M-113 Reconstruct







PROJECT: M-113 Reconstruct CHALLENGE: Fill Ditches While Maintaining Steady Traffic. SOLUTION: Staging and Persistence.

OWNER: Michigan Department of Transportation CONTRACT AMOUNT: \$3,737,777.77 DESIGN ENGINEER: Dave Pax, Traverse City MDOT ENGINEER CONTACT: (231) 941-1986 LOCATION: M-113 Fife Lake Township From M-186 to US-131, Grand Traverse County DATE STARTED: March 1, 2016 DATE COMPLETED: August 3, 2016 SELF-PERFORMED: 61% PARTNERS: Diane Dukes Inc, Ryan Bros, PK Contracting

As part of Michigan's trunkline highway system, M-113 is a well-traveled road that runs through Grand Traverse County and connects the residents of Traverse City to the main drag highway of US-131. The road runs through hilly country and features numerous twists and turns that can make it a dangerous drive in the dark or in the wintertime.

Recently, MDOT tasked Team Elmer's with revamping and restructuring M-113. The job involved ditching, filling, and raiding ditches, crushing and shaping the road, and paving the restored roadway. By filling in dips in the roadway, making grade corrections, and providing new pavement for five miles of highway, Team Elmer's job was to make M-113 a safer and steadier drive.

The project wasn't without its challenges. Since M-113 is one of the only convenient ways to get from Grand Traverse County to US-131, we had to maintain traffic while backfilling, shaping, and



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Highway M-113 Reconstruct By The Numbers

Clearing: 3.5 acres 3" Topsoil: 14,049 square yards Milling: 24,711 feet Silt Fence Eroison Control: 10,860 feet Mulch: 306,179.7 feet Trees Removed: 51

paving the roadway. Some of the fills were also quite significant, reaching up to seven feet in depth. Finally, to meet Michigan's environmental regulations for tree clearing, the project had to start on March 1st — even though winter in Northern Michigan often seems to push into late March or early April.

The key to the success and speed of the project was staging. Since Team Elmer's couldn't close down large sections of M-113 to get the job done, we opted instead to work in stages, completing one small stretch of road at a time. For the two main backfill sections, we shifted traffic over and worked on raising one side of the road. Once that side was raised, we put gravel on it and shifted the traffic back over, freeing up the other side of the road to be filled and elevated. We kept all the dirt from our clearing process on-site, making sure it was easily accessible for a quick fill.

Despite the somewhat complex and tedious nature of the project plan, Team Elmer's quickly found a rhythm in the staging process. In the end, we managed to finish the project a full three weeks ahead of schedule. Not only did the early finish allow us to open M-113 before Northern Michigan's busy summer tourism season was up, but it also helped us catch the growing season with roadside grasses. In fact, the grasses grew so fast that it was soon difficult to tell that Team Elmer's had ever been there at all! And since grasses are so important to erosion control, our early completion date will ultimately help ensure the structural integrity and longevity of the road for years to come.



