III

Planning Department

TOWN OF ACTON
472 Main Street
Acton, Massachusetts 01720
Telephone (978) 264-9636
Fax (978) 264-9630
planning@acton-ma.gov

MEMORANDUM

To: Planning Board ***Date:*** March 17, 2005

From: Roland Bartl, AICP, Town Planner R. B.

Subject: Revised Bond Calculation (Robbins Mill Estates)

On March 8, the Board postponed its vote on the bond sum for Robbins Mill after Poulty Homes asked for a reconsideration of the amount calculated for fill material. Our Engineering Department, after researching the matter and consulting with several sources, has adjusted the figure down from $22/yard to $16/yard (Item 1 B.). This reduction ends up being a compromise in the middle of the original calculation and what Poulty Homes had suggested ($12/yard).

This reduces the overall recommended bond amount by about $½ million to **$5,158,700**.

This item remains **off consent** due to Lauren's inability to vote on it.

TOWN OF ACTON ENGINEERING DEPARTMENT Date: **3/17/2005**
Street Name: Canterbury Hill Road & Blueberry Path Extension Length: **8068**
Subdivision Road Bond Calculation

DESCRIPTION	QTY	UNIT	COST/UNIT	TOTAL COST
ITEM 1 - CLEARING				
A. CLEARING, GRUBBING & EXCAVATING TOP SOIL	22	AC.	$ 10,000.00	$ 220,000.00
B. HAULED FILL	78000	C.Y.	$ 16.00	$ 1,248,000.00
C. EXCAVATION BELOW 26"		C.Y.		$ -
D. STUMP DISPOSAL		L.S.		$ -
	SUBTOTAL CLEARING (ITEM 1)			**$ 1,468,000.00**
ITEM 2 - WATER				
A. F & I - 6" WATER MAIN		L.F.		$ -
B. F & I - 8" WATER MAIN	8610	L.F.	$ 50.00	$ 430,500.00
C. F & I - 12" WATER MAIN		L.F.		$ -
D. F & I - TEMP. & FINAL PAVEMENT PATCHES	670	S.Y.	$ 95.00	$ 63,650.00
E. TAPPING, SLEAVE & GATE VALVE		EACH		$ -
F. HOUSE SERVICE CONNECTIONS	90	EACH	$ 900.00	$ 81,000.00
G. HYDRANTS, INCL. VALVES & FITTINGS	16	EACH	$ 4,600.00	$ 73,600.00
H. DIRECTIONAL DRILLING ON CARLISLE ROAD UNDER NASHOBA BROOK	150	L.F.	$ 100.00	$ 15,000.00
I. WATER DISTRICT ESTIMATE (to complete)		L.S.		$ -
	SUBTOTAL WATER (ITEM 2)			**$ 663,750.00**
ITEM 3 - DRAINAGE				
A. F&I - C.B. W/ SINGLE FRAME & GRATE	20	EACH	$ 2,500.00	$ 50,000.00
B. F&I - C.B. W/ DOUBLE FRAME & GRATE	11	EACH	$ 3,000.00	$ 33,000.00
C. F&I - D.M.H. W/ FRAME & COVER	44	EACH	$ 3,000.00	$ 132,000.00
D. F & I - GAS/OIL HOOD	31	EACH	$ 500.00	$ 15,500.00
E. F & I - PRECAST 12" FLARED END	1	EACH	$ 475.00	$ 475.00
F. F & I - PRECAST 15" FLARED END	1	EACH	$ 500.00	$ 500.00
G. F & I - PRECAST 18" FLARED END	3	EACH	$ 550.00	$ 1,650.00
H. F & I - PRECAST 24" FLARED END	3	EACH	$ 650.00	$ 1,950.00
I. F & I - PRECAST 30" FLARED END	3	EACH	$ 700.00	$ 2,100.00
J. F & I - DIVERSION D.M.H.	3	L.F.	$ 3,000.00	$ 9,000.00
K. F & I - DETENTION BASIN OUTLET STRUTURES	3	EACH	$ 3,000.00	$ 9,000.00
L. F & I - 12" R.C.P.	2760	L.F.	$ 35.30	$ 97,428.00
M. F & I - 15" R.C.P.	2488	L.F.	$ 41.40	$ 103,003.20
N. F & I - 18" R.C.P.	1693	L.F.	$ 44.80	$ 75,846.40
O. F & I - 24" R.C.P.	885	L.F.	$ 63.00	$ 55,755.00
P. F & I - 30" R.C.P.	475	L.F.	$ 87.50	$ 41,562.50
Q. RIP-RAP SWALE		L.F.		$ -
R. STONE SWALES		L.F.		$ -
S. SUBDRAIN W/PIPE	8100	L.F.	$ 17.50	$ 141,750.00
T. F & I - LEACH PITS & STONE		EACH		$ -
U. RIP-RAP at OUTFALLS	14	L.S.	$ 350.00	$ 4,900.00
V. F&I - Det./Ret. BASINS	7	EACH	$ 10,000.00	$ 70,000.00
W. CONTROL OUTLET MANHOLE		EACH		$ -
X. RETAINING WALL - DET/RET BASIN #2	25	C.Y.	$ 500.00	$ 12,500.00
	SUBTOTAL DRAINAGE (ITEM 3)			**$ 857,920.10**

ITEM 4 - SURFACE

A. F & I - 12" GRAVEL SUB-BASE	7300	C.Y.	$	31.00	$	226,300.00
B. F & I - 6" PROCESSED GRAVEL	3700	C.Y.	$	35.00	$	129,500.00
C. FINE GRADE for PAVING	8067	L.F.	$	9.00	$	72,603.00
D. 2" TYPE I BITUMINOUS CONC. - Binder	2400	TON	$	47.00	$	112,800.00
E. 1.5" TYPE I BITUMINOUS CONC. - Top	1800	TON	$	48.00	$	86,400.00
F. BITUMINOUS CONCRETE BERM	16100	L.F.	$	3.00	$	48,300.00
G. SIDEWALK (Gravel, Grading, & Paving)	8067	L.F.	$	15.00	$	121,005.00
H. WHEEL CHAIR RAMPS-AAB COMPLIANCE	6	EACH	$	250.00	$	1,500.00
I. SLOPED GRANITE EDGING	600	L.F.	$	13.00	$	7,800.00
	SUBTOTAL SURFACE (ITEM 4)				**$**	**806,208.00**

ITEM 5 - SHOULDERS

A. SHAPE SHOULDER & SUBGRADE	16140	L.F.	$	3.50	$	56,490.00
B. F & I - 6" LOAM for SHOULDERS	16140	L.F.	$	2.00	$	32,280.00
C. FINE GRADE, FERTILIZE & SEED SHOULDERS	16140	L.F.	$	1.00	$	16,140.00
D. SHAPE, LOAM, & SEED SLOPES		S.Y.			$	-
E. F & I - TREES (Est. by Tree Warden)	323	EACH	$	500.00	$	161,500.00
F. EROSION CONTROL	1	L.S.	$	10,000.00	$	10,000.00
G. F & I - SHRUBS	47	EACH	$	270.00	$	12,690.00
H. CONTINGENCY TREE PLANTING		L.S.			$	-
	SUBTOTAL SHOULDERS (ITEM 5)				**$**	**289,100.00**

ITEM 6 - ENGINEERING

A. F & I - ROAD BOUNDS, incl. LAYOUT & CERTIFICATION	89	EACH	$	350.00	$	31,150.00
B. F & I - COMMON LAND BOUNDS, incl. LAYOUT & CERTIFICATION	162	EACH	$	350.00	$	56,700.00
C. F & I - MAG NAILS, INCL. LAYOUT & CERTIFICATION	40	EACH	$	50.00	$	2,000.00
D. PREPARE "AS-BUILT" PLAN & LETTER CERTIFYING WORK	1	L.S.	$	20,000.00	$	20,000.00
E. ROAD LAYOUT with GRADES - 5 PHASES	20	EACH	$	2,000.00	$	40,000.00
F. LEGAL DESCRIPTION, WARRANT ARTICLE & PROPOSED DEED	1	L.S.	$	15,000.00	$	15,000.00
	SUBTOTAL ENGINEERING (ITEM 6)				**$**	**164,850.00**

ITEM 7 - MISCELLANEOUS

A. FIRE ALARM SYSTEM - PEDESTAL & BOX	3	L.S.	$	1,500.00	$	4,500.00
B. F & I - FIRE ALARM SYSTEM WIRE	8068	L.F.	$	4.70	$	37,919.60
C. F & I - ROAD SIGN, incl. POLE & PRIV WY PLATE	3	EACH	$	250.00	$	750.00
D. CARLISLE RD - INTERSECTION IMPROVEMENTS	1	L.S.	$	20,000.00	$	20,000.00
E. PAVEMENT MARKINGS - 4 CROSSWALKS	1	L.S.	$	1,000.00	$	1,000.00
F. STOP SIGN & LINE	4	EACH	$	250.00	$	1,000.00
G. F&I - GUARD RAIL	240	L.F.	$	30.00	$	7,200.00
H. F&I - RET WALL CARLISLE ROAD	110	L.F.	$	150.00	$	16,500.00
I. SPLIT RAIL FENCE - COMMON LAND	320	L.F.	$	14.00	$	4,480.00
J. RECREATION AREA	1	L.S.	$	250,000.00	$	250,000.00
K. STONE DUST TRAIL	680	L.S.	$	15.00	$	10,200.00
L. SIDEWALK: Carlisle Road	1600	L.F.	$	30.00	$	48,000.00
M. BALLFIELD PARKING	40	SPACE	$	800.00	$	32,000.00
N. TRAILHEAD PARKING	14	SPACE	$	450.00	$	6,300.00
	SUBTOTAL MISC. (ITEM 7)				**$**	**439,849.60**

SUBTOTAL	$	4,689,677.70
PLUS 10% CONTINGENCY	$	468,967.77
GRAND TOTAL	$	5,158,645.47
PRICE PER FOOT	$	639.40
FINAL BOND AMOUNT SAY....	**$**	**5,158,700.00**