- I. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers including house laterals.
- 2. Underground utilities have been plotted from available information and therefore their locations must be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to grading or construction of improvements.
- 3. Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR35.
- 4. Storm sewers 18" diameter or smaller shall be A.S.T.M. C-14.
- 5. Storm sewers 21" diameter or larger shall be A.S.T.M. C-76, Class III
- 6. All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (A.S.T.M. C-76, Class III) unless noted otherwise on the plans.
- 7. Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M 36, A.A.S.H.O. See plans for gauge.
- 8. All filled places under buildings, under proposed storm and sanitary sewer lines; and trench backfills under paved areas shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.O. T-180 Compaction Test" (A.S.T.M. D-1557) unless otherwise specified by local governing authority specifications. All tests shall be verified by a Soils Engineer.
- 9. All filled places in paved State, County or City roads (Highways) shall be compacted to 90% of maximum density as determined by the "Standard Proctor Test A.A.S.H.O. T-99" (A.S.T.M. D-698) unless otherwise specified by local governing authority specifications. All tests shall be verified by a Soils Engineer.
- 10. All storm and sanitary trench backfills will be water jetted. Granular backfill will be used under pavement areas.
- II. Easements shall be provided for storm sewers, sanitary sewers and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.
- 12. No area shall be cleared without permission of the developer.
- 13. All grade shall be within 0.2 feet more or less of those shown on the grading plan.
- 14. No slope shall be greater than 31 and shall be either sodded or seeded and mulched.
- 15. Hazard markers will consist of three (3) standard specification "Manual on Uniform Traffic Control Devices," end of roadway markers mounted on two (2) pound "U" channel sign post. Each marker shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.
- 16. All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
- 17. All standard street curb inlets to have front of inlet 2 feet behind curb.
- 18. The minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding house connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one half feet (2-1/2')
- 19. Water lines, valves, sleeves, meters and etc. shall meet all specifications and installation requirements of the local governing authority.
- 20. All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-IIO. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-III.
- 21. All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- 22. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- 23. All P.V.C. water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
- 24. All P.V.C. sanitary sewer pipe to be DR-35 or equal with crushed stone bedding uniformly graded between 'I" and I/4" size. This bedding shall extend from 6" below the pipe to twelve (12) inches above the top of the pipe.
- 25. All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed Right-of-Way Markers shall be reset at the completion of grading.
- 26. All streets must meet the specifications and installation requirements of the City of O'Fallon
- 27. All sanitary manhole tops shall be set 0.2' higher than the proposed ground except in pavement areas
- 28. All sanitary manholes shall have a 31 mil. thick coat of coal tar pitch waterproofing.
- 29. All sanitary service lines shall be 6" for Multi-family and 4" for Single family developments.
- 30. Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R 1736 or Deeter 1315 or approved equal.
- 31. A drop of 0.2 feet is required through each sanitary manhole
- 32. George Butler Assoc., Inc. shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.

ST. MARY'S WOODS

Part of the SW 1/4 of the NW 1/4 of Section 21, T. 47 N., R. 3 E., St. Charles County, Missouri IN THE CITY OF O'FALLON

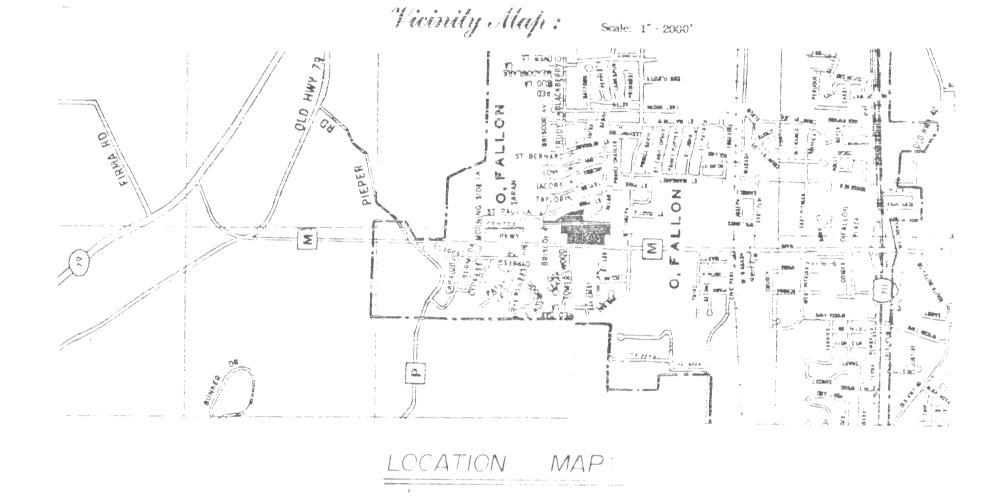
SHEET	DESCRIPTION
1 2 3 4 5 6 7 8-10	COVER SHEET FLAT PLAN GRADING PLAN STREET PROFILES SANITARY SEWER PROFILES STORM SEWER PROFILES DRAINAGE AREA MAP CONSTRUCTION DETAILS

RECEIVED MAR 1 1 1987

GEORGE BUTLE : ASSOCIATES, INC. SUITE 200 - 225 SOUTH MAIN ST. O'FALLON, MISSOURI 63366

5th Submittal

Approved Revised Plans 3/16/87 GBA-GRH



PROJECT BENCHMARK

CENTER OF EAST HEADWALL OVER BOX CULVERT AT HWY. "M" U.S.G.S. ELEV. 495.29



C. 1.	Surty Inlet
D. C. 1.	Double Curb Inlet
A.1.	Area Inlet
G. 1.	Grate Inlet
M. H.	Manhole
fores from .	Flared end section
E.P.	End pipe
C.P.	Concrete pipe
R.C.P.	Reinforced concrete pipe
C.M.P.	Corrugated metal pipe
C. I. P.	Cast iron pipe
P.V.C.	Polyvinyl chloride pipe
V.C.P.	Vitrified clay pipe
C.O.	Clean out
V. T.	Vent trap
Experimental consists and the first section of the constraint of t	Storm sewer (proposed)
STATE OF CONTRACTOR OF THE STATE OF THE STAT	Sanitary sewer (proposed)
uma 444 530 um 4444	Existing contour
	Proposed contour
9 s	Street sign
Photocom and the control of the cont	End of lateral
	Lateral
5	Lot or building number
	Test Hole
	Existing fence line
LINGER	Existing tree line
÷	Storm sewer (existing)
the Artif	Sanitary sewer (existing)
- conditionages	Water line

MARCH 6, 1987 SAM OUTHALL REVISIONS DET GEORGE BUTTER ASSOC.
MARCH 2, 1987 EXIST. MH 100 TO MH102 OCT. 1936 EXIST MH 101-MH 102 Fab. 1985 Per City of OFallon 12-17-85 PER CITY OF O'FALLON

V DATE DESCRIPTION

Tee and valve

Thrust block

Cap Hydrant

Leveloper / Owners:

BY CHK:

*3 OTIS HENRY DRIVE ST. CHARLES, MO. 63301

DHAWN BY F. Fry DATE Mov. 1985 84-095

349 MID RIVERS DRIVE 278- 211

RAY PICKETT, PE : E-14395 | ST FE TERS, MO 63376 44'