

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	8
Scenario Name	Asphalt
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete with curb on a sand or gravel foundation to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice, The stabilized area will address the resource concerns soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	Unstable area is surfaced with 630 square feet of asphalt, no curbing. Asphalt is underlain with 6" of compacted drainfill material. Area is frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. Associated practices are Access Road (560), Stream Crossing (578), Critical Area Planting (342). Provisions to store, utilize, and/or treat contaminated runoff shall be addressed under Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Area of Asphalt Pad
Scenario Unit	Square Foot
Scenario Typical Size	630

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,775.82	\$2.82
Equipment/Installation	\$101.52	\$0.16
Labor	\$186.20	\$0.30
Mobilization	\$923.12	\$1.47
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,986.66	\$4.74

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	46	Aggregate, Gravel, Graded	Gravel, includes materials, equipment and labor to transport and place. Includes washed and unwashed gravel.	Cubic yard	\$27.76	12	\$333.12
Materials	1867	Asphalt, pavement	Bituminous Concrete, includes materials, equipment and labor for 4" layer, base not included.	Square Foot	\$2.29	630	\$1,442.70
Equipment/Installation	48	Excavation, Common Earth, side cast, small equipment	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.16	47	\$101.52
Labor	231	General Labor	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	\$25.71	4	\$102.84
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	2	\$83.36
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	2	\$548.66
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	6
Scenario Name	Concrete with Curb > 1000 SF
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete with curb on a sand or gravel foundation to provide a stable, non-eroding surface. Curb is necessary to directly contaminated runoff to proper location. Installation includes all materials, equipment, and labor to install this practice. The stabilized area will address the resource concerns soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	Unstable area is surfaced with 2500 square feet of concrete with curbing. Curb is installed to direct contaminated runoff to proper location and to assist in the movement, handling and management of manure. Concrete slab is 5" thick with 6" of compacted drainfill underneath. Concrete curb is 24" tall and 8" wide with 3' wide footing, with reinforcing steel. Area is frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. Associated practices are Access Road (560), Stream Crossing (578), Critical Area Planting (342). Provisions to store, utilize, and/or treat contaminated runoff shall be addressed under Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Area of Concrete Pad
Scenario Unit	Square Foot
Scenario Typical Size	2500

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,228.66	\$0.49
Equipment/Installation	\$23,558.67	\$9.42
Labor	\$320.98	\$0.13
Mobilization	\$923.12	\$0.37
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$26,031.43	\$10.41

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	45	Aggregate, Sand, Graded, Washed	Sand, typical ASTM C33 gradation, includes materials, equipment and labor to transport and place	Cubic yard	\$26.71	46	\$1,228.66
Equipment/Installation	38	Concrete, CIP, formed reinforced	Steel reinforced concrete formed and cast-in-place in formed structures such as walls or suspended slabs by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$502.94	21	\$10,561.74
Equipment/Installation	50	Earthfill, Manually Compacted	Earthfill, manually compacted, includes equipment and labor	Cubic yard	\$5.34	46	\$245.64
Equipment/Installation	48	Excavation, Common Earth, side cast, small equipment	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.16	185	\$399.60
Equipment/Installation	37	Concrete, CIP, slab on grade, reinforced	Steel reinforced concrete formed and cast-in-place as a slab on grade by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$316.71	39	\$12,351.69
Labor	231	General Labor	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	\$25.71	6	\$154.26
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	4	\$166.72
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	2	\$548.66
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	5
Scenario Name	Concrete without Curb < 1000 SF
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete with curb on a sand or gravel foundation to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice, The stabilized area will address the resource concerns soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	Unstable area is surfaced with 630 square feet of concrete, no curbing. Concrete slab is 5" thick with 6" of compacted drainfill underneath. Area is frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. Associated practices are Access Road (560), Stream Crossing (578), Critical Area Planting (342). Provisions to store, utilize, and/or treat contaminated runoff shall be addressed under Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Area of Concrete Pad
Scenario Unit	Square Foot
Scenario Typical Size	630

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$320.52	\$0.51
Equipment/Installation	\$3,332.70	\$5.29
Labor	\$186.20	\$0.30
Mobilization	\$923.12	\$1.47
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,762.54	\$7.56

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	45	Aggregate, Sand, Graded, Washed	Sand, typical ASTM C33 gradation, includes materials, equipment and labor to transport and place	Cubic yard	\$26.71	12	\$320.52
Equipment/Installation	50	Earthfill, Manually Compacted	Earthfill, manually compacted, includes equipment and labor	Cubic yard	\$5.34	12	\$64.08
Equipment/Installation	48	Excavation, Common Earth, side cast, small equipment	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.16	47	\$101.52
Equipment/Installation	37	Concrete, CIP, slab on grade, reinforced	Steel reinforced concrete formed and cast-in-place as a slab on grade by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$316.71	10	\$3,167.10
Labor	231	General Labor	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	\$25.71	4	\$102.84
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	2	\$83.36
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	2	\$548.66
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	7
Scenario Name	Concrete without Curb > 1000 SF
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete with curb on a sand or gravel foundation to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice, The stabilized area will address the resource concerns soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	Unstable area is surfaced with 2500 square feet of concrete, no curbing. Concrete slab is 5" thick with 6" of compacted drainfill underneath. Area is frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. Associated practices are Access Road (560), Stream Crossing (578), Critical Area Planting (342). Provisions to store, utilize, and/or treat contaminated runoff shall be addressed under Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Area of Concrete Pad
Scenario Unit	Square Foot
Scenario Typical Size	2500

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,228.66	\$0.49
Equipment/Installation	\$12,996.93	\$5.20
Labor	\$320.98	\$0.13
Mobilization	\$923.12	\$0.37
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$15,469.69	\$6.19

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	45	Aggregate, Sand, Graded, Washed	Sand, typical ASTM C33 gradation, includes materials, equipment and labor to transport and place	Cubic yard	\$26.71	46	\$1,228.66
Equipment/Installation	50	Earthfill, Manually Compacted	Earthfill, manually compacted, includes equipment and labor	Cubic yard	\$5.34	46	\$245.64
Equipment/Installation	48	Excavation, Common Earth, side cast, small equipment	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.16	185	\$399.60
Equipment/Installation	37	Concrete, CIP, slab on grade, reinforced	Steel reinforced concrete formed and cast-in-place as a slab on grade by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$316.71	39	\$12,351.69
Labor	231	General Labor	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	\$25.71	6	\$154.26
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	4	\$166.72
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	2	\$548.66
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	2
Scenario Name	Curb with Footer
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete with curb on a sand or gravel foundation to provide a stable, non-eroding surface. Curb is necessary to directly contaminated runoff to proper location. Installation includes all materials, equipment, and labor to install this practice. The stabilized area will address the resource concerns soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	Curb is installed to direct contaminated runoff to proper location and to assist in the movement, handling and management of manure. Concrete curb is 24" tall and 8" wide and 100' long. Footing is 3' wide and 6" deep. Curbing is reinforced with rebar. Curb is underlain by 6" of drainfill. Area is frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. Associated practices are Access Road (560), Stream Crossing (578), Critical Area Planting (342). Provisions to store, utilize, and/or treat contaminated runoff shall be addressed under Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Length of Curb
Scenario Unit	Linear Foot
Scenario Typical Size	100

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$166.56	\$1.67
Equipment/Installation	\$5,729.46	\$57.29
Labor	\$307.51	\$3.08
Mobilization	\$923.12	\$9.23
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$7,126.65	\$71.27

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	46	Aggregate, Gravel, Graded	Gravel, includes materials, equipment and labor to transport and place. Includes washed and unwashed gravel.	Cubic yard	\$27.76	6	\$166.56
Equipment/Installation	38	Concrete, CIP, formed reinforced	Steel reinforced concrete formed and cast-in-place in formed structures such as walls or suspended slabs by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$502.94	11	\$5,532.34
Equipment/Installation	48	Excavation, Common Earth, side cast, small equipment	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.16	11	\$23.76
Equipment/Installation	50	Earthfill, Manually Compacted	Earthfill, manually compacted, includes equipment and labor	Cubic yard	\$5.34	6	\$32.04
Equipment/Installation	933	Skidsteer, 80 HP	Skidsteer loader with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$35.33	4	\$141.32
Labor	231	General Labor	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	\$25.71	5	\$128.55
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.90	4	\$95.60
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foreman and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	2	\$83.36
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	2	\$548.66

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	3
Scenario Name	Curb without Footer
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with reinforced concrete with curb on a sand or gravel foundation to provide a stable, non-eroding surface. Curb is necessary to directly contaminated runoff to proper location. Installation includes all materials, equipment, and labor to install this practice. The stabilized area will address the resource concerns soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	Curb is installed to direct contaminated runoff to proper location and to assist in the movement, handling and management of manure. Concrete curb is 24" tall and 8" wide and 100' long. Curb is installed on top of existing slab, no footing. Hole are drilled into existing slab to accommodate vertical rebar. Area is frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. Associated practices are Access Road (560), Stream Crossing (578), Critical Area Planting (342). Provisions to store, utilize, and/or treat contaminated runoff shall be addressed under Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Length of Curb
Scenario Unit	Linear Foot
Scenario Typical Size	100

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$0.00	\$0.00
Equipment/Installation	\$2,514.70	\$25.15
Labor	\$340.46	\$3.40
Mobilization	\$374.46	\$3.74
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$3,229.62	\$32.30

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation	38	Concrete, CIP, formed reinforced	Steel reinforced concrete formed and cast-in-placed in formed structures such as walls or suspended slabs by chute placement. Typical strength is 3000 to 4000 psi. Includes materials, labor and equipment to transport, place and finish.	Cubic yard	\$502.94	5	\$2,514.70
Labor	231	General Labor	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	\$25.71	10	\$257.10
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	2	\$83.36
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Agricultural Engineering
Practice Code/Name	561 - Heavy Use Area Protection
Scenario ID	1
Scenario Name	Rock/Gravel on Geotextile
Scenario Description	The stabilization of areas around facilities that are frequently and intensively used by people, animals or vehicles by surfacing with rock and or gravel on a geotextile fabric foundation to provide a stable, non-eroding surface. Installation includes all materials, equipment, and labor to install this practice, The stabilized area will address the resource concerns of soil erosion and water quality degradation.
Before Practice Situation	This practice applies to agricultural, urban, recreational and other frequently and/or intensively used areas requiring treatment to address soil erosion and water quality degradation.
After Practice Situation	The stabilized area is surfaced with approximately 630 square feet of rock and or gravel on approximately 70 square yards of geotextile fabric foundation material for surfacing areas around facilities that are frequently and intensively used by people, animals or vehicles and will address soil erosion and water quality degradation. All needed roads must use Access Road (560). Any needed treatment of stream crossings must use Stream Crossing (578). Any needed vegetation of disturbed areas must use Critical Area Planting (342). Provisions to collect, store, utilize, and or treat contaminated runoff must use Sediment Basin (350), Waste Storage Facility (313), or Waste Treatment (629) as appropriate. To reduce the potential for air quality problems from particulate matter associated with heavy use areas, consider the use of Windbreak/Shelterbelt Establishment (380) or Herbaceous Wind Barriers (603).
Scenario Feature Measure	Area of Gravel Pad
Scenario Unit	Square Foot
Scenario Typical Size	630

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$666.24	\$1.06
Equipment/Installation	\$421.46	\$0.67
Labor	\$140.90	\$0.22
Mobilization	\$923.12	\$1.47
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,151.72	\$3.42

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	46	Aggregate, Gravel, Graded	Gravel, includes materials, equipment and labor to transport and place. Includes washed and unwashed gravel.	Cubic yard	\$27.76	24	\$666.24
Equipment/Installation	50	Earthfill, Manually Compacted	Earthfill, manually compacted, includes equipment and labor	Cubic yard	\$5.34	24	\$128.16
Equipment/Installation	48	Excavation, Common Earth, side cast, small equipment	Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.16	24	\$51.84
Equipment/Installation	42	Geotextile, woven	Woven Geotextile Fabric. Includes materials, equipment and labor	Square Yard	\$2.44	70	\$170.80
Equipment/Installation	933	Skidsteer, 80 HP	Skidsteer loader with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$35.33	2	\$70.66
Labor	232	Equipment Operators, Light	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$23.90	2	\$47.80
Labor	231	General Labor	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	\$25.71	2	\$51.42
Labor	234	Supervisor or Manager	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$41.68	1	\$41.68
Mobilization	1139	Mobilization, medium equipment	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$274.33	2	\$548.66
Mobilization	1138	Mobilization, small equipment	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	\$187.23	2	\$374.46