GENERAL NOTES:

1. Soundings are in feet and tenths and refer to the plane of Mean Lower Low Water (MLLW).
2. Topography from previous surveys. All topography, including shoreline, bridges, piers, etc. is located approximate unless otherwise noted and should be used for general reference only.
3. Bench Mark Data: AG52 (Mass. Geod. Survey, Sept. 1936 - Essex, Essex County). At the Essex Town Hall on Martin Street (Route 22); 444 feet, along Martin Street, west of centerline of Winthrop Street and 81 feet south of centerline of Martin Street. A Massachusetts Department of Public Works bench mark disk stamped "AG52" set in the west corner of the first granite step at the main entrance to the town hall. Elevation is 30.26 feet above MLLW.
4. Coordinates are based on the Lambert Grid System for the Commonwealth of Massachusetts (Mainland Zone) & NAD 1927.
5. The sounding information depicted on these maps represents the SHOALEST soundings of those obtained from hydrographic surveys conducted during June 1997.
6. The information depicted on these maps represents the results of surveys made on the dates indicated, and can only be considered as indicating the general conditions existing at that time.
7. The sounding information depicted on these maps should NOT be used to determine volumes.
8. Field book: R & H 3989A.
   Depthsounder rolls: 97-256-01 thru 97-256-04.
   See NOAA chart No. 13282.

PLAN
SCALE: 1"=50'

GRAPHIC SCALE
1"=50 FEET 50' 0 50' 100'

SAFETY PAYS

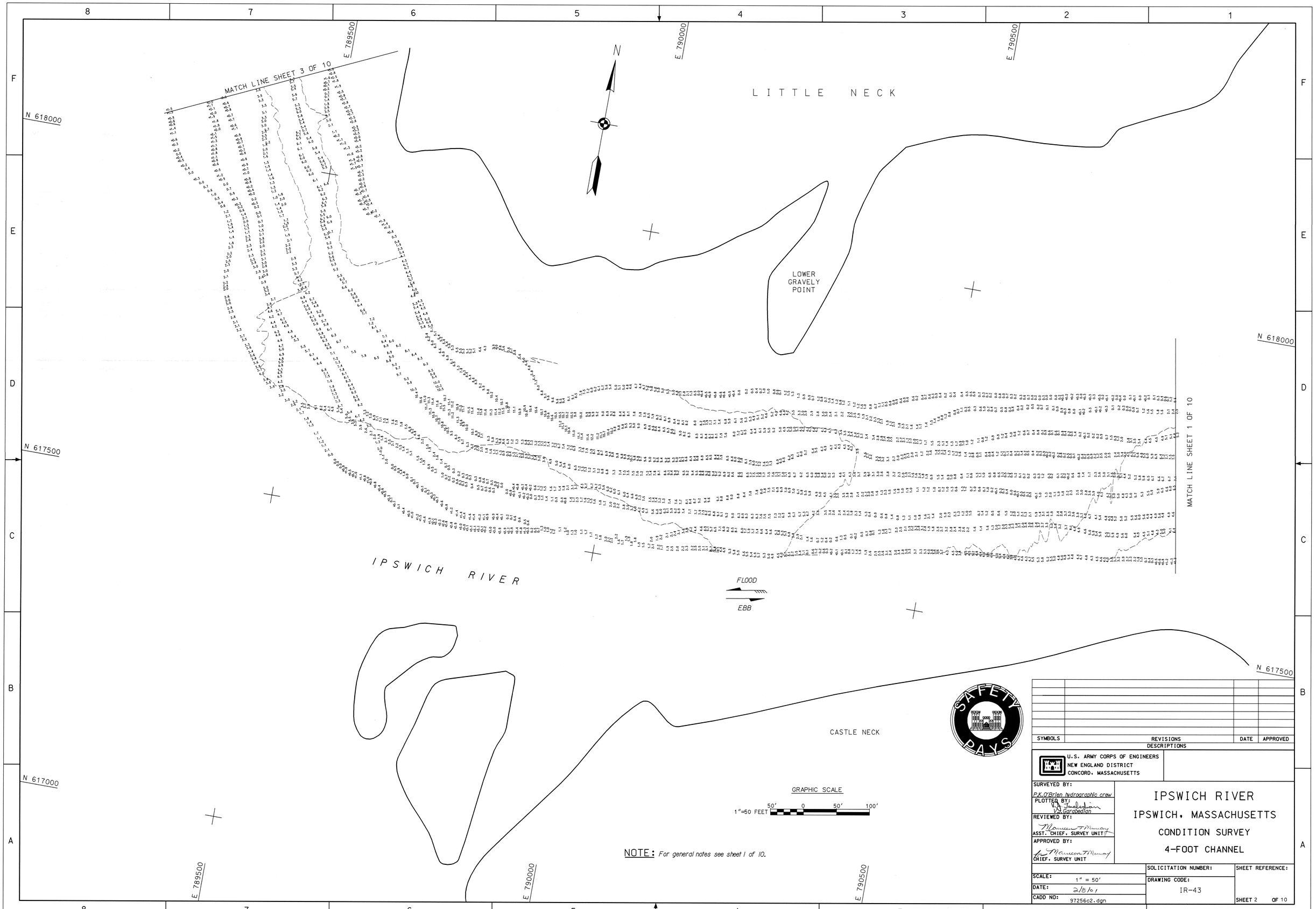
SYMBOLS	REVISIONS DESCRIPTIONS	DATE	APPROVED

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: P.K. O'Brien hydrographic crew
PLOTTED BY: V.J. Garabedian, J.J. Garabedian
REVIEWED BY: Maureen T. Murray
ASST. CHIEF, SURVEY UNIT
APPROVED BY: Maureen T. Murray
CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 2/8/01
CADD NO: 97256c1.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 1 OF 10



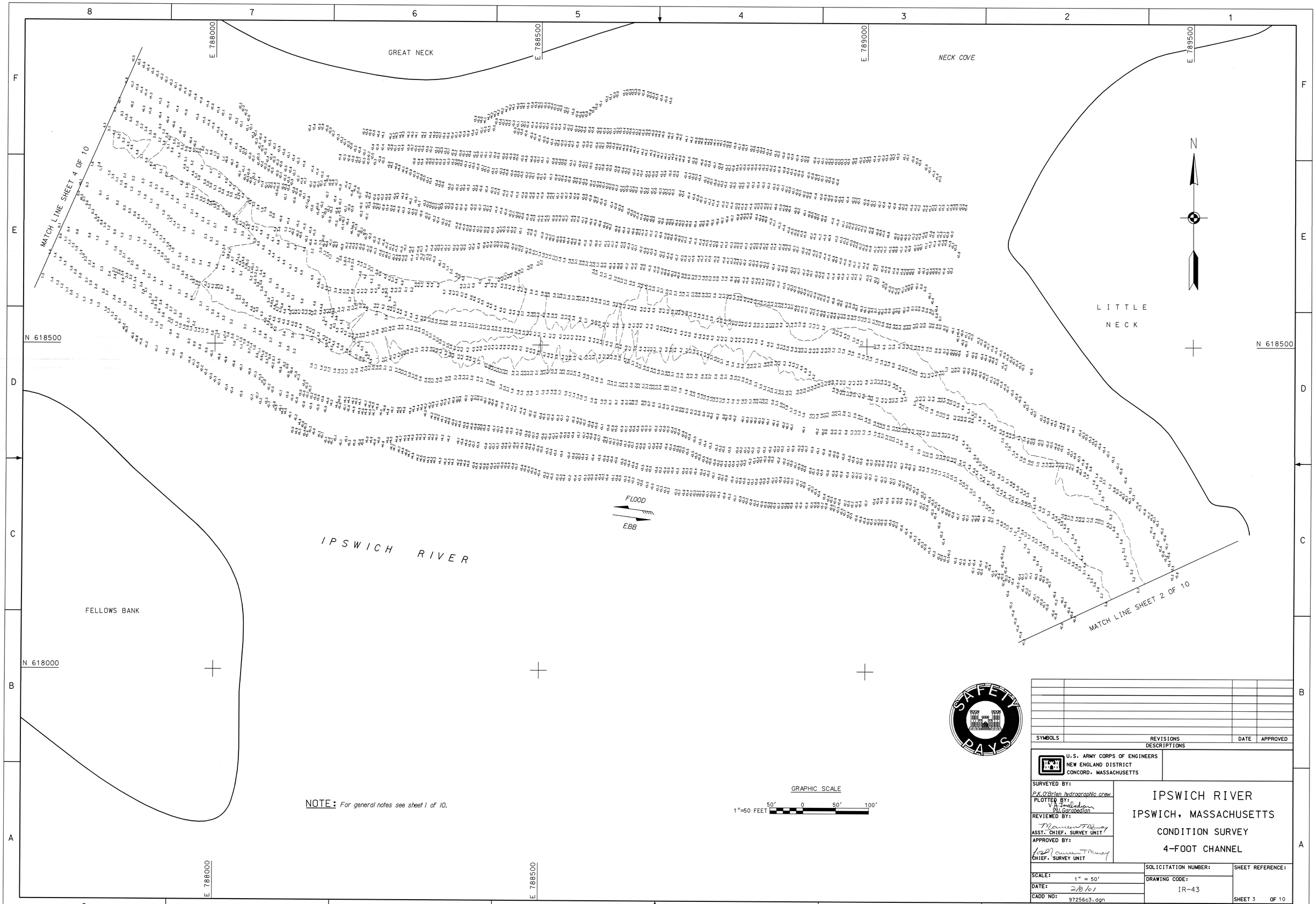
SYMBOLS	REVISIONS DESCRIPTIONS	DATE	APPROVED

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

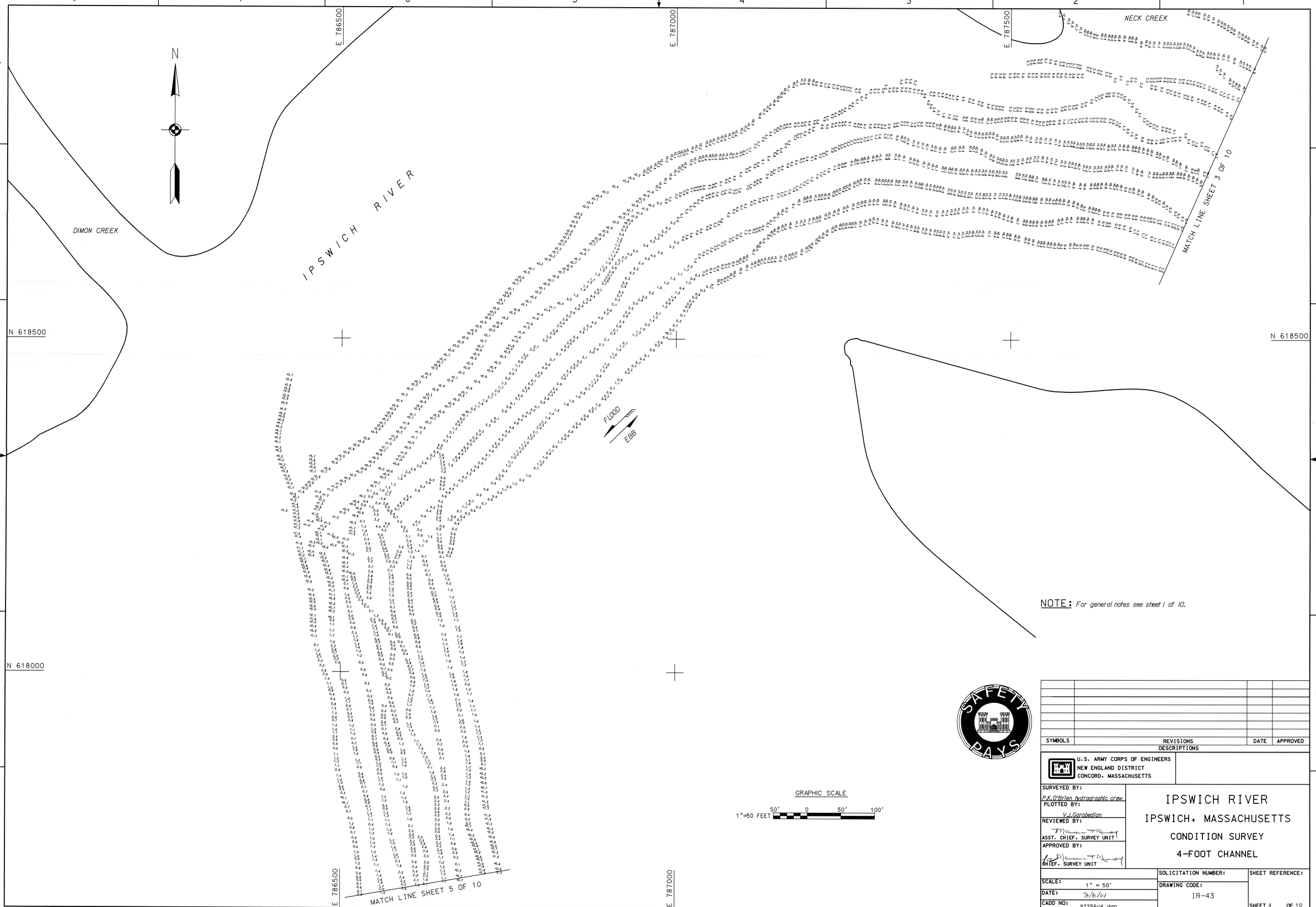
SURVEYED BY: P.K.O'Brien hydrographic crew
PLOTTED BY: V.J. Garabedian
REVIEWED BY: Maureen T. Murray
ASST. CHIEF, SURVEY UNIT
APPROVED BY: for Maureen T. Murray
CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 2/8/01
CADD NO: 97256c2.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 2 OF 10



NOTE: *For general notes see sheet 1 of 10.*



NOTE: *For general notes see sheet 1 of 10.*

GRAPHIC SCALE

1"=50 FEET 50' 0 50' 100'

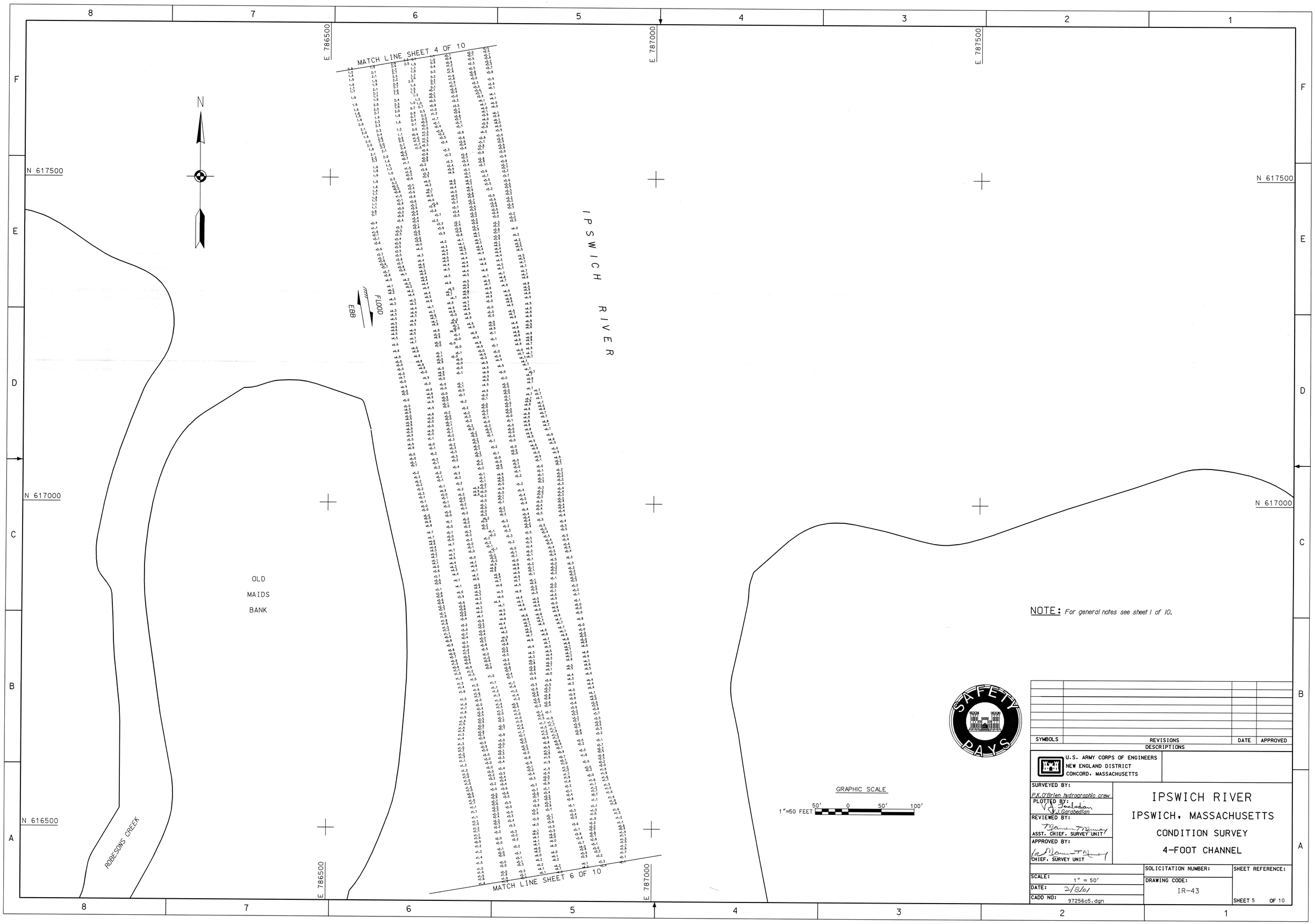
SYMBOLS	REVISIONS DESCRIPTIONS	DATE	APPROVED

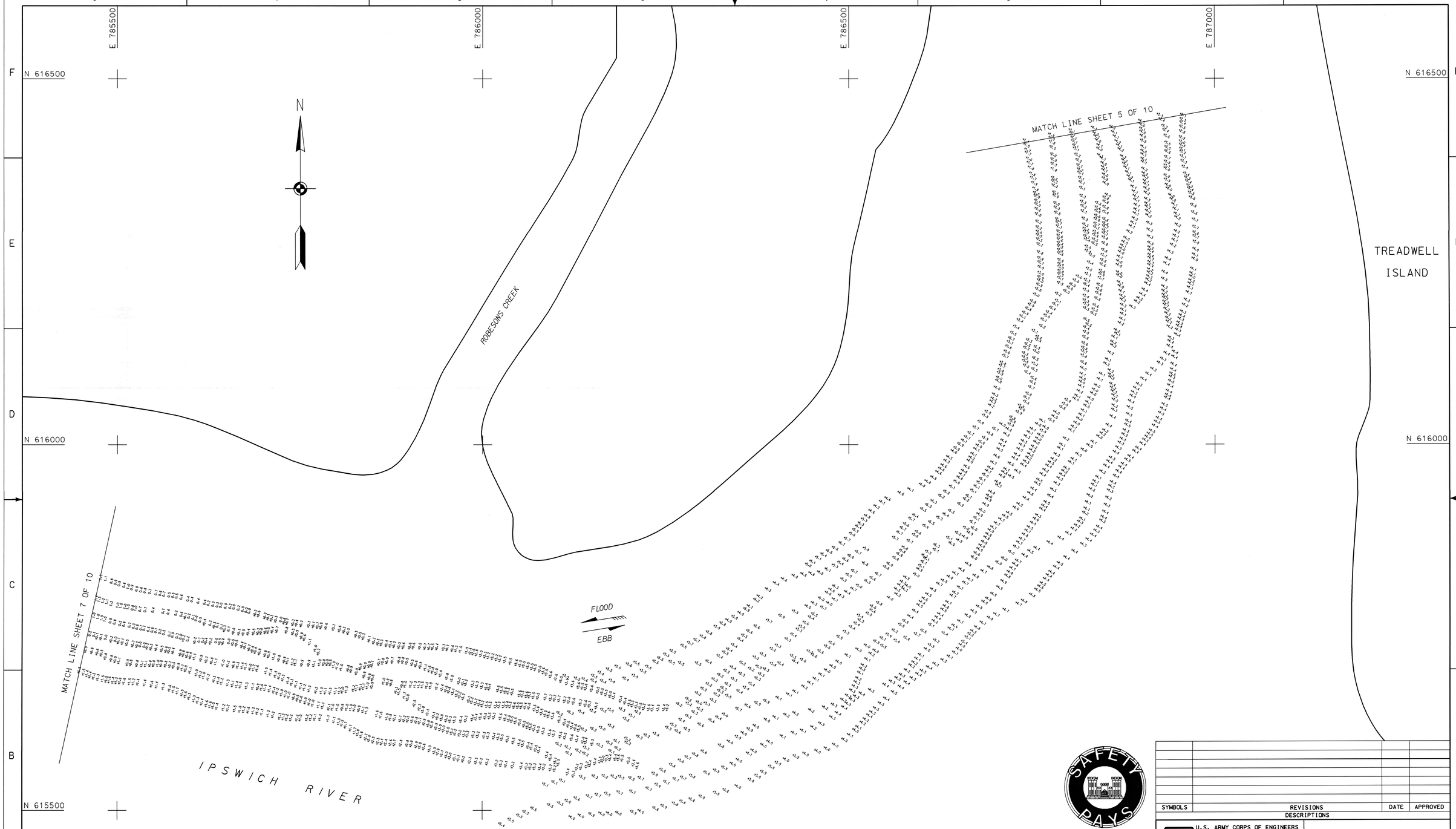
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: *P.K.O'Brien hydrographic crew*
PLOTTED BY: *V.J.Garabedian*
REVIEWED BY: ASST. CHIEF, SURVEY UNIT
APPROVED BY: CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 3/8/01
CADD NO: 97256c4.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 4 OF 10


MATCH LINE SHEET 4 OF 10
MATCH LINE SHEET 6 OF 10
E 786500
E 787000
E 787500
N 617500
N 617000
N 616500
N
FLOOD
EBB
IPSWICH RIVER
OLD MAIDS BANK
ROBESONS CREEK
NOTE: For general notes see sheet 1 of 10.
GRAPHIC SCALE
1"=50 FEET
50' 0 50' 100'
SAFETY PAYS
SYMBOLS
REVISIONS
DESCRIPTIONS
DATE
APPROVED
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS
SURVEYED BY:
P.K. O'Brien hydrographic crew
PLOTTED BY:
V.J. Garabedian
REVIEWED BY:
ASST. CHIEF, SURVEY UNIT
APPROVED BY:
CHIEF, SURVEY UNIT
IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL
SCALE: 1" = 50'
DATE: 2/2/01
CADD NO: 97256c5.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 5 OF 10



GRAPHIC SCALE

1"=50 FEET 50' 0 50' 100'

NOTE: For general notes see sheet 1 of 10.

SYMBOLS	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

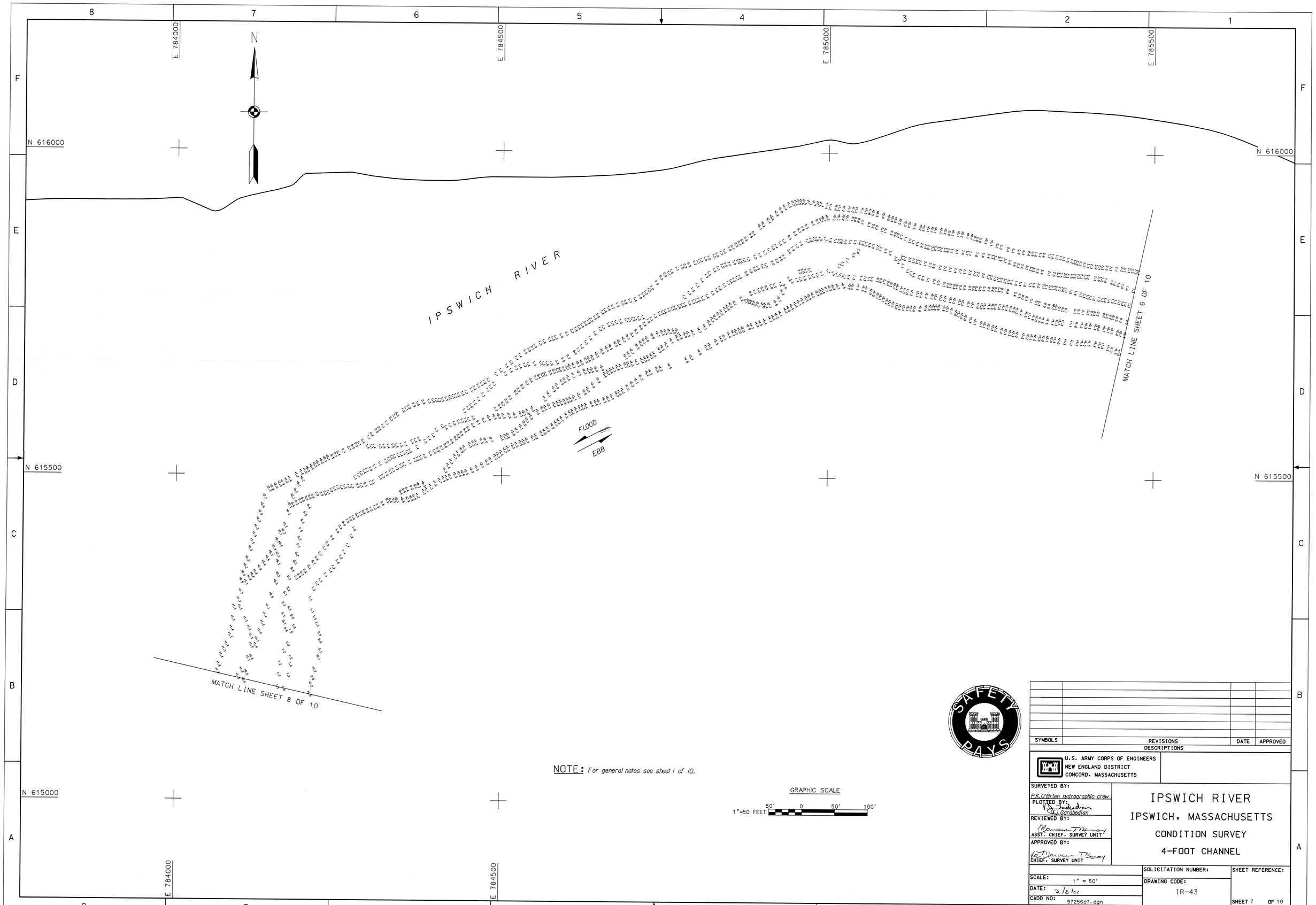
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: P.K.O'Brien hydrographic crew
PLOTTED BY: V.J. Garabedian, W.J. Garabedian
REVIEWED BY: Maureen T. Mooney, ASST. CHIEF, SURVEY UNIT
APPROVED BY: Maureen T. Mooney, CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 2/8/01
CADD NO: 97256c6.dgn

SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 6 OF 10



NOTE: *For general notes see sheet 1 of 10.*

GRAPHIC SCALE

1"=50 FEET 50' 0 50' 100'

SAFETY PAYS

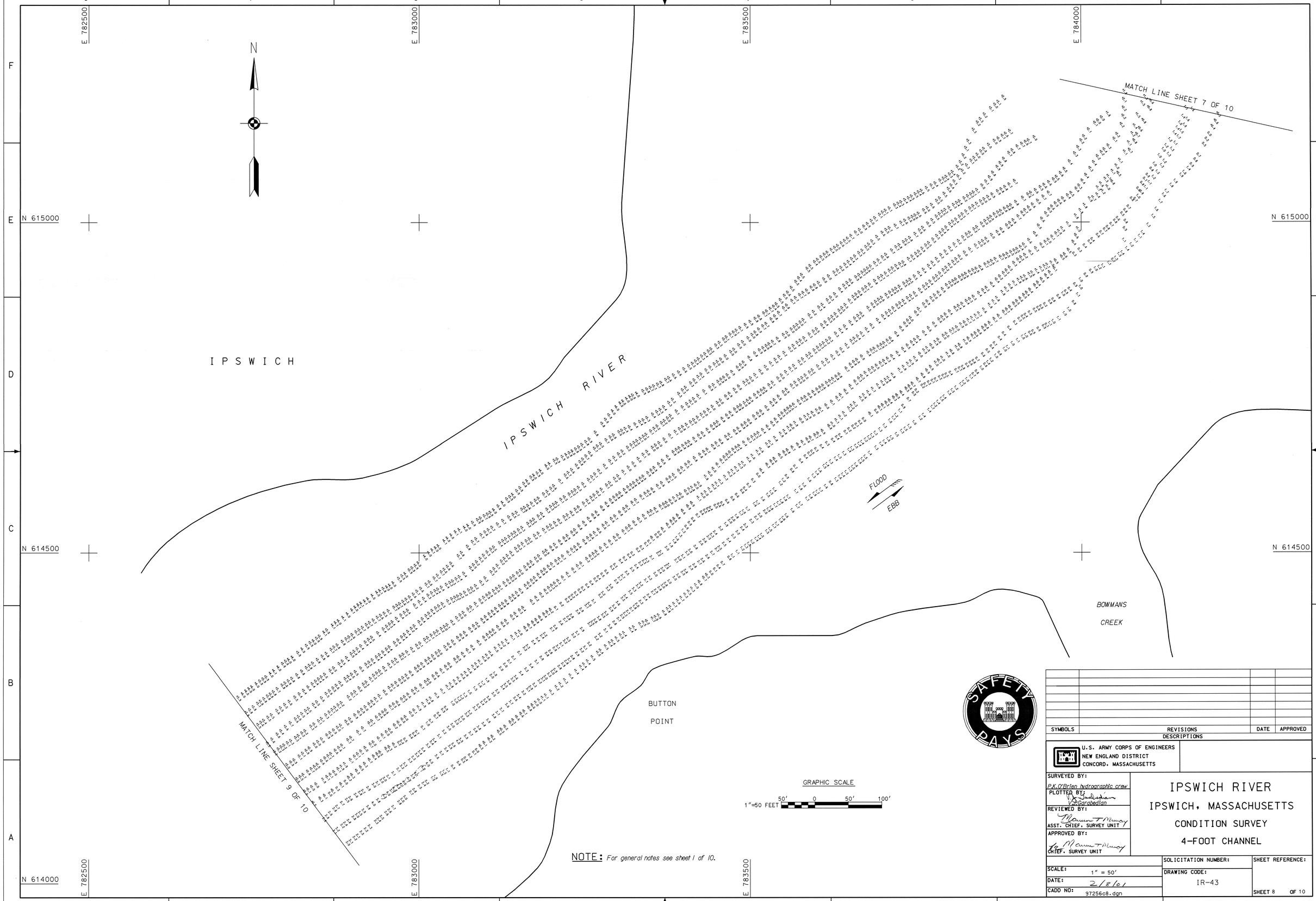
SYMBOLS	REVISIONS DESCRIPTIONS	DATE	APPROVED

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: P.K. O'Brien hydrographic crew
PLOTTED BY: M.J. Garabedian
REVIEWED BY: Maureen T. Murray, ASST. CHIEF, SURVEY UNIT
APPROVED BY: for Maureen T. Murray, CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 2/8/01
CADD NO: 97256c7.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE: SHEET 7 OF 10



NOTE: For general notes see sheet 1 of 10.

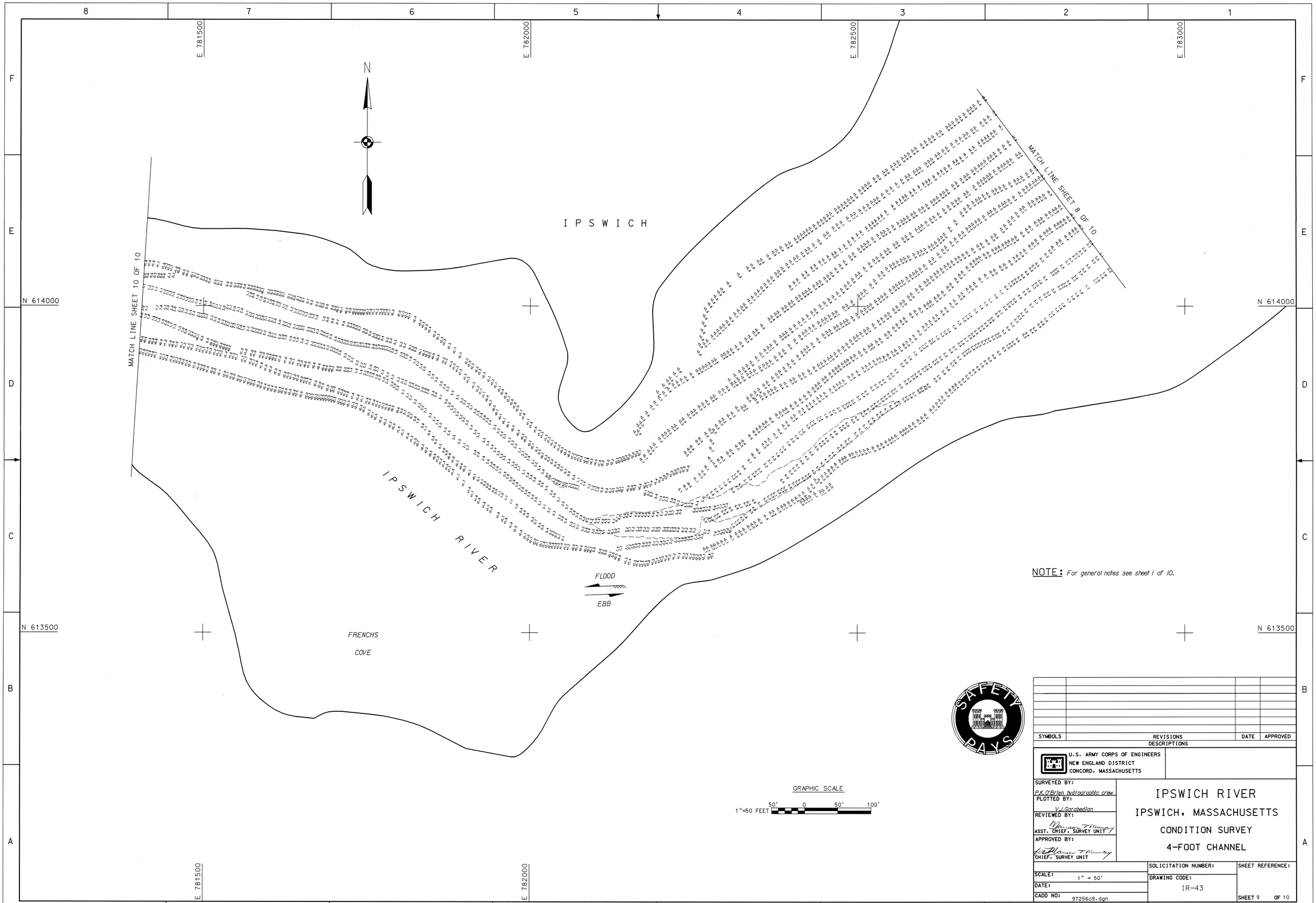
SYMBOLS	REVISIONS	DATE	APPROVED
	DESCRIPTIONS		

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: P.K.O'Brien hydrographic crew
PLOTTED BY: V.J.Garabedian
REVIEWED BY: ASST. CHIEF, SURVEY UNIT
APPROVED BY: CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 2/8/01
CADD NO: 97256c8.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 8 OF 10



NOTE: For general notes see sheet 1 of 10.

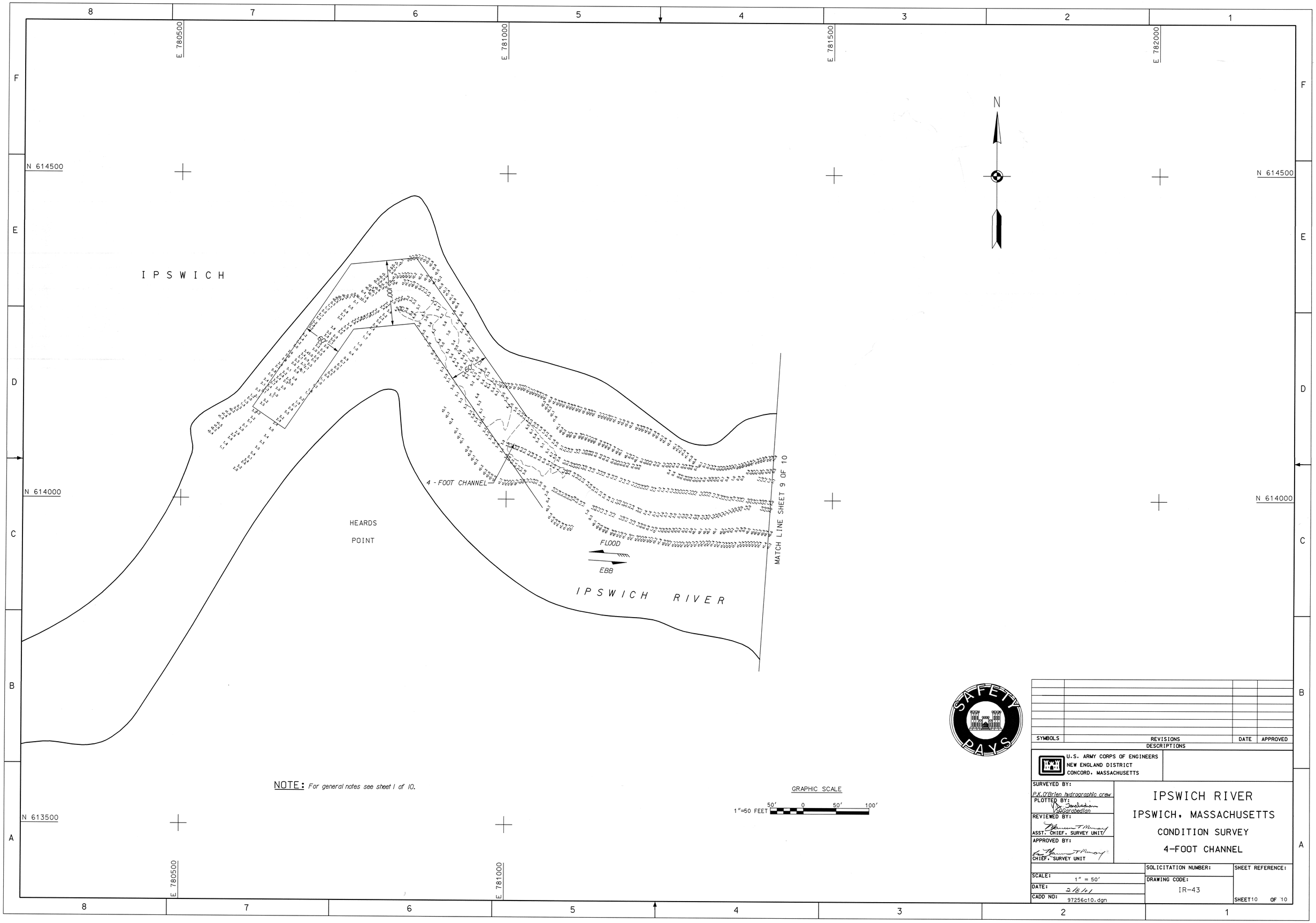
SYMBOLS	REVISIONS DESCRIPTIONS	DATE	APPROVED

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: P.K.O'Brien hydrographic crew
PLOTTED BY: V.J.Garabedian
REVIEWED BY: ASST. CHIEF, SURVEY UNIT
APPROVED BY: CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE:
CADD NO: 97256c9.dgn
SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 9 OF 10



NOTE: For general notes see sheet 1 of 10.

SYMBOLS	REVISIONS DESCRIPTIONS	DATE	APPROVED

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS

SURVEYED BY: P.K.O'Brien hydrographic crew
PLOTTED BY: V.D. Garabedian
REVIEWED BY: ASST. CHIEF, SURVEY UNIT
APPROVED BY: CHIEF, SURVEY UNIT

IPSWICH RIVER
IPSWICH, MASSACHUSETTS
CONDITION SURVEY
4-FOOT CHANNEL

SCALE: 1" = 50'
DATE: 2/8/01
CADD NO: 97256c10.dgn

SOLICITATION NUMBER:
DRAWING CODE: IR-43
SHEET REFERENCE:
SHEET 10 OF 10