

CENPS-OP-DMMO

MEMORANDUM FOR RECORD

9 February 1993

SUBJECT: DETERMINATION ON THE SUITABILITY OF DREDGED MATERIAL TESTED FOR THE REVISED METRO EMERGENCY BYPASS OUTFALL PROJECT, ELLIOTT BAY (COE Appl. No. 92-2-00530) FOR DISPOSAL AT THE ELLIOTT BAY PSDDA SITE.

8,100
1. The following summary reflects the consensus determination of the PSDDA Agencies' (U.S. Army Corps of Engineers, Department of Ecology, Department of Natural Resources, and the Environmental Protection Agency) with jurisdiction on dredging and disposal on the suitability of the estimated ~~7,100~~ 8,100 cubic yards of material proposed for dredging from the Emergency Bypass Outfall for disposal at the Elliott Bay nondispersive site. The determination of suitability is based on the acceptability of the sampling conducted on June 25, 1992 and all relevant test data contained in September 11, 1992 Data Summary Report from METRO.

2. The Agencies' approved sampling and testing plan was followed, and quality assurance/quality control guidelines specified by PSEP and the PSDDA program were generally complied with. The data gathered were deemed sufficient and acceptable for decision making by the Agencies based on best professional judgement.

3. The area ranking for this project was Low-moderate based on PSDDA agency reranking considerations documented in the 1991 Dredged Material Evaluation Application Report. Sampling consisted of compositing material from three boring locations for a single composited surface and a single subsurface analysis. The results of these analyses showed that virtually all LPAH and HPAH were quantitated above PSDDA screening levels in both Dredged Material Management Units (DMMU). Pyrene was found to be elevated above the PSDDA maximum level (18 percent greater than ML) in the composited surface analysis, whereas three chemicals, naphthalene, phenanthrene, and Total LPAH were quantitated above ML in the composited subsurface analysis (Table 1). No other chemicals were elevated above SL. Given these chemical testing results, the surface DMMU must undergo biological testing to render a suitability determination. Under PSDDA guidelines, when two or more chemicals of concern exceed maximum level guidelines the dredged material management unit is considered unsuitable for unconfined open-water disposal unless acute biological testing and special biological testing (chronic-sublethal testing) under the "dredgers option" are accomplished. At the present time the "dredgers option" has not been determined, and the subsurface DMMU is therefore considered unsuitable for unconfined open-water disposal.

4. METRO responded in the September 11, 1992 data summary report that they wanted to resample and test uncomposited samples in an attempt to determine the location of the high PAH's observed in the two composited analyses. The data summary report outlined the resampling effort proposed. PSDDA agencies reviewed the proposed resampling effort and responded back in a letter dated September 28, 1992 (enclosure 1) with conditional approval subject to making changes requested by the agencies. METRO evaluated the PSDDA agency recommendations and elected not to proceed with the resampling/retesting effort in a letter dated 19 January 1993 (enclosure 2).

5. No followup biological testing was accomplished to evaluate the surface DMMU (C1) or subsurface DMMU (C2). The applicant elected not to subject the surface DMMU to biological testing to render a suitability determination.

Table 1. Chemicals quantitated above PSDDA screening level.

CHEMICAL (ug/kg-dry wgt)	PSDDA SL	PSDDA BT	PSDDA ML	C-1 (M-UPR)	C-2 (M-LWR)
Acenaphthalene	64		640	370	220
Acenaphthene	63		630		670
Anthracene	130		1,300	1,100	1,000
Fluorene	64		640	160	500
Naphthalene	210		2,100	150	2,200
Phenanthrene	320		3,200	970	3,800
2-Methylnaphthalene	67		670	75	480
Total LPAH	610		6,100	2,871	8,870
Benzo(a)anthracene	450		4,500	2,800	1,800
Benzo(a)pyrene	680	4,964	6,800	3,000	2,500
Benzo(bk)fluoranthene	800		8,000	3,300	2,580
Benzo(ghi)perylene	540		5,400	1,700	1,900
Chrysene	670		6,700	2,900	2,200
Dibenzo(a,h)anthracene	120		5,400	640	430
Fluoranthene	630	4,600	6,300	4,400	3,800
Indeno(1,2,3-cd)pyrene	69		5,200	1,700	1,900
Pyrene	430		7,300	8,600	6,200
Total HPAH	1,800		51,000	29,040	23,310

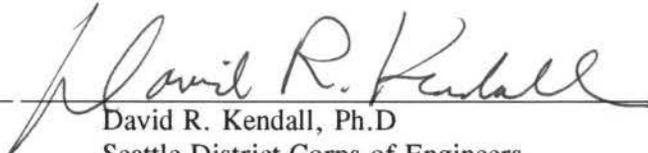
6. The Agencies concluded based on the above discussion and summary of sediment chemical characterization results for the METRO Emergency Bypass Outfall Project, that all the material tested (~~7,100~~ ^{8,100} cubic yards) is unsuitable for disposal at a PSDDA open-water disposal site.

7. This memorandum documents the suitability of proposed dredged sediments for unconfined open-water disposal at the Elliott Bay site. It does not constitute final agency approval of the project. A public notice will be issued for this project. During the public comment period, which follows a public notice, the resource agencies will provide input on the overall project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under Section 404 (b)(1) of the Clean Water Act.

Concur:

11 Feb 1993

Date


David R. Kendall, Ph.D
Seattle District Corps of Engineers

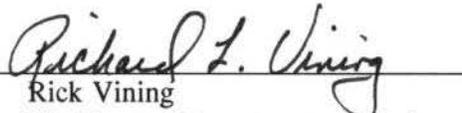
11 February 1993

Date


Justine Smith/John Malek
Environmental Protection Agency
Region X

19 Feb. 1993

Date


Rick Vining
Washington Department of Ecology

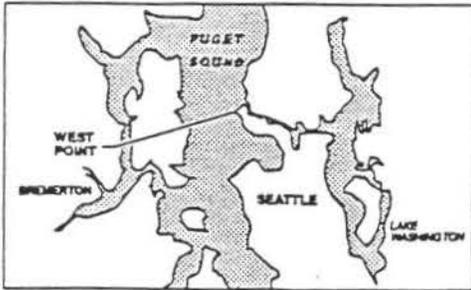
23 February 1993

Date


Gene Revelas
Washington Department of Natural Resources

Copies Furnished:

Jonathan Freedman, Corps
Justine Smith/John Malek, EPA
Rick Vining, Ecology
Gene Revelas, DNR
DMMO File



WEST POINT
SEWAGE TREATMENT PLANT
Latitude 47° 39' 44"
Longitude 122° 23' 15"

P U G E T
S O U N D

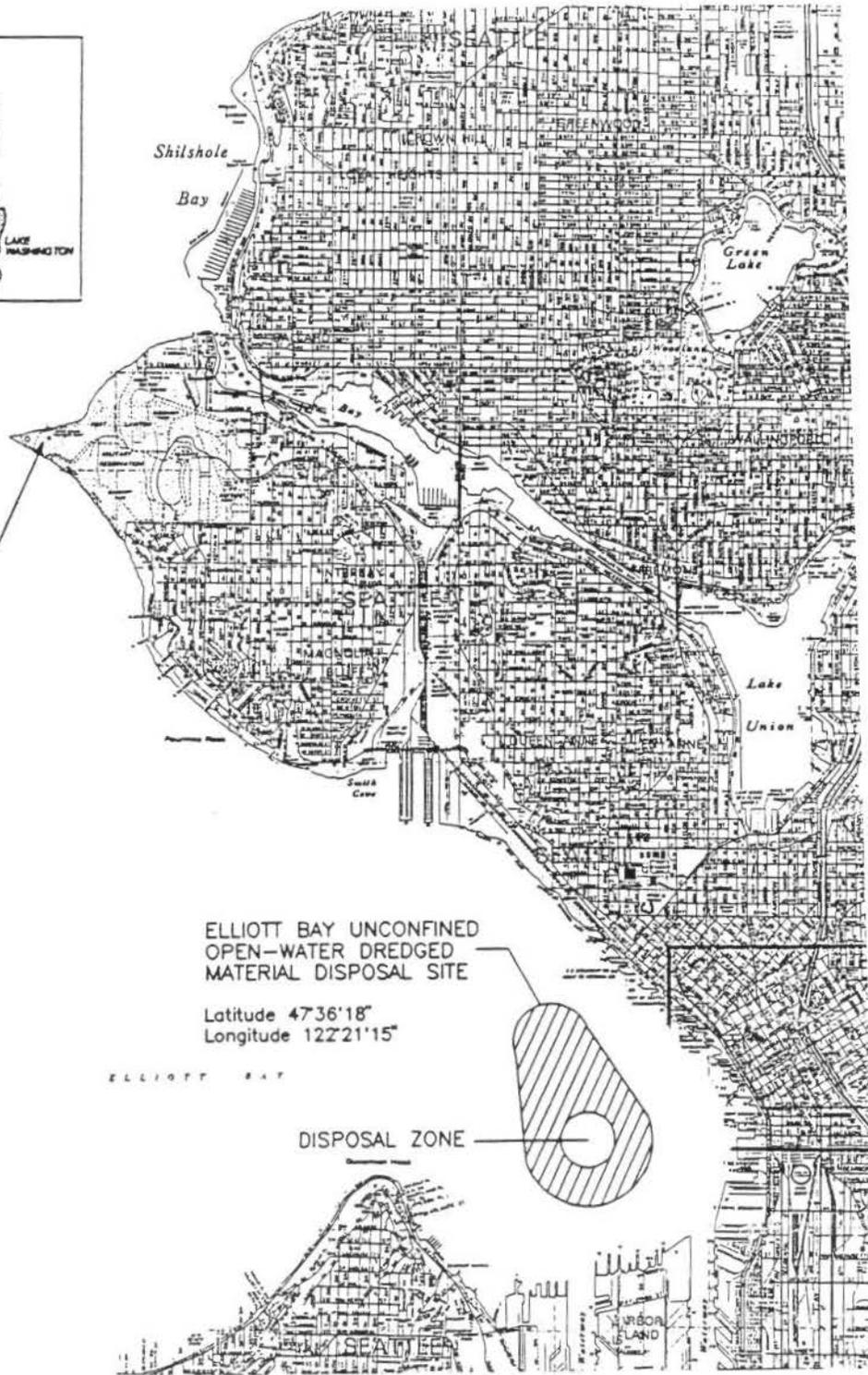
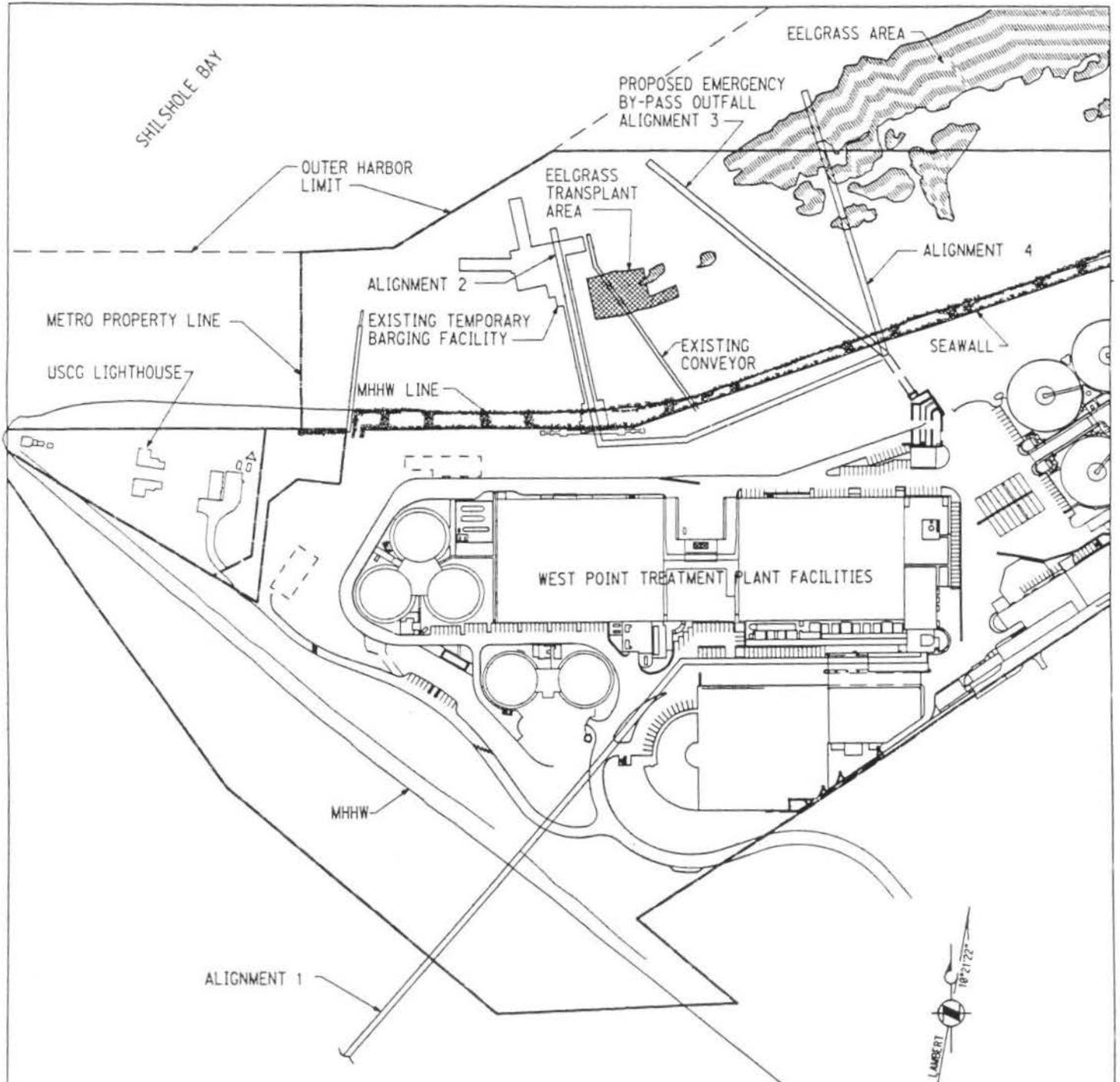


FIGURE 1
SITE LOCATION



NOTE:

CONSTRUCTION SHOULD NOT DIRECTLY IMPACT EELGRASS, ALTHOUGH ADJACENT EELGRASS BEDS WOULD BE AT RISK FROM SEDIMENT DISTURBANCE AND TURBIDITY. IN THE EVENT OF A LOSS OF A MEASURABLE AMOUNT OF EELGRASS DUE TO CONSTRUCTION, EELGRASS WOULD BE TRANSPLANTED.

FIGURE 2
EBO ALIGNMENT

WEST POINT TREATMENT PLANT 4/16/92

DWG REF:

CAD CONTROL DATE 01-04-89
54-MARINE PIPELINE, PERMIT.DGN - EGR

SHILSHOLE BAY

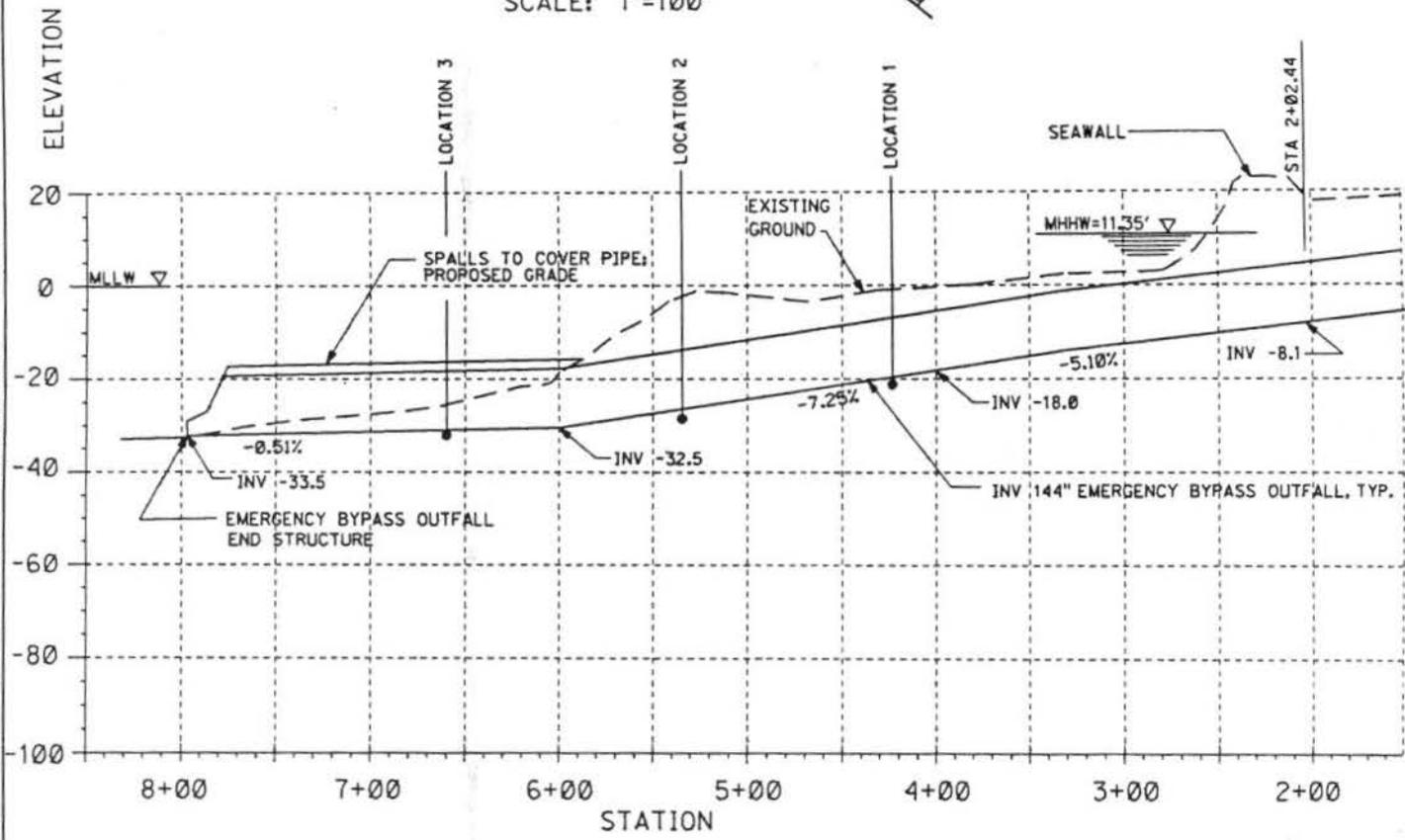
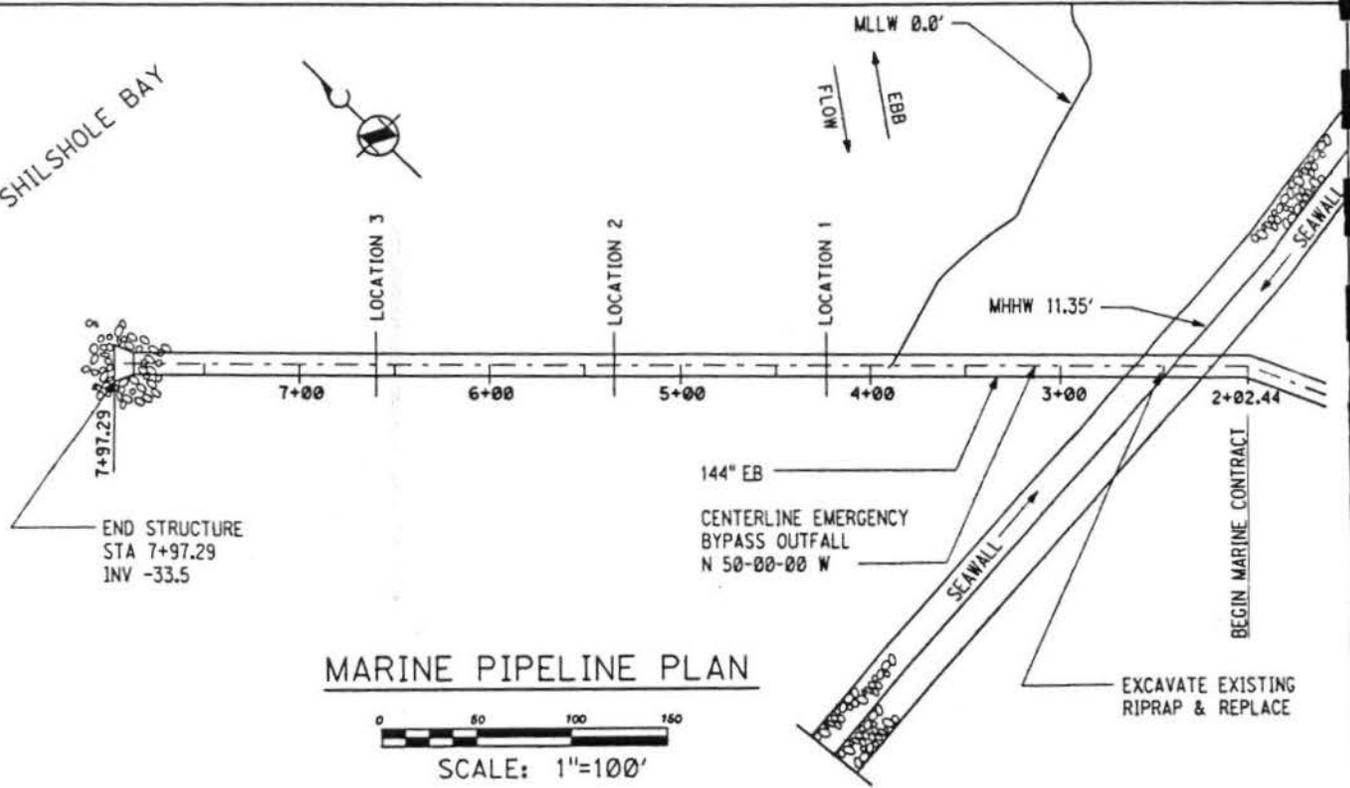


FIGURE 3
SAMPLE CORE LOCATIONS