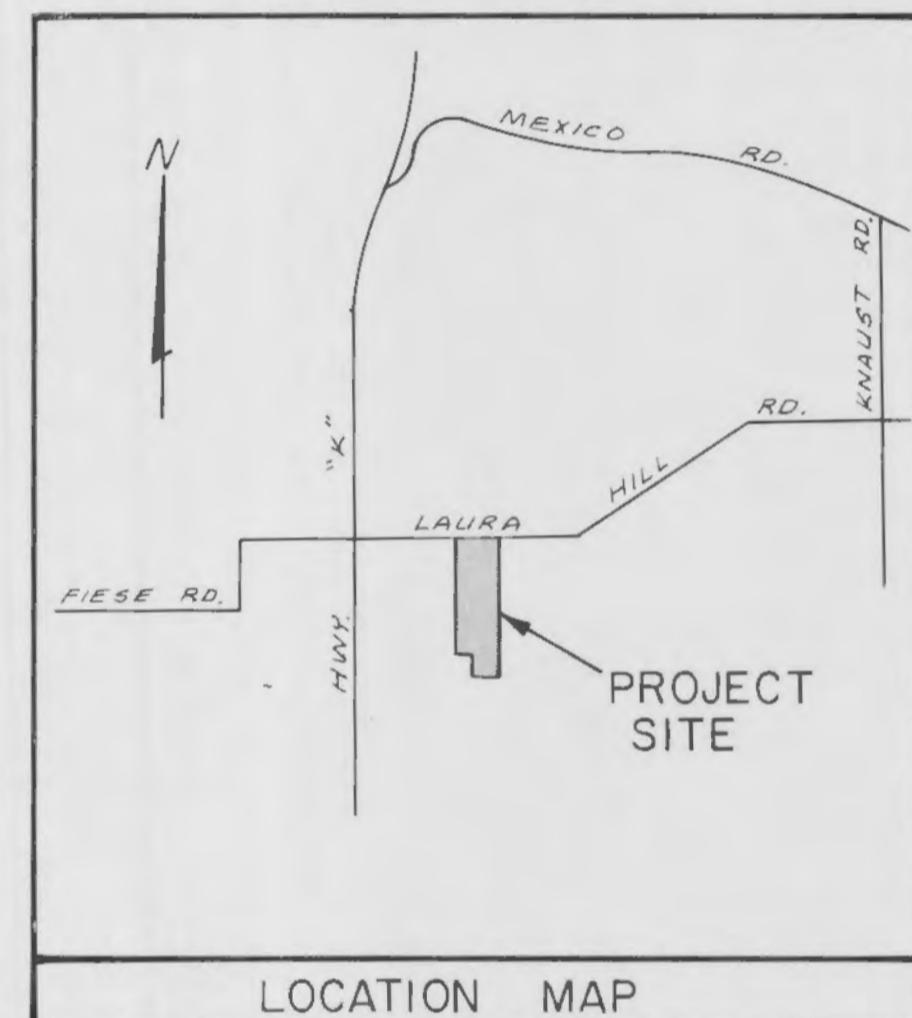


HILLCREST ESTATES



SANITARY SEWER NOTES

- a) All sanitary trench backfills shall be water jetted. Granular backfill is to be used under all pavement areas.
- b) 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.
- c) All P.V.C. sanitary sewer pipe shall be installed with crushed stone bedding uniformly graded between 1" and 1 1/2" size. This bedding shall extend from 6" below the pipe to 12 inches above the top of the pipe.
- d) All sanitary manhole tops shall be set 0.2 foot higher than the proposed ground except in pavement areas.
- e) All sanitary manholes shall have a 31 mil. thick coat of coal tar pitch waterproofing.
- f) Brick manhole construction is not permitted on the sanitary sewers.

GENERAL NOTES - ST. CHARLES COUNTY

- 1) All storm sewer structures, piping, construction methods, materials, and appurtenances shall conform to the latest details and specifications as set down by Metropolitan St. Louis Sewer District *or as modified by St. Charles County*.
- 2) All sanitary sewer structures, piping, construction methods, materials, and appurtenances shall conform to the latest details and specifications as set down by Metropolitan St. Louis Sewer District *or as modified by O'Fallon Sanitary District*.
- 3) After sewers and appurtenances are completed, inspected and accepted, the contractor will be permitted to connect the sewer extension into the existing system, in the presence of an inspector.
- 4) Jointing material Polyvinyl Chloride (PVC) sanitary sewer shall conform to ASTM Specifications D3212.
- 5) All polyvinyl chloride (PVC) sewer pipe shall conform to ASTM D-3034, Type PSW with a SDR rating of 35 or lower.
- 6) All polyvinyl chloride (PVC) water pipe shall conform to ASTM D-2241 with a SDR rating of 26 or lower. Joint materials shall conform to ASTM D3139.
- 7) The manhole frames and covers shall be Clay & Bailey No. 2008, Neenah R736, Ducter 315, or an approved equal.
- 8) Trenches under existing pavement or areas to be paved shall be granularly backfilled.
- 9) In areas where sewer appurtenances are to be constructed in filled ground, the fill will be placed to approximate finished grade and compacted as specified prior to the excavation and installation of the pipe.
- 10) The sewer contractor may construct the building sewer laterals in conjunction with the sanitary main, trunk or lateral sewers, within the development; so long as the building sewer lateral terminates five (5) feet or more outside the proposed or existing building line or foundation wall.
- 11) All fill areas under buildings, proposed storm or sanitary sewers and paved areas shall be compacted to 90% of maximum density as determined by the "Modified AASHTO T-180 Compaction Test" (ASTM D-1557) unless otherwise required by the soils engineer or by St. Charles County.
- 12) It shall be the grading contractors responsibility to notify the soils engineer of work in progress and to comply with the specifications by the soils engineer with regards to compaction, surface preparation, and placement in fill areas.
- 13) All stumps, limbs, and other debris are to be removed from the site unless a suitable on site dump area is approved in advance by the soils engineer if burning is approved. Clearing shall be completed under the supervision of the developer or his representative, and shall not be done without authorization.
- 14) All grading adjustments must be submitted in writing and approved by the site engineer and St. Charles County.
- 15) It is the developers responsibility to maintain all siltation controls as required by St. Charles County.
- 16) Underground utilities as shown have been plotted from available information and must be considered as approximate locations. The verification and location of all underground utilities either shown or not shown, shall be the responsibility of the contractor. It is the contractor's responsibility to provide location of underground utilities and to notify the proper utility company prior to any grading or construction.
- 17) Minimum separation between sanitary sewers and water mains shall be ten (10) feet horizontally and two (2) feet vertically.
- 18) When PVC sewer pipe is used, appropriate rubber seal waterstop, as approved by the sewer district, shall be installed between PVC pipe and masonry (concrete and brick) structures.
- 19) All standard street curb inlets shall have the front face of the inlet set one (1) foot behind back of curb. All area inlets are to be open four (4) sides unless otherwise noted.

APPROVED
3-6-86
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