

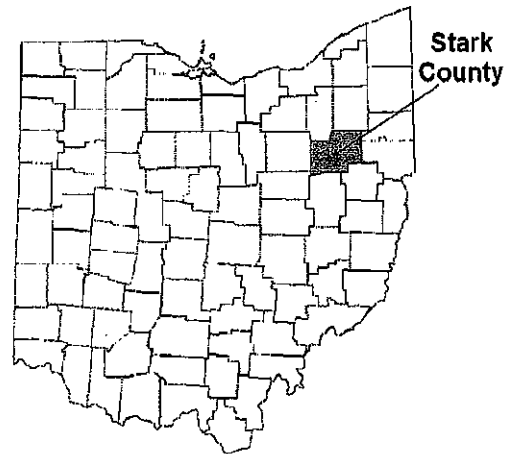
FLOOD INSURANCE STUDY



VOLUME 1 OF 2

STARK COUNTY, OHIO AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
ALLIANCE, CITY OF	390508
BEACH CITY, VILLAGE OF	390509
BREWSTER, VILLAGE OF	390510
CANAL FULTON, CITY OF	390511
CANTON, CITY OF	390512
EAST CANTON, VILLAGE OF	390513
EAST SPARTA, VILLAGE OF	390653
* HARTVILLE, VILLAGE OF	390514
* HILLS AND DALES, VILLAGE OF	390515
LIMAVILLE, VILLAGE OF	390836
LOUISVILLE, CITY OF	390516
MASSILLON, CITY OF	390517
* MEYERS LAKE, VILLAGE OF	390519
MINERVA, VILLAGE OF	390518
NAVARRE, VILLAGE OF	390520
NORTH CANTON, CITY OF	390521
STARK COUNTY (UNINCORPORATED AREAS)	390780
WAYNESBURG, VILLAGE OF	390667
* WILMOT, VILLAGE OF	390522



* NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED



REVISED:
February 16, 2012

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
39151CV001B

City of Massillon. Analyses of the hydraulic characteristics of the streams in the community were carried out to provide estimates of the elevations of the floods of the selected recurrence intervals along each flooding source studied in detail.

Cross-sections for the backwater analyses of East Sippo Creek were obtained from topographic maps having a scale of 1:2400 with two-foot contour intervals (Reference 49). The channel bottom profile was obtained by field measurement. All bridges, dams and culverts were field surveyed to obtain elevation data and structural geometry.

Locations of selected cross-sections used in the hydraulic analyses are shown on the Flood Profiles. For stream segments where a floodway was computed (Section 4.2), selected cross-section locations are also shown on the FIRM (Published Separately).

Channel roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and based on field observations of the streams and floodplain areas. Roughness factors for the main channel of East Sippo Creek range from 0.011 to 0.050 with floodplain roughness values from 0.060 to 0.100 for all floods.

Flood elevations of the 10-, 2-, 1-, and 0.2-percent-annual-chance floods for reaches studied in detail were developed using the USACE'S HEC-2 step-backwater computer model (Reference 51). The starting water-surface elevations for East Sippo Creek were calculated using the slope-area method. The hydraulic computations for this stream were started at the Tuscarawas River near the outlet of the East Sippo Creek Culvert.

Flood profiles were drawn showing the computed water-surface elevations for floods of the selected recurrence intervals.

Village of Minerva. Analyses of the hydraulic characteristics of the streams in the community were carried out to provide estimates of the elevations of the floods of the selected recurrence intervals along each flooding source studied in detail.

Cross-sections for the backwater analyses of Sandy Creek were obtained from topographic maps having a scale of 1:2400 with five-foot contour intervals (References 49 and 59). The channel bottom profile was obtained by field measurement. All bridges, dams and culverts were field surveyed to obtain elevation data and structural geometry.

Locations of selected cross-sections used in the hydraulic analyses are shown on the Flood Profiles. For stream segments where a floodway was computed (Section 4.2), selected cross-section locations are also shown on the FIRM (Published Separately).

Channel roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and based on field observations of the streams and floodplain areas. Roughness factors for the main channel of Sandy Creek range from 0.035 to 0.060 depending upon the characteristics of the channel bottom with floodplain roughness values ranging from 0.030 for cleared overbanks to 0.120 for heavily wooded overbanks. The acceptability of all assumed hydraulic factors, cross-sections and hydraulic structure data were checked by comparison with recorded high water marks on Sandy Creek in the Village of Minerva.

Flood elevations of the 10-, 2-, 1-, and floods for reaches studied in detail were developed using the USACE'S HEC-2 step-backwater computer model (Reference 51). The starting water-surface elevations for Sandy Creek were calculated using the slope-area method.