

# High Tunnel System

## Conservation Practice Job Sheet

325



Photo Source: [www.hightunnels.org](http://www.hightunnels.org)

### Definition

A high tunnel is a covered structure at least 6 feet in height, which modifies the climate to create more favorable growing conditions for vegetable and other specialty crops grown in the natural soil within the covered space.

### Purpose

The purpose of the high tunnel is to improve plant condition; soil quality and water quality from reduced nutrient and pesticide transport.

### Where used

A high tunnel may be used where extension of the growing season is needed due to climate conditions and crops can be grown in the natural soil profile.

Commercially available high tunnel structures are made in numerous widths and lengths. The high tunnels are constructed of metal or plastic bow frames that are covered with layer(s) of polyethylene or other approved cover. Ventilation is achieved by means of a combination of roll-up side vents, end vents, and occasionally, roof vents. Generally, the end walls are framed-in to

create door and ventilation areas. The high tunnel structure covers several crop rows, is wide enough to allow crop growth to full maturity under the tunnel, and is tall enough to allow spraying, cultivation and harvest to occur with the tunnel intact.

### Conservation management system

Water runoff from the high tunnels or from other nearby sources can cause erosion and ponding issues that may require the application of other practices such as infiltration trenches, diversions, underground outlets and critical area plantings. These additional practices must be planned and installed as a condition for the installation of a high tunnel. Additional practices should be considered as a part of a conservation plan, such as nutrient and pest management and crop rotation.

**High Tunnel System – Job Sheet**

Producer \_\_\_\_\_ Tract/Field \_\_\_\_\_

Field Office \_\_\_\_\_ Conservation Planner \_\_\_\_\_

**Materials List**

High Tunnel Structure w/end units (including 4 year manufacturer's warranty)  
size(s) \_\_\_\_\_

**Supporting Practices Required:** Installed according to Conservation Practice Standard and job sheets and/or construction drawings.

Roof Runoff Structure (558)                       Mulching (484)

Critical Area Planting (342)

Other \_\_\_\_\_

**High Tunnel Structure- design specifications**

Structure	Planned	Installed
Length (ft)		
Width (ft)		
Height in center (ft)		

Structure Manufacturer \_\_\_\_\_

**High Tunnel System Construction**

- Prepare site according to manufacturer's instructions.
- Lay out building location according to an approved site plan.
- Assemble high tunnel structure according to manufacturer's instructions.
- Install supporting practices as required, according to job sheets and/or construction drawings provided.

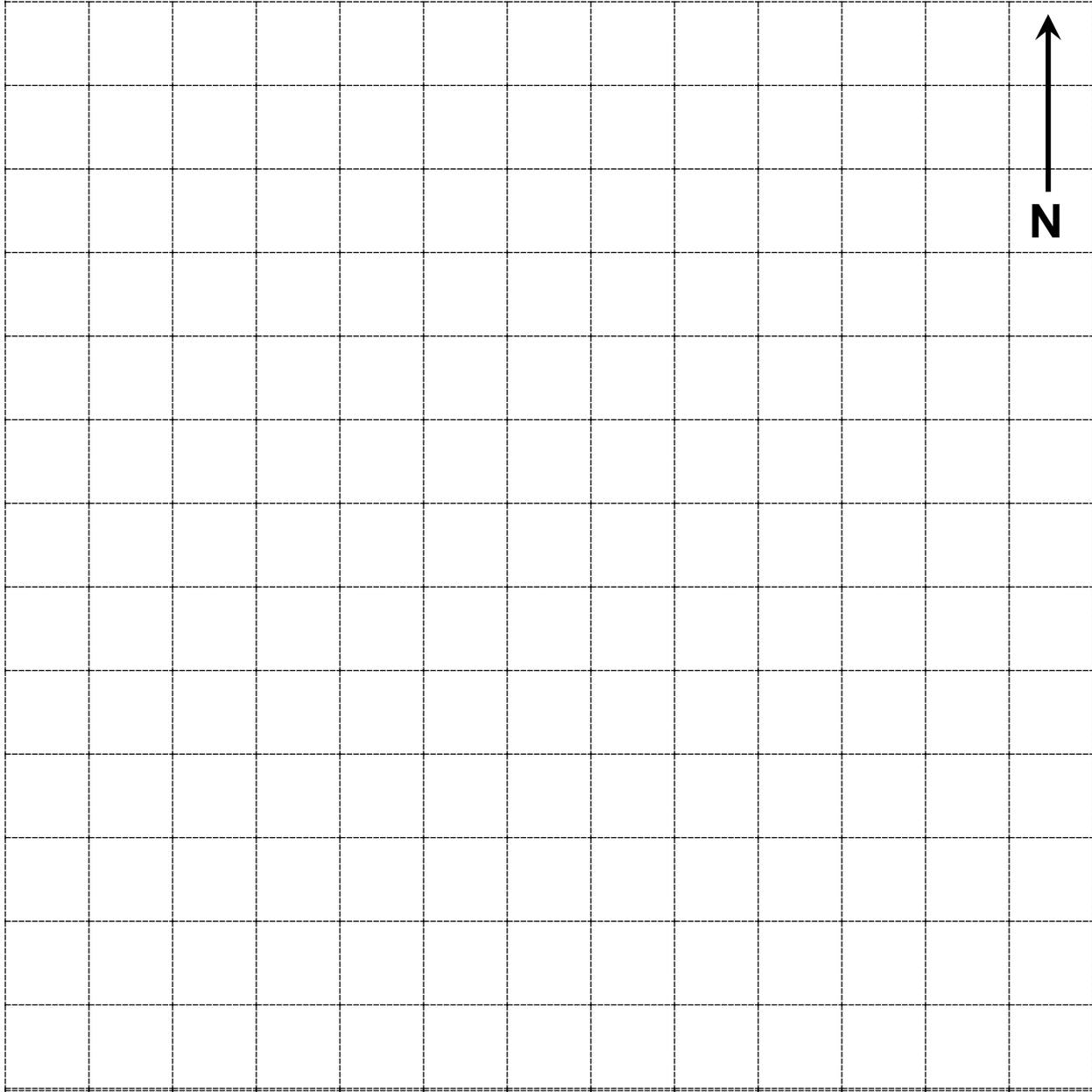
**Operation and Maintenance**

- Periodically inspect structure and cover for damage. Reinstall or repair promptly.
- Follow manufacturer's instructions for operation and maintenance of the high tunnel structure.
- Avoid damage to structure from equipment operated in and around the seasonal high tunnel.
- Inspect runoff control measures after every significant rainfall event. Repair promptly.
- Remove or manage snow loads immediately to ensure integrity of structure for the lifespan of the conservation practice OR
- Remove and store high tunnel cover at the end of each growing season to prevent damage from snow loads. Replace cover prior to use in the spring.
- Crops in High tunnel must be grown in soil profile. DO NOT use High Tunnel for crops grown in benches or pots.

## High Tunnel System – Layout and Location

Plan view of seasonal high tunnel system site shown below. **Note:** A JPEG image of the Conservation Practice map may be imported or attached in lieu of sketch.

Scale 1"= \_\_\_\_\_ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")



The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication program information (Braille, large print, audiotape, etc.) should contact the USDA Office of Communications (202) 720-2791.

To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.