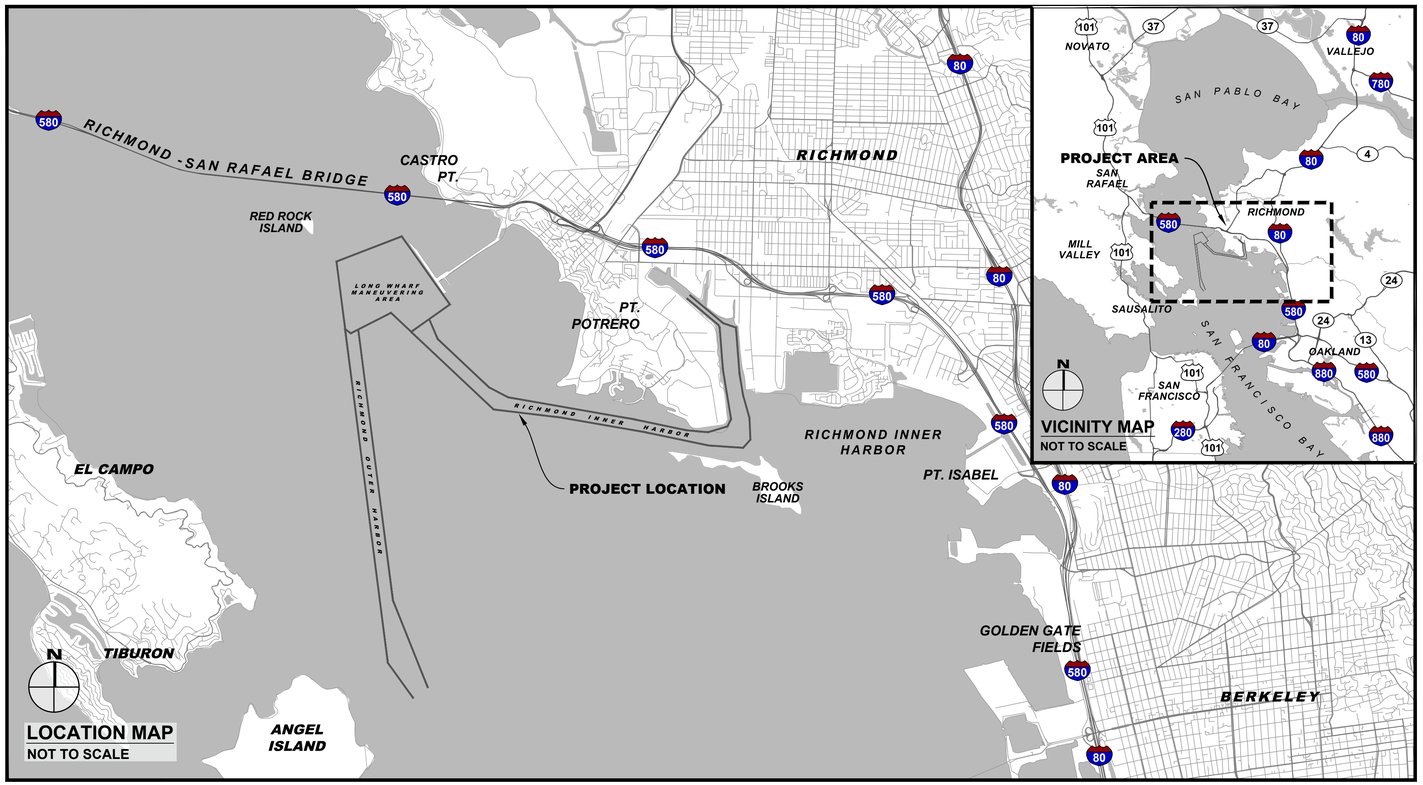
US Army Corps of Engineers®
San Francisco District

CONTRA COSTA COUNTY, CALIFORNIA
RICHMOND HARBOR CHANNEL
FY26 MAINTENANCE DREDGING PROJECT



SOLICITATION NO: W912P726RA020
CONTRACT NO: W912P726CXXXX
ISSUE DATE: JULY 2026

THIS PROJECT WAS DESIGNED BY THE SAN FRANCISCO DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS THAT APPEAR ON THESE PROJECT DOCUMENTS ARE WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF DRAWINGS IN THIS SET.

SUBMITTED BY: Erika Powell, P.E. — Digitally signed by Erika Powell, P.E. Date: 2026.07.08 16:16:19 -07'00'
ERIKA E. POWELL, PE — DATE
ACTING CHIEF, ENGINEERING BRANCH

APPROVED BY: Robin K. Inaba — Digitally signed by Robin K. Inaba Date: 2026.07.10 08:25:13 -07'00'
ROBIN K. INABA, AIA, PMP — DATE
CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

PREPARED UNDER THE DIRECTION OF:
VIRGINIA R. BRICKNER
LIEUTENANT COLONEL, U.S. ARMY
DISTRICT COMMANDER AND ENGINEER

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: F.SUN
DRAWN BY: L. KWONG
CHECKED BY: J. ZOULAS
SUBMITTED BY: E. POWELL
SIZE: ANSI D
ISSUE DATE: JULY 2026
SOLICITATION NO: W912P726RA020
CONTRACT NO: W912P726CXXXX
PROJECT NO: RIH-1-2026

U.S. ARMY CORPS OF ENGINEERS
SAN FRANCISCO DISTRICT
450 GOLDEN GATE AVE; 4TH FLOOR
SAN FRANCISCO, CA 94102-3404

CONTRA COSTA COUNTY, CALIFORNIA
RICHMOND HARBOR CHANNEL
FY26 MAINTENANCE DREDGING PROJECT

COVERSHEET

SHEET ID
G001
01 OF 08

SOLICITATION

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GENERAL NOTES:

1. ALL REACHES MUST BE DREDGED TO THE PROJECT DEPTH AS SPECIFIED. WHEN DREDGING TO THE REQUIRED DEPTH IN AREA WHERE A UTILITY CROSSING EXISTS, DREDGING MUST BE DONE IN ACCORDANCE WITH SPEC 01 11 00. BEFORE STARTING WORK, THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UNDERWATER AND OVERHEAD UTILITIES. WORK MAY ONLY BEGIN AFTER THESE LOCATIONS ARE CONFIRMED AND SAFE WORK LIMITS HAVE BEEN ESTABLISHED. THE UTILITY CROSSINGS SHOWN ON THE DRAWINGS REFLECT USACE'S KNOWLEDGE OF EXISTING UTILITIES.

2. BATHYMETRIC SURVEY FOR RICHMOND INNER HARBOR WAS CONDUCTED BY THE U.S. ARMY CORPS OF ENGINEERS, SAN FRANCISCO DISTRICT, ON 03 MARCH 2026.

3. BATHYMETRIC SURVEY SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER (MLLW) AT THE LOCALITY.

4. DRAWINGS ARE NOT TO BE USED AS NAVIGATION CHARTS.

5. INFORMATION SHOWN ON THE DRAWINGS IS BASED ON BATHYMETRIC SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

6. BATHYMETRIC SURVEY SOUNDINGS WERE TAKEN BY FATHOMETER (MULTI-BEAM SURVEY EQUIPMENT) AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.

7. COORDINATES ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM OF 1983 (CCS83), LAMBERT CONFORMAL PROJECTION ZONE III, AS DESCRIBED IN SPECIAL PUBLICATION NO. 253, PUBLISHED BY NATIONAL OCEAN SURVEY.

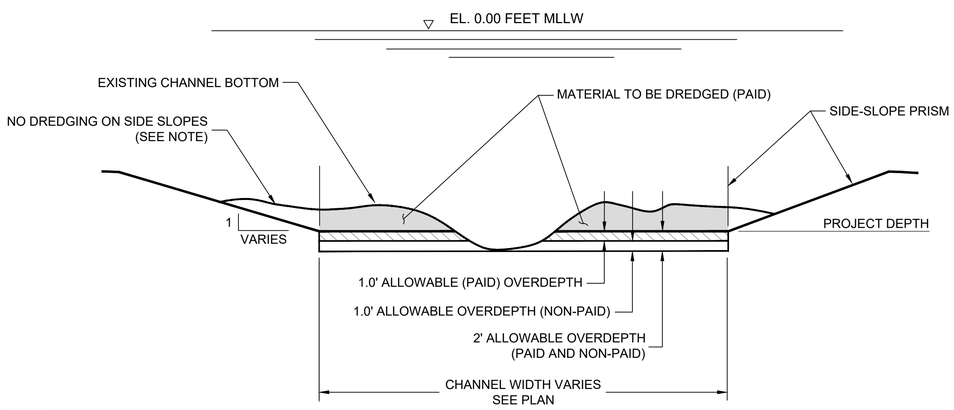
8. THE PROJECT DEPTH FOR REACH 1 TO REACH 14 IS -37 FT MLLW. THE DELIVERY SITE WILL BE GOVERNMENT FURNISHED MONTEZUMA WETLAND OFFLOADER. IN THE EVENT OF A DELAY AT THE MONTEZUMA WETLAND OFFLOADER EXCEEDING 24 HOURS, THE GOVERNMENT MAY DIRECT THE CONTRACTOR TO AN ALTERNATE GOVERNMENT FURNISHED PLACEMENT SITE.

9. THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATION REPRESENTS THE POSITION OF THE SINKER ONLY.

10. AERIAL IMAGE COURTESY OF ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY.

11. SEDIMENT SAMPLING AND TESTING DATA AVAILABLE UPON REQUEST.

12. RICHMOND INNER HARBOR POST-CONSTRUCTION EELGRASS SURVEY WAS CONDUCTED ON 07 APRIL 2025 BY MERKEL & ASSOCIATES INCORPORATED. REACHES 5 THROUGH 9 ALONG WITH REACHES 11, 12, AND 13 REQUIRE EELGRASS LIGHT MONITORING. THE CONTRACTOR SHALL REFERENCE THE SPECS FOR INFORMATION ABOUT EELGRASS SURVEYS. CONTRACTOR SHALL CONDUCT EELGRASS MONITORING FOR THE ENTIRE AREA OF THE REACH THAT REQUIRES EELGRASS MONITORING.



NOTE:

SEE SPECIFICATION SECTION 35 20 23 (DREDGING) FOR DETAILS.

TYPICAL DREDGING SECTION

NOT TO SCALE

ABBREVIATIONS

APPROX	APPROXIMATE
CLIN	CONTRACT LINE ITEM NUMBER
CY	CUBIC YARD
CU YD	CUBIC YARD
DIA	DIAMETER
DWG	DRAWING
E	EAST
EA	EACH
FT	FOOT / FEET
H	HORIZONTAL
L	LENGTH
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MLLW	MEAN LOWER LOW WATER
NAVD	NORTH AMERICAN VERTICAL DATUM 1988
N	NORTH
NO	NUMBER
NTS	NOT TO SCALE
PID	PERMANENT IDENTIFIER
RT	RIGHT
RTK	REAL TIME KINEMATIC
S	SLOPE / SOUTH
STA	STATION
TYP	TYPICAL
V	VERTICAL
W	WEST

ACCEPTANCE REACHES

REACH 1:	STA 0+21	TO	STA 27+00
REACH 2:	STA 27+00	TO	STA 43+00
REACH 3:	STA 43+00	TO	STA 55+00
REACH 4:	STA 55+00	TO	STA 69+00
REACH 5:	STA 69+00	TO	STA 81+00
REACH 6:	STA 81+00	TO	STA 100+00
REACH 7:	STA 100+00	TO	STA 120+00
REACH 8:	STA 120+00	TO	STA 140+00
REACH 9:	STA 140+00	TO	STA 157+81
REACH 10:	STA 157+81	TO	STA 161+80
REACH 11:	STA 161+80	TO	STA 168+91
REACH 12:	STA 168+91	TO	STA 173+00
REACH 13:	STA 173+00	TO	STA 193+00
REACH 14:	STA 193+00	TO	STA 217+02

SURVEY CONTROL DATA

HORIZONTAL DATUM:
CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 03, US SURVEY FT

REFERENCE FRAME:
NAD83(2011) EPOCH 2010.00

VERTICAL DATUM:
MEAN LOWER LOW WATER (MLLW)

PROJECT CONTROL:
ROSIE
PID: BBGS84
LATITUDE: 37°54'34.35772" N
LONGITUDE: 122°21'33.98267" W
ELLIPSOID HEIGHT: -92.185 FT
NAD83(2011), EPOCH 2010.00 | OPUS SOLUTION 2020-02-27 19:09:00Z

TIDAL DATUM CONTROL BENCHMARK:
BM 2 1932
PID: HT0920
PUBLISHED 04/21/2003
TIDAL EPOCH 1983-2001
MLLW ELEVATION: 16.08 FT

ORTHOMETRIC TO TIDAL DATUM TRANSFORMATION:
NAVD88 (GEOID18) ≥ MLLW (VDATUM)

SCHEDULE OF DRAWINGS

SHEET NUMBER	SHEET ID	DESCRIPTION
01	G001	COVERSHEET
02	G002	SCHEDULE OF DRAWINGS, ACCEPTANCE REACHES, SURVEY CONTROL DATA, ABBREVIATIONS, GENERAL NOTES, AND TYPICAL DREDGING SECTION
03	G003	KEY PLAN AND CHANNEL CONTROL POINT TABLES
04	C101	RICHMOND INNER HARBOR DREDGING PLAN STA 00+21 TO STA 38+50
05	C102	RICHMOND INNER HARBOR DREDGING PLAN STA 38+50 TO STA 91+50
06	C103	RICHMOND INNER HARBOR DREDGING PLAN STA 91+50 TO STA 144+50
07	C104	RICHMOND INNER HARBOR DREDGING PLAN STA 144+50 TO STA 201+50
08	C105	RICHMOND INNER HARBOR DREDGING PLAN STA 201+50 TO STA 237+00

US Army Corps of Engineers®

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DESIGNED BY: F. SUN
DRAWN BY: L. KWONG
CHECKED BY: J. ZOULAS
SUBMITTED BY: E. POWELL
SIZE: ANSI D
ISSUE DATE: JULY 2026
SOLICITATION NO: W912P726RA020
CONTRACT NO: W912P726CXXXX
PROJECT NO: RIH-1-2026

U.S. ARMY CORPS OF ENGINEERS
SAN FRANCISCO DISTRICT
450 GOLDEN GATE AVE, 4TH FLOOR
SAN FRANCISCO, CA 94102-3404

CONTRA COSTA COUNTY, CALIFORNIA
RICHMOND HARBOR CHANNEL
FY26 MAINTENANCE DREDGING PROJECT

SCHEDULE OF DRAWINGS, ACCEPTANCE REACHES, SURVEY CONTROL DATA, ABBREVIATIONS, GENERAL NOTES, AND TYPICAL DREDGING SECTION

SHEET ID
G002
02 OF 08

SOLICITATION

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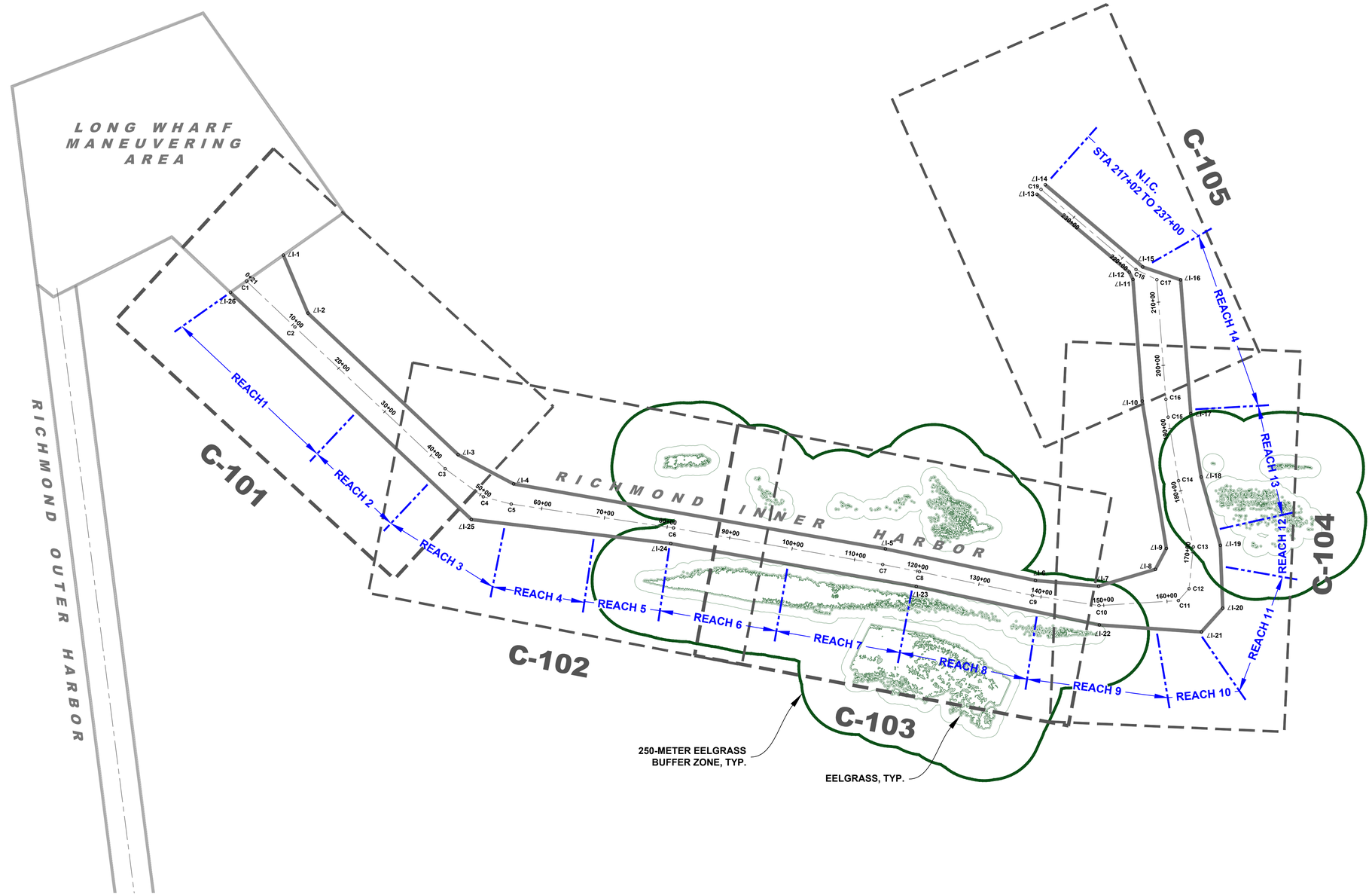
RICHMOND INNER HARBOR CHANNEL TOE CONTROL POINTS		
POINT ID	EASTING	NORTHING
∠I-1	6,010,314.28	2,162,197.51
∠I-2	6,010,702.46	2,161,282.52
∠I-3	6,013,071.04	2,159,051.01
∠I-4	6,013,946.57	2,158,590.79
∠I-5	6,019,811.99	2,157,565.50
∠I-6	6,022,179.38	2,157,068.47
∠I-7	6,023,175.24	2,156,977.58
∠I-8	6,024,071.72	2,157,243.76
∠I-9	6,024,244.63	2,157,572.06
∠I-10	6,023,863.13	2,159,896.61
∠I-11	6,023,718.07	2,161,814.06
∠I-12	6,023,659.10	2,161,929.33
∠I-13	6,022,203.51	2,163,156.86
∠I-14	6,022,334.83	2,163,307.70
∠I-15	6,023,871.49	2,162,011.81
∠I-16	6,024,470.69	2,161,806.34
∠I-17	6,024,629.99	2,159,700.65
∠I-18	6,024,794.33	2,158,699.33
∠I-19	6,025,096.44	2,157,620.99
∠I-20	6,025,133.92	2,156,630.24
∠I-21	6,024,797.57	2,156,256.37
∠I-22	6,023,187.74	2,156,366.30
∠I-23	6,020,299.03	2,156,972.78
∠I-24	6,016,426.10	2,157,649.80
∠I-25	6,013,280.69	2,158,029.15
∠I-26	6,009,479.89	2,161,610.01

RICHMOND INNER HARBOR CENTERLINE CONTROL POINTS		
POINT ID	EASTING	NORTHING
C-1	6,009,732.76	2,161,788.08
C-2	6,010,496.65	2,161,064.03
C-3	6,012,866.31	2,158,829.67
C-4	6,013,468.42	2,158,386.30
C-5	6,013,908.65	2,158,272.39
C-6	6,016,469.15	2,157,896.06
C-7	6,019,768.94	2,157,319.23
C-8	6,020,348.34	2,157,207.66
C-9	6,022,130.47	2,156,831.51
C-10	6,023,181.49	2,156,671.94
C-11	6,024,434.64	2,156,750.06
C-12	6,024,602.82	2,156,937.00
C-13	6,024,670.54	2,157,596.52
C-14	6,024,436.61	2,158,640.62
C-15	6,024,272.27	2,159,641.94
C-16	6,024,237.01	2,159,924.90
C-17	6,024,094.38	2,161,810.20
C-18	6,023,765.30	2,161,970.57
C-19	6,022,267.77	2,163,233.06



A1 KEY PLAN AND CHANNEL CONTROL POINT TABLES

SCALE: 1" = 800'

0 900' 1800'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: F.SUN
DRAWN BY: L. KWONG
CHECKED BY: J. ZOULAS
SUBMITTED BY: E. POWELL
SIZE: ANSI D
ISSUE DATE: JULY 2026
SOLICITATION NO: W912P726RA020
CONTRACT NO: W912P726CXXXX
PROJECT NO: RIH-1-2026

U.S. ARMY CORPS OF ENGINEERS
SAN FRANCISCO DISTRICT
450 GOLDEN GATE AVE, 4TH FLOOR
SAN FRANCISCO, CA 94102-3404

CONTRA COSTA COUNTY, CALIFORNIA
RICHMOND HARBOR CHANNEL
FY26 MAINTENANCE DREDGING PROJECT

KEY PLAN AND
CHANNEL CONTROL POINT TABLES

SHEET ID
G003
03 OF 09

SOLICITATION

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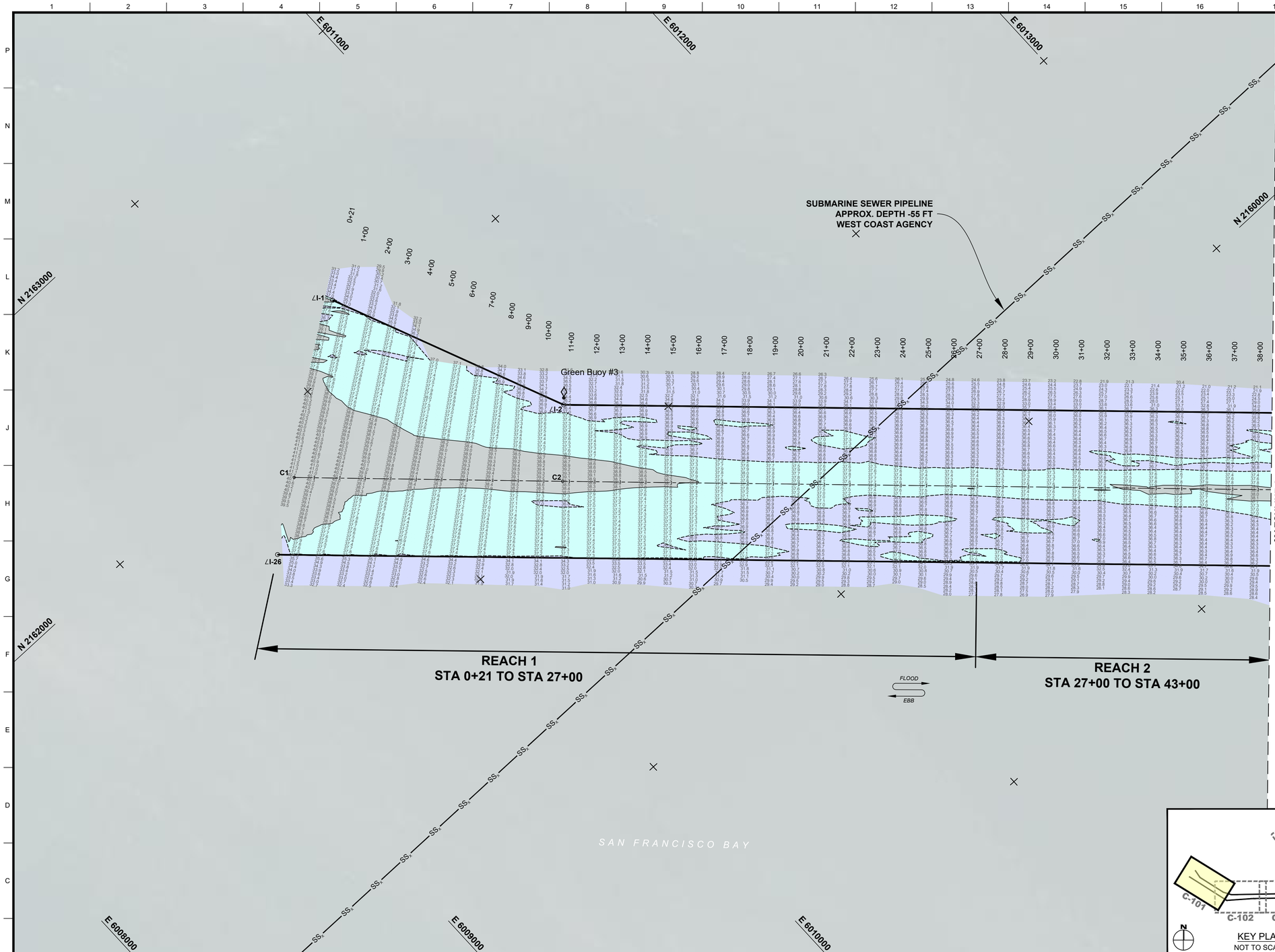

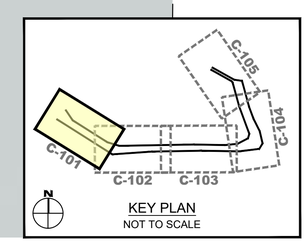

LEGEND

- -37 FEET
- -38 FEET
- 0.0 TO -37'
- -37' TO -38'
- BEACON
- BUOY

A1 RICHMOND INNER HARBOR DREDGING PLAN - STA 0+21 TO STA 38+50

SCALE: 1" = 200'

0 200' 400'

US Army Corps of Engineers®

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CONTRA COSTA COUNTY, CALIFORNIA
RICHMOND HARBOR CHANNEL
FY26 MAINTENANCE DREDGING PROJECT

RICHMOND INNER HARBOR DREDGING PLAN
STA 0+21 TO STA 38+50

SHEET ID
C101
04 OF 08

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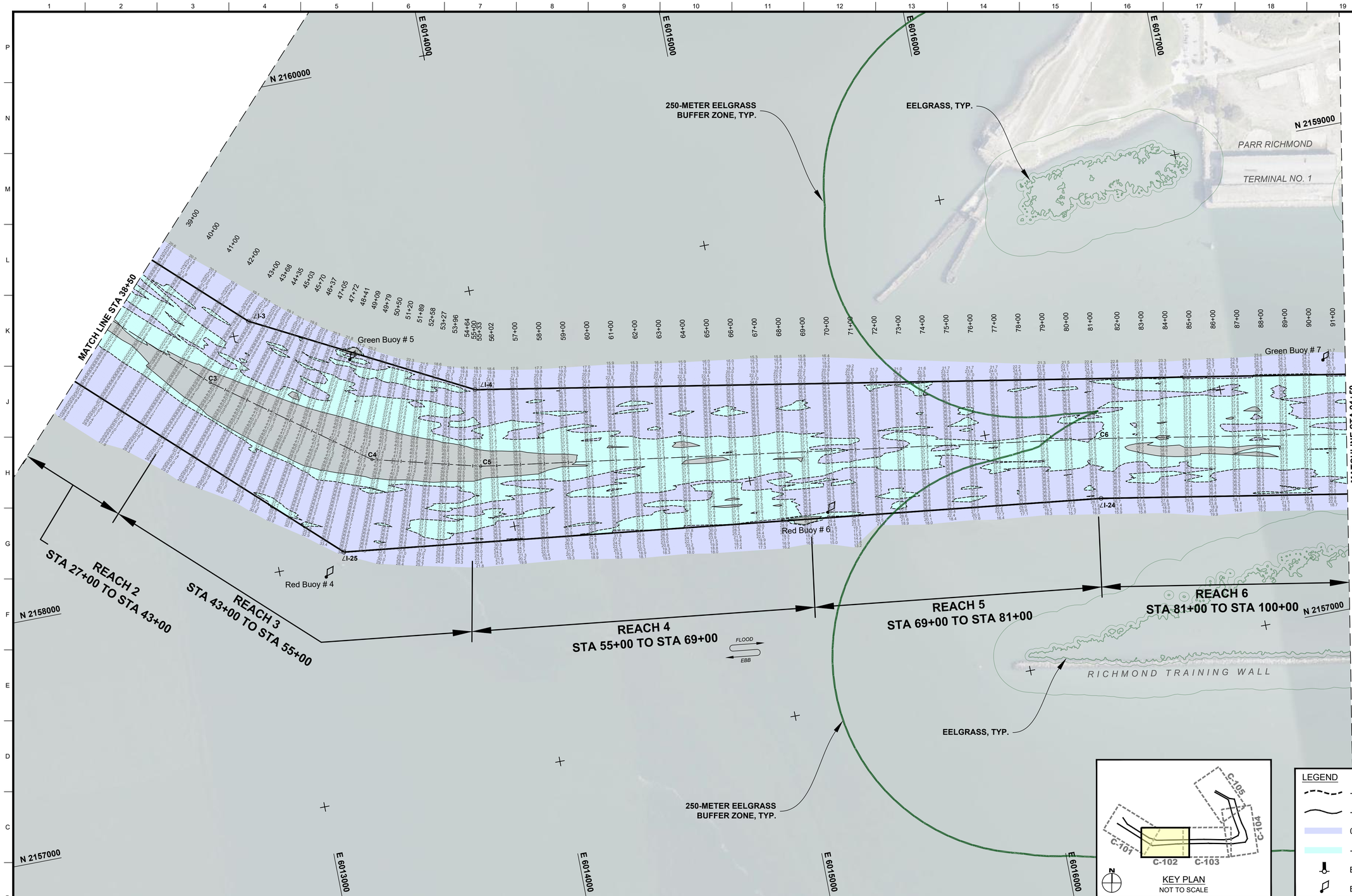

A1 RICHMOND INNER HARBOR DREDGING PLAN - STA 38+50 TO STA 91+50

SCALE: 1" = 200'

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U.S. ARMY CORPS OF ENGINEERS
SAN FRANCISCO DISTRICT
450 GOLDEN GATE AVE, 4TH FLOOR
SAN FRANCISCO, CA 94102-3404

CONTRA COSTA COUNTY, CALIFORNIA
RICHMOND HARBOR CHANNEL
FY26 MAINTENANCE DREDGING PROJECT

RICHMOND INNER HARBOR DREDGING PLAN
STA 38+50 TO STA 91+50

SHEET ID
C102
05 OF 08

SOLICITATION

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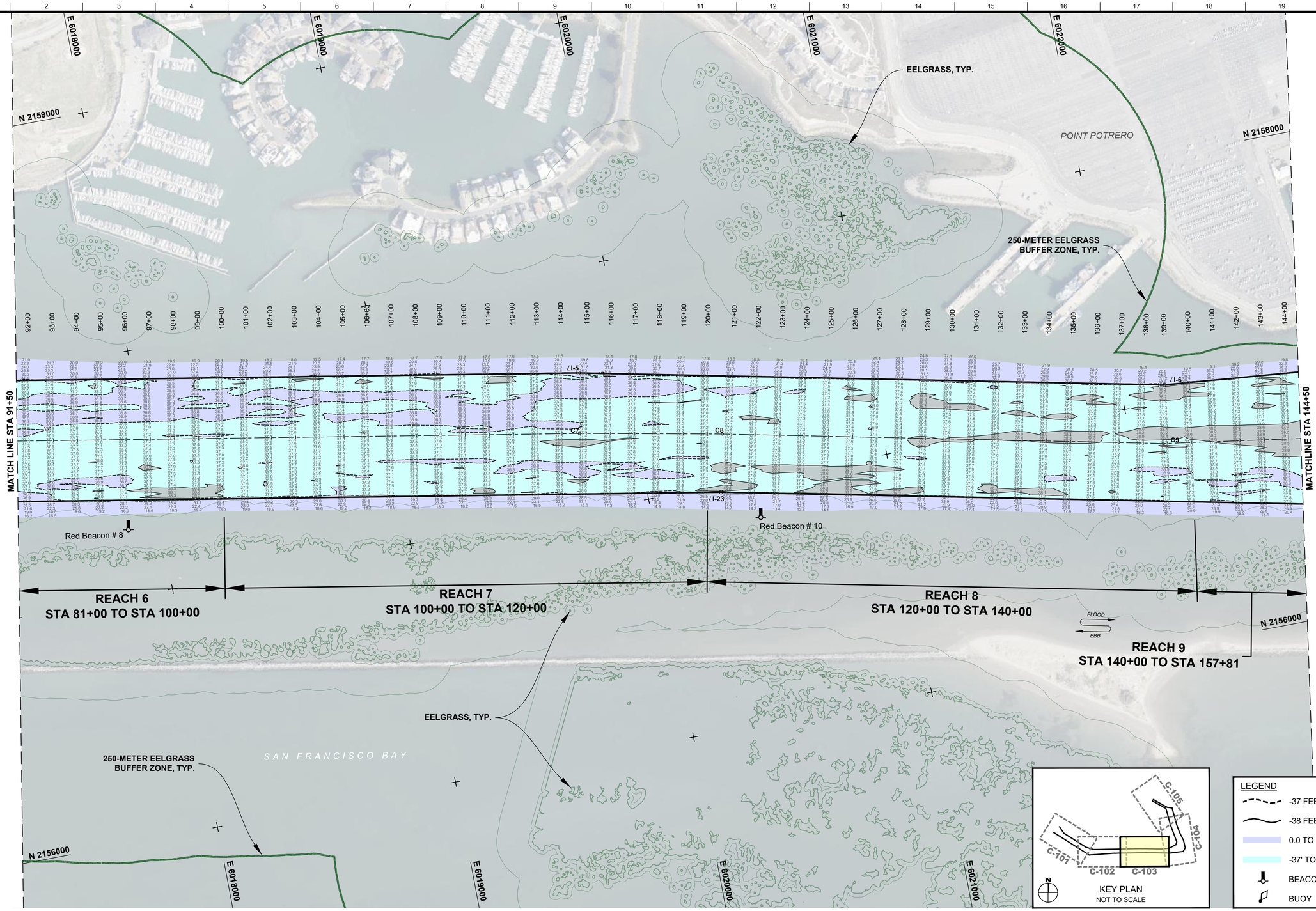

A1 RICHMOND INNER HARBOR DREDGING PLAN - STA 91+50 TO STA 144+50

SCALE: 1" = 200'

0 200' 400'

US Army Corps of Engineers®

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DESIGNED BY: F. SUN
DRAWN BY: L. KWONG
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RICHMOND INNER HARBOR DREDGING PLAN
STA 91+50 TO STA 144+50

SHEET ID
C103
06 OF 08

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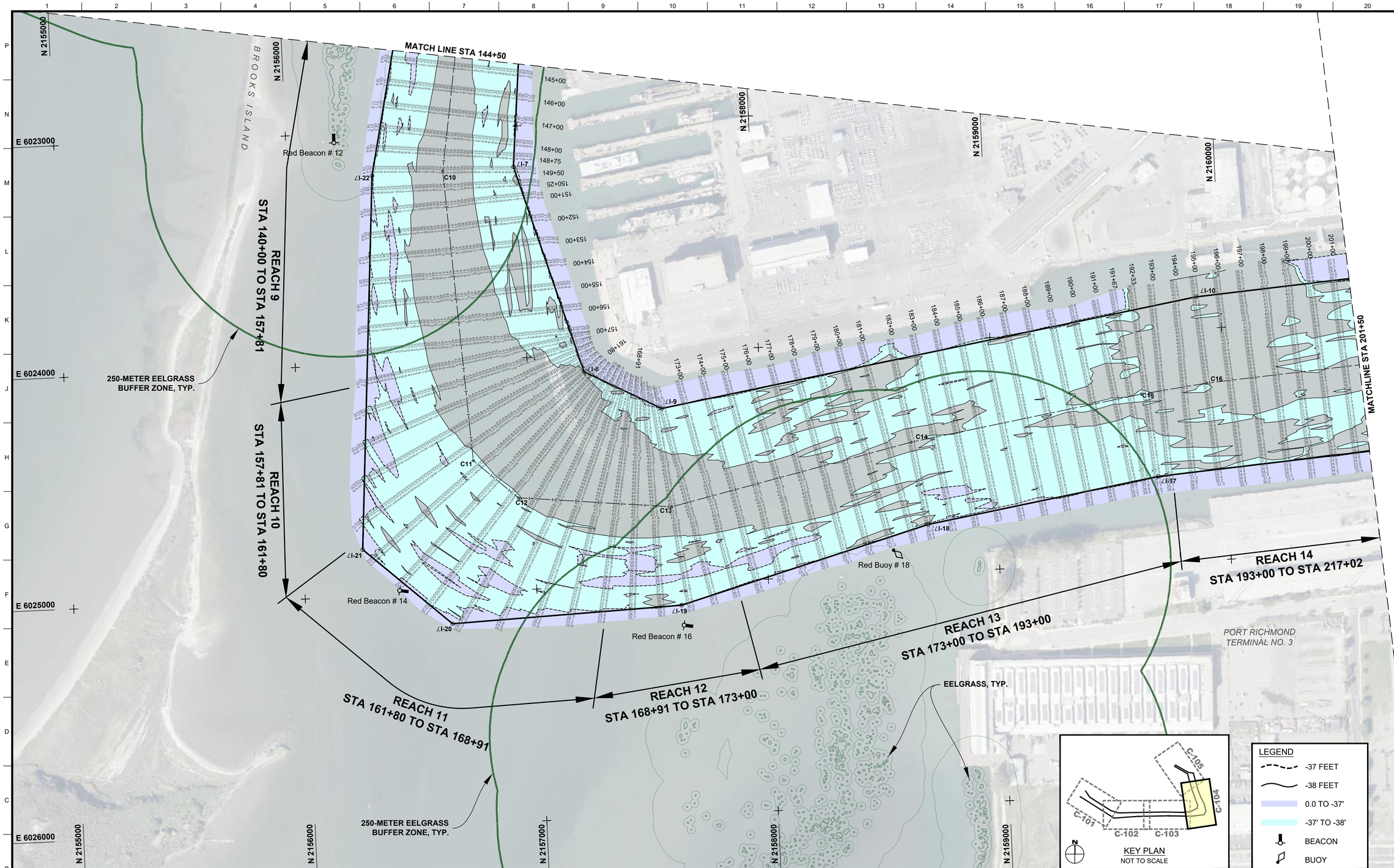

A1 RICHMOND INNER HARBOR DREDGING PLAN - STA 144+50 TO STA 202+00

SCALE: 1" = 200'

0 200' 400'

US Army Corps of Engineers®

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U.S. ARMY CORPS OF ENGINEERS
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SAN FRANCISCO, CA 94102-3404

CONTRA COSTA COUNTY, CALIFORNIA
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RICHMOND INNER HARBOR DREDGING PLAN
STA 144+50 TO STA 201+50

SHEET ID
C104
07 OF 08

SOLICITATION

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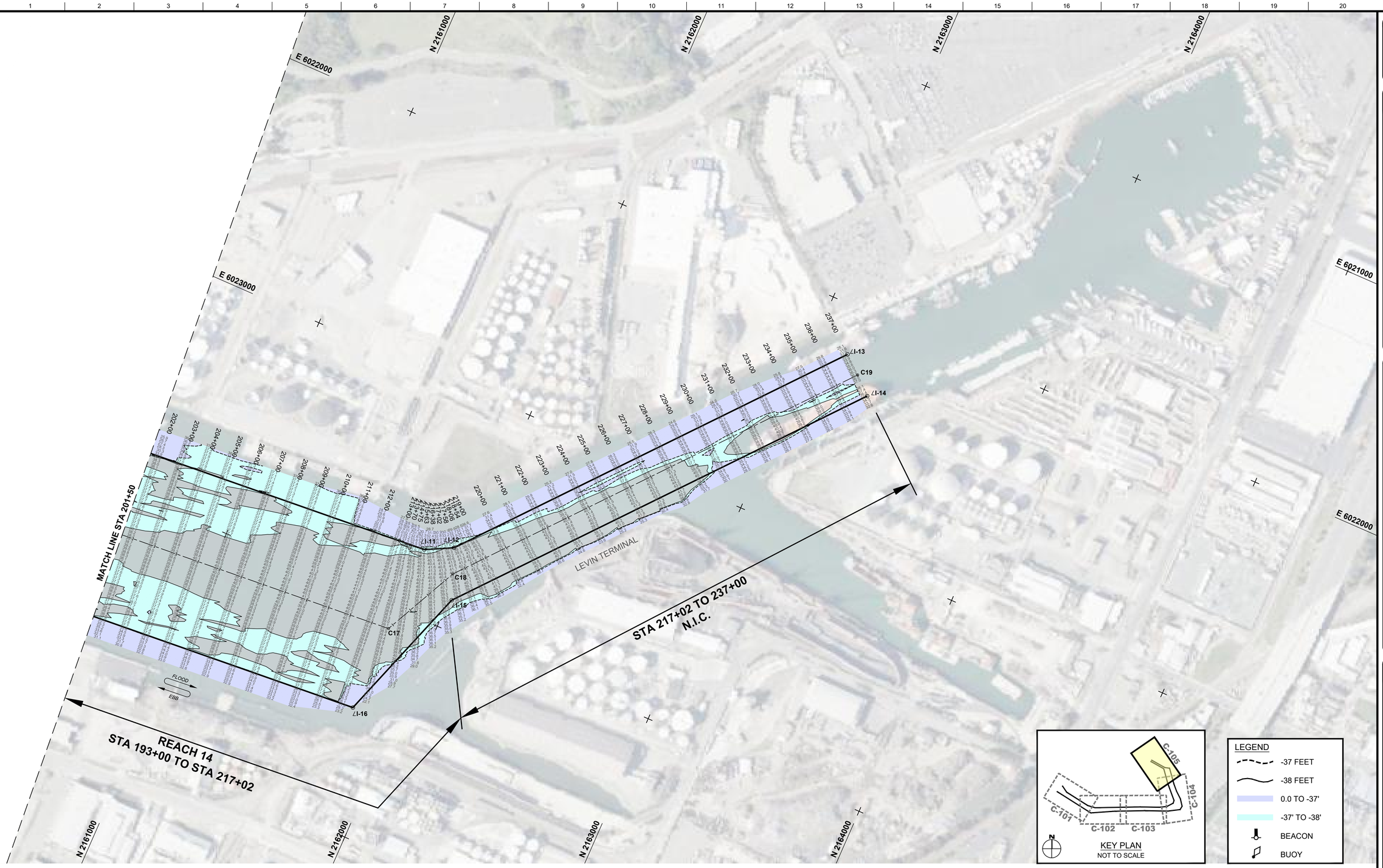

A1 RICHMOND INNER HARBOR DREDGING PLAN - STA 201+50 TO STA 237+00

SCALE: 1" = 200'

0 200' 400'

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RICHMOND INNER HARBOR DREDGING PLAN
STA 201+50 TO STA 237+00

SHEET ID
C105
08 OF 08

SOLICITATION

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