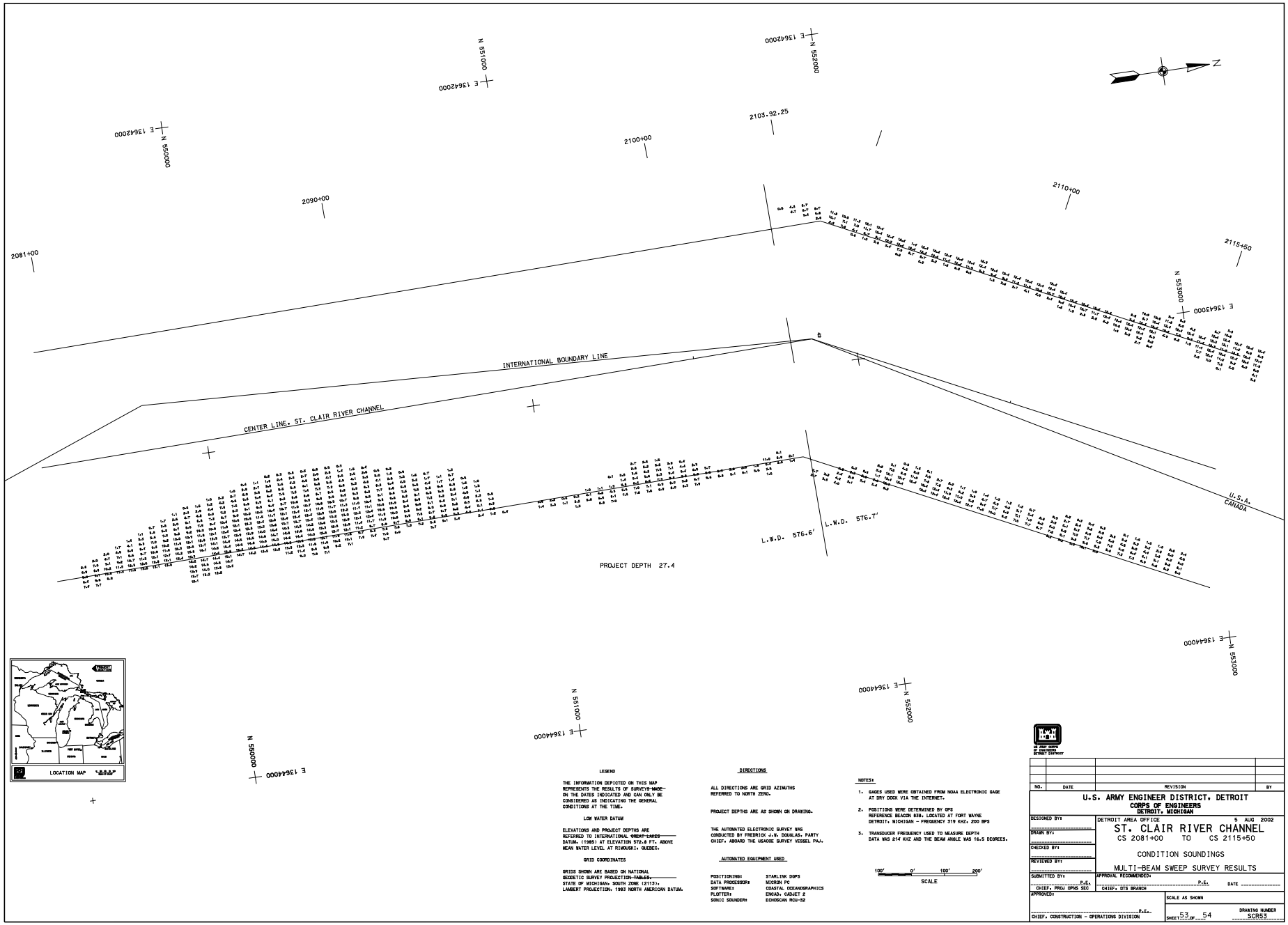

LEGEND

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

LOW WATER DATUM

ELEVATIONS AND PROJECT DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM, (1985) AT ELEVATION 572.8 FT. ABOVE MEAN WATER LEVEL AT RIMOUSKI, QUEBEC.

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, SOUTH ZONE (2113), LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM.

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS REFERRED TO NORTH ZERO.

PROJECT DEPTHS ARE AS SHOWN ON DRAWING.

THE AUTOMATED ELECTRONIC SURVEY WAS CONDUCTED BY FREDRICK J.V. DOUGLAS, PARTY CHIEF, ABOARD THE USACOE SURVEY VESSEL PAJ.

AUTOMATED EQUIPMENT USED

POSITIONING:	STARLINK DGPS
DATA PROCESSOR:	MICRON PC
SOFTWARE:	COASTAL OCEANOGRAPHICS
PLOTTER:	ENCAD, CADJET 2
SONIC SOUNDER:	ECHOSCAN MCU-32

NOTES:

1. GAGES USED WERE OBTAINED FROM NOAA ELECTRONIC GAGE AT DRY DOCK VIA THE INTERNET.
2. POSITIONS WERE DETERMINED BY GPS REFERENCE BEACON 838, LOCATED AT FORT WAYNE DETROIT, MICHIGAN - FREQUENCY 319 KHz, 200 BPS
3. TRANSDUCER FREQUENCY USED TO MEASURE DEPTH DATA WAS 214 KHZ AND THE BEAM ANGLE WAS 16.5 DEGREES.

100' 0' 100' 200'
SCALE

NO.	DATE	REVISION	BY

U.S. ARMY ENGINEER DISTRICT, DETROIT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
SUBMITTED BY:
CHIEF, PROJ OPNS SEC P.E.

DETROIT AREA OFFICE 5 AUG 2002

ST. CLAIR RIVER CHANNEL

CS 2081+00 TO CS 2115+50

CONDITION SOUNDINGS

MULTI-BEAM SWEEP SURVEY RESULTS

APPROVAL RECOMMENDED:
CHIEF, GTS BRANCH P.E. DATE

APPROVED:
CHIEF, CONSTRUCTION - OPERATIONS DIVISION P.E.

SCALE AS SHOWN

SHEET 53 OF 54

DRAWING NUMBER SCR53