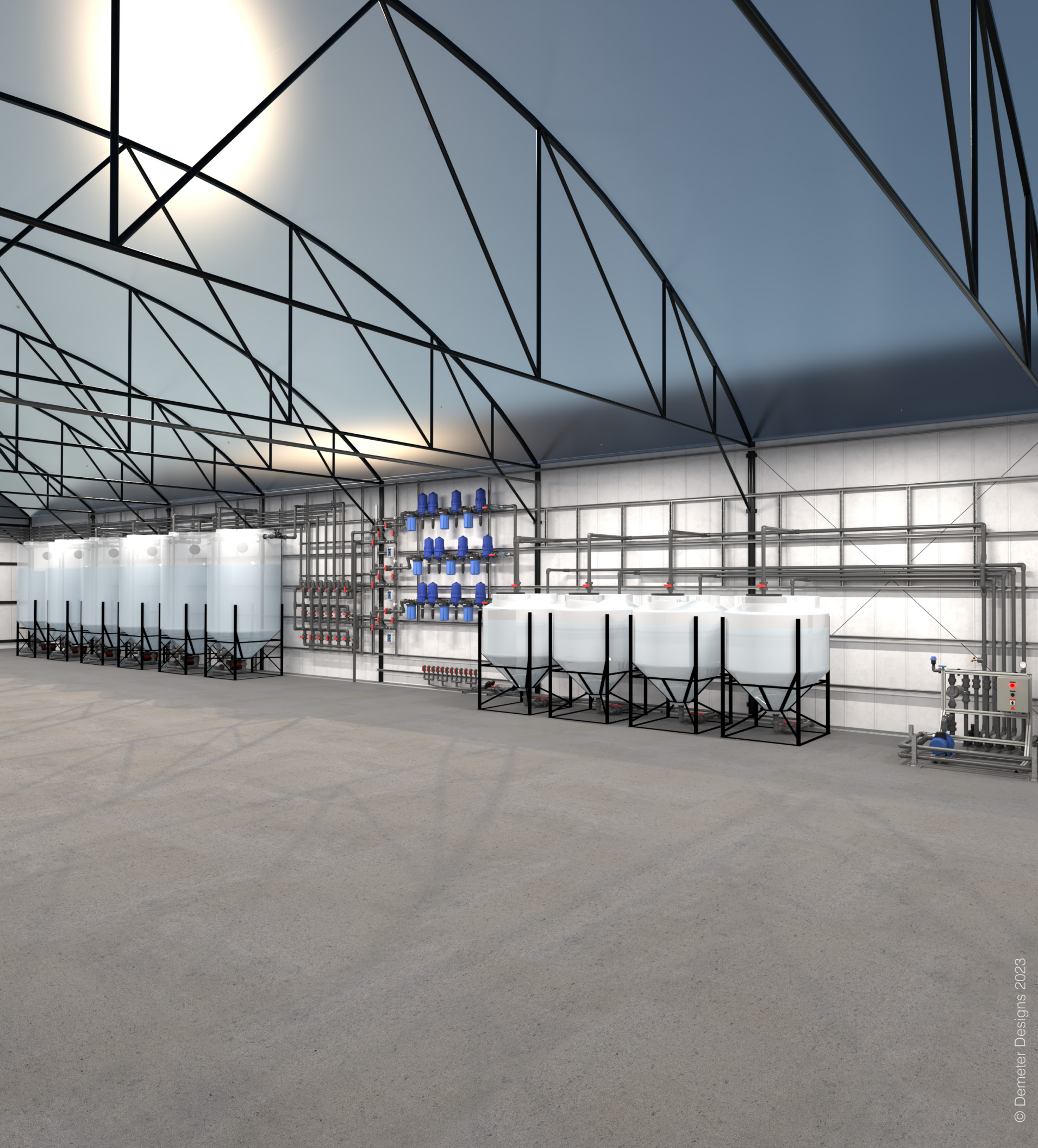


DEMETER

DESIGNS

RENDERING SUCCESS



Content

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

About Demeter Designs

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.

Why Choose Demeter Designs for Your Facility Build?

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.

“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

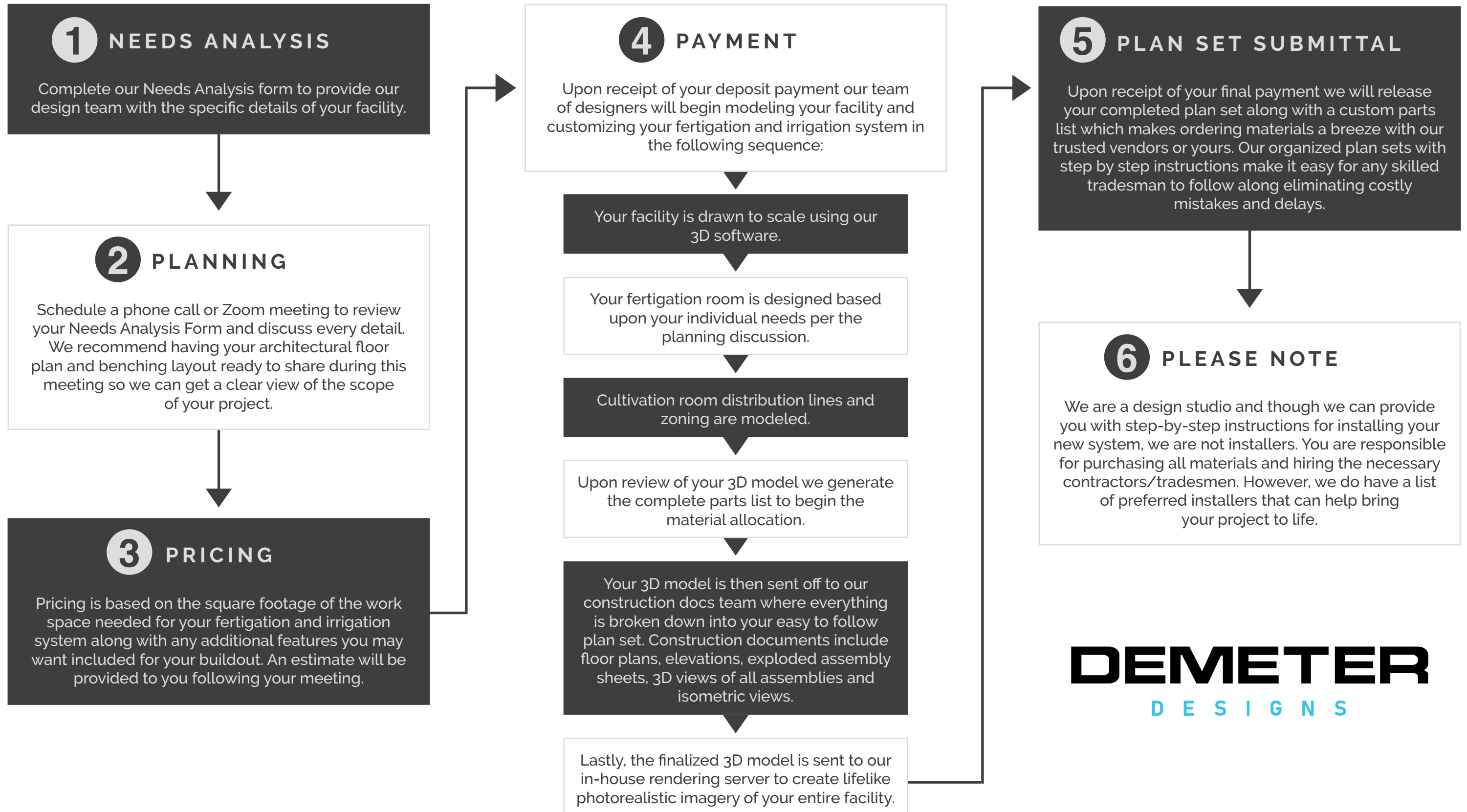
Demeter Designs will create an automated irrigation system tailored specifically for your facility no matter the size or complexity.

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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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.



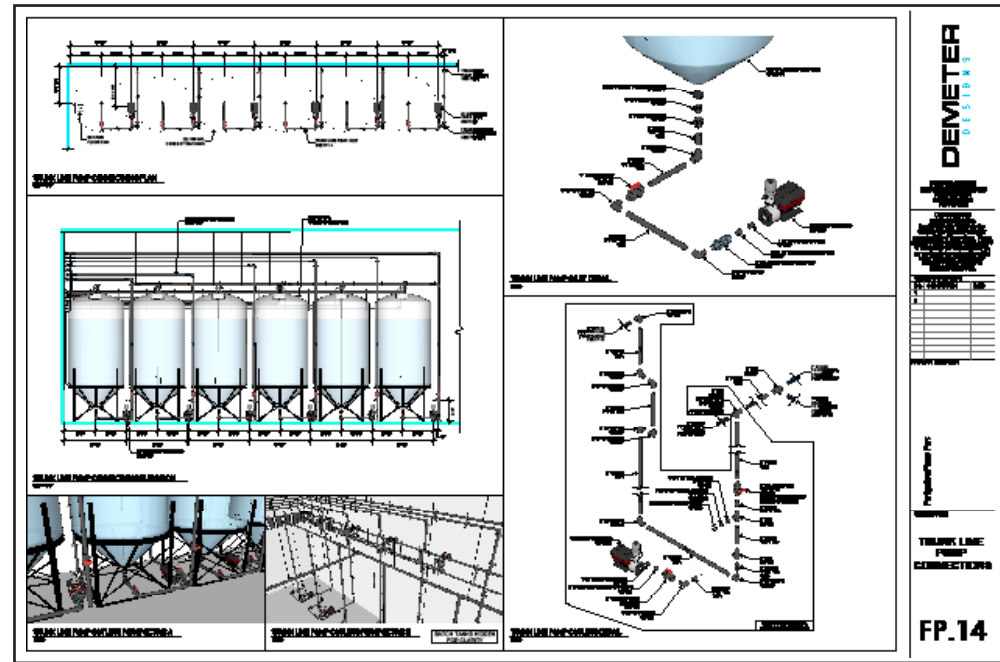
Scaling your commercial grow can be a lengthy and convoluted process...

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
General Information:	
Product name:	CRNE 10-6 N-FG-A-E-HQGE
Product No.:	59320029
EAN:	5713028369629
Technical:	
Rated pump speed:	3461 rpm
Rated flow:	53.3 US gpm
Rated head:	227 ft
Maximum head:	288.4 ft
Actual impeller diameter:	3.65 in
Stages:	1
Impeller:	1
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump calculation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQGE
Approvals:	CE/ULUS
Approvals for drinking water:	NSFANSI 61
Curve reference:	ISO9906-2012 3B
Pump version:	N

CRNE 10-6, 37240 V
Pumped liquid = Water
Liquid temperature during operation = 65 °F
Density = 62.29 lb/ft³

EQUIPMENT SPEC SHEETS

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SAMPLE PARTS LIST

QUANTITY	PART NUMBER	DESCRIPTION
74	NC16	1/8" NPT X 1/2" NPT
8	18011	ACTION 1" MALE TRANSITION NIPPLE
23	18013	ACTION 3/4" GLEE ADAPTER
5	18000	ACTION CAP
5	18002	ACTION DOUBLE MANIFOLD
4	18017-018	BANDS 3/4" MPT X 1/8" NIPPLE
4	MONIACONIN	BLUELAB GUARDIAN INLINE
1	FAN20098	CHEM-TAINER 2" BULKHEAD FITTING
2	8098901836	DAB E-SYBOX
4	80989036261	DAB E-SYBOX MINI 3
4	809890303802	DAB E-SYBOX WALL MOUNT
1	80989018161	DAB E-SYBOX
4	3874	DAYTON ELECTRONIC FLOAT SWITCH
4	MOD110MP-75KIT	DILUTION SOLUTIONS 3/4" LG-FLO MICRO DOSER KIT
8	C936-PH	DOSATRON 3/4" CHECK VALVE
16	HVIMAC34	DOSATRON 3/4" LG-FLO MIXING CHAMBER
4	35-750-318	DOSATRON 3/4" STAINLESS HAMMER ARRESTOR
10	D14M22V78BY	DOSATRON D14M22 VITON
4	D14M22000AFBPH	DOSATRON D14M22000 AFLAS
16	DS48M255	DOSATRON LG-FLO MIXING CHAMBER SUNSHADE
10	BUNHTQ	HOSE BIBB QUARTER TURN 3/4"
4	HL27023	HYDROLOGIC 3/4" BIG BOY FLOAT VALVE
10	H7940120	"H7940120" BALL VALVE
780	Q1WPCIL1.2AW-36	NETAFIM 1.2 GPH DRIP STACK ASSEMBLY 36"
4	61ETGHC-320	NETAFIM 1" GLOBE VALVE 320VAC SOLENOID
13	TLSOV	NETAFIM 17MM SHUT OFF VALVE
26	TLCRLL	NETAFIM 17MM TECHLOCK ELBOW
13	TLCRTE	NETAFIM 17MM TECHLOCK TEE
26	TLCR730A	NETAFIM 17MM 3/4" TECHLOCK MALE ADAPTER
8	61ET-750HZ	NETAFIM 1/4" GLOBE VALVE 1/4VAC SOLENOID
4	25445-140	NETAFIM 3/4" PALME FILTER 140 MESH
4	N-42068	NORWESCO 80 GAL INDUCTOR TANK
4	N-53397	NORWESCO 80 GAL INDUCTOR TANK STAND
1	N-44310	NORWESCO 750 GAL DOORWAY TANK
4	N100L	POWER FRESH AIR/POWER CORD
22	PR0804	PRESSURE GAUGE 1/4" X 2 1/2"
13	PR63039FM	SENINGER PRESSURE REGULATOR 3/4" 30PSI
1	806-012	SPEARS 1 1/4" 90° ELBOW
1	809-012	SPEARS 1 1/4" 90° SPG ELBOW
2	861-012	SPEARS 1 1/4" SPG MALE ADAPTER
1	3628-012	SPEARS 1/4" TRUE UNION BALL VALVE
1	897-012	SPEARS 1/4" UNION SOC X SOC
1	839-348	SPEARS 1 1/4" X 1" REDUCING BUSHING MPT X FPT
5	818-010	SPEARS 1 1/2" 45° ELBOW
16	817-010	SPEARS 1 1/2" 90° ELBOW
26	806-010	SPEARS 1 1/2" 90° ELBOW

PIPE LENGTH	PIPE SIZE
760	3/4" PVC
120	1" PVC
30"	1 1/4" PVC
	3/4" CONTECH FRONTIER
160	200 HOSE
760	17MM NETAFIM TUBING
60"	7/8" UNISTRUT
120"	1 1/2" UNISTRUT

COMPLETE PARTS LIST



PHOTOREALISTIC 3D RENDERINGS

Sample Construction Documents:

The image displays two technical drawings for a fertigation system. The left drawing is a general floor plan showing eight flower beds (FLOWER 1-8) arranged around a central corridor (CORR. 1 and CORR. 2) and a fertilizer room (FERT. ROOM). The right drawing is a detailed trunk line plan showing the piping layout for each flower bed, including zone drops, bench loop manifolds, room filters, and trunk line manifolds. A title block on the right side of the page contains the company name, contact information, and a copyright notice.

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 info@demeterdesigns.com
 775-993-5222

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VERSIONS & HISTORY:

NO.	DESCRIPTION	DATE
1		
2		

PROJECT LOCATION:

Fertigation Plans For:

DESCRIPTION:

FLOOR PLANS

FP.2

FLOOR PLAN
 3/32" = 1'-0"

TRUNK LINE PLAN
 1/8" = 1'-0"

FLOORPLANS

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

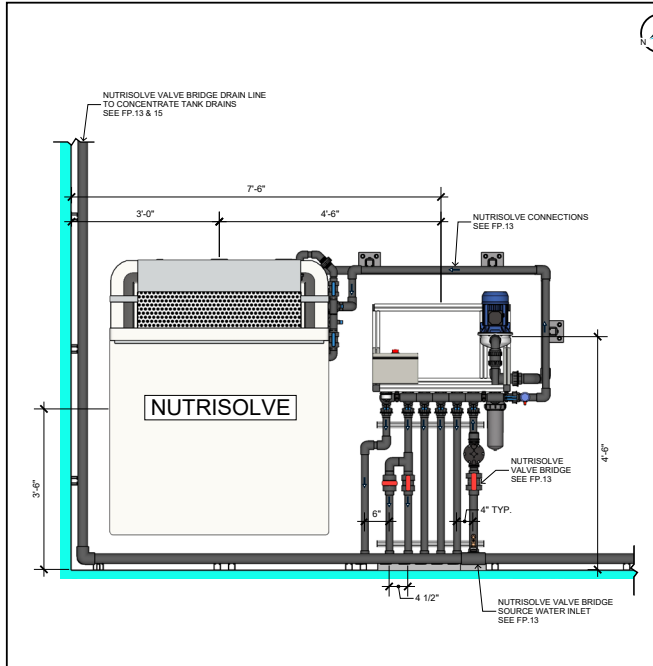
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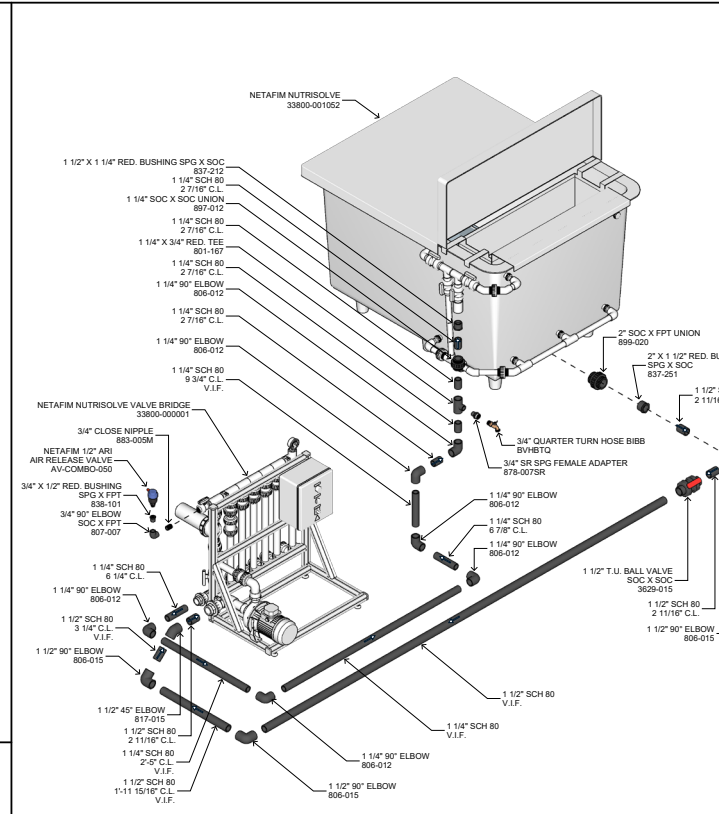
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ELEVATIONS

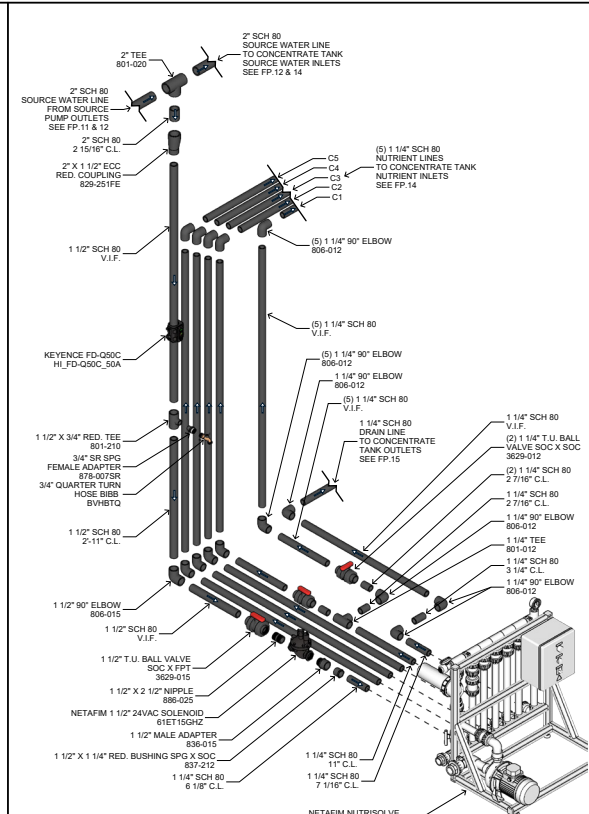
Sample Construction Documents:



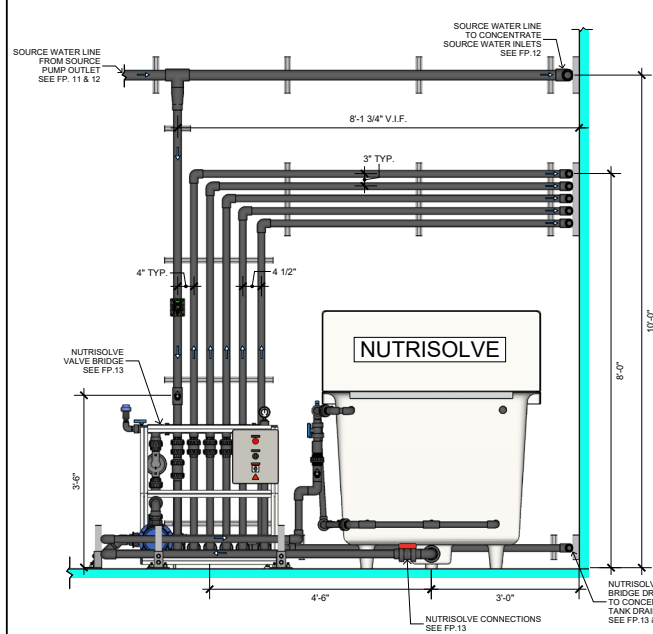
NUTRISOLVE CONNECTIONS & VALVE BRIDGE PLAN
3/4" = 1'-0"




NUTRISOLVE CONNECTIONS DETAIL
N.T.S.



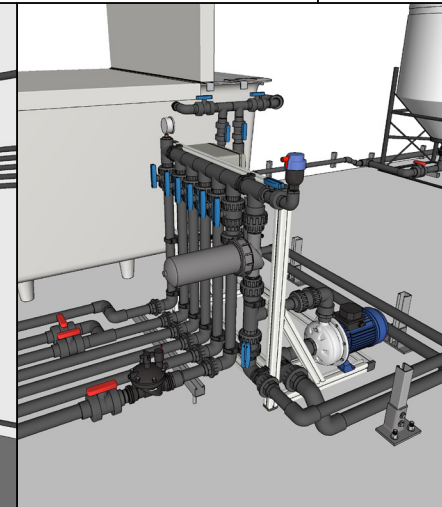
NUTRISOLVE VALVE BRIDGE DETAIL
N.T.S.



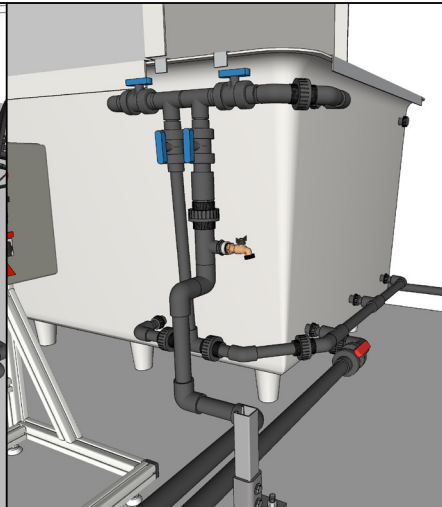
NUTRISOLVE CONNECTIONS & VALVE BRIDGE ELEVATION
3/4" = 1'-0"



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




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



NUTRISOLVE CONNECTIONS PERSPECTIVE
N.T.S.

ASSEMBLY SHEETS



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VERSIONS & HISTORY:

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PROJECT LOCATION:

Fertigation Plans For:

DESCRIPTION:

NUTRISOLVE CONNECTIONS & VALVE BRIDGE

FP.13

Sample Construction Documents:

FERTIGATION ROOM PIPE VIEW
N.T.S.

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1		
2		

PROJECT LOCATION:

Fertigation Plans For:

DESCRIPTION:

FERTIGATION ROOM PIPE VIEW

FP.20

ISOMETRIC VIEWS

Project Highlights

Tokanagan Farms

Jungle Boys

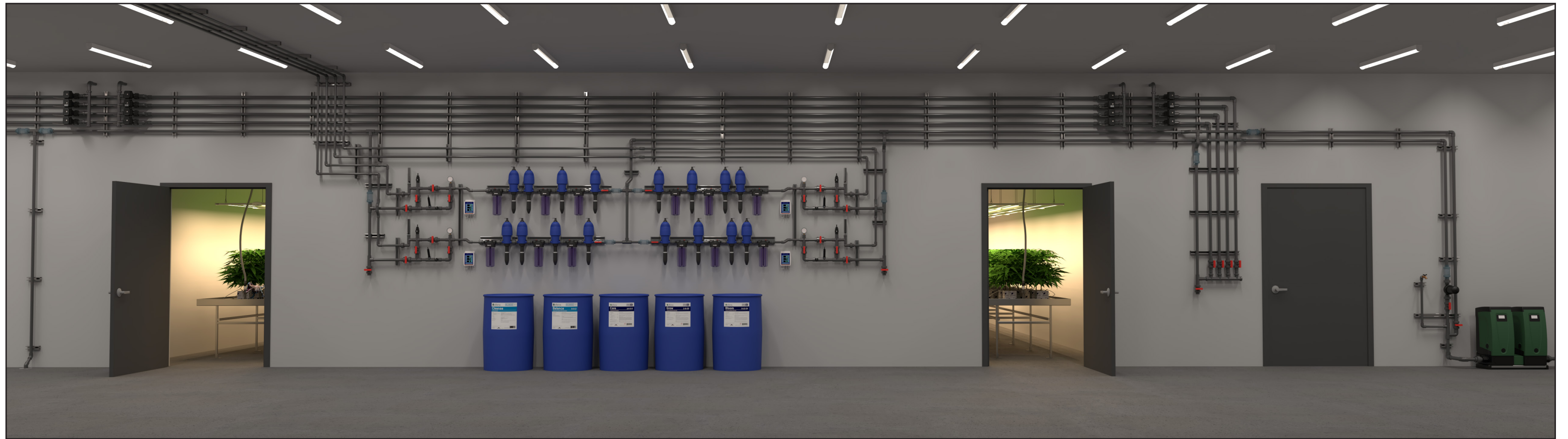
Clover Creek Cultivation

River Remedies

Grow Sciences

Golden Bloom Farms

HD Biotech



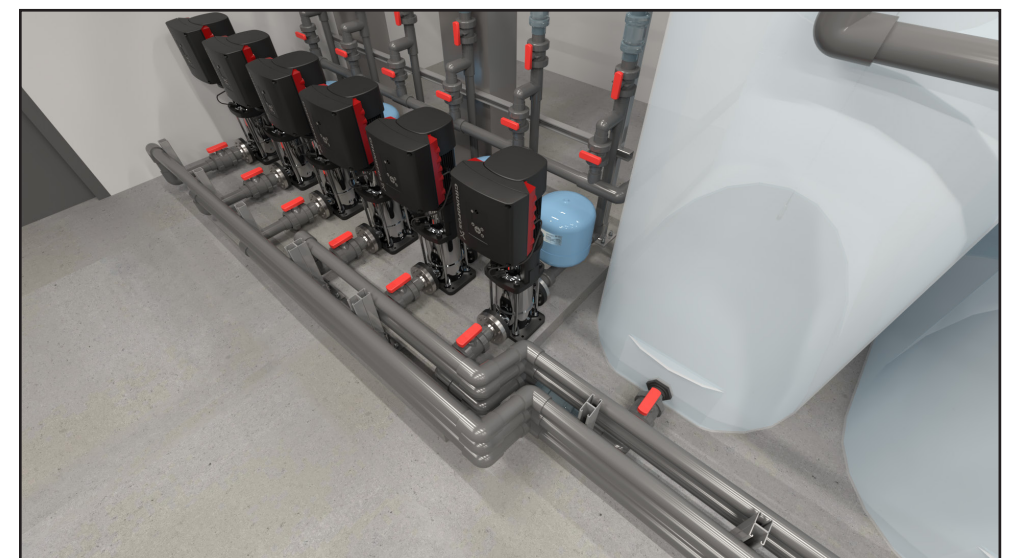
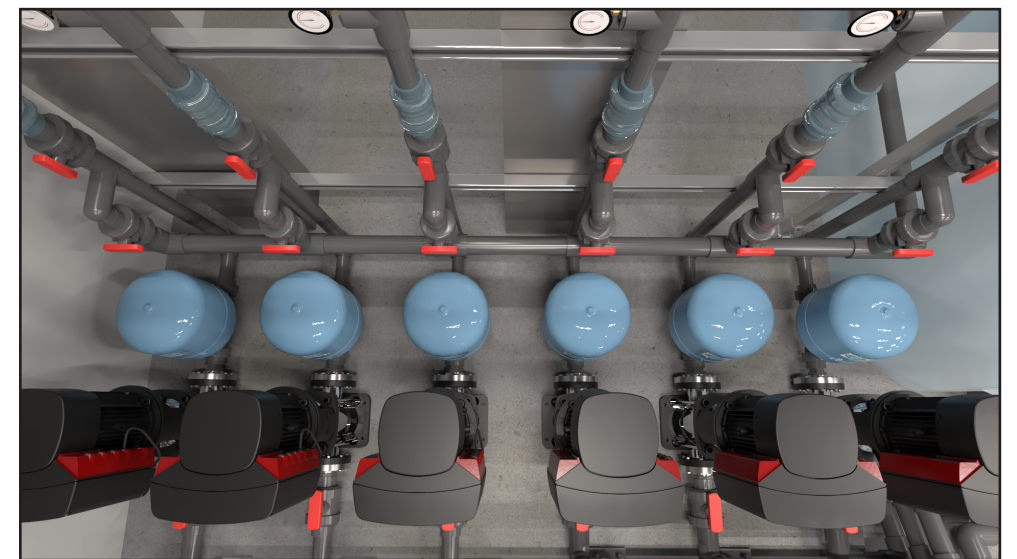
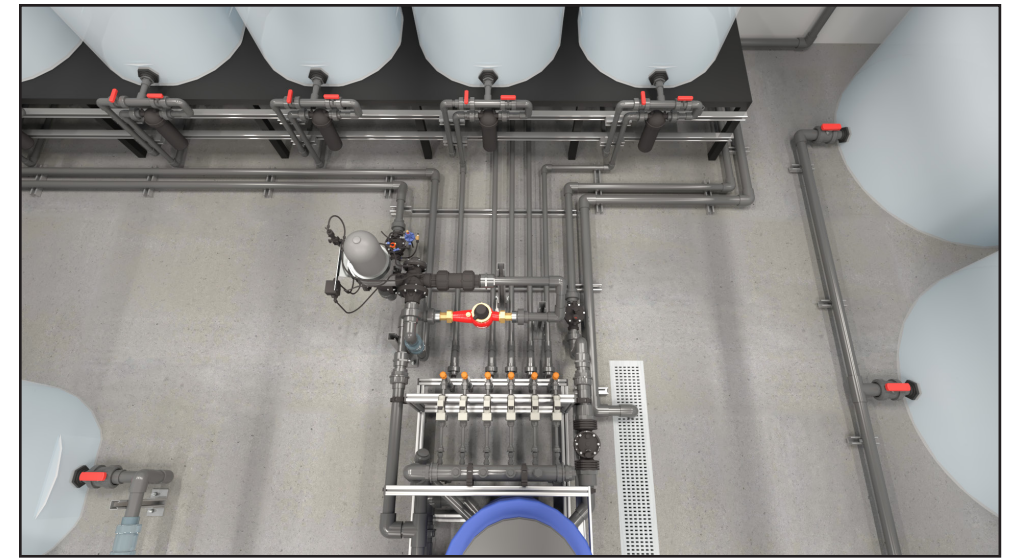
Tokanagan Farms. Penticton, British Columbia

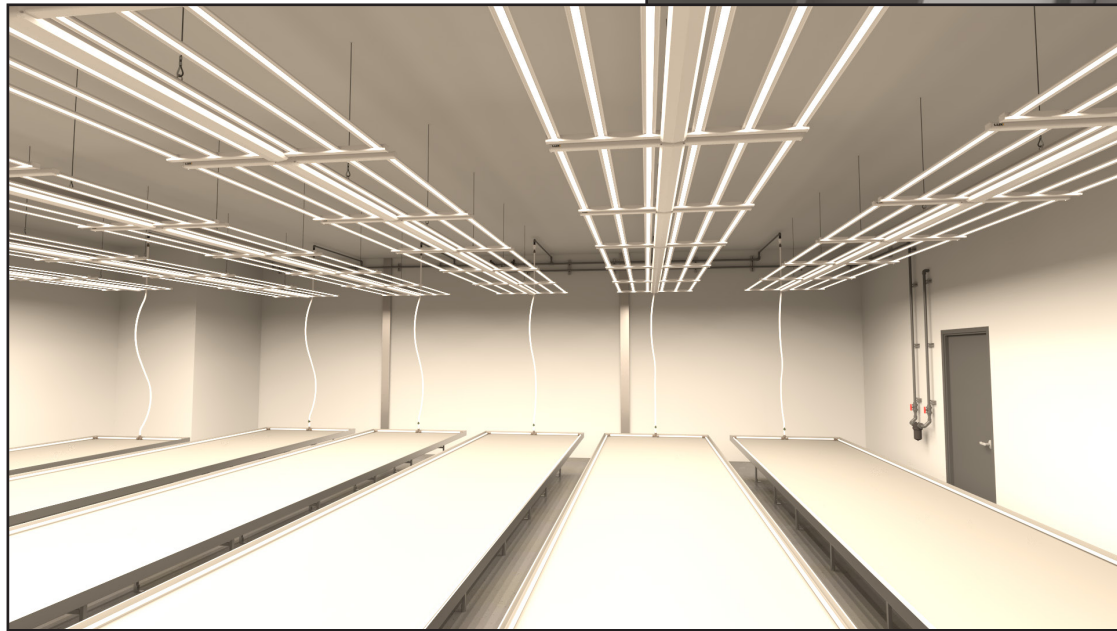


Jungle Boys. Ocala, Florida

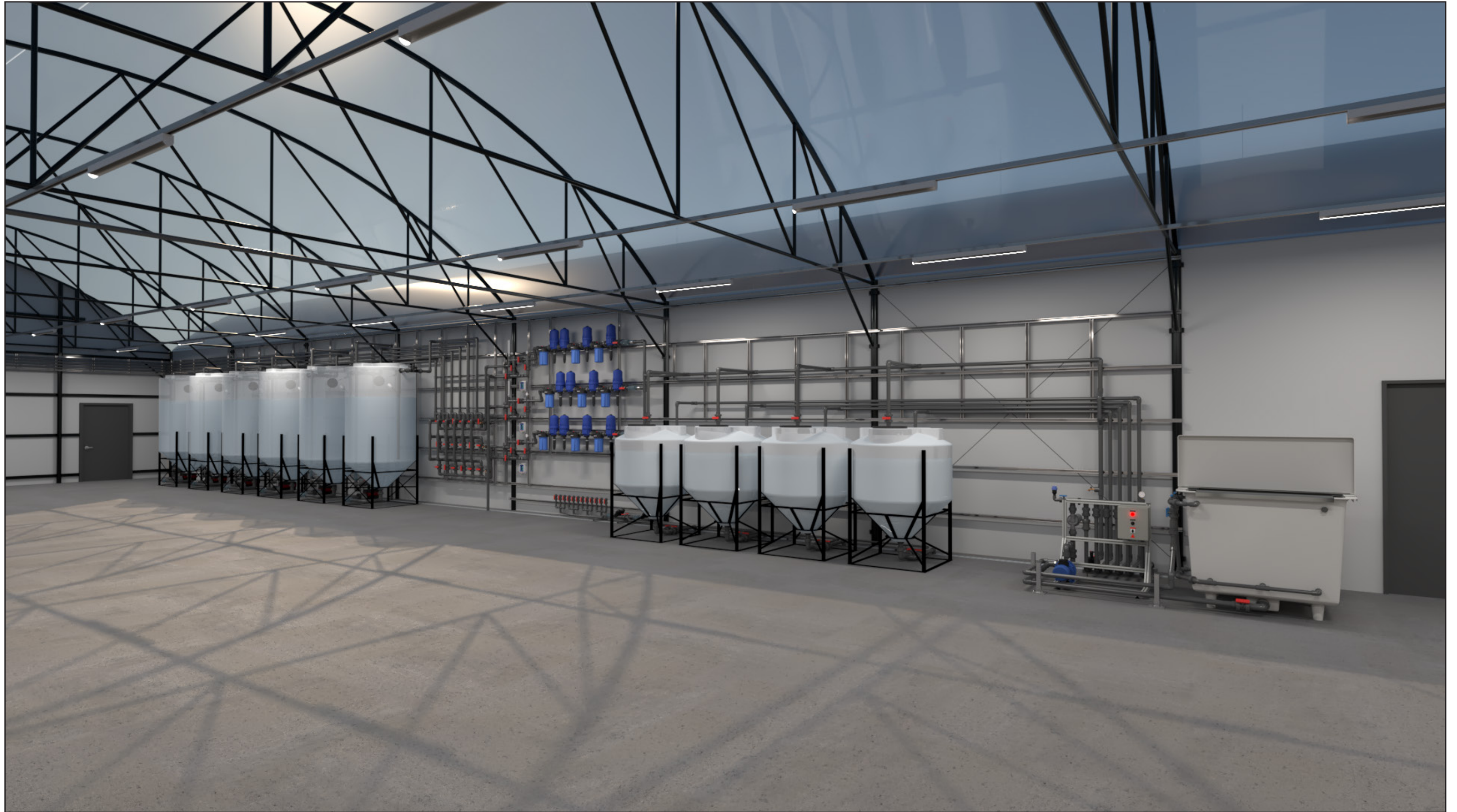


Jungle Boys. Ocala, Florida

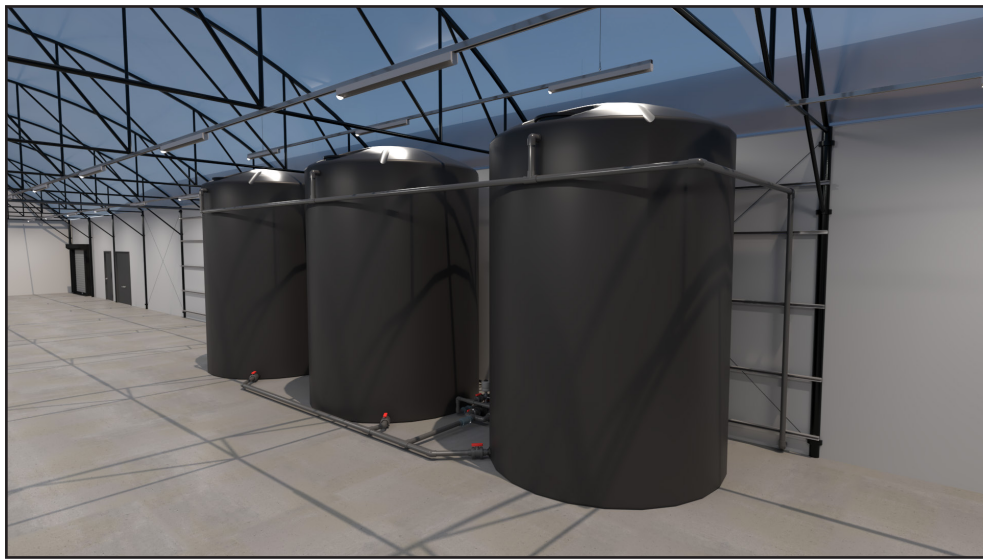
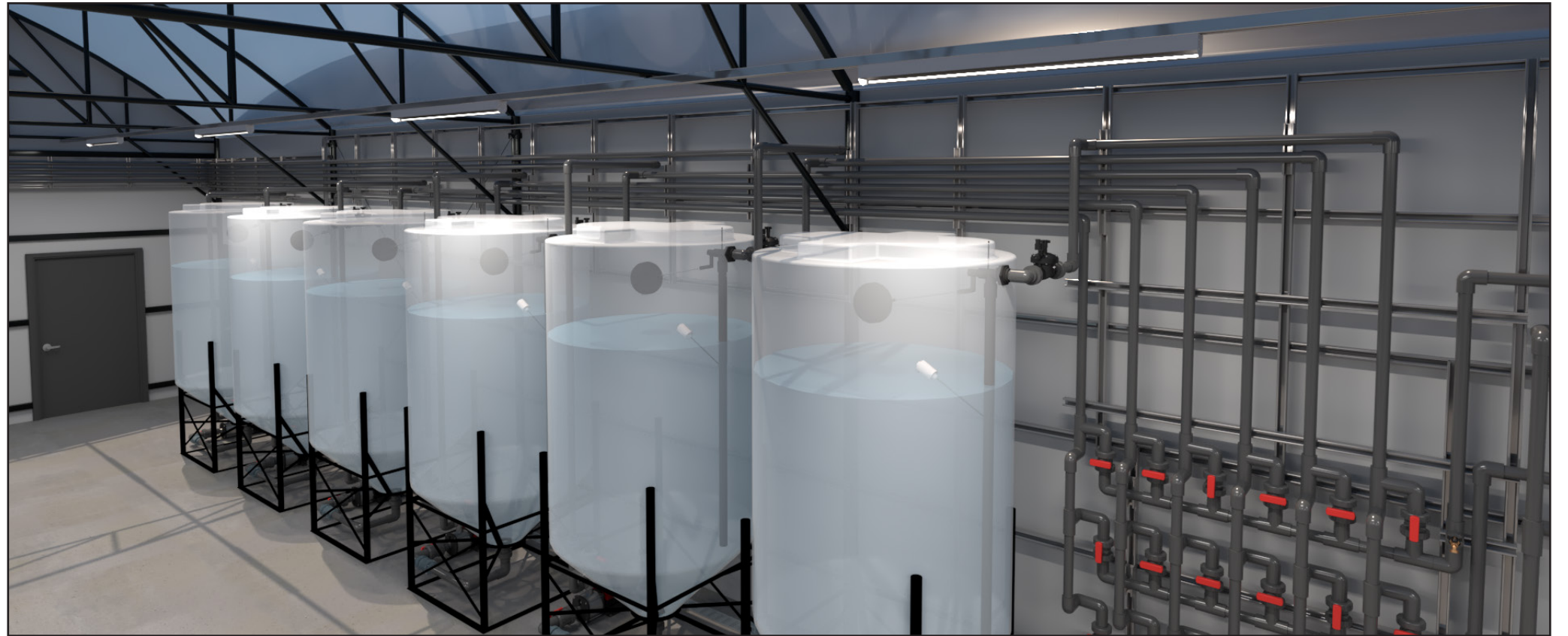




Jungle Boys. Ocala, Florida



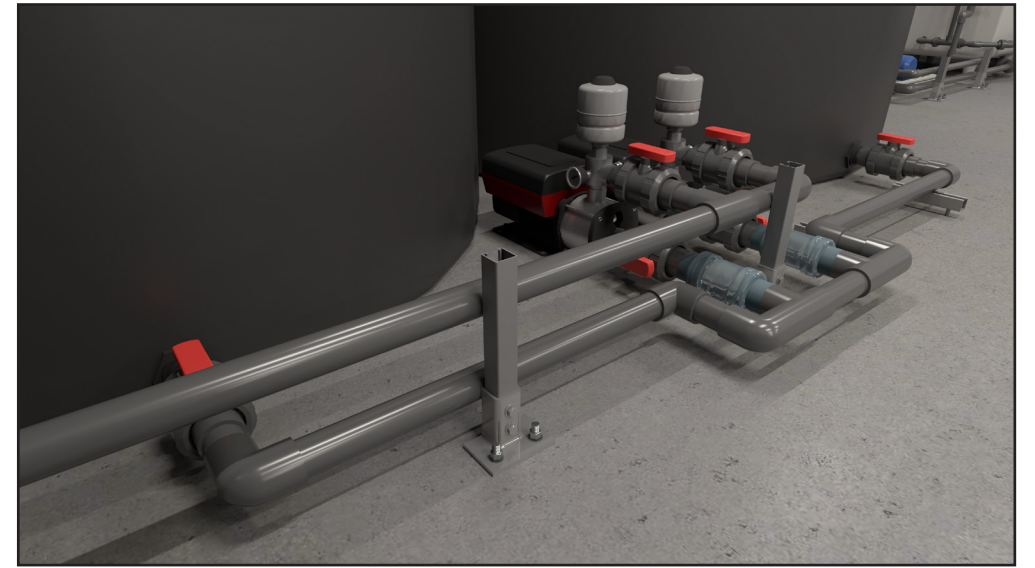
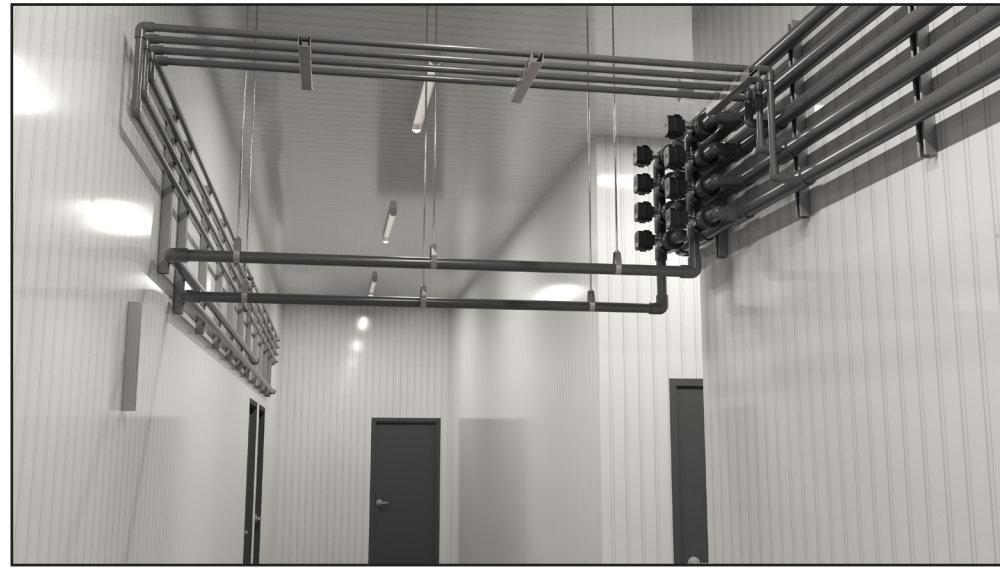
Clover Creek Cultivation. Caliente, Nevada



Clover Creek Cultivation. Caliente, Nevada



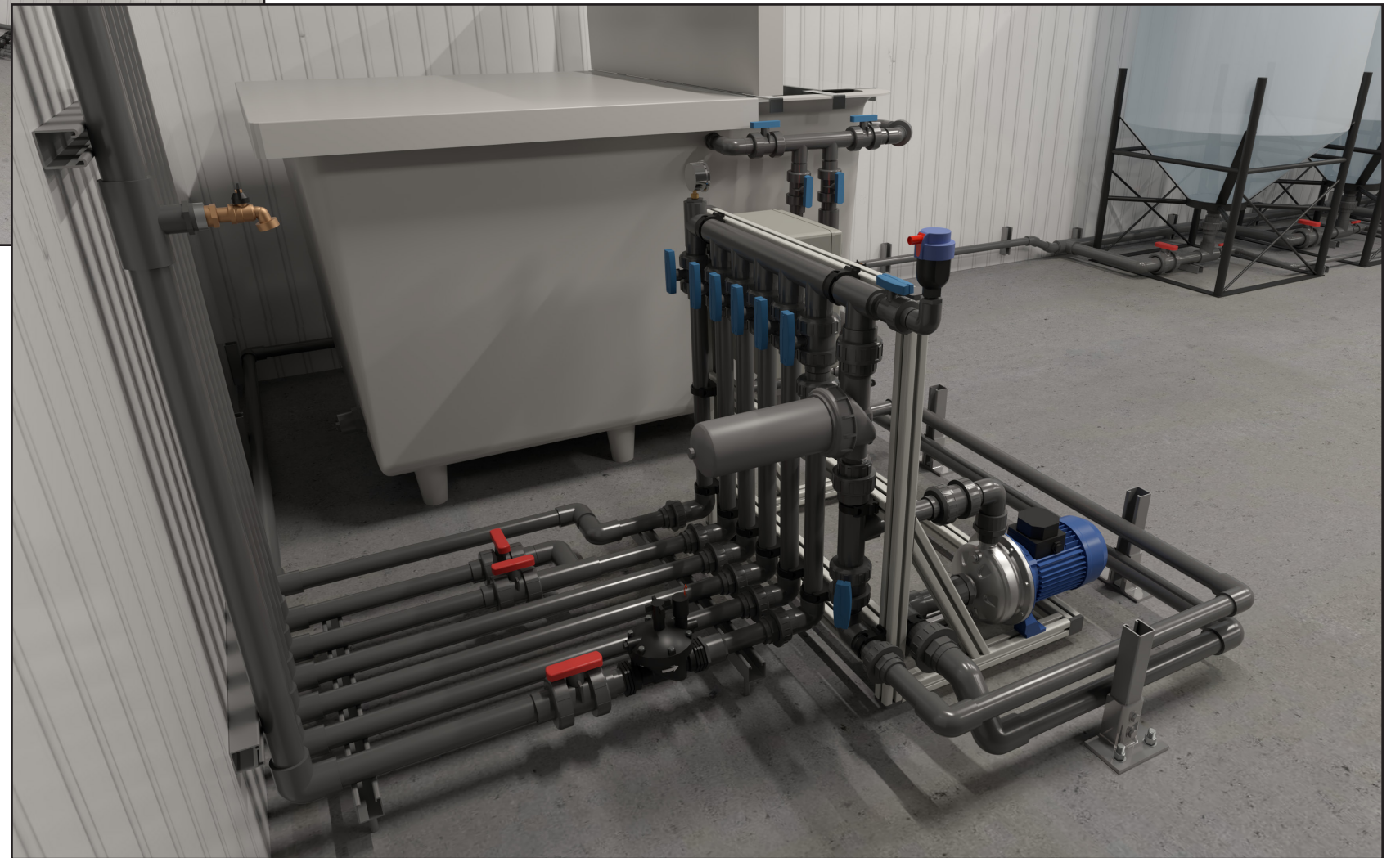
River Remedies. Byram, Mississippi



River Remedies. Byram, Mississippi

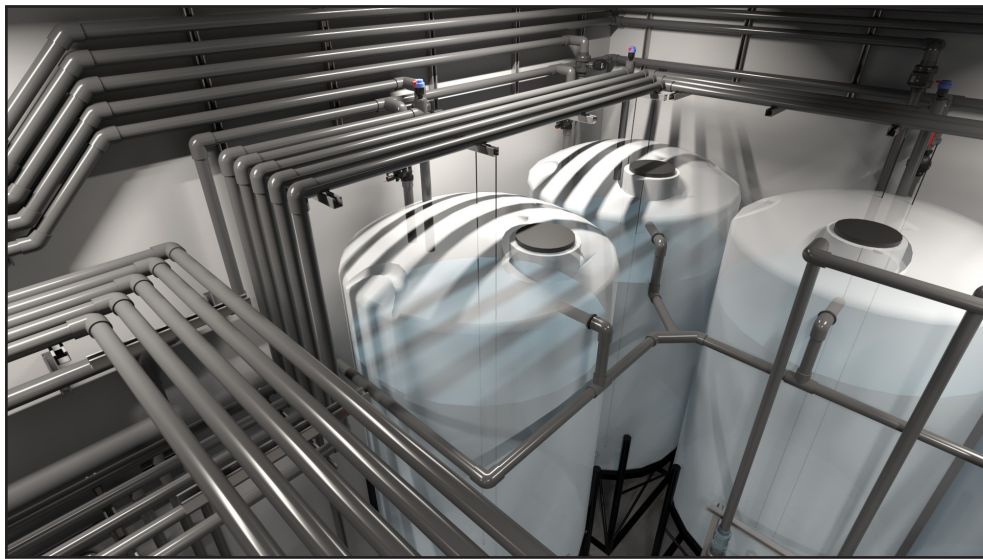
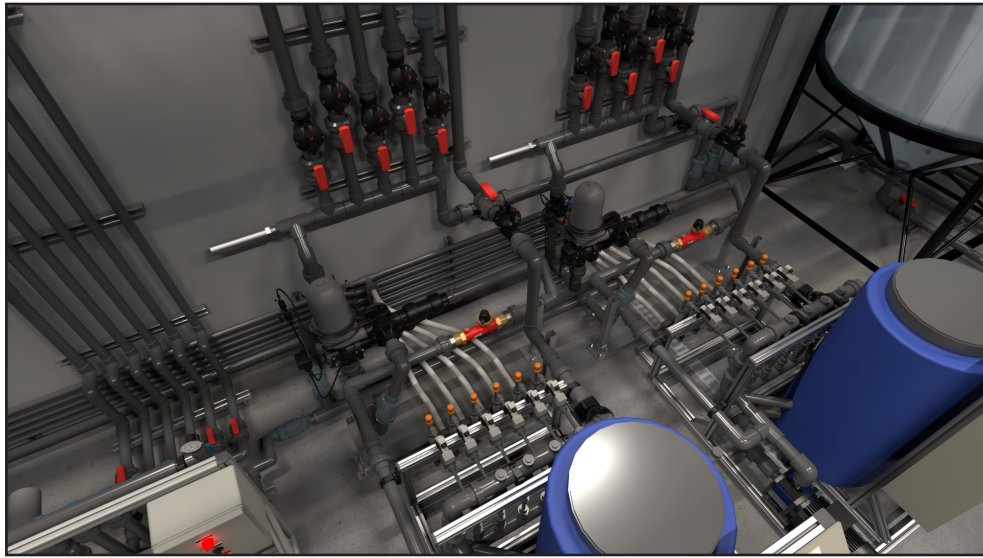


River Remedies. Byram, Mississippi





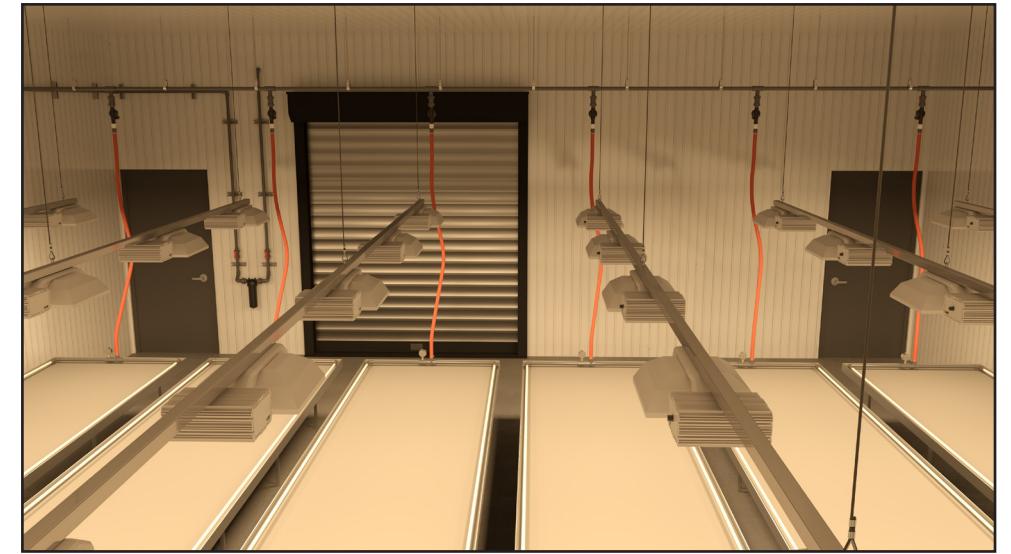
Grow Sciences. Phoenix, Arizona



Grow Sciences. Phoenix, Arizona



Golden Bloom Farms. Choctaw, Oklahoma



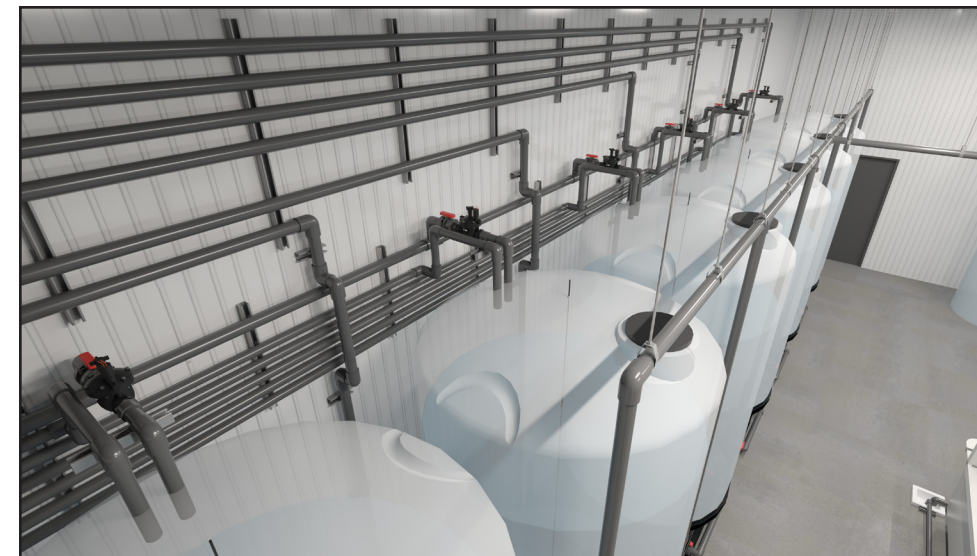
Golden Bloom Farms. Choctaw, Oklahoma



HD Biotech. Adelanto, California

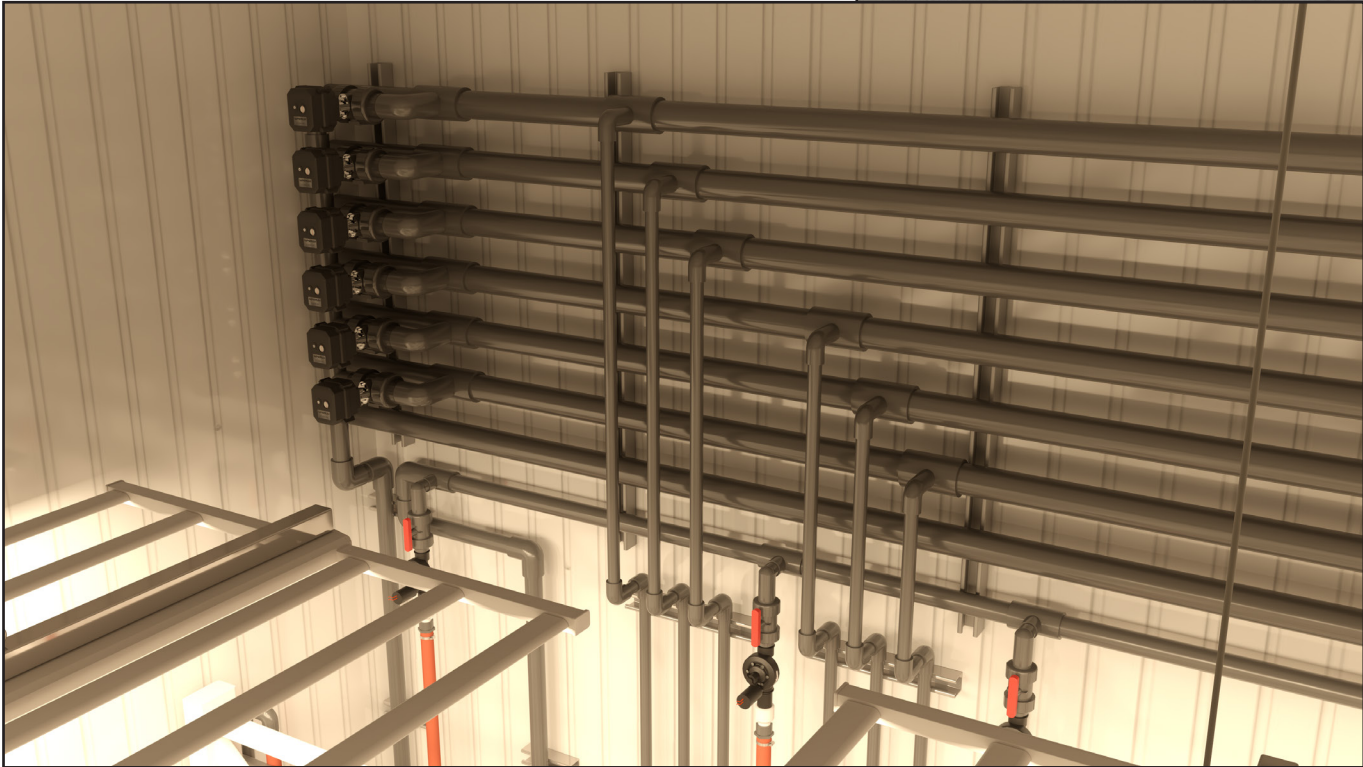


HD Biotech. Adelanto, California





HD Biotech. Adelanto, California



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