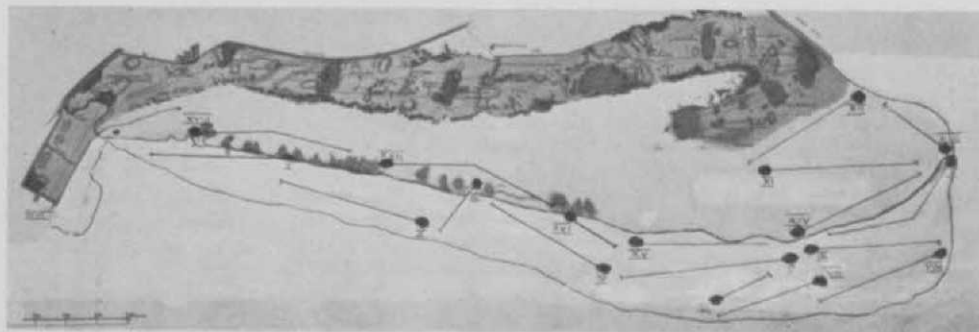


NEW COURSE PLANNED FOR ST. ANDREWS

ST. ANDREWS is to have another course that will reassert the position of the old Scotch town as the world shrine of golf, if proposals of local residents and influential non-resident British and American golfers are accepted. Modern golf equipment and the recession of the sea have the Old Course in a bad way in its claim to contemporaneous leadership. Four holes now are no more than of drive-and-chip length, and five (in addition to the par-3 holes) can be driven. The ninth, tenth, and twelfth holes are respectively 306, 312 and 314 yards, which gives an indication of

how hopeless it seems to be to preserve the Old Course's reputation as a championship venue.

The present so-called New Course never has been good enough to compare with the famous Old layout and as tinkering with the New course is pronounced futile by experts, it is proposed to install 18 great holes bordering the shore south of



Old Course at St. Andrews is shown in shaded area in upper portion of drawing; site and layout of proposed new 18-hole links is outlined directly beneath. New course will lie between Old Course and sea, as recession of water in recent years has left plenty of room, of the right topography, for a modern and model championship course.

the Old Course. In the last 40 years the sea has been receding to such an extent that in the new land there is plenty of territory of the right topography for a modern course.

Sir Nairne Stewart-Sandeman, Major Cecil Hutchison, and Sir Guy Campbell have been prime-movers of the 15-year-old effort to locate a modern course at St. Andrews and preserve the town's status as a golfing mecca. Golf constitutes a major factor in the town's income but the traditional lure is fast weakening due to the obsolescence of the famed Old course. Competent American appraisers of golf course architecture and playing interest declare that St. Andrews Old Course is far inferior to many other less ballyhooded courses in England, Scotland and the United States.

There has been persistently increasing mention in the United States of the Old

Course's shortcomings, consequently a definite drop in the former desire of American golfers to make a pilgrimage to the shrine. Proponents of the new course have told, with considerable validity, that a modern course would bring again to St. Andrews the easy spenders who figure it's a toss-up between St. Andrews and the Pyramids as relics, and that they can pass up both items of historic interest.

Not much opposition appears to be in the way of the town putting in the new course with a guarantee that construction expense will not exceed an amount that's very reasonable, considering the probable increase of outside money brought to St. Andrews by a modern course. Some natives are strong for the seaside plot being used as a bathing beach and promenade. You can get that at Coney Island, in case St. Andrews decides to compete.

DRAINAGE FIRST

By JOHN MONTEITH, Jr.

You can't grow turf unless you've licked your course's drainage problems

POOOR drainage is responsible for the loss of much turf as well as for a tremendous amount of poor turf on golf courses. To remain healthy our common turf grasses must find in the soil adequate food, water and air. A perfectly balanced food supply for grasses, as for man, is of no avail if there is not available enough water or air. Most grasses can not survive long with merely a supply of air available only to the leaves; they must have oxygen from air in the soil to maintain a healthy growth of roots.

In a loose open soil such as found in cultivated fields, moisture and air can penetrate readily. Even in natural stands of vegetation the soil is kept loose by the heaving of frost and the activities of earthworms and other small members of the animal world. On golf courses, however, soils are packed by constant use of machines and the trampling of players. Earthworms, grubs and other burrowing animals are discouraged as much as possible. Consequently the porosity of the soil on golf courses is quite different than

it is in cultivated fields or in wild places where grasses thrive.

When soil becomes saturated with water the air is forced out of the soil. To realize readily how this process works one may take a glass full of marbles. Each marble represents a particle of soil. Air fills the spaces between the marbles but is readily forced out when the glass is filled with water. The air cannot return to the spaces between the marbles until the water is drained off. If the water is left in the glass it can escape only by evaporation. As the water evaporates the spaces in the upper layer are gradually filled with air. In the lower part of the glass there is no air for a long period of time; an even longer time in cold, cloudy weather. On the other hand if there is a crack in the bottom of the glass