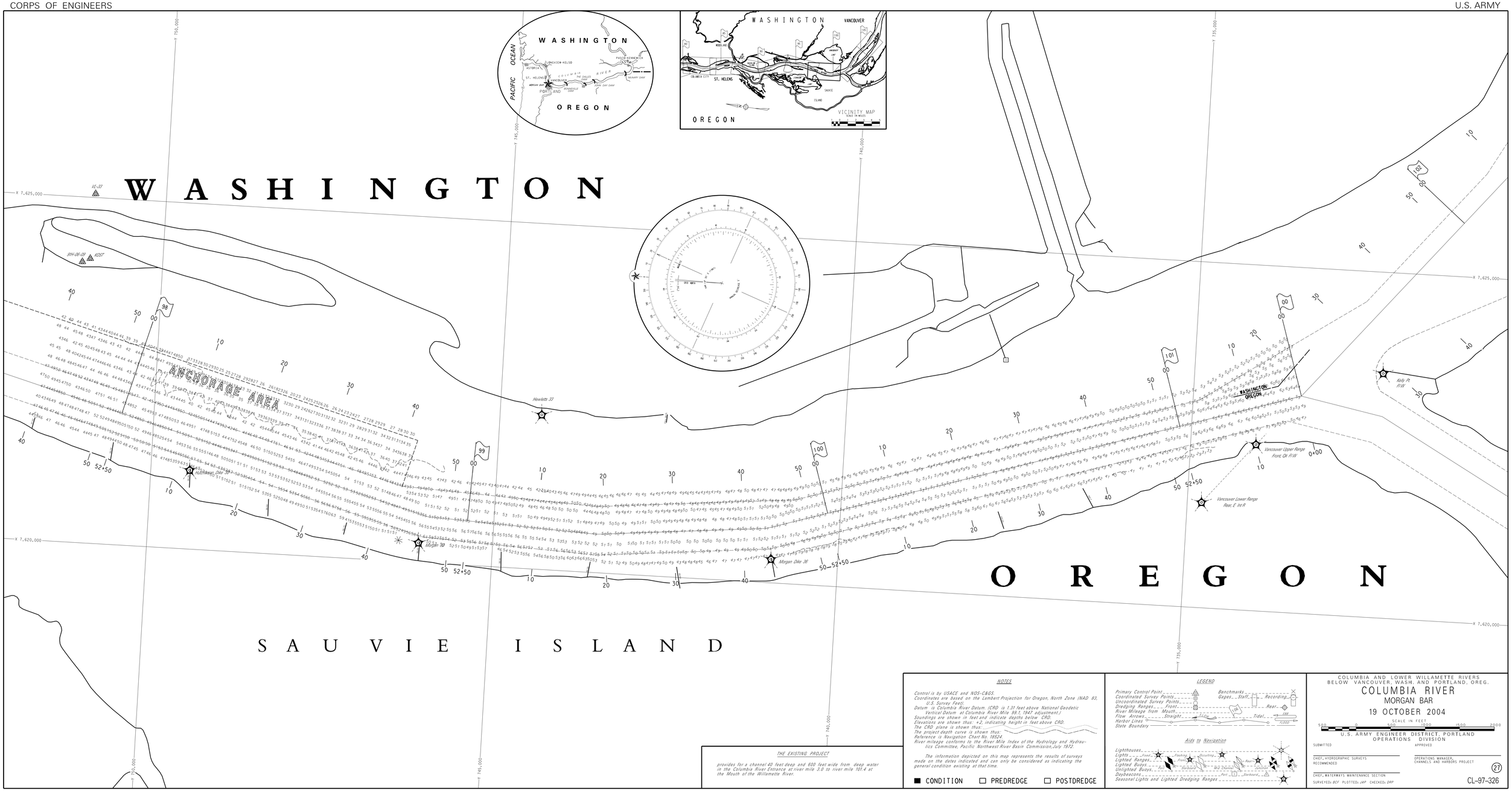

NOTES

Control is by USACE and NOS-C&GS.
Coordinates are based on the Lambert Projection for Oregon, North Zone (NAD 83, U.S. Survey Feet).
Datum is Columbia River Datum. (CRD is 1.31 feet above National Geodetic Vertical Datum at Columbia River Mile 38.1, 1947 adjustment.)
Soundings are shown in feet and indicate depths below CRD.
Elevations are shown thus: +2, indicating height in feet above CRD.
The CRD plane is shown thus:
The project depth curve is shown thus:
Reference is Navigation Chart No. 18524.
River mileage conforms to the River Mile Index of the Hydrology and Hydraulics Committee, Pacific Northwest River Basin Commission, July 1972.

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 condition existing at that time.

■ CONDITION ☐ PREDREDGE ☐ POSTDREDGE

THE EXISTING PROJECT

provides for a channel 40 feet deep and 600 feet wide from deep water in the Columbia River Entrance at river mile 3.0 to river mile 101.4 at the Mouth of the Willamette River.

LEGEND

Primary Control Point
Coordinated Survey Points
Uncoordinated Survey Points
Dredging Ranges ..... Front
River Mileage from Mouth
Flow Arrows ..... Straight
Harbor Lines
State Boundary

Benchmarks
Gages ..... Staff ..... Recording
Rear
Tidal
Int
FLOOD

Aids to Navigation

Lighthouses
Lights ..... Fixed ..... Flashing ..... Occulting
Lighted Ranges
Lighted Buoys ..... Red ..... Nun ..... Bell ..... Gong ..... Can ..... Spar ..... Spherical ..... Spindle ..... Pillar ..... Pole ..... Barrel ..... Conical
Unlighted Buoys
Daybeacons ..... Port ..... Starboard
Seasonal Lights and Lighted Dredging Ranges

COLUMBIA AND LOWER WILLAMETTE RIVERS
BELOW VANCOUVER, WASH. AND PORTLAND, OREG.

COLUMBIA RIVER

MORGAN BAR

19 OCTOBER 2004

SCALE IN FEET
500 0 500 1000 1500 2000

U.S. ARMY ENGINEER DISTRICT, PORTLAND
OPERATIONS DIVISION

SUBMITTED
CHIEF, HYDROGRAPHIC SURVEYS
RECOMMENDED
CHIEF, WATERWAYS MAINTENANCE SECTION

APPROVED
OPERATIONS MANAGER,
CHANNELS AND HARBORS PROJECT

SURVEYED: BCF PLOTTED: JAP CHECKED: DRP

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CL-97-326