



World's largest arched aluminum pedestrian bridge at Oakland Hills Country Club. (Story on Page 4)

Maple Rd. Arch Largest of Kind

(See Cover Picture)

This 210-ft. long, 40,000-lb. structure, 11 ft. wide, spans Maple Rd. in Birmingham, and is the largest arched aluminum pedestrian bridge in the world. It joins two 18-hole golf courses at the Oakland Hills Country Club, site of four U.S. Open championship matches.

The structure was designed and engineered by the Product Development Division of Reynolds Metals Co.

Twenty-two different aluminum shapes are used in the 20-ton bridge, which is 36 ft. high overall and provides 17-ft. clearance for highway traffic.

The 115-ft. hyperbolic arched center span was assembled at the site in May. It required less than 2½ hours to erect the span, with two lanes of traffic moving beneath.

Main arches are made of two 11-inch T-sections formed and welded together to form 22-inch I-beams. The handrailing incorporates green Reyno-wall paneling, and a protective aluminum fence flanks the walkway.

Most of the extruded aluminum shapes were formed at the Reynolds Metals Company plant in Grand Rapids.

Contractor for the bridge was Aluminum & Architectural Metals Co., Detroit. Engineers were Main & Fox, Birmingham.

Leaf Compaction May Solve Problem

Compaction — at a 20 to 1 ratio — is being suggested as a solution to the municipal leaf removal problem.

A modern street sweeper (with self-elevating, direct-unloading dirt collection hopper) and a familiar hump-backed packer refuse truck are the basic items of equipment needed for a leaf-disposal system, according to the Elgin Sweeper Co., Elgin, Ill.

The Elgin Pelican sweeper is equipped with a simple leaf leveling and piling accessory which attaches to its front, and the refuse truck is equipped with an extended loading hopper. A single packer-type refuse truck rated at 30 cu. yd. capacity can compress into one load leaves covering an entire football field waist deep, the company says.

The leaf leveler and piler serves two functions: First, it permits a flow of leaves (usually 8 to 10 inches high) to flow into the large sweeper brooms, where they are flicked directly on to a conveyor belt and carried into the 2½ cu. yd. dirt collection hopper; secondly, it permits large drifts of leaves to be fed to the sweeping brooms in regulated amounts.

Once the sweeper's dirt hopper is filled, the sweeper goes to the rear of the refuse truck equipped with its extended collection bin. The sweeper elevates its dirt hopper over the leaf pile and empties the leaves into the collection bin.

On horn signal from the sweeper, the packer truck pulls away and cycles its compaction equipment, which com-



moving it up to the body, where it is compressed at a 20 to 1 ratio. The sweeper retracts its dirt hopper and returns to sweeping until another 2½ yd. load is collected.

Cities using this system frequently find a single packer holds an entire day's sweeping of leaves, the Elgin firm reports.

When dumping is required, the filled packer truck goes to the disposal site. There, the tailgate mechanism (including bin extender attachment) is raised and an ejector or push-out ram, operating from the front of the truck body, ejects the mass of compacted leaves.

OFFICE BUILDING TO START

Datema Construction Co. is general contractor for a 7-story detached office