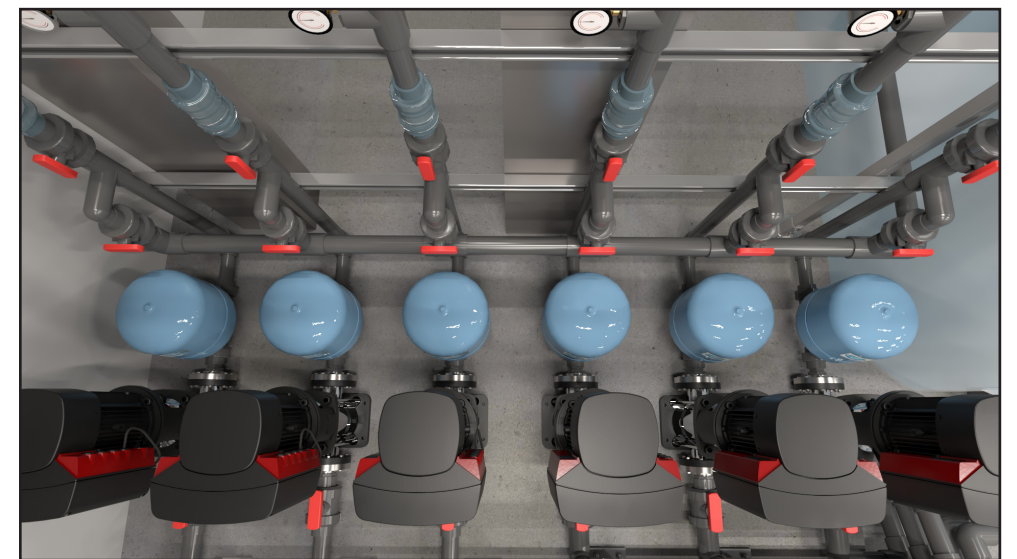
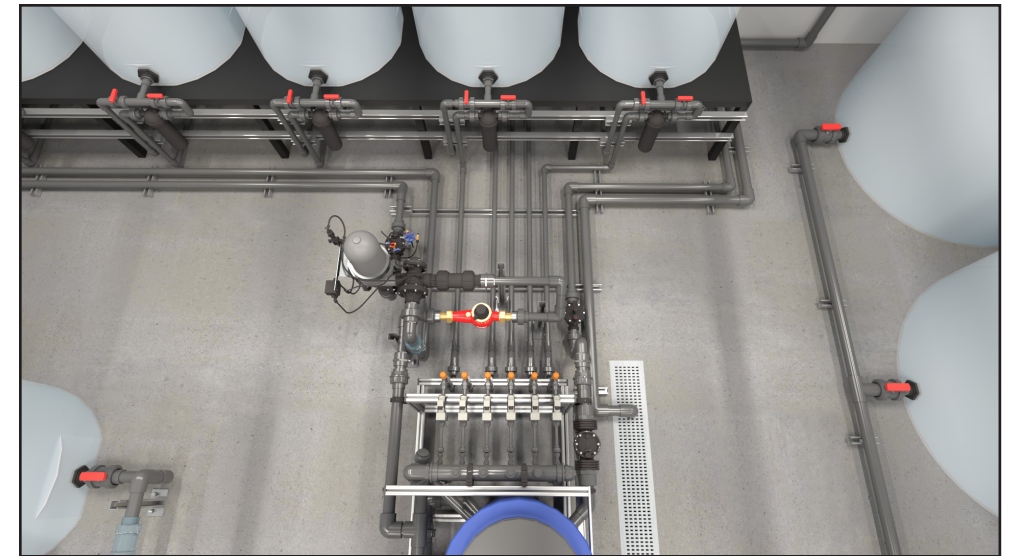


*Jungle Boys. Ocala, Florida*

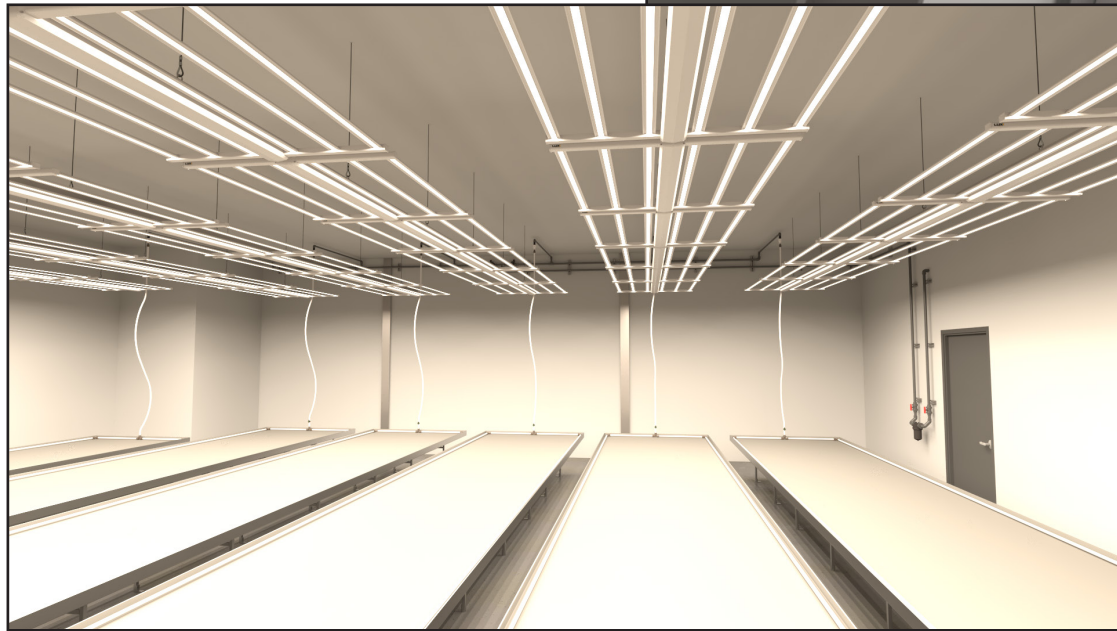




*Jungle Boys. Ocala, Florida*

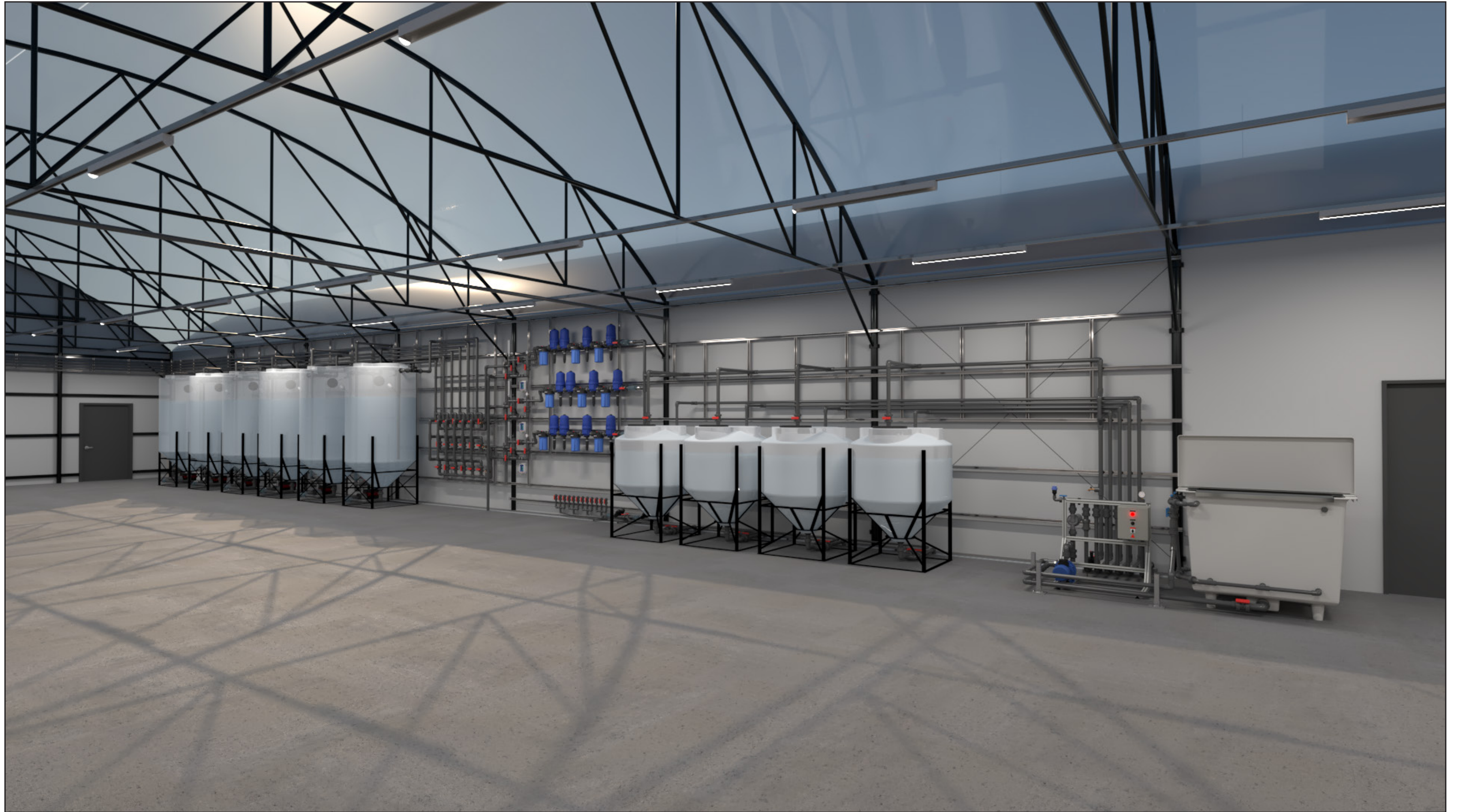






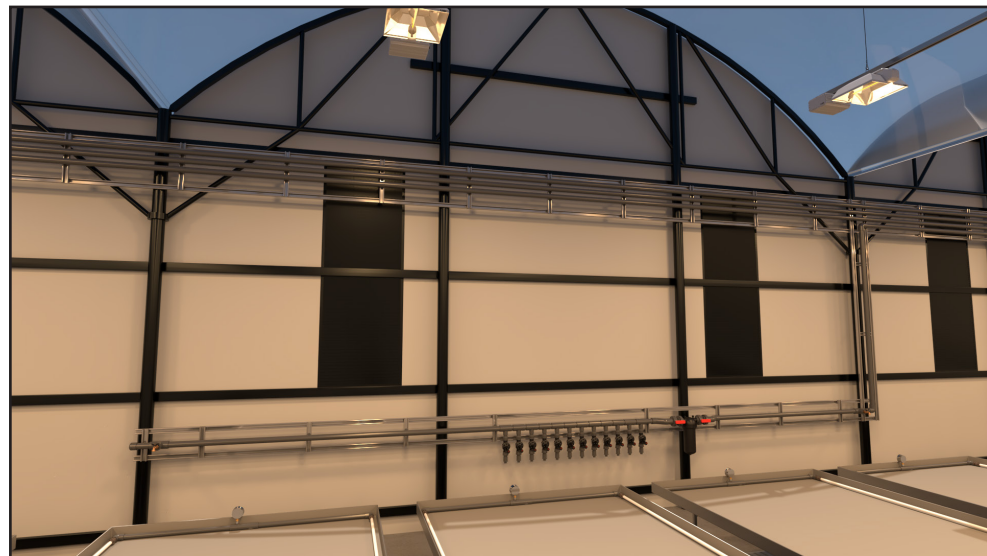
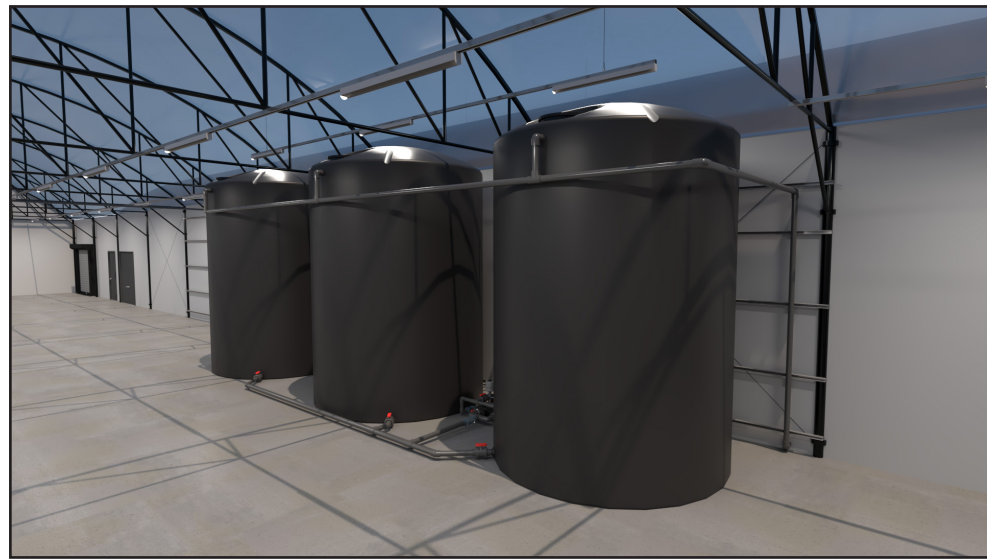
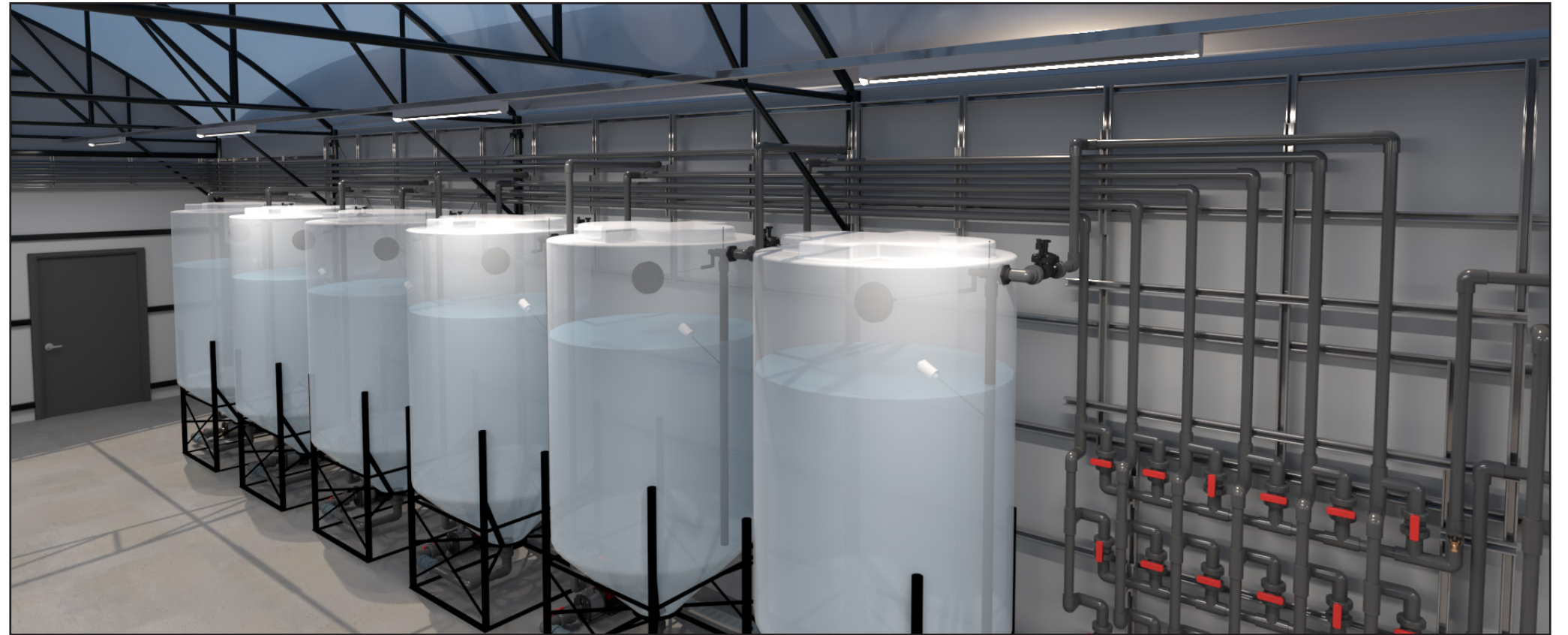
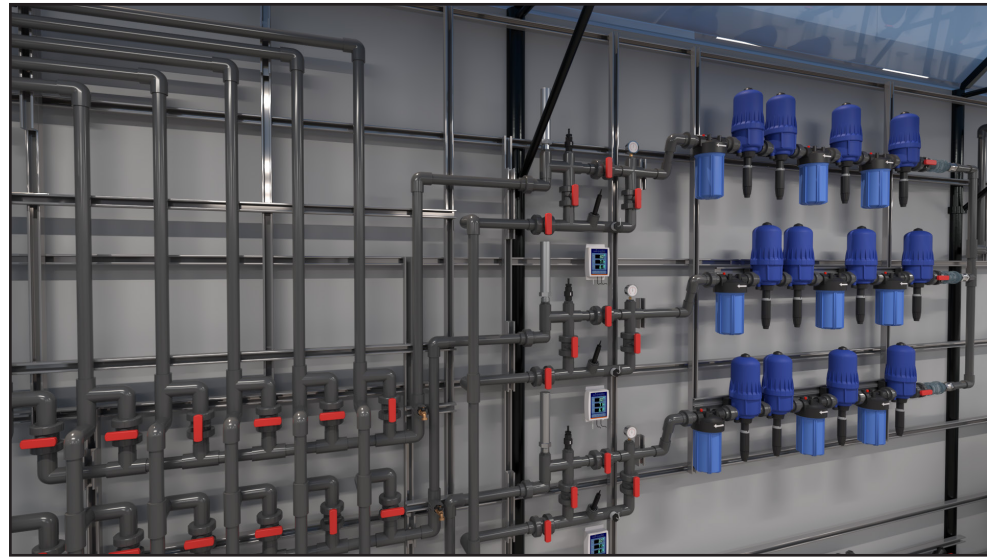
*Jungle Boys. Ocala, Florida*





*Clover Creek Cultivation. Caliente, Nevada*





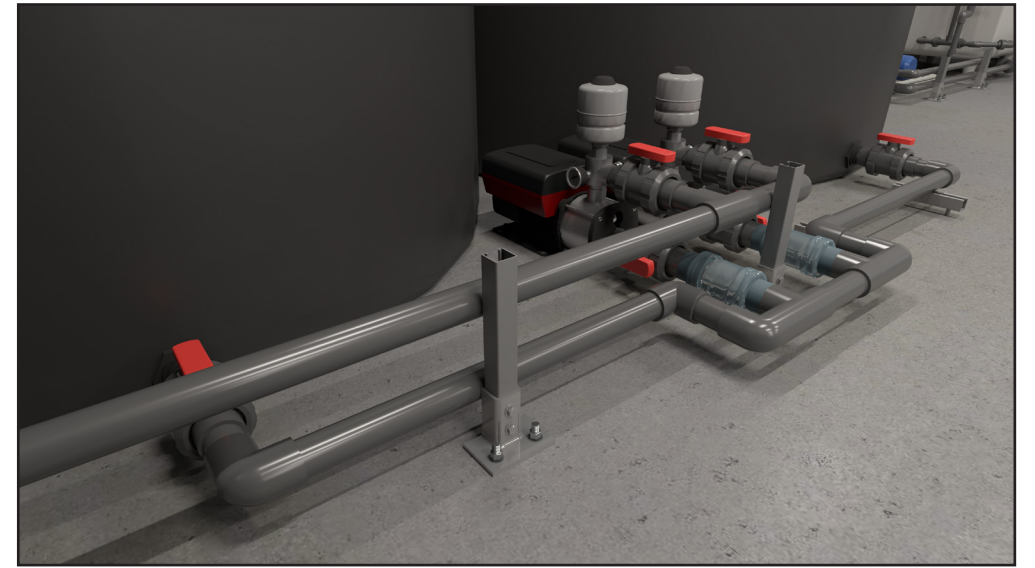
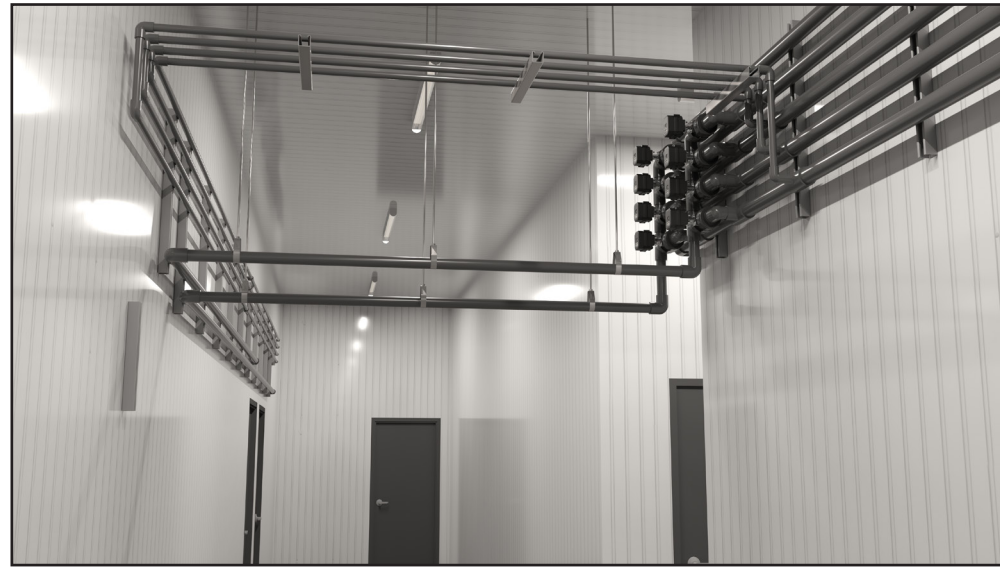
*Clover Creek Cultivation. Caliente, Nevada*





*River Remedies. Byram, Mississippi*



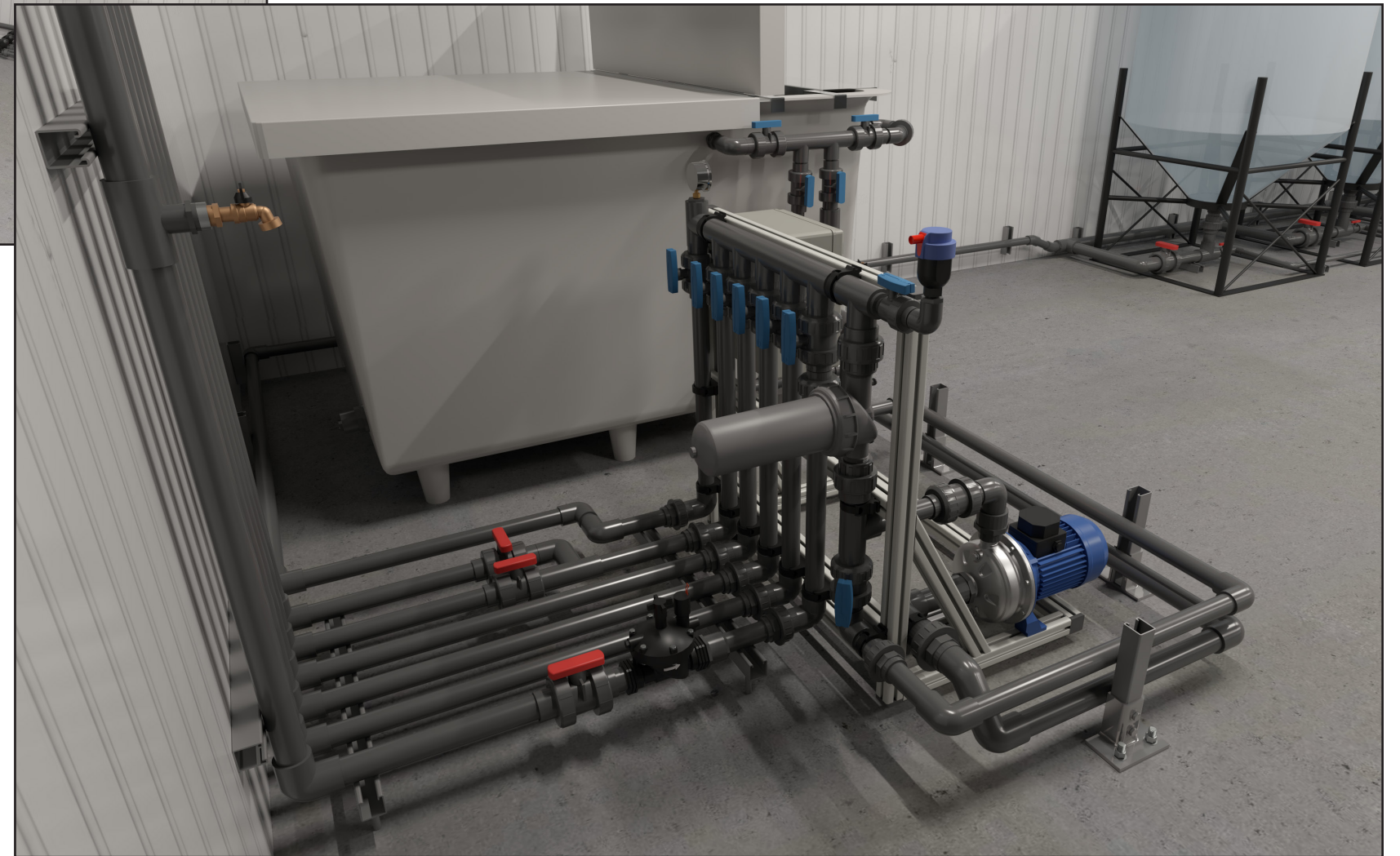


*River Remedies. Byram, Mississippi*





*River Remedies. Byram, Mississippi*

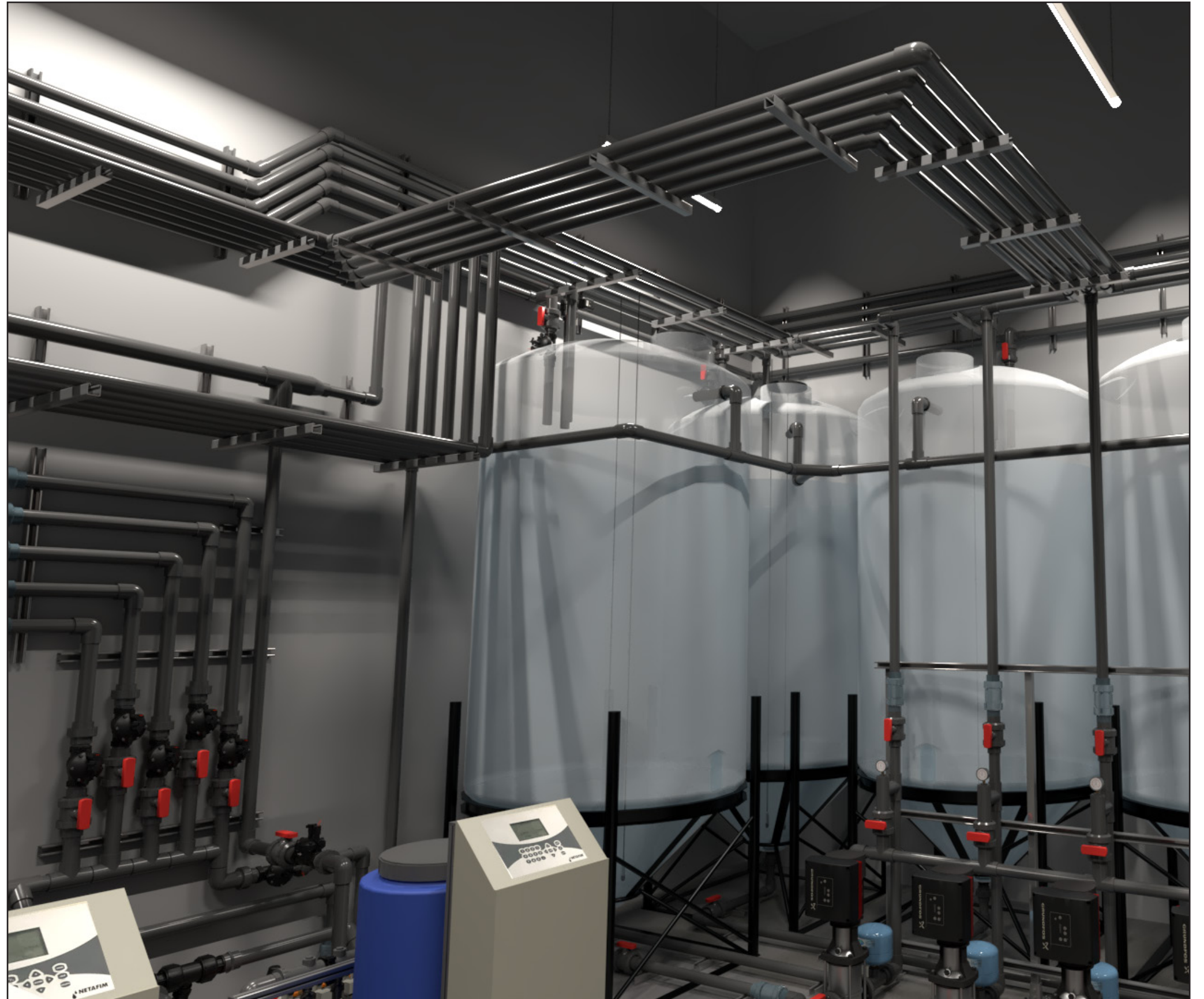
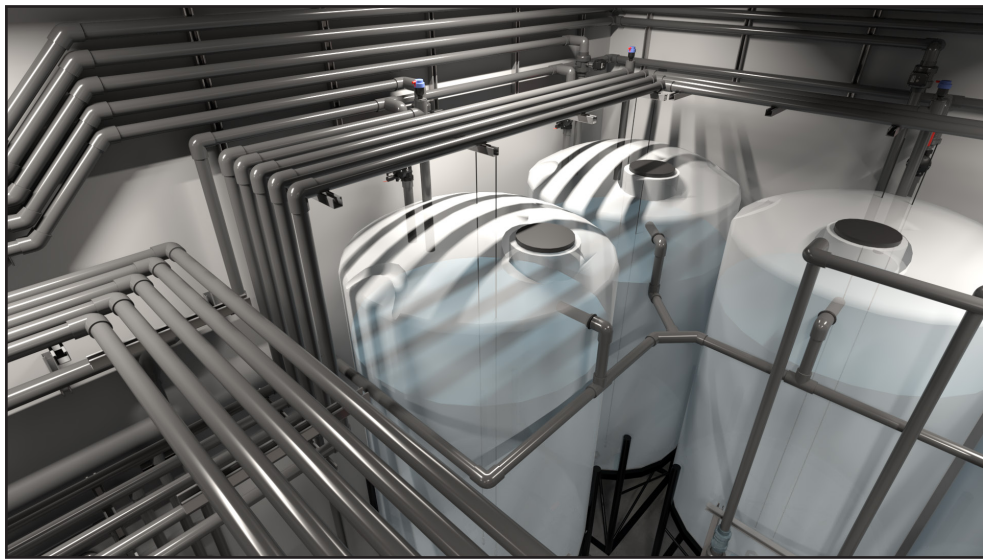
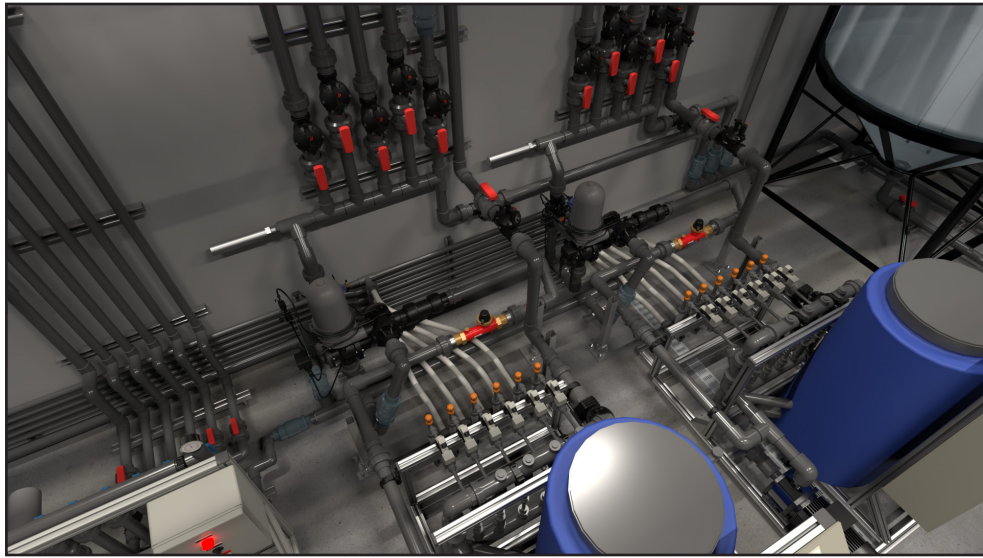






*Grow Sciences. Phoenix, Arizona*





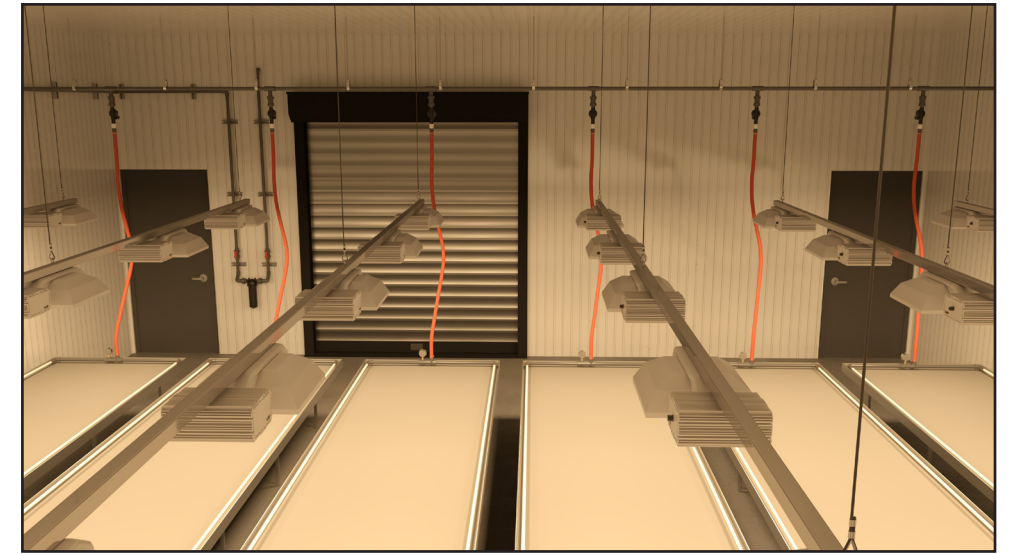
*Grow Sciences. Phoenix, Arizona*





*Golden Bloom Farms. Choctaw, Oklahoma*





*Golden Bloom Farms. Choctaw, Oklahoma*



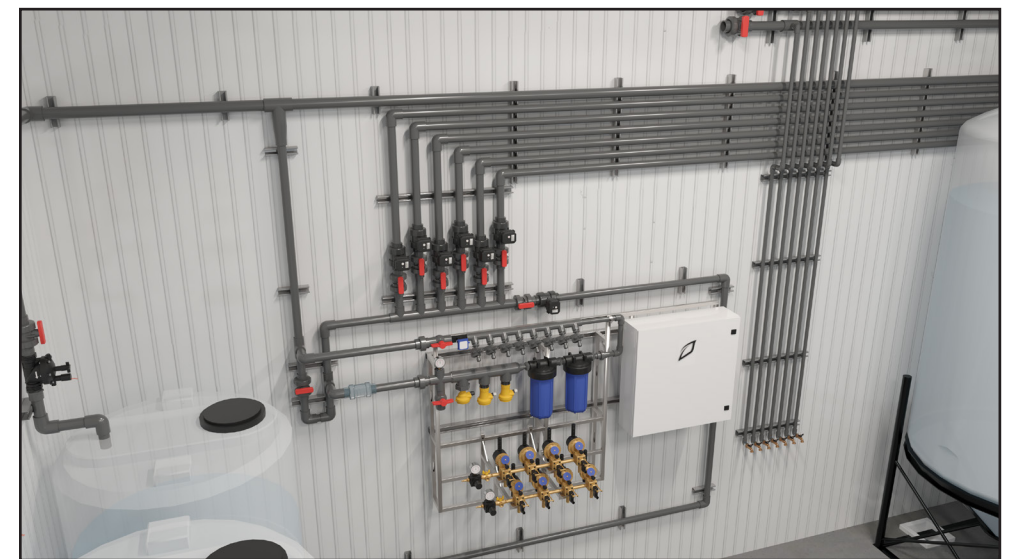


*HD Biotech. Adelanto, California*





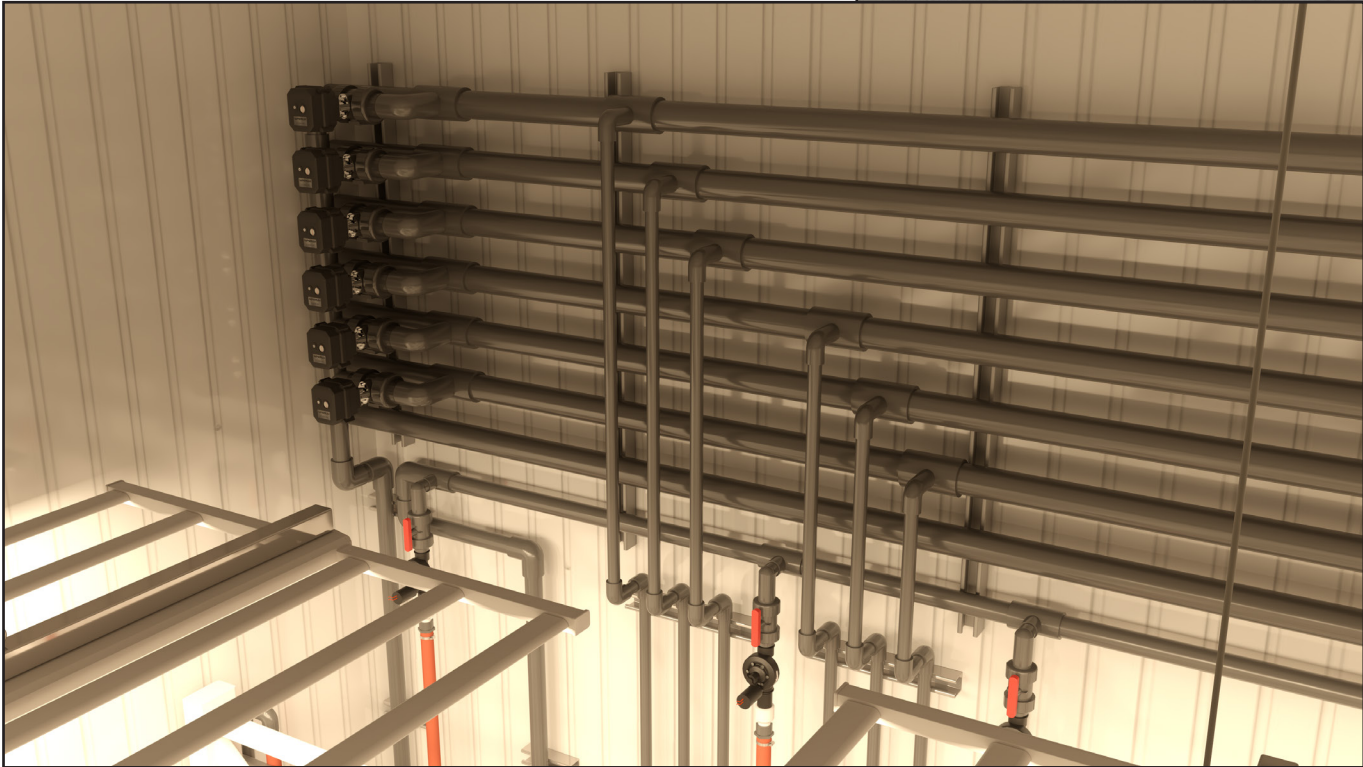
*HD Biotech. Adelanto, California*







*HD Biotech. Adelanto, California*





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