

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	558 - Roof Runoff Structure
Scenario ID	1
Scenario Name	Roof Gutter

Scenario Description
 A roof runoff structure, consisting of gutter(s), downspout(s), and appropriate outlet facilities. Used to keep roof clean water runoff uncontaminated and provide a stable outlet to ground surface. Facilitates waste management and protects environment by minimizing clean water additions to waste systems and addresses water quality concerns.
 Associated practices include Waste Storage Facility (313), Composting Facility (317), Heavy Use Area Protection (561), Watering Facility (614).

Before Practice Situation
 Applicable where: (1) a roof runoff management facility is included in an overall plan for an overall plan for a waste management system; (2) roof runoff needs to be diverted away from structures or contaminated areas; (3) there is a need to collect, control, and transport runoff from roofs to a stable outlet.

After Practice Situation
 A gutter, downspout, and a separate outlet system servicing the portion of the building roof that would otherwise drain into a waste management system or create erosion. Roof line of 200 ft serviced with gutter, four downspouts, and appurtances. Use underground outlet or other associated practice to carry water beyond end of downspout.

Scenario Feature Measure	Linear Length of gutter and downspout
Scenario Unit	Linear Feet
Scenario Typical Size	260

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$712.60	\$2.74
Equipment/Installation	\$0.00	\$0.00
Labor	\$1,640.88	\$6.31
Mobilization	\$195.13	\$0.75
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,548.61	\$9.80

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	558 - Roof Runoff Structure
Scenario ID	2
Scenario Name	Roof Gutter with Fascia

Scenario Description	<p>A roof runoff structure, consisting of gutter(s), downspout(s), and appropriate outlet facilities. Used to keep roof clean water runoff uncontaminated and provide a stable outlet to ground surface. Facilitates waste management and protects environment by minimizing clean water additions to waste systems and addresses water quality concerns.</p> <p>Associated practices include Waste Storage Facility (313), Composting Facility (317), Heavy Use Area Protection (561), Watering Facility (614), Underground Outlet (620), Diversion (362), and any relevant irrigation practices.</p>
Before Practice Situation	Applicable where: (1) a roof runoff management facility is included in an overall plan for an overall plan for a waste management system; (2) roof runoff needs to be diverted away from structures or contaminated areas; (3) there is a need to collect, control, and transport runoff from roofs to a stable outlet.
After Practice Situation	A gutter, downspout, and a separate outlet system servicing the portion of the building roof that would otherwise drain into a waste management system or create erosion. Roof line of 200 ft serviced with gutter, four downspouts, and appurtances. New 2' x8" fascia board needed for proper attachment. Use underground outlet or other associated practice to carry water beyond end of downspout. Payment based on measured length of installed gutters and downspouts.
Scenario Feature Measure	Linear Length of gutter w/fascia and downspout
Scenario Unit	Foot
Scenario Typical Size	260

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,308.01	\$5.03
Equipment/Installation	\$0.00	\$0.00
Labor	\$2,187.84	\$8.41
Mobilization	\$195.13	\$0.75
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$3,690.98	\$14.20

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	558 - Roof Runoff Structure
Scenario ID	3
Scenario Name	Concrete Curb

Scenario Description
 A roof runoff structure, consisting of a concrete curb or parabolic channel installed on existing impervious surface or the ground with appropriate outlet facilities. Environmental/design considerations, for example – snow loads, or a building without proper structural support needed for gutters dictate the use of an on-ground concrete curb. Used to keep roof clean water runoff uncontaminated and provide a stable outlet to ground surface. Facilitates waste management and protects the environment by minimizing clean water additions to waste systems and addresses water quality concerns.

Before Practice Situation
 Applicable where: (1) a roof runoff management facility is included in an overall plan for an overall plan for a waste management system; (2) roof runoff needs to be diverted away from structures or contaminated areas; (3) there is a need to collect, control, and transport runoff from roofs to a stable outlet.

After Practice Situation
 A concrete curb or parabolic channel and outlet system servicing the portion of the building roof that would otherwise drain into a waste management system or create erosion. Concrete curb (8" high) on a 2" wide slab extending the length of a 200' roof with additional length (5') for stable outlet.

Scenario Feature Measure	Linear Length of Curb
Scenario Unit	Linear Feet
Scenario Typical Size	205

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$224.08	\$1.09
Equipment/Installation	\$4,447.86	\$21.70
Labor	\$182.32	\$0.89
Mobilization	\$571.80	\$2.79
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$5,426.06	\$26.47

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	Mid Atlantic
State	New Jersey
Discipline Group	Environmental Engineering
Practice Code/Name	558 - Roof Runoff Structure
Scenario ID	4
Scenario Name	Trench Drain

Scenario Description
 A roof runoff structure, consisting of a trench filled with rock, with a polyethylene, corrugated, perforated drain tile installed in trench bottom. Used to keep roof clean water runoff uncontaminated and provide a stable outlet to ground surface. Environmental/design considerations, for example – snow loads, or a building without proper structural support needed for gutters dictate the use of a trench drain. Facilitates waste management and protects the environment by minimizing clean water additions to waste systems and addresses water quality concerns.

Before Practice Situation
 Applicable where: (1) a roof runoff management facility is included in an overall plan for an overall plan for a waste management system; (2) roof runoff needs to be diverted away from structures or contaminated areas; (3) there is a need to collect, control, and transport runoff from roofs to a stable outlet.

After Practice Situation
 A 2' deep by 3' wide by 200 long deep rock filled, tile drained trench. Trench system servicing the portion of the building roof that would otherwise drain into a waste management system or create erosion. If discharge point needs to be elsewhere use additional applicable practice.

Scenario Feature Measure	Linear Length Drain
Scenario Unit	Linear Feet
Scenario Typical Size	200

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$1,230.40	\$6.15
Equipment/Installation	\$1,103.35	\$5.52
Labor	\$91.16	\$0.46
Mobilization	\$390.26	\$1.95
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$2,815.17	\$14.08

