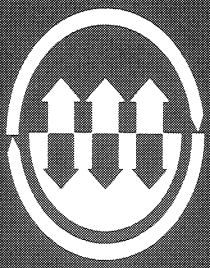
DESCRIPTION OF CURRENT CONDITIONS
VOLUME 2

GENERAL MOTORS CORPORATION
SAGINAW METAL CASTING OPERATIONS
SAGINAW, MICHIGAN



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DESCRIPTION OF CURRENT CONDITIONS REPORT

VOLUME 2

GM

GENERAL MOTORS CORPORATION
SAGINAW METAL CASTING OPERATIONS

Saginaw, Michigan

August, 1995

EMCON

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Appendix 2

Appendix 2.1
Historic Sanborn Fire Insurance Maps

Environmental Risk Information & Imaging Services, Inc.
1421 Prince Street ■ Suite 230 ■ Alexandria, VA 22314 ■ (703) 836-0402 ■ FAX (703) 836-0468

SANBORN MAPS™ by ERIS

THE REPRODUCTION OF THIS SANBORN FIRE INSURANCE MAP HAS BEEN MADE BY PERMISSION OF SANBORN MAPPING & GEOGRAPHIC INFORMATION SERVICE, THE COPYRIGHT HOLDER IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF AN AGREEMENT BETWEEN ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES AND SANBORN MAPPING & GEOGRAPHIC INFORMATION SERVICE DATED AUGUST 1, 1991.

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D SANBORN MAPPING & GEOGRAPHIC INFORMATION SERVICE DATED AUGUST 1, 1991.

1895

PERE MARQUETTE R. R. (BAY CITY DIVISION)

WM SCHUETTE AND CO. PLANING MILL AND LUMBER YARD

PLANING MILL
WALLS BRICK INSIDE WOODEN POSTS

STORAGE W. LUMBER, SHINGLES AND LATHS

WATER TANK 10' ABOVE GROUND

CHIMNEY 110' HIGH

LOADING SHED

LUMBER YARD

WM SCHUETTE AND CO. LUMBER YARD

PLANKED DRIVE

N. WASHINGTON AV.

MYRTLE

FARWELL

83

84

80

Scale of Map: 50 Feet to one inch

Environmental Risk Information & Imaging Services, Inc.
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SANBORN MAPS™ by ERIS

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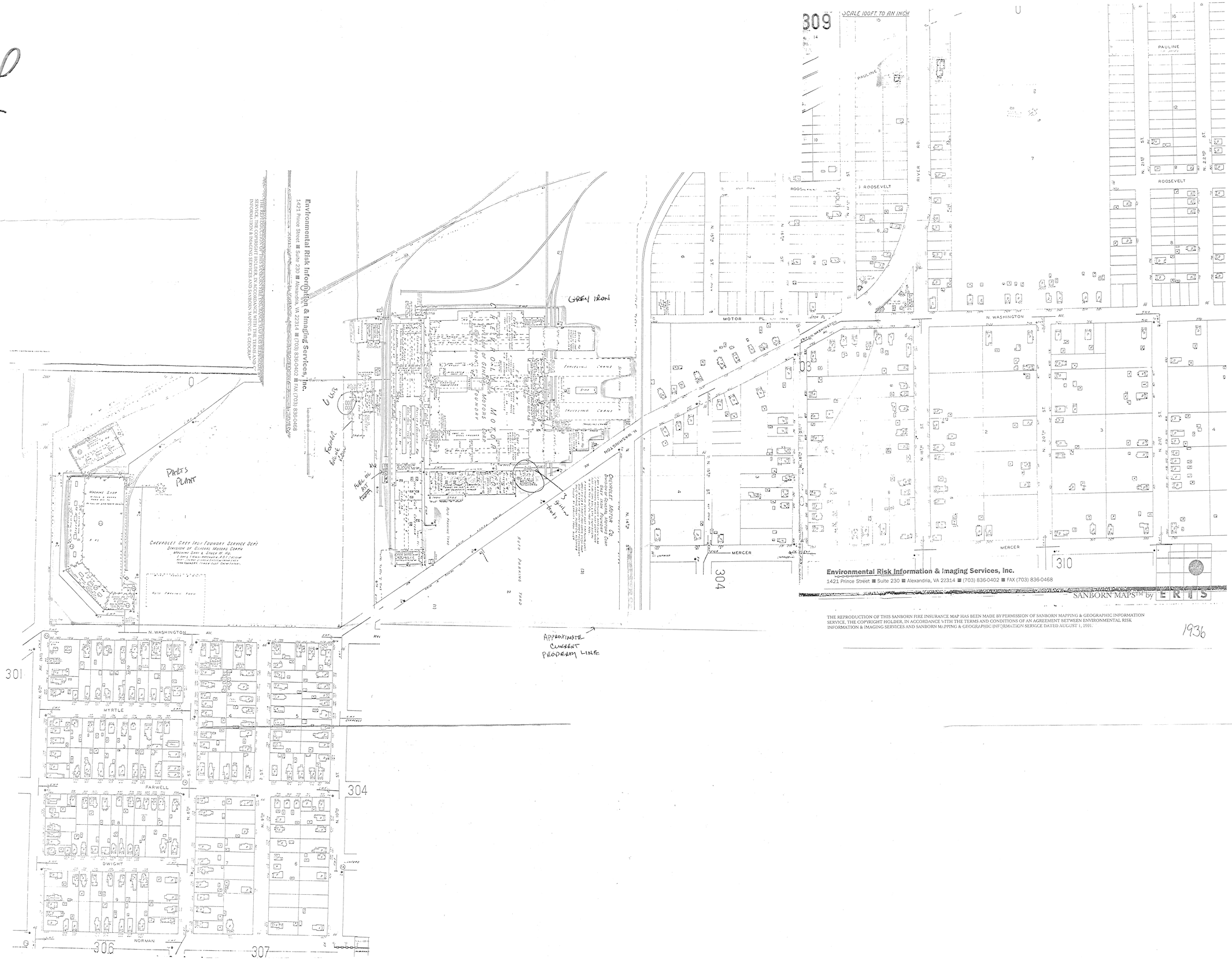
1901

1936


309
SCALE 100 FT. TO AN INCH
PAULINE
ROOSEVELT
RIVER RD.
MOTOR PL.
N. WASHINGTON AV.
MERCER
310
304
308
GREY IRON
CHEVROLET MOTOR CO.
CHEVROLET GEAR & AXLE FOUNDRY SERVICE DEPT.
DIVISION OF GENERAL MOTORS CORP.
PAINT'S PLANT
FARWELL GARAGE
G. W.R.R.
HOLDSHAW ST.
APPROXIMATE CURRENT PROPERTY LINE
301
MYRTLE
FARWELL
DWIGHT
NORMAN
306
307
304
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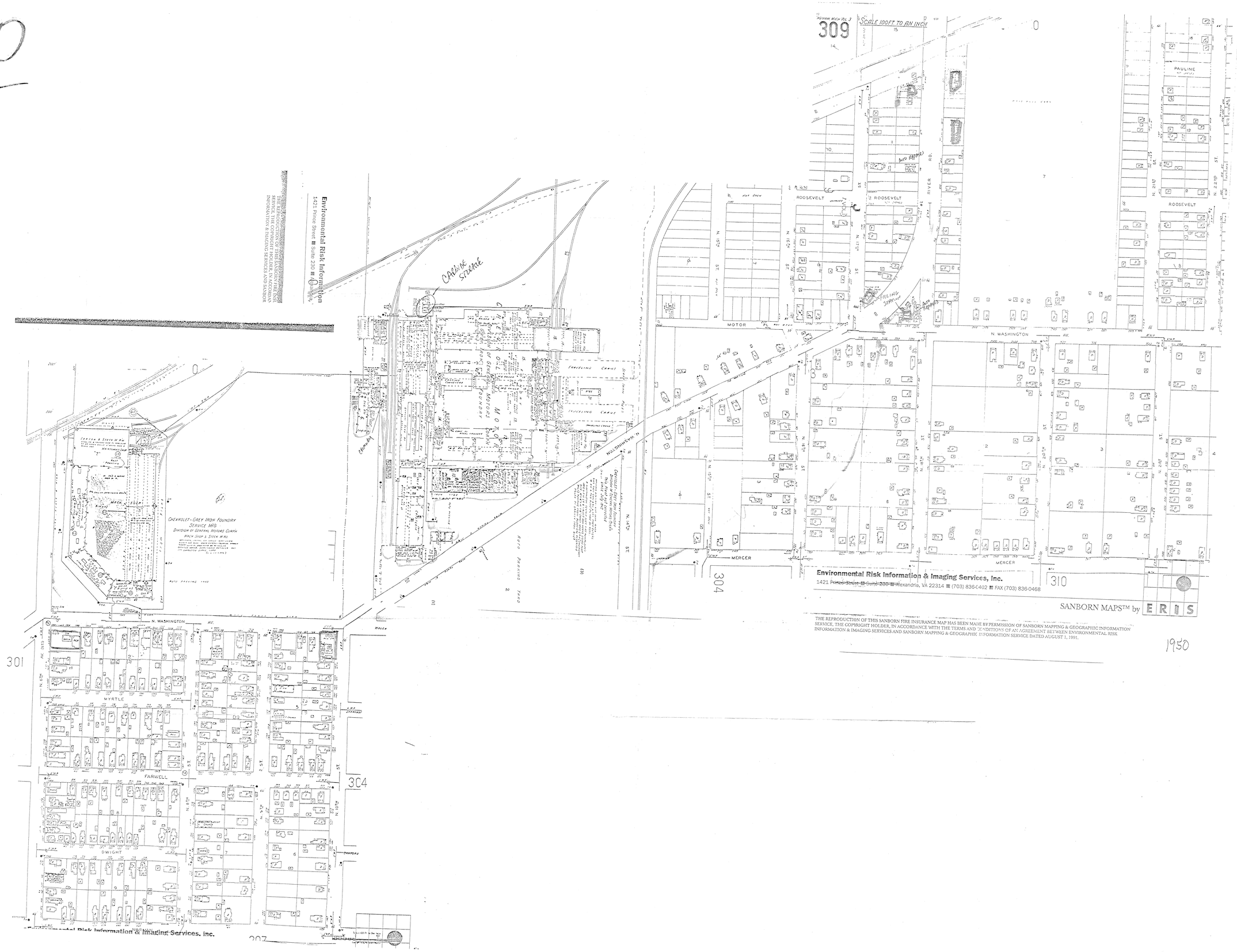
1936

1950


309
SCALE 100FT TO AN INCH
PAULINE
ROOSEVELT
MOTOR
N. WASHINGTON AV.
MERCER
304
310
301
MYRTLE
FARWELL
DWIGHT
CHEVROLET-GREY IRON FOUNDRY
SERVICE MFG
DIVISION OF GENERAL MOTORS CORP.
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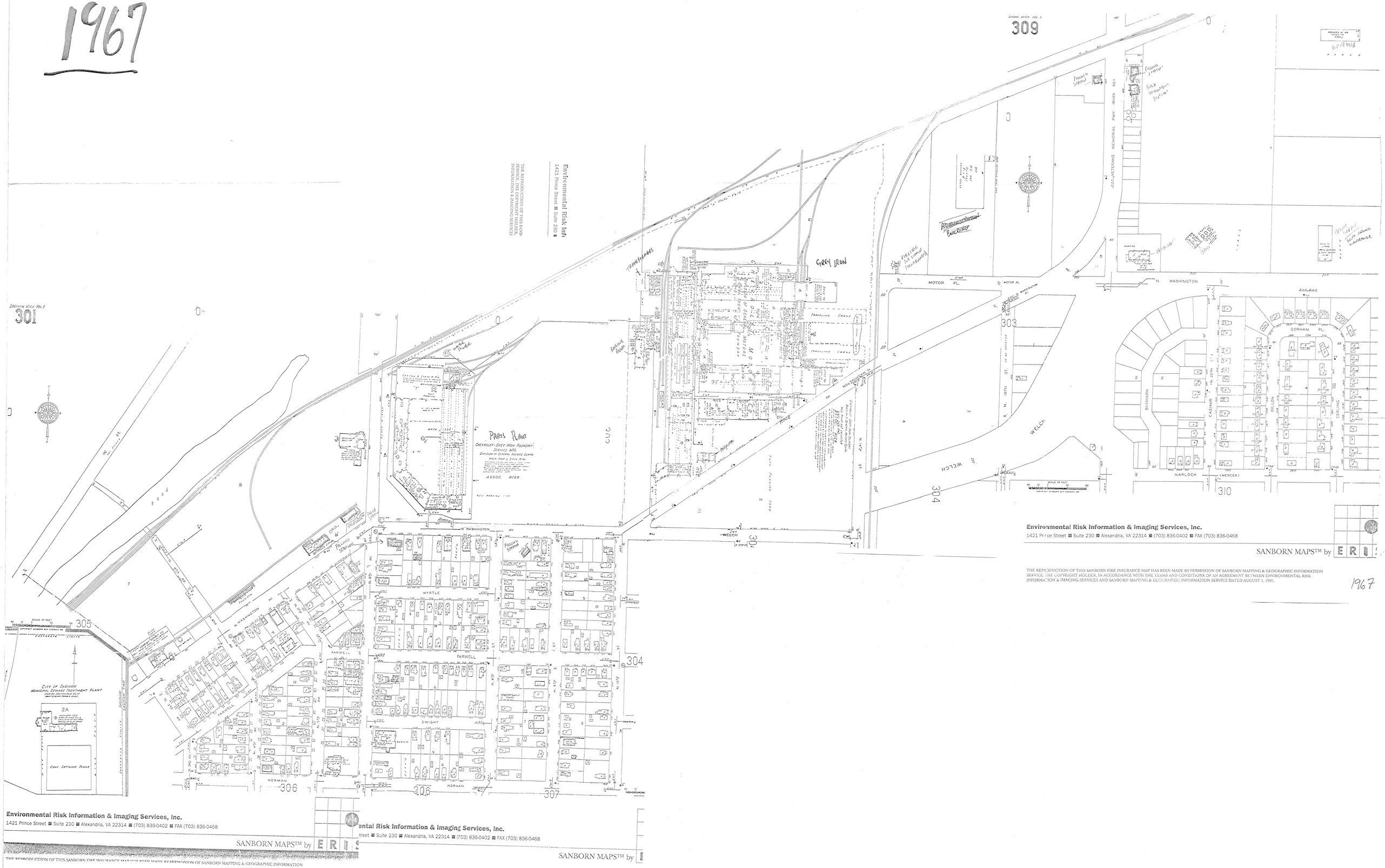
1950

1967



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1967

Appendix 2.2
Historic Area Maps

MICHIGAN SAGINAW RIVER (Reg)
Flint & Pere MARQUETTE R.R. CO.
(Wenzell)
1889

much

Map of the Saginaw River

AND THE

CITIES

OF THE

Saginaw Valley.

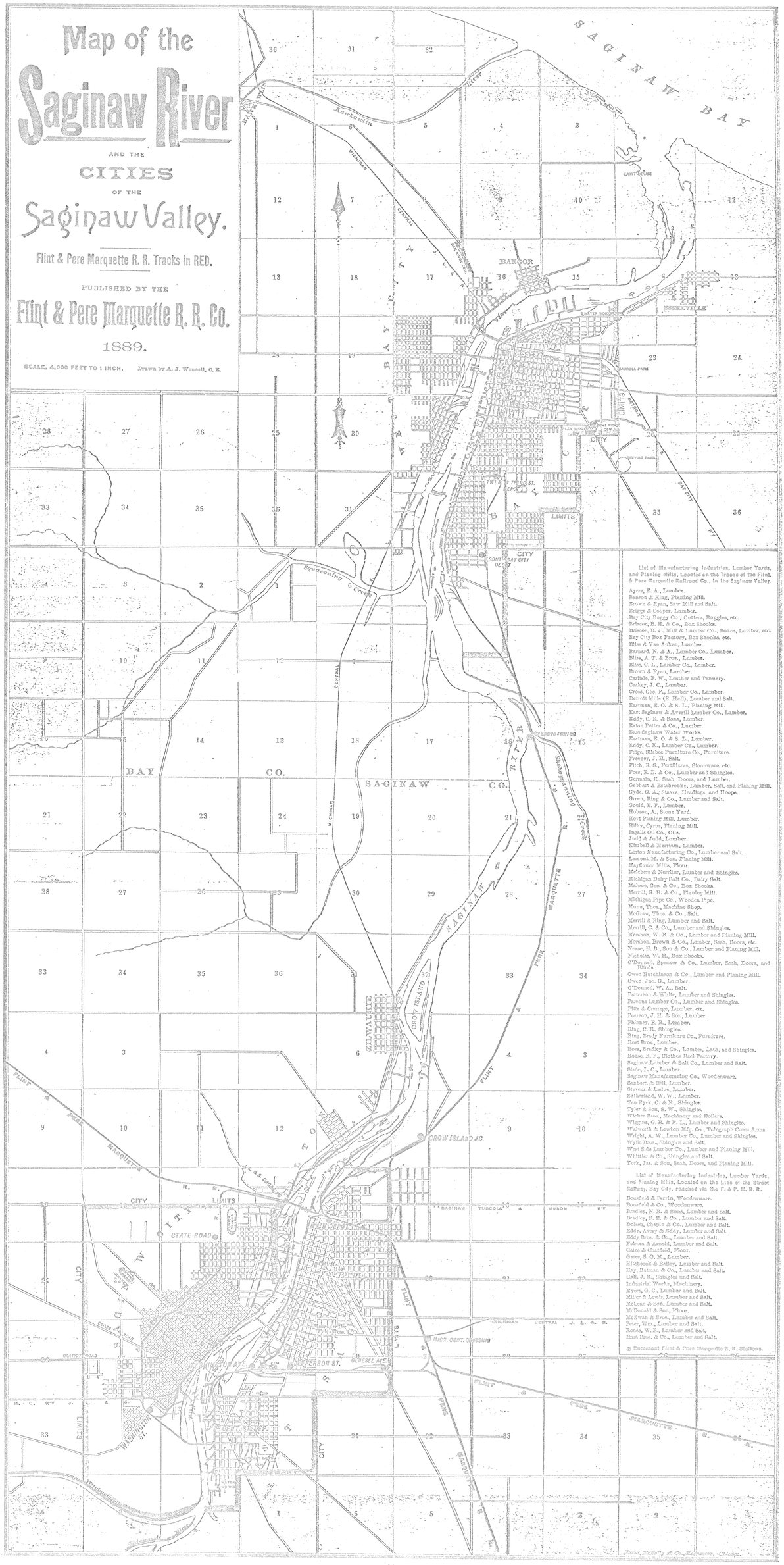
Flint & Pere Marquette R. R. Tracks in RED.

PUBLISHED BY THE

Flint & Pere Marquette R. R. Co.

1889.

SCALE. 4,000 FEET TO 1 INCH. Drawn by A. J. Wenzell, C. E.



List of Manufacturing Industries, Lumber Yards, and Planing Mills, Located on the Tracks of the Flint & Pere Marquette Railroad Co., in the Saginaw Valley.

Ayers, E. A., Lumber.
Benson & King, Planing Mill.
Brown & Ryan, Saw Mill and Salt.
Briggs & Cooper, Lumber.
Bay City Buggy Co., Cutters, Buggies, etc.
Briscoe, B. H. & Co., Box Shooks.
Briscoe, R. J., Mill & Lumber Co., Boxes, Lumber, etc.
Bay City Box Factory, Box Shooks, etc.
Bliss & Van Auken, Lumber.
Barnard, N. & A., Lumber Co., Lumber.
Bliss, A. T. & Bros., Lumber.
Bliss, C. L., Lumber Co., Lumber.
Brown & Ryan, Lumber.
Carlisle, F. W., Leather and Tannery.
Caskey, J. C., Lumber.
Cross, Geo. P., Lumber Co., Lumber.
Detroit Mills (E. Heath), Lumber and Salt.
Eastman, E. O. & S. L., Planing Mill.
East Saginaw & Averill Lumber Co., Lumber.
Eddy, C. K. & Sons, Lumber.
Eaton Potter & Co., Lumber.
East Saginaw Water Works.
Eastman, E. O. & S. L., Lumber.
Eddy, C. K., Lumber Co., Lumber.
Folger, Silsbee Furniture Co., Furniture.
Freeley, J. R., Salt.
Fitch, R. S., Fertilizers, Stoneware, etc.
Foss, F. B. & Co., Lumber and Shingles.
Germain, E., Sash, Doors, and Lumber.
Gebhart & Estabrooke, Lumber, Salt, and Planing Mill.
Gyde, G. A., Staves, Headings, and Hoops.
Green, Ring & Co., Lumber and Salt.
Gould, E. P., Lumber.
Hobson, A., Stone Yard.
Hoyt Planing Mill, Lumber.
Hiller, Cyrus, Planing Mill.
Ingalls Oil Co., Oils.
Judd & Judd, Lumber.
Kimball & Morrison, Lumber.
Linton Manufacturing Co., Lumber and Salt.
Lamont, M. & Son, Planing Mill.
Mayflower Mills, Flour.
Mebbers & Nordier, Lumber and Shingles.
Michigan Dairy Salt Co., Dairy Salt.
Malone, Geo. & Co., Box Shooks.
Merrill, G. H. & Co., Planing Mill.
Michigan Pipe Co., Wooden Pipe.
Mann, Thos., Machine Shop.
McGraw, Thos. & Co., Salt.
Merrill & Ring, Lumber and Salt.
Merrill, C. & Co., Lumber and Shingles.
Meehan, W. B. & Co., Lumber and Planing Mill.
Murphot, Brown & Co., Lumber, Sash, Doors, etc.
Nease, H. R., Son & Co., Lumber and Planing Mill.
Nicholas, W. H., Box Shooks.
O'Donnell, Spencer & Co., Lumber, Sash, Doors, and Blinds.
Owen Hutchinson & Co., Lumber and Planing Mill.
Owen, Jno. G., Lumber.
O'Donnell, W. A., Salt.
Patterson & White, Lumber and Shingles.
Parsons Lumber Co., Lumber and Shingles.
Pitts & Cranage, Lumber, etc.
Pearson, J. H. & Son, Lumber.
Phinney, E. R., Lumber.
Ring, C. N., Shingles.
Ring, Brady Furniture Co., Furniture.
Rust Bros., Lumber.
Rose, Bradley & Co., Lumber, Lath, and Shingles.
Rocse, E. F., Clothes Reel Factory.
Saginaw Lumber & Salt Co., Lumber and Salt.
Slade, L. C., Lumber.
Saginaw Manufacturing Co., Woodenware.
Sanborn & Hill, Lumber.
Stevens & Ladue, Lumber.
Sutherland, W. W., Lumber.
Ten Eyck, C. & N., Shingles.
Tyler & Son, S. W., Shingles.
Wilcox Bros., Machinery and Rollers.
Wiggins, H. S. & F. L., Lumber and Shingles.
Walworth & Lawton Mfg. Co., Telegraph Cross Arms.
Wright, A. W., Lumber Co., Lumber and Shingles.
Wylie Bros., Shingles and Salt.
West Side Lumber Co., Lumber and Planing Mill.
Whittier & Co., Shingles and Salt.
York, Jas. & Son, Sash, Doors, and Planing Mill.

List of Manufacturing Industries, Lumber Yards, and Planing Mills, Located on the Line of the Street Railway, Bay City, reached via the F. & P. M. R. R.

Bousfield & Perrin, Woodenware.
Bousfield & Co., Woodenware.
Bradley, N. E. & Sons, Lumber and Salt.
Bradley, F. N. & Co., Lumber and Salt.
Dolson, Chapin & Co., Lumber and Salt.
Eddy, Avery & Eddy, Lumber and Salt.
Eddy Bros. & Co., Lumber and Salt.
Folsom & Arnold, Lumber and Salt.
Gates & Chatfield, Flour.
Gates, S. O. M., Lumber.
Hitchcock & Bailey, Lumber and Salt.
Hay, Butman & Co., Lumber and Salt.
Hall, J. H., Shingles and Salt.
Industrial Works, Machinery.
Myers, G. C., Lumber and Salt.
Miller & Lewis, Lumber and Salt.
McLean & Son, Lumber and Salt.
McDonald & Son, Flour.
McEwan & Bros., Lumber and Salt.
Peter, Wm., Lumber and Salt.
Rouse, W. H., Lumber and Salt.
East Bros. & Co., Lumber and Salt.

@ Represent Flint & Pere Marquette R. R. Stations.

Rand, McNally & Co., Engravers, Chicago.

By Transfer
OCT 14 1912
1912

Price 20 cents

WAR DEPARTMENT
CORPS OF ENGINEERS

SURVEY OF THE NORTHERN AND NORTHWESTERN LAKES
Made in obedience to Acts of Congress
and orders of
THE CHIEF CORPS OF ENGINEERS, U.S. ARMY

SAGINAW RIVER
MICHIGAN

Prepared and first issued under the direction of
F.G.RAY, Assistant Engineer in Charge
1918

SCALE 1:30,000.

NOTES.

Soundings, in feet, are reduced to Standard Low Water Datum. See table of comparative elevations of water levels.
Water areas with depths of 6, 12 and 18 feet are tinted in blue.
Latitudes and Longitudes are based on the "North American Datum."
Shore line and land contours are referred to the water surface of Lake Huron at the time of survey. Topographic contour interval, 10 ft.
Surveys by the U.S. Lake Survey in 1915 and 1916.
Chart prepared, under the supervision of Edward Molitor, Assistant Engineer.

E. ft. contours ——————
D ft. " ——————
18 ft. " ——————

WAR DEPARTMENT
CORPS OF ENGINEERS

UPPER SAGINAW RIVER
INCLUDING
CITY OF SAGINAW

SCALE 1:10,000.

SAGINAW CO.

TOBICO MARSH

Nicolet Beach

Tobico Beach

ZILWAUKEE

TRANSMISSION LINE

CARROLLTON

BAY CITY

SAGINAW CO.

SAGINAW BAY

SAGINAW

PUBLIC PROPERTY
Issued for official use under the provisions of Section 74 of Act of Congress approved January 12, 1895 (Public No. 141)

Comparative Elevations of Water Levels on Lake Huron.
referred to Mean Sea Level
(adjusted Levels of 1903)

High Water of 1838	584.69 ft.
Mean stage 1860 - 1917 inclusive	581.36 ft.
Low water datum, for Harbor improvements, (1917)	579.00 ft.
Lowest recorded, monthly mean, (Dec. 1819)	576.02 ft.
Plane of reference of this chart (Standard Low Water)	578.50 ft.

For CHANNEL IMPROVEMENTS, &c.
Consult the latest Bulletin and Supplements of the Survey of Northern and Northwestern Lakes published under the direction of the Chief of Engineers, U.S. Army, by the U.S. Lake Survey Office, Detroit, Mich.
These publications are obtainable by chart purchasers upon application to the Lake Survey Office.

SAILING DIRECTIONS.
Bearings of sailing courses are true. Distances in statute miles.
The distances given on sailing lines are to or from the points of departure shown on Coast and General Charts.
Sailing lines ——————. Range lines ——————.

NOTICE
MARINERS *are requested to report uncharted obstructions or errors in this chart to the* U.S. LAKE SURVEY OFFICE, *or to the nearest* U.S. ENGINEER OFFICE. *(See form attached to Supplements to Bulletins.)*

MAGNETIC VARIATIONS.

LOCALITY.	ANNUAL CHANGE.	DATE OF OBSERVATION.	VARIATION 1918.
Bay City	2°01' W.	Oct. 1915	2°18' W.

ABBREVIATIONS.
F.=Front, *Obs.*=Obstruction, *W.*=white, *R.*=red, *B.*=black, *sec.*=seconds, *Lt.*=Light, *S.*=spar, *R.*=can, *RCE.*=Range, *STO. SIG. STA.*=Storm Signal Station.
L. or Isl.=Island.
The figures in brackets placed after the letters denoting character of light indicate the visibility in statute miles when observer eye is 15 feet above lake level.

DRY DOCKS.

Location.	Name of Dock.	Length.		Width.		Depth.	
		On floor.	Between Gates.	On floor.	Between Gates.	Over Sill.	Over Blocks.
Bay City, Mich.	James Davidson	490	515	60	100	20	20

The depths given in above table are referred to the mean level.

OPENING AND CLOSING OF NAVIGATION.

Location.	Average Dates of		Number of days	Average Length of Season.
	Opening.	Closing.		
Saginaw River, Mich.	Apr. 7	Dec. 30	22	118

NOTE. The magnetic variations on compass roses apply in their respective positions on this chart unless otherwise noted. Land use expressed to the nearest quarter degree.

SCALE OF FEET.
SCALE OF METERS.
STATUTE MILES.

Issued July 26, 1918 (no)

Published at U.S. LAKE SURVEY OFFICE, Detroit, Michigan
" " U.S. ENGINEER OFFICE, Buffalo, N.Y.
" " U.S. ENGINEER OFFICE, Sault Ste. Marie, Mich.
" " U.S. ENGINEER OFFICE, 26 Bridge St., New York, N.Y.
" " U.S. ENGINEER OFFICE, Albany, N.Y.
AIDS TO NAVIGATION CORRECTED FROM INFORMATION RECEIVED TO JULY 26, 1918

Catalogue No. 524

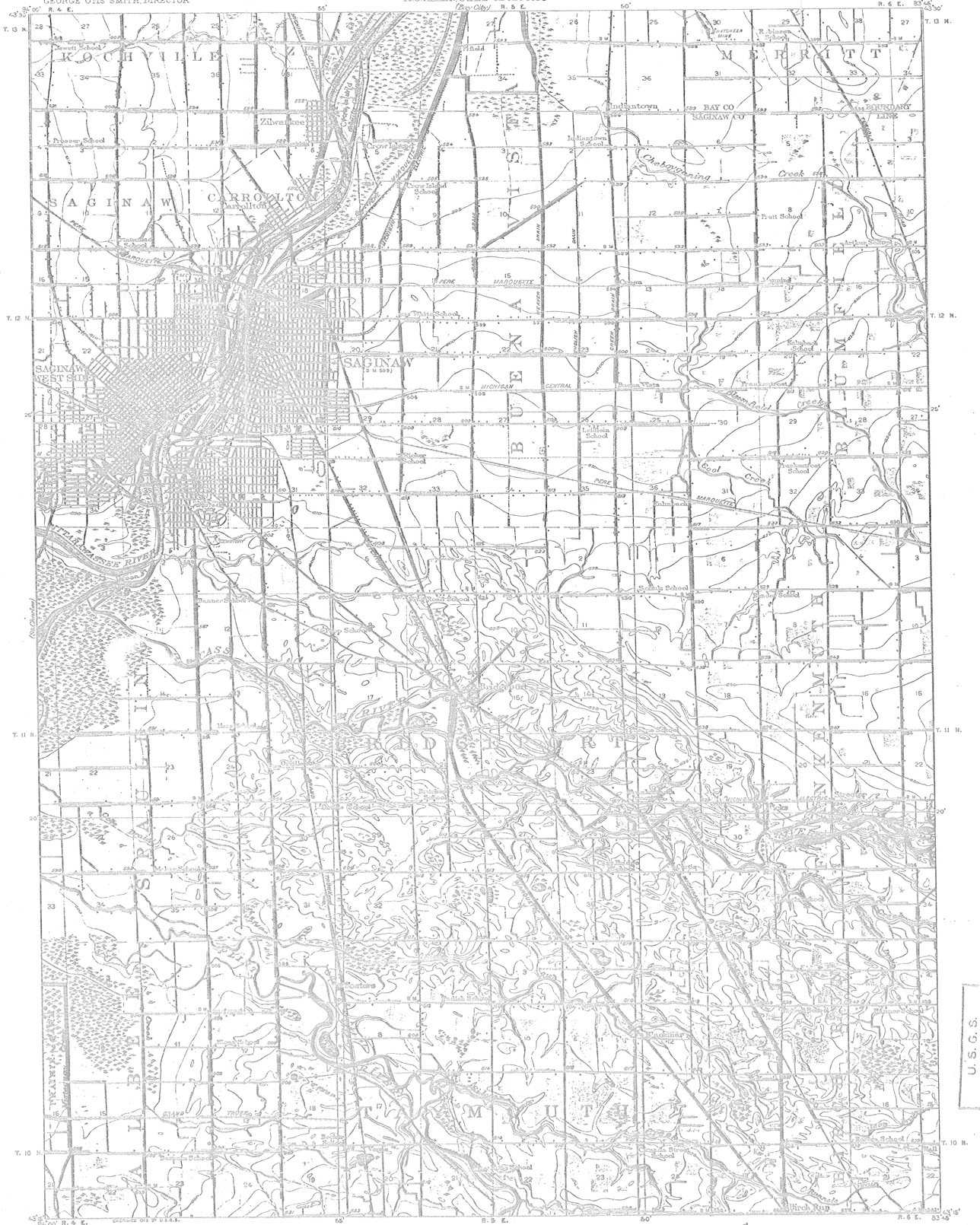
G3311 .P5 svar .U49

DEPARTMENT OF THE INTERIOR
FRANKLIN K. LANE, SECRETARY
U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

TOPOGRAPHY

STATE OF MICHIGAN
BOARD OF GEOLOGICAL SURVEY
R.C. ALLEN, STATE GEOLOGIST

MICHIGAN
SAGINAW QUADRANGLE


SAGINAW
CARROLLTON
Carrollton
KOCHVILLE
ZILWAUKEE
Zilwaukee
MERRITT
BUENA VISTA
BUTZEL
SPAULDING
Indiantown
BAY CO
SAGINAW CO
Chebaylaming Creek
Coal Creek
Birch Run
SAGINAW WEST SIDE
SAGINAW
(S.M. 593)
TITTABAWASSEE RIVER
Crowell School
Prosser School
Indiantown School
Ingleside School
Pratt School
Arthur School
Schaible School
Franklinton
Lellhein School
Hustonville School
Schall School
Bamberg School
Hemmeter
Zilwaukee School
Public School
Carrollton School
Public School
Custons
Public School
Birch Run
Public School
Edenburg
Public School
Public School
Public School

Catalogue N° 526 Price 40 cents

WAR DEPARTMENT
CORPS OF ENGINEERS

SURVEY OF THE NORTHERN AND NORTHWESTERN LAKES
Made in obedience to Acts of Congress
and orders of
THE CHIEF OF ENGINEERS, U. S. ARMY

SAGINAW RIVER
INCLUDING
BAY CITY, MICH.

1927

POLYCONIC PROJECTION

SCALE 1:30,000

AUTHORITIES

U.S. LAKE SURVEY
Topography vicinity of Saginaw River in 1906. South end of Saginaw Bay and Saginaw River from its mouth to City of Saginaw in 1915 and 1916.

U.S. ENGINEER OFFICE, Detroit, Mich.
Channel Improvements to date of issue.

NOTES

Soundings are in feet and are referred to Standard Low Water Datum. See table of comparative elevations of water levels.

Latitudes and Longitudes are based on the "North American Datum."

Shore line and land contours are referred to the water surface of Lake Huron at the time of survey. Topographic contour interval 10 feet.

The figures in brackets placed after the letters denoting character of light indicate its visibility in statute miles when observers eye is 15 feet above lake level.

The magnetic variations on compass roses apply to their respective positions on the chart and are expressed to the nearest quarter degree.

Water areas with depths to 6, 12 and 18 feet are tinted in blue.

6 ft. contours
12 ft. "
18 ft. "

Harbor lines established by the Secretary of War are indicated thus:

ABBREVIATIONS

F - fixed, Fl - flashing, Occ - occulting, W - white, R - red, B - black, sec - seconds, vis - visible, m - miles, S - spar, N - nun, LT-Light, STO S S STA - Storm Signal Station, RGE-Range, I or Isl - Island, P D - Position Doubtful.

UPPER SAGINAW RIVER
INCLUDING
CITY OF SAGINAW

1927

SCALE 1:30,000

BULLETIN AND SUPPLEMENTS

Consult the latest Bulletin and Supplements of the Survey of Northern and Northwestern Lakes, published under the direction of the Chief of Engineers, U. S. Army, by the U. S. Lake Survey Office, Detroit, Mich., for description of coasts, harbors, channels and obstructions, rules and regulations, latest reports of conditions, etc. These publications will be furnished to chart purchasers, upon application, by the U. S. Lake Survey Office.

Mariners are requested to report uncharted obstructions or changes affecting this or other charts to the U.S.LAKE SURVEY OFFICE or to the nearest U.S.ENGINEER OFFICE. (See form attached to Supplements to the Bulletin).

SAILING DIRECTIONS

Bearings of sailing courses are true. Distances are in statute miles. The distances given on sailing lines are in or from the points of departure shown on Coast and General Charts.

Sailing lines: Range lines:

COMPARATIVE ELEVATIONS OF WATER LEVELS ON LAKE HURON
(referred to Mean Sea Level; adjusted Levels of 1903)

High Water of 1838	584.69 ft.
Mean stage 1860-1926, both inclusive	580.97 ft.
Low Water Datum for Harbor Improvements (1916)	579.60 ft.
Plane of reference of this chart (Standard Low Water)	578.50 ft.
Lowest recorded monthly mean (Feb. 1926)	577.36 ft.

MAGNETIC VARIATION

Locality	Observed Variation	Date of Observation	Computed Variation July, 1930
Bay City	2° 01.1 W.	Oct. 1915	3°02'W.

OPENING AND CLOSING OF NAVIGATION

Location	Average dates		Years used for averages	Average number of days closed
	Opening	Closing		
Saginaw River, Mich.	Apr. 7	Dec. 10	22	118

DRY DOCK

Depths referred to Harbor Improvement Datum.

Location	Name or Owner	Length		Width			Depth
		On Blocks	Over All	Bottom	Top	Entrance	Over Sill
Bay City, Mich.	James Davidson	400 ft.	435 ft.	60 ft.	100 ft.	60 ft.	14½ ft.

Issued November 1927 (500)

On sale at U. S. LAKE SURVEY OFFICE, Detroit, Mich.
" " " U. S. ENGINEER OFFICE, Buffalo, N.Y.
" " " U. S. ENGINEER OFFICE, Sault Ste. Marie, Mich.
" " " U. S. ENGINEER OFFICE, 1st. District, New York, N.Y.
" " " U. S. ENGINEER OFFICE, Albany, N.Y.

AIDS TO NAVIGATION CORRECTED FROM INFORMATION RECEIVED TO NOVEMBER 23, 1927

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48
G3311 .P5 svar .U49

WAR DEPARTMENT
CORPS OF ENGINEERS

SURVEY OF THE NORTHERN AND NORTHWESTERN LAKES

Made in obedience to Acts of Congress
and orders of
THE CHIEF OF ENGINEERS, U.S. ARMY

SAGINAW RIVER

INCLUDING

BAY CITY, MICH.

1930

POLYCONIC PROJECTION

SCALE 1:30,000

AUTHORITIES

U.S. LAKE SURVEY
Topography vicinity of Saginaw River in 1906. South end of Saginaw Bay and Saginaw River from its mouth to City of Saginaw in 1915 and 1916. U.S. Aerial Survey in 1927.
U.S. ENGINEER OFFICE, Detroit, Mich.
Channel improvements to date of issue.

NOTES

Soundings are in feet and are referred to Standard Low Water Datum. See table of comparative elevations of water levels hereon.
Latitudes and longitudes are based on the North American Datum.
Shore line and land contours are referred to the water surface of Lake Huron at the time of survey. Topographic contour interval 10 feet.
The figures in brackets placed after the letters denoting character of light indicate its visibility in statute miles when observers eye is 15 feet above lake level.
The magnetic variations on compass roses apply to their respective positions on the chart and are expressed to the nearest quarter degree.
Water areas with depths up to 6, 12 and 18 feet are tinted in blue.

6 ft. contours
12 ft. "
18 ft. "

Harbor lines established by the Secretary of War are indicated thus:

ABBREVIATIONS

F - fixed, Fl - flashing, Occ - occulting, W - white, R - red, B - black, sec - seconds, vis - visible, m - miles, S - spar, N - nun, LT-Light, STO SIG STA - Storm Signal Station, RGE-Range, I or Isl - island, P D - Position Doubtful.

UPPER SAGINAW RIVER

INCLUDING

CITY OF SAGINAW

1930

POLYCONIC PROJECTION

SCALE 1:30,000

BULLETIN AND SUPPLEMENTS

Consult the latest Bulletin and Supplements of the Survey of Northern and Northwestern Lakes, published under the direction of the Chief of Engineers, U. S. Army, by the U. S. Lake Survey Office, Detroit, Mich., for description of coasts, harbors, channels and obstructions, rules and regulations, latest reports of conditions, etc. These publications will be furnished to chart purchasers, upon application, by the U. S. Lake Survey Office.

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Sailing lines: Range lines:

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(referred to Mean Sea Level; adjusted Levels of 1903)

High Water of 1838,	584.69 ft.
Mean stage 1860 - 1929, both inclusive	580.94 ft.
Low Water Datum for Harbor Improvements (1916)	579.60 ft.
Plane of reference of this chart (Standard Low Water)	578.50 ft.
Lowest recorded monthly mean (Feb. 1926)	577.36 ft.

MAGNETIC VARIATION

Locality	Observed Variation	Date of Observation	Computed Variation July, 1930
Bay City	2° 01.1' W.	Oct. 1915	3° 02' W.

OPENING AND CLOSING OF NAVIGATION

Location	Average dates		Years used for averages	Average number of days closed
	Opening	Closing		
Saginaw River, Mich.	Apr. 7	Dec. 10	22	118

DRY DOCK

Depths referred to Harbor Improvement Datum.

Location	Name or Owner	Length		Width			Depth
		On Blocks	Over All	Bottom	Top	Entrance	Over Sill
Bay City, Mich.	James Davidson	400 ft.	435 ft.	60 ft.	100 ft.	60 ft.	14½ ft.

SCALE OF FEET
SCALE OF METERS
STATUTE MILES

Issued December 1930 (600)

On sale at U.S. LAKE SURVEY OFFICE, Detroit, Mich.
" " " U.S. ENGINEER OFFICE, Buffalo, N.Y.
" " " U.S. ENGINEER OFFICE, Sault Ste. Marie, Mich.
" " " U.S. ENGINEER OFFICE, 1st. District, New York, N.Y.
" " " U.S. ENGINEER OFFICE, Albany, N.Y.

AIDS TO NAVIGATION CORRECTED FROM INFORMATION RECEIVED TO DECEMBER 26, 1930

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Division of Maps
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Library of Congress

SAGINAW RIVER Catalogue No. 524

G3311 .P5 svar .U49

Catalogue No.524 Price 40 cents

SAGINAW RIVER MICHIGAN

1937

POLYCONIC PROJECTION

SCALE 1:20,000.

DEPTHS IN FEET

WAR DEPARTMENT
CORPS OF ENGINEERS

SURVEY OF THE NORTHERN AND NORTHWESTERN LAKES

NOTES

COMPARATIVE ELEVATIONS OF WATER LEVELS ON LAKE HURON
(referred to Mean Tide at New York; adjusted levels of 1935)

Mean stage 1900-1936, both inclusive.....579.8 ft.
PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....578.5 ft.

BLUE TINT. Areas with depths to 18 feet except in improved channels are tinted blue.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure shown on coast and general charts.

VISIBILITY OF LIGHTS. The visibility of lights is in statute miles when observer's eye is 15 feet above water level.

BULLETIN. For latest information as to controlling depths in improved harbors consult latest edition of the Bulletin and Supplements thereto, a copy of which, containing descriptions of coasts, harbors, channels, dry docks, canals, etc., and rules and regulations, will be furnished chart purchasers upon application to the U.S. Lake Survey Office.

ABBREVIATIONS. B - black; C - can; F - fixed, Fl - flashing; G - green; H S - horizontal stripes; m - miles; N - nun; Occ - occulting; P D - position doubtful; R - red; S - spar, Sto Sig - storm signal station; V S - vertical stripes, vis - visible; W - white.

SAGINAW BAY

SAGINAW RIVER

TRUE COMPASS

MAGNETIC COMPASS

MAGNETIC VARIATION 3°15' W 1935

DUMPING GROUND

STATE PARK

ZILWAUKEE

CARROLLTON

WEST BAY CITY

EAST SAGINAW

CROW ISLAND

MIDDLE GROUND

GRAVEYARD POINT

SHIAWASSEE RIVER

TITTABAWASSEE RIVER

SCALE OF FEET

SCALE OF METERS

STATUTE MILES

Edition o May 1937

Published by
U.S. LAKE SURVEY OFFICE
On sale at U.S. Lake Survey Office Detroit, Mich., and at U.S. Engineer Offices at Buffalo, N.Y., Albany, N.Y., 1st District Newy... and S. Ste. Marie, Mich.
AIDS TO NAVIGATION AND AVAILABLE DE... CORRECTE... MAY 7, 1937

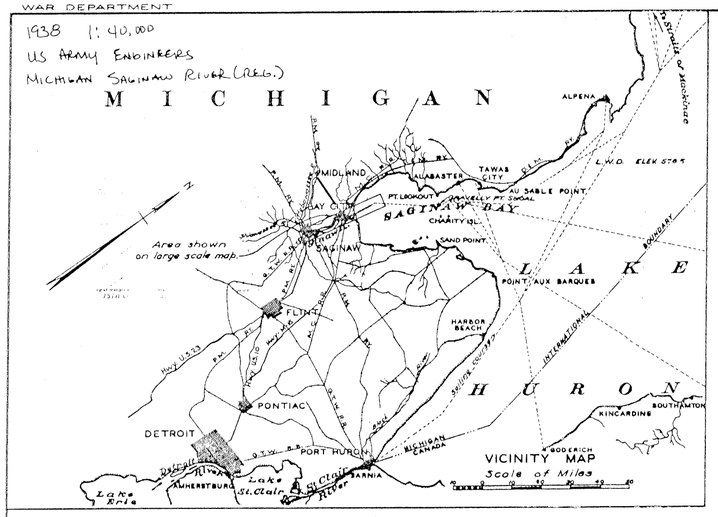
Catalogue No.524

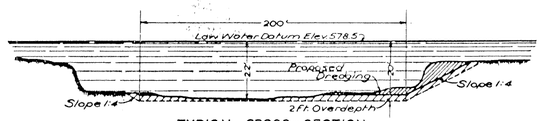
Division of Maps
JUN 30 1937
G3311 .P5 svar .U49
67

WAR DEPARTMENT

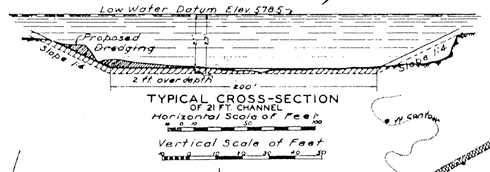
CORPS OF ENGINEERS, U.S. ARMY

1938 1:40,000
US ARMY ENGINEERS
MICHIGAN SAGINAW RIVER (REG.)





TYPICAL CROSS-SECTION
OF 20 FT CHANNEL



TYPICAL CROSS-SECTION
OF 21 FT. CHANNEL
Horizontal Scale of Feet
Vertical Scale of Feet

RECOMMENDED CHANNEL
200 FEET WIDE - 21 FEET DEEP

Leeward limit of recommended 21 Ft. modification

LAKE
SAGINAW

Limit of existing 18.5 Ft. project

HURON
BAY

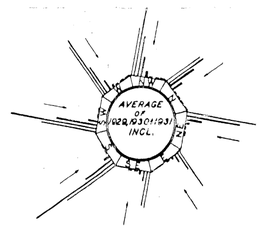
Hydraulic disposal from previous dredging

B A Y

C I T Y

RECOMMENDED MODIFICATION
OF PROJECT
CHANNEL TO BE-
21 FEET DEEP
MINIMUM WIDTH - 200 FEET
TOTAL LENGTH - 13 MILES

MIDDLE GROUND
BAY TERMINAL CO.
WOLVERINE COAL & DOCK CO.
GULF OIL CO.
G.R. & I. RY.
PURE OIL CO.
DOW CHEMICAL CO.
STANDARD OIL CO.
OHIO OIL CO.
ATLAS PORTLAND CEMENT CO.
Location of Consumers Power Co. plant now under construction
Upper limit of recommended 21 foot modification
ESSEXVILLE



DIRECTION AND VELOCITY OF WIND
AT PORT HURON, MICH.
From U.S. Weather Bureau Records
Scale of Hours
Velocities
0-9 miles per hour
10-14
15-19
20-24
25-29
30-34
35-39
40- miles per hour or more

GLOBE PE CO.

G.T.W. R.R.

P.M. RY.

ADDITIONAL RIGHT OF WAY REQUIRED

S A G I N A W

ZILWAUKEE

HURON PORTLAND CEMENT CO.
JOINER COAL CO.

CARROLLTON

CONSUMERS POWER CO.

WILLOW

HWY. U.S. 23

CROW ISLAND

CONSUMERS POWER CO. TURNING BASIN

SAGINAW BRICK & TERMINAL CO.

CARROLLTON BAR

CHEVROLET MOTOR CO.

CHEVROLET MOTOR CO TURNING BASIN

ADDITIONAL RIGHT OF WAY REQUIRED

RECOMMENDED MODIFICATION
OF PROJECT
CHANNEL TO BE -
20 FEET DEEP
MINIMUM WIDTH - 200 FEET
TOTAL LENGTH - 14 MILES

REMOVAL OF 3500 FEET OF U.S. REVETMENT REQUIRED

Legend
Recommended dredging to 21 Ft. depth shown thus 21 20
Additional right of way required shown thus

All depths are referred to Low Water Datum, elevation 578.5 ft. above Mean Tide at New York.

Upper limit of Federal project

THE REMER COAL & SUPPLY CO.

APPROVED TURNING BASIN
To be dredged 15 Ft. below low water datum.

Upper limit of recommended 20 foot modification.

SAGINAW BAY AND RIVER, MICHIGAN

TO ACCOMPANY REVIEW AND SURVEY REPORT DATED MAR. 12, 1938

In 1 Sheet

Scale 1:40,000

Scale of Feet

U.S. ENGINEER OFFICE, DETROIT, MICH., MAR. 12, 1938

Submitted: V.G. Hall, Senior Engineer

Approved: T.D. Stinson, Col., Corps of Engineers

Drawn by V.G.H.

File No. D. Sag. 10/370

HOUSE DOC. NO. 170, 75TH CONG., 3D SESSION

58355-D U.S. GOVERNMENT PRINTING OFFICE: 1938

Division of Maps
MAY 31 1938
Library of Congress

Catalogue No.524 Price 50 cents

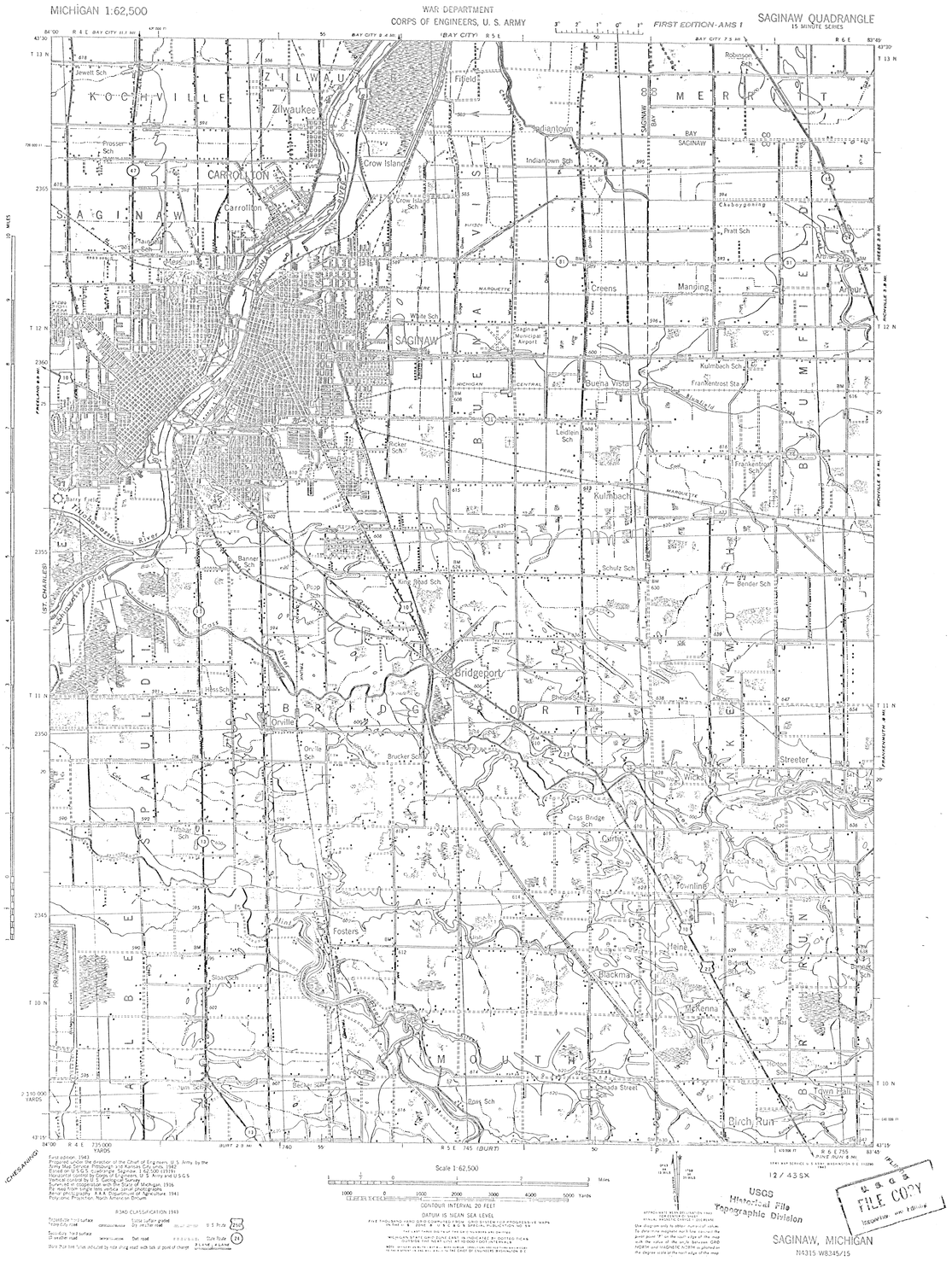
SAGINAW BAY

DUMPING GROUND

Rifle Range

Rifle Range

Rifle Range



STATE CODE
MAJOR MINOR
MI

AGENCY CODE
GS

U.S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY
NCIC
NATIONAL CARTOGRAPHIC INFORMATION CENTER
507 National Center, Reston, Virginia 22092
Phone 703-750-6045

ROLL NUMBER
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FRAME NUMBER
145

Catalogue No.524 Price 50 cents

U. S. LAKE SURVEY

SURVEY OF THE NORTHERN AND NORTHWESTERN LAKES

SAGINAW RIVER

MICHIGAN

CHART Nº 524

1948

POLYCONIC PROJECTION

SCALE 1:20,000

DEPTHS IN FEET

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

NOTES

COMPARATIVE ELEVATIONS OF WATER LEVELS ON LAKE HURON
(referred to Mean Tide at New York; adjusted levels of 1935)

Mean stage 1900 - 1947, both inclusive ..... 579.8 ft.
PLANE OF REFERENCE OF THIS CHART (Low Water Datum) ..... 578.5 ft.

BLUE TINT. Areas with depths to 18 feet, except in channels maintained by the United States, are tinted blue.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

VISIBILITY OF LIGHTS. The visibility of lights is in statute miles when observer's eye is 15 feet above water level.

ABBREVIATIONS. Alt - alternating; B - black, blds - bowlders, BKW - breakwater; C - can, CGS - coast guard station; DFS - distance finding station; F - fixed, Fl - flashing, (FB) - fog bell, (FD) - fog diaphone, (FH) - fog horn, (FO) - fog oscillator, (FS) - fog siren, (Fog W) - fog whistle; G - green, Gp - group; H B - horizontal bands; I - interrupted; m - miles; N - nun; Occ - occulting; P D - position doubtful; Qk - quick; RBn - radiobeacon, R G E - range, R - red, rky - rocky; S - spar, Sec - sector, S-L - short-long, Sto Sig - storm signal station; V S - vertical stripes, vis - visible; W - white.

BULLETIN. For latest information as to controlling depths in improved harbors consult latest edition of the Bulletin and Supplements thereto, containing descriptions of coasts, harbors, channels, dry docks, canals, bridge clearances, rules and regulations, etc. Copies may be purchased from the U. S. Lake Survey.

Edition of November 1948

Published by
U. S. LAKE SURVEY
CORPS OF ENGINEERS
630 Federal Building, Detroit 26, Michigan
AIDS TO NAVIGATION CORRECTED TO NOVEMBER 19, 1948
NOVEMBER 10 1949 L.M.S.

G3311 .P5 svar .U49

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Act of Congress approved January 12, 1895 (Public No.)

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Catalog No.524 Price 50 cents

CORPS OF ENGINEERS U.S. ARMY

U. S. LAKE SURVEY

SURVEY OF THE NORTHERN AND NORTHWESTERN LAKES

SAGINAW RIVER
MICHIGAN

CHART Nº 524

1952

POLYCONIC PROJECTION

SCALE 1:20,000

DEPTHS IN FEET

NOTES

COMPARATIVE ELEVATIONS ON LAKE HURON
(referred to Mean Tide at New York; 1935 Datum)

Mean stage 1900-1950, both inclusive ..... 579.8 ft.
PLANE OF REFERENCE OF THIS CHART (Low Water Datum) ..... 578.5 ft.

BLUE TINT. Areas with depths to 18 feet, except in channels maintained by the United States, are tinted blue.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

VISIBILITY OF LIGHTS. The visibility of lights is in statute miles when observer's eye is 15 feet above water level.

ABBREVIATIONS. Am - amber, Alt - alternating; B - black, Blds - bowlders, Bkw - breakwater; C - can, CG - Coast Guard; DFS - distance finding station; DIA - diaphone; F - fixed, Fl - flashing, Fog Sig - fog signal; G - green, Gp - group; H - horizontal bands; I - interrupted; LSS - lifesaving station; m - miles; N - nun; Occ - occulting; PO - position doubtful; Qk - quick; R - red, RBn - radiobeacon, REF - reflector, RGE - range, rky - rocky; S - spar, S-L - short-long, SEC - sector; VS - vertical stripes, vis - visible; W - white, WB SIG STA - Weather Bureau signal station, WHIS - whistle.

GREAT LAKES PILOT. For latest information as to controlling depths in improved harbors consult latest edition of the Great Lakes Pilot, containing descriptions of coasts, harbors, channels, dry docks, canals, bridge clearances, rules and regulations, etc. Copies may be purchased from the U. S. Lake Survey.

SAGINAW BAY

SAGINAW RIVER

BAY CITY

CARROLLTON

ZILWAUKEE

CROW ISLAND

ESSEXVILLE

DUMPING GROUND

MIDDLE GROUND

STATE PARK

Ricotta Beach

Rosemary Island

Parishville Beach

Hawkinson Beach

Tittabawassee River

Green Point

Shiawassee River

Hoyt Park

Island Park

Bay City Yacht Club

Saginaw Bay Yacht Club

Bay City Waterworks

Consumers Power Co. Plt.

Dow Chemical Co.

Standard Oil Co.

Pure Oil Co.

Michigan Sugar Co.

Monitor Sugar Co.

Woodruff Corp.

Aerial Cable

Old Crib

Obstructions & Dns. Bks

Chesapeake & Ohio Ry

Grand Trunk Western R.R.

New York Central R.R.

Pere Marquette R.R.

Detroit & Mackinac Ry.

Lake States Transportation Co.

Saginaw Grey Iron Foundry

Chevrolet Saginaw Service Mfg

Saginaw Malleable Iron Div.

Central Foundry Division (General Motors Corp.)

Airport

Saginaw Bay Range

Saginaw River Range

Saginaw River Entrance Range

Saginaw River Upper Range

Saginaw River Lower Range

Saginaw River Rear Range

Saginaw River Front Range

Saginaw River Entrance Range Rear

Saginaw River Entrance Range Front

Saginaw River Upper Range Rear

Saginaw River Upper Range Front

Saginaw River Lower Range Rear

Saginaw River Lower Range Front

Saginaw River Rear Range

Saginaw River Front Range

Saginaw Bay Range Rear

Saginaw Bay Range Front

TRUE COMPASS

MAGNETIC COMPASS

MAGNETIC VARIATION 1° 45' W 1950

SCALE OF FEET
STATUTE MILES

Published and for sale by
U. S. LAKE SURVEY
CORPS OF ENGINEERS, U. S. ARMY
630 Federal Building, Detroit 26, Michigan

AIDS TO NAVIGATION CORRECTED TO

Edition of June 1952

Army-U S Lake Survey, Detroit-Lorna 055-900

Library of Congress
Government Source
SEP 1952
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G3311 .P5 svar .U49

Catalog No.524

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF MICHIGAN

SAGINAW QUADRANGLE
MICHIGAN—SAGINAW CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 SAGINAW 15' QUADRANGLE

4271 III SE (AUBURN)
4271 III SE (ESSEXVILLE)
4271 I (ST. CHARLES 1:62 500)
4270 IV NE (BIRCH RUN NORTH)
4270 IV SE (SAGINAW NE)

Mapped, edited, and published by the Geological Survey
in cooperation with State of Michigan agencies

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1965. Field checked 1967

Selected hydrographic data compiled from U. S. Lake Survey Chart 524 (1967)
This information is not intended for navigational purposes

Polyconic projection. 1927 North American datum
10,000-foot grid based on Michigan coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks,
zone 17, shown in blue

Red tint indicates areas in which only landmark buildings are shown

Fine red cashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

SCALE 1:24 000

CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS LOW WATER 576.8 FEET

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

G & M Division
4 MAR 1970
Library of Congress

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
Interstate Route · U.S. Route · State Route

SAGINAW, MICH.
NW/4 SAGINAW 15 QUADRANGLE
N4322.5—W8352.5/7.5
1967
AMS 4270 IV NW—SERIES V862

Appendix 2.3
Adjacent Property Owners Map And Summary

PARCEL MAP

PREPARED FOR:

GM Saginaw Metal Casting Operations

SAGINAW, MICHIGAN

Please refer to corresponding *ADJACENT PROPERTY OWNERSHIP* table

KEY

62 — NUMBER CORRESPONDING TO THE ADJACENT PROPERTY OWNERSHIP TABLE

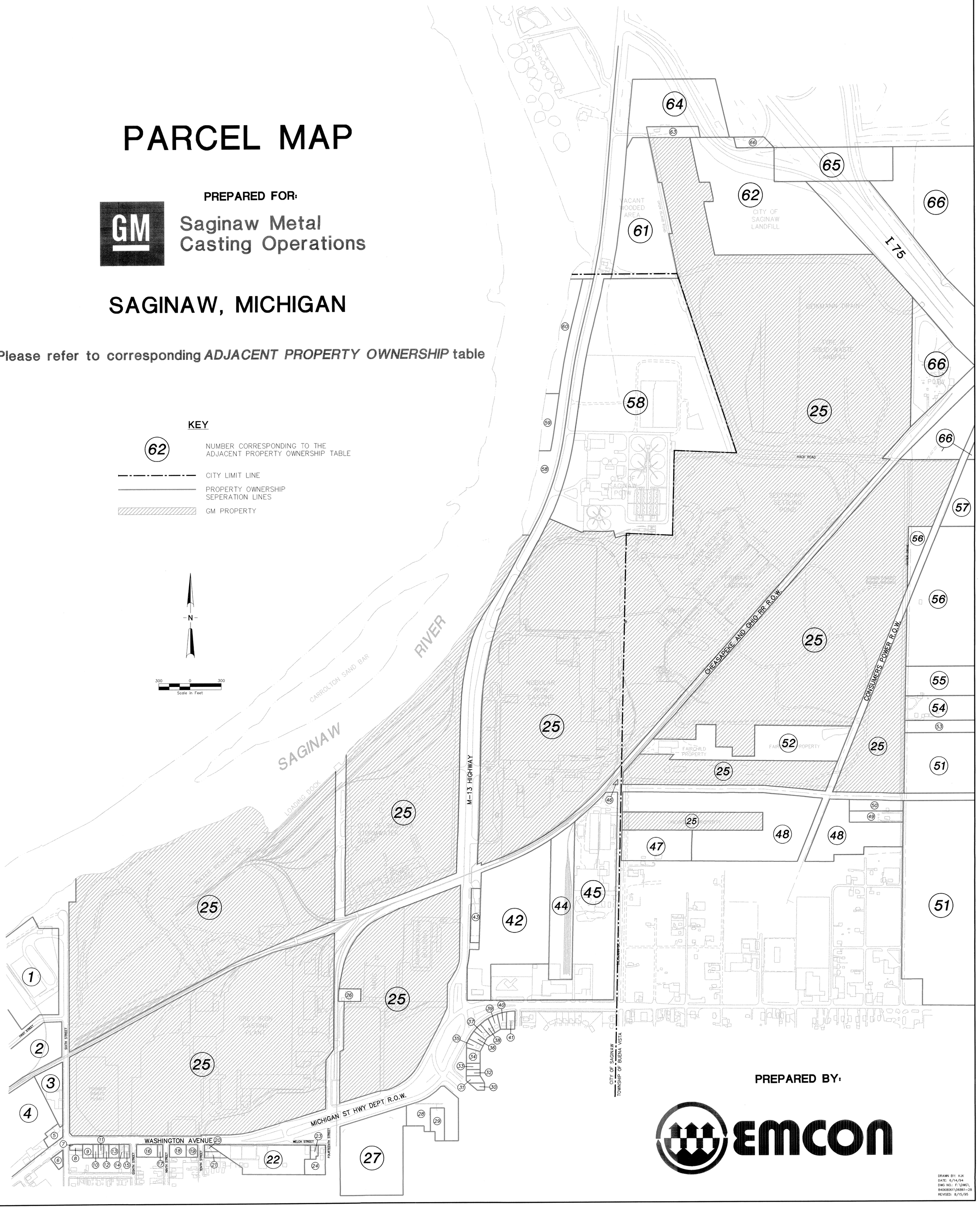
CITY LIMIT LINE

PROPERTY OWNERSHIP SEPERATION LINES

GM PROPERTY

N

300 0 300
Scale in Feet



PREPARED BY:

EMCON

DRAWN BY: KJK
DATE: 6/14/94
DWG NO.: F:\DWG\84068061\D6861-28
REVISED: 8/15/95

ADJACENT PROPERTY OWNERSHIP (page 3)

56	1012-5-09-2009-000 1012-5-09-2010-000 1012-5-09-2011-000	Bourdow Trucking Company	3000 & 3110 North Outer Drive	3000 & 3110 North Outer Drive Buena Vista, MI
57	1012-5-09-2004-000	E. Wehner	3110 Hack	3110 Hack Buena Vista, MI
58	1012-5-05-4171-A00 1012-5-05-4010-000 1012-5-05-4009-000	City of Saginaw	2406 Veterans Mem. Pkwy. 4000 Veterans Mem. Pkwy. 3000 Crow Island Rd.	4000 Veterans Mem. Pkwy. Saginaw, MI 48601
59	N/A	Saginaw County		
60	21-4335-00100	City of Saginaw - Park		2300 Veterans Mem. Pkwy. Saginaw, MI
61	1012-5-05-4007-000	Marilyn J. Adams	4500 Crow Island	4500 Crow Island Saginaw, MI 48601
62	1012-5-05-4105-B00 1012-5-05-4002-A00 1012-5-05-4124-A00 1012-5-05-1002-A00 1012-5-05-1006-A00	City of Saginaw	4000 S. US 23 I-75	Saginaw, MI 48601
63	1012-5-05-1004-A00	City of Saginaw		Saginaw, MI 48601
64	1012-5-05-1002-000 1012-5-05-1004-000	Michigan State Highway Dept.	4000 S. US 23	4000 S. US 23 Saginaw, MI 48601
65	1012-5-05-1002-B00 1012-5-05-1006-000	Michigan State Highway Dept.	4000 South US 23	4000 South US 23 Saginaw, MI 48601
66	1012-5-05-3002-000 1012-5-04-3006-000	Buena Vista Township		Buena Vista, MI

Appendix 2.4
Surrounding Land use Map (Zoning)

SURROUNDING LAND USE MAP

PREPARED FOR:

GM Saginaw Metal Casting Operations

SAGINAW, MICHIGAN

ZONING LEGEND

CITY OF SAGINAW		BUENA VISTA TOWNSHIP	
B-1	BUSINESS (Local)	A-1	AGRICULTURAL (Farmland Preservation)
B-2	BUSINESS (General)	A-2	AGRICULTURAL (Dispersed Residential)
M-2	INDUSTRIAL (General)	B-3	COMMERCIAL (Wholesale and Business Services)
M-3	INDUSTRIAL (Heavy)	CG-1	CONSERVATION GREENBELT (Floodplain or Wetland)
R-1	RESIDENTIAL (1 Family)	M-1	INDUSTRIAL (Limited Manufacturing)
R-2	RESIDENTIAL (2 Family)	M-2	INDUSTRIAL (Intensive Manufacturing)
R-3	RESIDENTIAL (Multi-Family)	R-2	RESIDENTIAL (One and Two Family)
RO-1	RESTRICTED (Office)	R-3	RESIDENTIAL (Multi-Family)

ZONING DESIGNATIONS AND BOUNDARIES FROM CITY OF SAGINAW, MICHIGAN ZONING MAP – (1990), AND CHARTER TOWNSHIP OF BUENA VISTA ZONING MAP DATED 9/15/91.

KEY

- RAILROAD TRACKS
- SURFACE WATER
- CITY LIMIT LINE
- PROPERTY LINE

M-2 A-2 CG-1 VACANT WOODED AREA CRAPO ROAD CITY OF SAGINAW LANDFILL I 75 GAGE (DEIKMANN) DRAIN TYPE III SOLID WASTE LANDFILL BUENA VISTA POTW A-1 PAGE ROAD CITY OF SAGINAW POTW SECONDARY SETTLING POND WATER RESERVOIR (LAGOON #5) PRIMARY LAGOONS FORMER DOWNES SCHOOL BUILDING M-3 WWTP A-2 M-2 CARROLTON SAND BAR SAGINAW RIVER FORMER NODULAR IRON PLANT M-13 HIGHWAY CITY OF SAGINAW STORMWATER DITCH WATER RESERVOIR POWER HOUSE M-1 M-2 M-2 SAND SLUICING PUMP HOUSE ADL ADMINISTRATION BUILDING AMDC R-3 R-3 B-1 R-1 B-3 R-2 B-3 GREY IRON PLANT FIRST AVE. SIXTH STREET D & C RAILROAD R.O.W. STORAGE BUILDING SPRUCE GARAGE FORMER PARTS PLANT CLOSED 1982 DEMOLISHED 1985 R-3 CITY OF SAGINAW TOWNSHIP OF BUENA VISTA WASHINGTON AVENUE B-2 R-2 RO-1 EIGHTH STREET NINTH STREET TENTH STREET FOURTEENTH STREET

N

300 0 300
Scale in Feet

PREPARED BY:

EMCON

F:\DWG\84068061\068061-29.DWG PLOT 1=300 08/16/95

Appendix 2.5
Utility Line Location Plan Sheets

GRINNELL CO. TO START HERE

APPROX. 1050-0

NEW 12" MAIN FROM CITY MAIN

FENCE LINE

WELCH AVENUE

NEW WATER METER PIT SEE DETAIL ON SHEET # 2.0

DETAIL OF PAVEMENT GUARD POST

SECTION A-A ON PLATE 3

PLAN OF PLATE 3

8" TO BE DETERMINED IN FIELD

APPROX. 230.0"

℄ OF TANK

12" CAST IRON RISER

12" CAST IRON RISER

1 GALV. FOR MERCURY GAGE

PUMP SEE DETAIL ON SHEET # P

FENCE LINE

SUB-STATION

CONSUMERS POWER CO.

CHEV. G.I. FOUNDRY

COAL BUNKER

PUMP PIT

EXIST. 8"

CUT IN NEW 8"x8"x8" TEE

EXIST. GOULD TEE

SHIPPING DOCK

CINDER ROAD

CORE COOLING COURT EXIST. 2" GAS HYDT.

EXPERIMENTAL FOUNDRY

RESERVOIR

CAFETERIA

TABLES

OFFICE

LOCKER ROOM MEN

CLEANING ROOM

EXIST. 2" GAS HYDT.

SEE A-1 PAGE

PAVEMENT

EXIST. 3-WAY HYDT.

MEDICAL BUILDING

SALARIED PERSONNEL PARKING AREA

EXIST. 6" A.S.P.

EXIST. 6" A.S.P.

EXIST. 6" A.S.P.

EXIST. 6" A.S.P.

EXIST. 2" GAS HYDT.

EXIST. 2" GAS HYDT.

EXIST. 2" GAS HYDT

No.	ELEV. OF COVER RIM	STATUS (1994)	No.	ELEV. OF COVER RIM	STATUS (1994)
1		EXISTING	69		ABAN.
2		EXISTING	70		ABAN.
3	591.86	ABANDON	71		ABAN.
4	591.86	ABANDON	72		ABAN.
5	591.86	ABANDON	73		ABAN.
6	591.86	ABANDON	74		ABAN.
7		EXISTING	75		ABAN.
8		EXISTING	76		ABAN.
9	591.86	ABANDON	77		ABAN.
10	591.86	ABANDON	78		ABAN.
11	591.86	ABANDON	79		ABAN.
12		EXISTING	80		ABAN.
13	GRATE	ABANDON	81		ABAN.
14	GRATE	ABANDON	82		ABAN.
15	GRATE	ABANDON

ELEVATOR BLDG.

F.M.C. BUILDING PUMP HOUSE

TOWER

ROADWAY

EXPERIMENTAL FOUNDRY

OFFICE AREA

PARKING

MILLWATER PUMP HSE

RESERVOIR

TOWER

NO. 3 CASTING COOLING COURT

APPROVED ROADWAY

PAINT STOR'G

NO. 3 CLEANING DEPT

TRUCK SHIP'G

CLEANING ROOM

CONV #19

NO 3 FOUNDRY

CONV #21A

CONV #15B

NO 3 CUPOLA BLDG.

CORE COOLING COURT

BAKING OVEN

SAND BINS NO. 3 SAND STORAGE

NO 2 & 3 CORE DEPT

CORE OVENS (OIL OR GAS)

2 & 3

NO. 2 SAND STORAGE

DOCK

NO. 2 CLEANING ROOM

NO. 2 FOUNDRY

CONV #8

CONV #7

NO 2 CUPOLA BLDG.

COOLING COURT

CONV #5

NORTH STREET

CONV #3

CONV #14

NO 1 FOUNDRY

CONV #2

CONV #1

NO. 1 CLEANING ROOM

NO. 1 CORE DEPT

NO. 1 SAND STORAGE

MAINTENANCE DEPT.

GENERAL STORES & LOCKER ROOM ADDITION

RECEIVING

AREA

TRUCK DOCK

MENS LOCKER ROOM

WOMEN LOCKER

LOCKERS

CAFETERIA

MANG DINING

SALARY DINING RM.

CONFERENCE ROOM

ENGINEERING

MEDICAL

OFFICE BLDG

SERVICE GARAGE

PUMP HSE

PIT

T.C.

SUB STATN

CLEANING ROOM ADDITION

NO. 1 CLNG. RM.

MAINT. AREA

NEW CASTING STORAGE BLDG.

FIRE PUMP HOUSE

WATER TOWER

ACCT. MANG'S BLDG

GAS HOUSE

CONSUMERS POWER SUB. STATION ENCLOSURE

TOWER

PRIMARY SUB. STAT'N

STORAGE

HOURLY PARKING AREA

SALARY PARKING AREA

ROADWAY

STORAGE BLDG.

PUMP HOUSE

COOLING TOWER

COOLING TOWER ADDITION

NO. 4 CLEANING DEPT.

NO 3 TEN TON CRANE RUNWAY

TUNNEL

STORAGE BLDG

NO. 3 CORE SAND STORAGE

NO. 2 CORE SAND STORAGE

CLAY STORAGE SILOS

OIL HOUSE

TANKS UNDERGROUND

TRUCK RAMP

RES. BLDG

STORAGE BLDG.

NO 2 TEN TON CRANE RUNWAY

TRANSFER CRANE RUNWAY

BRIQUETTE PLANT

NO. 1 TRUCK DUMP

NO 1 TEN TON CRANE RUNWAY

SHAW CRANE RUNWAY

SUB STATION

MATERIAL STORAGE

NO. 1 SAND STORAGE

ROADWAY

MOTOR PLACE

STREET

Roof Hose Cabinets Product. Stg. Bldg.
Col. C-3 (R1,-1)
Col. E-3 North (R1,-2)

NOTE: NEW DWG. # A-53910 FOR ROOF HOSE CABINETS

REF. DWG. LBK 0-5500-01 (A-56477)

LEGEND

LOCATION OF ROOF HOSE CABINET

(R4,13-6) R4 = RISER NUMBER
13 = BUILDING NUMBER
6 = ROOF HOSE CABINET NUMBER

CHEVROLET-SAGINAW GROUP (MOTOR DIV.)
FLINT, MICHIGAN
PLANT LAYOUT
DATE 4-1-43 DRAWN BY RB/ESTES
SCALE 50'=1" CHECKED BY
F-6391-L

WASH. AVE.

10th

12th

M-81

M-81

NO. 4 SAND SLUICING PUMP HOUSE
TOWER
ROADWAY
REF. DWG A-25699
R.R. SCALES
NO. 6 COOLING TOWER
NO. 5 COOLING TOWER
NO. 2 PUMP HOUSE
HOT WELL
45° EL.
A-19755 SHT #2
STORAGE BLDG.
NO. 1 PUMP HOUSE
COOLING TOWER
CDL PUMP HOUSE
EXPERIMENTAL FOUNDRY
OFFICE AREA
PARKING
RESERVOIR
PAINT STOR'G
LEAK TEST MANIFOLD
TRUCK
CLEANING ROOM
NO. 3 CLEANING DEPARTMENT
NO. 4 CLEANING DEPT.
REF. A-31955
NO. 7 MOLDING LINE
NO. 3 FOUNDRY
RECYCLE TANK A-13388 (SHT 20)
NO. 3 TEN TON CRANE RUNWAY
CUPOLA BUILDING
CORE COOLING COURT
NO. 21 MOLDING LINE
NO. 16 MOLDING LINE
ACET. MANIFOLD BLDG.
GAS HOUSE
TUNNEL
STORAGE BUILDING
NO. 3 CORE SAND STORAGE
NO. 2 CORE SAND STORAGE
CLAY STORAGE SILOS
OIL BUILDING
TANKS UNDERGROUND
STORAGE BUILDING
TRUCK RAMP
ROADWAY
CONSUMERS POWER SUB. STATION ENCLOSURE
TOWER
PRIMARY SUB. STATN
STORAGE
COREROOM
SAND BINS NO. 3 SAND STORAGE
NO. 2 SAND STORAGE
NO. 1 SAND STORAGE
CWR-1 CWR-2 CWR-3 CWR-4 CWR-5 CWR-6 CWR-7 CWR-8 CWR-9 CWR-10 CWR-11 CWR-12 CWR-13 CWR-14
NO. 1 CLEANING ROOM
NO. 2 FOUNDRY
NO. 4 MOLDING LINE
NO. 3 MOLDING LINE
NO. 2 TEN TON CRANE RUNWAY
SEE B-11667
2 1/2"
SCRAP REMELT CLEANING BUILDING
BRIQUETTE PLANT
SLAG DISP. SYS.
WATER TOWER
FIRE PUMP HOUSE
PIT
J-CAR BUILDING
SUB STATION
CLEANING ROOM ADDITION
NO. 1 CLEANING ROOM
NORTH STREET
NO. 1 FOUNDRY
NO. 1 CORE DEPARTMENT
NO. 1 SAND STORAGE
NO. 1 TEN TON CRANE RUNWAY
CUPOLA BUILDING
SHAW CRANE RUNWAY
REF: A-24609 & A-29764
SUB STAT'N
MATERIAL STORAGE
NO. 1 SAND STORAGE
VALIDATION / QUALITY ASSURANCE OFFICES
A.C. UNITS
MAINT. AREA
NEW CASTING STORAGE BUILDING
TRUCK DOCK
MENS LOCKER ROOM
FOREMEN LOCKERS
LOCKERS
CAFETERIA
CAFE KITCHEN
PLT. PATR.
LADIES L. RM.
MANG. DINING
SALARY
FIRE ENG.
DINING RM.
CONFERENCE ROOM
SERVICE GARAGE
OFFICE BUILDING
ENGINEERING
MEDICAL
SECURITY
COMPRES. ROOM
MAINTENANCE DEPARTMENT
PATTERN SHOP VALIDATOR ROOM
GENERAL STORES & PATTERN LOCKER ROOM ADDITION
2ND. FLOOR
PHOENIX & TRAINING
RECEIVING AREA
TRUCK WELL
PAINT
OXY
ACETYLENE
PLT. PATR.
14TH STREET
SCALE
MAINT. TRAINING ROOM 1ST. FLOOR - A.C. UNIT
HOURLY PARKING AREA
SALARY PARKING AREA
M81
WASHINGTON AVE.

TAG NO.	SIZE	COL. LINE	LOCATION	ELEV.*	DWG. NO.
CWR-14	4"	3/D	CORE ROOM NO.2	618'-0"	C2-6017-05
CWR-13	3"	11/B	FINISHING ROOM	629'-0"	F2-6020-02
CWR-12	6"	24/D	MOLD LINE NO.3	601'-0"	M3-6030-12
CWR-11	2"	14/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-10	8"	8/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-9	4"	4/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-8	4"	3/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-7	4"	14/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-6	3"	11/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-5	3"	8/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-4	3"	5/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-3	3"	4/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-2	8"	2/D	CORE ROOM NO.2	618'-0"	C2-6013-05
CWR-1					

VALVE TAG NUMBER LIST - CWR

* ALL ELEVATIONS ARE APPROXIMATE

Architects
Engineers
Planners

Lester B. Knight & Associates, Inc.
549 West Randolph Street
Chicago, Illinois 60606

By	Chkd	Description	Date	Prints
SAB		"AS BUILT"	9/2/86	3
SAB		REVISED COMPUTER ISSUE	8/1/86	2
SAB		COMPUTER ISSUE	7/18/86	1

Drawn M. AHRENS
Checked T.EDISON
Reviewed
Reviewed 2-25-87 Jack Rehrig

Project
CENTRAL FOUNDRY DIVISON - G.M.C.
1985 GREY IRON MODERNIZATION
SAGINAW MICHIGAN

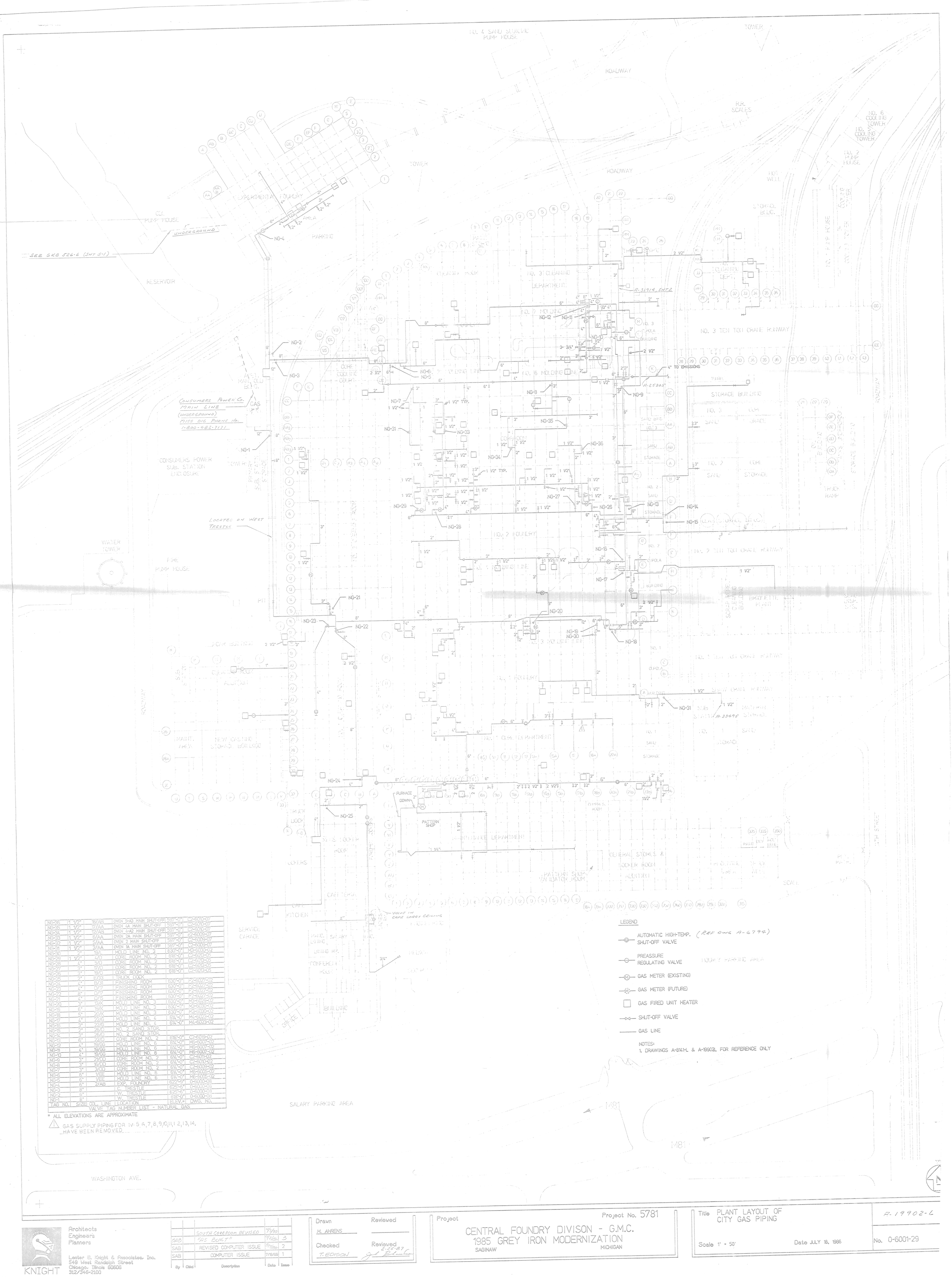
Project No. 5781

Title PLANT LAYOUT OF COOLING TOWER WATER RETURN PIPING

Scale 1" - 50' Date JULY 18, 1986

A-28369-L

No. 0-6001-25



TAG NO.	SIZE	COL. LINE	LOCATION	ELEV.*	DWG. NO.
			VALVE TAG NUMBER LIST - NATURAL GAS		
NG-35	1 1/2"	18/AB	OVEN 5-A3 MAIN SHUT-OFF	597'-0"	C2-6010-07
NG-35	1 1/2"	17/AA	OVEN 4-A MAIN SHUT-OFF	597'-0"	C2-6010-07
NG-34	1 1/2"	17/AB	OVEN 4-A2 MAIN SHUT-OFF	597'-0"	C2-6010-07
NG-33	1 1/2"	6/AA	OVEN 2A MAIN SHUT-OFF	597'-0"	C2-6009-07
NG-32	1 1/2"	5/AA	OVEN 2 MAIN SHUT-OFF	597'-0"	C2-6009-07
NG-31	1 1/2"	3/AA	OVEN 1A MAIN SHUT-OFF	597'-0"	C2-6009-07
NG-30	3"	19/L	MOLD LINE NO. 3	630'-0"	M3-6030-02
NG-29	1 1/2"	4/D	CORE ROOM NO. 2	618'-0"	C2-6013-05
NG-28	4"	5/D	CORE ROOM NO. 2	618'-0"	C2-6013-05
NG-27	3"	17/D	CORE ROOM NO. 2	618'-0"	C2-6013-05
NG-26	3"	19/D	CORE ROOM NO. 2	618'-0"	C2-6013-05
NG-25	2"	E/A3	TRUCK DOCK		
NG-24	2"	E/A3	FINISHING ROOM	630'-0"	F2-6027-02
NG-23	4"	0/17	FINISHING ROOM	630'-0"	F2-6027-02
NG-22	8"	0/17	FINISHING ROOM	630'-0"	F2-6027-02
NG-21	4"	0/15	FINISHING ROOM	630'-0"	F2-6027-02
NG-20	3"	13/K	MOLD LINE NO. 3	630'-0"	M3-6029-02
NG-19	6"	19/K	MOLD LINE NO. 3	630'-0"	M3-6030-02
NG-18	5"	20/K	MOLD LINE NO. 3	630'-0"	M3-6030-02
NG-17	2"	22/G	MOLD LINE NO. 4	614'-0"	M4-6023-02
NG-16	3"	22/G	MOLD LINE NO. 4	614'-0"	M4-6023-02
NG-15	3"	26/D	NO. 2 SAND STOR.		
NG-14	3"	26/D	NO. 2 SAND STOR.		
NG-13	6"	22/D	CORE ROOM NO. 2	616'-0"	C2-6019-02
NG-12	4"	19/GG	MOLD LINE NO. 6	614'-0"	M6-6007-02
NG-11	4"	19/GG	MOLD LINE NO. 6	614'-0"	M6-6007-02
NG-10	4"	19/GG	MOLD LINE NO. 6	614'-0"	M6-6007-02
NG-9	3"	21/DD	CORE ROOM NO. 2	614'-0"	C2-6010-02
NG-8	3"	16/DD	CORE ROOM NO. 2	614'-0"	C2-6009-02
NG-7	3"	3/DD	CORE ROOM NO. 2	614'-0"	M6-6005-02
NG-6	6"	1/EE	MOLD LINE NO. 6	614'-0"	M6-6005-02
NG-5	6"	1/EE	MOLD LINE NO. 6	614'-0"	M6-6005-02
NG-4	6"	2/AB	EXP. FOUNDRY	622'-9"	0-6000-08
NG-3	8"		C. TRESTLE	625'-6"	0-6000-05
NG-2	8"		W. TRESTLE	625'-6"	0-6000-05
NG-1	8"		W. TRESTLE	619'-0"	0-6000-04

* ALL ELEVATIONS ARE APPROXIMATE

⚠ GAS SUPPLY PIPING FOR IV-5,6,7,8,9,10,11,12,13,14, HAVE BEEN REMOVED

LEGEND

- AUTOMATIC HIGH-TEMP. SHUT-OFF VALVE (REF DWG A-6794)
- PREASSURE REGULATING VALVE
- GAS METER (EXISTING)
- GAS METER (FUTURE)
- GAS FIRED UNIT HEATER
- SHUT-OFF VALVE
- GAS LINE

NOTES:
1. DRAWINGS A-8141L & A-19902L FOR REFERENCE ONLY

KNIGHT
Architects
Engineers
Planners
Lester B. Knight & Associates, Inc.
549 West Randolph Street
Chicago, Illinois 60606
312/346-2100

By	Chkd	Description	Date	Issue
		SOUTH COREROOM REVISED	4/3/90	
SAB		"AS BUILT"	5/21/86	3
SAB		REVISED COMPUTER ISSUE	5/7/86	2
SAB		COMPUTER ISSUE	7/18/85	1

Drawn M. AHRENS — Reviewed

Checked T. EDISON — Reviewed 2-25-87

Project No. 5781

Project
CENTRAL FOUNDRY DIVISON - G.M.C.
1985 GREY IRON MODERNIZATION
SAGINAW MICHIGAN

Title PLANT LAYOUT OF CITY GAS PIPING

Scale 1" = 50' — Date JULY 18, 1986

A-19902-L

No. 0-6001-29

NO. 4 SAND SLUICING PUMP HOUSE

BLEEDER

TIE-IN SEE A-56601

ROADWAY

TOWER

R.R. SCALES

NO. 6 COOLING TOWER

NO. 5 COOLING TOWER

NO. 2 PUMP HOUSE

HOT WELL

EXPERIMENTAL FOUNDRY

MW-3

A-13377

OFFICE AREA

PARKING

CDL PUMP HOUSE

CDL MILLWATER PUMPS
WORTHINGTON
NO.12DL20 DOUBLE SUCTION
18 7/8" IMPELLERS
350 HP MOTORS
1775 RPMS

18" (UNDERGROUND)

MW-1

MW-2

BLEEDER

STRAINER
R.P.ADAMS CO.
TYPE AWS

RESERVOIR

ROADWAY

A-36499

STORAGE BLDG.

PAINT STOR'G

CLEANING ROOM

NO. 3 CLEANING DEPARTMENT

MW-21

DUST COLL.

TRUCK SHIPG.

MW-2C

MW-22

NO. 4 CLEANING DEPT.

NO. 3 TEN TON CRANE RUNWAY

HOSE

NO. 1 PUMP HOUSE

COOLING TOWER

BLEEDER

NO. 17 MOLDING LINE

NO. 3 FOUNDRY

CUPOLA BUILDING

MW-24

MW-23

NO. 21 MOLDING LINE

NO. 16 MOLDING LINE

CORE COOLING COURT

MW-5

BLEEDER

TUNNEL

6" (UNDERGROUND)

BLEEDER

STORAGE BUILDING

MW-25

ACET. MANIFOLD BLDG.

GAS HOUSE

MW-7

MW-6

SAND BINS NO. 3

NO. 3 CORE SAND STORAGE

NCR-DC-114
A-41116

NO. 2 CORE SAND STORAGE

OIL BUILDING

TANKS UNDERGROUND

STORAGE BUILDING

TRUCK RAMP

CONSUMERS POWER SUES. STATION ENCLOSURE

TOWER

PRIMARY SUB. STATN STORAGE

COREROOM

MW-18

SAND STORAGE

NO. 2 SAND STORAGE

BLEEDER ELEV. 644.0" (SEE A-56607)

MW-17

MW-16

NOT INSTALLED

4" N.P.

BLEEDER

2"ϕ

CLAY STORAGE SILOS

OUTER WELL MILLWATER PUMPS
WORTHINGTON 12DL20
17 1/2" IMPELLERS
250 HP MOTORS
1775 RPMS.

STRAINER (IN PIT BLDG.)
S.P.KINNEY MODEL A.

WATER TOWER

FIRE PUMP HOUSE

NO. 2 FOUNDRY

NO. 10 PIT

NO. 2 TEN TON CRANE RUNWAY

MW-19

NO. 3 MOLDING LINE

MW-14
MW-27
MW-15
MW-13

TO PIT #8

SCRAP REMELT CLEANING BUILDING

BRIQUETTE PLANT

SLAG DISP. SYS.

OUTER WELL

PIT

MW-8

MW-11

MW-26

MW-12

(TUNNEL)

MW-9

MW-10

INNER WELL MILLWATER PUMPS
WORTHINGTON 12DL20
18 7/8" IMPELLERS
350 HP MOTORS
1775 RPM'S.

STRAINER R.P.ADAMS TYPE HWS.

INNER WELL

JANITOR BUILDING

SUB STATION

LEARNING ROOM ADDITION

NO. 1 CLEANING ROOM

NORTH STREET

NO. 1 CORE DEPARTMENT

1 1/2" TAP
SEE B-14903

NO. 1 SAND STORAGE

SUB STAT'N

MATERIAL STORAGE

SHAW CRANE RUNWAY

NO. 1 TEN TON CRANE RUNWAY

ROADWAY

MAINT. AREA

NEW CASTING STORAGE BUILDING

SCR-DC-112.8"
A-41112

IN TUNNEL

NO. 1 FOUNDRY

COMPRES. ROOM

TRUCK DOCK

MENS LOCKER ROOM

FOREMEN LOCKER

LOCKERS

CAFETERIA

CAFE KITCHEN

PLT. PATR.

LADIES LR.

MAINTENANCE DEPARTMENT

PATTERN SHOP VALIDATOR ROOM

GENERAL STORES & LOCKER ROOM ADDITION

RECEIVING AREA

TRUCK WELL

PAINT

OXY

ACE'LENE

PLT. PATR.

14TH STREET

SCALE

SERVICE GARAGE

MANG. DINING

SALARY

FIRE ENG.

DINING RM.

CONFERENCE ROOM

ENGINEERING

MEDICAL

SECURITY

OFFICE BUILDING

A-56607 (VALVE NOT INSTALLED)

SALARY PARKING AREA

HOURLY PARKING AREA

M81

M81

WASHINGTON AVE.

LEGEND

DUST COLLECTOR

MW-27	16"	21/H	MOULD LINE NO.4		M4-6023-02
MW-26	12"	21/K	MOULD LINE NO.3		M3-6028-02
MW-25	6"	22/DD	NO.3 CUPOLA BLDG.		
MW-24	6"	24/EE	NO.3 CUPOLA BLDG.		
MW-23	10"	FF	EAST TRESTLE	650'-0"	0-6000-11
MW-22	8"	19/HH	NO.3 CLEANING ROOM		
MW-21	6"	19/LL	NO.3 CLEANING ROOM		
MW-20	14"	JJ	EAST TRESTLE	650'-0"	0-6000-11
MW-19	4"	21/AB	CORE ROOM NO.2	640'-0"	C2-6005-06
MW-18	12"	21/B	CORE ROOM NO.2	640'-0"	C2-6005-06
MW-17	12"	21/B	CORE ROOM NO.2	640'-0"	C2-6005-06
MW-16	12"	20/E	EAST TRESTLE	682'-0"	0-6000-12
MW-15	10"	21/H	MOULD LINE NO.4		M4-6023-02
MW-14	18"	21/G	MOULD LINE NO.4		M4-6023-02
MW-13	18"	21/K	MOULD LINE NO.3		M3-6028-02
MW-12	6"	B/K	MOULD LINE NO.3		M3-6028-02
MW-11	10"	5/K	MOULD LINE NO.3		F2-6027-02
MW-10	6"	19/E	FINISHING ROOM		F2-6027-02
MW-9	20"	19/E	FINISHING ROOM		F2-6027-02
MW-8	18"	D/5	FINISHING ROOM		
MW-7	10"	E/BB	FINISHING ROOM	627'-0"	F2-6012-05
MW-6	18"	E/BB	FINISHING ROOM	627'-0"	F2-6012-05
MW-5	12"	DD	CENTRAL TRESTLE	618'-6"	0-6000-09
MW-4	24"	DD	CENTRAL TRESTLE	618'-6"	0-6000-09
MW-3	10"	3/G	EXP. FOUNDRY		0-6000-15
MW-2	8"	1/A	EXP. FOUNDRY		
MW-1	18"	2/AA	EXP. FOUNDRY		
TAG NO.	SIZE	COL. LINE	LOCATION	ELEV.*	DWG. NO.

VALVE TAG NUMBER LIST - MILLWATER

* ALL ELEVATIONS ARE APPROXIMATE.

Architects
Engineers
Planners

Lester B. Knight & Associates, Inc.
543 West Randolph Street

SAB	"AS BUILT"	9/12/86	3
SAB	REVISED COMPUTER ISSUE	8/11/86	2
SAB	COMPUTER ISSUE	7/18/86	1
		Date	Initials

Drawn M. AHRENS

Checked T. EDISON

Reviewed

Reviewed 2-20-87

Project

CENTRAL FOUNDRY DIVISON - G.M.C.
1985 GREY IRON MODERNIZATION
SAGINAW MICHIGAN

Project No. 5781

Title PLANT LAYOUT OF MILLWATER PIPING

Scale 1" = 50'

Date JULY 18, 1986

A-19908-L

No. 0-6001-22