

CALVARY BAPTIST CHURCH

OFFSITE SANITARY SEWER LINE

CITY OF O'FALLON GENERAL NOTES

1. 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.
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, SDR-35.
4. Storm sewers 18" in diameter or smaller shall be ASTM C-14.
5. Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
6. All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III), unless noted otherwise in 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, 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 local governing authority specifications. All tests will be verified by a soils engineer.
9. 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.
10. All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
11. 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 the permission of the developer.
13. All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
14. No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
15. Hazard markers will consist of three (3) standard specification, "Manual 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-110. All rubber gasket joints on water main iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
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 PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
24. 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.
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 manholes top 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 waterproofing.
29. All sanitary service lines shall have a 6" diameter for multi-family and a 4" diameter 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. The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
33. Brick shall not be used on manholes.
34. 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.
35. Waterproofing: Waterproofing will be required on the exterior of all manholes. The bilumen 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.
36. This site is served by:
FIRE - O'FALLON FIRE DISTRICT
SCHOOL - MENTZVILLE SCHOOL DISTRICT
TELEPHONE - GTE
GAS - ST. CHARLES GAS CO.
ELECTRIC - UNION ELECTRIC CO.
WATER - CITY OF O'FALLON
SANITARY SEWERS - CITY OF O'FALLON

LOCATION MAP

DRAWING INDEX

Sheet	Description
1	COVER SHEET
2	SITE PLAN
3	SANITARY SEWER PROFILE
4-5	DETAIL SHEETS

LEGEND

	Sanitary Sewer (Proposed)	R.C.P.	Reinforced Concrete Pipe
	Sanitary Sewer (Existing)	C.M.P.	Corrugated Metal Pipe
	Storm Sewer (Proposed)	C.I.P.	Cast Iron Pipe
	Storm Sewer (Existing)	P.V.C.	Polyvinyl Chloride Pipe
	Water Line & Size	V.C.P.	Vitrified Clay Pipe
	Light Standard	T.B.R.	To Be Replaced
	Double Water Meter Setting	T.B.R.&R	To Be Replaced and Relocated
	Single Water Meter Setting	G.O.	Clean Out
	Hydrant	V.T.	Vent Trap
	Curb Inlet	S.C.I.	Skewed Curb Inlet
	Curb Inlet	T.B.R.	To Be Replaced
	Double Curb Inlet	D.C.I.	Double Curb Inlet
	Existing Fence Line	G.I.	Grate Inlet
	Existing Tree Line	A.I.	Area Inlet
	Street Sign	D.A.I.	Double Area Inlet
	Existing Contour	C.C.	Concrete Collar
	Proposed Contour	F.E.	Flared End Section
	Grouted Rip-Rap	T.W.	Top Of Wall
	End of Lateral	E.D.	Energy Dissipator
	Asphalt Pavement	M.H.	Manhole
	Concrete Pavement	C.P.	Concrete Pipe
		(TYP)	Typical
		Unless Noted	Unless Noted

REVISIONS

PICKETT RAY & SILVER

Celebrating 25 Years of Service

ENGINEERS AUTHENTICATION	DEVELOPER
The responsible engineer certifies that the set of plans hereto attached, including the seal, signature and date hereunder attached, is prepared for all other engineering plans involved in the project and specifically includes revisions after this date unless reauthenticating.	
PICKETT, RAY & SILVER, INC.	
Signature	Date

PREPARED FOR:
CALVARY BAPTIST CHURCH

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DRAWN <u>KJD</u>	DATE <u>4-2</u>
CHECKED <u>JGC</u>	DATE <u>4-2</u>
FIELD BOOK <u>609</u>	PROJECT # <u>95-</u>
JOB ORDER # <u>34</u>	

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CIVIL ENGINEERS
PLANNERS
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