

CIVIL WORKS ADMINISTRATION

CITY OF MILWAUKEE

R. E. STOELTING
COMMISSIONER
OF PUBLIC WORKS



809 N. BROADWAY
DALY 5000

April 23, 1934

Mr. R. E. Stoelting
Commissioner of Public Works

Attn: Mr. D. S. Teter, Project Engineer

Dear Sir:

In accordance with your bulletin dated April 6, 1934, I am reporting to you as follows:

1. Date of Report -- April 10, 1934.
2. Project No. 153.
3. Status of Project -- Discontinued March 31, 1934.
4. Percent Completed -- About 25%.
5. ~~Description of work~~ -- There is a ledge of rock in the bed of the Milwaukee River, at Lincoln and Estabrook Parks, which is an obstruction to the flow of water in the Milwaukee River during severe storms causing about 600 acres of property to be inundated, and during low water holding the water in the River as an elongated lake. In order to prevent this recurrent flooding, it was necessary to remove about one mile of this rock ledge for a width of 200 ft., and a depth of about 6 ft. Thereafter, it would be necessary to construct an automatic dam in the stream in such a way that the gates of the dam would open during times of flood, but would close during low water so as to keep the elevation of the water upstream as it always existed for the purpose of retaining the present facilities for boating, bathing and fishing.

Under the C.W.A. Program, the City of Milwaukee undertook to do that part of the work of removing the rock ledge west of the Port Washington Road Bridge for a distance of approximately 2,000 ft., and the Milwaukee County Park Commission undertook the work of removing the rock east of the Port Washington Road Bridge for a distance of 3,000 ft.

An earthen dike was first constructed along the middle of the stream from the Port Washington Road Bridge westerly for about 1,800 ft. from which point a dike was connected with the north shoreline of the River. The north half of the River was

1-6
12/1/33

April 23, 1934

then dewatered, rock was loosened by drilling and blasting, and was excavated partly by steam shovel operations and partly by hand by loading into trucks.

The material excavated was used largely in making a base for about a mile of road in Lincoln Park adjoining the River, and for other purposes such as dry walls, rip-rap, walks, and for temporarily surfacing streets. All excess material is taken to a crushing plant, operated by the City, nearby and stock-piled so that it may be used at any time for some municipal purposes.

At the present time, an average width of 67 ft. of rock has been removed out of 200 ft. of channel width contemplated and to the final grade.

QUANTITATIVE DATA

Solid Rock Removed	17,650 Cu. Yds.
Loose Rock Removed	1,550 " "
Earth Removed	3,250 " "
Dike-Rock & Earth Fill	1,750 " "
Road-Rock & Earth Fill	200 " "
Total Yardage	<u>24,400 Cu. Yds.</u>

6. Material, Tool and Sundry Equipment hereto attached. Attention is drawn to the fact that inventory includes items on hand as follows:

11,150 Lbs. 40% Gelaton Dynamite	\$1588.87
5,200 Waterproof Blasting Caps	431.23
2,000 Ft. Connecting Wire	28.00
1 Blasting Machine	35.00
	<u>\$2083.10</u>

7. Since the discontinuance of the C.W.A. work, a high stage of water tore out approximately 200 ft. of dike so that the flood waters are now pouring through the excavation made.

A temporary snow fence was erected along the north shore of the stream at Lincoln Park to prevent children from wading into the River. This is necessary because the edges of the rock cut are perpendicular, and persons wading in the shallower portions might step into the deep portion and drown.

The work that has been done is of value inasmuch as the expense of completing the work has been materially reduced. We are anxious to continue the work now for the reason

April 23, 1934

that a large investment has been made for the dike, which dike may be washed away if the work is abandoned indefinitely. It is also necessary, if no further major work can be done, that the edges of the rock cut be sloped so that the danger against drowning may be prevented. Until this is done, it will not be possible for the Park Board to finally improve the shoreline of the Milwaukee River with park paths, planting, etc.

Another important reason for continuing work is that it will not be possible to make use of the cut thus far made for the discharge of water for the reason that the dry weather flow is so small that the south half of the River will be dry, which will cause objection by abutting property owners, and also by reason of the fact that the low stage of water will prevent swimming at the Public Bathing Beach in Lincoln Park, and prevent bathing at other points along the River owned by private persons.

When the entire ledge is removed, the County will construct the automatic dam above referred to. The dike may then be removed after which the entire job will be of value to the community in preventing the inundation of land in times of flood, and in the use of a large sheet of water for good swimming, fishing and boating, and for skating during the winter months.

We attach hereto a sketch showing progress made up to the present time.

Very truly yours,

F. W. Ullius

F.W.Ullius, Spec. Asst. Engr.

FWU:MS
Encl.

COMMENTS ON PROJECT #153

There is a ledge of rock in the bed of the Milwaukee River, at Lincoln and Estabrook Parks, which is an obstruction to the flow of water in the Milwaukee River during severe storms causing about 600 acres of property to be inundated, and during low water holding the water in the River as an elongated lake. In order to prevent this recurrent flooding, it was necessary to remove about one mile of this rock ledge for a width of 200 ft., and a depth of about 6 ft. Thereafter, it would be necessary to construct an automatic dam in the stream in such a way that the gates of the dam would open during times of flood, but would close during low water so as to keep the elevation of the water upstream as it always existed for the purpose of retaining the present facilities for boating, bathing and fishing.

Under the C.W.A. Program, the City of Milwaukee undertook to do that part of the work of removing the rock ledge west of the Port Washington Road Bridge for a distance of approximately 2,000 ft., and the Milwaukee County Park Commission undertook the work of removing the rock east of the Port Washington Road Bridge for a distance of 3,000 ft.

An earthen dike was first constructed along the middle of the stream from the Port Washington Road Bridge westerly for about 1,800 ft., from which point a dike was connected with the north shoreline of the River. The north half of the River was then dewatered, rock was loosened by drilling and blasting, and was excavated partly by steam shovel operations and partly by hand by loading into trucks.

The material excavated was used largely in making a base for about a mile of road in Lincoln Park adjoining the River, and for other purposes such as dry walls, rip-rap, walks, and for temporarily surfacing streets. All excess material is taken to a crushing plant, operated by the City, nearby and stock-piled so that it may be used at any time for some municipal purposes.

At the present time, an average width of 67 ft. of rock has been removed out of 200 ft. of channel width contemplated and to the final grade.

QUANTITATIVE DATA

Solid Rock Removed	17,650	Cu. Yds.
Loose Rock Removed	1,550	" "
Earth Removed	3,250	" "
Dike-Rock & Earth Fill	1,750	" "
Road-Rock & Earth Fill	200	" "
Total Yardage	24,400	Cu. Yds.

Since the discontinuance of the C.W.A. work, a high stage of water tore out approximately 200 ft. of dike so that the flood waters are now pouring through the excavation made.

A temporary snow fence was erected along the north shore of the stream at Lincoln Park to prevent children from wading into the River. This is necessary because the edges of the rock cut are perpendicular, and persons wading in the shallower portions might step into the deep portion and drown.