

7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input checked="" type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered		<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site	

DESCRIBE THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE

When it was completed to Jersey City in 1836, the Morris Canal was 102.30 miles long, with a .67 mile long navigable feeder connecting Lake Hopatcong with the main canal at Landing. In 1837, a navigable 4.26 mile long feeder was added to conduct the impounded waters of Greenwood Lake into the main canal at Mountain View via the Pompton River. The river itself provided slack-water navigation for another 1.75 miles to the foot of Pompton Falls. In about 1845, a navigable spur, approximately .33 miles long, enabled boats to service the Stanhope Iron Works. Thus the total length of the Morris Canal can be set at 109.31 miles.

Water for the operation of the canal was impounded at Lake Hopatcong, Greenwood Lake, Stanhope Reservoir (now Lake Musconetcong), Green Pond, Cranberry Lake, Bear Pond, Waterloo Lake, and Saxton Falls. Many rivers and streams were taken into the canal as well; chief among them: the Lopatcong Creek, the Rockaway River, Beach Glen and Granny's Brooks, the Passaic, Pequannock, Ramapo, Wanaque, and Hackensack Rivers. The minor streams are too numerous to recount.

The canal had a total rise and fall of some 1674 feet between Jersey City and Phillipsburg. Only about 225 feet were overcome by ordinary lockage: 10 locks west, and 22 east, of the summit level at Lake Hopatcong. Except for the 18 foot lift of Lock # 17E at Newark, the locks averaged 10 feet of lift per lock. Two other locks served as guard locks. Five of the 22 locks east of the summit were tide locks, or outlet locks. All locks, with the exception of the tide locks, were constructed of stone with wooden gates. The tide locks, because of the corrosive action of salt water, were made entirely of wood.

The remaining 1450 feet of the canal's elevations were overcome by means of 23 inclined planes, averaging 63 feet of vertical lift each.

As first built, the canal held four feet of water in a prism 32 feet wide at the top and 29 feet wide at bottom. Locks 75 feet long, 9 feet wide passed boats of 16 to 18 tons burden. In 1840-41 locks were enlarged to 98 feet by 12 feet in order to pass boats of 45 tons burden, and planes, were correspondingly widened two feet. The plane machinery proved unable to handle that much weight, and section boats were brought into use by 1845. Separable at midships, these boats could be passed over the planes one section at a time. Time and water consumption were prohibitive, however, and plane machinery of a new, more powerful design was built, and the prism was enlarged to 40' x 25' x 5'. Thereafter, section boats of 65 to 75 tons burden could pass the planes in one piece, and in one operation. Locks were further lengthened, ultimately reaching about 90 feet.

The inclined planes originally used on the Morris Canal were of several types. Wet basins, or movable locks were among the first designs. Boats were floated into basins at top or

(cont.)

SEE INSTRUCTIONS