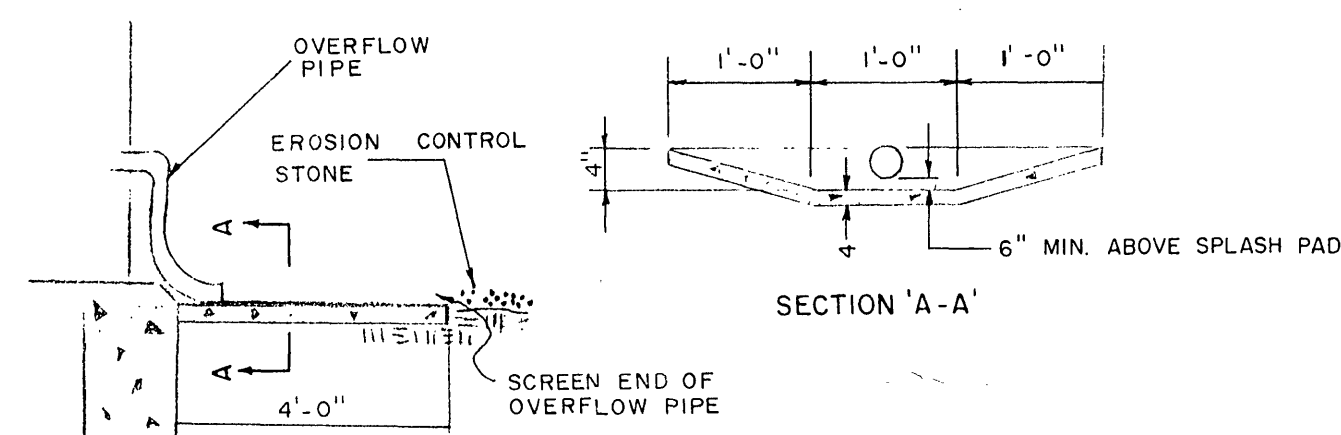
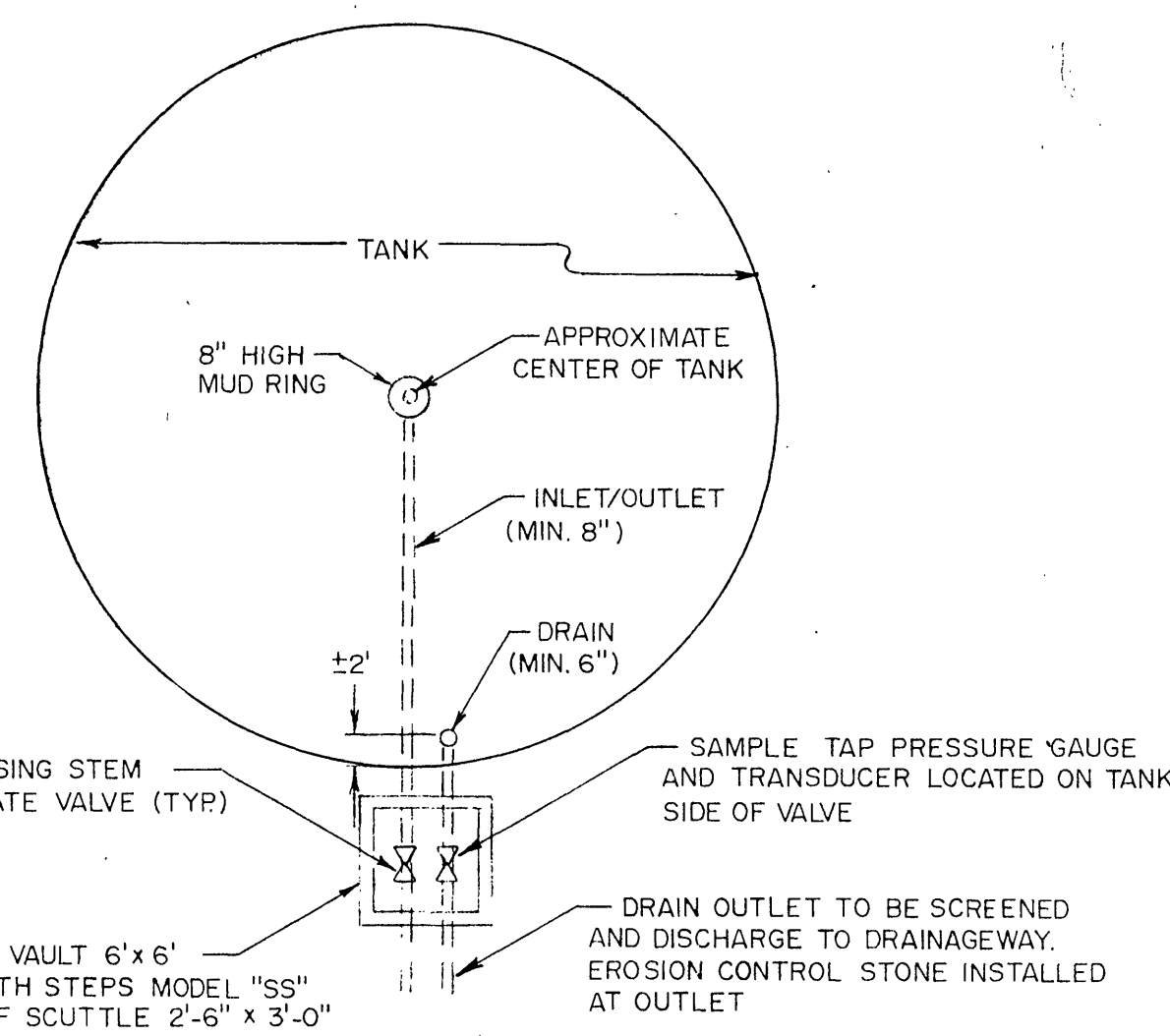
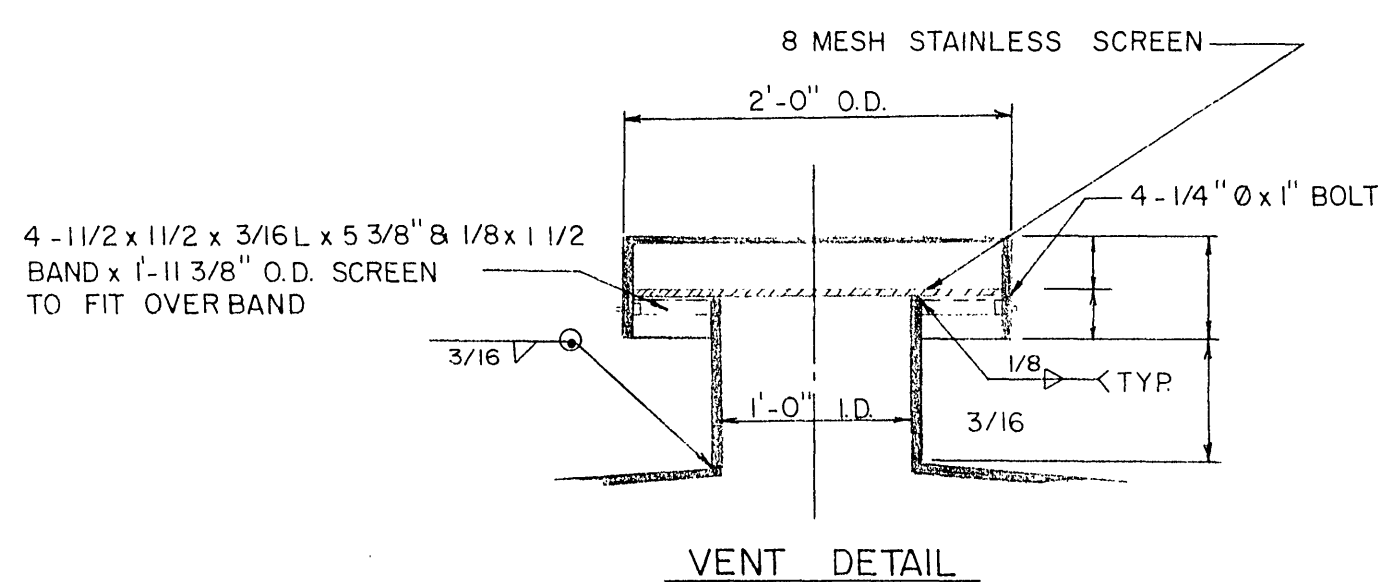
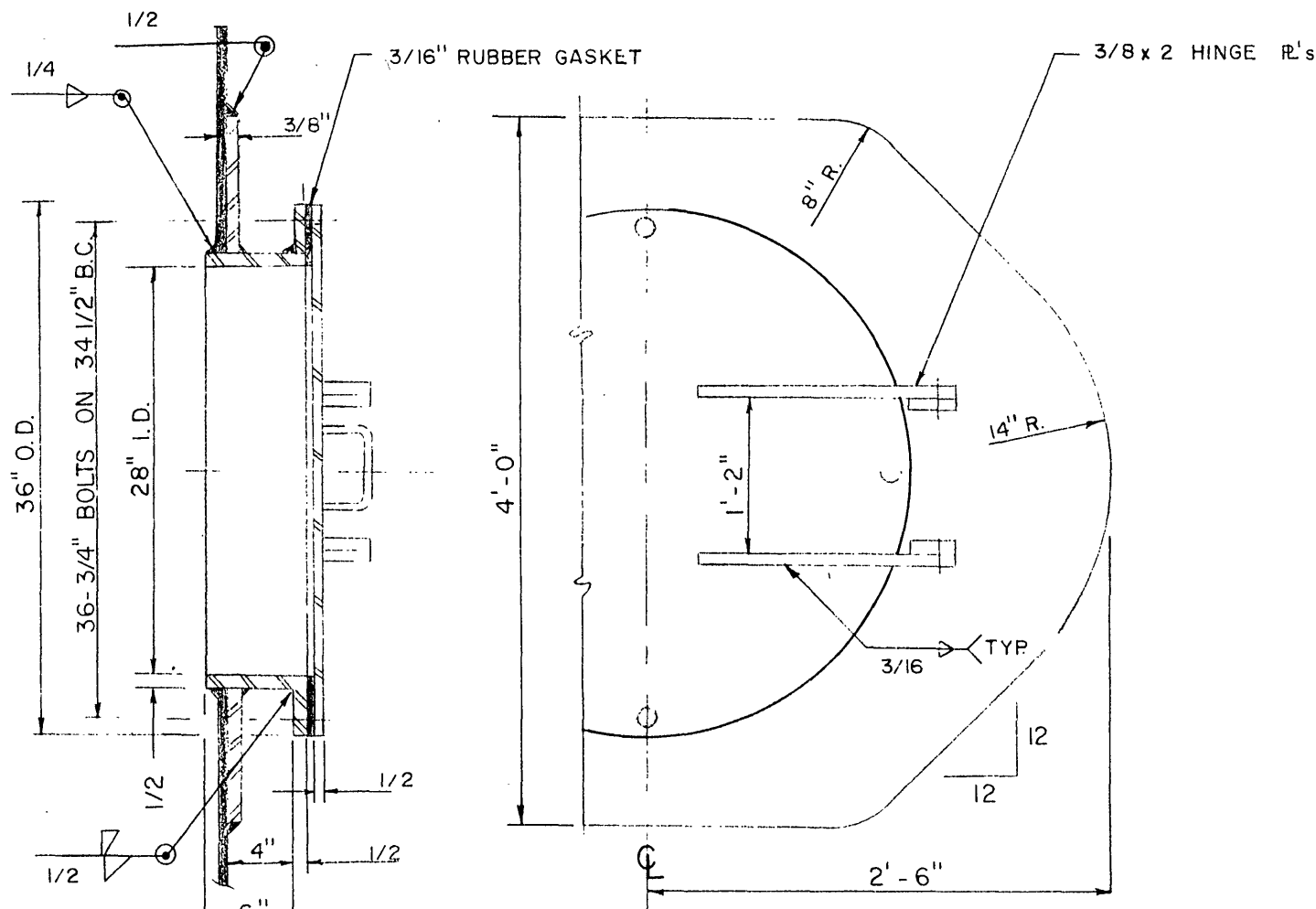
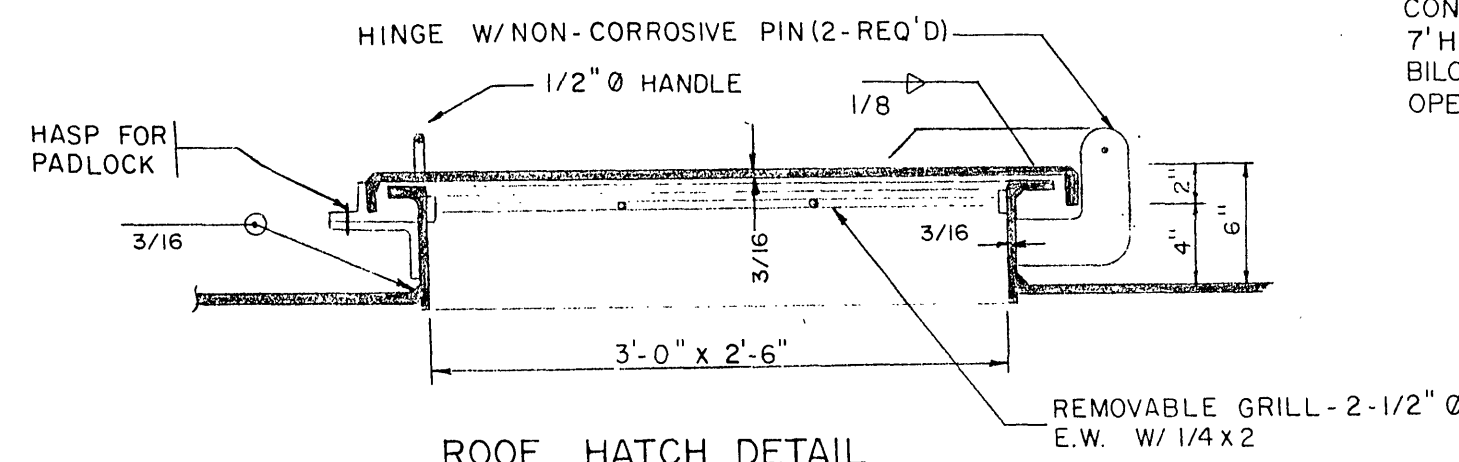
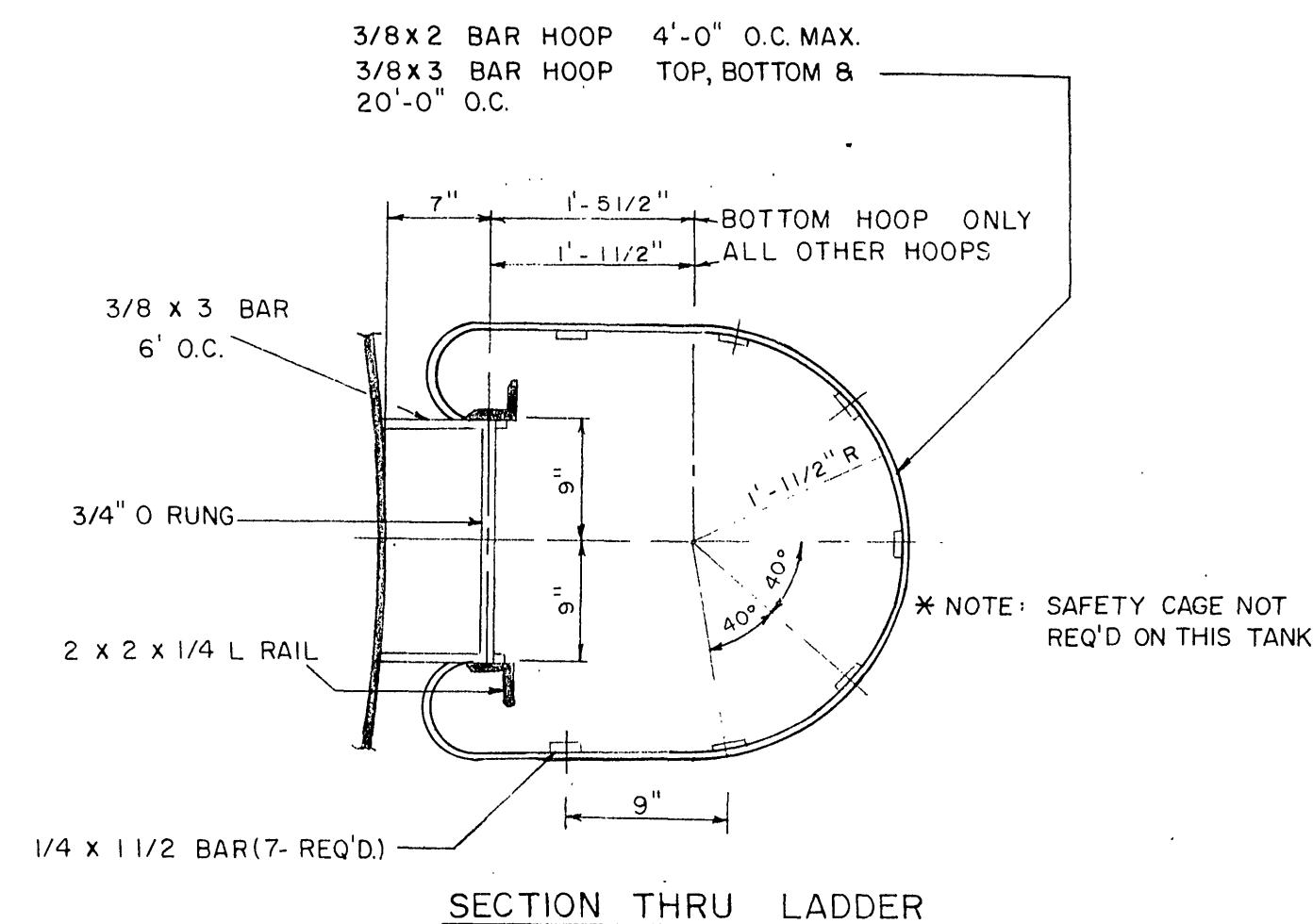


NOTES:
ALL REBAR TO BE ASTM A615, GR. 60
ALL CONCRETE TO BE 4,000 P.S.I.
FOUNDATION DESIGNED FOR MIN. 3,000 P.S.F. SOIL
BEARING. OWNER TO VERIFY PER AWWA D-100-79



WATER STORAGE TANK

SPECIFICATIONS CONTROLLING DESIGN: AWWA D100, AWS D5-2-79, AWWA D103

MATERIAL: Plates - ASTM A36
Structural - ASTM A36
Pipe - Standard Weight Black Pipe ASTM A53
Flanges - 150# Raised Face Slip-On ASA B16.5

SURFACE PREPARATIONS OF MATERIALS: All interior and exterior surfaces to be sandblasted in accordance with SSPC SP10 (near white blast cleaning.) All debris, sand, etc., shall be removed from tank prior to final cleaning. All surfaces shall be washed or air cleaned prior to disinfection.

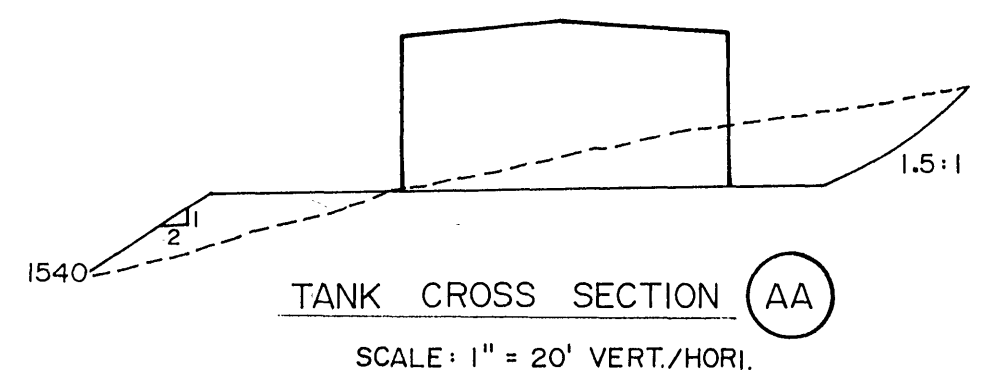
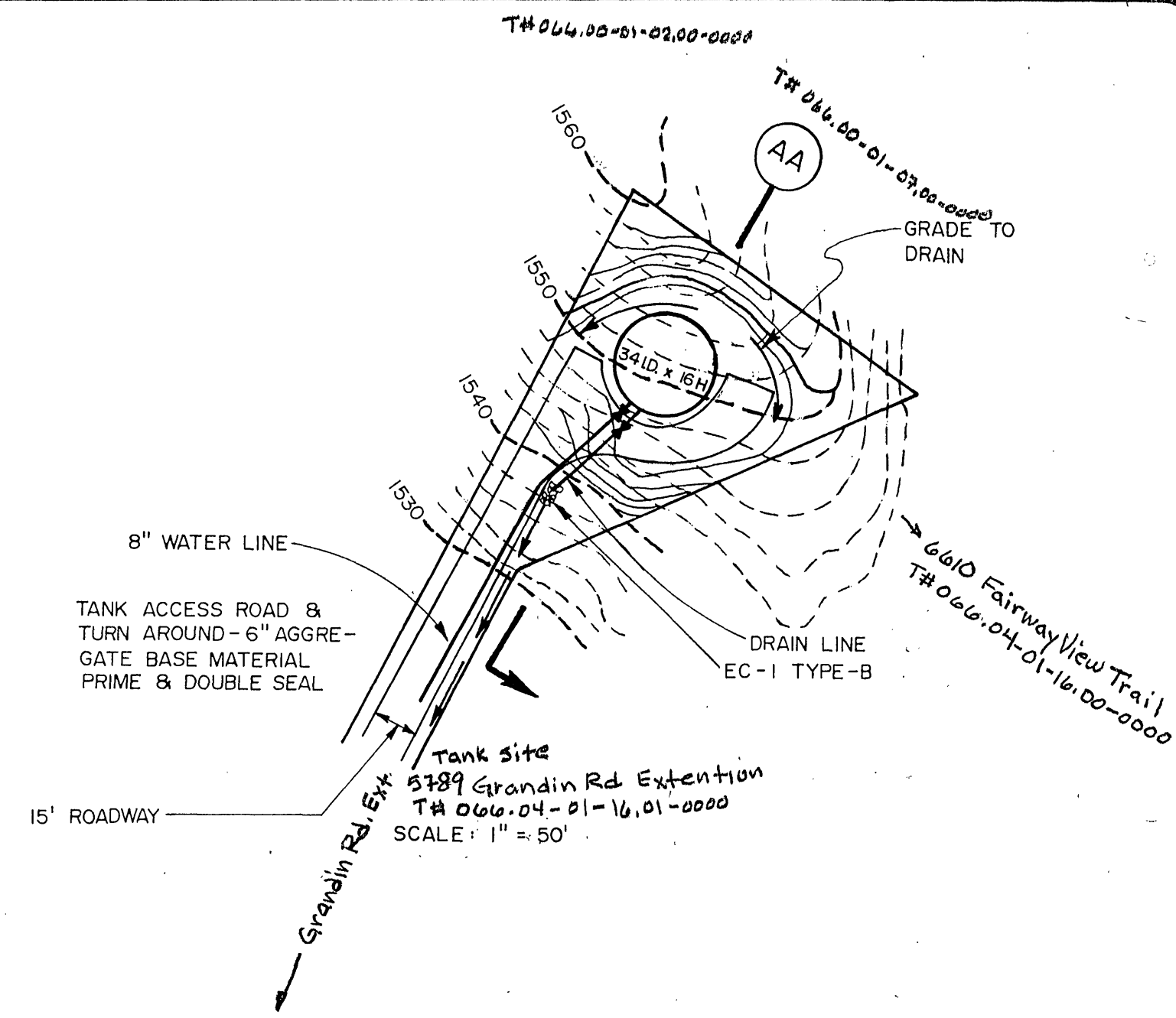
INTERIOR PAINT: Two Coat Epoxy Polyamide, 7.0 to 11.0 total dry mils. The inside paint shall be Tnemec 20-1 (Pota-Pox Primer 20-1211 and Pota-Pox Finish 20-2000); Pennsbury two coat H.B. Epoxy (Penn-Chem Coating 54-W-23 Primer and Penn-Chem Coating 54-G-161 Finish) or equal as approved by the Director.

EXTERIOR PAINT: Aliphatic Polyurethane 5.5 to 8.0 total dry mils. The outside paint shall be either Tnemec 70/71-3, Pennsbury Coatings, Water Tank System No. 10 or equal as approved by the Utility Director.

UNDERSIDE OF BOTTOM PAINT: Shop prime underside of all bottom plates with one coat at 4.0 mils dry film thickness.

STERILIZATION: After the interior paint is sufficiently dry, all interior surfaces to be sterilized in accordance with AWWA C652-86, Section 4.2, Method #2. Use one ounce of HTH per 26 gallon of water or produce a strong solution of 200 ppm. available chlorine. This is accomplished by dissolving the appropriate amount of HTH into a thin paste and adding the paste directly to the 6" of water. After thoroughly mixing this solution, a portable pump is used to spray all interior surfaces and to pump the solution from the tank. Allow a minimum of one (1) hour after draining this strong solution from the tank before filling with potable water. Fill the tank to overflow elevation and test for bacteriological quality. Take two bacteriological samples 24 hours apart. The tank can be placed in operation after the bacteriological quality has been verified.

TANK CUSHION: After compaction of backfill to 95% of maximum theoretical density as determined by standard proctor, four (4) inches of sand with two (2) inch slope rise to tank center saturated with oil shall be installed and compacted.



SITE PLAN

PIPING: Shall be scheduled 40 welded steel pipe from tank bottom to point outside tank constructed minimum 6" below footing grade. Inlet/outlet connection to be at approximate center of tank with minimum 8 inch high mud ring. Drain connection to be located adjacent and two (2) feet from tank walls. Pipe ditch shall be backfill with crushed stone compacted in 6" layers. Exterior to tank, valves and valve vaults shall be installed on both lines.

Screens for outlet ends of overflow, blowoff and drain pipes shall be 1/2" x 1/2" mesh, minimum 17 gauge galvanized hardware cloth. The hardware cloth shall be crimped around end of pipe and secured with galvanized steel wire.

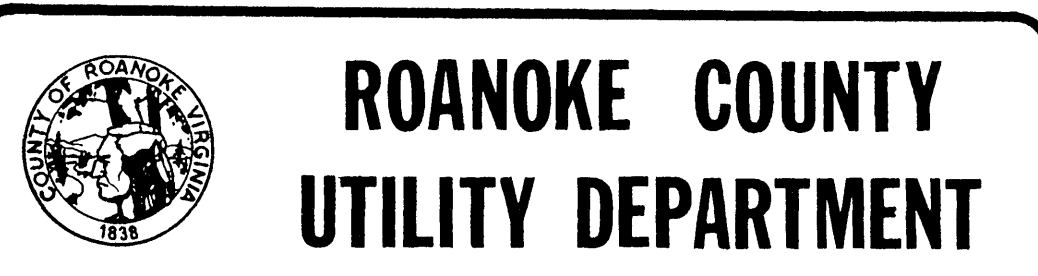
Tank level controls, pressure gauges and sample taps shall be approved or constructed by Roanoke County Utility Department to satisfy the requirements at each location.

FABRICATION: Detail sheet provides minimum welding requirements. Tank fabricator to provide County three sets of complete shop drawings of all facilities to be used.

ALL WATER FACILITIES SHALL BE IN ACCORDANCE TO ROANOKE COUNTY STANDARDS AND SPECIFICATIONS AND WATERWORKS REGULATIONS COMMONWEALTH OF VIRGINIA/STATE BOARD OF HEALTH.

LADDER COVER: Fabricate and install channel type ladder cover 8 feet long and width to match proposed ladder. Cover to be hinged to ladder or ladder supports only with continuous piano type hinge. Hinge to cover length of ladder. Cover to include provisions for locking with standard padlock 3 feet from bottom of cover. Cover or additional sections to extend beyond ladder to side of tank on all sides of ladder.

BRUNING 4021 52725



NO.	REVISIONS	DATE
		01-20-86

STORAGE TANK FOR FAIRWAY FOREST ESTATES (34' I.D. x 16')

DATE:
SCALE:
DRAWING BY:
DESIGNED BY:
APPROVED BY:

PHASE I

SHEET
1
OF
4