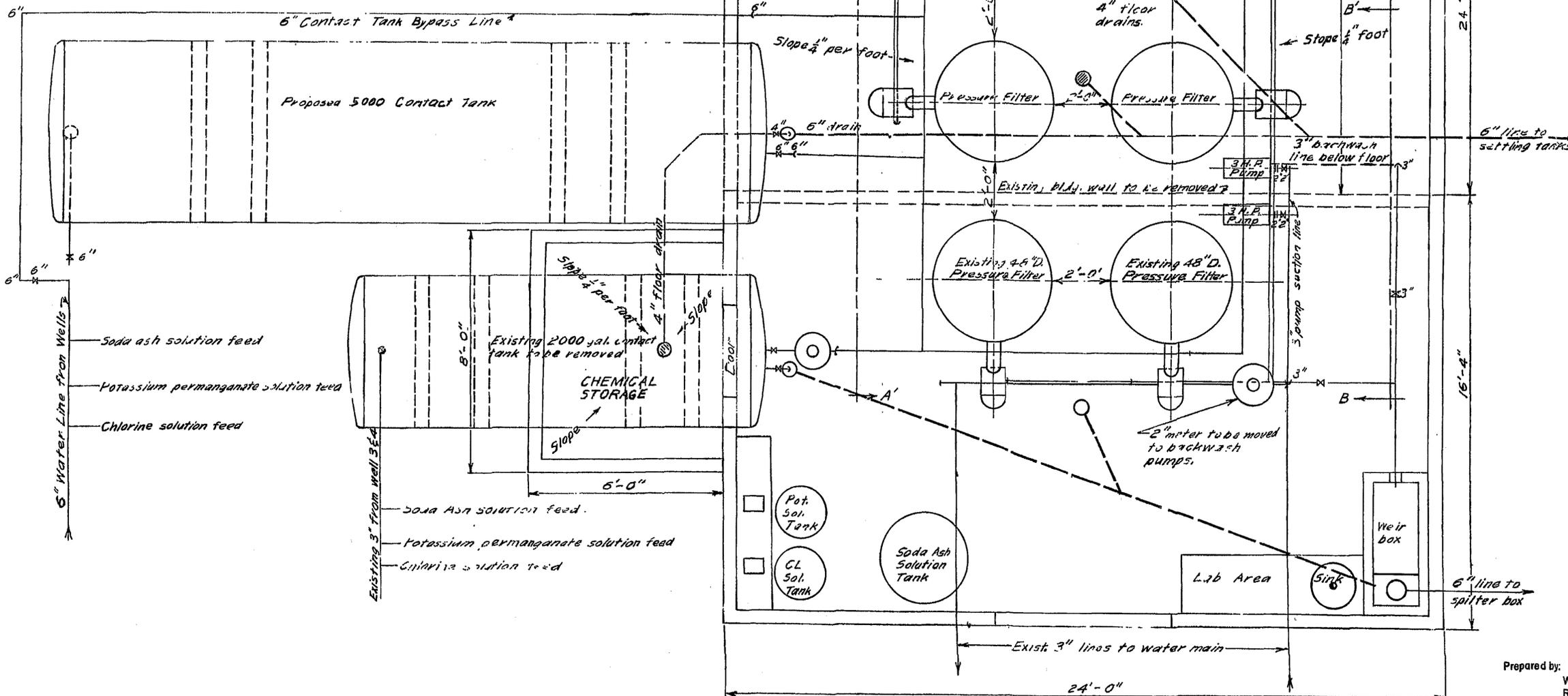


SPECIFICATIONS:

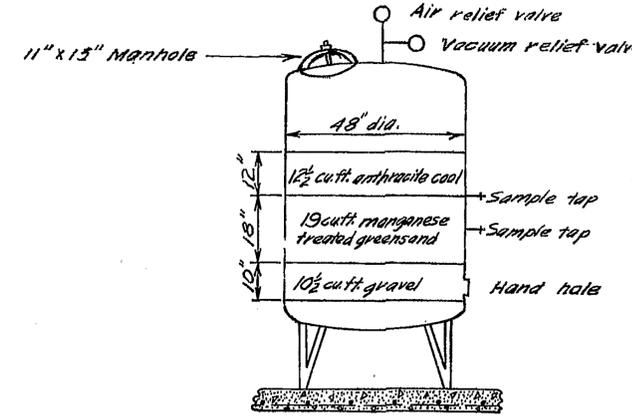
- The pressure filters shall be manually controlled, 48" diameter by 60" in height Greensand filters manufactured for use in the treatment of potable water. The filter media shall be of the type and the depths shown on the drawings. Sample taps shall be provided (1) just prior to the water entering the filters, (2) at a point between the anthracite coal media and the manganese treated greensand and (3) halfway down the manganese treated greensand. The filter media gradation shall be as recommended by the filter manufacturer or approved by the engineer.
- All pipe, valves, fittings, etc. shall be ASTM Class 125 suitable for potable water. All pipe shall be ANWA approved and/or NSF approved for potable water use.
- The tank shall be constructed in such a manner that it is acceptable for the storage of potable water and meets all requirements of Section 11.02.05, Page 167 of the Commonwealth of Virginia Waterworks Regulations dated June, 1977.
- The contact tank shall be constructed so that it will be safe to operate with pressures up to 125 p.s.i. The tank shall meet all of the requirements of the Department of Labor and Industry's Boiler and Pressure Vessel Rules and Regulations dated 1974 and amended effective 1978 as issued by the Commonwealth of Virginia.
- The interior of the tank shall be painted with an interior coating material that is on the list of interior coating materials for Potable Water Tanks acceptable in Virginia. The outside of the tank shall be sandblasted, primed and painted with enamel color selected by owner.
- A Watts 8A or approved equal vacuum breaker shall be provided on all hose bibs.
- The backwash pumps shall be Model 3DM1 $\frac{1}{2}$ -3H.P. centrifugal pumps as manufactured by Jacuzzi Bros. Inc. or approved equal.
- The water treatment system additions shall be disinfected by filling with 50 p.p.m. liquid chlorine solution and held for 24 hours maintaining a residual of 25 p.p.m. After 24 hours the system shall be flushed and two (2) bacteriological samples shall be taken 24 hours apart and found to be free of coliform organisms before the system is put in service.
- An electric heater shall be provided in the building addition to prevent freezing.
- A minimum of 3 light fixtures shall be provided in the building addition to be located as follows, two in front of the filters and one in the vicinity of the back door.
- Two louvered vents shall be provided, to be located in opposite walls.
- The existing chemical feed equipment, testing equipment, dehumidifier, settling basins, etc. are more than adequate to serve the treatment plant addition.

Specifications continued:



SPECIFICATIONS CONTINUED:

- The meter on the backwash line shall be a 2 inch diameter Badgermeter Turbo, Class II type with a safe operating capacity of 160 gpm. The meters on the filter inlets shall be 1 $\frac{1}{2}$ inch Badger Easy-Read Meters with a safe operating capacity of 100 gpm.
- The pressure gauges on the filters shall be Type BNI Regal gauges measuring up to 60 lbs. and 140 ft.
- The pumps in wells No. 3, No. 4, and No. 13 shall operate at the same time and the chemical feeders shall operate in conjunction with the well pumps.
- PVC pipe shall be used above the filters. The lines entering and exiting the filters shall be galvanized steel and shall be provided with a union to connect to the overhead pipe. The drainline for the filter backwash shall be PVC pipe.
- The piping within the building shall be color coded to distinguish the chemical feed, raw water, finished water, backwash, filter backwash waste, etc., lines. The color coding key shall be displayed in a visible area of the building.



EXPANSION OF WATER IRON & MANGANESE REMOVAL FACILITIES
to serve
THE WATERFRONT SECTIONS 2 THRU 9

owned by
BREMBLE PROPERTIES, INC.
GILLS CREEK MAG. DIST.
FRANKLIN COUNTY, VIRGINIA

NOT TO SCALE

Prepared by:

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July 30, 1985

