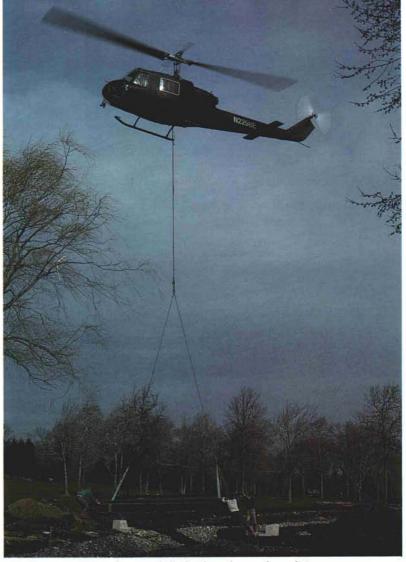
HELP FROM ABOVE

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A helicopter effectively moved the bridge when soil conditions were too soft for heavy equipment.

GOLF COURSE superintendents need ingenuity to solve unforeseen problems, but John Adamonis, superintendent of the Spring Valley Country Club, had people "looking up" to find his solution.

Spring Valley Country Club, located in Sharon, Massachusetts, was constructed in 1960. Almost from the beginning the club was faced with drainage problems due to its flat terrain and inadequate drainage channels. To overcome the problem, engineers determined that many of their drainage canals needed to be enlarged. The project involved digging out the existing brook system, stabilizing the banks, lining the canal with geotextile blanket, and covering with rip-rap rock.

The reconstruction was scheduled during the winter, when the membership was absent and the course was closed. Heavy equipment operations on the frozen turf would minimize damage to the fairways and reduce soil compaction. A very cold December provided ideal conditions for the operation of heavy equipment. January and February brought warmer temperatures, but by March conditions had deteriorated to the point that the staff was faced with a roadblock for completion of the project. Many tons of rip-rap rock and four twoton bridges had yet to be installed.

The staff brainstormed for ideas of a way to move the rock without the heavy equipment while still completing the project by the time the course reopened in spring. After much deliberation, a suggestion was made to move the rock by air. After contacting seven airfields, John Clark of C&W Ag-Air, a specialist in heavy construction lifts, was located and hired.

With a crowd of onlookers, 2,000pound loads of rip-rap were placed on military-issue tarps. The tarps were lifted "knapsack style" and released in the desired location. After a few trips, the pilot had mastered the technique so that he could release one side of the tarp, laying the rip-rap into place with precision. Minimal handwork was required to finish the area.

Careful planning allowed 25 tons of rip-rap and four 2-ton prefabricated bridges to be put into place in about $1\frac{1}{2}$ hours. The total cost was approximately \$2,500, which was considered reasonable compared to the cost of contracting heavy equipment and the amount of work that would have been needed to repair damage to the turf and soil.

Picturesque rip-rap channels now thread through the golf course along with the new bridges. This demonstrates yet another example of today's golf course superintendent applying his flexibility and imagination to succeed in the face of a unique challenge.