

City of O'Fallon

General Notes

- Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
- 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.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
- Storm sewers 18" in diameter or smaller shall be ASTM C-14.
- Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
- All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise on the plans.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.O. See plans for gauge.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.O. T-180 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a Soils Engineer.
- All earthen filled places within State, County, or City roads (Highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.A.S.H.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a Soils Engineer.
- All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
- 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.
- No area shall be cleared without the permission of the developer.
- All grade shall be within 0.2 feet (more or less) of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
- 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.
- 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.
- All standard street curb inlets to have front of inlet 2 feet behind curb.
- 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 of not less than 12 inches.
- Water Lines shall conform to all specifications and installation requirements of the local governing authority.
- All cast iron fittings 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-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
- All PVC sanitary sewer pipe shall be DR-35 or equal with crushed stone bedding uniformly graded between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
- 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.
- All streets must meet the specifications and installation requirements of the City of O'Fallon.
- All sanitary manhole tops shall be set 0.2' higher than the proposed ground except in pavement areas.
- All sanitary manholes shall have a 31 mil thick coat of coal tar pitch waterproofing.
- All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for Single-family developments.
- Manhole frame and cover shall be Clay and Bailey No. 2008 for Neenah R-1736 or Deeter 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole.
- The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
- Brick shall not be used on manholes.
- Sewer contractor shall maintain 24" vertical separation between all storm sewers and the sludge force main. Contractor shall be responsible for verifying separation prior to storm sewer installation.
- This tract is served by:

Union Electric
GTE
St. Charles Co. Water District # 2
St. Charles Gas Co.
MMEI
O'Fallon Fire District
Fort Zumwalt School District

- Waterproofing: Waterproofing will be required on the exterior of all manholes. The bitumen shall consist of two coats of asphalt, coal-tar pitch, or a coating meeting American Society for Testing and Materials (ASTM) D-41. Asphalt shall conform to the requirements of ASTM D 449. Coal-tar pitch shall conform to the requirements of ASTM D 450. Coating shall be 31 mils thickness.



IMPROVEMENT PLANS

A TRACT OF LAND BEING PART OF SECTIONS
 5 AND 6, T. 46 N., R. 3 E., AND
 SECTIONS 32 AND 33, T. 47 N., R. 3 E.,
 ST. CHARLES COUNTY, MISSOURI
(486 LOTS)



Location Map

SCALE: 1" = 2000'

APPROVED as reviewed by John Chalko at GBA.

- w/ Following:
- Extend San. S. to the east between lots 116 and 117.
 - Verify easement or ROW available for construction of the storm sewer existing DET & MH 247.
 - Provide correspondence notifying utilities of work.

Items addressed in memo from P.R. is dated 11-14-94. JRE

Jim Rigo 10/27/94

TREE PRESERVATION DURING DEVELOPMENT:

EXISTING TREES:

AREA OF TREES TO BE SAVED = 2.75 ACRES
 AREA OF TREES TO BE REMOVED = 21.25 ACRES
 TOTAL AREA OF EXISTING TREES = 24.00 ACRES

TREES REQUIRED:

24.00 ACRES x 80% = 19.20 ACRES
 24.00 ACRES - 19.20 ACRES = 4.80 ACRES
 4.80 ACRES - 2.75 ACRES (EXISTING) = 2.05 ACRES
 15 TREES/ACRE x 2.05 ACRES = 30.75 = 31 TREES

Index

Sheet	Description
1	COVER SHEET
2-9	SITE PLANS
10-17	GRADING PLANS
18-23	STREET PROFILES
24-31	SANITARY SEWER PROFILES
32-39	STORM SEWER PROFILES
40-47	DRAINAGE AREA MAPS
48-49	WATER PLANS
50-55	CONSTRUCTION DETAIL
55-A	LIFT STATION DETAIL

Benchmark

TOP OFF WEST END ROLLED CONC. CURB
 AT THE N.W. INTERSECTION OF
 FEISE ROAD & COTTONWOOD LANE
 ELEV. 615.66

Legend

	Sanitary Sewer (Proposed)	C.I.	Curb Inlet
	Sanitary Sewer (Existing)	D.C.I.	Double Curb Inlet
	Storm Sewer (Proposed)	G.I.	Grate Inlet
	Storm Sewer (Existing)	A.I.	Area Inlet
	Water Line & Size	D.A.I.	Double Area Inlet
	Tee & Valve	C.C.	Concrete Collar
	Hydrant	F.E.	Flared End Section
	Cap	E.P.	End Pipe
	Lot or Building Number	E.D.	Energy Dissipator
	Existing Fence Line	M.H.	Manhole
	Existing Tree Line	C.P.	Concrete Pipe
	Street Sign	R.C.P.	Reinforced Concrete Pipe
	Direction of Proposed Residence	C.M.P.	Corrugated Metal Pipe
	Existing Contour	C.I.P.	Cast Iron Pipe
	Proposed Contour	P.V.C.	Polyvinyl Chloride
	Grouted Rip-Rap	V.C.P.	Vitrified Clay Pipe
	End of Lateral	C.O.	Clean Out
	Asphalt Pavement	V.T.	Vent Trap
	Concrete Pavement		
	Storm/Sanitary Structure		
	Test Hole		
	Power Pole		
	Light Standard		

ENGINEERS AUTHENTICATION

The responsibility for professional engineering liability on this project is hereby limited to the set of plans authorized by the seal, signature and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in the project and specifically excludes revisions after this date unless reauthorized.

PICKETT, RAY & SILVER, INC.

Civil Engineers
 Planners
 Land Surveyors

PREPARED BY
 KAPLAN
 P.O. BOX 2222
 ST. LOUIS, MO 63116
 PH: 314-241-1111

STATE OF MISSOURI
 HAROLD J. BARTCH
 NUMBER E-17751
 PROFESSIONAL ENGINEER

Signature: _____ Date: _____

Rev. 9-19-94. DUCKETT CREEK CANAL
 Rev. 8-23-94 L.S. Per LIFT STA
 Rev. 6-27-94 Top City of O'Fallon
 Rev. 5-10-94 To City of O'Fallon