

### **3.10 Earth Removal Calculations**

## The Meadow at Acton Earth Removal Calculations

Job: SM-4810

Done by: BRE

Checked by: GD

Date: 4/10/12

Plan Reference: Comprehensive Permit Plan for The Meadow at Acton by Stamski and McNary, Inc. dated: March 23, 2012.

### Proposed Site Work (Site Grading, Foundations, Etc.):

3 Methods used: (using AutoCAD Land Desktop Development)

Grid Method: Net 5,723 Fill

Composite Method: Net 5,753 Fill

Average End Method: Net 5,728 Fill

$(5,723 + 5,753 + 5,728) / 3 = 5,735$  C.Y. of material added as general fill

### Roof Drain (Cultec Recharger 330XL):

Depth: 3.54'

Area: 66.5 S.F.

Quantity: 25 units

$66.5 \text{ S.F.} \times 3.54 \text{ FT.} \times (1 \text{ C.Y.} / 27 \text{ C.F.}) \times 25 \text{ units} = 218 \text{ C.Y.}$  of material removed as cut

### Pavement (Driveway)

Average Depth of Pavement & associated gravel is 15"

Total Pavement Area = 26,806 S.F.

$26,806 \text{ S.F.} \times 15" \times (1 \text{ FT} / 12") \times (1 \text{ C.Y.} / 27 \text{ C.F.}) = 1,241 \text{ C.Y.}$  of material removed as cut

### Sidewalk

Average Depth of Pavement & associated gravel is 15"

Total Area = 4,140 S.F.

$4,140 \text{ S.F.} \times 15" \times (1 \text{ FT} / 12") \times (1 \text{ C.Y.} / 27 \text{ C.F.}) = 192 \text{ C.Y.}$  of material removed as cut

### Individual Driveways

Average Depth of Pavement & associated gravel is 15"

Total Area = 21,084 S.F.

$21,084 \text{ S.F.} \times 15" \times (1 \text{ FT} / 12") \times (1 \text{ C.Y.} / 27 \text{ C.F.}) = 976 \text{ C.Y.}$  of material removed as cut

### Final Adjustment:

$5,735 \text{ C.Y.} - 227 \text{ C.Y.} - 1,241 \text{ C.Y.} - 192 \text{ C.Y.} - 976 \text{ C.Y.} = 3,099 \text{ C.Y.}$  of Material added as general fill  
(Assumes top & subsoil stripped and reused on-site)