

CONSTRUCTION NOTES

GENERAL NOTES

- 1. ALL ITEMS SHALL BE CONSTRUCTED TO THE DIMENSIONS AND ELEVATIONS SHOWN ON THE DRAWINGS. ANY CHANGES SHALL BE APPROVED BY THE NRCS REPRESENTATIVE ON SITE.
- 2. ALL PERMITS, EASEMENTS, AND RIGHTS OF WAY ARE THE RESPONSIBILITY OF THE LANDOWNER.
- 3. IT IS THE EXCAVATION CONTRACTORS RESPONSIBILITY TO CALL "DIG SAFE" AND TO COMPLY WITH ALL VERMONT LAWS AND REGULATIONS REGARDING THE LOCATION AND WORK AROUND UNDERGROUND UTILITIES. DIG SAFE (888) 344-7233.
- 4. ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN A MANNER THAT MINIMIZES SEDIMENT FROM ENTERING ANY WATER BODIES, INCLUDING DRAINAGE WAYS, SEE VT D.E.C. SEDIMENT AND EROSION CONTROL HANDBOOKS.
- 5. CONSTRUCTION MAY NOT BEGIN UNTIL THE CONTRACTOR, LANDOWNER, AND NRCS HAVE A PRE-CONSTRUCTION MEETING IN ORDER TO DISCUSS THE DETAILS OF THE PROJECT.
- 6. IT SHALL BE THE CONTRACTOR'S AND LANDOWNER'S RESPONSIBILITY TO NOTIFY NRCS AT LEAST TWO DAYS IN ADVANCE OF:
  - A. START OF CONSTRUCTION.

MICRO-IRRIGATION NOTES:

- 7. DOUBLE CHECK VALVE ASSEMBLIES (DCVs) ARE NOT SUFFICIENT FOR BACKFLOW PREVENTION ON DOMESTIC SYSTEMS ACCORDING TO NRCS STANDARDS. PRESSURE VACUUM BREAKERS (PVBs) OR REDUCED PRESSURE ZONE ASSEMBLIES (RPZs) ARE REQUIRED. CONSULT LOCAL CITY CODE FOR ACCEPTABLE BACKFLOW PREVENTION MEASURES IF TYING INTO MUNICIPAL SYSTEMS.
- 8. PLACE THE VALVE STATION WITHIN THE HIGH TUNNEL OR OTHER ENCLOSURE TO PROTECT FROM FREEZING DURING EARLY/LATE SEASON USE OR DAMAGE FROM ADVERSE WEATHER CONDITIONS.
- 9. AFTER THE GROWING SEASON, DISASSEMBLE THE PVB ASSEMBLY AT THE UNIONS SHOWN AND DRAIN THE ENTIRE SYSTEM TO PREVENT FREEZING.
- 10. ABOVE GROUND PVC PIPE MUST BE PAINTED WITH 2 COATS OF LATEX PAINT TO PROTECT PIPE MATERIALS FROM UV DEGRADATION.
- 11. CONTINUED WATER LEAKAGE FROM THE AIR VENT INDICATES THE NEED FOR REPAIR. SOME MINOR LEAKAGE MAY OCCUR ON START UP AND IS NORMAL.
- 12. IT IS RECOMMENDED TO PLACE DRIP LINE VENTS ON THE HIGH POINTS OF THE DRIP LINE TO PREVENT DEBRIS FROM BEING PULLED INTO THE EMITTERS VIA VACUUM PRESSURE WHEN THE LINE IS DRAINED.
- 13. CHEMIGATION / FERTIGATION PORTS AND BACKFLOW PREVENTION REQUIREMENTS:
  - A. WHERE PRESSURE **WILL NOT BE** ADDED AT THE PORT (VENTURI INJECTOR OR OTHER), PVBs ARE ACCEPTABLE FOR BACKFLOW PREVENTION.
  - B. WHERE PRESSURE **WILL BE** ADDED AT THE PORT (INJECTOR PUMP OR POSITIVE DISPLACEMENT), RPZs ARE THE **ONLY** ACCEPTABLE BACKFLOW PREVENTION METHOD AND ARE REQUIRED.
- 14. SYSTEM REQUIREMENTS:  
WATER SOURCE INFORMATION: \_\_\_\_\_

PRESSURE SOURCE INFORMATION: \_\_\_\_\_ PSI MINIMUM PRESSURE REQUIRED FOR SYSTEM OPERATION

PRESSURE TANK

\_\_\_\_\_ PSI KICK ON PRESSURE

\_\_\_\_\_ PSI KICK OFF PRESSURE

\_\_\_\_\_ GAL TANK VOLUME

NEW PUMP

\_\_\_\_\_ FT TOTAL DYNAMIC HEAD

\_\_\_\_\_ GPM PUMP FLOW RATE

EXISTING PUMP \_\_\_\_\_ HORSEPOWER

MAKE: \_\_\_\_\_

MODEL: \_\_\_\_\_

FINISH WORK NOTES:

- 15. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND MULCHED ACCORDING TO CONSTRUCTION SPECIFICATION #52.



LOCATION MAP  
SCALE: \_\_\_\_\_

BILL OF MATERIALS

ITEM #	ITEM	QUANTITY	UNIT	CONSTRUCTION SPECIFICATIONS
1.	SITE PREPARATION	FOR	JOB	1, 5
2.	_____” DIA _____ RATED _____ MAINLINE PIPE		FT.	41
3.	FROST FREE HYDRANT (LEAD FREE)		EA.	11, 41
4.	FILTER, 140 MESH MINIMUM		EA.	41
5.	BACKFLOW PREVENTION VALVE RPZ PVB		EA.	41
6.	PRESSURE GAUGE		EA.	41
7.	PRESSURE REGULATOR		EA.	41
8.	MISCELLANEOUS PIPE, FITTINGS, & APPURTENANCES	AS REQUIRED		41
9.	MANIFOLD HOSE		FT.	41
10.	STARTER VALVE		EA.	41
11.	DRIP TAPE		FT.	41
12.	STAPLES		EA.	41



Date1/1/2021

Designed

Drawn

Checked

Approved by

VT STANDARD DRAWING

United States  
Department of  
Agriculture  
Natural Resources  
Conservation Service

HAZARD CLASS  
LOW

JOB CLASS

MICROIRRIGATION SYSTEM – HIGH TUNNEL  
CONSTRUCTION NOTES & BILL OF MATERIALS  
VERMONT

File Name

Drawing Name  
VT-441-001-2021

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### PLAN VIEW

PROFILE:

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File Name

Drawing Name

VT-441-001-2021

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MICROIRRIGATION SYSTEM – HIGH TUNNEL  
PLAN – PROFILE

# ALUMINIUM

HAZARD CLASS  
LOW

## JOB CLASS



**United States  
Department of  
Agriculture**

**Natural Resources  
Conservation Service**

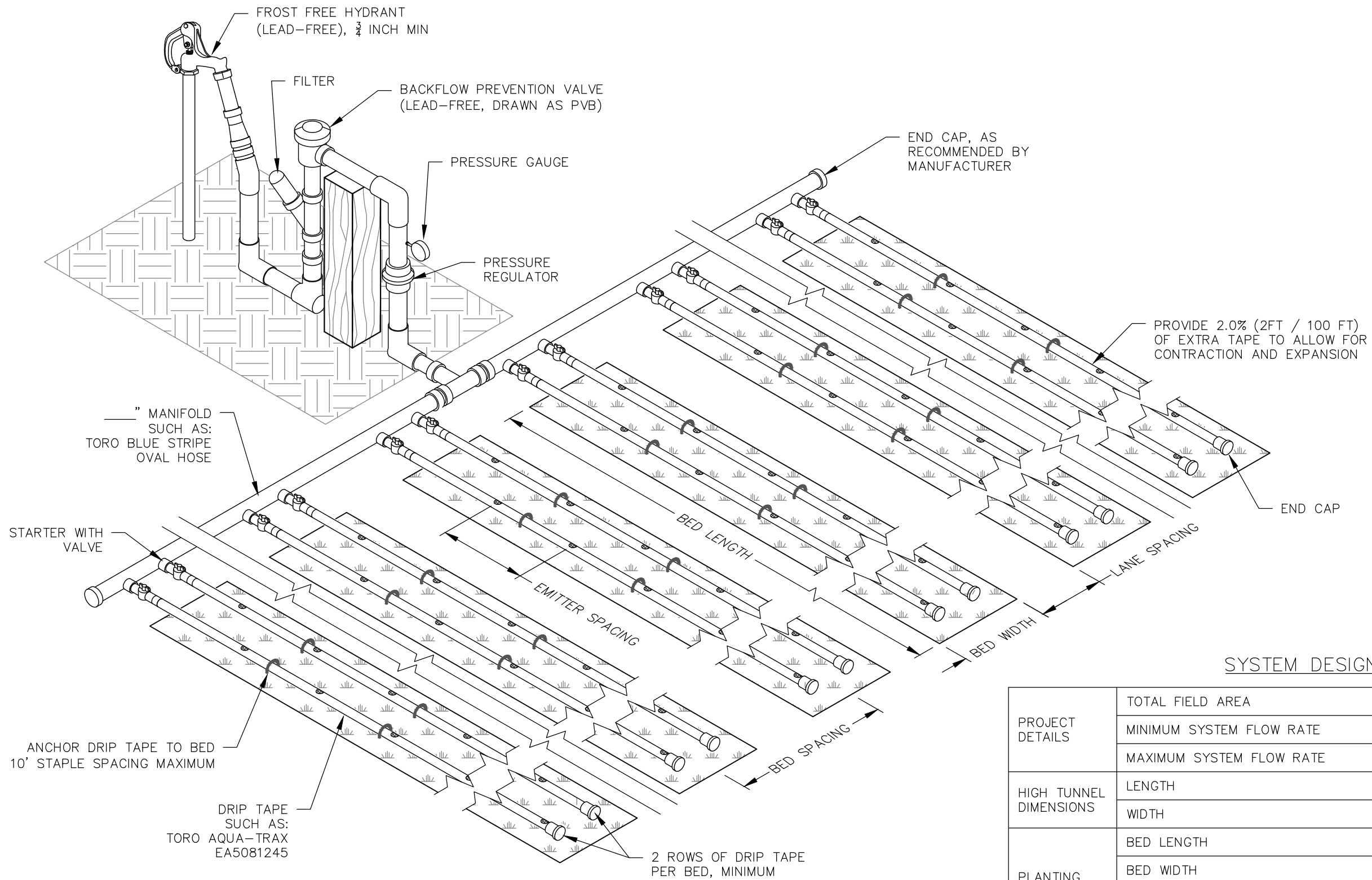


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SYSTEM DESIGN

PROJECT DETAILS	TOTAL FIELD AREA		SQUARE FEET
	MINIMUM SYSTEM FLOW RATE		GPM
	MAXIMUM SYSTEM FLOW RATE		GPM
HIGH TUNNEL DIMENSIONS	LENGTH		FEET
	WIDTH		FEET
PLANTING BED DETAILS	BED LENGTH		FEET
	BED WIDTH		INCHES
	LANE SPACING		INCHES
	BED SPACING		INCHES
DRIP TAPE DETAILS	TAPE DIAMETER		INCHES
	EMITTER FLOW RATE		GPH
	EMITTER SPACING		INCHES
	NUMBER OF ROWS PER BED		EACH
ZONE DETAILS	NUMBER OF ZONES		EACH
	FLOW RATE PER ZONE		GPM

Date

1/1/2021

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Natural Resources  
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HAZARD CLASS  
LOW

JOB CLASS

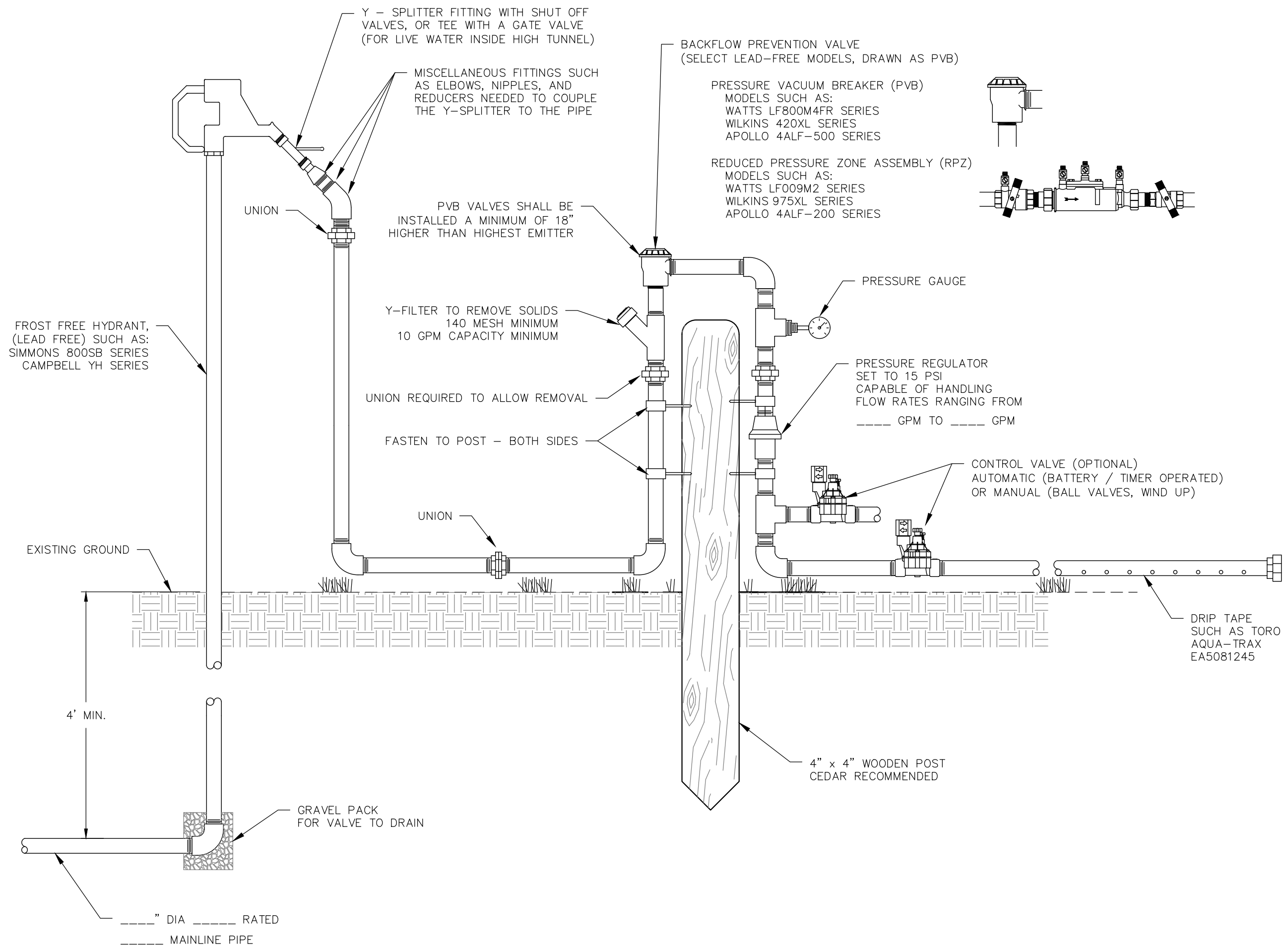
MICROIRRIGATION SYSTEM – HIGH TUNNEL  
ISOMETRIC / SYSTEM DETAILS

VERMONT

File Name

Drawing Name  
VT-441-001-2021

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Date 1/1/2021	
Designed Drawn Checked Approved by	
VT STANDARD DRAWING	
United States Department of Agriculture Natural Resources Conservation Service	
HAZARD CLASS LOW	JOB CLASS
MICROIRRIGATION SYSTEM – HIGH TUNNEL PLUMBING DETAILS	
VERMONT	
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