

of the new Correctional Institution for Women. The history of this mini-city is traced back to the Riker family, the original owners who used it for farming. They subsequently sold the island to the City in 1885 and it then became known as the "Municipal Farms" with its fields being tendered by inmates transported there daily from the penal institutions on Blackwell's Island (Welfare Island), located about 1.5 miles away in the East River.

Around 1930 the City was faced with the problem of replacing its existing outdated facilities on Welfare Island. This continual problem of replacing outmoded facilities with modern ones while still staying operational determined the selection of Rikers Island as a new penal center, since it already was under the jurisdiction of the Department of Correction.

From 1935 to 1954 the island housed a penitentiary for men including supporting utility service and access facilities such as the ferry slip, visitor's building and warehouses (figure 2).

The island's future potential was realized in 1954 and a major expansion of its correctional facilities was initiated and is still underway.

The original island covered an area of less than 90 acres. A War Department map (figure 3) dated January 24, 1893, shows the boundaries of the island at that time.

It contained little or no organic silt while bedrock was found to be approximately 25 feet down from existing grade.

The island's topsoil is a 6 inch layer of fibrous organic matter which has evolved from sporadic growth and deterioration of vegetation over the years. It is highly permeable and only after proper compaction to increase its water holding abilities will it support the growth of grass. Its permeability on the other hand makes it immune to frost action. Huge boulders presumably left there during the ice age have been encountered in the northern part of the island during pile driving operations. Organic silt formed the bed of the East River that surrounds the island and subsequent filling operations either displaced or entrapped and consolidated it, creating unstable subsoil conditions.

The filling operations helped Rikers Island grow to 400 acres in total land area. Part of this fill during the 1920's and 30's was in the form of garbage dumping. A trestle constructed from Astoria (North Beach) was used to transport the garbage to the island.

The recent completion of the Women's Correctional Institution and the currently under construction Adolescent Remand Shelter were preceded by an enormous filling operation that raised the grade in the central portion of the island approximately 12 feet over an 120 acre area. This fill and earlier fill caused much havoc with the composite piles supporting the earlier buildings, because these piles were not firmly set on rock. Early War Department soundings indi-