

**Practice: 578 - Stream Crossing**

**Scenario # 1 Rip Rap Crossing**

**Scenario Description:**

**Missouri**

A stabilized area or structure constructed across a stream to provide a travel way for people, livestock, equipment, or vehicles. This practice applies to all land uses where an intermittent or perennial watercourse exists and a ford crossing is desired for livestock, people, and /or equipment. Stream bed in the channel reach containing the crossing must be vertically stable. Scenario is for stabilizing the bottom and slope of a stream channel using Rip Rap, gravel and geotextile. This scenario includes site preparation, dewatering, acquiring and installing rip rap and gravel on channel bottom and approaches. Scenario is based on a 20' wide x 50' long crossing. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

**Before Practice Situation:**

Water flow could not cross access road or trail without erosion; or access road or trail could not cross channel.

**After Practice Situation:**

Stream flow is not impeded and a stable base exists for equipment, people and/or animals to cross. Associated practices could be (342) Critical Area Planting, (560) Access Road, (575) Animal Trails and Walkways, (566) Recreational Trails and Walkways, (500) Obstruction Removal, or (584) Channel Stabilization.

**Scenario Feature Measure:**

Crossing dimensions

**Scenario Typical Size:**

1000	Square Foot	Tot Unit Cost	\$2.96
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Rock Riprap, Placed with geotextile	37	Cubic yard	\$58.74	\$2,173.38
Materials	Aggregate, Gravel, Graded	19	Cubic yard	\$24.76	\$470.44
Equip./Install.	Excavation, common earth, side cast, large	37	Cubic Yard	\$1.74	\$64.38
Labor	Equipment Operators, Heavy	2	Hour	\$27.22	\$54.44
Mobilization	Mobilization, medium equipment	1	Each	\$200.43	\$200.43

Total Cost: \$2,963.07

**Payment types:**

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$2.22	EQIP-HU	\$2.67
WHIP	\$2.22	WHIP-HU	\$2.67
EQIP-NOI	\$2.22	EQIP-HUNOI	\$2.67
EQIP-MRBI	\$2.22	EQIP-HUMRBI	\$2.67
WHIP-MRBI	\$2.22	WHIP-HUMRBI	\$2.67
EQIP-CCPI	\$2.22	EQIP-HUCCPI	\$2.67

**Practice: 578 - Stream Crossing**

**Scenario # 2 Concrete Crossing**

**Scenario Description:**

**Missouri**

A stabilized area or structure constructed across a stream to provide a travel way for people, livestock, equipment, or vehicles. This practice applies to all land uses where an intermittent or perennial watercourse exists and a ford crossing is desired for livestock, people, and /or equipment. Stream bed in the channel reach containing the crossing must be vertically stable. Scenario is for stabilizing the bottom and slope of a stream channel using concrete. This scenario includes site preparation, dewatering, acquiring and installing gravel and concrete channel bottom and approaches. Scenario is based on a 20' wide x 50' long crossing. Use (396) Aquatic Organism Passage instead, when the primary intent is biological concerns, not hydrologic.

**Before Practice Situation:**

Water flow could not cross access road or trail without erosion; or access road or trail could not cross channel.

**After Practice Situation:**

Stream flow is not impeded and a stable base exists for equipment, people and/or animals to cross. Associated practices could be (342) Critical Area Planting, (560) Access Road, (575) Animal Trails and Walkways, (566) Recreational Trails and Walkways, (500) Obstruction Removal, or (584) Channel Stabilization.

**Scenario Feature Measure:**

Crossing dimensions

<b>Scenario Typical Size:</b>	1000	Square Foot	Tot Unit Cost	\$6.97
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Aggregate, Gravel, Graded	19	Cubic yard	\$24.76	\$470.44
Equip./Install.	Concrete, CIP, formed reinforced	3	Cubic yard	\$402.08	\$1,206.24
Equip./Install.	Concrete, CIP, slab on grade, reinforced	19	Cubic yard	\$253.20	\$4,810.80
Equip./Install.	Excavation, common earth, side cast, large	45	Cubic Yard	\$1.74	\$78.30
Mobilization	Mobilization, medium equipment	2	Each	\$200.43	\$400.86

Total Cost: \$6,966.64

**Payment types:**

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$5.22	EQIP-HU	\$6.27
WHIP	\$5.22	WHIP-HU	\$6.27
EQIP-NOI	\$5.22	EQIP-HUNOI	\$6.27
EQIP-MRBI	\$5.22	EQIP-HUMRBI	\$6.27
WHIP-MRBI	\$5.22	WHIP-HUMRBI	\$6.27
EQIP-CCPI	\$5.22	EQIP-HUCCPI	\$6.27