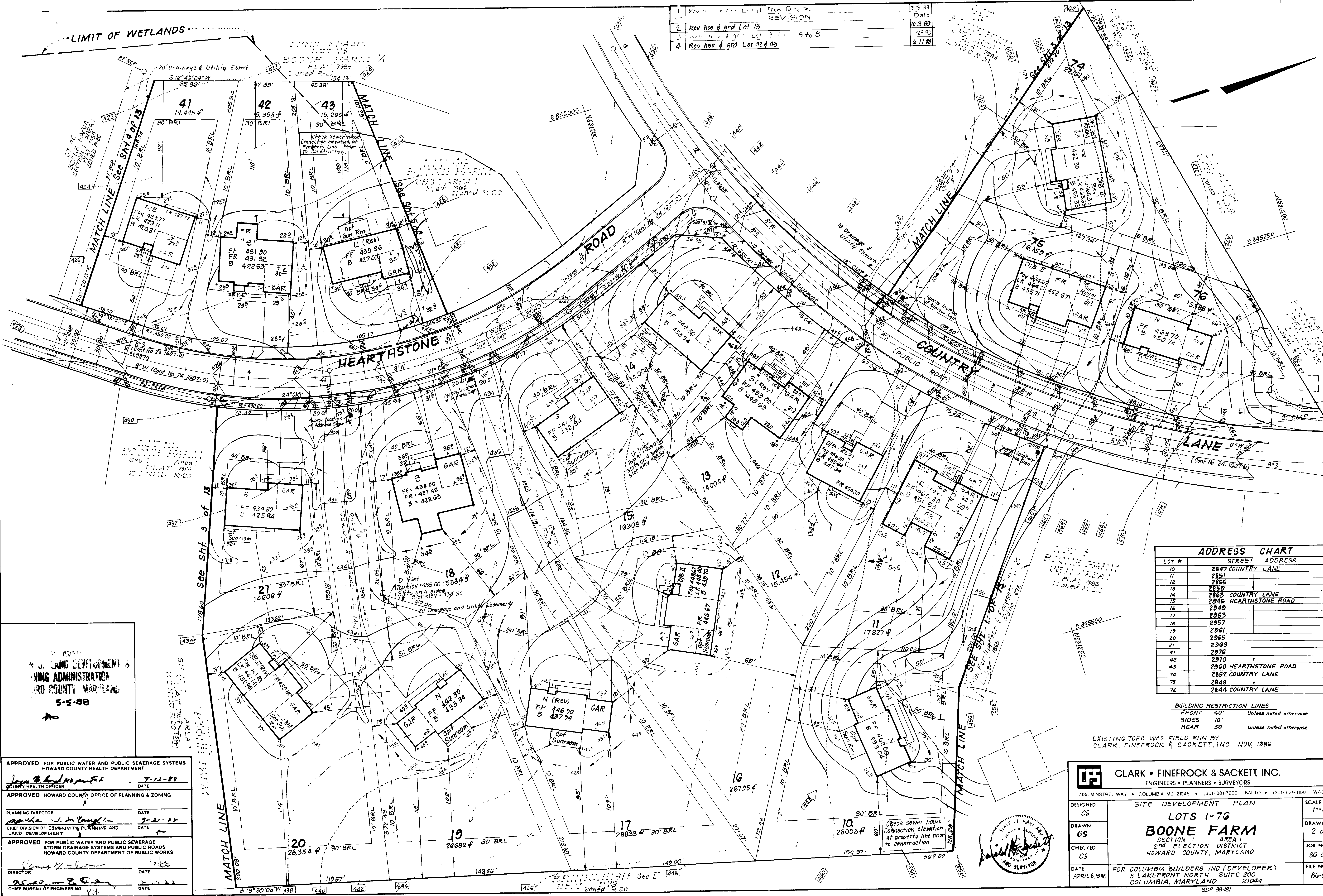


NO.	REVISION	DATE
1	Rev hse & grd Lot 11 from G to K	7/18/89
2	Rev hse & grd Lot 13	10/3/89
3	Rev hse & grd Lot 14, 15, 16 to S	12/5/90
4	Rev hse & grd Lot 42 & 43	6/11/91



ADDRESS CHART	
LOT #	STREET ADDRESS
10	2847 COUNTRY LANE
11	2851
12	2855
13	2859
14	2863 COUNTRY LANE
15	2845 HEARTHSTONE ROAD
16	2849
17	2853
18	2857
19	2861
20	2865
21	2869
41	2876
42	2870
43	2860 HEARTHSTONE ROAD
74	2852 COUNTRY LANE
75	2848
76	2844 COUNTRY LANE

BUILDING RESTRICTION LINES
 FRONT 40' Unless noted otherwise
 SIDES 10'
 REAR 30' Unless noted otherwise

EXISTING TOPO WAS FIELD RUN BY CLARK, FINEFROCK & SACKETT, INC NOV, 1986

LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	7-12-89
APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING	
PLANNING DIRECTOR	DATE
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
DIRECTOR	DATE
CHIEF BUREAU OF ENGINEERING	DATE

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 - BALTO • (301) 621-8100 WASH

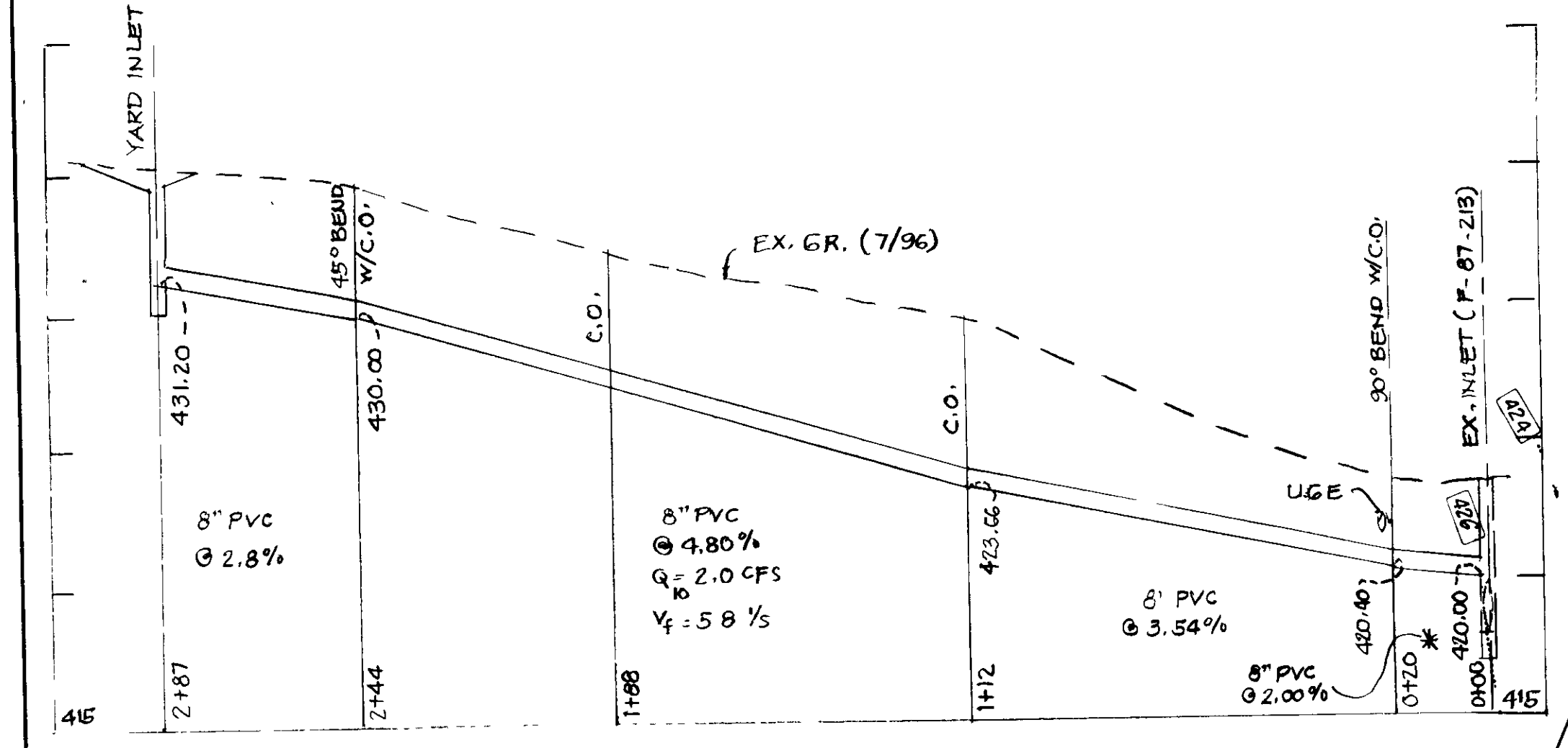
DESIGNED CS	SITE DEVELOPMENT PLAN LOTS 1-76 BOONE FARM SECTION 1 AREA 1 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN GS		DRAWING 2 OF 13
CHECKED CS		JOB NO 86-078
DATE APRIL 8, 1988		FILE NO 86-078-X

FOR COLUMBIA BUILDERS INC (DEVELOPER)
 3 LAKEFRONT NORTH SUITE 200
 COLUMBIA, MARYLAND 21044
 SDP 88-181

NO.	REVISION	DATE
1	REV LOT 22 FROM G.P.R. (REV.), (REV. D) W/4 GRADING LOT 25 & 34, REV. HAZ 4 GRD. LOT 33 FROM DB II (REV.) TO U	12594
2	REVISION LOT 23 & 24 - ADD PRIVATE DRAIN	9-30-96



For Revision Dated 9-30-96



LOT #	STREET ADDRESS
22	2973 HEARTHSTONE RD
23	2977 HEARTHSTONE RD
24	2981 HEARTHSTONE RD
25	2985 HEARTHSTONE RD
26	2905 CRABAPPLE LANE
27	2909 CRABAPPLE LANE
28	2913 CRABAPPLE LANE
29	2917 CRABAPPLE LANE
30	2916 CRABAPPLE LANE
31	2912 CRABAPPLE LANE
32	2908 CRABAPPLE LANE
33	2904 CRABAPPLE LANE
34	2993 HEARTHSTONE RD
35	2997 HEARTHSTONE RD

AND DEVELOPMENT
ADMINISTRATION
CITY MANAGER
5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
9-12-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
9-22-88

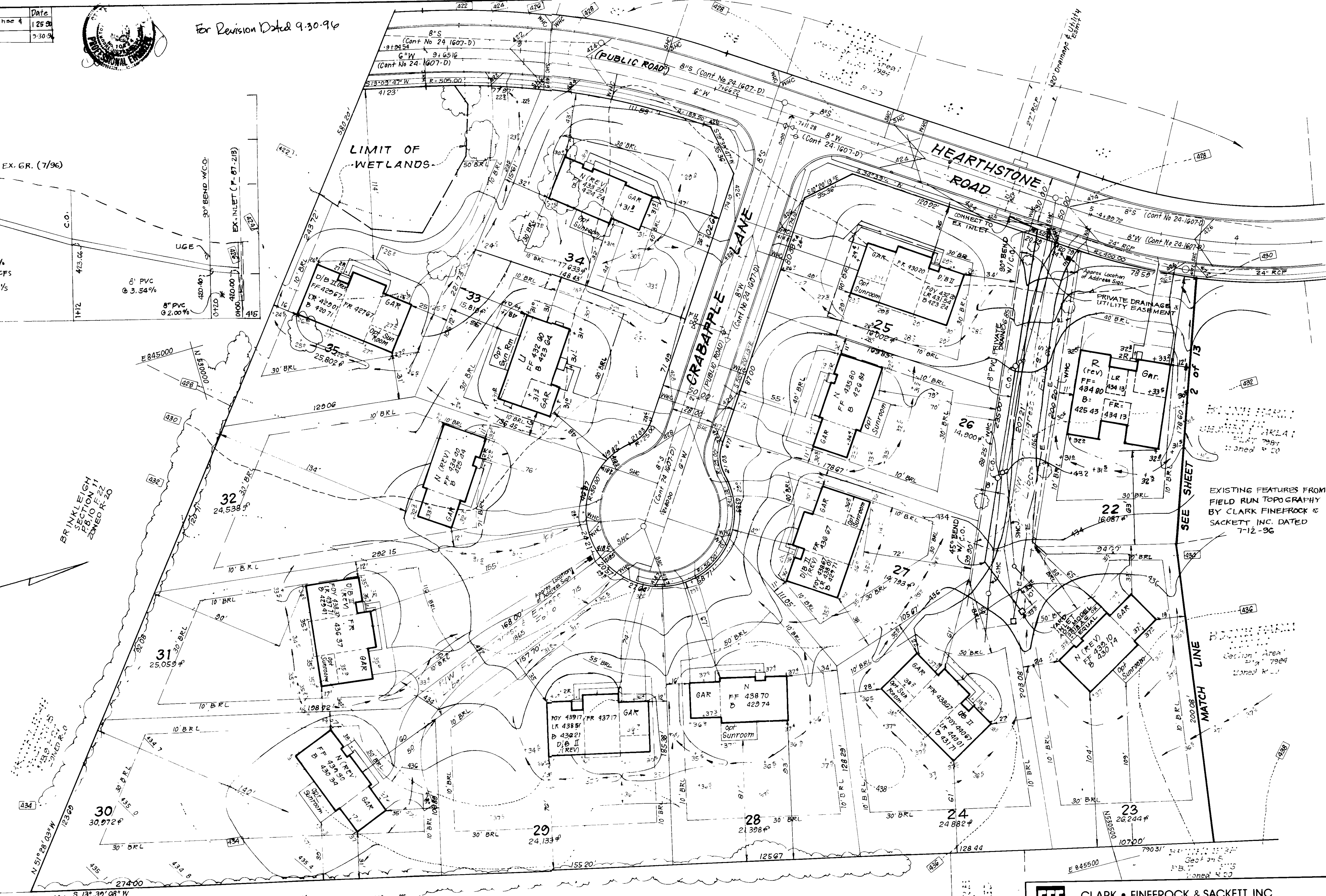
PLANNING DIRECTOR
9-21-88

CHIEF DIVISION OF COMMUNITY PLANNING AND
LAND DEVELOPMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

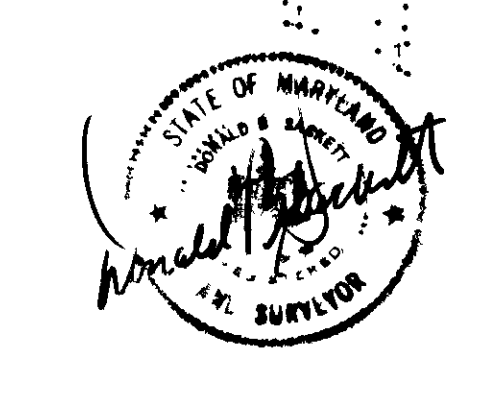
DIRECTOR
2-27-88

CHIEF BUREAU OF ENGINEERING



BUILDING RESTRICTION LINES
FRONT 40' Unless noted otherwise
SIDES 10'
REAR 30' Unless noted otherwise

Existing topo was field run by
Clark, Finerock & Sackett, Inc Nov, 1986

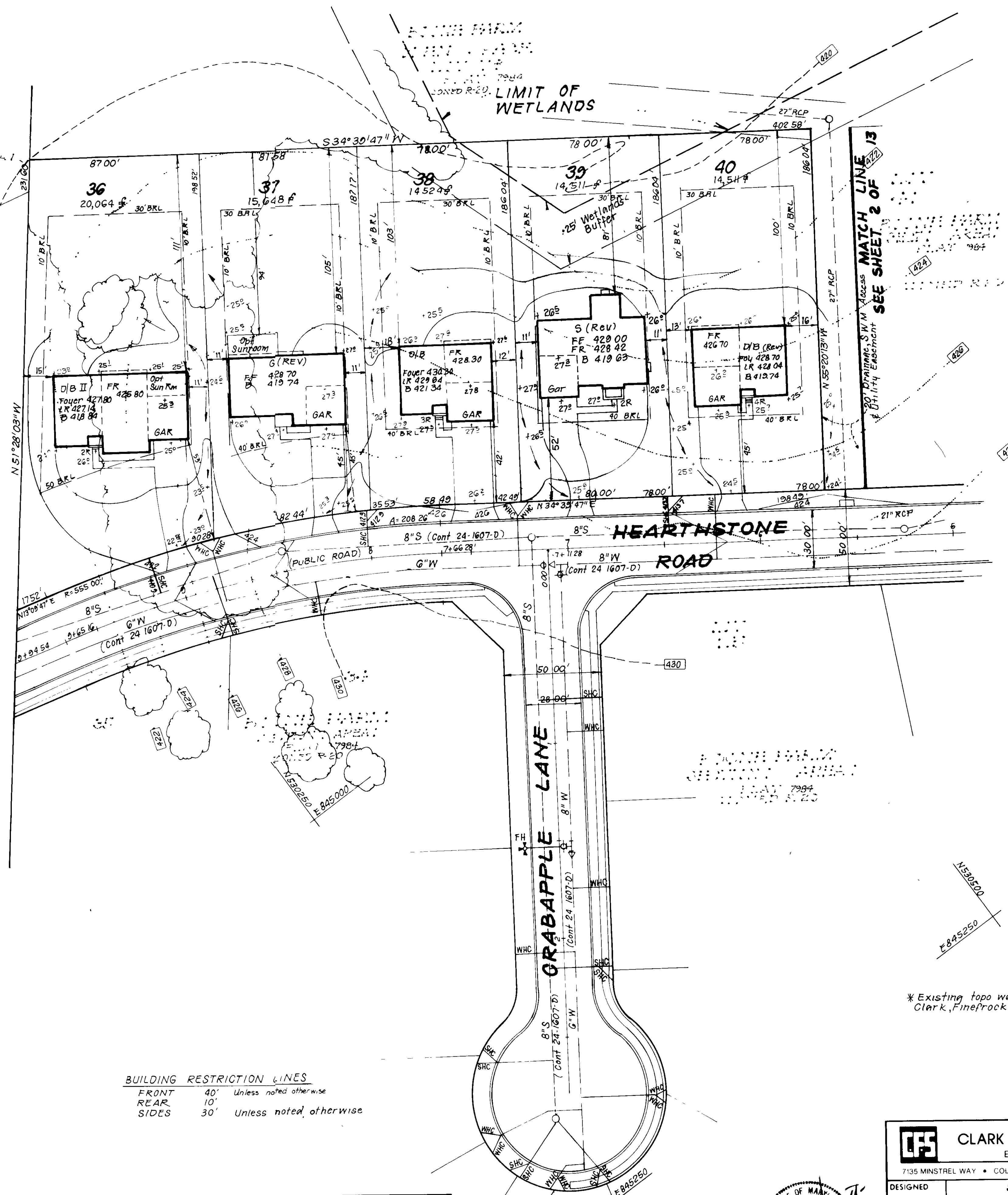


CLARK • FINEPROCK & SACKETT, INC
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7200 - BALTO • (301) 621-8100 - WASH

DESIGNED CS	SITE DEVELOPMENT PLAN LOT 1-76 BOONE FARM SECTION 1 AREA 1 2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN CS		DRAWING 3 OF 13
CHECKED CS		JOB NO 86 078
DATE Apr 8 1988		FILE NO 86-078-X

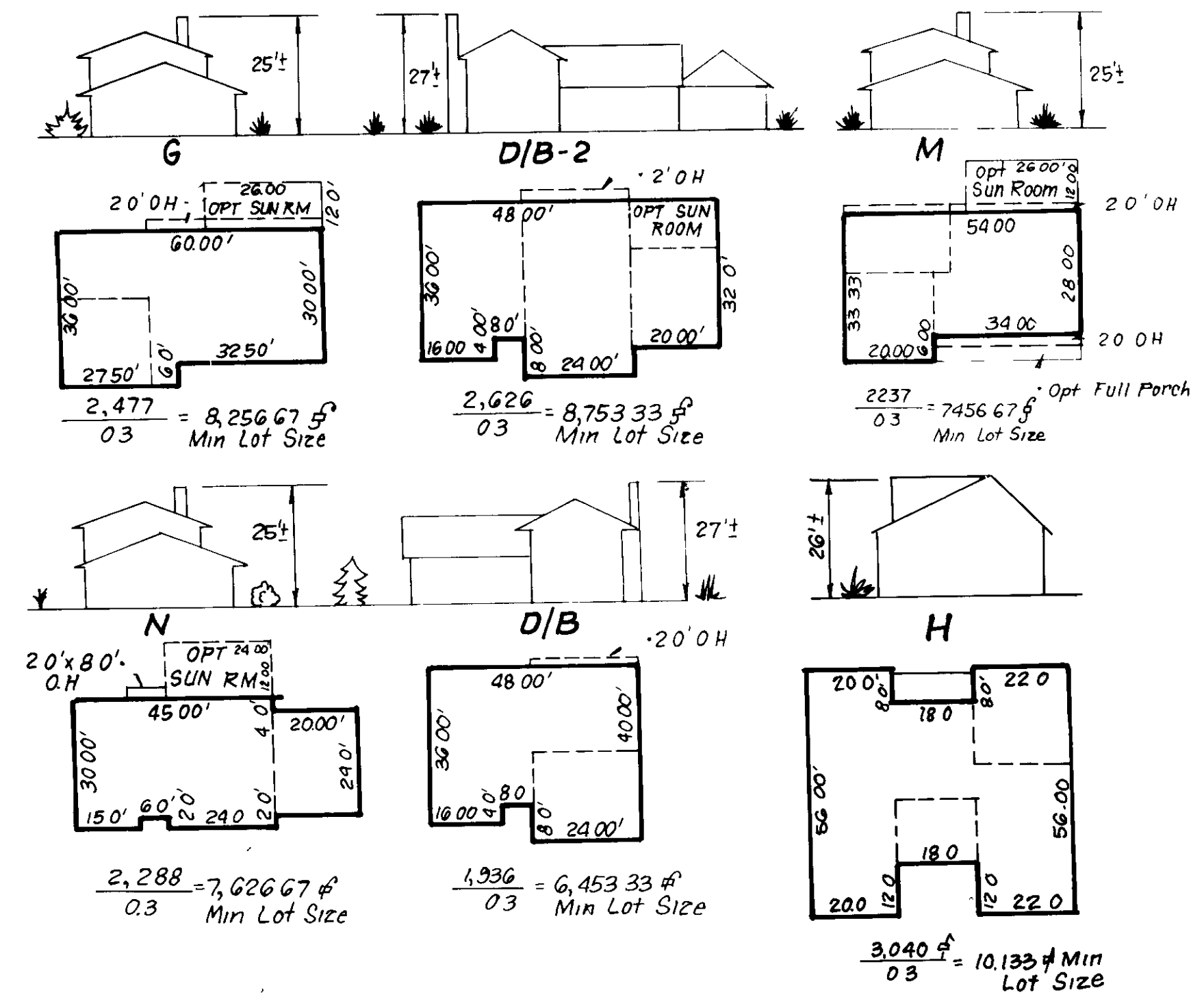
FOR COLUMBIA BUILDERS INC (DEVELOPER)
3 LAKEFRONT NORTH SUITE 200
COLUMBIA, MARYLAND 21044
SDP-88-181

REV	REVISION	DATE
1	Rev hse & grd lot 39 from D/B Rev to S (rev)	6/12/90



TYPICAL HOUSES

SCALE: 1"=30'
Note: All units have 1" roof eaves front and rear



BUILDING RESTRICTION LINES
FRONT 40' Unless noted otherwise
REAR 10'
SIDES 30' Unless noted otherwise

LOT #	STREET ADDRESS
36	2998 HEARTHSTONE ROAD
37	2994
38	2990
39	2986
40	2982 HEARTHSTONE ROAD

* Existing topo was field run by Clark, Fineprock & Sackett, Inc November 1986

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 9/12/88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR
DATE: 9-22-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR
DATE: 9-21-88

5-5-88

CLARK • FINEPROCK & SACKETT, INC
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 - BALTO • (301) 621-8100 - WASH

DESIGNED CS	SITE DEVELOPMENT PLAN LOTS 1-76 BOONE FARM SECTION 1 AREA 1 2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN GS		DRAWING 4 of 13
CHECKED CS		JOB NO 86-078
DATE April 8, 1988		FILE NO 86-078-X

FOR COLUMBIA BUILDERS INC (DEVELOPER)
3 LAKEFRONT NORTH SUITE 200
COLUMBIA, MARYLAND 21044

SDP-88-101

1	Rev hse & grd w/ lot 70 from N to G (rev)	9
REVISION		
2	Rev hse & grd Lots 65 & 71	10 4 89
3	Rev hse & grd Lots 46 & 47	6 11 89
4	Rev hse & grd lot 47	12 7 92
5	Rev hse & grd lot 45	9 16 93

LOT #	STREET ADDRESS
44	2950 HEARTHSTONE ROAD
45	2875 COUNTRY LANE
46	2879 COUNTRY LANE
47	2883 COUNTRY LANE
48	2887 COUNTRY LANE
64	2843 LEAF SHADE DRIVE
65	2847 LEAF SHADE DRIVE
66	2884 COUNTRY LANE
67	2880 COUNTRY LANE
68	2876 COUNTRY LANE
69	2872 COUNTRY LANE
70	2868 COUNTRY LANE
71	2864 COUNTRY LANE
72	2860 COUNTRY LANE
73	2856 COUNTRY LANE

5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

[Signature]
COUNTY HEALTH OFFICER
DATE 7-12-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

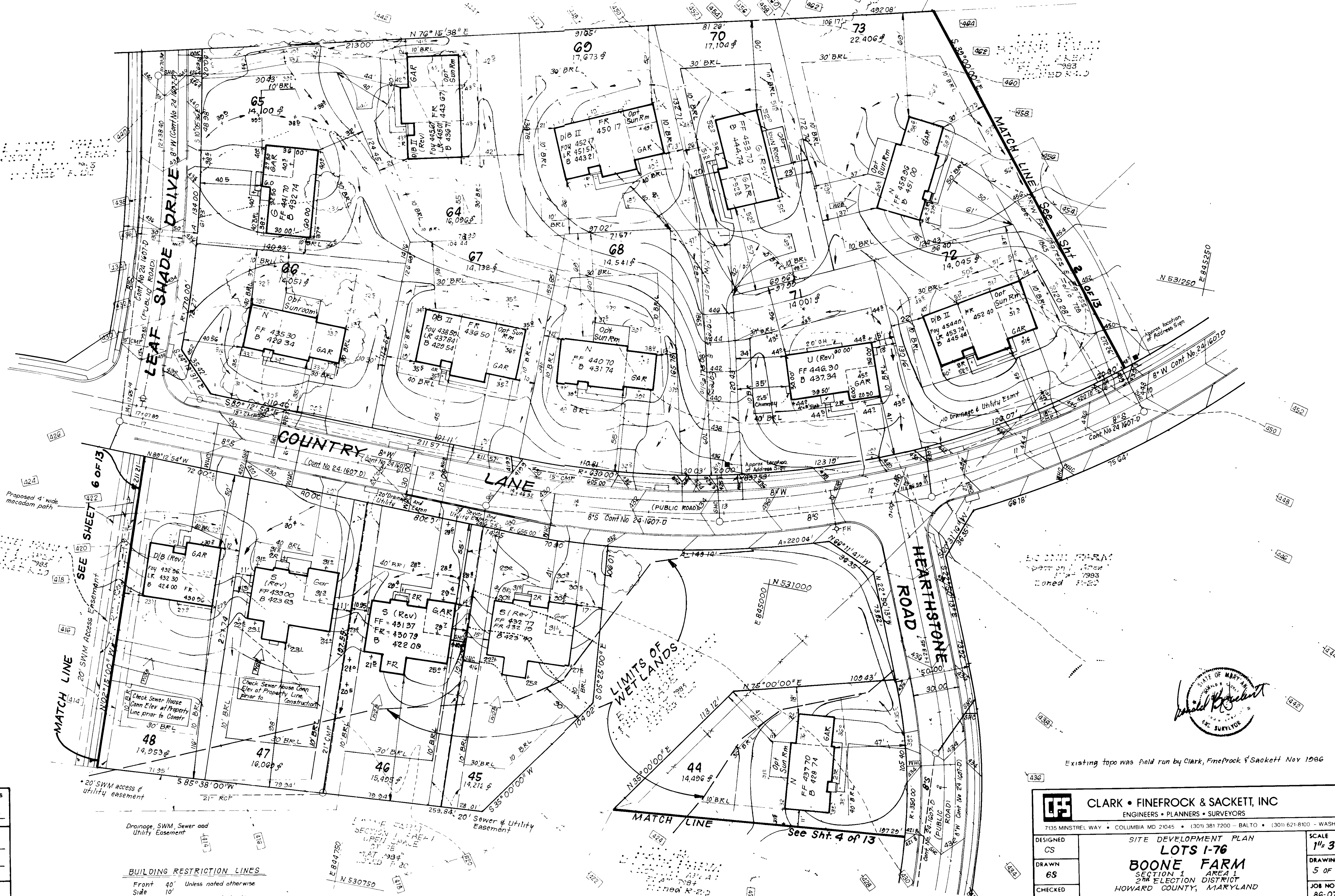
[Signature]
PLANNING DIRECTOR
DATE 9-22-88

[Signature]
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE 7-21-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature]
DIRECTOR
DATE 8-29-88

[Signature]
CHIEF BUREAU OF ENGINEERING
DATE



Existing topo was field run by Clark, Finefrock & Sackett Nov 1986

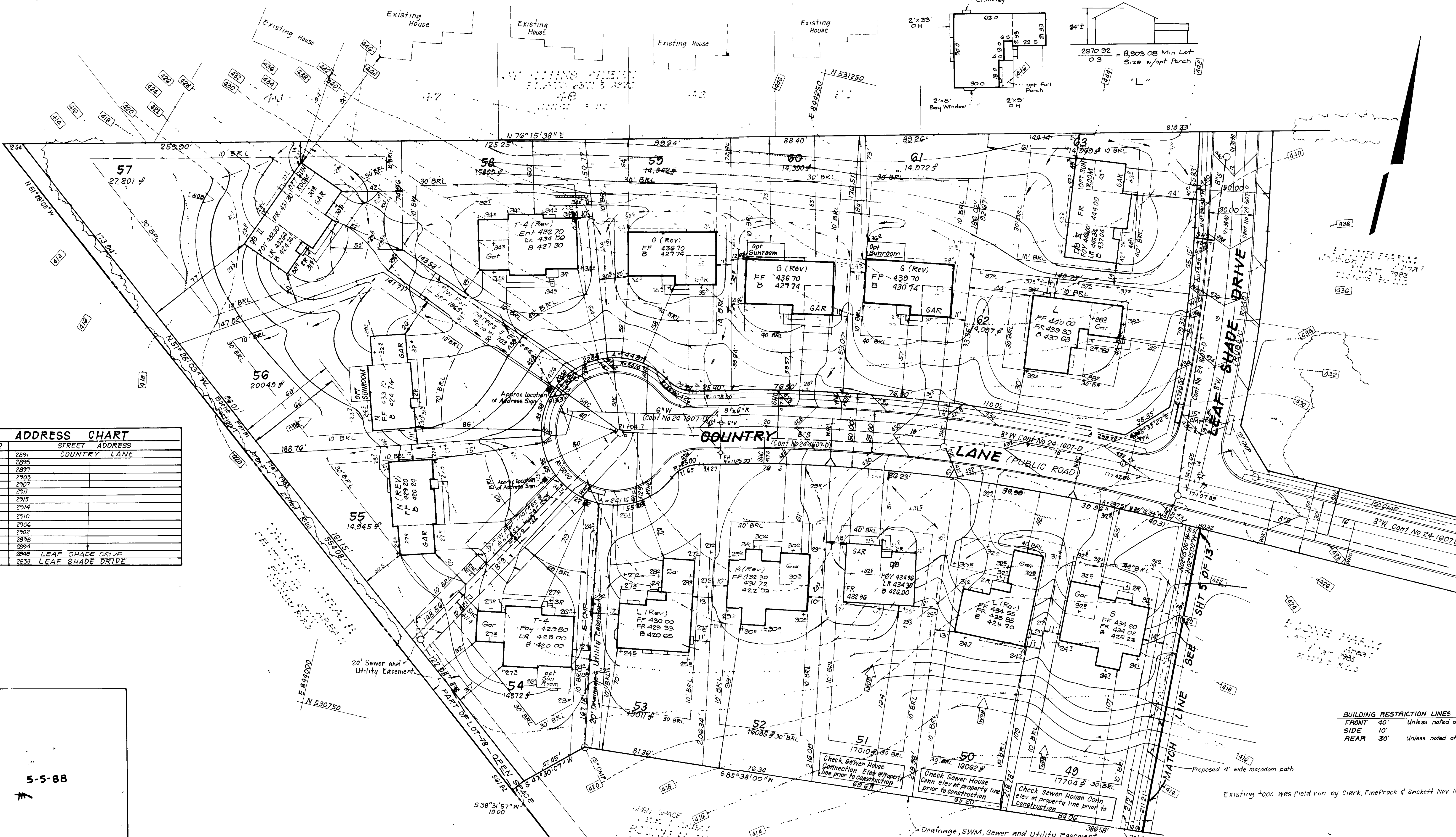
CLARK • FINEFROCK & SACKETT, INC
ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 - BALTO • (301) 621-8100 - WASH

DESIGNED	CS	SITE DEVELOPMENT PLAN LOTS 1-76	SCALE 1" = 30'
DRAWN	6S		
CHECKED	CS	BOONE FARM SECTION 1 AREA 1 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 5 OF 13
DATE	April 8 '88		
FILE NO	86-078-X		

FOR: COLUMBIA BUILDERS, INC (DEVELOPER)
3 LAKEFRONT NORTH SUITE 200
COLUMBIA, MARYLAND 21044

SDP 88-181



ADDRESS CHART		
LOT NO	STREET	ADDRESS
49	2891	COUNTRY LANE
50	2895	
51	2899	
52	2903	
53	2907	
54	2911	
55	2915	
56	2919	
57	2923	
58	2927	
59	2931	
60	2935	
61	2939	
62	2943	LEAF SHADE DRIVE
63	2947	LEAF SHADE DRIVE

5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 9-12-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 9-22-88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
 DATE: 9-21-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 9-29-88

CHIEF BUREAU OF ENGINEERING: [Signature]

No	REVISIONS	Date
6	Rev hse f qrd lots 58 and 62	7-7-84
5	Rev hse f qrd lot 52	9-16-83
4	Rev hse f qrd lot 53. Add hse typical	6-25-83
3	Rev hse f qrd lot 50. Add hse typical	6-14-83
2	Rev hse f qrd lots 54 & 43	3-9-83
1	Revise qrd on lots 53 & 54	9-7-88

BUILDING RESTRICTION LINES
 FRONT 40' Unless noted otherwise
 SIDE 10'
 REAR 30' Unless noted otherwise

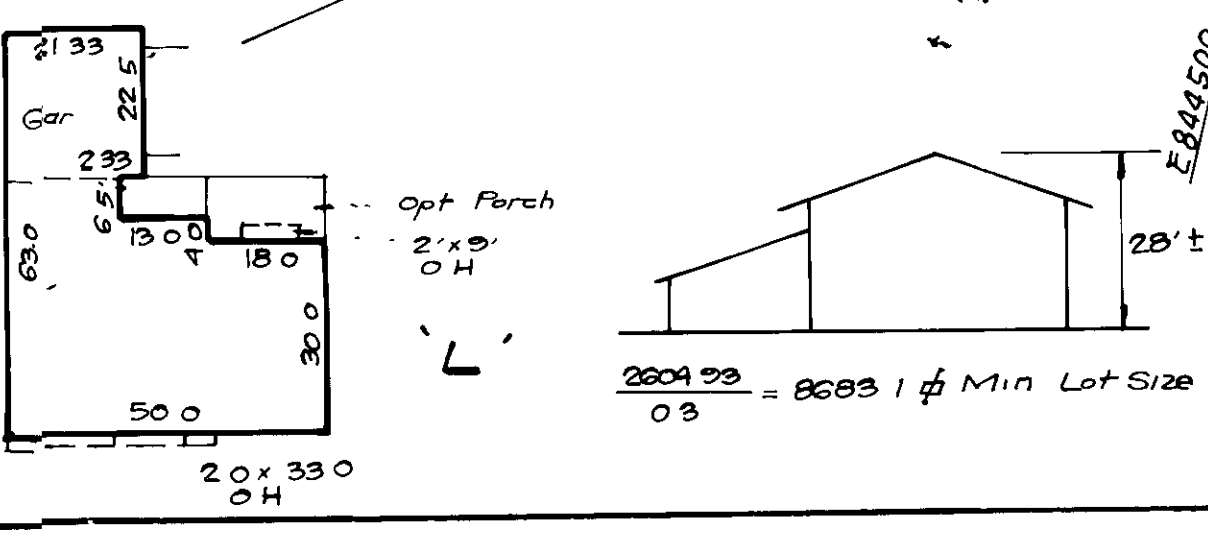
CLARK • FINEFROCK & SACKETT, INC
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 - BALTO • (301) 621-8100 - WASH

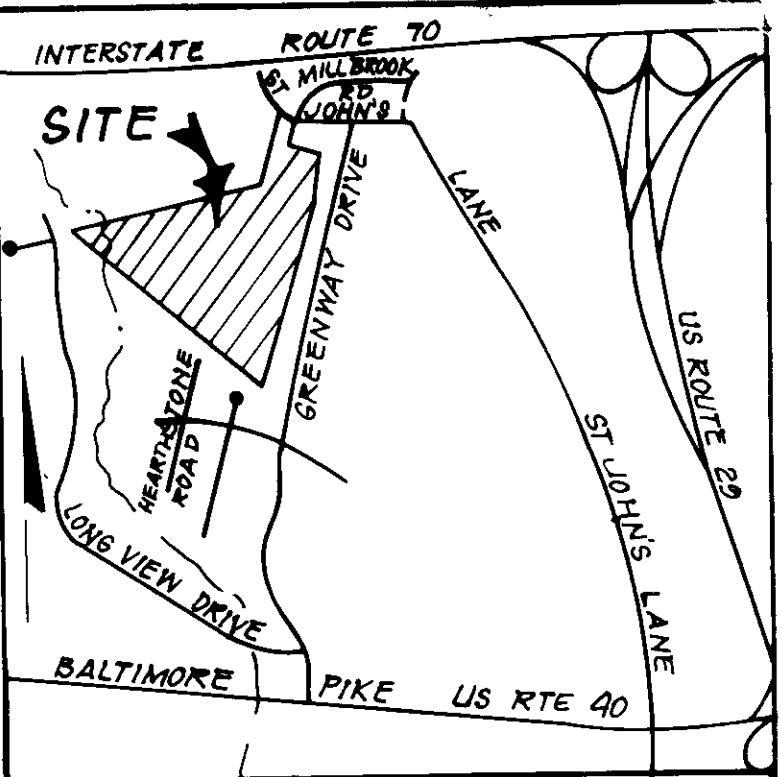
DESIGNED CS
 DRAWN 6S
 CHECKED CS
 DATE Apr 8, 1988

SITE DEVELOPMENT PLAN
LOTS 1-76
BOONE FARM
 SECTION 1 AREA 1
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

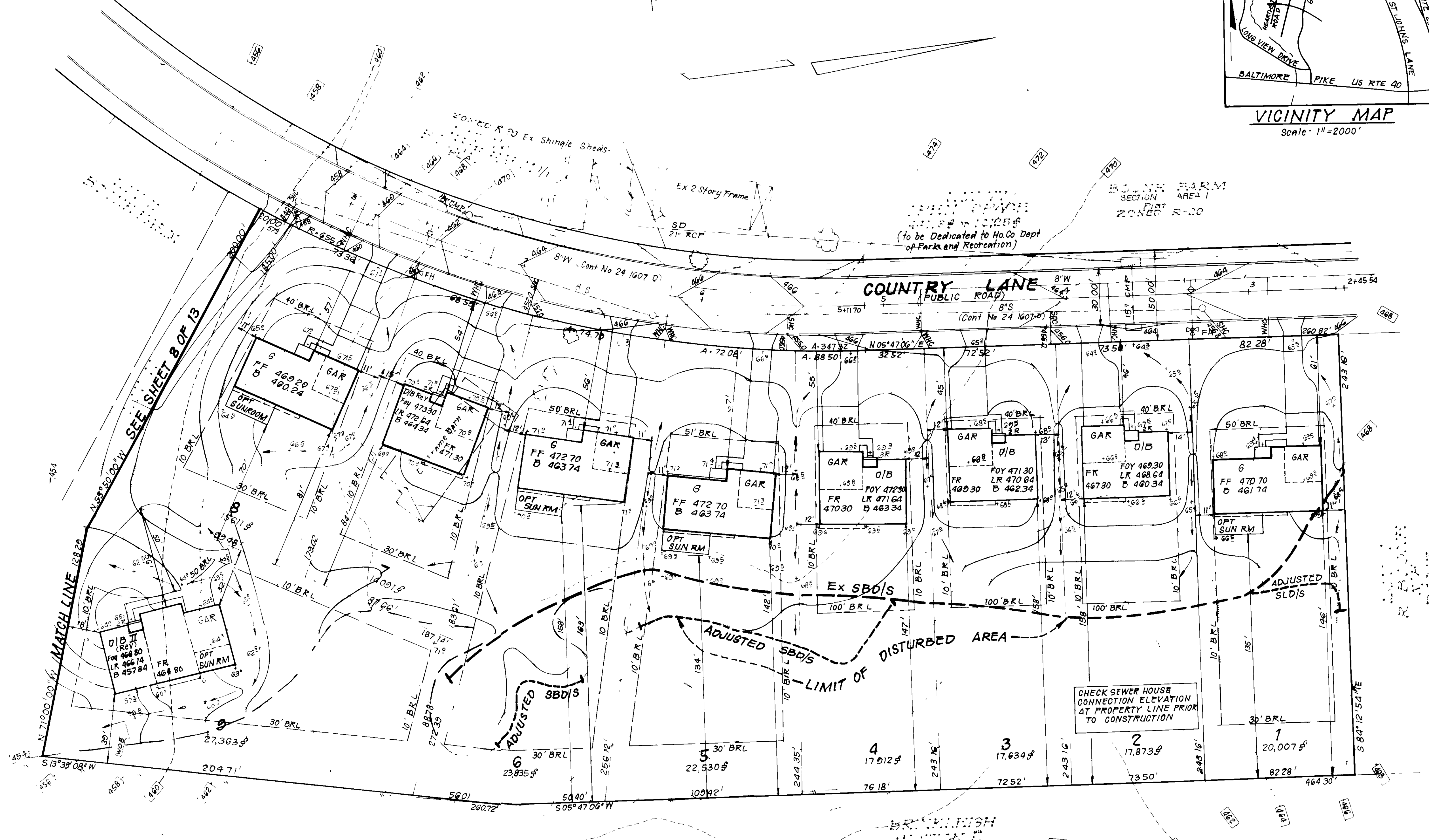
FOR: COLUMBIA BUILDERS, INC (DEVELOPER)
 3 LAKEFRONT NORTH SUITE 200
 COLUMBIA, MARYLAND 21044

SCALE 1"=30'
 DRAWING 6 OF 15
 JOB NO 86-078
 FILE NO 86-078-X
 SDP-88-181





NOTE ALL SEDIMENT CONTROLS SHOWN AS EXISTING ARE FROM BOONE FARM ROAD CONSTRUCTION PLANS F-87-213



LEGEND

- 1 Contour Interval 2ft
- 2 Existing Contour 330
- 3 Proposed Contour 410
- 4 Spot Elevation 1105
- 5 Direction of Drainage
- 6 Exist Trees to be Saved
- 7 Walk out basement
- 8 Existing Spot Elevation
- 9 Straw Bale Dike / Silt Fence

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED FOR COMMUNITY PLANNING AND ZONING, HOWARD COUNTY DEPARTMENT OF COMMUNITY PLANNING AND ZONING

APPROVED FOR THE BUREAU OF ENGINEERING

5-5-88

Reviewed for HOWARD SCD
 Name: *James M. Nelson*
 Signature: *James M. Nelson* 8/24/88
 U.S. Soil Conservation Service



ENGINEERS CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Richard J.H. Stepp 4/12/88
 RICHARD J.H. STEPP Date

BUILDING RESTRICTION LINES
 FRONT 40' Unless noted otherwise
 SIDES 10'
 REAR 30' Unless noted otherwise

EXISTING TOPOG WAS FIELD RUN BY CLARK, FINEFROCK & SACKETT, INC NOV. 1986

SUBDIVISION NAME BOONE FARM		SECT/AREA 1-1	LOTS 1-76
PLAT #	BLOCK #	ZONE	TAXI/ZONE MAP/ELET DIST CENSUS TR
		R-20	17 2nd
WATER CODE H-04		SEWER CODE 5750900	

CLARK • FINEFROCK & SACKETT, INC
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSFIEL WAY • COLUMBIA MD 21045 • (301) 381-7200 BALTO • (410) 381-1111 W.A. 11

SEDIMENT & EROSION CONTROL PLAN
 LOTS 1-76
BOONE FARM
 SECTION 1 AREA 1
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DESIGNED: GLB
 DRAWN: 6S
 CHECKED: GLB
 DATE: April 8, 1988

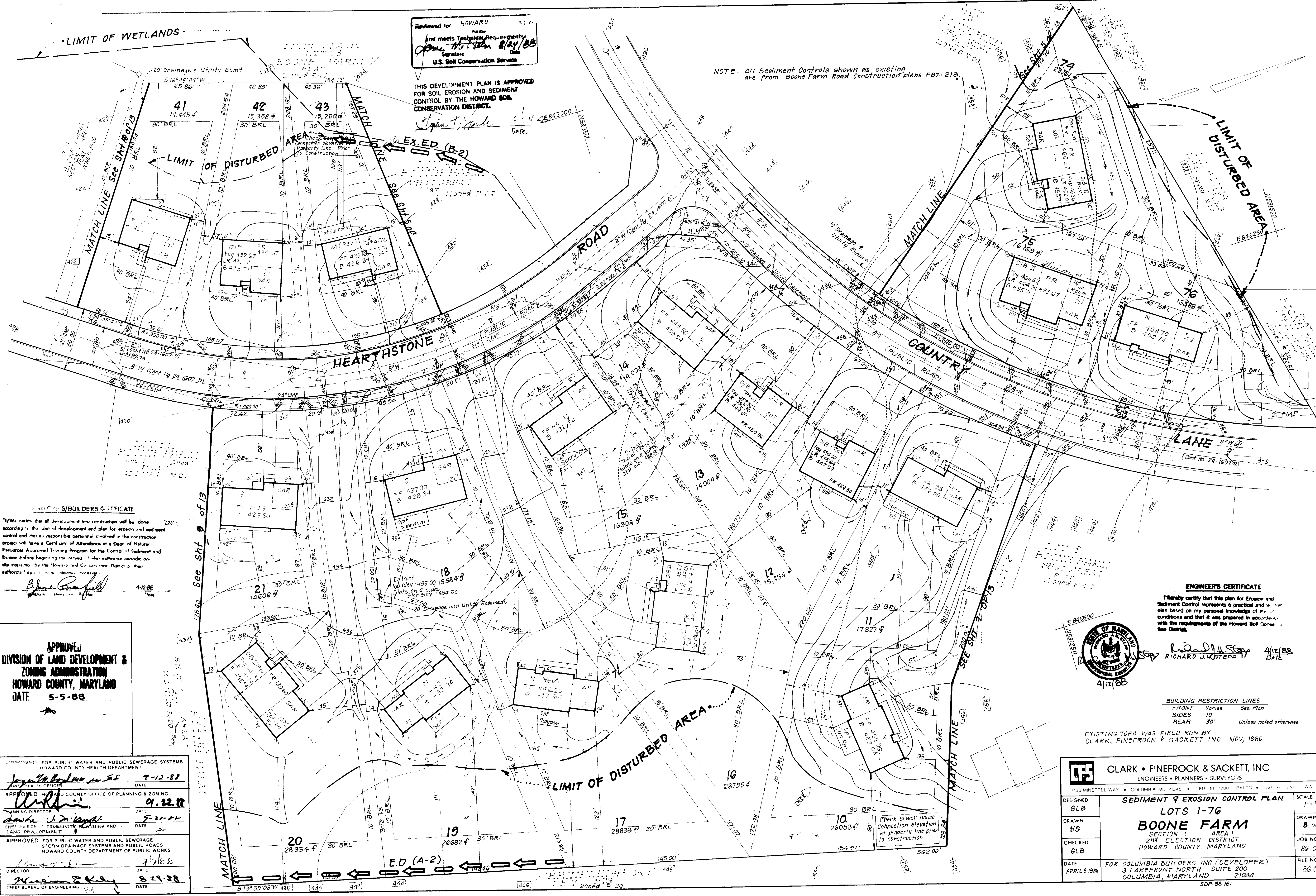
SCALE: 1"=30'
 DRAWING: 7 OF 13
 JOB NO: 86-078
 FILE NO: 86-078-3E
 SDP-86-181

LIMIT OF WETLANDS

Reviewed for HOWARD
Name: *John M. Stepp*
and meets Technical Requirements
Signature: *John M. Stepp* 8/24/88
Date: 8/24/88
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.

NOTE: All Sediment Controls shown as existing
are from Boone Farm Road Construction plans F87-213.



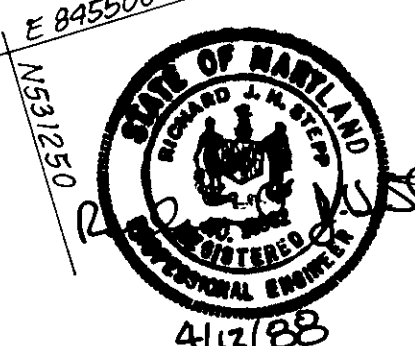
BUILDER'S CERTIFICATE
I/We certify that all development and construction will be done according to the plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the work. I also authorize periodic on-site inspections by the Howard Soil Conservation District or their authorized agents.
John M. Stepp
4-12-88
Date

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 7-12-88
APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE: 9-22-88
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 8-29-88

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.



Richard J. Stepp
RICHARD J. STEPP
4/17/88
DATE

BUILDING RESTRICTION LINES
FRONT Varies See Plan
SIDES 10'
REAR 30' Unless noted otherwise

EXISTING TOPO WAS FIELD RUN BY
CLARK, FINEROCK & SACKETT, INC NOV, 1986

CLARK • FINEROCK & SACKETT, INC ENGINEERS • PLANNERS • SURVEYORS		SCALE: 1"=30'
DESIGNED: GLB	SEDIMENT & EROSION CONTROL PLAN	DRAWING: 8 OF 13
DRAWN: GS	LOTS 1-76	JOB NO: 86-078
CHECKED: GLB	SECTION 1 AREA 1	FILE NO: 86-078-8E
DATE: APRIL 8, 1988	BOONE FARM	
	2ND ELECTION DISTRICT	
	HOWARD COUNTY, MARYLAND	
	FOR COLUMBIA BUILDERS INC (DEVELOPER)	
	3 LAKEFRONT NORTH SUITE 200	
	COLUMBIA, MARYLAND 21044	
	SDP-88-181	

NOTE: ALL SEDIMENT CONTROLS SHOWN AS EXISTING ARE FROM BOONE FARM ROAD CONSTRUCTION PLANS F-87-213



Reviewed for HOWARD SCD
Name
Signature
Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephan G. [Signature]
Date 8/24/88

DEVELOPERS/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to the plan of development and plan for erosion and sediment control and that all responsible persons involved in the construction project will have a Certificate of Attendance in a Days of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. This certifies that the site inspection by the Howard Soil Conservation District or their authorized agents will be done as required." 4-12-88

B. [Signature]
Date 4-12-88

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

[Signature]
DATE 7-12-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

[Signature]
DATE 9-22-88

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

[Signature]
DATE 8-21-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature]
DATE 4-16-88

DIRECTOR

[Signature]
DATE 8-27-88

CHIEF BUREAU OF ENGINEERING

Existing topo was field run by Clark, Fineprock & Sackett, Inc Nov, 1986

BUILDING RESTRICTION LINES

FRONT VARIES See Plan
SIDES 10'
REAR 30' Unless noted otherwise



ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

[Signature]
RICHARD J. STEPP
Date 4/12/88

CLARK • FINEPROCK & SACKETT, INC
ENGINEERS • PLANNERS • SURVEYORS

7135 MINTREL WAY • COLUMBIA MD 21045 • (410) 381-7200 • BALTO. • (301) 478-1447

DESIGNED GLB

DRAWN G.S.

CHECKED GLB

DATE Apr 8, 1988

FOR COLUMBIA BUILDERS INC (DEVELOPER)
3 LAKEFRONT NORTH, SUITE 200
COLUMBIA, MARYLAND 21044

SDP-88-181

SCALE 1"=30'

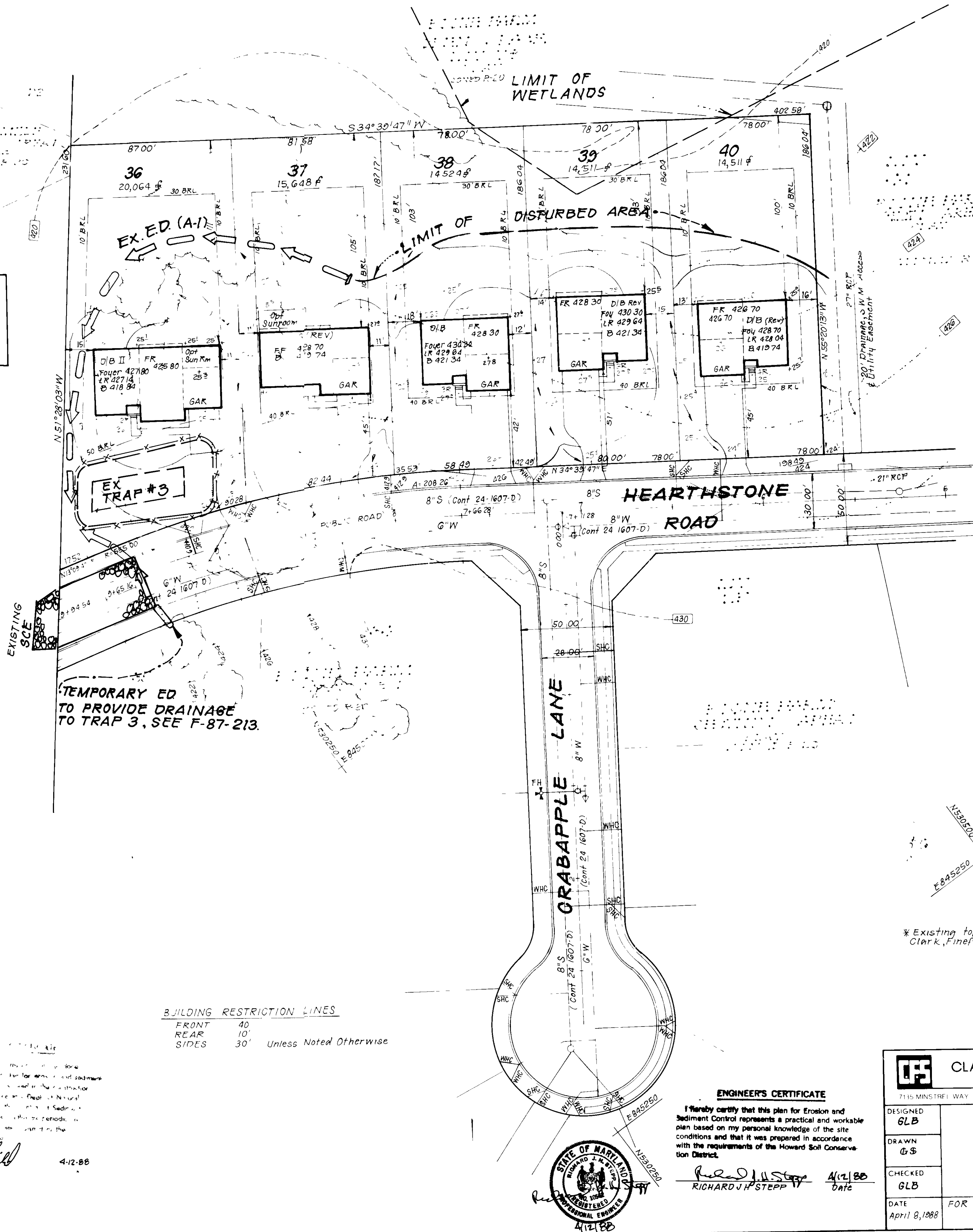
DRAWING 9 OF 13

JOB NO 86-078

FILE NO 86-078-3E

NOTE All sediment controls shown as existing are from Boone Farm Road Construction plans F87-213

NOTE: SEE F87-213 FOR LOCATION AND DETAILS OF TEMPORARY SEDIMENT CONTROL AND SWM BASIN NO. 1.



Reviewed for HOWARD
Name
and meets Technical Requirements
James M. Hill 8/24/88
Signature Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Hill 8/24/88
Date

* Existing topo was field run by Clark, Finerock & Sackett, Inc November 1986

BUILDING RESTRICTION LINES
FRONT 40'
REAR 10'
SIDES 30' Unless Noted Otherwise

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
James M. Hill 9-12-88
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
James M. Hill 9-22-88
PLANNING DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James M. Hill 9-21-88
DIRECTOR DATE

APPROVED DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 5-5-88

DEVELOPER
James M. Hill 4-12-88

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Richard J. Stepp 4/12/88
RICHARD J. STEPP DATE

CLARK • FINEPROCK & SACKETT, INC
ENGINEERS • PLANNERS • SURVEYORS

DESIGNED GLB
DRAWN GS
CHECKED GLB
DATE April 8, 1988

SEDIMENT & EROSION CONTROL PLAN
LOTS 1-7G
BOONE FARM
SECTION 1 AREA 1
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE 1"=30'
DRAWING 10 OF 13
JOB NO 86-078
FILE NO 86-078-5E

FOR COLUMBIA BUILDERS INC (DEVELOPER)
3 LAKEFRONT NORTH SUITE 200
COLUMBIA, MARYLAND 21044
SDP-86-181

NOTE ALL SEDIMENT CONTROLS SHOWN AS EXISTING ARE FROM BOONE FARM ROAD CONSTRUCTION PLANS F87-213

DEVELOPER'S/BUILDER'S CERTIFICATE

I hereby certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary.

James Greenfield
Signature of Developer/Builder
4-12-88
Date

Reviewed for HOWARD COUNTY SCD
Name
and meets Technical Requirements
John W. Smith 8/24/88
Signature
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen P. ...
Date

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 5-5-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

John W. Smith
COUNTY HEALTH OFFICER
DATE 9-12-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

John W. Smith
PLANNING DIRECTOR
DATE 9-22-88

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

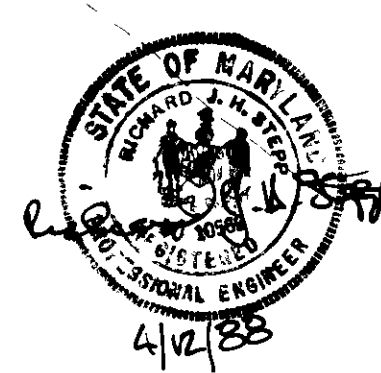
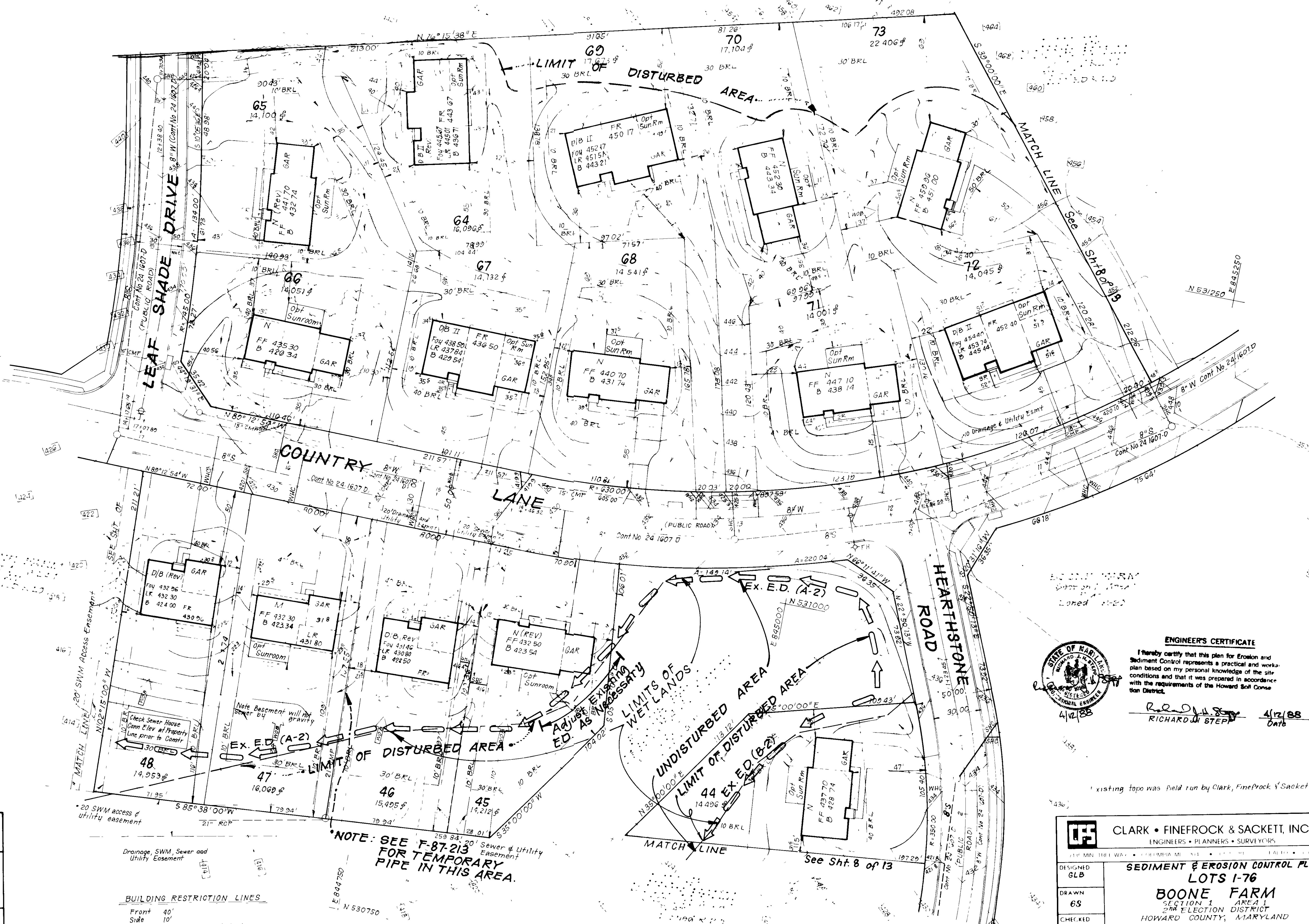
John W. Smith
DIRECTOR
DATE 9-17-88

John W. Smith
CHIEF BUREAU OF ENGINEERING
DATE 8-27-88

Drainage, SWM, Sewer and Utility Easement

BUILDING RESTRICTION LINES
Front 40'
Side 10'
Rear 30' Unless noted otherwise

NOTE: SEE F-87-213 FOR TEMPORARY PIPE IN THIS AREA.



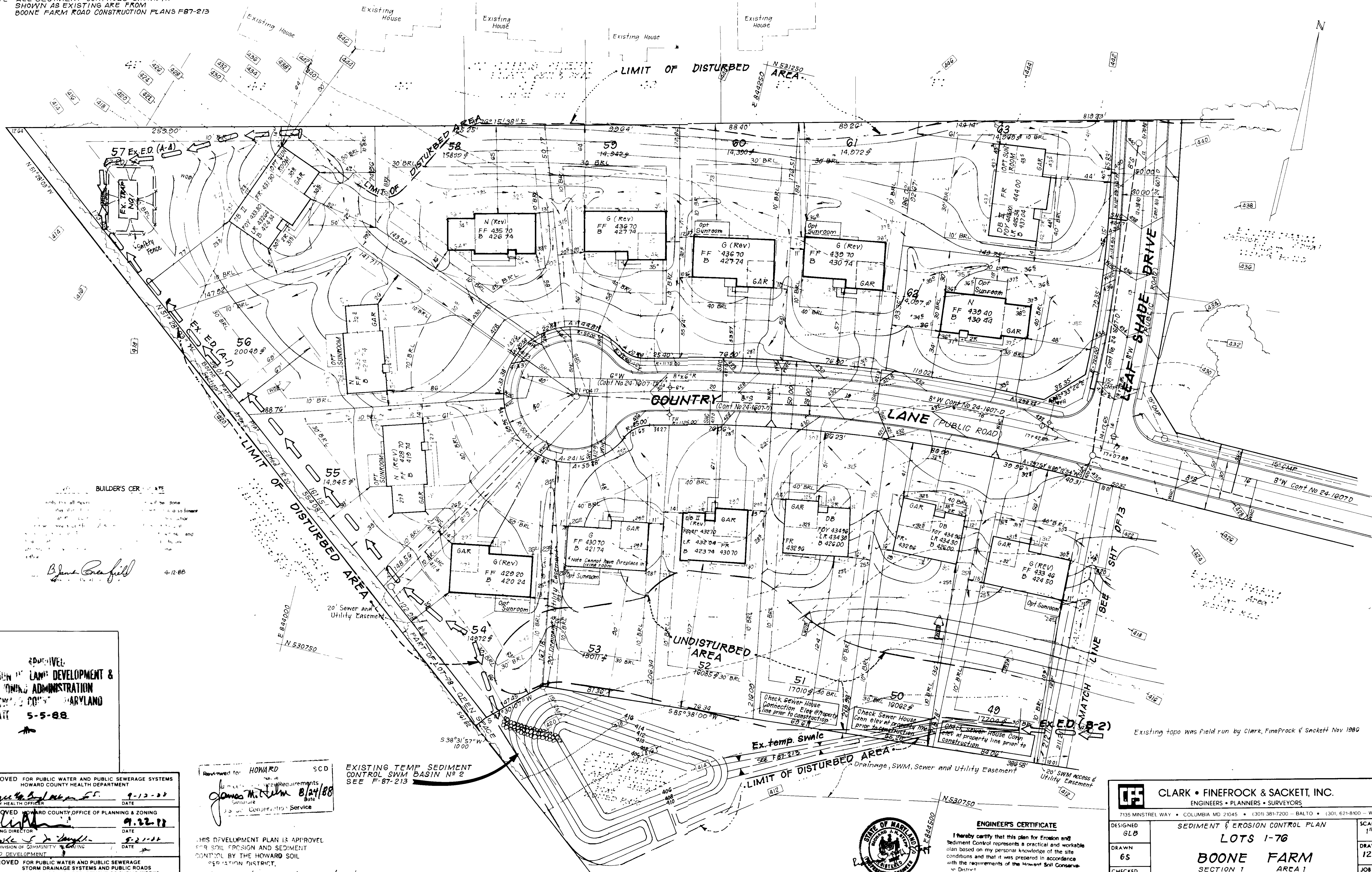
ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Richard W. Step
RICHARD W. STEP
4/12/88
Date

Existing topo was field run by Clark, Finefrock & Sackett Nov. 1986

CLARK • FINEFROCK & SACKETT, INC ENGINEERS • PLANNERS • SURVEYORS		SCALE 1" = 30'
DESIGNED GLB	SEDIMENT & EROSION CONTROL PLAN LOTS 1-76	DRAWING 11 OF 13
DRAWN GS	BOONE FARM SECTION 1 AREA 1 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 86-078
CHECKED GLB		FILE NO. 86-078SE
DATE April 8 '88	FOR: COLUMBIA BUILDERS, INC (DEVELOPER) 3 LAKEFRONT NORTH SUITE 200 COLUMBIA, MARYLAND 21044	

SDP-88-181

NOTE ALL SEDIMENT CONTROLS SHOWN AS SHOWN AS EXISTING ARE FROM BOONE FARM ROAD CONSTRUCTION PLANS F87-213



BUILDER'S CERTIFICATE
 I hereby certify that all improvements shown on this plan have been constructed in accordance with the approved plan and that the same are complete and ready for occupancy.
 James Greenfield
 4-12-88

APPROVED FOR
 LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 5-5-88

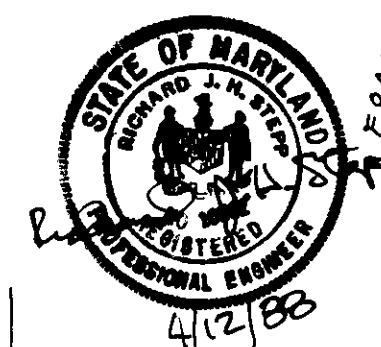
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 9-12-88
 APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 9-22-88
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 8-29-88

Reviewed for HOWARD SCD
 Requirements
 Signature Date 8/24/88
 Date 8/24/88

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Date 8/24/88

EXISTING TEMP SEDIMENT CONTROL SWM BASIN NO 2
 SEE F-87-213

No	REVISIONS	Date
1	Rev grd lots 53 & 54	9788



ENGINEERS CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 RICHARD JH STEPP
 DATE 4/12/88

CLARK • FINEPROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 - BALTO • (301) 621-8100 - WASH		
DESIGNED GLB	SEDIMENT & EROSION CONTROL PLAN LOTS 1-76 BOONE FARM SECTION 1 AREA 1 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: COLUMBIA BUILDERS, INC. (DEVELOPER) 3 LAKEFRONT NORTH SUITE 200 COLUMBIA, MARYLAND 21044	SCALE 1"=30'
DRAWN 6S		DRAWING 12 OF 13
CHECKED GLB	JOB NO 86-078	FILE NO 86-078-SE
DATE Apr 8, 1988		SDP-88-181

CONSTRUCTION SEQUENCE

	# DAYS
1 OBTAIN GRADING PERMIT	2
2 COMPLETE PHASE I ITEM 6 AS SHOWN UNDER F-87-213	0
3 INSPECT CONTROLS INSTALLED UNDER F-87-213 AND REPAIR/ADJUST AS NECESSARY	2
4 RELOCATE CONTROLS AS SHOWN ON PLAN	2
5 ROUGH GRADE AS REQUIRED & EXCAVATE FOR FOUNDATIONS	30
6 CONSTRUCT STRUCTURES, DRIVEWAYS & WALKS	200
7 FINE GRADE & STABILIZE SITE	30
8 BEGIN PHASE II UNDER F-87-213	0

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed

Seedbed Preparation Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened

Soil Amendments In lieu of soil test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Inspect all seeded areas and make needed repairs, replacements and reseedings

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed

Seedbed Preparation Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

Seeding For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod

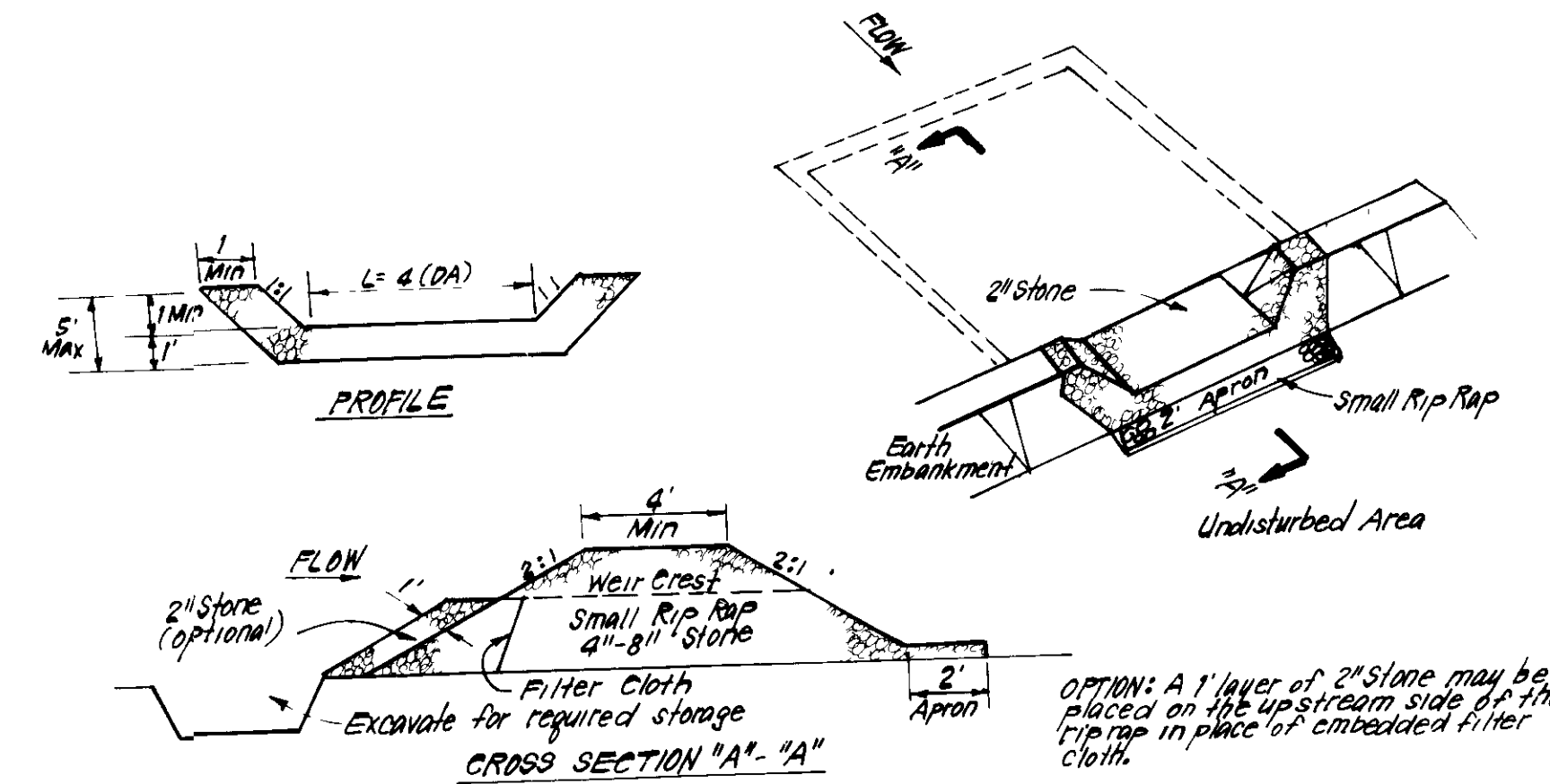
Mulching Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

- 1) A minimum of 2 hours notice must be given to the Board County Office of Inspection and Permits prior to the start of any construction (992-2437)
- 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
- 3) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
- 7) Site Analysis.

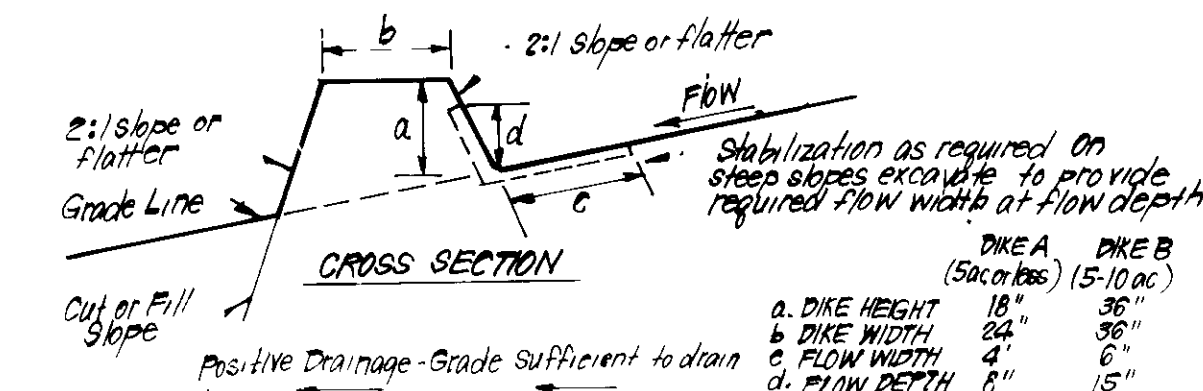
Total Area of Site	42.48 Acres
Area Disturbed	2772 Acres
Area to be roofed or paved	5.44 Acres
Area to be vegetatively stabilized	22.28 Acres
Total Cut	6670 Cu. yds
Total Fill	52150 Cu. yds
Offsite waste/borrow area location	N/A
- 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 9) Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- 10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- 11) If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- 12) All pipes to be blocked at the end of each day (see detail below).
- 13) The total amount of straw bale dikes/silt fence equals 240 L.F.



CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The rip rap area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip rap 4-8" along with 1" thickness of 2" aggregate placed on the up-grade side of the trap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.ST.) STV.
NO SCALE



CONSTRUCTION SPECIFICATIONS:

1. All dikes shall be compacted by earth-moving equipment
2. All dikes shall have positive drainage to an outlet
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

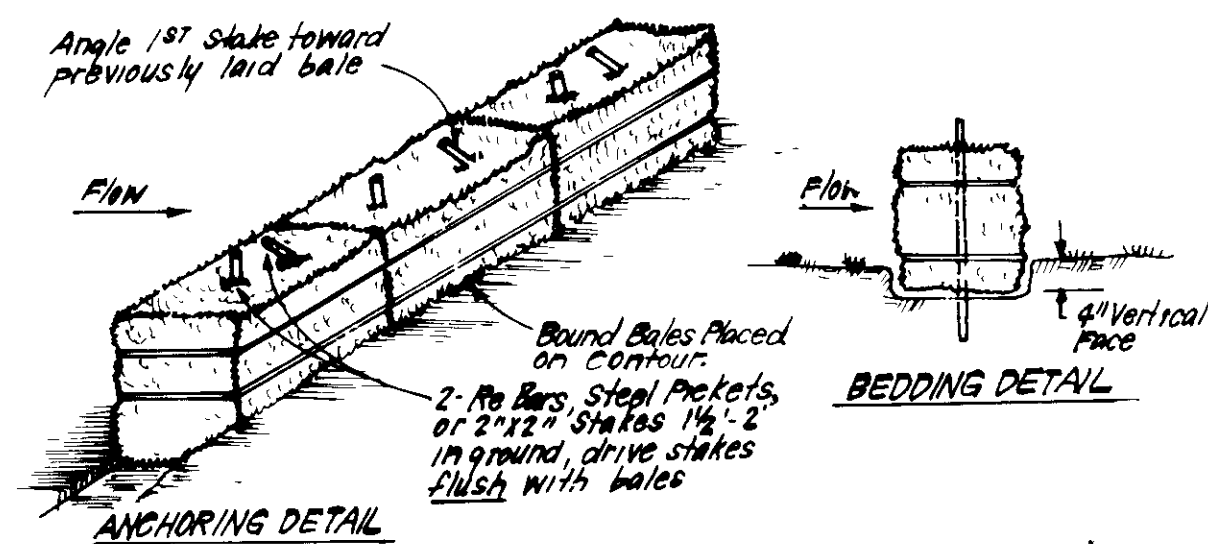
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1.	0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2.	3.1 - 5.0%	Seed & Straw Mulch	Seed, willow, or Excelsior Sed, 2" Stone
3.	5.1 - 8.0%	Seed, willow, or Sod, 2" Stone	Lined Rip Rap 4-8" Stone
4.	8.1 - 20.0%	Lined Rip Rap 4-8" Stone	Engineering Design

- A Stone to be 2" Stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
- Rip Rap to be 4-8" in a layer at least 8" thick, pressed into soil.
- Approved equivalents can be substituted for any of the above materials.

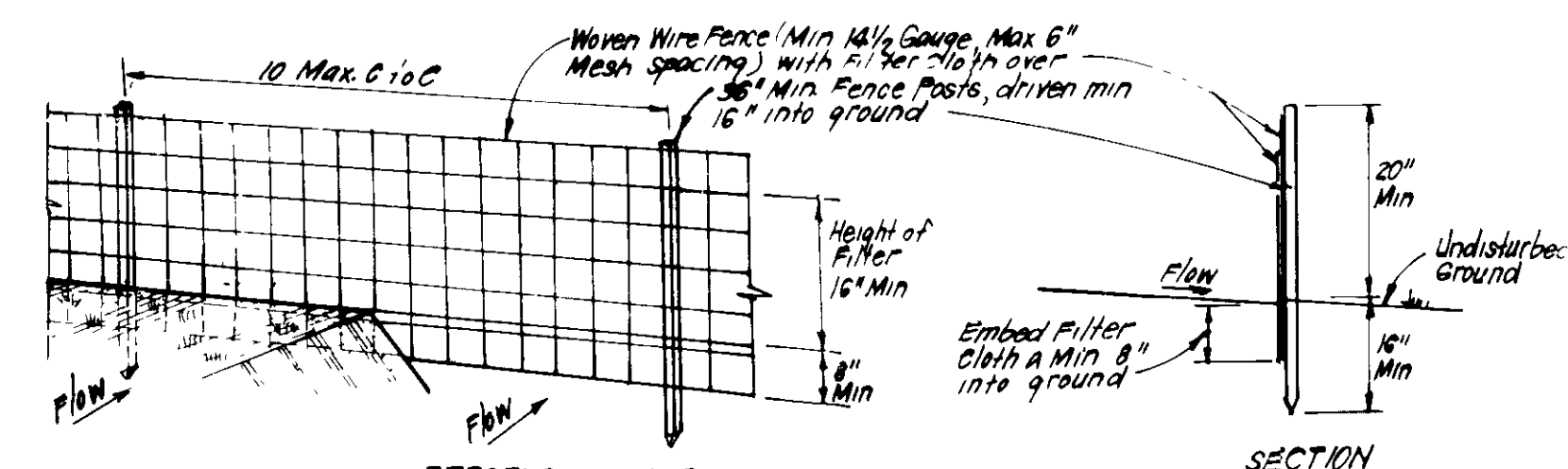
7. Periodic inspection and Required Maintenance must be provided after each rain

EARTH DIKE DETAIL (E.D.)
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
1. Bales shall be placed at the Top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales
 2. Each bale shall be embedded in the soil a min of 4" and placed so the bindings are horizontal
 3. Bales shall be securely anchored in place by either 2 stakes or re bars driven thru the bale. The 1 1/2" stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale
 4. Inspection shall be frequent and repair replacement shall be made promptly as needed
 5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage

STRAW BALE DIKE DETAIL (SBD)
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
1. Woven wire fence to be fastened securely to fence posts with wire ties or staples
 2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid sections
 3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded
 4. Maintenance shall be performed as needed and material removed when "bulges" develop in Silt Fence

POSTS: Steel, either T or U Type or 2" Hardwood
FENCE: Woven Wire, 1/4" Gauge, 6" Max. Mesh Spacing
FILTER CLOTH: Filter, Min. 100% Submittal, TIAAN or Approv equ.
PREFABRICATED UNIT: Geotex, Envirofence, or Approv equal

SILT FENCE DETAIL (S)
NO SCALE

DEVELOPER'S/BUILDER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Richard J. Stepp 4-12-88

ENGINEER'S CERTIFICATE



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Richard J. Stepp 4/12/88
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

APPROVED FOR PLANNING & LAND DEVELOPMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

APPROVED FOR PLANNING & LAND DEVELOPMENT

APPROVED FOR PLANNING & LAND DEVELOPMENT

APPROVED

LAND DEVELOPMENT & PLANNING ADMINISTRATION

HOWARD COUNTY MARYLAND

5-5-88

CLARK • FINEFROCK & SACKETT, INC.

ENGINEER • PLANNERS • SURVEYORS

SEDIMENT & EROSION CONTROL PLAN

LOTS 1-7G

BOONE FARM

SECTION 1 AREA 1

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

FOR COLUMBIA BUILDERS, INC. (DEVELOPER)

3 LAKEFRONT NORTH SUITE 200

COLUMBIA, MARYLAND 21044

SDP-88-181

86-078-2E