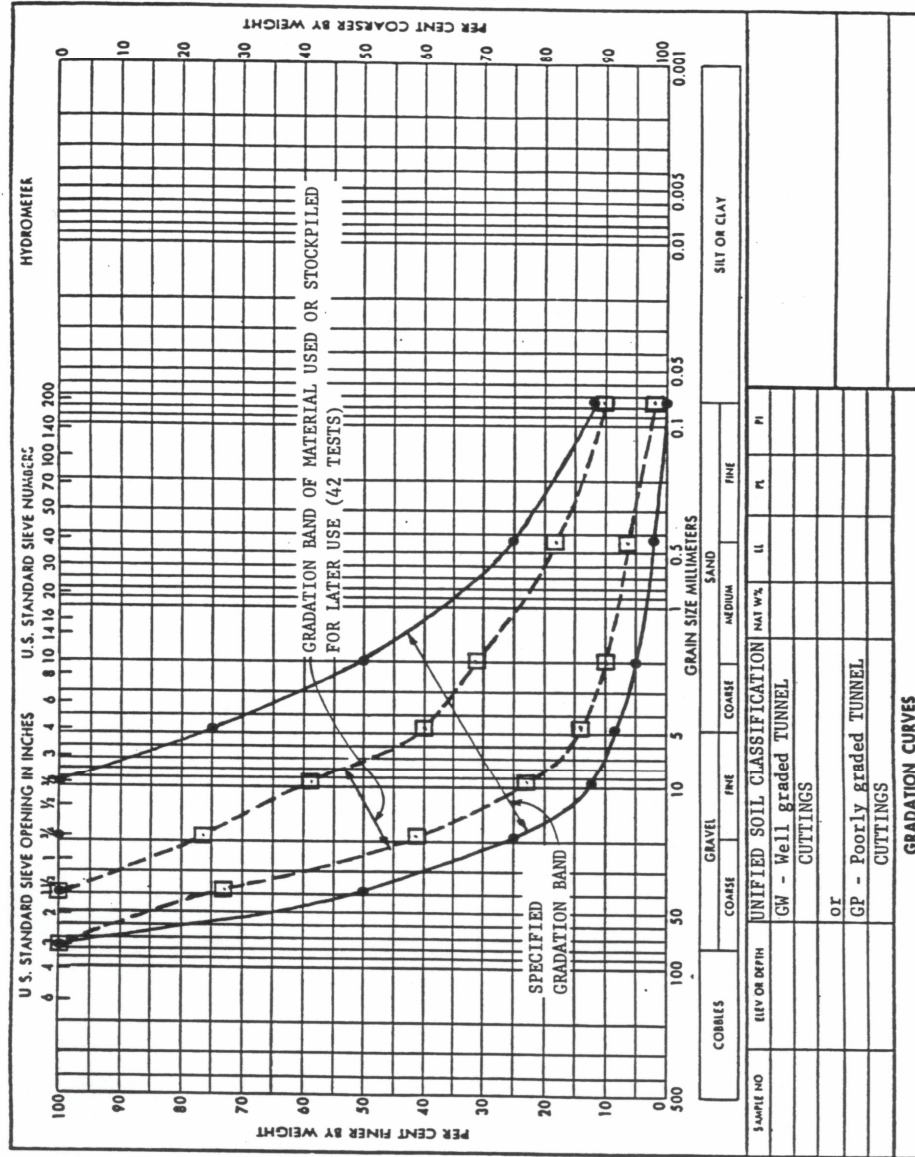


LEGEND	
●	Unconfined Compressive Strength after 7 days of curing
▲	Unconfined Compressive Strength after 28 days of curing
■	Unconfined Compressive Strength after 90 days of curing

NOTE:
Test results shown are typical for BACKFILL CONCRETE placed in various safety-related areas of the plant site during the period May 30, 1978 to October 30, 1980. Tests performed according to ASTM C39-71.

NOTE:
These test results pertain to BACKFILL CONCRETE placed around the outer walls of the following safety-related structures on the dates indicated:

Structure	Date of Pour
Waste Processing Bldg.	May 30, 31, 1978
	December 19, 1979
	October 30, 1980
Diesel Gen. Bldg., Unit 1	March 23, 27, 1979
	May 4, 8, 22, 23, 24, 29, 30, 1979
Fuel Storage Bldg., Unit 1	September 21, 25, 1979
	March 12, 1980
Primary Aux. Bldg., Unit 1	May 16, 18, 1979
Service Water Pumphouse	January 4, 1980
	July 14, 1980
Containment Bldg., Unit 1	June 4, 28, 1979
	July 3, 6, 1979
Control Bldg., Unit 1	March 8, 1979
	June 1, 1979



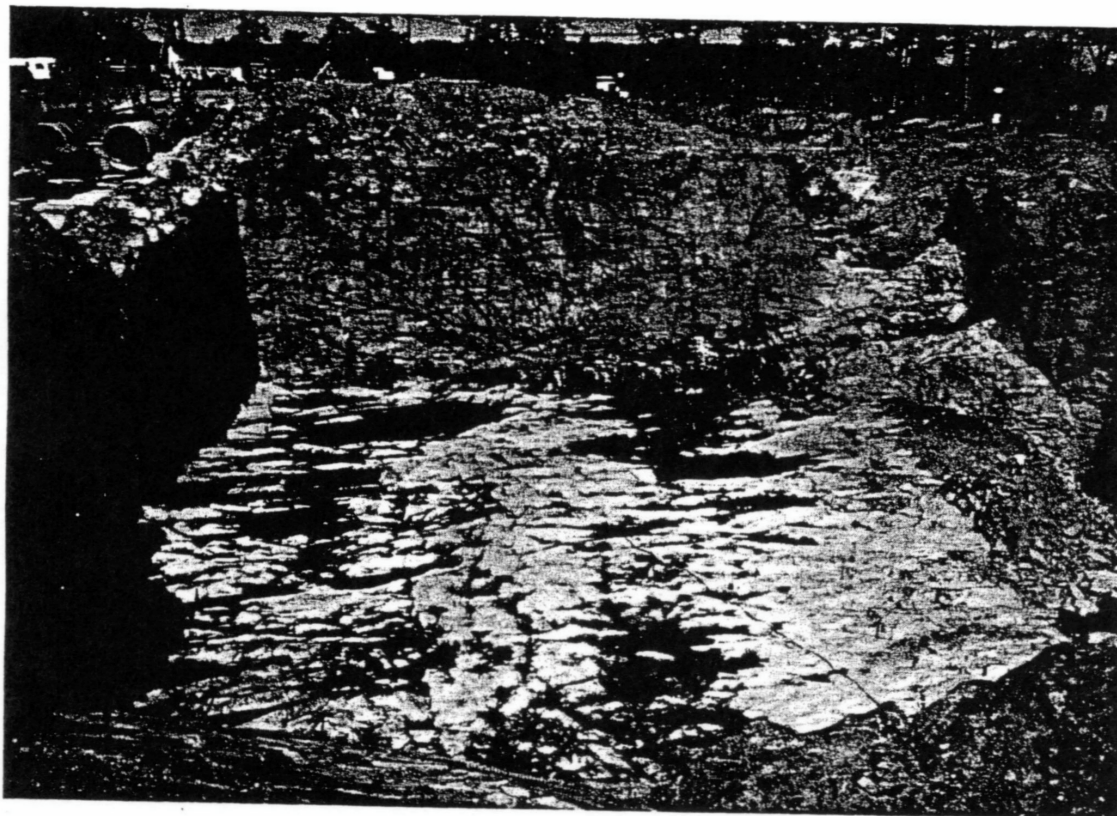
SEABROOK STATION
 UPDATED FINAL SAFETY
 ANALYSIS REPORT

Tunnel Cuttings

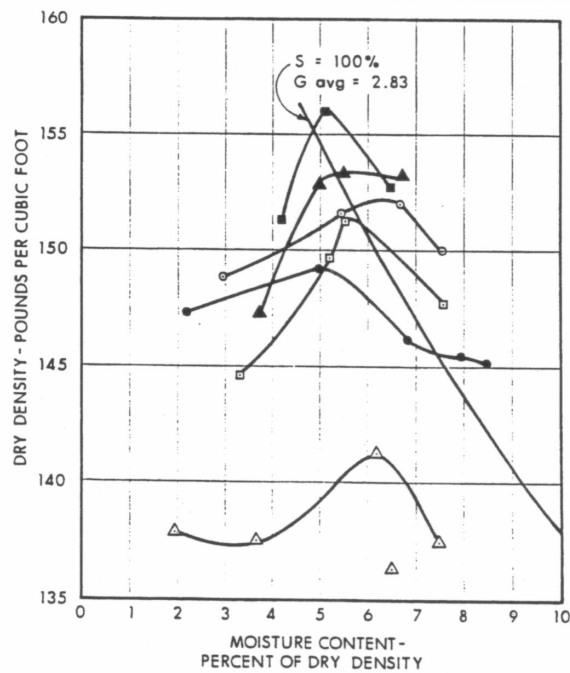
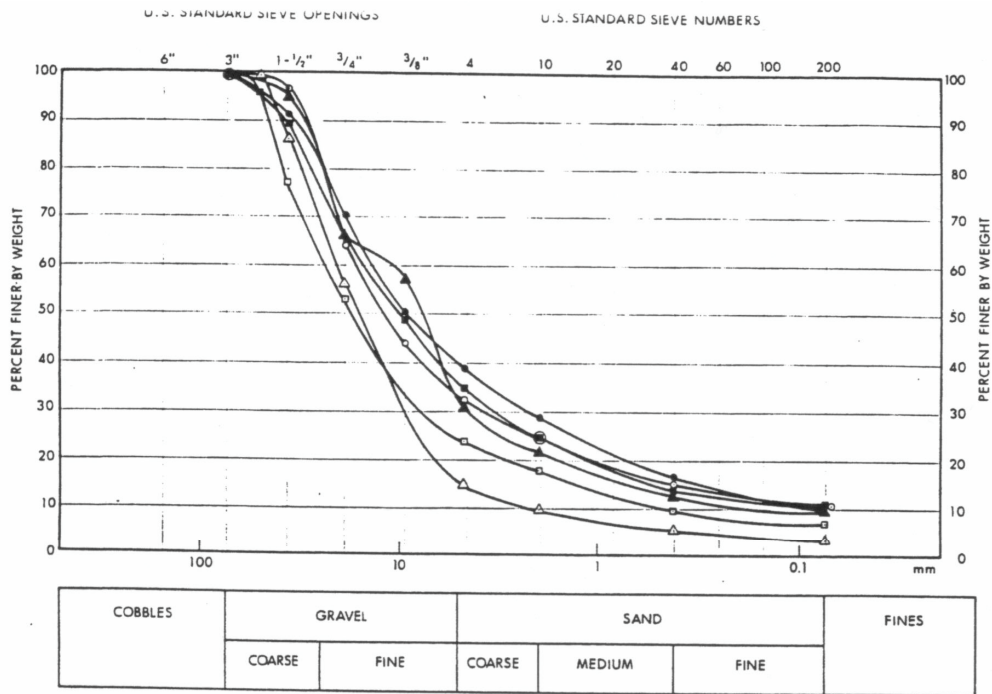
Figure 2.5-61



SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Overall View of Foundation Excavations, Looking East from Unit 2 toward Unit 1	
		Figure 2.5-62



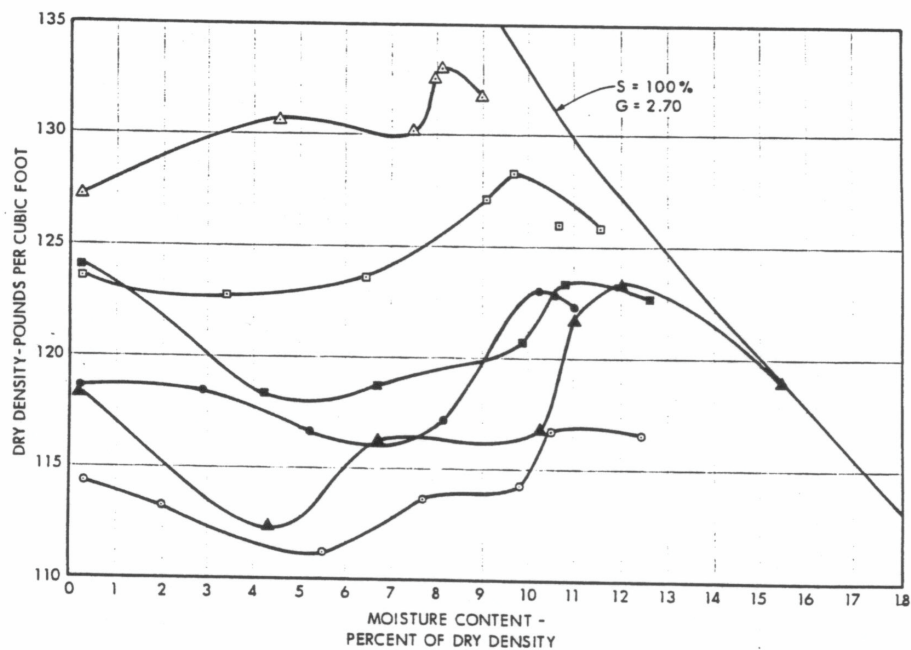
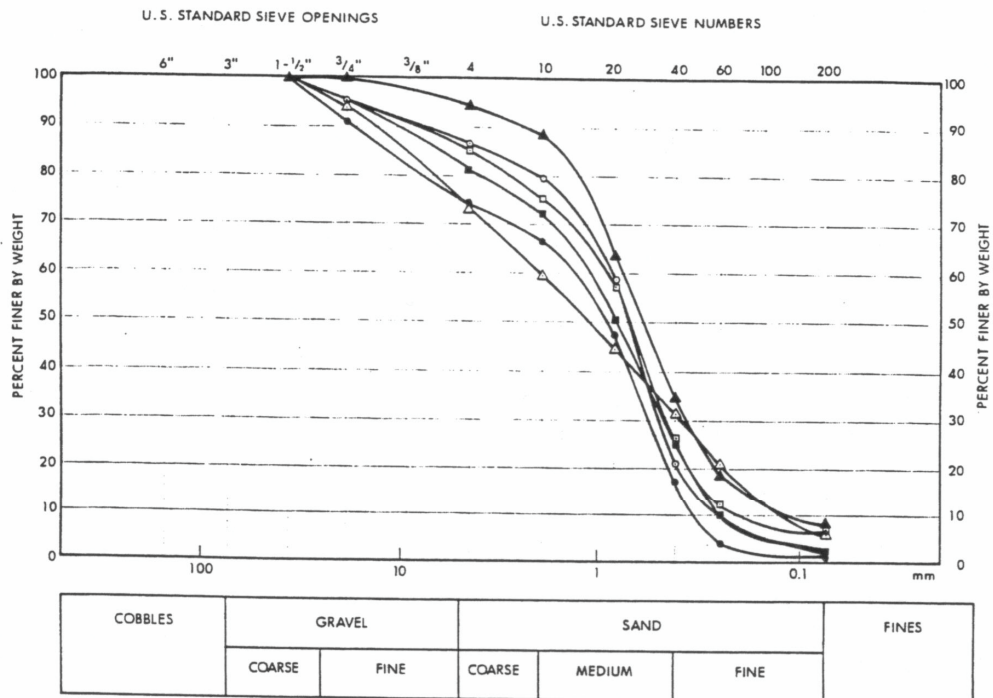
SEABROOK STATION UPDATED FINAL SAFETY ANALYSIS REPORT	Foundation Excavation for Service and Circulating Water Pumphouse Looking North	
		Figure 2.5-63



SEABROOK STATION
UPDATED FINAL SAFETY
ANALYSIS REPORT

Summary Plot of Compaction Curves for Tunnel Cuttings
(March to September 1979)

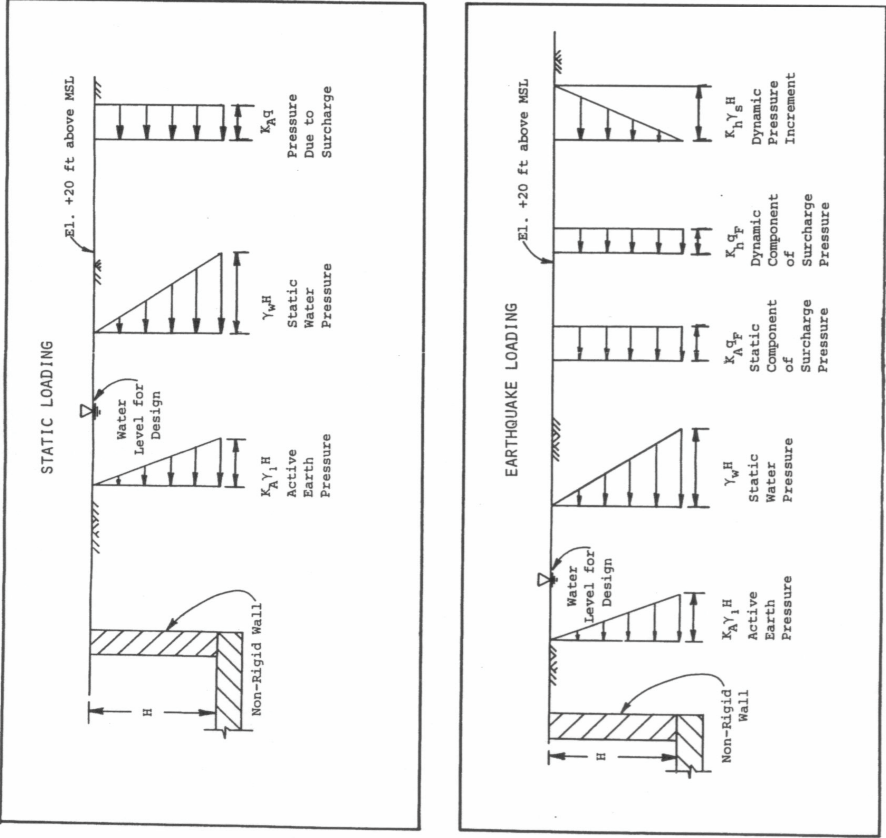
Figure 2.5-64



SEABROOK STATION
UPDATED FINAL SAFETY
ANALYSIS REPORT

Summary Plot of Compaction Curves for Offsite Borrow
(June to December 1979)

Figure 2.5-65

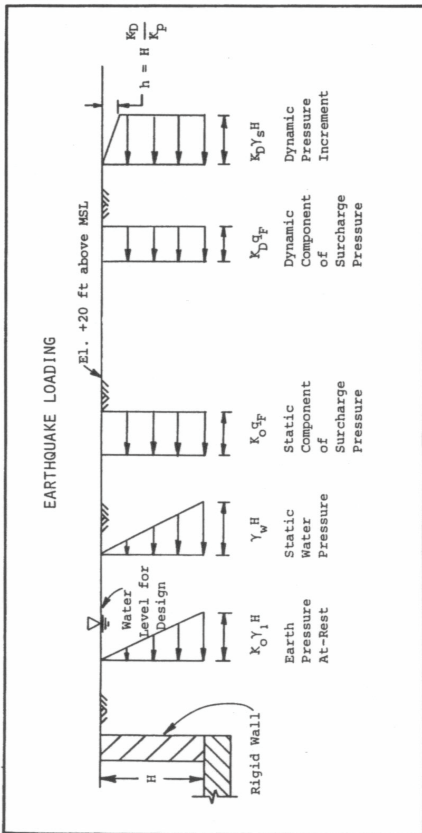
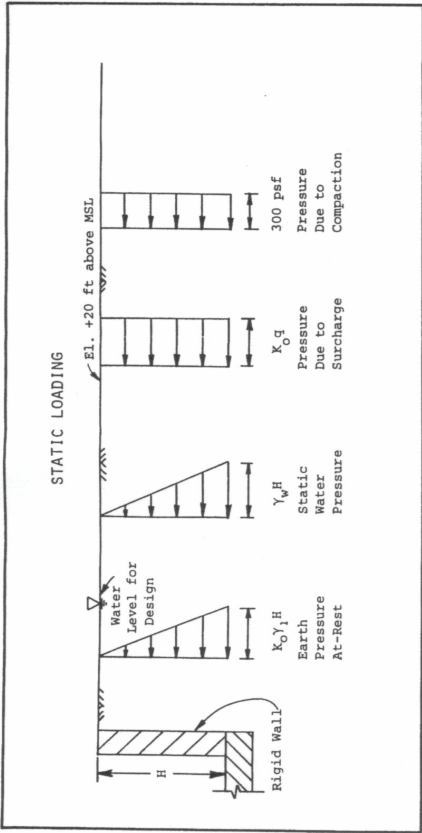


NOTATION

H = Depth of wall below grade, ft.
 γ_1 = Buoyant Unit Weight, use 62.5 pcf for
offsite borrow
 γ_s = Saturated Unit Weight, use 125 pcf
for offsite borrow
 γ_w = Unit Weight of water, use 62.5 pcf
q = Live Load Surcharge = 500 psf minimum
 q_F = Fixed or Permanent Surcharge, psf
(where applicable)
 K_A = Coefficient of Active Earth Pressure,
use $K_A = 0.30$
 K_h = Coefficient of Dynamic Earth Pressure,
use $K_h = 0.19$ for SSE
 $K_h = 0.10$ for OBE

NOTES

1. A non-rigid wall is defined as a retaining wall
which is not supported at the top by floors,
etc., and can deflect under earth pressure.
2. Finished plant grade is +20 ft MSL. Design
groundwater level is El. +20 ft MSL (refer to
Section 2.5.4.6).
3. See Fig. 2.5-53 for lateral loads on rigid walls.



NOTATION

H = Depth of wall below grade, ft.

γ_i = Buoyant Unit Weight, use 62.5 pcf for offsite borrow

γ_s = Saturated Unit Weight, use 125 pcf for offsite borrow

γ_w = Unit weight of water, use 62.5 pcf

q = Live Load Surcharge = 500 psf minimum

q_f = Fixed or Permanent Surcharge, psf (where applicable)

K_o = Coefficient of At-Rest Earth Pressure, use $K_o = 0.5$

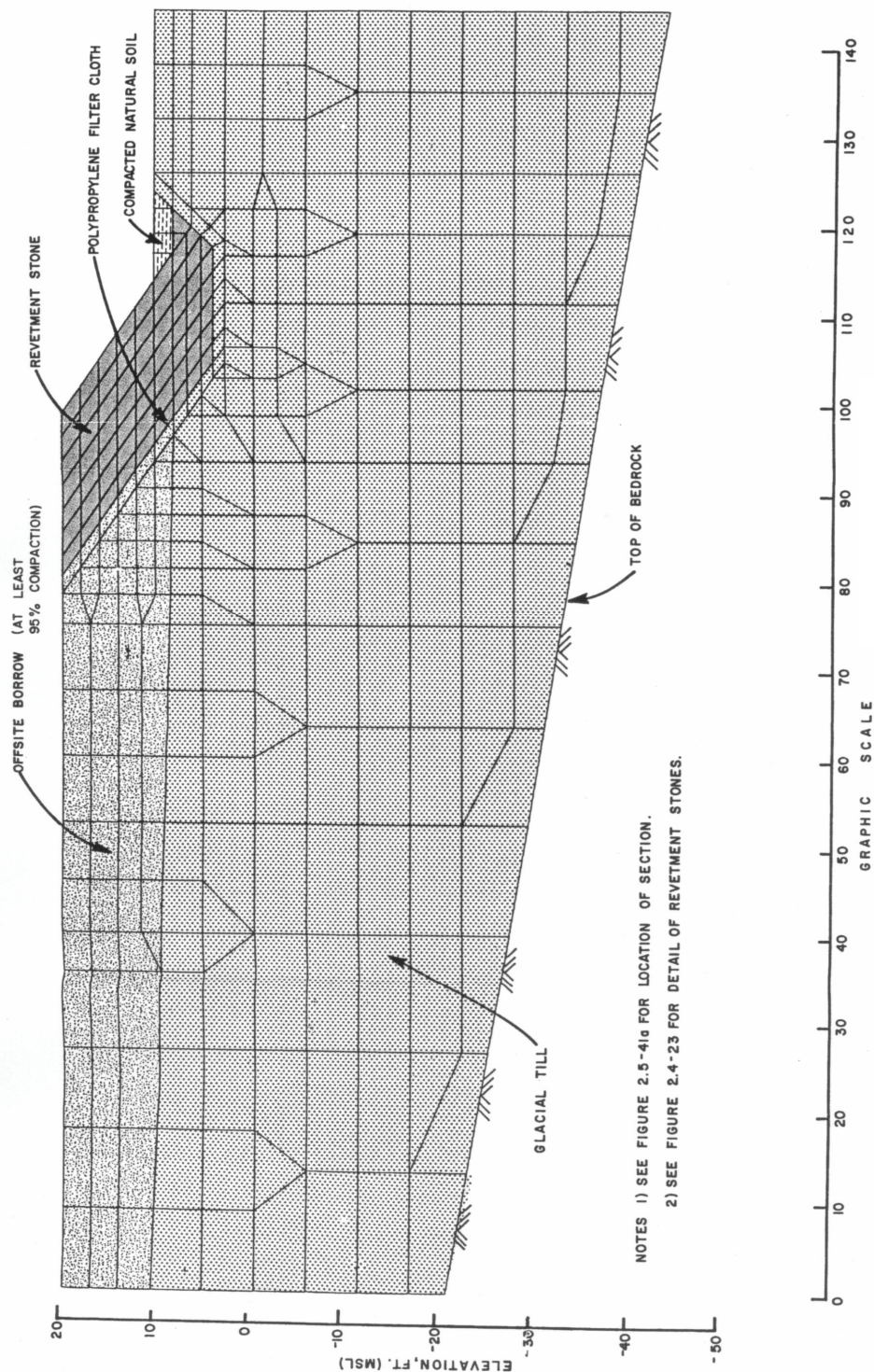
K_p = Coefficient of Passive Earth Pressure, use $K_p = 3.3$

K_D = Coefficient of Dynamic Earth Pressure, use $K_D = 0.28$ for SSE

K_D = 0.15 for OBE

NOTES

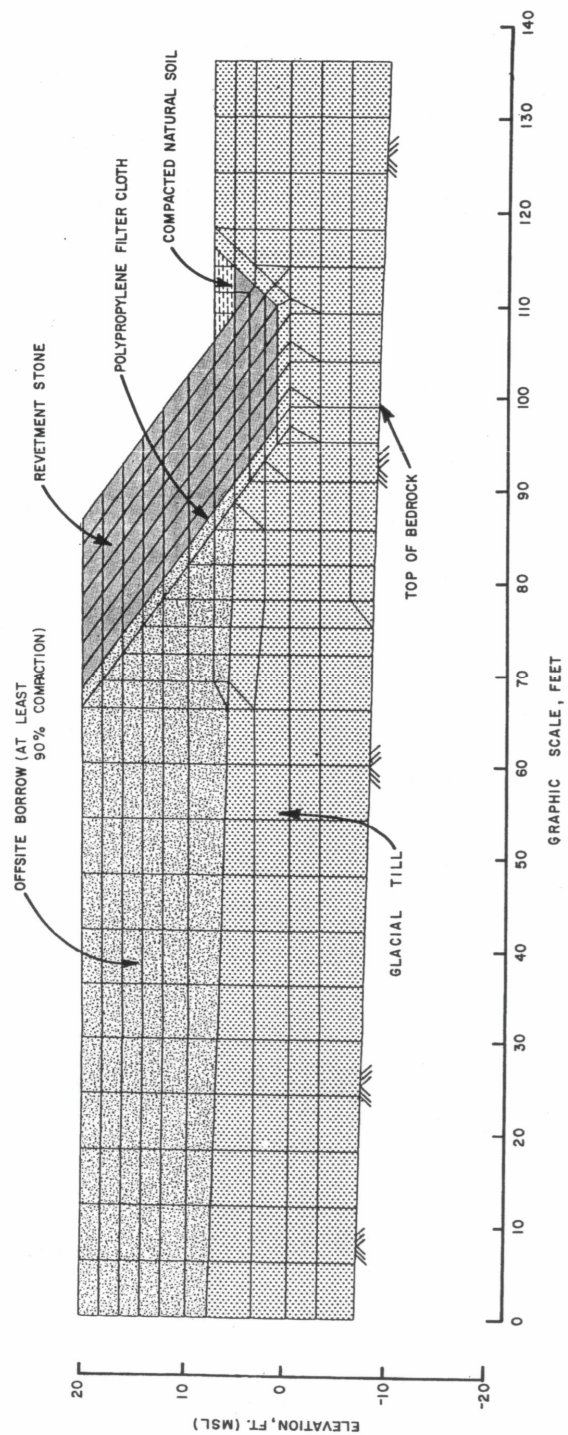
1. A rigid wall is defined as a foundation wall supported and effectively restrained by the floors, walls, etc., which cannot deflect under earth pressure.
2. Finished plant grade is +20 ft MSL. Design groundwater level is EL. +20 ft MSL (refer to Section 2.5.4.6).
3. See Fig. 2.5-52 for lateral loads on non-rigid walls.



SEABROOK STATION
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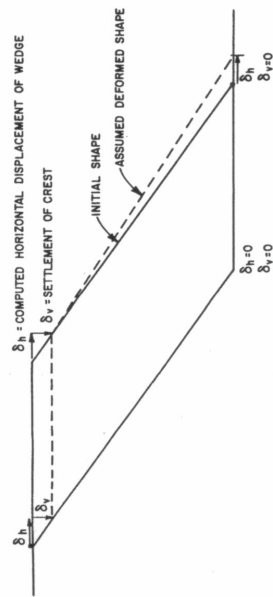
Soil Profile and Finite Mesh Revetment A – Deepest Soil
Deposit Cross Section Q-Q

Figure 2.5-68

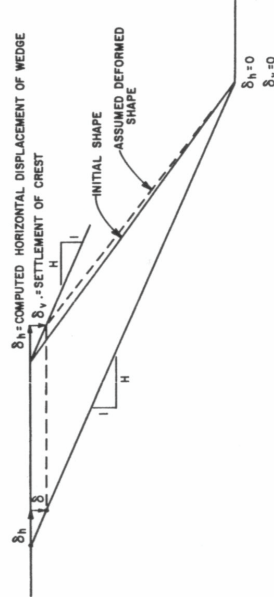


NOTES: 1) SEE FIGURE 2.5-41a FOR LOCATION OF SECTION.

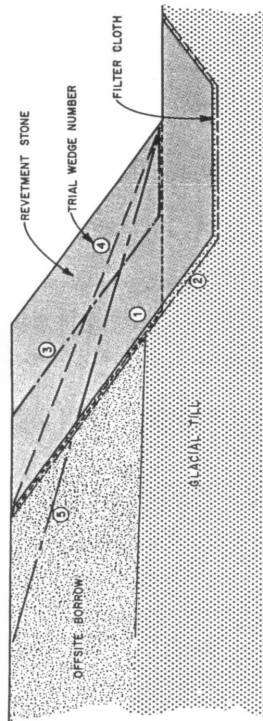
2) SEE FIGURE 2.4-43 FOR DETAILS OF RETVEMENT STONE.



SETTLEMENT FOR WEDGES 1 AND 3
(not to scale)

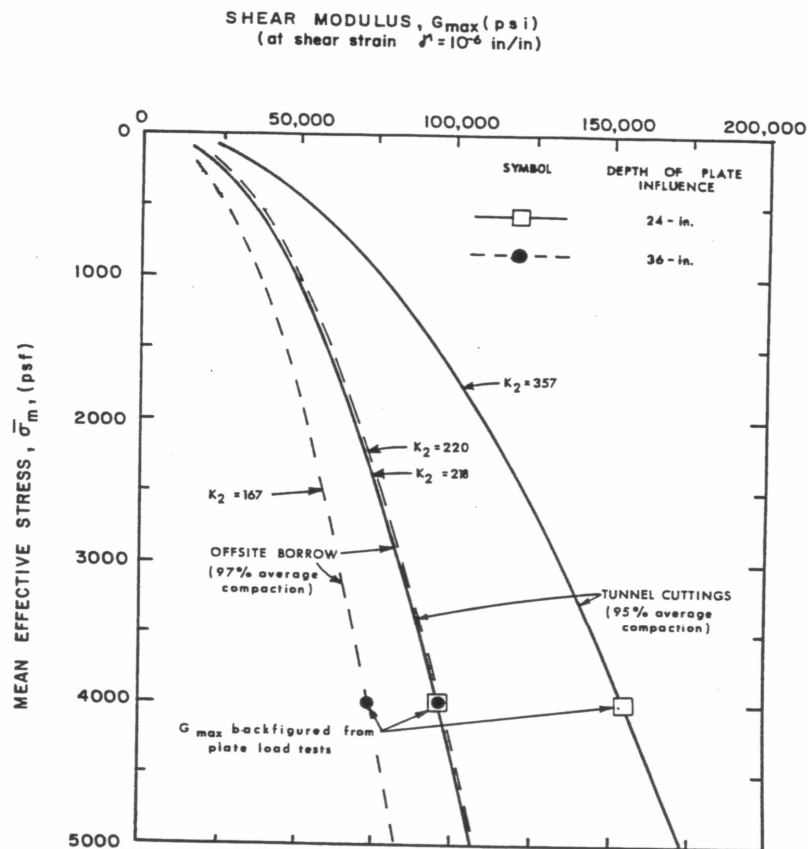


SETTLEMENT FOR WEDGE 4
(not to scale)



TRIAL DISPLACEMENT WEDGES
(not to scale)

- NOTES
- 1) See Figs. 2.5-54 and 2.5-55 for exact geometry of sections analyzed.
 - 2) See Fig. 2.4-23 for details of revetment stone.
 - 3) Displacements for Wedges 2 and 5 were significantly lower than for the other wedges. Therefore, settlements were not analyzed for these wedges.



- NOTES: 1. See FSAR text, Subsection 2.5.4.7 for description of method used to backfigure G_{max} from plate load tests.
2. Curves for G_{max} vs $\bar{\sigma}_m$ were generated from the plate load test data using the relationship $G_{2max} = G_{1max} \sqrt{\sigma_{2m} / \sigma_{1m}}$ with G_1 and σ_1 being the plate load test values.
3. Values of G for shear strain levels greater than 10^{-6} in./in. can be obtained using the average modulus reduction curve for sands presented in Seed and Idriss (1970).
4. Values of K_2 for use in the equation $G_{max} = 1000 K_2 (\bar{\sigma}_m)^{1/2}$ are shown next to each curve.