

SSM HEALTHCARE IMPROVEMENT PLANS

CITY OF O'FALLON GENERAL NOTES

AS RECORDED IN PLAT BOOK 42, PAGE 45 AND ALSO BEING
PART OF U.S. SURVEY 55, TOWNSHIP 47 NORTH, RANGE 3 EAST
ST. CHARLES COUNTY, MISSOURI

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LOCATION MAP

- 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 II) unless noted otherwise in the plans.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.T.O. See plans for gauge.
- All filled places under proposed roads, 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 AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All filled places in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. Ensure the moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
- 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.T.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 plot. See record plot 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 grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
- No slope shall be steeper than 3' (horizontal) to 1' (vertical) 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 finished 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').
- Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority. Water mains shall have a minimum of 42" of cover.
- 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 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 new utilities under City streets shall be bored.
- 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 manholes top 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.
- Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R-1736 or Deeter 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole. Minimum cover of 42" is required on all sanitary sewer mains.
- 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 the construction of sanitary or storm sewer structures.
- 5/8" diameter trash bars shall be provided for all inlets.
- 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.
- All concrete pipe or ADS N-12 pipe shall be installed with "O-Ring" Rubber type gaskets per M.S.D. standard construction specifications or manufacturer.
- The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or the City of O'Fallon and/or MoDOT. The contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The Owner and/or the City of O'Fallon and/or MoDOT may at their option direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement or in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/or MoDOT.
- Developer must supply City construction inspectors with soils reports prior to or during site soil testing.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- Owner shall provide a copy of the soils report to grading contractor. Contractor shall be responsible for adhering to all recommendations outlined in the soils report.
- All new utilities under City streets shall be bored.
- All sanitary laterals and sanitary mains crossing under roadways must have the proper rock backfill and to required compaction.
- HDPE pipe is to be N-12WT or equal and shall meet ASTM F1417 water tight field test.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed of in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.
- If intersecting roadway does not have a curb, then the curb on the new entrance shall begin 10' from the edge of the existing roadway line.
- Sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed of in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer.
- Developer must supply City construction inspectors with soils reports prior to or during site soil testing. The soil report will require to include maximum dry density, optimum moisture content, maximum and minimum allowable moisture content, curve must be plotted to show density from a minimum of 90% compaction and above as determined by the Modified AASHTO T-180 Compaction Test (A.S.T.M.-D-1157) or above from a minimum of 95% as determined by the Standard Proctor Test AASHTO T-99, Method C (A.S.T.M.-D-698). Proctor type must be designated on document. Curve must have at least 5 density points with moisture content and sample locations listed on document, specific gravity, natural moisture content, liquid limit, and plastic limit.
- All requirements of the Planning and Zoning Commission have been addressed.
- All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City and MoDOT. Signs designating street name shall be on the opposite side of the street from traffic control signs.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- The City of O'Fallon shall also be contacted for utility located under its maintenance responsibility. This may include water, sanitary, storm, and traffic locates.
- Graded areas that are to remain bare for over 2 weeks are to be seeded and mulched (DNR requirement).
- Traffic control is to be per MoDOT or MUTCD, whichever is more stringent.

LEGEND					
—	Sanitary Sewer (Proposed)	⊙	Sanitary Structure	R.C.P.	Reinforced Concrete Pipe
—○—	Sanitary Sewer (Existing)	⊙	Storm Structure	C.M.P.	Corrugated Metal Pipe
---	Storm Sewer (Proposed)	⊙	Test Hole	C.I.P.	Cast Iron Pipe
---□---	Storm Sewer (Existing)	⊙	Power Pole	P.V.C.	Polyvinyl Chloride
—	Water Line & Size	⊙	Light Standard	V.C.P.	Vitrified Clay Pipe
—EX—	Existing water line	⊙	Double Water Meter Setting	A.T.G.	Adjust To Grade
⊙	Tee & Valve	⊙	Single Water Meter Setting	C.O.	Clean Out
⊙	Hydrant	C.I.	Curb Inlet	V.T.	Vent Trap
⊙	Cap	S.C.I.	Skewed Curb Inlet	T.B.R.	To Be Removed
18	Lot or Building Number	D.C.I.	Double Curb Inlet	T.B.R.&R	
—x—	Existing Fence Line	G.I.	Grate Inlet	T.B.P.	To Be Protected
⊙	Existing Tree Line	A.I.	Area Inlet	T.B.A.	To Be Abandoned
⊙	Street Sign	D.A.I.	Double Area Inlet	B.C.	Base Of Curb
⊙	Existing Contour	C.C.	Concrete Collar	T.C.	Top Of Curb
⊙	Proposed Contour	F.E.	Flared End Section	T.W.	Top Of Wall
⊙	Grouted Rip-Rap	E.P.	End Pipe	B.W.	Base Of Wall
⊙	End of Lateral	E.D.	Energy Dissipator	(TYP)	Typical
⊙	Asphalt Pavement	M.H.	Manhole	U.N.O.	Unless Noted Otherwise
⊙	Concrete Pavement	C.P.	Concrete Pipe	U.I.P.	Use in Place

These "AS-BUILT" storm and sanitary sewer plans are based on actual field observations conducted during June and November, 2007 and the results are shown herein.

By: Roger G. Allen
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STATE OF MISSOURI
PICKETT, RAY & SILVER'S CORPORATE
REGISTRATION NO. LS-54-D

BENCH MARKS

Project Benchmark RM66: A cross cut on the western bolt of a fire hydrant located at the northeastern corner of Mill Pond Drive and Spring Hill Drive. Elevation = 581.74 feet (NGVD1929).

TBM: "M" in Mueller on Fire Hydrant
52' west of the edge of asphalt to Highway K
and 21' North of the center of entrance to
1101 Highway "K"
ELEVATION = 565.73

MoDOT UTILITIES
(314) 340-4100
Fiber Optics are present



7-8-08 98
APPROVED

OWNER/DEVELOPER:
LILLIBRIDGE HEALTHCARE
REAL ESTATE TRUST
CONTACT: NOE MARTINEZ
5308 WEST PLANO PARKWAY
PLANO, TEXAS, 75093-4821
972-248-9100 EXT.4360
P&Z APPROVAL 10.05.06
FILE #2606.01

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Prepared For:
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"AS-BUILTS" 12.17.07

REVISIONS	NO.	DATE	REVISIONS PER CITY COMMENTS	REVISIONS PER MoDOT COMMENTS	REVISIONS PER "AS-BUILTS"
	1	10.19.06			
	2	11.09.06			
	3	12.15.06			
	4	7.12.07			
	5	7.31.07			
	6	12.17.07			

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
PICKETT, RAY & SILVER, INC

RECEIVED
JUN 27 2008

DRAWN	DATE
J.M. WINTERS	10.11.06
CHECKED	DATE
S.D. MARION	10.11.06
PROJECT # 91090.LILB.02C	FIELD BOOK 450E
TASK # 2	

SSM HEALTHCARE
IMPROVEMENT PLANS
COVER SHEET
SHEET 1 OF 11
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OLD UTILITY NOTE
Underground facility structures and utilities have been plotted from available surveys and record information and, therefore, their locations must be considered approximate only. Verification of location of all underground structures and facilities, either shown or not shown on these plans shall be the responsibility of the contractor.