4. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.

couplings will not be allowed.

5. Concrete pipe joints shall be MSD Type "A" approved compression type joints and shall conform to the requirements of the Specifications for joints for Circular Concrete Sewer and Culvert Pipe, using flexible, watertight, Rubber-type Gaskets ASTM C443. Band-type gaskets depending entirely on cement for adhesion and resistance to displacement during jointing shall not be used.

6. All filled places under proposed storm and sanitary sewer lines and / or paved areas including trench backfills within and off the road right-of-way shall be compacted to 90 percent of maximum density as determined by the "Modified AASHTO T-180 Compaction Test" (ASTM D-1557). All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations.

7. All filled places in proposed and existing St. Charles County roads (highways) shall be compacted from the bottom of the fill up to 90 percent maximum density as determined by the "Modified AASHTO T-180 Compaction Test" (ASTM D-1557). Paved areas in cuts shall meet the same compaction requirements. All tests shall be verified by a Soils Engineer concurrent with grading operations.

8. All storm and sanitary sewer trench backfills shall be water-jetted. Granular backfill shall be used under pavement areas. In areas where storm and sanitary sewers cross, trench shall jetted following placement of intitial pipe and prior to placement of second pipe and again after placement of second pipe. This shall to be done in the presence of a Local Governing Authority Representative. Jetting shall be 100% completed and approved prior to paving. Seven days shall pass at all street crossings after jetting and before paving operations at the crossings. In the case of pipe crossings, the first pipe trench shall be jetted and allowed time to settle before the installation of the next pipe.

9. Easements shall be provided for storm sewers, sanitary sewers and all utilities on the record plat. Record plat will contain complete information regarding location and size of easements. All existing and proposed monuments will be shown on the final record plat.

10. No area shall be cleared without permission of the developer.

11. All grades in unpaved areas shall be within 0.2 feet more or less of those shown on the grading plan.

12. Unless otherwise noted, no slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.

13. Barricades will consist of three standard 9 reflector-red diamond end of roadway hazard markers mounted on two pound "U" channel sign post, with bottom of marker four feet above pavement surface.

14. All standard street curb inlets to have front of inlet 2 feet behind curb.

15. Water lines, valves, sleeves, meters and etc. shall meet all specifications and installation requirements of the local governing authority. There shall be a minimum of 18" vertical/10' horizontal separation between all water mains and sanitary sewers.

All water hydrants and valves shall be cast iron and installed in accordance with plans & details.

17. Water pipe shall be ASTM D2241 Class 200 SDR21. Twelve (12) gauge coated copper tracer wire and tracer tape shall be used.

all public roads are free from dust, mud and/or debris that may be produced

18. The developer will comply with grading requirements of the City of O'Fallon.

19. All streets must meet the specifications and installation requirements of the standard specifications of City of O'Fallon.

20. Contractor shall maintain all siltation control measures and shall insure that

as a direct result of construction operations on this project.

## WINGHAVEN PHASE I IMPROVEMENT PLANS FOR EAGLE ROCK VILLAGE

PART OF U.S. SURVEY NO. 1669 AND PART OF SECTIONS 11 & 12 TOWNSHIP 46 NORTH, RANGE 2 EAST CITY OF O'FALLON, MISSOURI

21. All exterior manholes shall be waterpfoofed on the exterior in accordance with Missouri Department of Natural Resources specifications. 10 CSR-8.120 (7) (E).

22. This tract is served by:

A. SANITARY SEWERS: DUCKETT CREEK SEWER DISTRICT

B. WATER: PUBLIC WATER SUPPLY DISTRICT NO.2 OF ST. CHARLES COUNTY

C. ELECTRIC: AMEREN UE

D. GAS: ST. CHARLES GAS

E. PHONE: GTE

F. SCHOOL DISTRICT: WENTZVILLE SCHOOL DISTRICT

G. FIRE DISTRICT: WENTZVILLE FIRE PROTECTION DISTRICT

23. Brick shall not be used on manholes.

24. All pipes shall have positive drainage through manholes. No flat base structures are allowed.

29. All sanitary manholes shall be 42" minimum inside diameter.

30. No water meters, valves or blow-off valves will be permitted in streets or driveways

31. Specifications for street name signs and stop signs

 a) Street name signs and stop signs shall be aluminum. b) Street name signs shall be green backing with white letters.

c) Height of sign shall be seven (7) feet from the fininsh grade to the bottom of the sign.

32. Notify the City of O'Fallon 48 hours prior to the commencement of grading and/or prior to the commencement of construction.

33. The Contractor shall prevent all storm surface water, mud and construction debris from entering the existing sanitary sewer system.

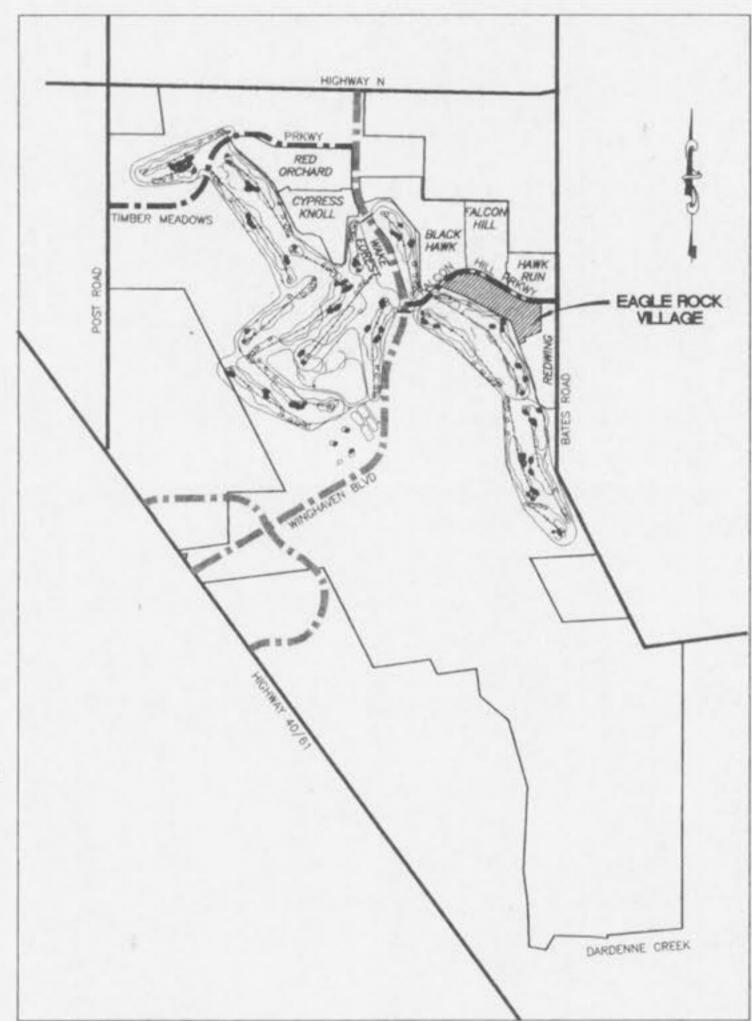
34. The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination and inspection.

35. This site falls outside of the 100-year flood zone. Reference Flood Insurance Rate Maps 29183C0240E, 29183C0220E, 29183C0440E. Effective date August 2, 1996

36. All stormwater inlets shall be provided with a 5/8"# trash bar per City of O'Fallon

37. Starm manholes shall be cast with a 0.2' drop along the flowline.

38. All storm sewer trenches non-perpendicular to roadway right-of-way must be jetted twice prior to paving. This may be waved if inlets are separated by 15' or less as measured along roadway centerline.



NOT TO SCALE

LOCATION MAP

EXISTING PROPOSED STRUCTURES +(500) SPOT ELEVATION BUILDING LINE \_\_\_\_ CENTER LINE \_\_\_\_ STORM SEWER -----OVERHEAD TELEPHONE CABLE TELEVISION OVERHEAD ELECTRIC UNDERGROUND ELECTRIC UNDERGROUND TELEPHONE FLOW LINE ELEVATION (FL 510.00) INVERT ELEVATION (INV 520.00) FLOW LINE ELEV. AT GUTTER (G 515.00) TC 515.50 TOP OF CURB ELEV. (TC 515.50) CURB INLET/AREA INLET GRATED INLET MANHOLE FLARED END SECTION DOUBLE CURB INLET/AREA INLET MWOVW WATER VALVE OR METER GVA GM GAS VALVE OR METER GV\_GM FIRE HYDRANT W/VALVE # FH UTILITY OR POWER POLE UP-0-PP UP - PP GUY WIRE 0-0 LIGHT STANDARD 0-11 TBOTP TELEPHONE BOX OR PEDESTAL DSB SIGNAL BOX ■ SB SIGNS (NOTE TYPE OF SIGN) HANDICAPPED BENCHMARK SOIL BORING RAILROAD FENCE (NOTE TYPE OF FENCE) STRAW BALE BARRIER OR ------SYNTHETIC FILTER BARRIER STREET LIGHT D.SL TO BE REMOVED SANITARY SEWER STRUCTURES STORM SEWER STRUCTURES

LEGEND

ELEVATION REFERENCE MARK: RM36 ELEV. 501.92 - CHISELED SQUARE ON TOP OF SOUTHWEST WINGWALL AT EAST END OF WESTBOUND U.S. HIGHWAY 40 BRIDGE OVER DARDENNE CREEK

John Cicling

DEVELOPER: WINGHAVEN RESIDENTIAL, LLC by MCBRIDE and SON HOMES, INC. #1 MCBRIDE and SON CORPORATE CENTER DRIVE CHESTERFIELD, MISSOURI 63005 (314) 537-2000

## SHEET INDEX:

COVER SHEET

SITE PLAN

GRADING PLAN

DRAINAGE AREA MAP STREET PROFILES

SANITARY SEWER PROFILES

STORM SEWER PROFILES

WATER MAIN PLAN WARPING DETAILS

CONSTRUCTIONS DETAILS

1 06/16/98 PER O'FALLON 2 06/26/98 PER O'FALLON 3 07/16/98 PER O'FALLON PROJECT NO. CONTRACT NO. 970231 DRAWN DATE 05/12/98

DISCLAIMER OF RESPONSIBILITY

I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsi-bility for all other Drawings, Specifications, Estimates, Reports or other documents or in-

struments relating to or intended to be used for any part or parts of the architectural or

**COVER SHEET** 

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CHECKED

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