

- GENERAL NOTES**
- Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, if the contractor has shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of improvements.
  - All filled areas shall be compacted to 90% of maximum density as determined by the Modified Proctor Compaction Test (A.S.T.M. D-1557).
  - No slope shall be steeper than 1:1 or as called for in the soils report for the project. All slopes shall be seeded or seeded and mulched.
  - No graded area to be allowed to remain bare over winter with-  
out being seeded and/or mulched.

**TYPICAL SECTION - RELOCATED CHANNEL**

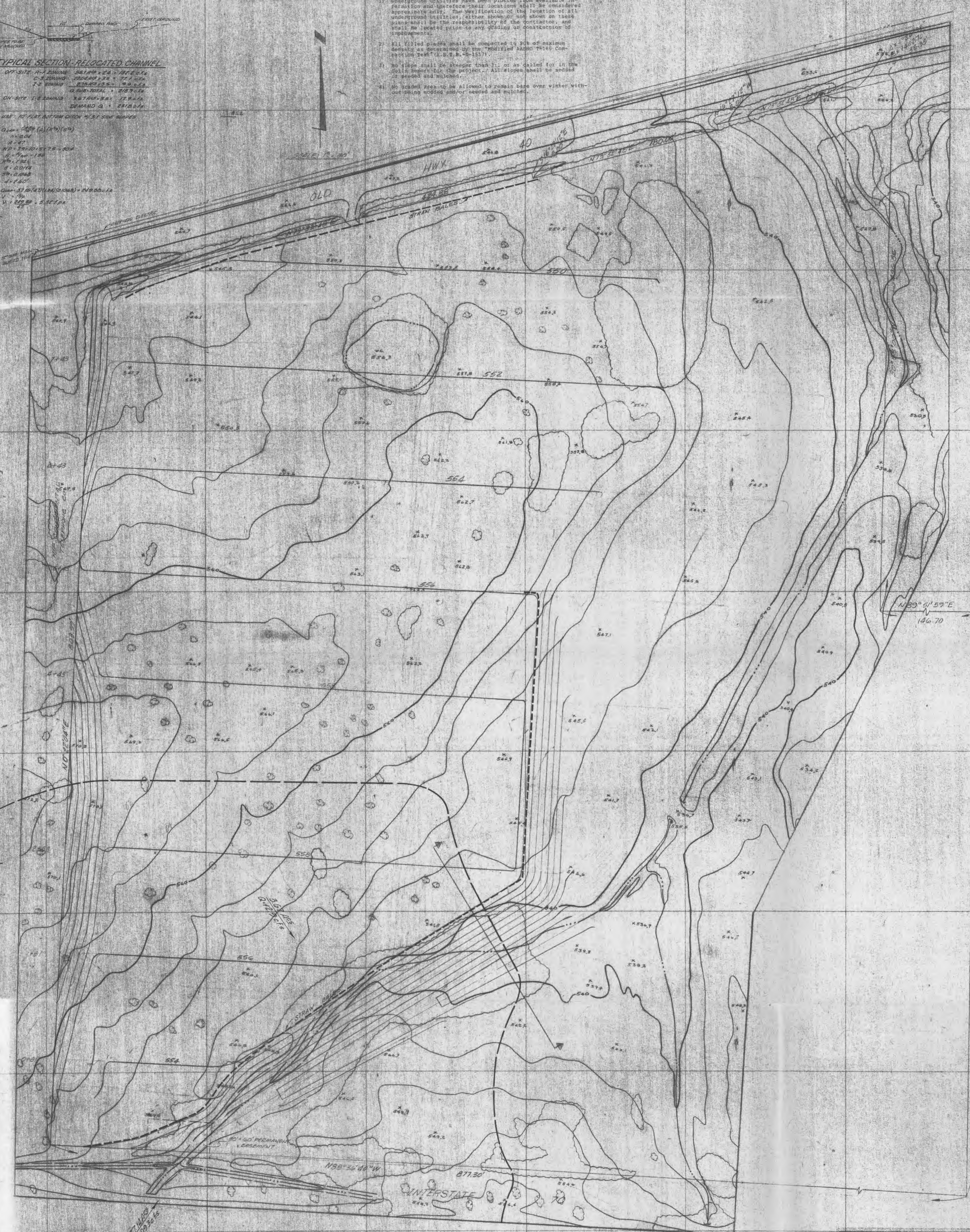
OFF-SITE: R-1 ZONING 381.49 ± 2.2 - 181.4 ± 2.2  
 C-3 ZONING 380.00 ± 3.5 - 171.4 ± 2.2  
 T-2 ZONING 378.50 ± 3.5 - 9.0 ± 2.2

ON-SITE: T-2 ZONING 387.00 ± 3.5 - 179.4 ± 2.2  
 DEMAND Q = 2.818 CFS

USE: 10' FLAT BOTTOM DITCH W/ 3:1 SIDE SLOPES

Q<sub>max</sub> = 1.22 (4) (1.4) (5.4)  
 K = 0.04  
 N = 0.47  
 NP = 1.94 (1) (1.7) (2.0)  
 L = 1.74 (1) (1.5) (1.9)  
 S<sub>0</sub> = 1.54  
 S = 0.0118  
 S<sub>1</sub> = 0.008  
 S<sub>2</sub> = 0.01

Q<sub>max</sub> = 37.15 (4) (1.4) (1.0) (1.0) = 24000 cfs  
 V = 3.9  
 W = 1.05 (1) (1.0) (1.0)



**APPROVED**  
 6-8-85  
 9-6-85

RECEIVED SEP 03 1985

GEORGE BUTLER ASSOCIATES, INC.  
 SUITE A - 114 EAST ELM ST.  
 O'FALLON, MISSOURI 63366

PREPARED FOR:  
**FRED WEEBE, INC.**  
 7023 ALLEGRA  
 ST. LOUIS, MO. 63111  
 PHONE 628-1870

*Second Submittal*  
 Revised 9/26/85



O'FALLON QUARRY PROPERTY  
 PREPARED FOR  
 FRED WEEBE, INC.  
 BY  
**SOBEK**  
 580 SPIRIT OF ST. LOUIS BLVD.  
 SPIRIT OF ST. LOUIS AIRPORT, CHESTNUTFIELD, MO. 63017  
 DATE OF PHOTOGRAPHY: 6-26-85  
 SCALE: 1" = 30'  
 4' CONTOUR INTERVAL  
 NOTE: DASHED CONTOURS ARE APPROXIMATE

**BAX ENGINEERING CO., INC.**  
 530 Madison Street  
 St. Charles, MO. 63301  
 946-6588  
 724-3330  
 Date: 7-31-85 Order No.: 64-1629