

JOINT UTILITY TRENCH IMPROVEMENT IN EASEMENT STANDARD NO. U-1 PART 1 - GENERAL

1.01 STANDARDS

A. Gas service shall conmform to paragraphs 1-4, 6-10, & 12 of Section 2, Gas, of "Electric & Gas Service Reaulremtns", by Pacific Gas & Electric Company, 1995.

PART 2 - MATERIALS

2.01 POLYETHYLENE PLASTIC PIPE

- A. Polyethylene plastic pipe shall meet the requirement of ASTM D2513, "Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing and Fittings."
- B. Polyethylene plastic pipe shall have a maximum SDR (ratio of pipe diameter to wall thickness) equal to 11.5, and standard pipe lengths equal to 40 feet. Working pressure shall be 100 psig.

2.02 SOCKET FITTINGS

A. Socket fittings shall conform to ASTM D2683.

2.03 BUTT-FUSION FITTINGS

A. Butt-fusion fittings shall conform to ASTM D2513, molded.

2.04 RISER

A. Riser shall consist of a manufacturer's standard transition fitting, transition from plastic to 7 mil to 12 mil thick epoxy-coated steel pipe and swaged gas-tight with 0-ring seals and metal insert. Provide manufacturer's standard protection sleeve and riser supports as required.

2.05 GAS PRESSURE REDUCING VALVES

A. Gas pressure reducing valves shall be sized for load and inlet conditions and shall be provided with low pressure cut-off and internal over pressure relief. Where meter is inside buildings, pipe relief discharge to outside of building. Gas pressure reducing valves shall conform to P.G. & E requirements and shall be Rockwell; Fischer; or equal.

2.06 GAS METER

A. Gas meter shall be a pedestal mounted, diaphragm, bellows, or turbine style, as required, sized for load and inlet conditions. Gas meter shall have aluminum or enamel coated steel case with resettable counter. Furnish combined register totalizer with escape hole in housing, and means for sealing against tampering. Gas meter shall conform to P.G. & E requirements and shall be Rockwell; Fischer, or equal.

2.07 VALVE BOXES

- A. Valve boxes shall be manufactured of a high density reinforced concrete with a minimum compressive strength of 4000 PSI. Boxes shall have a belled top or flared shoulders to prevent settling and an integral cast iron seat of the rattle proof design and a cast iron lid. The box and lid shall be H-20 rated.
- B. Valve box lids shall be manufactured of cast iron with machined seating surfaces. Lids shall be provided with cast-in markings indicating "Gas". Lids with welded markings will not be acceptable.
- C. Extensions shall be as manufactured for the box or 8" Class 100 PVC pipe. Grade rings for adjusting the box shall be as manufactured for the box.
- D. The valve box shall be Christy G5; Brooks; or equal.

2.08 LOCATOR WIRE

A. Locator Wire shall be #12 UF conforming to NEMA standards and NEC Article 339 for direct burial. Splicing of wire shall be made with a water proof epoxy splice kit.

2.09 MISCELLANEOUS MATERIALS

A. Any incidental material or equipment not mentioned in these specifications or shown on the plans which may be necessary for completion and successful operation of the gas service system, or required by the Utility Company, shall be furnished and installed as though shown or provided for.

CONSTRUCTION NOTES

PART 2 - MATERIALS

2.01 PVC SEWER PIPE

- A. Sewer pipe used for gray water from septic tank systems shall be Schedule 40 polyvinyl chloride pipe for solvent weld applications.
- B. Fittings shall be schedule 40 PVC.
- C. Solvent weld cleaner and glue shall be as approved by the pipe manufacturer.

PART 3 - CONSTRUCTION

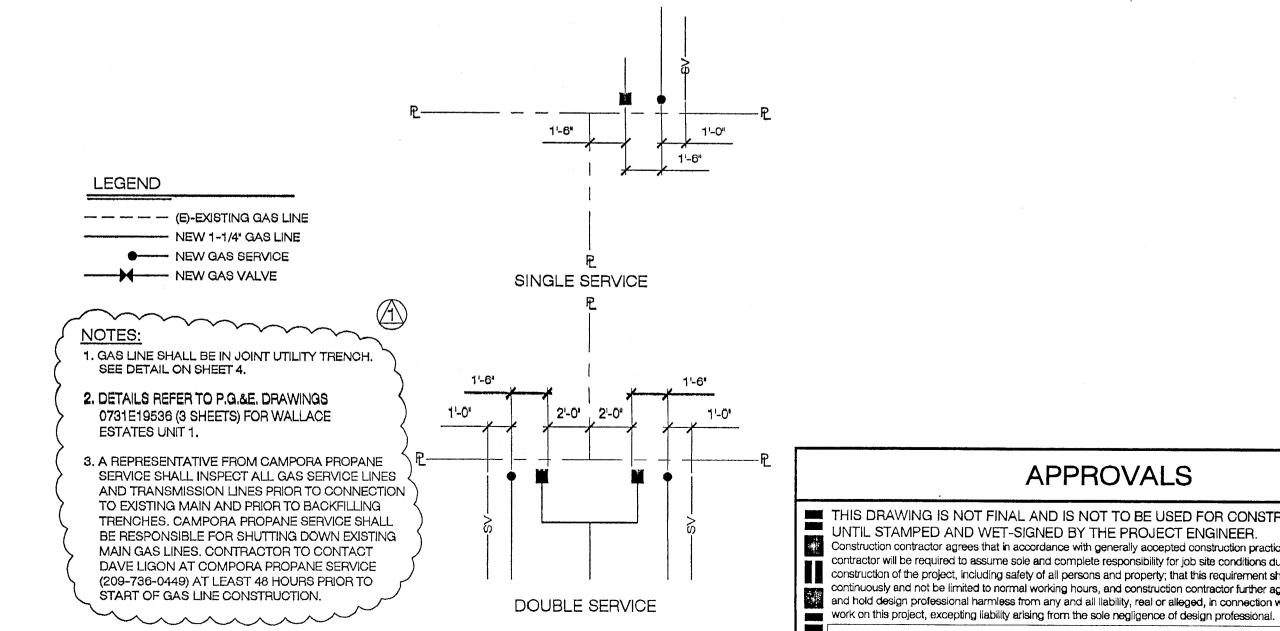
3.01 MAIN LINES

A. Grey water sewer main lines shall be installed on a uniform slope without deviation from the grade line. Lines shall be sloped to achieve a minimum velocity of 2 feet per

3.02 LATERALS

A. Laterals between septic tank and the main line shall be installed at a uniform slope

Trenches under paving shall be backfilled with controlled density backfill, see Detail Sheet 4 of 6.



# **APPROVALS**

THIS DRAWING IS NOT FINAL AND IS NOT TO BE USED FOR CONSTRUCTION UNTIL STAMPED AND WET-SIGNED BY THE PROJECT ENGINEER.

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of

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REVISIONS

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WEATHERBY-REYNOLDS-FRITSON

ENGINEERING AND DESIGN

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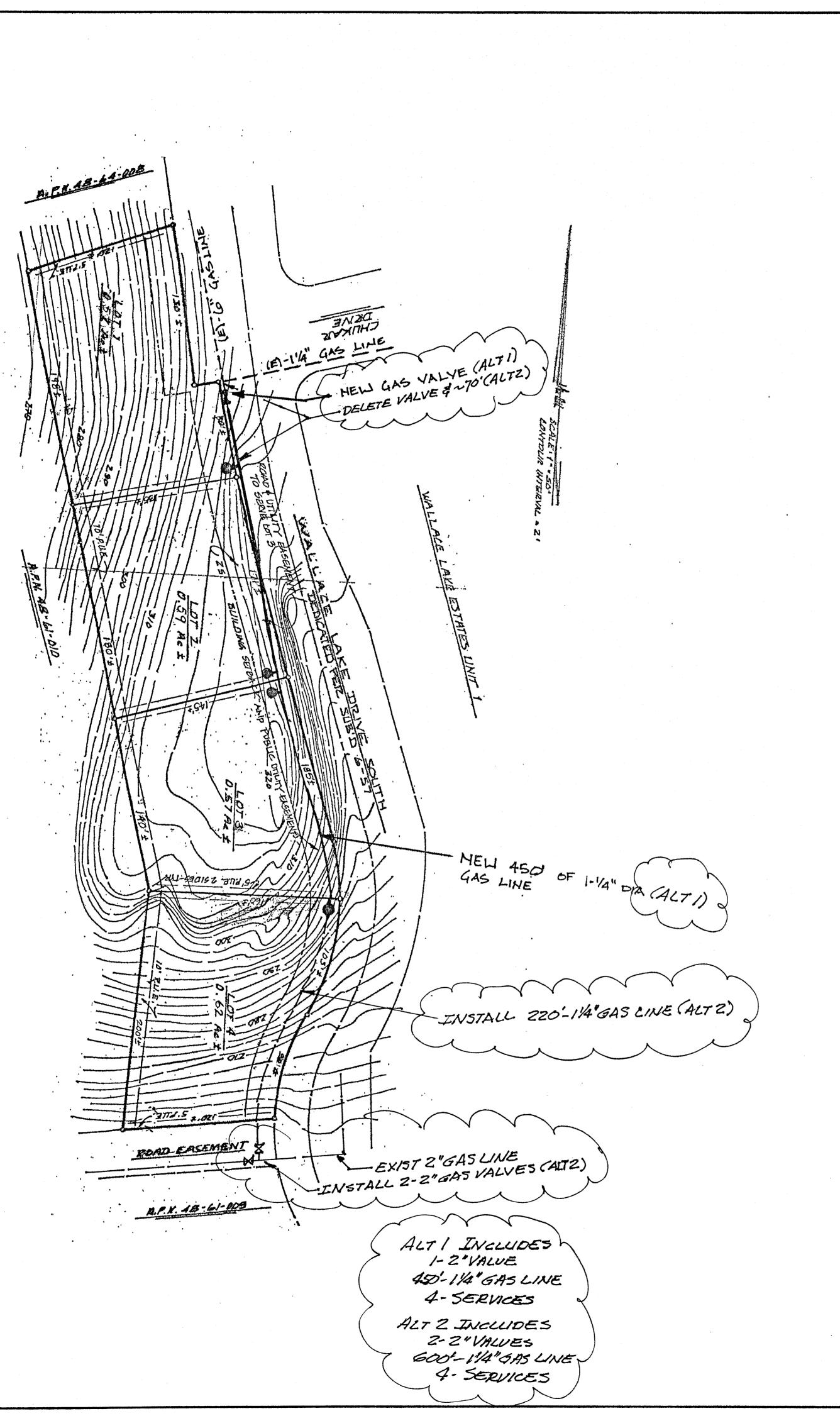
PLAN AND NOTES FILE NO. D-5598 DRAWN BY DATE

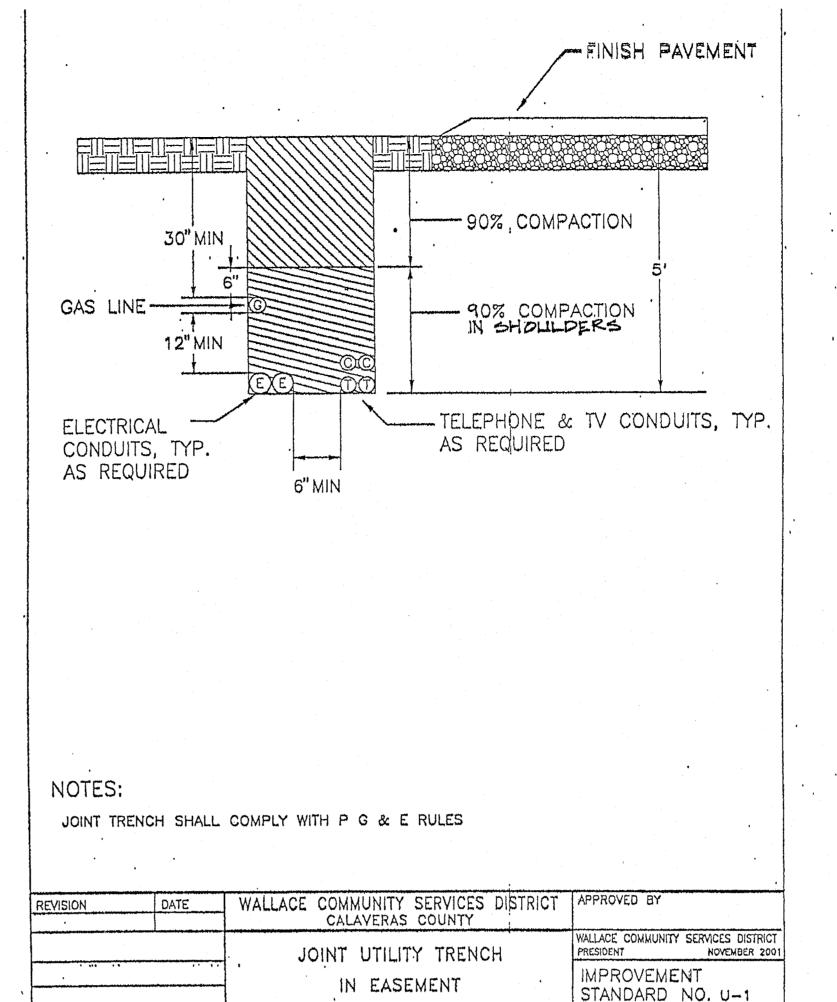
GAS LINE

IMPROVEMENT

05-2006 SCALE AS NOTED SHEET

4 OF 6 SHEETS





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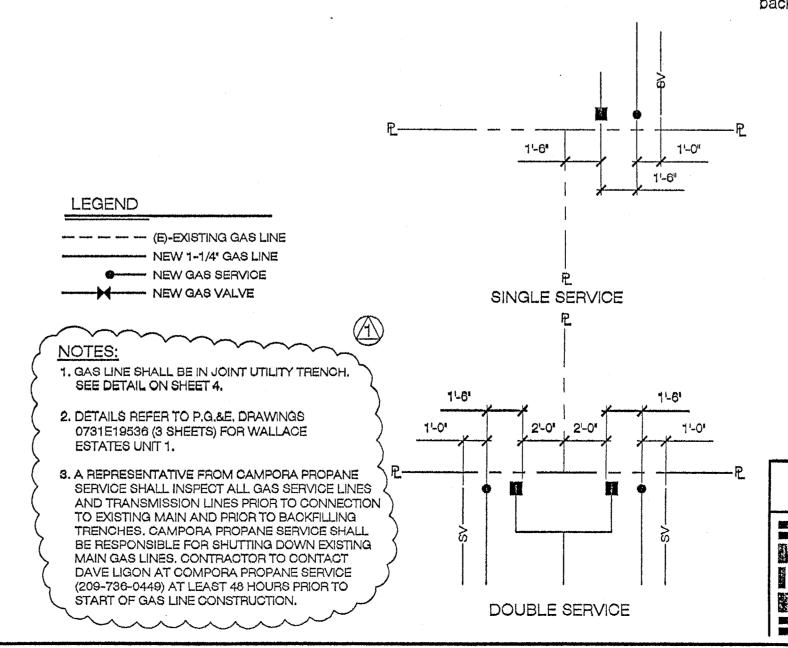
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REVISIONS



WEATHERBY-REYNOLDS-FRITSON



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DRAWINGS .... GAS LINE **IMPROVEMENT** 

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