Application for Permit to Develop in a Floodplain Area

The undersigned hereby makes application for a permit to develop in a designated floodplain area. The work to be performed is described below and in attachments hereto. The undersigned agrees that all such work shall be done in accordance with the requirements of the City of Saginaw Floodplain Ordinance and with all other applicable local, State and Federal regulations. This application does not create liability on the part of the City of Saginaw or any officer or employees thereof for any flood damage that results from the reliance on this application or any administrative decision made lawfully thereunder.

Owner:	RACER Trust c/o Dave Favero	Consultant:	GHD
Address:	500 Woodward Ave., Suite 2650, Detroit, MI 48226	Address:	651 Colby Drive, Waterloo, Ontario, CA
Telephone:	734-879-9525	Telephone:	519-884-0510
	email: dfavero@racertrust.org	Email :	john-eric.pardys@ghd.com
Location:	77 West Center Street, Saginaw MI		

A. Description of Work (Complete for All Work): See Attachment 1

1. Proposed Development Description:
   New Building ☐ Improvement to Existing Building ☐
   Manufactured Home ☐ Filling ☑
   Other Place 1 foot thick soil cover over approximately 5.8 acres within the 100-year floodplain.

2. Size and location of proposed development (attach site plan):
   Fill and grade approximately 24.7 acres of which approximately 5.8 acres is within the 100-year floodplain. See attachment 2 for the site vicinity plan, flood zone map, plan/profile, and compensating cut figure.

3. Is the proposed development in a Special Flood Hazard Area (Zones A, AE, A1-A3, AH or AO)?
   Yes ☑ No ☐

4. Per the floodplain map, what is the zone and panel number of the area of the proposed development?
   Zone AE and X Panel Number Panel 135 of 360 (Map # 26145C0135 D) - See Attachment 3

5. Are other Federal, State or local permits obtained?
   Yes x Type: MDEQ Joint Permit (WRP002985), U.S. EPA approval is pending, SESC permit to be obtained)
   No Reason: Work is within a 100-year floodplain and disturbed area is greater than 1 acre

6. Is the proposed development in an identified floodway?
   Yes ☐ No ☑

7. If yes to #6, is a "No Rise Certification" with supporting data attached?
   Yes ☐ No ☐

B. Complete for New Structures and Building Sites:

1. Base Flood Elevation at the site: _____feet NGVD
2. Required lowest floor elevation(including basement):_____feet NGVD
3. Elevation to which all attendant utilities, including all heating and electrical equipment will be protected from flood damage: _____feet NGVD

C. Complete for Alterations, Additions, or Improvements to Existing Structures:

1. What is the estimate market value of the existing structure? $_____
2. What is the cost of the proposed construction? $_____
3. If the cost of the proposed construction equals or exceeds 50 percent of the market value of the structure, then the substantial improvement provisions shall apply.

D. Complete for Non-residential Flood proofed Construction:

1. Type of flood proofing method:_____
2. The required flood proofing elevation is: _____feet NGDV
3. Flood proofing certification by a registered engineer is attached: Yes ☐ No ☐

E. Complete for Subdivisions and Planned Unit Developments:

1. Will the subdivision or other development contain 50 lots or 5 acres? Yes ☐ No ☐
2. If yes, does the plat or proposal clearly identify base flood elevations? Yes ☐ No ☐
3. Are the 100 Year Floodplain and Floodway delineated on the site plan? Yes ☐ No ☐

NOTE: Upon Completion of the project, elevation certificate(s) must be provided by the applicant in order to receive an occupancy permit.

ADMINISTRATIVE

1. Permit approved _____ Permit denied _____
2. Elevation Certification attached: Yes ☐ No ☐
3. As-Built lowest floor elevation _____feet NGVD

Applicant's Signature: David Fawen Date June 21, 2016

Approved City Engineer: _____ Date: _____

Approved Chief Inspector: _____ Date: _____

Questions please call (989) 759-1410, 7:30am to 4pm

Return for review and processing:

City of Saginaw – Engineering Department, 1315 S Washington Ave., Saginaw, MI 48601

Attachment M

Scope of Work

ATTACHMENT 1

SCOPE OF WORK
CITY OF SAGINAW - APPLICATION FOR PERMIT TO DEVELOP IN A FLOODPLAIN AREA
RACER MALLEABLE IRON INDUSTRIAL LAND
SAGINAW, MI

Scope of Work

The proposed scope of work is to be completed on a portion of RACER's Malleable Iron Industrial Land (Site), specifically the former Saginaw Malleable Iron (SMI) Facility concrete floor slab (see Drawing 1 in Attachment 2). The proposed scope of work associated with this permit request involves the removal of PCB impacted concrete and soil, as well as, the placement of a 1-foot soil cover over the entire concrete floor slab (24.7 acres) of which approximately 5.8 acres is within the 100-year floodplain. The proposed work was approved by the Michigan Department of Environment Quality on March 29, 2016 and U.S. EPA approval is pending. A MDEQ Floodplain Permit was obtained on June 19, 2016 and a County of Saginaw Soil Erosion and Sedimentation Control permit is in the process of being obtained.

Concrete Floor Slab

PCB impacts have been horizontally delineated in concrete to 10 ppm. PCB-impacted concrete above 10 ppm is to be removed and disposed of off-Site. The entire thickness (~8-12 inches) of the concrete floor slab will be removed and disposed of either as a TSCA (>50 ppm PCBs) waste or a non-TSCA (<50 ppm) waste. Areas where concrete will be excavated will be restored with on-Site material and six (6) inches of concrete to match the grade of the existing surrounding concrete surface.

I27.7 Manhole Area

PCB impacts in soil in the I27.7 Manhole Area have been horizontally and vertically delineated in soil to 1 ppm. PCB-impacted soil greater than 100 ppm shall be removed and disposed of off-Site. The excavation of soil will be completed to a predetermined depth of 5 feet or until the water table, whichever is shallower. The soil is expected to all be disposed of as TSCA waste. The I27.7 Manhole Area excavation will be backfilled with on-Site material and 1-foot of clay to match the grade of the existing surrounding concrete surface.

Soil Cover

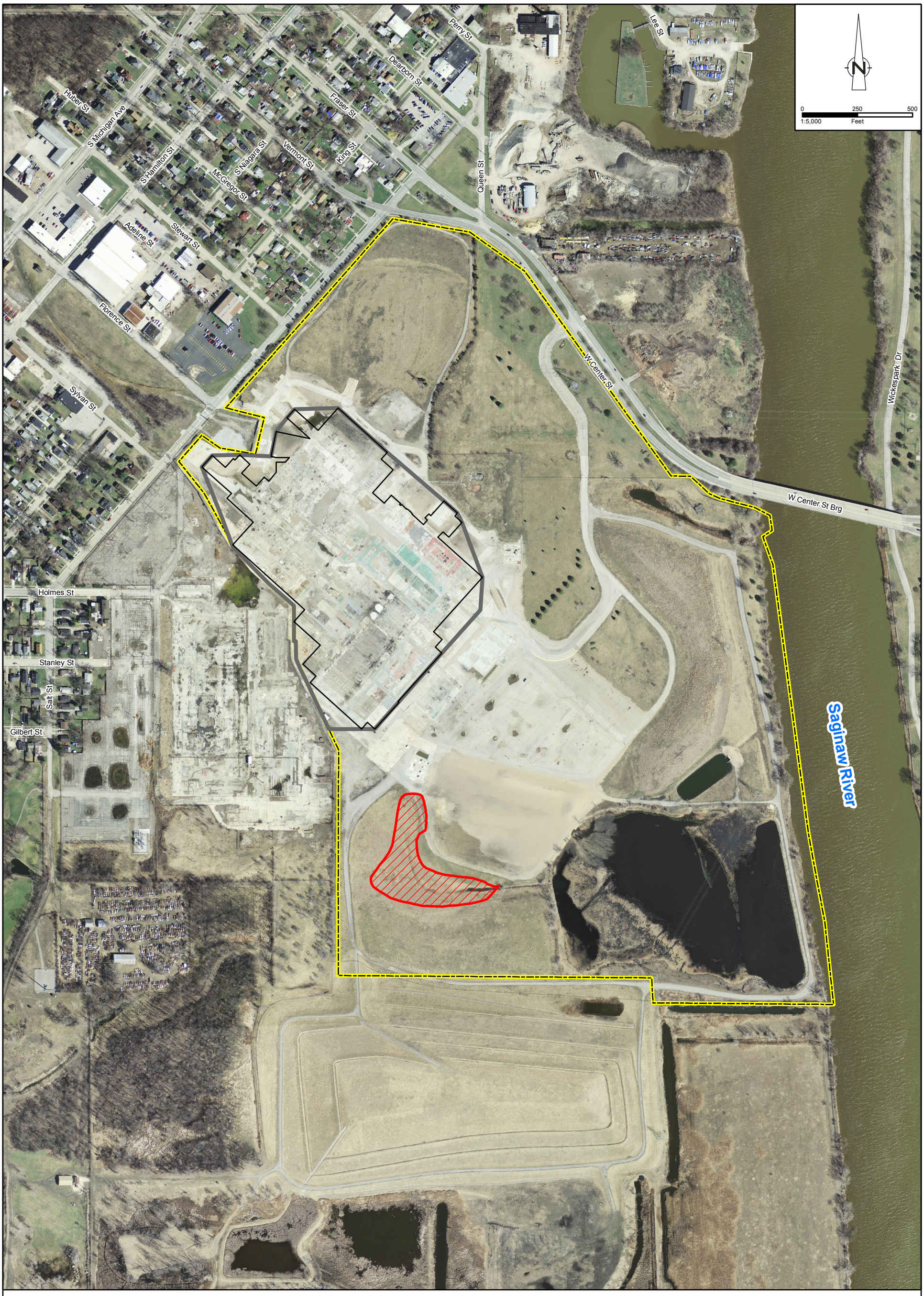
A one (1) foot soil cover will be placed over the entire concrete floor slab, the I27.7 Manhole Area (on top of clay backfill in this area), and some adjacent areas to provide a barrier to the remaining PCBs in the concrete floor slab, provide storm water management, provide a barrier to lead impacted soil in a select area, and will also allow a future owner to more readily convert any portion of the slab (currently to be restricted to low occupancy) with PCB impacts less than 10 ppm to high occupancy use.

Filling Below the Floodplain

An approximately 5.8 acre portion of the area to be covered is below the 100-year floodplain. With the placement of a 1-foot cover over the concrete floor slab, a compensating cut within the 100-year floodplain is required. Drawing 5 in Attachment 2 presents the area where a compensating cut of 2,800 cubic yards is proposed to off-set the fill being placed above the 100-year floodplain.

Attachment 2

Maps and Drawings



Aerial Image: 2010 USGS High Resolution Orthoimagery for Saginaw County, MI.
Streets: Processed TIGER 2010 Streets, U.S. Census Bureau.
Coordinate System: NAD 1983 StatePlane Michigan South FIPS 2113 Feet

LEGEND

- Approximate Limits of RACER Property
- Concrete Floor Slab Area To Be Covered With 1-ft of Material (~24.8 ac)
- Proposed Compensating Cut Area Below Floodplain (~2.64 ac)

figure 1

SITE VICINITY MAP
Saginaw, Michigan

007878-T01(THEI001)GIS-WA003 February 17, 2016

SOURCE:
BBL DRAWING 27608B04 DATED 9/23/05; (10' CONTOURS).
BBL DRAWING 6589S2 RECEIVED OCTOBER 2006; (2' CONTOURS).

MICHIGAN SPC, NAD 83, NGVD29.

N

0 75 150 ft

LEGEND

- RACER MALLEABLE PROPERTY BOUNDARY (APPROX.)
- UNPAVED ROAD
- GROUND SURFACE ELEVATION CONTOUR
- FENCE LINE
- SWAMPY AREA
- SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD. BASE FLOOD ELEVATIONS DETERMINED
- AREAS OF 500 YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE AND AREAS PROTECTED BY LEVELS FROM 100-YEAR FLOOD

SAGINAW RIVER

MALLEABLE IRON

SAGINAW PENINSULA

590
600
610
620
630
640

Nº	Revision	Date	Initial

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

RACER - SAGINAW
MALLEABLE INDUSTRIAL LAND

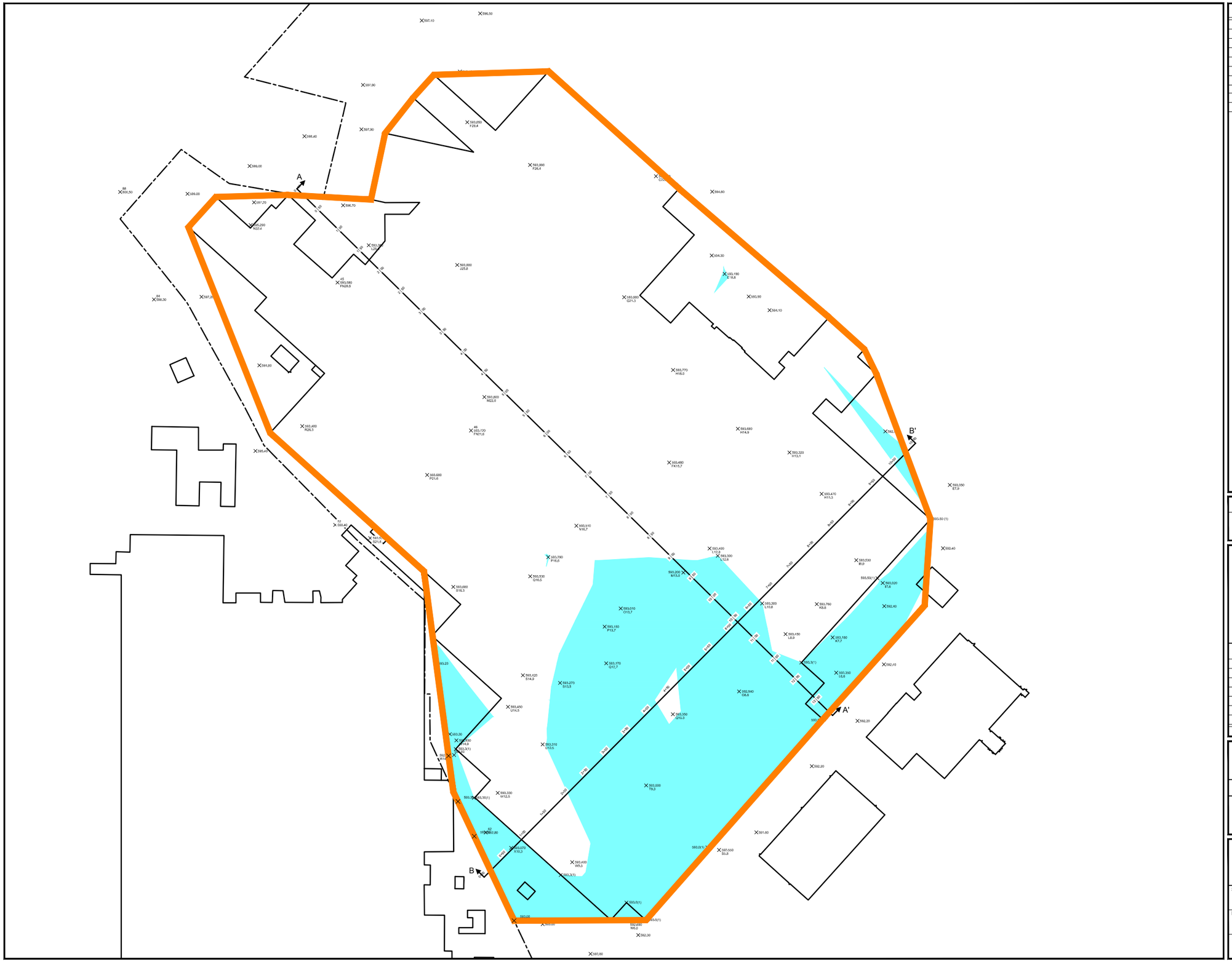
SAGINAW, MICHIGAN

FLOOD ZONE MAP

GHD

Source Reference:

Project Manager:	Reviewed By:	Date:	
M.T.	J.P.	JANUARY 2016	
Scale: 1" = 150'	Project Nº: 07878-00	Report Nº: THIE001	Drawing Nº: figure 2



Nº	Revision	Date	Initial

NOTE:
A MINIMUM 1-FT OF COVER IS TO BE PLACED ABOVE THE CONCRETE FLOOR SLAB. AT THE EDGE OF THE CONCRETE FLOOR SLAB, COVER IS TO TRANSITION TO MATCH EXISTING GRADES (MAX. 3:1 SLOPE).

SEDIMENT AND EROSION CONTROL NOTES:
1. THE SELECTED CONTRACTOR WILL OBTAIN A SOIL EROSION AND SEDIMENTATION CONTROL (SESC) PERMIT THROUGH THE COUNTY OF SAGINAW AND COMPLETE THE WORK IN ACCORDANCE WITH THE SESC PERMIT. THE SESC MEASURES INCLUDED ON THIS DRAWING ARE EXPECTED TO MEET THE REQUIREMENTS OF THE COUNTY OF SAGINAW, HOWEVER, THE SPECIFIC DETAILS WILL BE INCLUDED IN THE PERMIT.
2. SESC MEASURES WILL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. SESC MEASURES WILL BE INSPECTED AND MAINTAINED THROUGHOUT THE DURATION OF THE CONSTRUCTION ACTIVITIES AND UNTIL THE SITE IS FULLY STABILIZED.

PARAMETER	UNIT	QUANTITY
TOTAL AREA OF 1-FT COVER PLACEMENT	ACRES	24.7
AREA TO BE FILLED BELOW FLOODPLAIN	ACRES	5.8
AREA TO BE FILLED ABOVE FLOODPLAIN	ACRES	18.9
TOTAL VOLUME OF FILL TO BE PLACED	CUBIC YARDS	39927
VOLUME OF FILL TO BE PLACED BELOW FLOODPLAIN	CUBIC YARDS	2680
VOLUME OF FILL TO BE PLACED ABOVE FLOODPLAIN	CUBIC YARDS	37247

SOURCE OF POINTS:
- PLANT SEWER SURVEY, SPICER, 1996;
- TOPOGRAPHIC SURVEY, BBL, 1994.

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

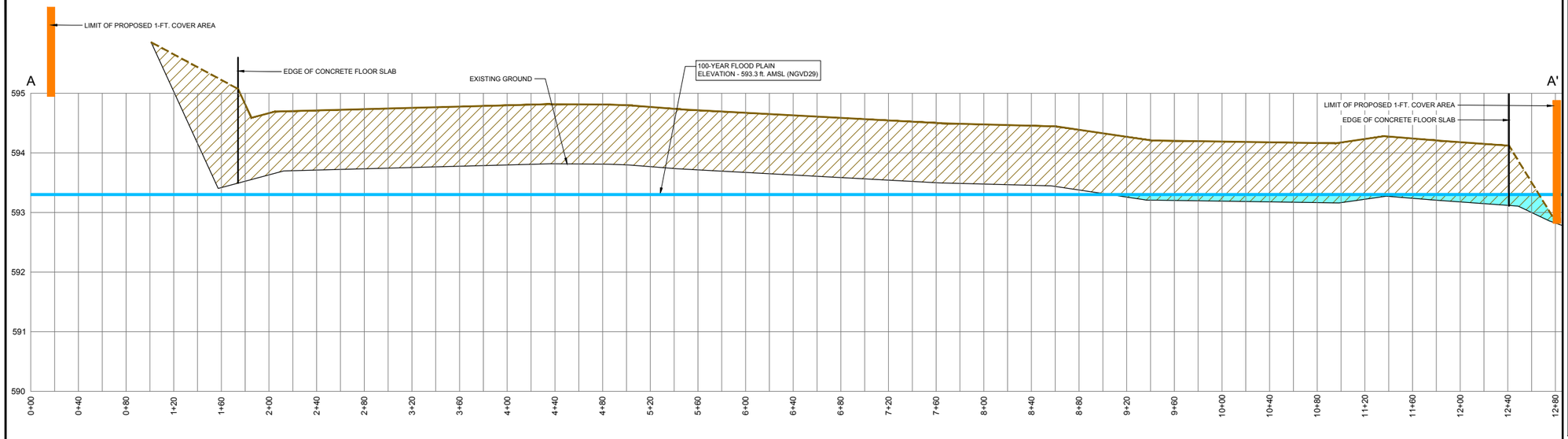
REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST

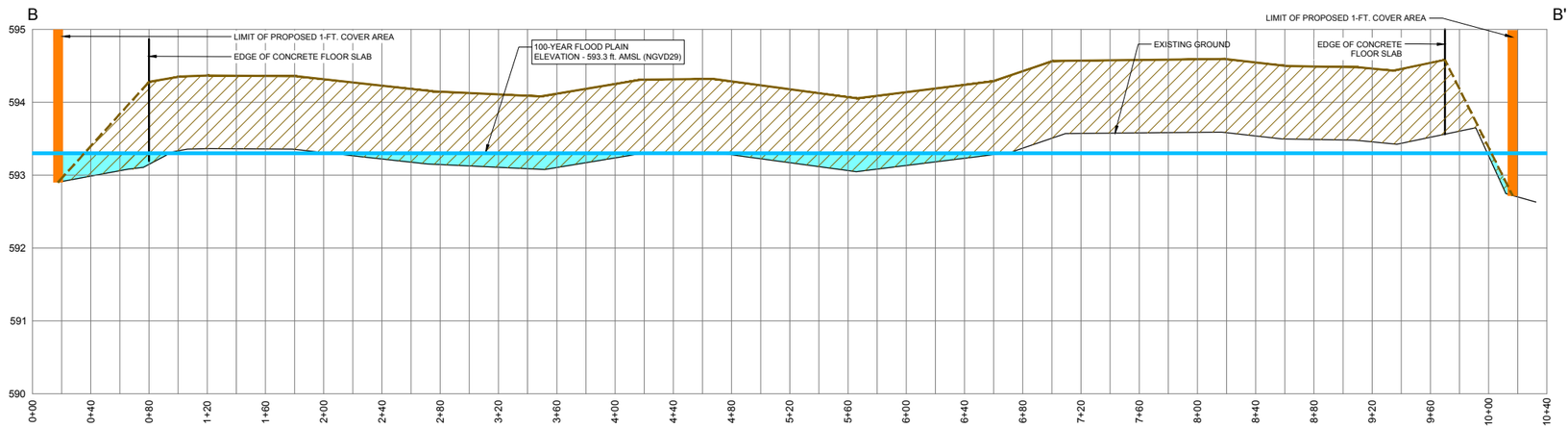
SAGINAW, MICHIGAN

AREA OF PROPOSED 1-FT COVER BELOW FLOOD PLAIN

GHD

Source Reference: 07878-T01(C3D-PRES016)GN-WA001			
Project Manager: MT	Reviewed By: JEP	Date: FEBRUARY 2016	
Scale: AS SHOWN	Project Nº: 07878-00	Report Nº: THIE001	Drawing Nº: figure 3





SCALES:
1"=50' HORIZONTAL
1"=1' VERTICAL
50X VERTICAL EXAGGERATION

Nº	Revision	Date	Initial

LEGEND

- FILL TO BE PLACED BELOW FLOOD PLAIN ELEVATION OF 593.3 ft AMSL (NGDV 29)
- 1-FT OF FILL TO BE PLACED ABOVE CONCRETE FLOOR SLAB
- FILL BEYOND CONCRETE FLOOR SLAB TO TRANSITION TO EXISTING GRADES (MAX. 3:1 SLOPE)

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST

SAGINAW, MICHIGAN

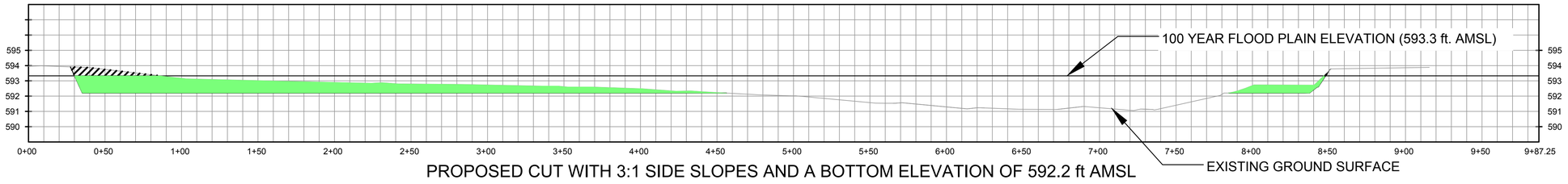
CROSS-SECTIONS

GHD

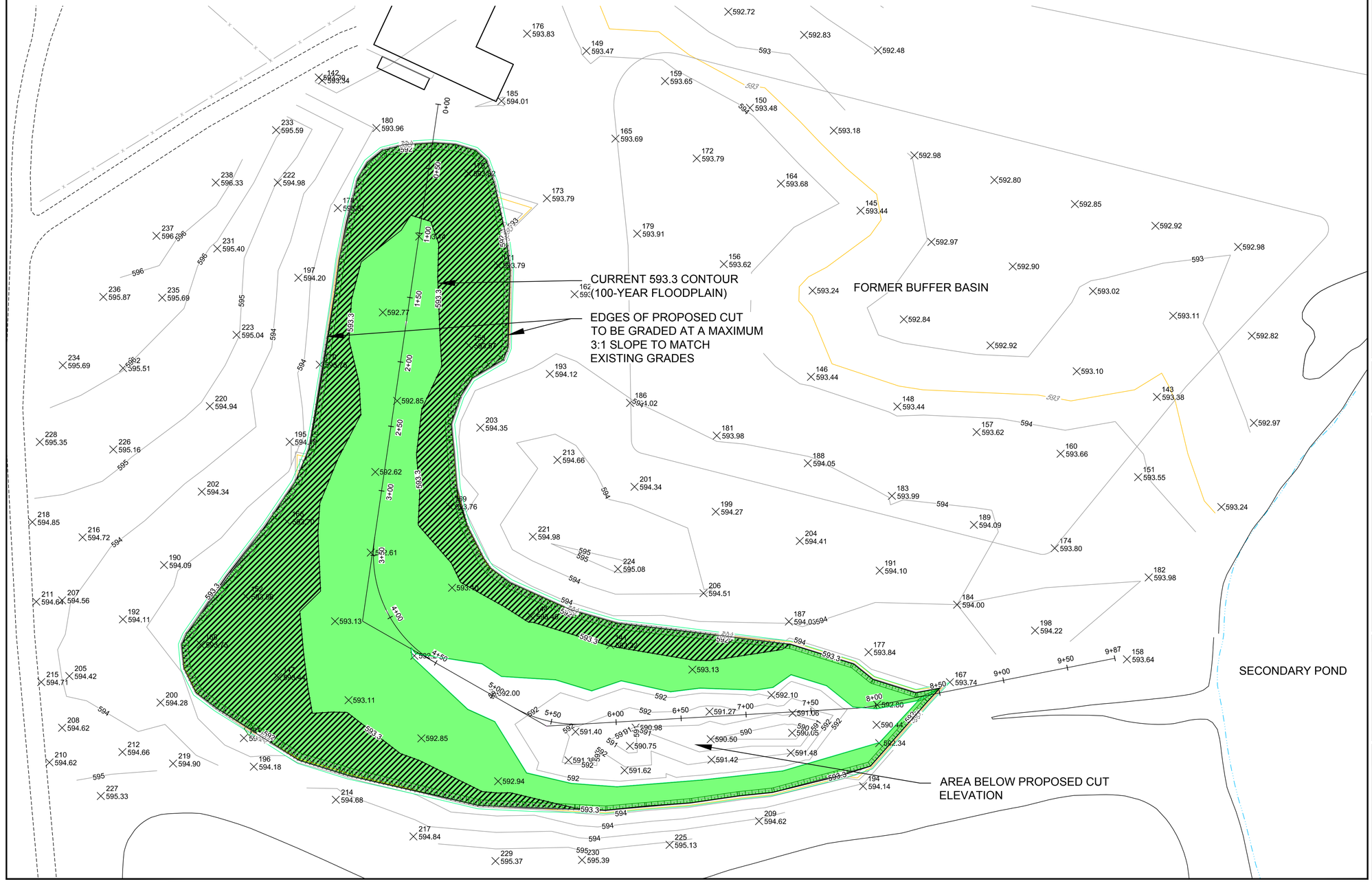
Source Reference: 07878-T01(C3D-PRES016)GN-WA001

Project Manager:	Reviewed By:	Date:	
MT	JEP	FEBRUARY 2016	
Scale: AS SHOWN	Project Nº: 07878-00	Report Nº: THIE001	Drawing Nº: figure 4

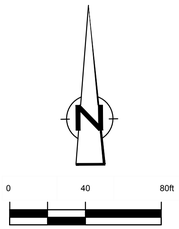
07878-00(THIE001)GN-WA003 FEB 12, 2016



PROPOSED CUT WITH 3:1 SIDE SLOPES AND A BOTTOM ELEVATION OF 592.2 ft AMSL



No	Revision	Date	Initial



LEGEND

PROPOSED CUT BELOW FLOOD PLAIN ELEVATION OF 593.3 ft. AMSL (NGDV 29)

PROPOSED CUT ABOVE FLOOD PLAIN ELEVATION OF 593.3 ft. AMSL (NGDV 29)

+ 593.918 SPICER SURVEY POINT (DECEMBER 2015)

NOTES:

- A COMPENSATING CUT APPROXIMATELY 3,380 CY WAS CALCULATED BY VARYING THE CUT DEPTH OF THE AREA IDENTIFIED BELOW THE 100-YR FLOOD PLAIN
- THE CUT DEPTH IS 592.2 FT AMSL

PARAMETER	UNIT	QUANTITY
AREA TO BE CUT BELOW FLOODPLAIN	ACRES	2.27
VOLUME TO BE CUT FROM BELOW FLOODPLAIN	CUBIC YARDS	2803
VOLUME TO BE CUT FROM ABOVE FLOODPLAIN	CUBIC YARDS	576
TOTAL CUT VOLUME	CUBIC YARDS	3380

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

DRAWING STATUS

Status	Date	Initial

REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST

SAGINAW, MICHIGAN

COMPENSATING CUT AREA FOR FILL TO BE PLACED BELOW FLOOD PLAIN

GHD

Source Reference: 07878-T01(C3D-THIE001)GN-WA001			
Project Manager: MT	Reviewed By: JEP	Date: FEBRUARY 2016	
Scale: 1"=40'	Project No: 07878	Report No: THIE001	Drawing No: figure 5

I:\drawings\07000s\07878\07878-SOURCE\07878-T01(C3D-THIE001)GN-WA001 - cut-calc-pres.dwg

Attachment 3

Floodplain Map

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for possible updated flood hazard information prior to use of this map for property purchase or construction purposes.

Coastal base flood elevations apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD), and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Areas of special flood hazard (100-year flood) include Zones A, AE, AH, AO, A99, V, and VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

Corporate limits shown on this map are based on the best data available. The user should contact appropriate community officials to verify the corporate limits delineations shown on this map.

For community map revision history prior to countywide mapping, see section 6.0 of the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index.

DIGITAL DATA AVAILABILITY: Digital files containing the thematic floodplain information shown on these maps are published by the Federal Emergency Management Agency in DLG-3 Optional format on CD-ROM. Requests for data should include the full name of the community or county and the Flood Insurance Rate Map panel numbers covered by the request. Contact the Federal Emergency Management Agency, Map Service Center, 6730 Santa Barbara Court, Baltimore, Maryland 21227-5832. Telephone 1-800-358-9616.

NOTE: The coordinate system used for the production of this Flood Insurance Rate Map (FIRM) is Universal Transverse Mercator (UTM), North American Datum of 1927 (NAD27), Clarke 1866 spheroid. Corner coordinates shown on the FIRM are in latitude and longitude referenced to the Universal Transverse Mercator projection, NAD27. Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of the information shown on the FIRM.

ATTENTION: Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, contact the National Geodetic Survey at the following address:

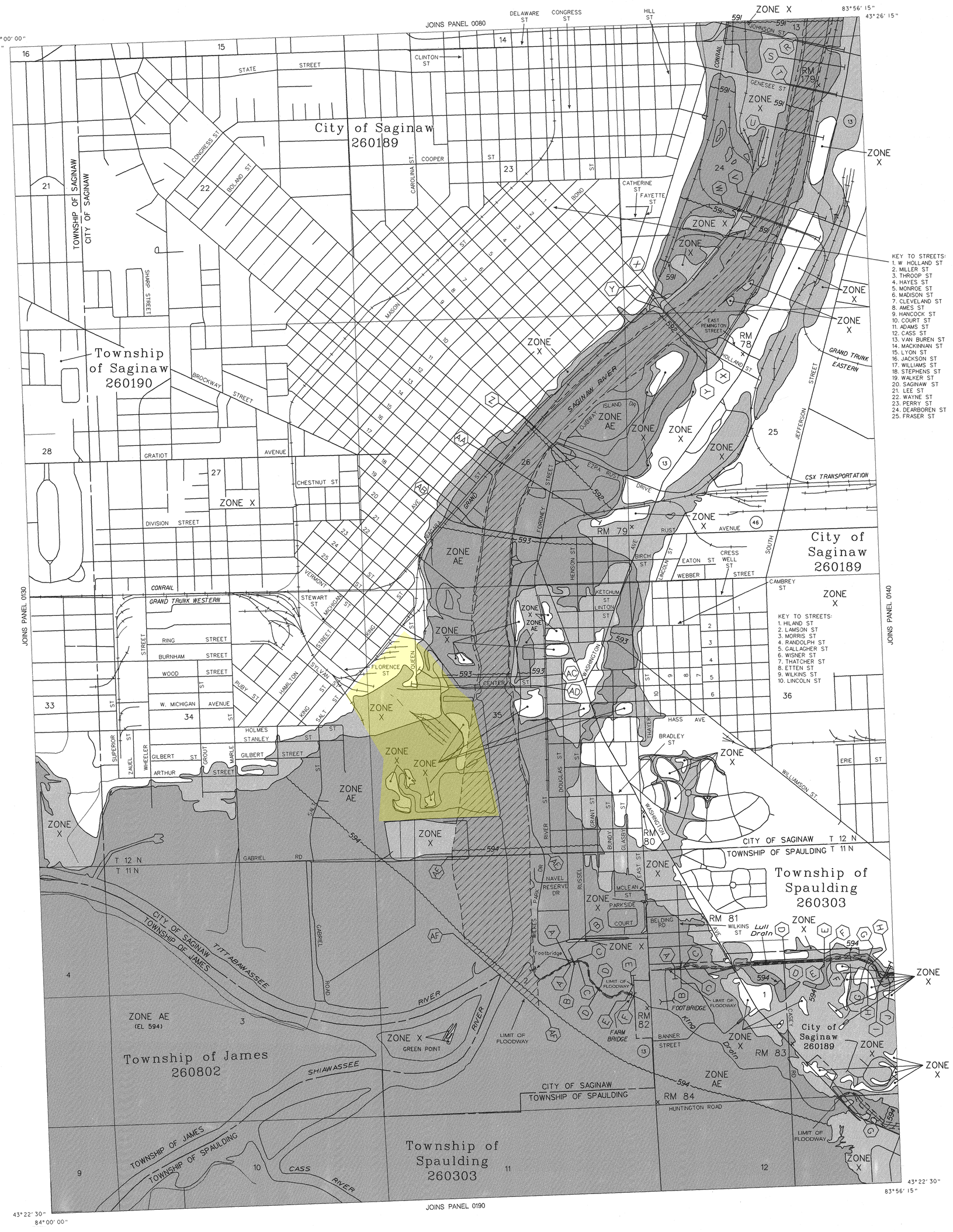
Vertical Network Branch, N/CG13
National Geodetic Survey, NOAA
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

BASE MAP SOURCE: Planimetric base map files were provided in digital format by the Detroit District of the U.S. Army Corps of Engineers (USACE). These files were compiled from aerial photographs dated 1982 to 1987 provided by the USACE and digital U.S. Geological Survey 7.5-Minute Series Topographic Maps at a scale of 1:24,000 provided by the Michigan Department of Natural Resources. Additional information may have been derived from other sources. Users of this FIRM should be aware that minor adjustments may have been made to specific base map features.

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION IN FT. (NGVD)[1]	DESCRIPTION OF LOCATION
RM 179	590.48	A Bronze U.S. Lake Survey disk designated "H.L. Mon. 116" located on top of northeast abutment of the Genesee Street bridge over the Saginaw River, approximately 11 feet north of north face of bridge.
RM 78	608.01	A bronze U.S. Lake Survey disk designated "SR 20" set vertically in east hall located at the intersection of East Remington Street and Washington Avenue southwest from corner of building.
RM 79	602.30	A bronze U.S. Lake Survey disk designated "SR 21" set vertically in north face of Saginaw-Waterworks building located at the intersection of Rust Avenue and Washington Avenue, approximately 14 feet southeast of southeast side of entrance.
RM 80	599.08	A U.S. Geological Survey disk designated "60 Mich." located in angle of intersection of East Street and Washington Avenue, approximately 27 feet south of curb point.
RM 81	598.10	A chiseled cross in the top of a bolt on the west side of the hydrant at the southwest corner of the intersection of Washington Avenue and Belding Road.
RM 82	592.51	A chiseled square on center of west concrete guardrail of East Street bridge over King Drain.
RM 83	594.64	A chiseled cross in the top of a bolt on the north side of a hydrant approximately 18 feet north of the centerline of Washington Avenue.
RM 84	589.65	A chiseled cross on a bolt on the northeast side of a hydrant 36 feet east of the centerline of East Street, 36 feet north of the centerline of Huntington Road.

[1]National Geodetic Vertical Datum of 1929



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year floodplain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS*

Identified 1983 | Identified 1990 | Otherwise Protected Areas

*Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet**
- (A)—(A) — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone**
- RM7x — Elevation Reference Mark
- M1.5 — River Mile

**Referenced to the National Geodetic Vertical Datum of 1929

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

OCTOBER 16, 1997

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

Refer to the FLOOD INSURANCE RATE MAP effective date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

SAGINAW COUNTY, MICHIGAN (ALL JURISDICTIONS)

PANEL 135 OF 360

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
JAMES, TOWNSHIP OF	260802	0135	D
SAGINAW, CITY OF	260189	0135	D
SAGINAW, TOWNSHIP OF	260190	0135	D
SPAULDING, TOWNSHIP OF	260303	0135	D

Notice to User: The MAP NUMBER shown below should be used when placing map orders; the COMMUNITY NUMBER shown above should be used on insurance applications for the subject community.

MAP NUMBER
26145C0135 D

EFFECTIVE DATE:
OCTOBER 16, 1997

Federal Emergency Management Agency