



**COMPACTION NOTE:**  
 THE SOILS ENGINEER SHALL VERIFY THAT ALL COMPRESSIBLE MATERIAL HAS BEEN REMOVED PRIOR TO PLACEMENT OF FILL AND THAT ALL FILL UNDER SANITARY AND STORM SEWER LINES CONSTRUCTED ABOVE GRADE HAS BEEN COMPACTED TO 90% OR "MODIFIED PROCTOR" FILL IS TO BE PLACED IN A MAXIMUM 4" LIFTS. TESTS SHALL BE TAKEN AT A MAXIMUM OF 50' INTERVALS ALONG THE ROUTE OF THE PIPE IN FILL AREAS. TESTS SHALL BE TAKEN AT 2' INTERVALS VERTICALLY STARTING AT THE BOTTOM OF THE FILL FROM THE TOP OF PIPE TO VISIBLE SOIL. A COPY OF THESE RESULTS WILL BE SUBMITTED TO SEWER INSPECTOR PRIOR TO CONSTRUCTION.

**GRADING AND DRAINAGE NOTES**

1. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
2. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADINGS AND BE INSTALLED ACCORDINGLY.
3. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
4. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
5. S/C.P. - SMOOTH INTERIOR CORRUGATED PLASTIC PIPES 4" FITTINGS SHALL BE: A.D.S.-N2 MFRD. BROADVANCED DRAINAGE SYSTEMS, INC. 3300 RIVERSIDE DRIVE, COLUMBUS, OHIO 43221 (614) 451-3051
6. FRENCH DRAIN SHALL BE INSTALLED IF DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS.

**ATTENTION SEWER CONTRACTOR**

For sewer pipe (storm, sanitary and combined) with a design grade less than one percent (1%), verification of the pipe grade will be required for each installed reach of sewer prior to any surface restoration or installation of any surface improvements. The contractor's field supervisor will be required to provide daily documentation verifying that the on-site pipe grade meets the design grade through the submittal of signed cut sheets to the Sewer Inspector upon request.

Field surveyed verification must be made under the direction of a licensed land surveyor or registered engineer. The Contractor will be required to remove and replace any sewer reach having an on-site grade which is flatter than the design grade by more than 0.01%. Sewers with grades greater than the design slope may be left in place, provided no other sewer grade is reduced by the variance in the default grade.

Sewer Inspector also reserves the right to require the Contractor to remove and replace any sewer (at any time prior to construction approval) for which the as-built grade does not comply with the grade tolerance shown in the above paragraphs.

The Sewer Contractor shall be responsible for any costs associated with the field verification of the sewer grade or removal and replacement of the sewer pipe or associated appurtenances.

THE SEAL OF STANLEY F. VISNOVSKE ON THIS DRAWING APPLIES ONLY TO THE CIVIL ENGINEERING SHOWN. IT DOES NOT APPLY FOR ANY RESPONSIBILITY TAKEN FOR GEOTECHNICAL, (INCLUDING BUT NOT LIMITED TO SOILS STABILITY), STRUCTURAL, HVAC, PLUMBING, ELECTRICAL, FIRE PROTECTION, TRAFFIC ENGINEERING, SURVEYING (BOUNDARY AND TOPOGRAPHIC), OR ARCHITECTURAL (BUILDING OR LANDSCAPE).

**Heideman & Associates, Inc.**  
 13545 Barrett Parkway Drive  
 Suite 200  
 St. Louis, Missouri 63021  
 Phone: 314-822-2217  
 Fax: 314-822-7858

Storm Sewer Profiles / Details  
**LOWE'S of O'FALLON**  
 O'Fallon, Missouri

DATE	DESCRIPTION	REVISIONS
11/24/98	REV. CITY COMMENTS	
12/23/98	REV. COMMENTS	
3/7/99	REVISED RET. WALL	
4/26/99	REV. ENTRANCES	
5/28/99	REV. REVIEW	
7/12/99	REV. SAN. SEWER	
8/6/99	REV. COMMENTS	
8/30/99	REV. COMMENTS	
9/22/99	REV. COMMENTS	
DATE	11-10-98	
CHECKED BY	STANLEY F. VISNOVSKE	
DRAWN BY	DPB	
SHEET NO.	C-7	
JOB NO.	98293	