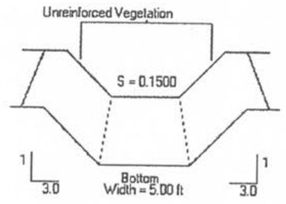
North American Green - Erosion Control Materials Design Software Ver.4.1 - Channel | 4/4/2007 02:20 PM | COMPUTED BY: A-A

PROJECT NAME: preston woods phase II | PROJECT NUMBER:

FROM STATION/REACH: | TO STATION/REACH: | DRAINAGE AREA: | DESIGN FREQUENCY:

HYDRAULIC RESULTS

Discharge (cfs)	Peak Flow Period (hrs)	Velocity (fps)	Area (sq.ft.)	Hydraulic Radius(ft)	Normal Depth (ft)
4.1	0.5	2.22	1.85	0.27	0.31



Not to Scale

LINER RESULTS

Reach	Material Type / Staple Pattern	Phase / Class	Veg. Type / Veg. Density	Soil Type	Manning's 'n'	Permissible Shear Stress (psf)	Calculated Shear Stress (psf)	Safety Factor	Remarks
Straight	Unreinforced		Mix		0.107	4.20	2.91	1.44	STABLE
		C	75-95%	Clay		0.070	0.015	4.52	STABLE

SECTION "A-A"

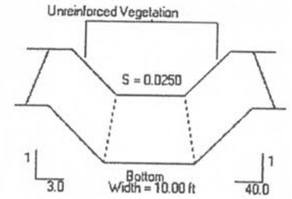
North American Green - Erosion Control Materials Design Software Ver.4.1 - Channel | 4/4/2007 02:17 PM | COMPUTED BY: B-B

PROJECT NAME: preston woods phase II | PROJECT NUMBER:

FROM STATION/REACH: | TO STATION/REACH: | DRAINAGE AREA: | DESIGN FREQUENCY:

HYDRAULIC RESULTS

Discharge (cfs)	Peak Flow Period (hrs)	Velocity (fps)	Area (sq.ft.)	Hydraulic Radius(ft)	Normal Depth (ft)
13.1	0.5	0.90	14.54	0.39	0.62



Not to Scale

LINER RESULTS

Reach	Material Type / Staple Pattern	Phase / Class	Veg. Type / Veg. Density	Soil Type	Manning's 'n'	Permissible Shear Stress (psf)	Calculated Shear Stress (psf)	Safety Factor	Remarks
Straight	Unreinforced		Mix		0.140	4.20	0.97	4.33	STABLE
		C	75-95%	Clay		0.070	0.003	23.32	STABLE

SECTION "B-B"

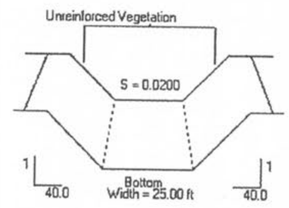
North American Green - Erosion Control Materials Design Software Ver.4.1 - Channel | 4/4/2007 02:14 PM | COMPUTED BY: D-D

PROJECT NAME: preston woods phase II | PROJECT NUMBER:

FROM STATION/REACH: | TO STATION/REACH: | DRAINAGE AREA: | DESIGN FREQUENCY:

HYDRAULIC RESULTS

Discharge (cfs)	Peak Flow Period (hrs)	Velocity (fps)	Area (sq.ft.)	Hydraulic Radius(ft)	Normal Depth (ft)
0.3	0.5	0.14	2.13	0.07	0.08



Not to Scale

LINER RESULTS

Reach	Material Type / Staple Pattern	Phase / Class	Veg. Type / Veg. Density	Soil Type	Manning's 'n'	Permissible Shear Stress (psf)	Calculated Shear Stress (psf)	Safety Factor	Remarks
Straight	Unreinforced		Mix		0.250	4.20	0.09	44.27	STABLE
		C	75-95%	Clay		0.070	0.000	759.14	STABLE

SECTION "D-D"

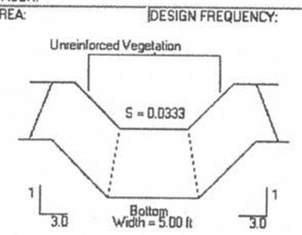
North American Green - Erosion Control Materials Design Software Ver.4.1 - Channel | 3/5/2007 01:15 PM | COMPUTED BY: F-F

PROJECT NAME: Preston Woods Phase II | PROJECT NUMBER:

FROM STATION/REACH: | TO STATION/REACH: | DRAINAGE AREA: | DESIGN FREQUENCY:

HYDRAULIC RESULTS

Discharge (cfs)	Peak Flow Period (hrs)	Velocity (fps)	Area (sq.ft.)	Hydraulic Radius(ft)	Normal Depth (ft)
0.9	0.5	0.60	1.49	0.23	0.26



Not to Scale

LINER RESULTS

Reach	Material Type / Staple Pattern	Phase / Class	Veg. Type / Veg. Density	Soil Type	Manning's 'n'	Permissible Shear Stress (psf)	Calculated Shear Stress (psf)	Safety Factor	Remarks
Straight	Unreinforced		Mix		0.166	3.33	0.54	6.20	STABLE
		D	75-95%	Clay		0.070	0.001	59.32	STABLE

SECTION "F-F"

REVISIONS

DESC	DATE
1 OWNER COMMENTS/CITY COMMENTS	12/19/07
2 CITY COMMENTS	1/31/08

DEVELOPER/OWNER:
THE JONES COMPANY HOMES, L.L.C.
16640 CHESTERFIELD GROVE, SUITE 200
CHESTERFIELD, MO 63005
PHONE: (636) 537-7192

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SEAL:

PRESTON WOODS - PHASE III
MASS GRADING PLANS
+ PARTIAL STORM SEWER
ST. CHARLES, MO. 63366

SWALE CROSS SECTIONS

planning • engineering • surveying • landscape architecture
Cole and ASSOCIATES INCORPORATED
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DESIGNED BY: JKW
DRAWN BY: JKW
CHECKED BY: JFH
DATE: 8/13/07
Job Number: 07-0178
Sheet Number: G6.4

USER: jwilson TAB: G6.4
DATE: Jan 11, 2008 -- 7:51am
DRAWING: S:\JOBS\Jobs2007\07-0178_C07-0178\dwg\MASS GRADING PLANS PHASE III\G_GPLAN_G6.0 DETAILS.dwg