

Practice: 423 - Hillside Ditch

Scenario: #1 - Channel, Hand Labor

Scenario Description:

A hillside ditch is a channel that has a supporting ridge on the lower side, constructed with hand labor across the slope at defined gradient and horizontal or vertical interval, with or without a vegetative barrier to safely control the flow of water by diverting runoff from upland sloping areas to a stable outlet. The resource concerns addressed include soil erosion, water quality degradation, and excess runoff.

Before Situation:

Hillside Ditch applies to steeply sloping sites where surface flow is damaging sloping upland, and there is sufficient soil depth for constructing a hillside ditch system. Hillside ditches shall not be used to provide protection to buildings, roads, or other improvements.

After Situation:

A hillside ditch is constructed with hand labor and consist of approximately 300 feet of channel that has a supporting ridge on the lower side, constructed across the slope at defined gradient and horizontal or vertical interval, with or without a vegetative barrier to safely control the flow of water by diverting runoff from upland sloping areas to a stable outlet. A hillside ditch controls and reduces soil erosion, water quality degradation, and excess runoff. Any needed vegetation will be completed under critical area planting (342). Erosion control during construction activities will use Stormwater Runoff Control (570). Other associated practices include Critical Area Planting (342), Grassed Waterway (412), Underground Outlet (620), Mulching (484), Subsurface Drainage (606), Lined Waterway or Outlet (468), Underground Outlet (620), and Grade Stabilization Structure (410).

Scenario Feature Measure: Length of Channel

Scenario Unit: Linear Feet

Scenario Typical Size: 300

Scenario Cost: \$394.60

Scenario Cost/Unit: \$1.32

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
	1145				0.5	
	1142				0.5	

Labor

Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$32.40	0.5	\$16.20
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.92	20	\$378.40

Practice: 423 - Hillside Ditch

Scenario: #2 - Channel, Equipment

Scenario Description:

A hillside ditch is a channel that has a supporting ridge on the lower side, constructed with equipment across the slope at defined gradient and horizontal or vertical interval, with or without a vegetative barrier to safely control the flow of water by diverting runoff from upland sloping areas to a stable outlet. The resource concerns addressed include soil erosion, water quality degradation, and excess runoff.

Before Situation:

A hillside ditch applies to steeply sloping sites where surface flow is damaging sloping upland, and there is sufficient soil depth for constructing a hillside ditch system. Hillside ditches shall not be used to provide protection to buildings, roads, or other improvements.

After Situation:

A hillside ditch is constructed with equipment and consists of approximately 200 cubic yards of excavated channel that has a supporting ridge on the lower side, constructed across the slope at defined gradient and horizontal or vertical interval, with or without a vegetative barrier to safely control the flow of water by diverting runoff from upland sloping areas to a stable outlet. A hillside ditch controls and reduces soil erosion, water quality degradation, and controls excess runoff. Any needed vegetation will be completed under critical area planting (342). Erosion control during construction activities will use Stormwater Runoff Control (570). Other associated practices include Critical Area Planting (342), Grassed Waterway (412), Underground Outlet (620), Mulching (484), Subsurface Drainage (606), Lined Waterway or Outlet (468), Underground Outlet (620), and Grade Stabilization Structure (410).

Scenario Feature Measure: Volume of Channel

Scenario Unit: Cubic Yard

Scenario Typical Size: 200

Scenario Cost: \$602.42

Scenario Cost/Unit: \$3.01

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
	1145				0.5	
	1142				0.5	
Equipment/Installation						
Excavation, Common Earth, side cast, small equipment	48	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.29	200	\$458.00
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$32.40	1	\$32.40
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.92	1	\$18.92
Mobilization						
Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$186.19	0.5	\$93.10