

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
EASTERN MASSASAUGA RATTLESNAKE

ENV:JDG

1 of 3

APPR:DWS:MJO:04-07-26

FHWA:APPR:04-08-26

a. Description. Contractors are advised that the project area supports a population of the Eastern Massasauga rattlesnake (EMR) or is within its known range. This species is listed as federally threatened under the U. S. Endangered Species Act of 1973 (Act) and state threatened under Part 365 of Public Act 451 of Michigan's Natural Resources and Environmental Protection Act. This special provision notifies the Contractor that EMR may be onsite, addresses take prohibitions and provides material and construction requirements.

b. Materials.

1. EMR Fence is silt fence described in sections 208, 910, and 916 of the Standard Specifications for Construction, and section 3.1.3 of the Soil Erosion and Sedimentation Control Manual. EMR Fence may also serve as silt fence used for sediment control when the construction requirements of this special provision are followed.

2. If mulch blankets are used, they must be wildlife friendly within the stationing or locations detailed in the "Wildlife Friendly Erosion Control" plan note (Note Sheet). Wildlife friendly blankets are 100 percent biodegradable and manufactured with non-plastic materials such as jute, sisal or coir fiber. Degradable, photodegradable, UV-degradable, oxo-degradable, or oxo-biodegradable plastic netting including polypropylene, nylon, polyethylene and polyester are not acceptable alternatives. Netting materials must have a loose weave design with movable junctions between the machine and cross machine direction twines that move independently and reduce the potential for wildlife entanglement. For reference, mulch blankets in slope restoration types F and G are considered wildlife friendly.

c. Construction. Adhere to the following requirements:

1. 'Take' (killing, harming, or disturbing in any manner) of EMR is prohibited without a federal permit from the U.S. Fish and Wildlife Service. The Act furnishes enforcement authority to the U.S. Fish and Wildlife Service and contains severe penalties for violations. The Contractor is liable to the Department for any penalties imposed for violations to the Act due to the Contractor's failure to comply with this special provision. Fines and penalties range up to \$50,000 and 1 year in prison. Violation of any requirement listed below can lead to an immediate work stoppage in EMR habitat.

2. Prior to working on the job site, all on-the-ground contractor staff involved with construction must review the attached fact sheet (3 of 3). If a central location exists to post information (e.g., job board), display the fact sheet for staff to review. The purpose of the fact sheet is to furnish the Contractor with identification information, notification that a venomous snake may be onsite, and raise awareness regarding its protected legal status.

3. Immediately report any possible EMR sightings to the Engineer. The Engineer will notify the Endangered Species Coordinator in the MDOT Environmental Services Section.

4. EMR Fence. Ensure silt fence labeled “EMR Fence” is installed exactly as shown on the plans prior to any disturbance within the project limits. Disturbance includes excavation, filling, grading, staging of equipment or vehicles, and storage of any materials.

Ensure both ends of the EMR Fence are “J-hooked.” J-hooks are intended to redirect snakes that travel along the fence back to natural habitats. J-hooks must be 2 to 2.5 feet wide and at least 15 feet long unless otherwise specified on the plans. J-hooks must stay within road right-of-way or consent to grade areas. An example J-hook is shown in Figure 1.

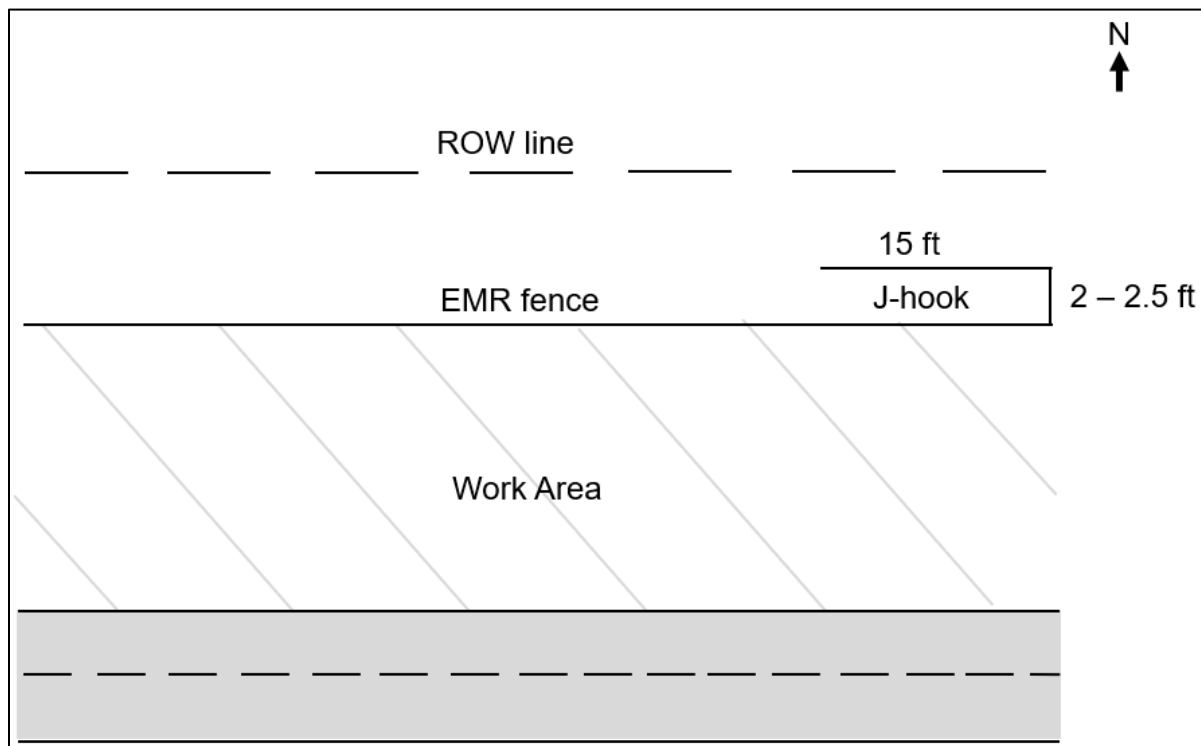


Figure 1: EMR Fence and j-hook. At the end of the installation, redirect the fence perpendicular and away from the road for 2 - 2.5 feet. Return the fence parallel to the road for 15 feet. This figure is not drawn to scale but is intended to illustrate how j-hooks are oriented relative to the road and work area.

For trunkline projects only. Once installed, the Engineer must contact the MDOT Endangered Species Coordinator to schedule a walkthrough EMR survey prior to any earth disturbance. Allow 14 days for the walkthrough survey to occur. Once completed, the MDOT Endangered Species Coordinator will notify the Engineer that construction may proceed in areas with EMR Fence.

d. Measurement and Payment. All costs associated with complying with this special provision will not be paid for separately but will be considered to have been included in other pay items in the contract.

Eastern Massasauga Rattlesnake (*Sistrurus catenatus*)

Protected as federally threatened



Photos courtesy of the Michigan Department of Natural Resources and Michigan State University

This species is suspected to occur at or near the work site. Please have staff read the following information.

What Does an Eastern Massasauga Rattlesnake Look Like?

The eastern massasauga rattlesnake is a thick-bodied and short venomous snake. Adults typically measure 18 to 30 inches long. This species is gray to grayish-brown with dark blotches bordered by white down the middle of its back. The head is thick and triangular and has an obvious neck. Like many venomous snakes, the massasauga has vertical slitted pupils like a cat and heat sensing pits below the eyes. A rattle is present on the tail that "buzzes" as a warning signal, although they may strike without rattling. This is the only rattlesnake in Michigan.

Where Does It Live?

These snakes prefer wet areas, such as marshes, wet prairies, wet woods, and along rivers and lakes. They also use adjacent upland during parts of the year, especially in the summer. They hibernate during the winter in crayfish burrows, under logs and tree roots, and in small mammal burrows.

What Should You Do If You See a Massasauga Rattlesnake?

Massasaugas are shy and try to avoid confrontation but that does not mean they won't bite to protect themselves. Never try to handle, chase, provoke, or threaten a snake. When in potential snake habitat, wear thick boots that cover your ankles, long pants, and do not reach into thickets or under logs. If you hear the buzzing of a rattle stay calm and back away from the sound slowly. The snake will leave if you give it space.

If an eastern massasauga rattlesnake is found at a Michigan Department of Transportation (MDOT) project, the construction engineer should be contacted immediately.

How is the Massasauga Protected Under the Law?

The eastern massasauga rattlesnake is protected under federal law by the Endangered Species Act. This status prohibits harming or harassing the species along with policies to protect the species habitat.

For More Information:

60-Second Snakes: The Eastern Massasauga Rattlesnake

www.youtube.com/watch?v=-PFnXe_e02w

Photos

http://animaldiversity.org/site/accounts/pictures/Sistrurus_catenatus.html

General Information

<http://mnfi.anr.msu.edu/emr>