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1863 - 1973

A history of the development of Fox Creek from 1863 to 1973 including the flood of March and April, 1973.

Written and drawn by;

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Survey Instrumentman

Survey Bureau

City Engineers Office

City of Detroit

July 1973

The information for the history of Fox Creek was acquired from the following sources.

Maps:

Atlas of The City of Detroit published by, E. Robinson printed in 1885

Official Atlas of Wayne County published by Wm. C. Sauer printed in 1891

Harbor Lines of Detroit & Vicinity recorded in Wayne Co. Records, L.20 P 75

Dated 1892

General Map of Wayne Co.

published by Wm. C. Sauer

printed in 1893

General Map of Wayne Co.

published by Wm. C. Sauer

printed in 1904

Official Atlas of The United States

Detroit Folio

published by The U. S. Geological Survey

printed in 1917

County Drains Within The City of
Detroit & Environs
Wayne County Drain Comm.
printed in 1961

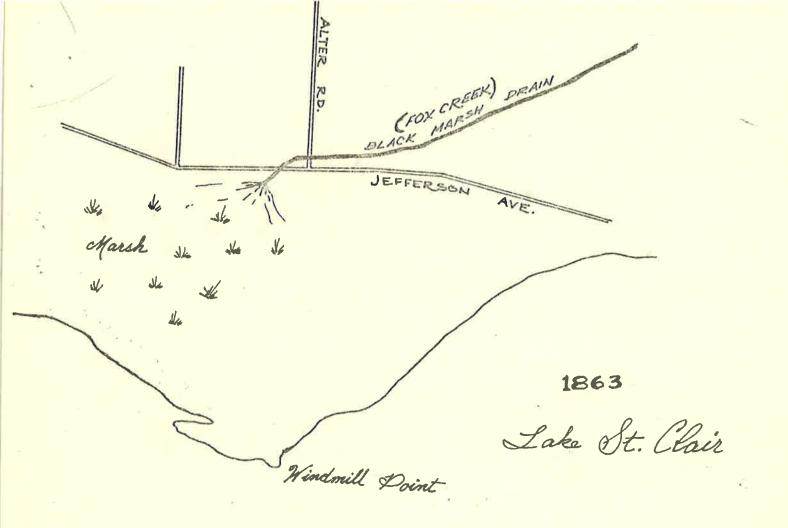
## Letters:

From Walt Williams, Engineer of Survey to Alfred Berraducci, City Engineer Dated June 13, 1968 and Aug. 7, 1968

From Walter E. Vashak, Asst. Corporation Counsel, to Perry M. Fellows, City Engineer. Dated Oct. 28, 1928

## Other information:

Department of The Army Lake Survey District Corps of Engineers

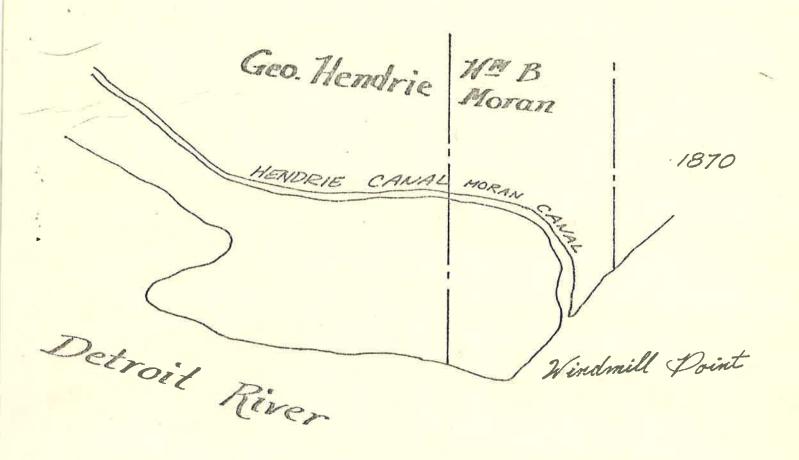


In 1863 Black Marsh Drain was established.

The course of the drain was in a southwesterly direction from the present Moross Rd. to

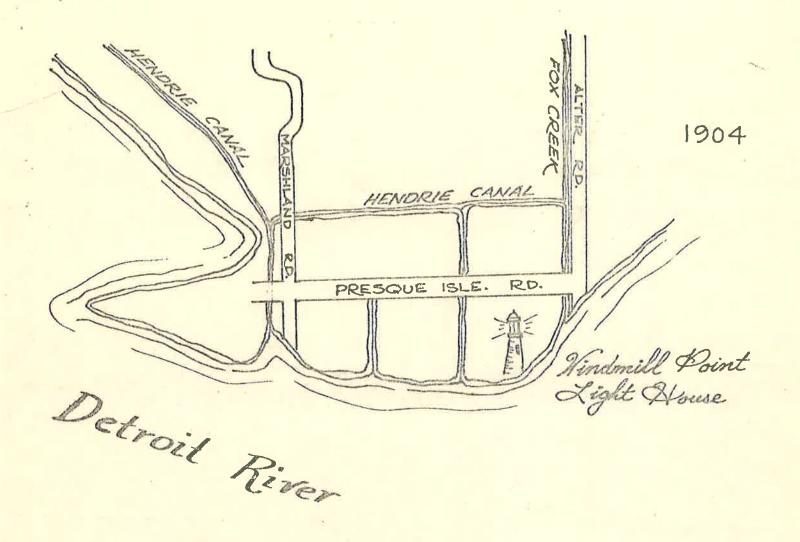
Alter Rd. and Jefferson where the drain emptied into a marsh of about one square mile.

Previous to 1863 this area from Moross to Alter was a natural water shed for the Grosse Points.



Due to high lake levels in the late 1860's, a dike was constructed from Connor Creek along the existing shoreline to Windmill Point. The construction created a canal along the side of the dike. The canal was called Hendrie Canal as it went through the George Hendrie property. Where the canal emptied into Lake St. Clair it was called Moran canal because of the property owner William B. Moran. The canal emptied into the lake near the present outfall of Fox Creek.

Around 1880 a connecting link between the Alter Rd. end of Black Marsh Drain and the Moran canal was dug. The southwestern end of Black Marsh Drain was called Fox Creek. When the connection was made between it and the Moran Canal the canal was called Fox Creek.

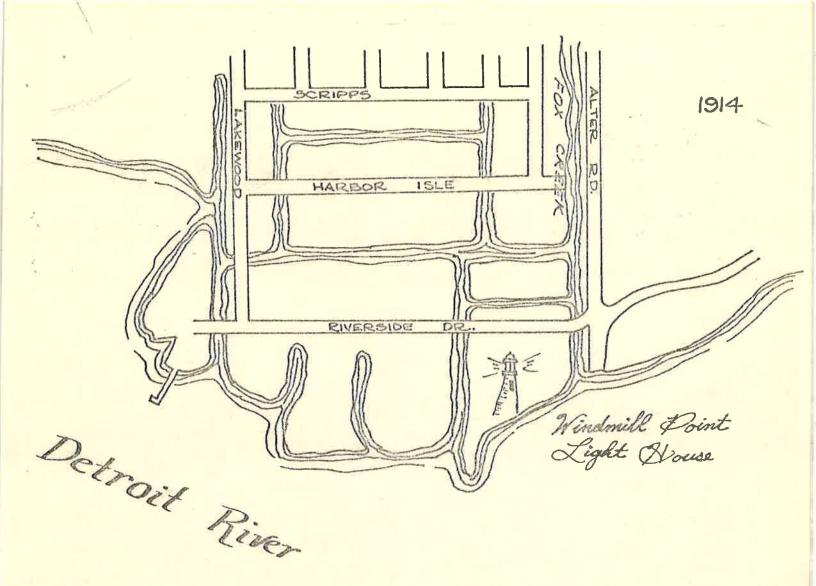


By 1904 three other canals had been dug.

One which was later to become Lakewood Canal connected the Hendrie Canal to the lake.

Another which is now the eastern most canal (with the exception of Fox Creek) also connected the canal to the lake. The third has since been filled in.

This area was in Grosse Pointe and not until 1907 was it annexed to Detroit.



Shortly before 1914, the remainder of the canals were built and the present street locations were established. In 1930 the portion of Fox Creek north of Jefferson and the Black Marsh Drain had become a covered sever with a pumping station at Jefferson and Ashland. Hendrie Canal had also been filled in from Connor Creek to Lakewood Canal.

in 1952, high waters flooded the area during the summer months. The Department of Public Works raised a clay dike along Alter Road on the east side of Fox Creek. The Office of Civil Defense and the Department of Public Works placed clay dikes on private property where water was overflowing into the streets.

After the waters receded, many people in the area were supset because of the unsightly clay banks which were left on their property. When high waters again threatened in 1969, these residents were opposed to taking precautionary steps because of their opposition to clay dikes.

Complicating the containment of waters in Fox Creek proper is the fact that a storm overflow sewer from Grosse Pointe Park enters the northerly end of the canal. By an agreement reached in 1938, the City of Detroit is obligated to maintain Fox Creek to allow 2,000 cfs of water to flow from Grosse Pointe Park. A resume of this agreement is contained in Addendum S.

In 1969 reports of small leaks from the canals onto the abutting property reached the City Engineer's Office. A survey of the situation was requested and as a result several water gauges were placed throughout the canal system. From these gauges, readings were taken and plotted on a chart. From this chart and other reports from the Corps of Engineers and individual property owners, it became apparent that the water was continuing to rise. At this time, the City Engineer's Office notified the owners of the property abutting the canal system of the high water and that necessary steps should be taken to hold back the water. (see attached sheet #S-1).

Later that same year another notice was sent to the property owners again warning them of the high water and the need to take corrective actions to protect their property. (see sheet #S-2).

The water continued to rise and in 1971 another notice was sent out. (see sheet #S-3).

On November 14, 1972, a steady wind from the northeast, up to 30 MPH, caused a fast rise in water levels in the affected areas. At approximately 4:00 am on the morning of November 14, 1972, water levels in Fox Creek and tributary canals overflowed onto Harbor and Klenk Islands, Ashland, Scripps and Lakewood Streets. By 6:00 am of that morning City crewere were at the site to lend assistance. It should be pointed out that on this occasion the overlow occurred in a limited number of locations and that widespread inundation was caused primarily by catch basin blocked by the autumn leaf fall. When the catch basins were cleared, the flooded areas were drained through the sewer system in a matter of hours. The situation was sufficiently serious, however, to prompt the City Engineer to seek emergency authorization from the Common Council under the existing ordinance. Such authorization was granted to do emergency diking by the Council at approximately noon of November 14, 1972. During the brief period of high water on that date, a record of locations where overflowing has taken place was made, and a copy of this tabulation was sent to the Superintendent of Street Maintenance, who undertook diking operation at these locations. Such diking operations were

carried out by City forces at a pace allowed by the normal work schedule of the Division of Street Maintenance. In addition, notices were sent to the property owners of record where overflowing has taken place. (See sheet # S-4). All of these notices referred to the Detroit Municipal Code, Section 39-1-6. (See Sheet # S-5).

Limited diking by D.P.W. forces continued along with the furnishing of sandbags and sand to residents upon request.

On January 8, 1973, a letter under date of January 5, was received from the Corps of Engineers announcing a program of "advance Flood Emergency Measures under Public Law 84-99" and a series of meetings to be held at various locations in the areas affected with potential flood conditions. The City Engineer's Office was represented at the January 12, 1973 meeting held in Mt. Clemens, Michigan. This was the first notification received from the Corps of Engineers Indicating potential flood water levels.

On January 17, 1973, the City Engineer's Office addressed another letter to the Common Council reporting on its activities in the flood affected areas from November 14, 1972, to the date of the referred letter and advising the Council of possible Federal assistance with the recommendation that the Council refer the matter to the Corporation Counsel asking that legal steps be taken to qualify Detroit for such assistance. Pending action by the Council, Mr. John Cross, Assistant Corporation Counsel, was

contacted for informal opinions as to the adequacy of our existing ordinance allowing the City to function in an emergency situation. Mr. Cross replied that he thought at least a strengthening of the ordinance was in order and that upon request of the Council to the Corporation Counsel such steps would be taken. At the same time, the City Engineer directed the Bureau of Surveys to proceed with the preparation of drawings indicating a flood control program covering approximately 3 lineal miles of waterfront for submission to the Corps of Engineers.

In late January of 1973, the City Engineer's Office was informed that at the request of the Governor, the affected area of the City of Detroit has been declared a disaster area by the Office of Emergency Preparedness. Such information as was required to be submitted from the City was prepared and forwarded by the City Engineer's Office and the Council was notified of the Federal Government's action by letter dated February 2, 1973.

In the meantime, limited operations continued in the area with D.P.W. forces and communications were kept with the Corps of Engineers as to predicted high water levels and the status and requirements to qualify under the "Operation Foresight" program. The Corps final predictions for 1973 high water levels were not available.

On February 28, 1973, a letter from the Corps of Engineers was received announcing their final predictions for the 1973 period.

At approximately this time, the City Engineer determined it to be advisable that City representatives should meet with citizens in the community to (1) advise them of potential flood conditions, and (2) inform them that the City had qualified for Federally assisted flood insurance. It was decided that the Jefferson-Chalmers District Council was the logical source for citizen communication. The City Engineer and Assistant City Engineer met with the Jefferson-Chalmers Council and requested their assistance in reaching the community with whatever information we could provide on the situation. Three subsequent meetings were held with citizen groups from the area.

When all of the necessary drawings had been prepared for application to the Corps of Engineers, it was found that the legal provisions of the qualifying regulations exceeded the anticipated actions and again the matter was referred to Mr. Cross, the Assistant Corporation Counsel, for clarification with the Corps. It was at this time they became aware of the necessity for a class action court order to enable them to assure the Corps that they could encroach upon private property without interference to build necessary dikes, etc. Mr. Cross then informed the City Engineer that no Common Council request for Corporation Counsel assistance had been received by Mr. Glusac and requested another letter be sent to Common Council asking for such action. On March 1, 1973, such a letter was sent to Council.

The court case was concluded on the 22nd of March giving the City and the Corps of Engineers the right to enter on private lands. (See S-6, 7, and 8).

The flooding of March 17 started with high winds from the SSW which continued from Wednesday, March 14, to Friday, March 16, resulting in the water in Lake Huron, St. Clair River, and Lake St. Clair being held back from flowing down into the Detroit River. Late Friday afternoon the wind shifted, coming from the north. This wind shift forced the water to flow faster than normal into Lake St. Clair and the Detroit River. The water in the canals started to rise and by 7:00 PM that evening the level of the water had reached 97.40 city datum\*. Klenk Island was flooded and water was flowing through 70% of the drives on Scripps, 40% on Ashland, and 40% on Harbor Island.

On Saturday, March 17, the winds continued from the north.

At 10:00 AM the water peaked at 97.90. The streets and walks were flooded from the river to Jefferson and from Fox Creek to Clairpointe. Herbor Island and Klenk Island were completely flooded and the residents had to be evacuated.

When the water receded, the D.P.W., at the direction of the City Engineer, moved into the area on a massive scale. Utilizing as many as 100 D.P.W. personnel and 20 pieces of heavy equipment, the diking program began that had been presented to the Corps of Engineers. The City forces and volunteers completed approximately 15,000 lineal feet of the original program 16,500 lineal feet.

<sup>\*</sup> To convert from city datum to Great Lakes Survey and Corps of Engineers datum, add 478.465 feet.

The Corps of Engineers started on April 24th to do the balance.

The headquarters for the entire operation was at the foot of Lakewood in Alfred Brush Ford Park with Isolated locations on Klenk and Harbor Islands.

After consultation with the Corps of Engineers, it was decided that the dikes would be built to an elevation of 100 feet, City Datum.

On April 9, 1973, the water in the canals reached the highest recorded level, 98.50.

During the building of the dikes it was found that many of the sand bag dikes had been over built and that a less stronger dike would have held back the water just as well. Also, where there was no supervision, many of the walls were being built too high and incorrectly.

Was a problem. Where there was a drive, dump trucks were able to back in and dump the load but the bags would then have to be picked up and either carried or reloaded into wheelbarrows and then pushed to where they were going to be used. Wherever there were no drives, bags had to be wheeled in from the street. Two Cushman light duty three wheel motorized carts were obtained from Parks & Recreation as they could get into the back yards just as easily as the wheelbarrows. The carts, in addition, could carry three times as much as the wheelbarrows. Also being motorized they were able to carry the sand bags all the way from the area

where the sand was bagged.

By April 19, the building of the dikes on Klenk and Harbor Islands, Lakewood, Scripps, Ashland, and Manistique were completed. The building of dikes around the St. Clair Canal was being taken care of by the Corps of Engineers.

The contractor who performed the sand bagging of St. Clair canal utilized a loading tipple made of plywood which allowed sand to flow through a restricting hole into a bag held under the hole. Filled bags were then transported up the canal on a motorized flat top barge. A front end loader was used to place sand in the tipple.

# A final comment:

If it were not for all the volunteers who helped in the filling of bags, which were supplied by the Corps of Engineers, and helped with the construction of the dikes, it would have taken the City many extra weeks of work to complete the dikes. There were people who came from as far away as Ann Arbor. There were housewives, children, Girl Scouts, Boy Scouts, church groups, college kids, a group from a school for the retarded. On one Sunday afternoon, 15 to 20 members of a motor-cycle club came and bagged more sand than the dike crews could use the following Monday morning. One man, who lived in Chicago and was on vacation in Detroit, spent two weeks hauling bags in his truck. The volunteers came in busses, trucks, cars, bikes, and on foot.

People were working so late into the night that PLC had to come and install lights.

The Salvation Army sent their canteen truck to the flood area every day and served hot coffee, doughnuts, sandwiches, soup, and soft drinks most of which were donated by restaurants, meat packing firms, soft drink companies, and women in the area.

One lady on Klenk Island opened her boat livery every morning and served hot coffee and doughnuts.

City of Betroit

ROBERT P. ROSELLE

CHARLES E. MCCARTHY
Deputy Commissioner
General Superintendent

LUTHER B. ARNOLD
Assistant General
Superintendens

JEROME P. CAVANAGH, Mayor
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
528 CITY-COUNTY BUILDING
DETROIT, MICHIGAN 48226

Telephone: 965-4200

Alfred Berarducci, P.E. City Engineer

ROBERT R. HICKS, P.F. Assistant City Engineer

THEODORE R. MORGAN
Secretary

IN REPLY PLEASE REFER TO

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Pursuant to Section 39-1-6 of the Detroit Municipal Code, you are hereby notified that due to the high water levels of the Detroit River, the canals, navigable streams, and other connecting water courses in the City, the Public Health, Safety, and Welfare requires the provision of adequate barriers, dikes, and other embankments at the appropriate location on property at , also identified as

which according to the latest assessment roll identifies you as the riparian owner thereof, to protect against the overflow of flood waters.

This notice is given in accordance with the Detroit Municipal Code requirement, copy of which is attached, which makes the placing of such protection the responsibility of the property owner.

You are also notified that such barrier, dike, or embankment must be placed not later than 10 days from the date of this notice.

A copy of this notice is being posted on the subject property.

Date: July 31, 1969

Very truly yours,

AlfQed Berarducci City Engineer

AB:ck

Enclosure

cc: Commissioner Robert P. Roselle, Public Works Gerald J. Remus, Detroit-Metropolitan Water Services City of Detroit

JEROME P. CAVANAGH, Mayor

DEPARTMENT OF PUBLIC WORKS

CITY ENGINEER'S OFFICE

528 CITY-COUNTY BUILDING DETROIT, MICHIGAN 48226

Telephone: 965-4200

August 19, 1969

ALFRED BERARDUCCI, P.E. City Engineer

ROBERT R. HICKS, P.E.
Assistant City Engineer

THEODORE R. MORGAN
Secretary

IN REPLY PLEASE REPER TO

GEN:RRH 510 Ashland, Lot 501, Fox Creek Subdivision

On August 6, 1969 , a notice was mailed to you instructing you that the above property in the City of Detroit required adequate barriers to protect against the overflow of flood waters.

Our investigations reveal that, to date, no action has been taken to comply with this notice. You are, therefore, notified that unless immediate corrective steps are taken, the City will provide the necessary reinforcement and assess the cost to you in accordance with the provisions of Ordinance No. 39-1-6.

Very truly yours,

Alfred Berarducci City Engineer

AB:CCL:ck

ROBERT P. ROSELLE

Commissioner

LUTHER B. ARNOLD

CHARLES E. MCCARTHY

Assistant General Superintendent

Deputy Commissioner General Superintendent

cc: Commissioner Robert P. Roselle, Department of Public Works

bc: S.I. Yavruian
C. C. Lederer
W. Williams

H. Hood

S-2



#### CITY OF DETROIT

ROMAN S. GRIBBS, Mayor

April 7, 1971

DEPARTMENT OF PUBLIC WORKS . CITY ENGINEER'S OFFICE 528 CITY-COUNTY BUILDING, DETROIT, MICHIGAN 48226

Dear Sir:

The United States Corps of Engineers is predicting extremely high water for the Great Lakes, including the Detroit River, this coming summer. The peak period for this high water will likely be reached in June and early in July. The high water level is anticipated to be equal to or possibly above that of July 1969.

In accordance with Section 39-1-6 of the Municipal Code, which requires that property owners take necessary steps to prevent overflow of flood water across their property. You, as a taxpayer of record of properties in the Fox Creek Canal area, are advised to check your retaining walls, docks or dikes which restrain the canal on which your property borders and strengthen or otherwise prepare these structures for high water. Copy of Section 39-1-6 of the Municipal Code is attached.

Questions which you may have regarding current and anticipated water levels may be directed to the Survey Bureau of the City Engineer's Office, Telephone No. 224-2970 or our Administrative Office, Telephone No. 224-3953.

Very truly yours,

ROBERT R. Hicks

Acting City Engineer

RRH:pc



### CITY OF DETROIT

ROMAN S. GRIBBS, Mayor

DEPARTMENT OF PUBLIC WORKS & CITY ENGINEER'S OFFICE NINTH FLOOR, CADILLAC TOWER, DETROIT, MICHIGAN 48226

During the recent high water condition it was noted that water from the canal at the rear of the property listed below crossed over the lot and into the street. It is anticipated that the water levels will rise higher in the early spring and possibly for short periods, under certain wind conditions, at any time.

Pursuant to Section 39-1-6 of the Detroit Municipal Code, you are therefor notified that the Public Health, Safety, and Welfare requires the provision of adequate barriers, dikes, and other embankments at the appropriate location on property at 606 Ashland Avenue also identified as Lot 483 Fox Creek Subdivision which according to the latest assessment roll identifies you are the riparian owner thereof, to protect against the overflow of flood waters.

This notice is given in accordance with the Detroit Municipal code requirement, copy of which is attached, which makes the placing of such protection the responsibility of the property owner.

You are also notified that such barrier, dike, or embankment must be placed not later than 10 days from the date of this notice. Noncompliance will result in the Department of Public Works taking such action as is necessary to protect the public interest.

A copy of this notice is being posted on the subject property.

Your cooperation in protecting the public interest will be appreciated. Arrangments for temporary flood protection can be made by contacting the Department of Public Works Street Maintenance Division at 826-5900.

Very truly yours

Louis W. Klei City Engineer

December 19, 1972

LWK:JJC:mh encl.

cc: Commissioner Russell Mr. S. Yavruian

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y or personally accepts the same. (C. O.

Sec. 39-1-6. Dikes, barriers, etc., as protection from floodwaters—Duty of riparian owners to erect and maintain.<sup>2</sup>

Whenever the city engineer finds that, because of the rising of the level of the waters in canals, rivers, navigable streams or similar places in the city, the safety, health, property and general welfare of the public is endangered by floodwaters and that immediate action is necessary to protect such public interests, he shall notify the riparian owners thereon, at the address given in the last assessment roll, and shall also post a notice on every lot, building or structure thereon to immediately provide adequate barriers, dikes or other embankments to protect against the overflow of floodwaters. Should any such owner fail to so provide, the commissioner of public works, with the sanction of the common council, shall proceed to provide such barriers, dikes or embankments. No barrier, dike or embankment, once so constructed, shall be altered or removed without the . consent, in writing, of the city engineer. Each riparian owner shall maintain such structures at his own expense. The city engineer may, from time to time, examine such structures, and shall give notice to any owner as aforesaid of failure to maintain. If, after notice, such owner fails to maintain, as required, the commissioner of public works shall enter upon such premises and shall reinforce or replace such defective barriers, dikes or embankments. Such reinforcement or replacement shall be at the expense of such riparian owner, and shall be collectible by an action in assumpsit. (C. O. 1954, ch. 171, § 10.)

## Sec. 39-1-7. Disorderly conduct.3

or a diversion or any rout or riot, by which the peace and good order or borhood is disturbed, shall be guilty of disorderly conduct and shall be as provided in section 1-1-7. (C. O. 1954, ch. 223, § 2.)

Sec. 39-1-8. Disorderly house, etc.— Keeping of same P.

No person shall keep, within the city, of ill fame, house of assignation, or house for the resort of common or a disorderly saloon, barroom, tavern, beer hall, grocery, theater, or building of any kind, or any house, room or building with cards, dice, billiards, nine or ten-pin alleys, wheels of formachines or other instruments or devices whatever, or shall in any in

<sup>&</sup>lt;sup>2</sup> For charter provisions authorizing city to provide for the use, control and regulation of streams, waters and watercourses within the city, see Char., tit. 3, ch. 1, § 12(1).

<sup>&</sup>lt;sup>3</sup> As to disorderly conduct, etc., in taxi dance halls, see § 5-7-21 of this Code. As to disturbing the peace on boats operated on canals within city, see § 27-3-6. As to disorderly conduct in public parks, see § 42-1-28. As to disorderly conduct on boats in public parks, see § 42-2-7.

<sup>4</sup> As to prostitution, see §§ 39-1-52 to 39-1-54 of this Code.