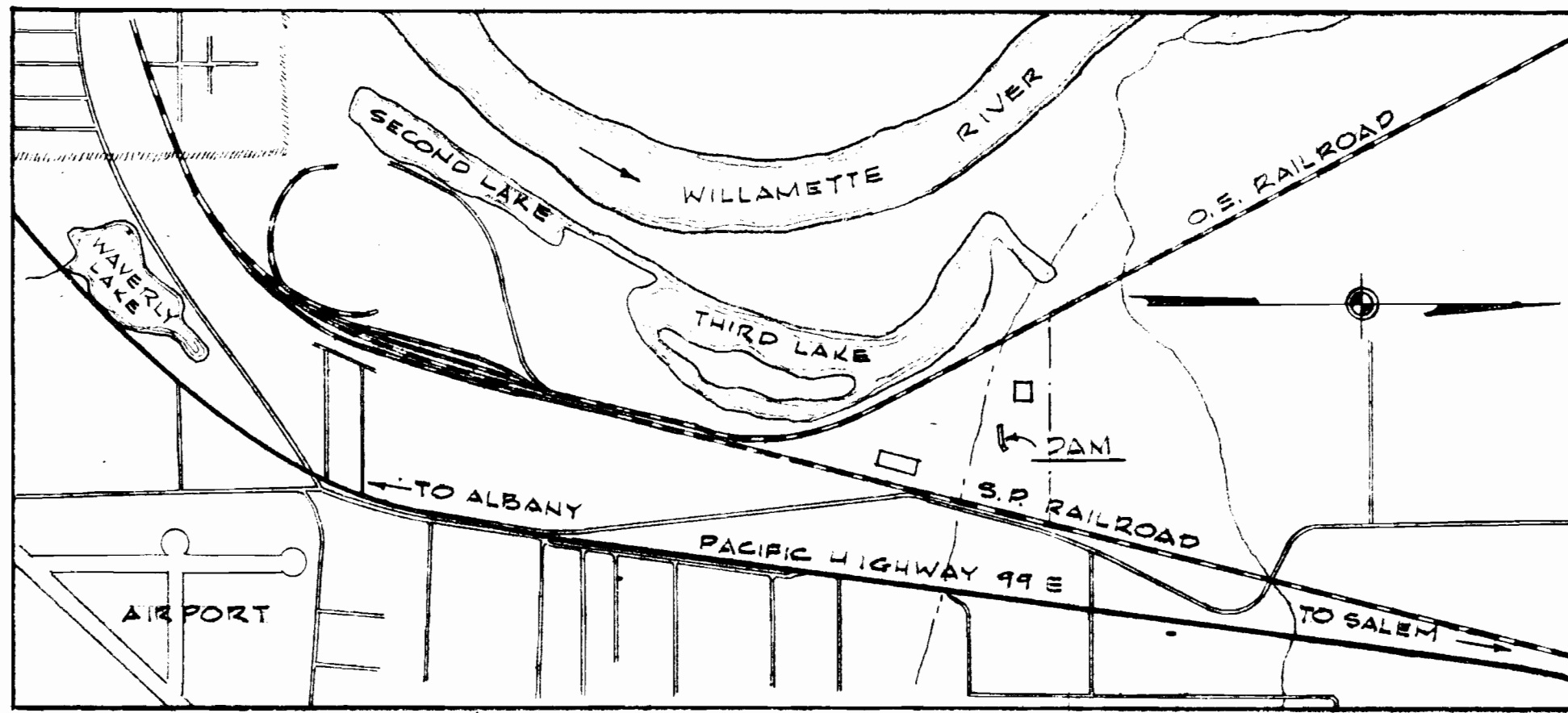
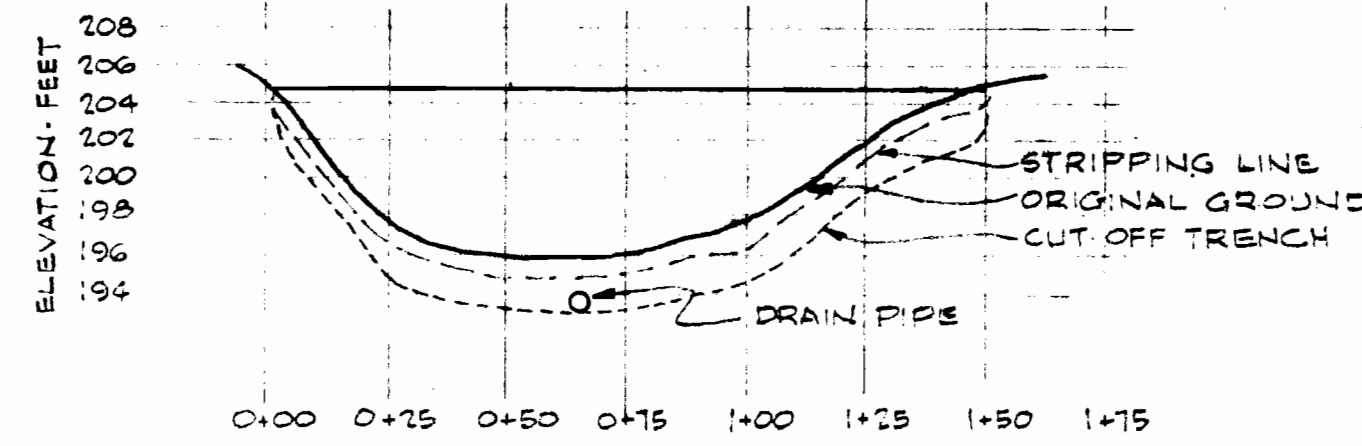
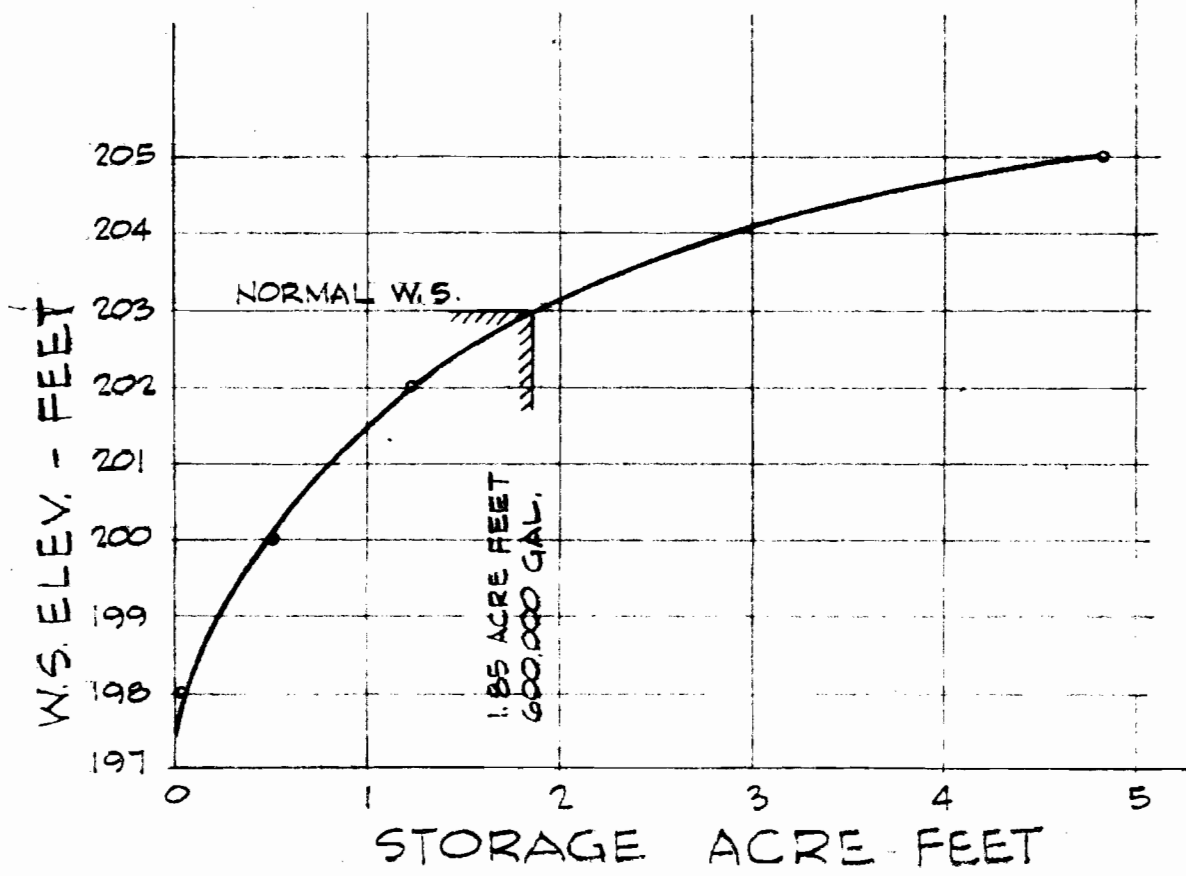


Instructions for construction of an earthen dike for impounding water.

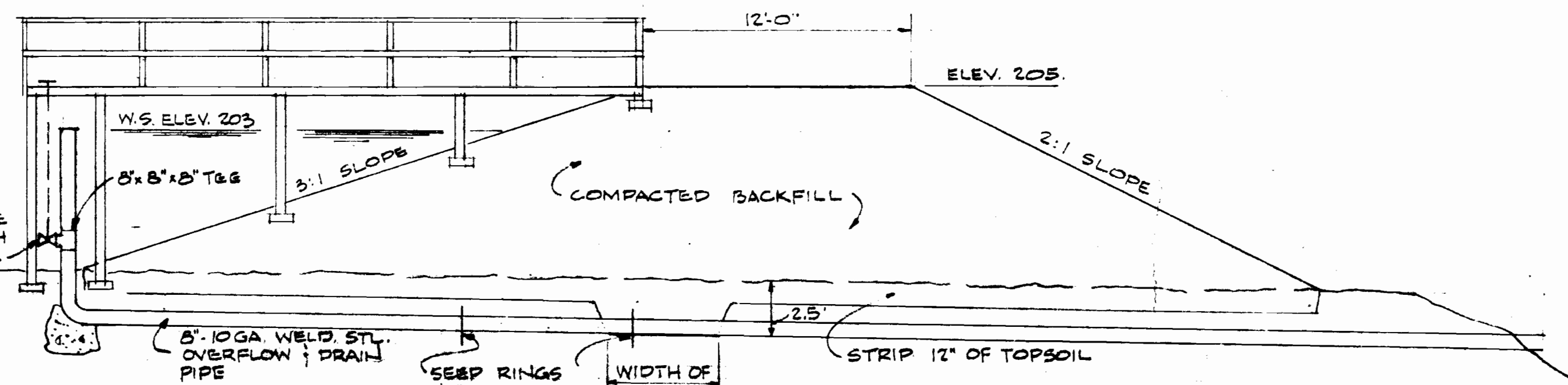
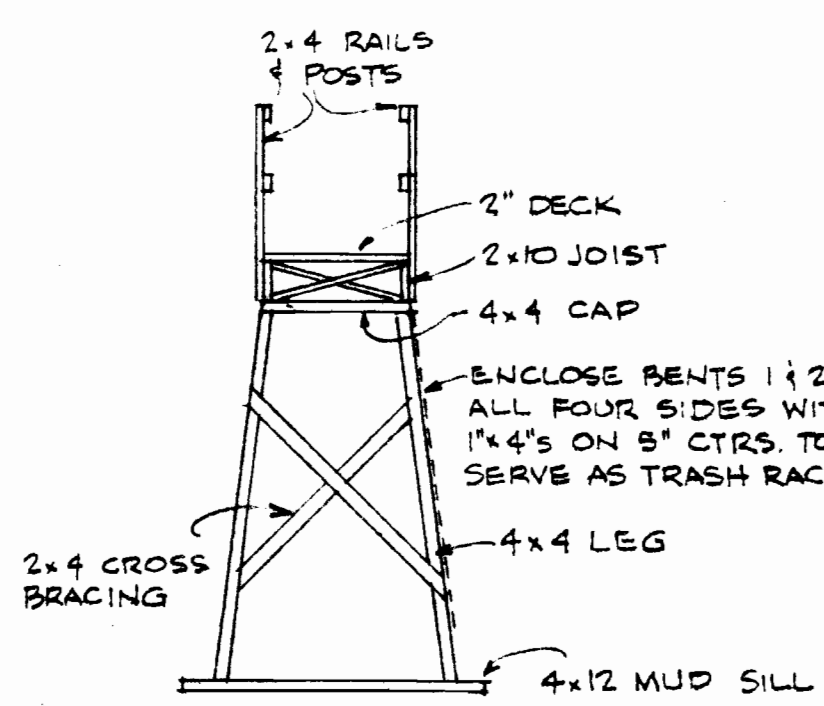
1. Preparation of foundation.
The area under the base of the dam should be stripped of all vegetation and topsoil to a depth of about one foot.
 2. Cutoff trench.
The cutoff trench should be cut to a depth of about 2.5 feet below the original ground. The material so removed may be used in filling the outer portions of the dam.
 3. Borrow material.
Borrow material shall be selected from sidehill or sloping areas because it is expected that material so selected will be less wet than materials from borrow areas on flat ground. The borrow should not be selected from areas below the elevation of normal water surface.
 4. Compacted fill.
Due to the high moisture content of the soil, it will be necessary to provide much more compaction than is normally required. The fill should be rolled continuously with a tractor and rubber-tired roller. If necessary, the rolling operation should be delayed to insure good compaction between each lift. Track laying tractor is not considered as compacting equipment, nor will adequate compaction be achieved by the normal operation of the earth moving equipment over the fill.
 5. Outlet pipe.
Materials:
 - a. 8" x 10 gage welded steel pipe with ~~welded~~ or dresser couplings.
 - b. Seep rings of 10 gage or heavier plate.
 - c. Outlet valve may be either a gate valve or an iron body brass mounted slide gate - with operating stem to deck of walkway.
 - d. Walkway - douglas fir - construction grade.
 Workmanship:
 - a. The outlet pipe shall be placed in a trench in original ground and the backfill tamped in place with pneumatic tampers.
 - b. A concrete pad shall be placed under the head at the standpipe. Concrete to be a minimum of 6" thick under the head and the full width of the trench.
 - c. The standpipe shall be truly vertical. It shall be braced to bents No. 1 and No. 2.
 - d. Bents No. 1 and No. 2 shall be enclosed with 1 x 4 sheathing with approximately a 1" gap between boards to provide trash protection for the overflow pipe and drain valve.
- * Order has been placed by Wah Chang Corporation.



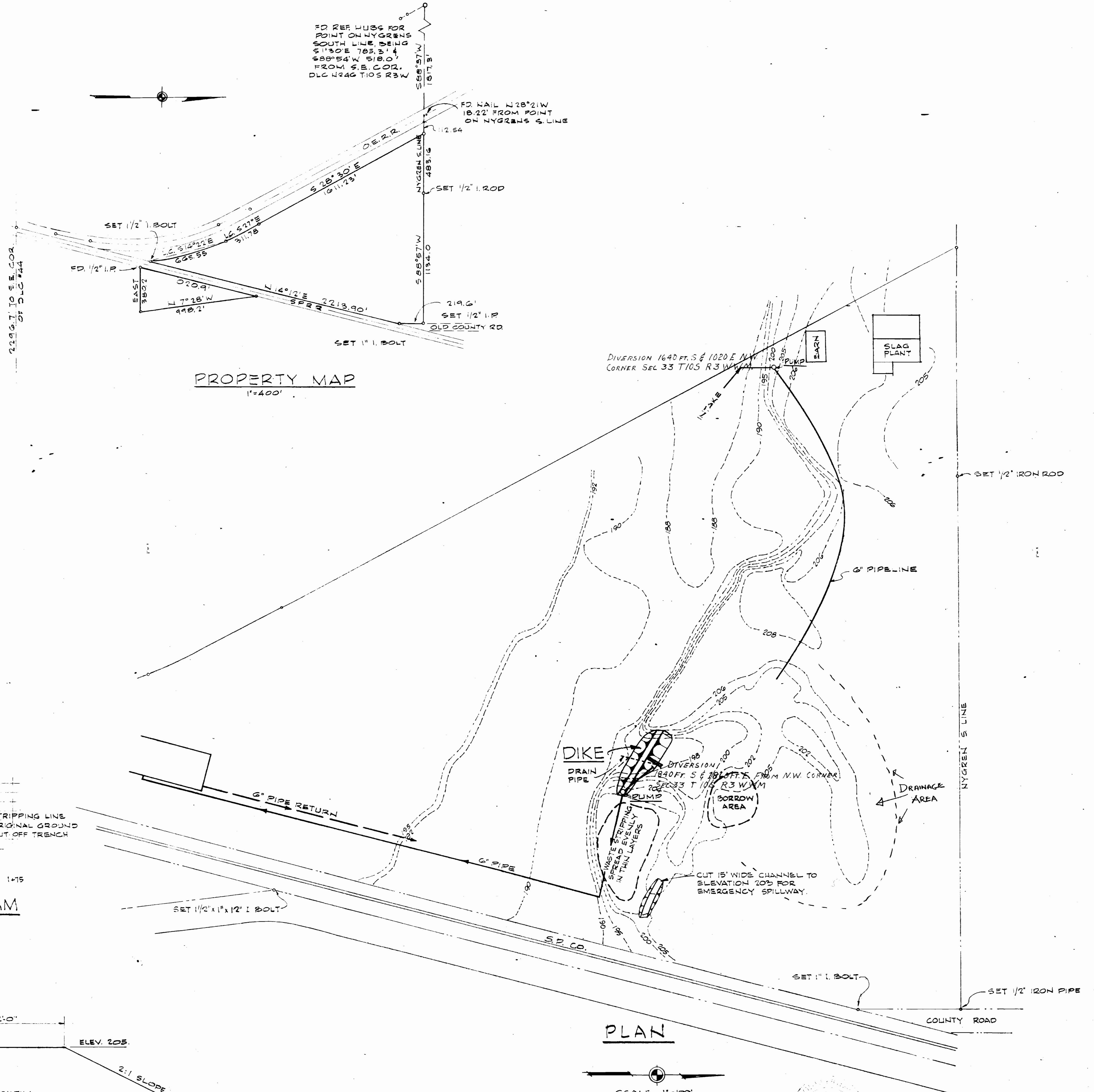
VICINITY MAP



PROFILE ON AXIS OF DAM



CROSS SECTION OF DIKE
SCALE 1" = 5'



PLAN

SCALE 1" = 100'

NOTE: TOPOGRAPHY ON ASSUMED DATUM

William A. Waters

Application No. R-31207 & 31208
Permit No. R-1959 & 28577

OWNER WAH CHANG CORP. ALBANY, OREGON	ENGINEERS CORNELL, HOWLAND, HAYES & MERRYFIELD CORVALLIS, OREGON	PROJECT ZIRCONIUM PLANT SETTLING BASIN DETAILS	SHEET 1 OF 1 DWG. NO. G-1215-2
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NO.	INDEX	DATE	REVISION