

FULL DEPTH RECLAMATION RECONSTRUCTING A ROAD



Most roads in the Town of Amherst are reconstructed using the FULL DEPTH RECLAMATION procedure that involves grinding up the existing pavement, grading, compacting and repaving. The Engineering Division in the Department of Public Works creates a Pavement Reconstruction Design, develops construction specification, and issues an Invitation to Bid. After the contract is awarded to the lowest bidder, the Engineering Division coordinates the application of the pavement design with a licensed contractor. Following is a general order of construction:



DIGSAFE marks any known underground utilities. Man-hole and Water Valves elevations are lowered below the depth of the reclaiming process. Sometimes the contractor prefers to remove cast iron frames and covers and places them along the edge of the roadway until they can be reinstalled.

Reclaiming existing pavement is a procedure whereby a Pavement Reclaimer grinds, pulverizes and mixes the existing asphalt to a depth of 8 inches or more.



RECLAIMER



Grindings are graded and compacted to provide an excellent base for new pavement. Sometimes grindings will be removed and stockpiled at town facilities for use with other Public Works projects. If it will be more than a day before the road will be paved, trucks will spray calcium chloride on the gravel road for dust control and surface preservation.

In areas where good road drainage is critical, the town engineers may check the road grades with survey equipment before the road is paved with hot mix asphalt.



PAVING MACHINE



Trucks carrying 24 tons of hot mix asphalt dump their loads into the hoppers of a specialized paving machine that spreads an even layer of asphalt onto the newly graded roadway. Normally a binder layer is placed first and then a top layer is placed on the binder at a later time.



An inspector from the town records the temperature and amount of asphalt placed for each job. A road that is 1600 ft long and 24 ft. wide will need approximately 900 tons of hot mix asphalt.



Each layer is quickly compacted before the hot mix cools and cures. Routine traffic follows.



Before the top layer of asphalt is placed, the utility structures are raised to the correct elevation and the top layer of hot mix asphalt is applied.

Finally a smooth, newly paved road is in place and will last many years with proper care and maintenance.