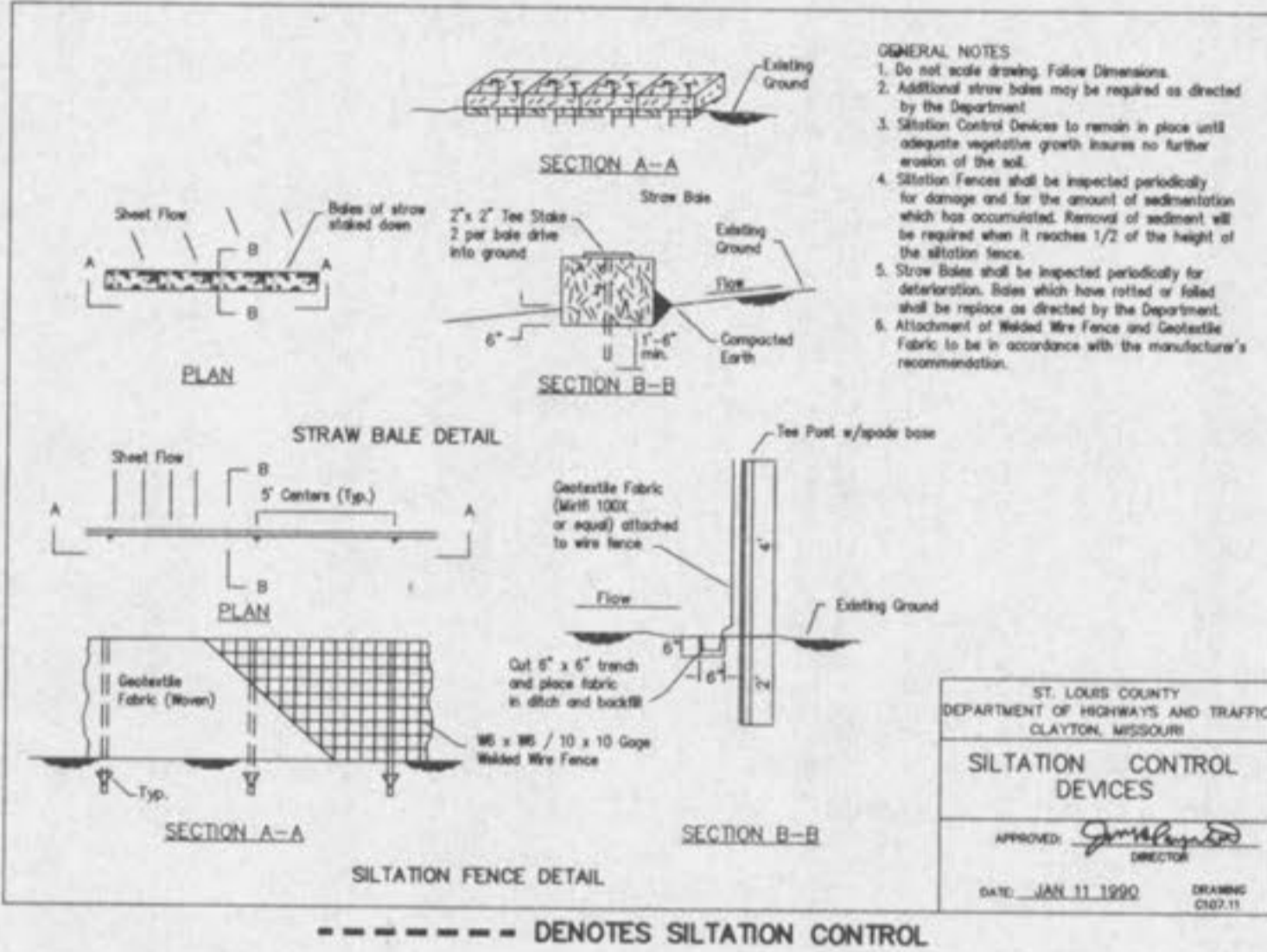


**EARTHWORK QUANTITIES**

	CUT	FILL	
SUBGRADE	278,312 c.y.	269,039 c.y.	Subgrade
	+ 2,580 c.y.	= 7,580 c.y.	
	280,892 c.y.	261,459 c.y.	

SITE BALANCES W/ 7.5% SHRINKAGE

THE ESTIMATED EARTHWORK QUANTITIES ARE CALCULATED FOR PERMIT AND INSPECTION. THESE QUANTITIES ARE NOT INTENDED TO BE USED FOR BIDDING.



**TYPICAL YARD SWALE HYDRAULICS**

Maximum Q = 4.00 cfs  
 Maximum V = 4.00 ft./sec.  
 N=0.030 (Grass)

Maximum side slopes = 3 (Horizontal) : 1 (Vertical)

Longitudinal Slope (%)	Q (CFS)	V (ft./sec.)	D (ft.)
0.5	4	1.89481682	0.836852789
1.0	4	2.4572734	0.736618511
2.0	4	3.118668934	0.646843926
3.0	4	3.71000035	0.598490621
4.0	3.51071866	4	0.54088807
5.0	2.51206592	4	0.457335601
6.0	1.91099329	4	0.399060698
7.0	1.516488	4	0.355491209
8.0	1.24122656	4	0.321613971
9.0	1.04021299	4	0.294422173
10.0	0.888149422	4	0.242052296

6.0' MIN. WIDTH  
 MIN. DEPTH 1.0'  
 SODDED  
 3:1 SLOPE

**VEGETATIVE ESTABLISHMENT For Urban Development Sites**

**APPENDIX A**

**Seeding rates:**

**Permanent:**

Tall Fescue - 30 lbs./ac.  
 Smooth Brome - 20 lbs./ac.  
 combined - Fescue @ 15 lbs./ac. and Brome @ 10 lbs./ac.

**Temporary:**

Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1,000 square foot)  
 Oats - 120 lbs./ac. (2.75 lbs. per 1,000 square foot)

**Seeding periods:**

Fescue or Brome - March 1 to June 1  
 August 1 to October 1

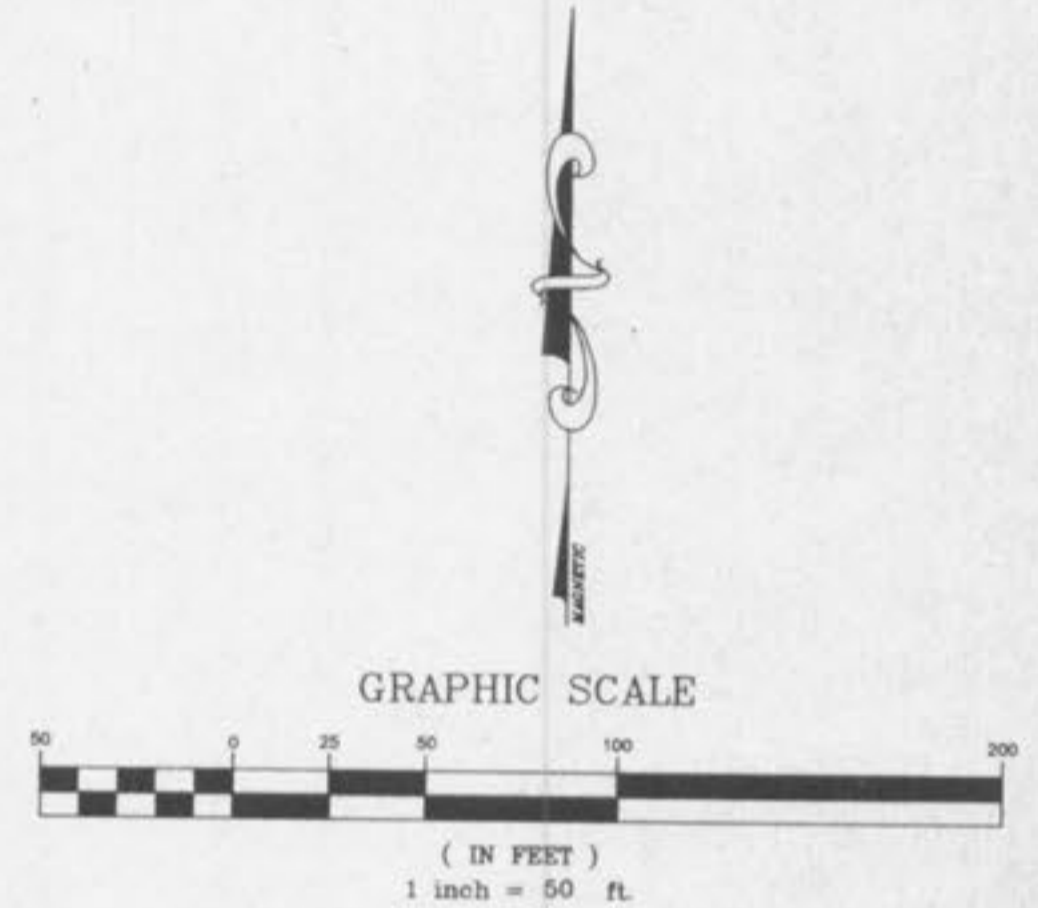
Wheat or Rye - March 15 to November 1  
 Oats - March 15 to September 15

**Mulch rates:** 100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)

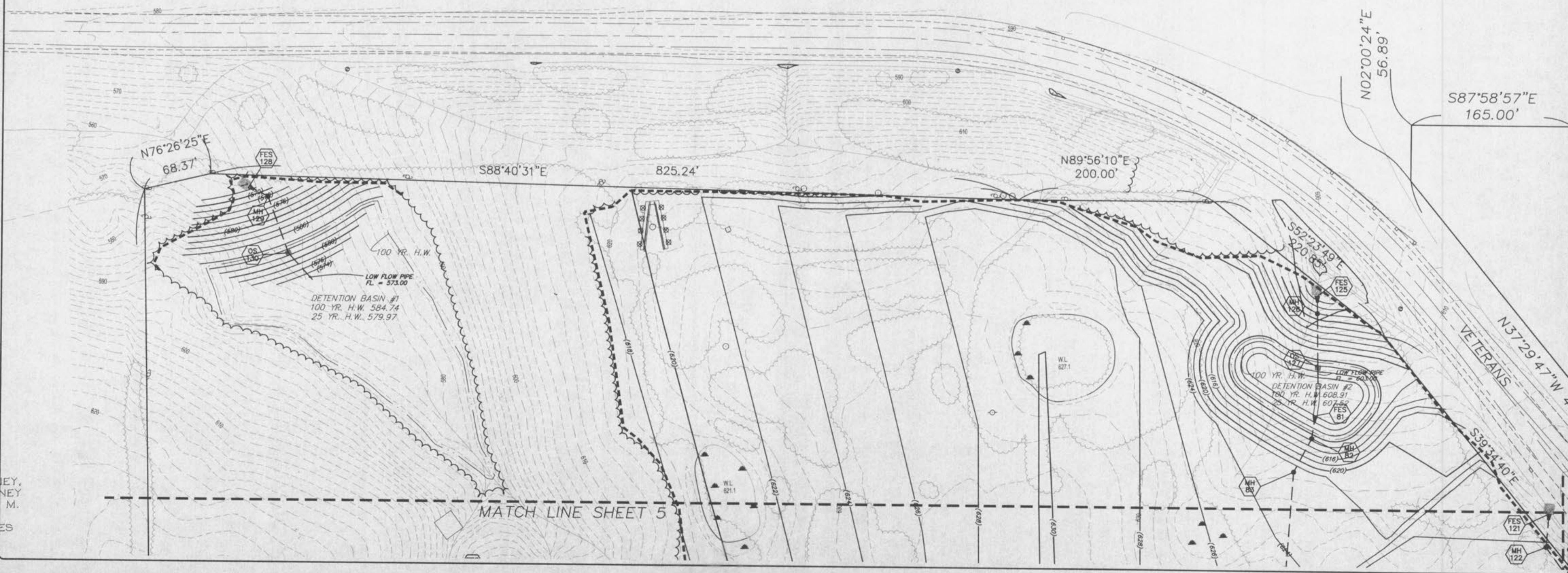
**Fertilizer rates:**

Nitrogen 30 lbs./ac.  
 Phosphate 30 lbs./ac.  
 Potassium 30 lbs./ac.  
 Lime 600 lbs./ac. ENM\*

\* ENM = effective neutralizing material as per State evaluation of quarried rock.



INTERSTATE 70



ISSUE	REMARKS/DATE
1	7/29/01
2	9/7/01
3	9/28/01
4	10/18/01
5	11/7/01

PREPARED FOR:  
**McBride & Son Homes, Inc.**  
 #1 McBride & Son Center Drive  
 Chesterfield, Missouri 63005  
 (636) 537-2000



PREPARED BY:  
**THE STERLING CO.**  
 ENGINEERS & SURVEYORS  
 5055 NEW BALMARTIN ROAD  
 ST. LOUIS, MISSOURI 63129  
 (314) 487-0440 FAX 487-8944  
 E-Mail: Sterling@com-stl.net

DRAWN	DESIGNED	CHECKED
<b>THORNBURY CROSSING</b>		
SITE/GRADING PLAN		
PROJECT:	NO. 00 11 289	SHEET 6 OF 33