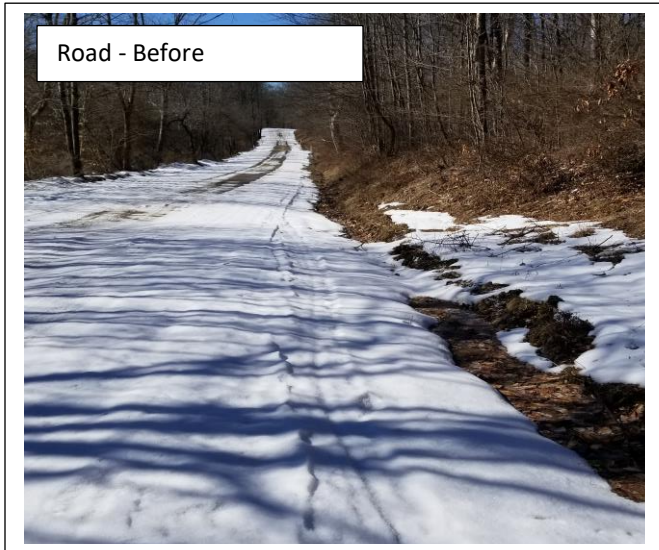


Kingsley Township – Branch Road Forest County



Problem: Existing cross pipes were undersized, and there were not enough. Severe erosion was occurring at the outlets of the existing cross pipes. The poor drainage was causing the road base to become unstable.

Solution: The 4 existing 15” cross pipes were replaced with 18” cross pipes while 6 additional 18” cross pipes and 2 turn-outs were added to help separate and disperse runoff. Head and end walls were installed at the inlet and outlet of every pipe. Rip-Rap aprons were installed at each outlet to prevent erosion. 650 tons of fill were added to strengthen the road base and help promote proper drainage. All disturbed areas were seeded and mulched.

