

**LEGEND**

	FOREST CONSERVATION EASEMENT		EXISTING STREAM BANK
	EX. FOREST CONSERVATION EASEMENT		EXISTING STREAM/WETLAND BUFFER
	FOREST CONSERVATION EASEMENT SIGN (SEE SHEET 2 FOR DETAILS)		CRITICAL ROOT ZONE (CRZ) FOR ISOLATED SPECIMEN TREES
	EXISTING PAVEMENT		CRITICAL ROOT ZONE (CRZ) FOR EDGE OF NEW TREE LINE
	WETLANDS		TREE PROTECTION (SEE DETAIL SHEET 2 FOR DETAIL)
	EXISTING TREE		

**FCE AREA TABULATION**

AREA "A":	0.31 AC
AREA "B":	0.16 AC
AREA "C":	0.43 AC
AREA "D":	0.07 AC
AREA "E":	0.11 AC
AREA "F":	1.91 AC
AREA "G":	1.11 AC
<b>TOTAL:</b>	<b>7.1 AC</b>

THE FOREST CONSERVATION OBLIGATION INCURRED BY THIS PROJECT HAS BEEN SATISFIED WITH RETENTION 7.1 ACRES OF EXISTING FOREST WHICH EXCEEDS THE BREAK-EVEN POINT OBLIGATION OF 7.06 ACRES FOR THIS SITE. FOREST CONSERVATION SURETY IN THE AMOUNT OF \$61,855 HAS BEEN POSTED FOR THIS PROJECT. SURETY WILL BE PAID WITH F-09-071.

THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 18.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

THE TECHNICAL REQUIREMENTS AND RECOMMENDED PRACTICES ASSOCIATED WITH THE IMPLEMENTATION OF A FOREST CONSERVATION PLAN, INCLUDING THE CONSTRUCTION PERIOD, POST-CONSTRUCTION PERIOD, AND LONG TERM MANAGEMENT SHALL BE IN ACCORDANCE WITH CHAPTER V "IMPLEMENTATION PRACTICES AND TECHNIQUES" OF THE HOWARD COUNTY FOREST CONSERVATION MANUAL.

**ENVIRENS INC.**

FCA QUALIFIED PROFESSIONAL: *Michael Hollins*  
MICHAEL HOLLINS

<b>OWNER</b>	<b>DEVELOPER</b>
<b>CHASE LAND, LLC</b>	<b>CHASE LAND, LLC</b>
14401 SWEITZER LANE SUITE 200 LAUREL, MD 20707 TEL: (240) 294-5731 FAX: (240) 294-5737 CONTACT: HILLARY GOLT	14401 SWEITZER LANE SUITE 200 LAUREL, MD 20707 TEL: (240) 294-5731 FAX: (240) 294-5737 CONTACT: HILLARY GOLT

NO.	DATE	REVISION	DATE
1	1/6/2011	REMOVED SITE DEVELOPMENT INFORMATION & LOD. REVISED FCE LABELS, FILE NUMBER REFERENCE, AND ADDED CME BORDER.	1/6/2011 659-FD10 CURRENT

NO. 32441  
Exp. 12/22/2011

PARCEL: *8/p 235* LIBER/FOLIO #: *5867/0368*

**FOREST CONSERVATION PLAN**  
for  
**CHASE LAND SUBDIVISION**  
F - 09 - 071

TAX MAP: 43  
GRID: 19

6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
EX. ZONING M-1 & MXD-3

SCALE: AS NOTED  
DATE: JANUARY 2011

**CME ENGINEERING**  
CME ENGINEERING LP  
27 East Main Street, Frostburg, MD 21532  
301-689-1700 FAX: 301-689-5177

**SHEET 1 of 2**

**NOTE: ORIGINAL MAPPING PREPARED BY TIMMONS GROUP DATED 10/28/2008**

I hereby certify that these documents were prepared or approved by me and that I am a duly Licensed Professional Engineer under the laws of Maryland.  
No. 32441  
Exp. 12/22/2011

REVIN L. ODER  
OF CME MANAGEMENT LLC, GENERAL PARTNER OF CME ENGINEERING LP.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Walt Redwood*  
Chief, Division of Land Development

1/20/11

BALTIMORE WASHINGTON BOULEVARD & US ROUTE 1

MARYLAND STATE HIGHWAY US ROUTE 1 BALTIMORE WASHINGTON BOULEVARD 60' PUBLIC ROAD R/W

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION R/W PROJECT NO. HO796B31 PLAT NO. 55113 STATIONS 198.00 - 207.00

EX. 20' W (CLASS) B2 (DP) (CONTR. #76W)

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION R/W PROJECT NO. HO796B31 PLAT NO. 55113

FOREST CONSERVATION NOTES

CONSTRUCTION PHASE:

1. THE LIMITS OF THE FOREST CONSERVATION AREAS SHALL BE STAKED AND FLAGGED.
2. A PRE-CONSTRUCTION MEETING AT THE SITE SHOULD BE HELD TO CONFIRM THE LIMITS OF CLEARING SPECIFIED. THE MEETING SHOULD INCLUDE THE OWNER/OWNER'S REPRESENTATIVE, THE ON-SITE FOREMAN IN CHARGE OF LAND DISTURBANCE, THE ENVIRONMENTAL CONSULTANT, AND THE APPROPRIATE HOWARD COUNTY INSPECTOR(S).
3. TREE PROTECTION FENCING & FOREST RETENTION AREA SIGNS SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING ACTIVITIES. THE FENCING AND SIGNS SHALL BE MAINTAINED DURING THE ENTIRE CONSTRUCTION PERIOD. NONE OF THE DEVICES SHALL BE ANCHORED OR ATTACHED TO THE TREES TO REMAIN. THE MAINTENANCE TIME FRAME MAY BE EXTENDED TO ACCOMMODATE SUBSEQUENT PHASES OF DEVELOPMENT.
4. EQUIPMENT, CONSTRUCTION PARKING, MATERIAL STORAGE, ETC. SHALL NOT BE WITHIN THE FOREST RETENTION AREA. ONLY ACTIVITIES THAT IMPLEMENT REFORESTATION PLANTING AND MAINTENANCE (I.E. WATERING, FERTILIZING, THINNING, PRUNING, REMOVAL OF DEAD & DISEASED TREES/LIMBS WHERE NECESSARY, ETC.) ARE ALLOWED IN THE FOREST RETENTION AREA. CLEARING FOR THE PURPOSE OF SODDING OR PLANTING GRASS IS NOT PERMITTED WITHIN THE FOREST RETENTION AREA ONCE IT HAS BEEN ESTABLISHED.
5. AT THE END OF THE CONSTRUCTION PHASE, THE DESIGNATED QUALIFIED PROFESSIONAL SHALL CONVEY CERTIFICATION TO THE ADMINISTRATOR OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM THAT ALL FOREST RETENTION AREAS HAVE BEEN PRESERVED, ALL REFORESTATION AND/OR AFFORESTATION PLANTINGS (IF APPLICABLE) HAVE BEEN INSTALLED AS REQUIRED BY THE FOREST CONSERVATION PLAN, AND THAT ALL PROTECTION MEASURES REQUIRED FOR THE POST-CONSTRUCTION PERIOD HAVE BEEN INSTALLED. UPON REVIEW OF THE FINAL CERTIFICATION DOCUMENT FOR COMPLETENESS AND ACCURACY, THE PROGRAM COORDINATOR WILL NOTIFY THE OWNER OF RELEASE FROM THE CONSTRUCTION PHASE OBLIGATIONS AND REQUIREMENTS. THE 2-YEAR (MINIMUM) POST-CONSTRUCTION PHASE AND MANAGEMENT PERIOD THEN COMMENCES.

POST-CONSTRUCTION PHASE:

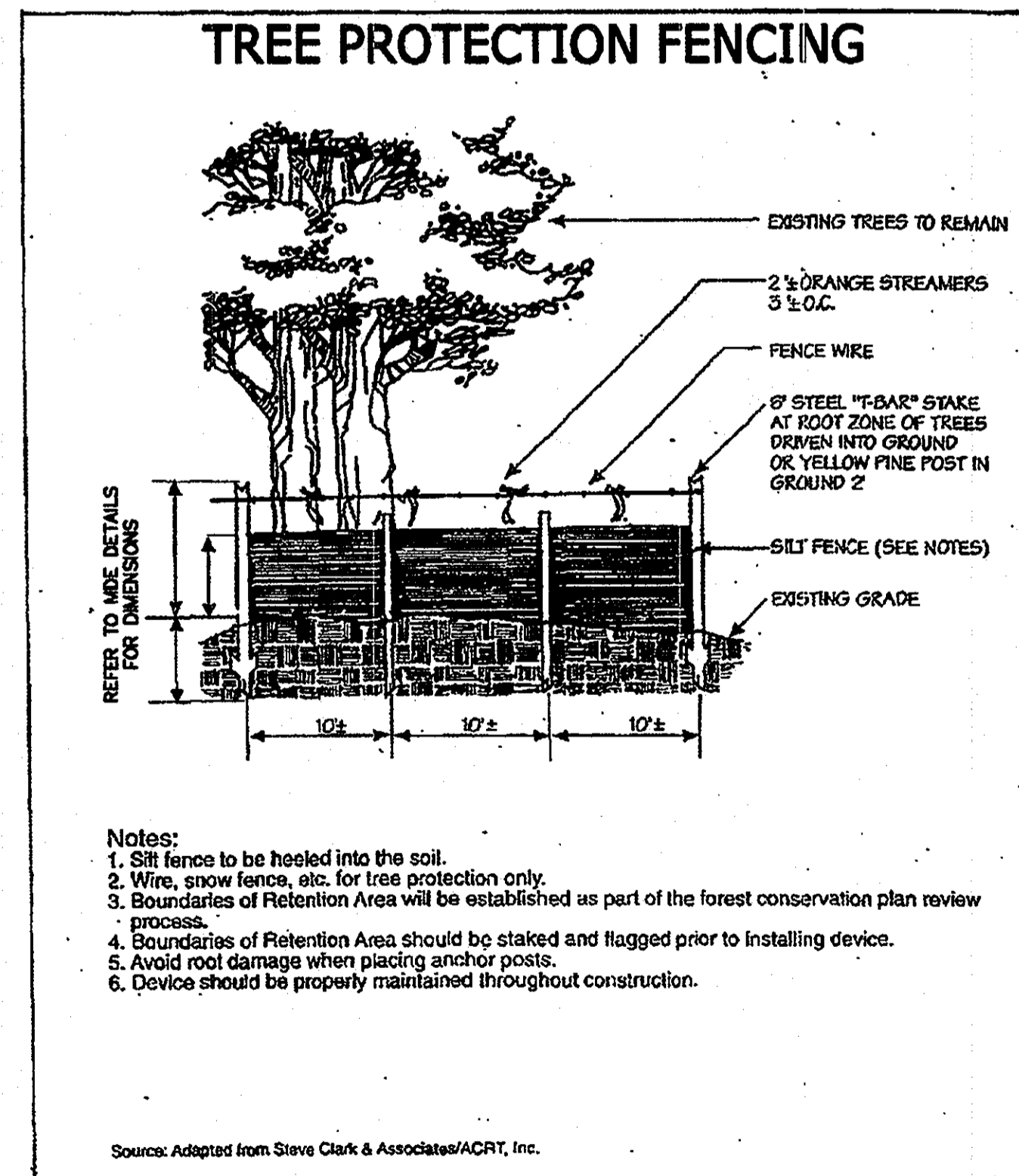
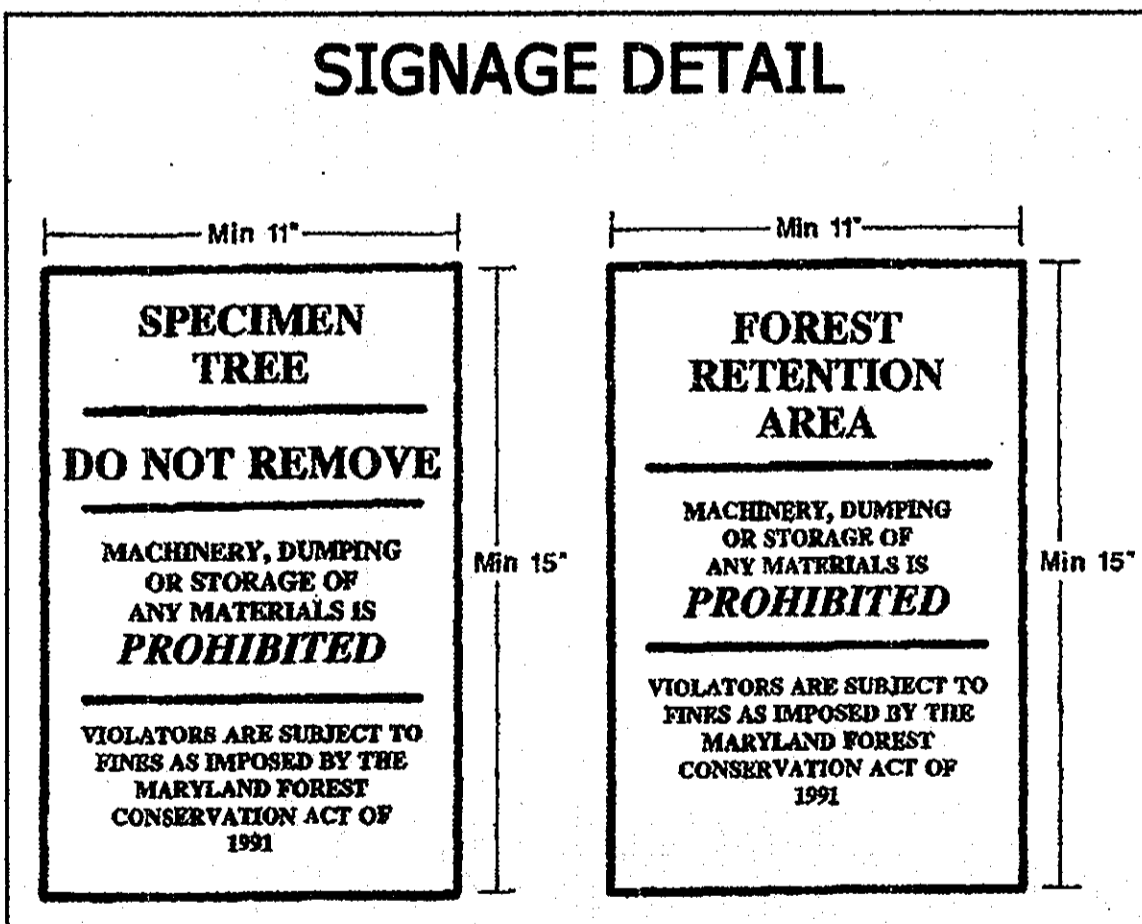
THE CONTRACTOR AND OWNER SHALL MONITOR ANY UNAUTHORIZED USE OF FOREST CONSERVATION AREAS AS DEFINED IN THE FOREST CONSERVATION MANUAL. THESE AREAS SHALL INCLUDE, BUT ARE NOT LIMITED TO, STRESS REDUCTION (I.E. ROOT PRUNING, CROWN REDUCTION, PRUNING, WATERING, FERTILIZING, MULCHING, ETC.) AND REPAIR OF TREE DAMAGES (I.E. ROOT REPAIR, REMOVAL OF DEAD LIMBS, SOIL AERATION, REMOVAL OF DEAD OR DYING TREES POSING AN IMMEDIATE SAFETY HAZARD, REMOVAL OF TEMPORARY TREE PROTECTION STRUCTURES, ON-SITE INSPECTION BY LOCAL OR STATE PROJECT INSPECTOR, EDUCATION OF OWNERS OR OCCUPANTS ON NEED TO RESPECT RETENTION, REFORESTATION OR AFFORESTATION AREAS, ETC.). CONTRACTOR AND OWNER SHALL ALSO BE RESPONSIBLE FOR MAINTENANCE OF FOREST CONSERVATION EASEMENT SIGNS, PERIODIC INSPECTION FOR CONTINUED COMPLIANCE, THINNING/REMOVAL OF INVASIVE SPECIES, AND CERTIFICATION THAT SURVIVAL RATES HAVE BEEN MET.

GENERAL NOTES

THE CONTRACTOR AND OWNER SHALL ADHERE TO THE NOTES AND GUIDELINES SET FORTH IN THE HOWARD COUNTY FOREST CONSERVATION MANUAL SECTIONS V-2 THRU V-8 AND APPENDIX I.

Note: Use 0 for all negative numbers that result from the calculations.

<b>Net Tract Area</b>	
A. Total Tract Area	A= 22.5ac
B. Deductions (Critical Area, area restricted by local ordinance or program)	B= 0.1ac
C. Net Tract Area Net Tract Area = Total Tract (A) - Deductions (B)	C= 22.4ac
<b>Land Use Category:</b>	
D. Afforestation Threshold (Net Tract Area (C) x 15%)	D= 0.0ac
E. Conservation Threshold (Net Tract Area (C) x 15%)	E= 3.36ac
<b>Existing Forest Cover</b>	
F. Existing Forest Cover within the Net Tract Area	F= 21.9ac
G. Area of Forest Above Conservation Threshold If the Existing Forest Cover (F) is greater than the Conservation Threshold (E), then $G = F - E$ ; otherwise $G = 0$ .	G= 18.54ac
<b>Breakeven Point</b>	
H. Breakeven Point (Amount of forest that must be retained so that no mitigation is required)	H= 7.06ac
(1) If the Area of Forest Above Conservation Threshold (G) is greater than 0, then $H = (0.2 \times \text{the Area of Forest Above Conservation Threshold (G)}) + \text{the Conservation Threshold (E)}$ ;	
(2) If the Area of Forest Above Conservation Threshold (G) is less than 0, then $H = \text{the Existing Forest Cover (F)}$	
I. Forest Clearing Permitted Without Mitigation $I = \text{Existing Forest Cover (F)} - \text{Breakeven point (H)}$	I= 14.84ac
<b>Proposed Forest Clearing</b>	
J. Total Area of Forest to be Cleared	J= 14.8ac
K. Total Area of Forest to be Retained $K = \text{Existing Forest Cover (F)} - \text{Forest to be Cleared (J)}$	K= 7.10ac
<b>Planting Requirements</b>	
If the Total Area of Forest to be Retained (K) is at or above the Breakeven Point (H), no planting is required, and no further calculations are necessary (L=0, M=0, N=0, P=0, Q=0, R=0).	
Otherwise, calculate the planting requirement(s) as follows:	
L. Reforestation for Clearing Above the Conservation Threshold (1) If the Total Area of Forest to be Retained (K) is greater than the Conservation Threshold (E), then L = the Area of Forest to be Cleared (J) x 0.25; (2) If the Forest to be Retained (K) is less than or equal to the Conservation Threshold (E), then L = Area of Forest Above Conservation Threshold (G) x 0.25	L= N/A
M. Reforestation for Clearing Below the Conservation Threshold (1) If Existing Forest Cover (F) is greater than the Conservation Threshold (E) and the Forest to be Retained (K) is less than or equal to the Conservation Threshold (E), then $M = 2.0 \times (\text{Conservation Threshold (E)} - \text{Forest to be Retained (K)})$ ; (2) If Existing Forest Cover (F) is less than or equal to the Conservation Threshold (E), then $M = 2.0 \times \text{Forest to be Cleared (J)}$	M= N/A
N. Credit for Retention Above the Conservation Threshold If the area of Forest to be Retained (K) is greater than the Conservation Threshold (E), then $N = K - E$ ; Otherwise $N = 0$	N= N/A
P. Total Reforestation Required $P = L + M - N$	P= N/A
Q. Total Afforestation Required If Existing Forest Cover (F) is less than the Afforestation Threshold (D), then $Q = \text{Afforestation Threshold (D)} - \text{Existing Forest Cover (F)}$	Q= N/A
R. Total Planting Requirement $R = P + Q$	R= N/A
<b>Forest Conservation Worksheet</b>	<b>C:5</b>



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PROJECT NO: 659-FOTO  
FOLDER NAME: CURRENT  
CAD DWG FILE: ForestConPlan\_20110104.dwg  
DRAWN BY: WMD  
CHECKED BY: KLY  
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OWNER	DEVELOPER
<b>CHASE LAND, LLC</b> 14401 SWEITZER LANE SUITE 200 LAUREL, MD 20707 TEL: (240) 294-5731 FAX: (240) 294-5737 CONTACT: HILLARY COLT	<b>CHASE LAND, LLC</b> 14401 SWEITZER LANE SUITE 200 LAUREL, MD 20707 TEL: (240) 294-5731 FAX: (240) 294-5737 CONTACT: HILLARY COLT

PARCEL: P/O 235 LIBER/FOLIO # 5867/0368

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F - 09 - 071

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SCALE: AS NOTED DATE: JANUARY 2011

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**SHEET 2 of 2**

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I hereby certify that these documents were prepared or approved by me and that I am a duly Licensed Professional Engineer under the laws of Maryland.  
No. 32441  
Exp. 12/22/2011

KEVIN L. JODER  
OF CME MANAGEMENT LLC, GENERAL PARTNER OF CME ENGINEERING LP.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signatures]*  
Date: 1/20/11  
Date: 1/21/11