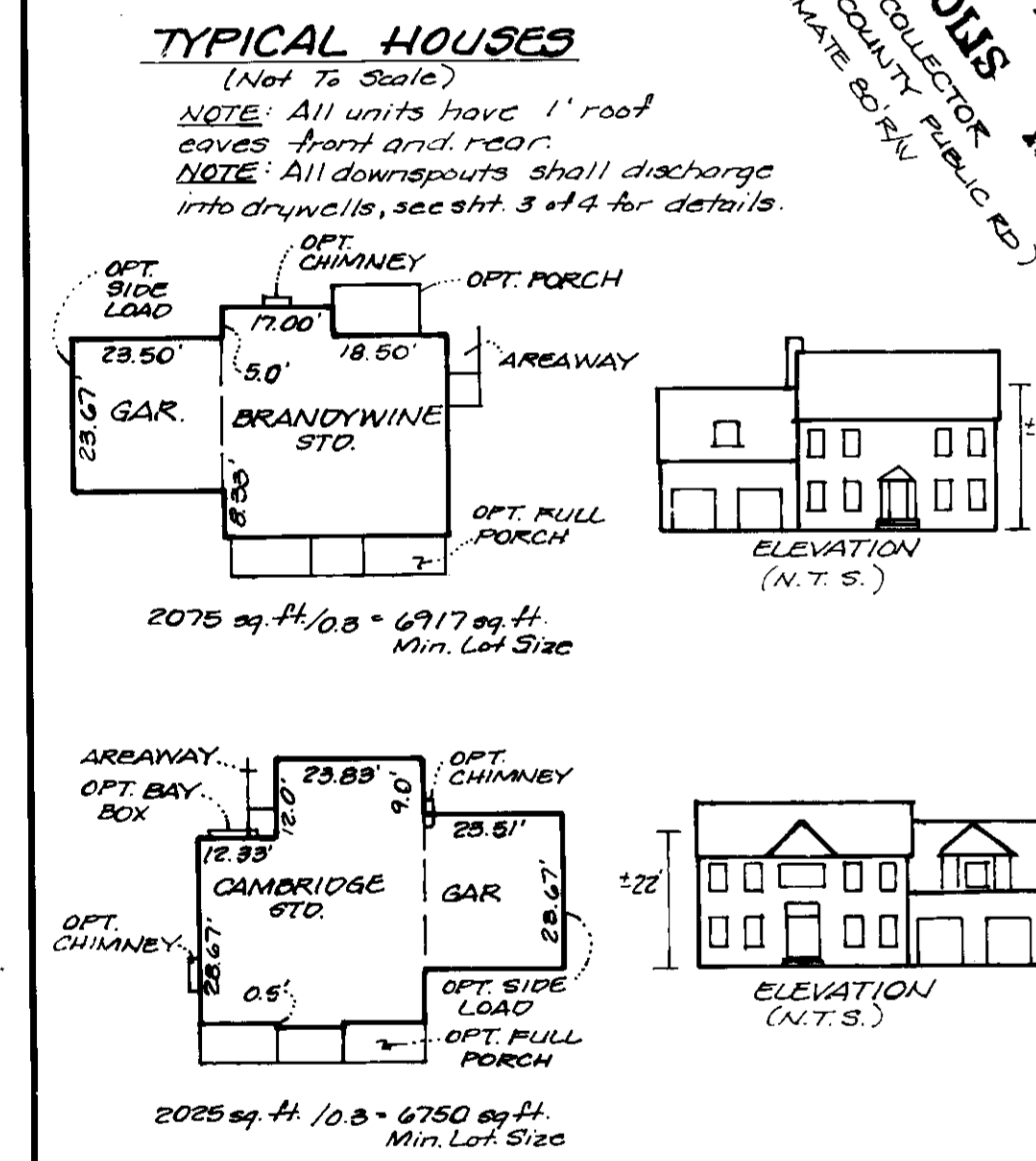
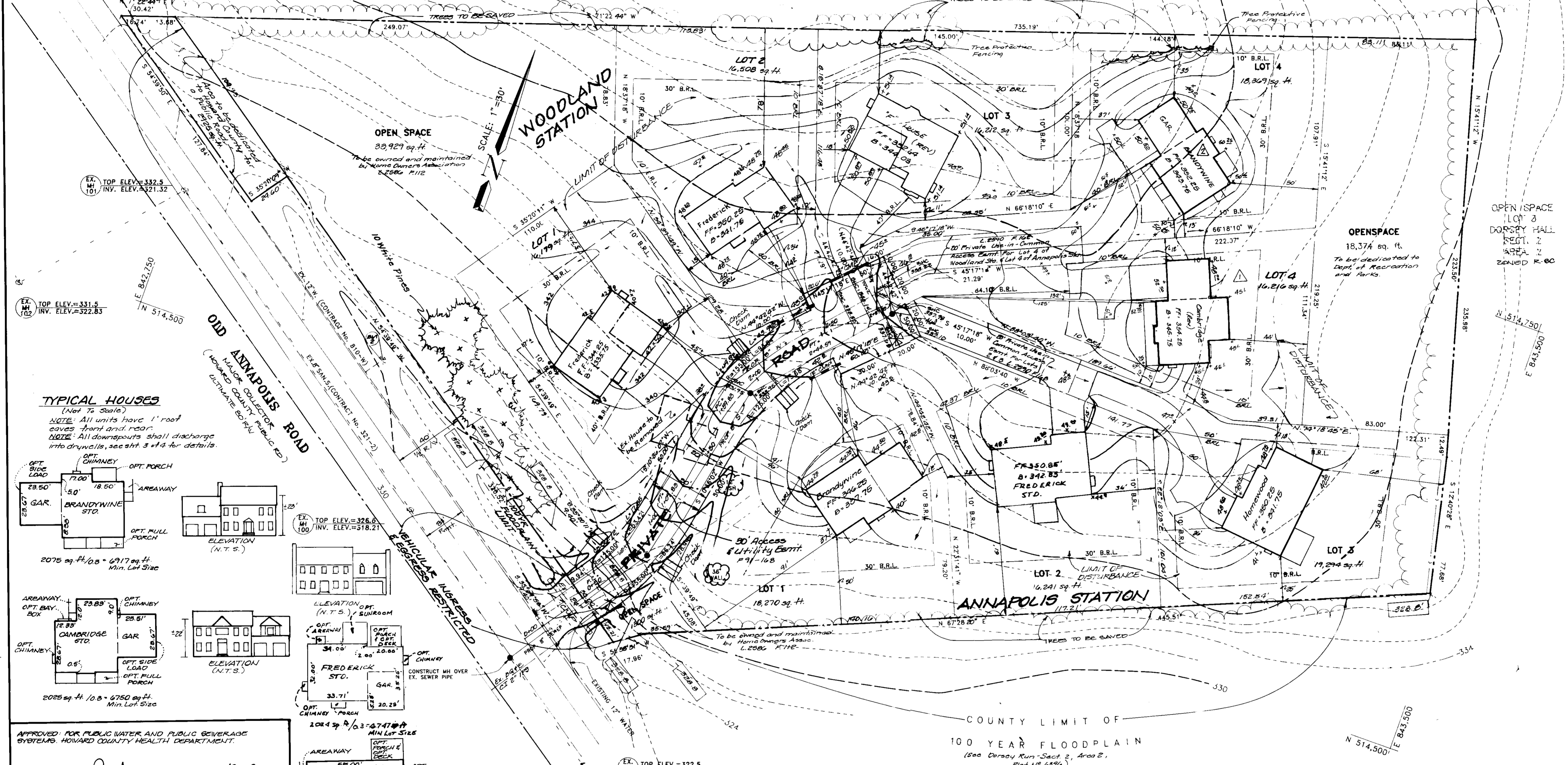
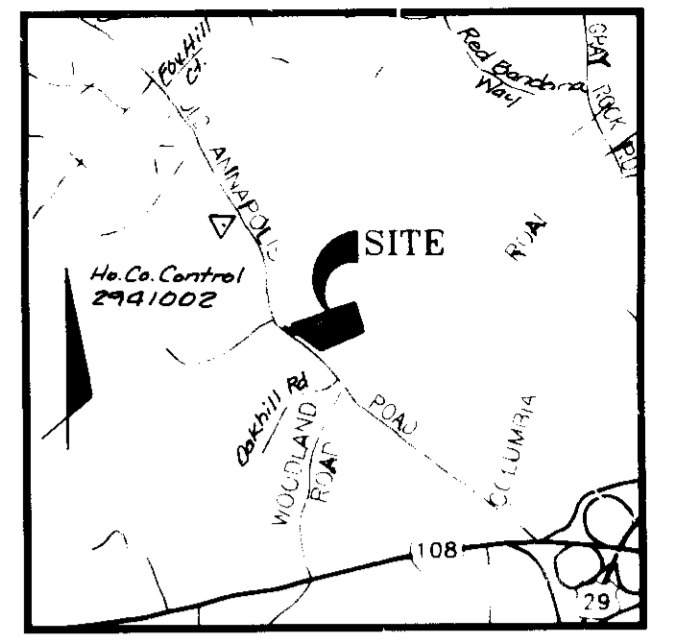


Sheet #	Description
1 of 3	Site Development Plan
2 of 3	Soil Conservation Plan
3 of 3	Stormwater Management

Lot Size Tabulations					
Lot #	Gross Area	Floodplain Area	Spec. Area	Gr. St. Area	Min. Lot Area
WOODLAND STATION					
1	16,179	-	-	16,179	16,179
2	16,508	-	-	16,508	16,508
3	16,818	-	200	16,818	16,818
4	16,249	-	2295	16,016	16,016
5	28,929	1521.65	-	28,407.35	28,407.35
ANNAPOLIS STATION					
1	18,270	-	-	18,270	18,270
2	16,291	-	-	16,291	16,291
3	19,294	-	8188	16,106	16,106
4	16,216	-	200	16,016	16,016
5	18,374	-	-	18,374	18,374
6	1,300	348.94	-	951.06	951.06
7	8,037.7	538.68	-	7,499.02	7,499.02

SEWER INVERT CHART					
Lot #	Inv. @ Main	Inv. @ R.C.	Min. Perm. Elev.	Remarks	Type of Conn.
1	331.57	331.75	335.75	WOODLAND STA.	Drop House
2	336.19	336.85	341.75	"	"
3	339.46	340.14	344.14	"	"
4	337.72	338.22	343.68	"	"
1	333.69	333.75	337.55	ANNAPOLIS STA.	Drop House
2	337.22	337.68	342.15	"	"
3	336.94	337.10	341.60	"	"
4	337.82	337.85	343.68	"	"



- General Notes:
- Total area of site = 4.65 acres
 - Dead reference: 2022/85
 - Property zoned R-20.
 - Boundary and Topography surveyed in the field by Boender Associates, Inc.
 - 100 year floodplain delineated based on Howard County 100 year floodplain data.
 - No wetlands on site.
 - Soils map based on Howard County Soils Map #.
 - Fees in lieu of providing Storm Water Management has been approved.
 - All construction materials shall be in accordance with the Howard County Road Construction Code & Specifications.
 - Utilities to be utilized:
 - Water: Cont. No. 810-W
 - Sewer: Cont. No. 821-E
 - All onsite driveways are to be private.
 - Any damage to County Owned right-of-ways shall be corrected at the developer's expense.
 - Contractor to verify location of underground utilities prior to beginning work.
 - Contractor to notify Miss Utility at 527-7777 at least five days prior to beginning construction.
 - The contractor or developer shall contact the Construction/Inspection Division of Howard County at 972-7272 at least twenty-four hours prior to beginning construction.
 - Survey datum based on Md. State Plane Coordinate System.
 - For paving details see sheet #4 of 4.
 - Ref. No.: WP 92-41 & WP 92-42, F91-16B & F91-17C
 - Proposed Access Road is to be privately maintained.
 - Existing driveway entrance is according to Howard County standards. Re-paving will take place at construction stage.

21. Dry wells to be provided for roof run-off for each house.

22. Benchmarks shown approximate.

B.M. 1 (White) Ho. Co. Control Sta. 2141002 Elev. 399.333, Conc. Man. @ Surf. 21' S. of E. road

B.M. 2 Fire hydrant @ Bennett Dr., Elev. 331.70

SITE ANALYSIS

Existing Zone:	R-20
Total area of parcels to be submitted:	4.65 acres (202,854 sq. ft.)
Woodland Station:	2.39 acres
Annapolis Station:	2.26 acres
Number of units permitted:	8 units, acre
Number of units proposed:	8 units
Proposed use: Single Family Detached units	4.48 acres
Open Space:	Total provided: 0.93 acres
	Total required: 0.93 acres
Woodland Station:	Required 0.48 acres or 20% Proposed 0.81 acres (34%)
Annapolis Station:	Required 0.45 acres or 20% Proposed 0.55 acres (34%)
Total area of lots to be recorded:	3.16 acres
Woodland Station 1.55 (65%) Ac.	
Annapolis Station 1.61 (71%) Ac.	
Area of roadway to be dedicated: (along Old Annapolis Road)	1.6397 S.F. (0.038 Ac.)

APPROVED FOR PUBLIC WATER AND PUBLIC BEVERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

[Signature] 2-19-93 DATE
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[Signature] 2/24/93 DATE
DIRECTOR

[Signature] 2/26/93 DATE
CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT

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

[Signature] 2/10/93 DATE
DIRECTOR

[Signature] 12-8-92 DATE
CHIEF ENGINEER

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

[Signature] 12/9/92 DATE
SOIL CONSERVATION SERVICE

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

[Signature] 12/9/92 DATE
SOIL CONSERVATION DISTRICT

DEVELOPERS CERTIFICATE

I 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 certification of attendance at a Maryland Department of Environment approved training program for the periodic on-site inspections by the Howard Soil Conservation district or their authorized agents, as are deemed necessary.

[Signature] 3-10-92 DATE
Developer

ENGINEER CERTIFICATE

I certify that this plan for erosion and sediment control represents a practical and workable plan based on personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

[Signature] 3-10-92 DATE
Engineer

ADDRESS CHART

WOODLAND STATION	
1	9712 Old Annapolis Rd.
2	9708 " "
3	9704 " "
4	9700 " "

ANNAPOLIS STATION	
1	9696 Old Annapolis Rd.
2	9692 " "
3	9688 " "
4	9684 " "

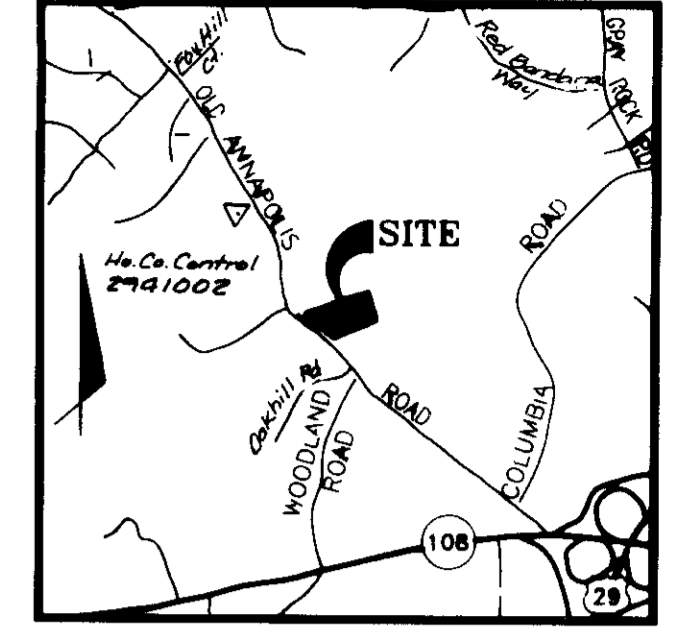
SUBDIVISION NAME: ANNAPOLIS/WOODLAND STATIONS	SECTION/AREA: -	PARCEL NO. LOTS: 163 & 203 1-4	TITLE: SITE DEVELOPMENT PLAN
PLAT NO. OR L.P. #: 10601 & 10502	BLOCK NO. #: 3	TAX/DISTRICT MAP: 30	PROJECT: ANNAPOLIS / WOODLAND STATIONS
WATER CODE: F-13	SEWER CODE: 5740300	ELECT. DIST. #: 208	LOCATION: ELECTION DISTRICT HOWARD CO. MD.
REP. NO.: F91-17C, WP92-41, WP92-42, F91-16B, SEP 75-03		DESIGNED BY: LJB	SCALE: 1"=30'
		DRAWN BY: MB	PAGE NO. #: 32
		CHECKED BY: MB	JOB NO. #: 91002
		DATE: NOV. 1991	DRAWING NO. #: 1 OF 3

Boender Associates
ENGINEERS - PLANNERS - SURVEYORS
3230 BETHANY LANE
ELLCOTT CITY, MD. 21043
(301) 465-7777 FAX: (301) 465-7966

Sheet #	Description
1 of 3	Site Development Plan
2 of 3	Settlement Control Plan
3 of 3	Details Plan

Lot Size Tabulations						
Lot #	Gross Area #	Plain Area #	Sub Area #	Gr. St. Slopes	Min. Lot Area #	
WOODLAND STATION						
1	16,179	-	-	16,179	-	16,179
2	16,508	-	-	16,508	-	16,508
3	16,818	-	-	16,818	-	16,818
4	16,294	-	-	16,294	-	16,294
5	16,294	-	-	16,294	-	16,294
6	16,294	-	-	16,294	-	16,294
7	16,294	-	-	16,294	-	16,294
ANNAPOLIS STATION						
1	18,270	-	-	18,270	-	18,270
2	16,294	-	-	16,294	-	16,294
3	19,294	-	-	19,294	-	19,294
4	16,294	-	-	16,294	-	16,294
5	18,294	-	-	18,294	-	18,294
6	1,500	242.46	-	768.57	-	768.57
7	8,627.7	536.68	-	8,091.02	-	8,091.02

SEWER INVERT CHART						
Lot #	Invert	Min. Elev.	Max. Elev.	Min. Depth	Remarks	Type of Sewer
1	331.97	331.95	338.79	6.82	WOODLAND STA.	Drop House
2	330.19	330.85	341.79	11.60		
3	339.40	340.14	349.14	9.74		
4	337.72	338.22	340.68	2.96		Sewer House
1	333.09	333.75	337.55	4.46	ANNAPOLIS STA.	Drop House
2	337.22	337.68	342.16	4.94		
3	336.44	337.10	341.60	5.16		Sewer House
4	337.02	337.68	349.68	12.66		



VICINITY MAP
Scale: 1" = 2000'

General Notes:

- Total area of site = 4.65 acres
- Deed reference: 2022/85
- Property zoned R-20.
- Boundary and Topography surveyed in the field by Boender Associates, Inc.
- 100 year floodplain delineated based on Howard County 100 year floodplain data.
- No wetlands on site.
- Soils map based on Howard County Soils Map #.
- Fee in lieu of providing Storm Water Management has been approved.
- All construction materials shall be in accordance with the Howard County Road Construction Code & Specifications.
- Utilities to be utilized:
Water: Cont. NR: 92-1
Sewer: Cont. NR: 92-2
- All private driveways are to be private.
- Any damage to County Owned right-of-ways shall be corrected at the developer's expense.
- Contractor to verify location of underground utilities prior to beginning work.
- Contractor to notify Miss Utility at 527-7777 at least five days prior to beginning construction.
- The contractor or developer shall contact the Construction/Inspection Division of Howard County at 472-7272 at least twenty-four hours prior to beginning construction.
- Survey datum based on Mid-State Plane Coordinate System.
- For paving details see sheet # 4 of 4.
- Ref. NR: WP 92-41 & WP 92-42, F91-108 & F91-170.
- Proposed Access Road is to be privately maintained.
- Existing driveway entrance is according to Ho County standards. Re-paving will take place at construction stage.
- Dry wells to be provided for roof run-off for each house.
- Benches are shown approximate:
BN-1 (Halter) Ho Co. Control Sta. 2541002
Elev. 294.330, Cont. Man. @ Surf. 21' E. of E. Road.
BN-2 Fire hydrant @ Bennett Belt, Elev. 331.70

SITE ANALYSIS

Existing Zone:	R-20
Total area of parcels to be submitted:	4.65 acres (202,654 sq. ft.)
Woodland Station:	2.38 acres
Annapolis Station:	2.28 acres
Number of units permitted:	2 units/acre
Number of units proposed:	8 units
Proposed use: Single Family Detached units	
Open Space:	Total provided: 1.46 acres Total required: 0.93 acres
Woodland Station:	Required 0.48 acres or 20% Proposed 0.81 acres (34%)
Annapolis Station:	Required 0.45 acres or 20% Proposed 0.65 acres (34%)
Total area of lots to be recorded:	3.16 acres
Woodland Station 1.55 (85%) Ac.	
Annapolis Station 1.61 (71%) Ac.	
Area of roadway to be dedicated: (along Old Annapolis Road)	1,629.97 S.F. (0.086 Ac.)

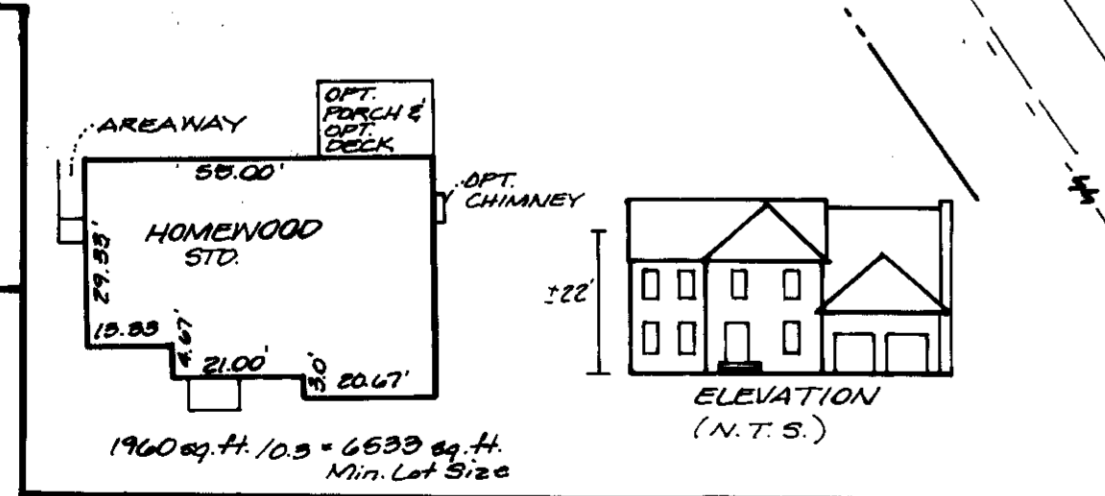
APPROVED FOR PUBLIC WATER AND PUBLIC BEVERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
[Signature] 2/19/93
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
[Signature] 2/24/93
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF COMMUNITY PLANNING & LAND DEVELOPMENT.
[Signature] 2/26/93
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC BEVERAGE SYSTEMS, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
[Signature] 2/10/93
DATE

[Signature] 12-28-92
DATE



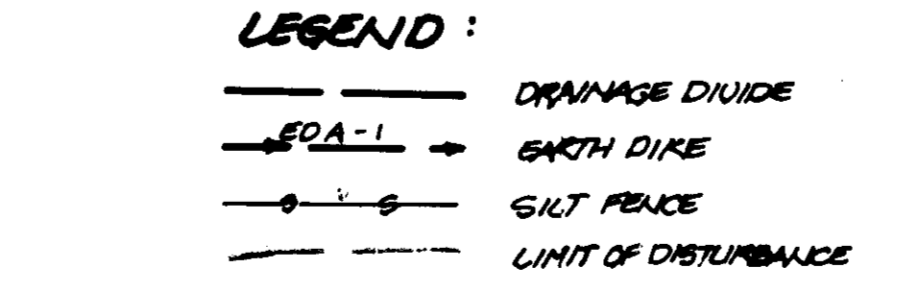
ST. NO. 1: 1.50 AC.
STORAGE REQUIRED: 2700 C.F.
STORAGE PROVIDED: 2530 C.F. @ 32.5"
SIDE SLOPE: 2:1
BOTTOM DIM. 1.5' X 40'
BOTTOM ELEV.: 325.0
WEIR ELEV.: 325.0
CLEANOUT ELEV.: 325.0
WEIR LENGTH: 5'

ST. NO. 2: 0.35 AC.
STORAGE REQUIRED: 702 C.F.
STORAGE PROVIDED: 704 C.F. @ 33.4"
SIDE SLOPE: 1:1
BOTTOM DIM.: 8' X 10'
BOTTOM ELEV.: 330.2
WEIR ELEV.: 335.2
CLEANOUT ELEV.: 332.2
WEIR LENGTH: 4'

ST. NO. 3: 0.56 AC.
STORAGE REQUIRED: 1008 C.F.
STORAGE PROVIDED: 1022 C.F. @ 33.6"
SIDE SLOPE: 1:1
BOTTOM DIM.: 10' X 14'
BOTTOM ELEV.: 332.2
WEIR ELEV.: 337.2
CLEANOUT ELEV.: 334.2
WEIR LENGTH: 4'

DEVELOPERS CERTIFICATE
I 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 certification of attendance at a Maryland Department of Environment approved training program for the periodic on-site inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.
[Signature] Date

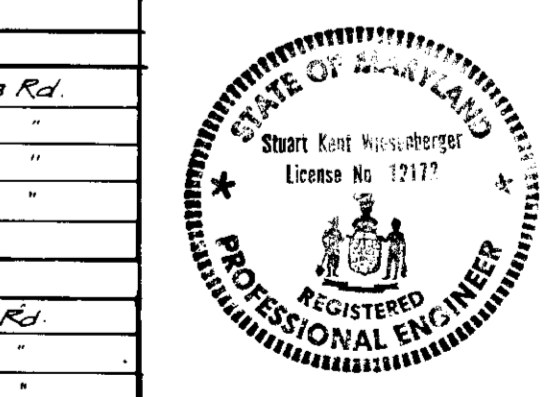
ENGINEER CERTIFICATE
I certify that this plan for erosion and sediment control represents a practical and workable plan based on personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
[Signature] 3-10-92
Date



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
[Signature] 12/9/92
DATE

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 12/9/92
DATE

SUBDIVISION NAME: ANNAPOLIS/WOODLAND STATIONS	SECTION/AREA: -	PARCEL NO. #: 103 & 203	TITLE: SEDIMENT CONTROL PLAN
PLAT NO. OR L.P.F. #: 10601 & 10602	BLOCK NO. #: 3	ZONING: R-20	PROJECT: ANNAPOLIS/WOODLAND STATIONS
WATER CODE: F-13	SEWER CODE: 5740300	CONVEYANCE TRACT: 6028.01	LOCATION: BINBLE FAMILY DETACHED
REP. NR. #: F91-170, W92-41, W92-42, F91-108, 2541002	SEWER CODE: 5740300	CONVEYANCE TRACT: 6028.01	ELECTION DISTRICT: HOWARD
SCALE: 1" = 30'	DESIGNED BY: J.C.O.	DRAWN BY: M.B.	CHECKED BY: DATE
FIELD BOOK: 32	PAGE NO. #: 51-67	JOB NO. #: 91002	DRAWING NO. #: 2 OF 3



OWNER
ANNAPOLIS STATION JOINT VENTURE
5405 Twin Knolls Road
Columbia, Maryland 21043
Phone: (301) 997-4223

Boender Associates
ENGINEERS, PLANNERS, ARCHITECTS
3230 BETHANY LANE
ELLICOTT CITY, MD 21043
(301) 465-7777 FAX: (301) 465-7966

PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, disking 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 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 urethane 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 periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (14 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.5 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 unruffed 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 feet or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Maintenance: inspect all seeded areas and make needed repairs, adjustments and reseedings.

TEMPORARY SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, disking 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 bushels 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 (0.7 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 unruffed 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 feet 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 24 hours notice must be given to the Howard 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: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days for 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 are not allowed 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. The Analysis: Total area of site 4.65 Acres, Area disturbed 2.15 Acres, Area to be roofed or paved 0.65 Acres, Area to be vegetatively stabilized 1.49 Acres, Total fill 6577 Cu. Yds., Total cut 2089 Cu. Yds., Waste/borrow area location Approved by SCS.

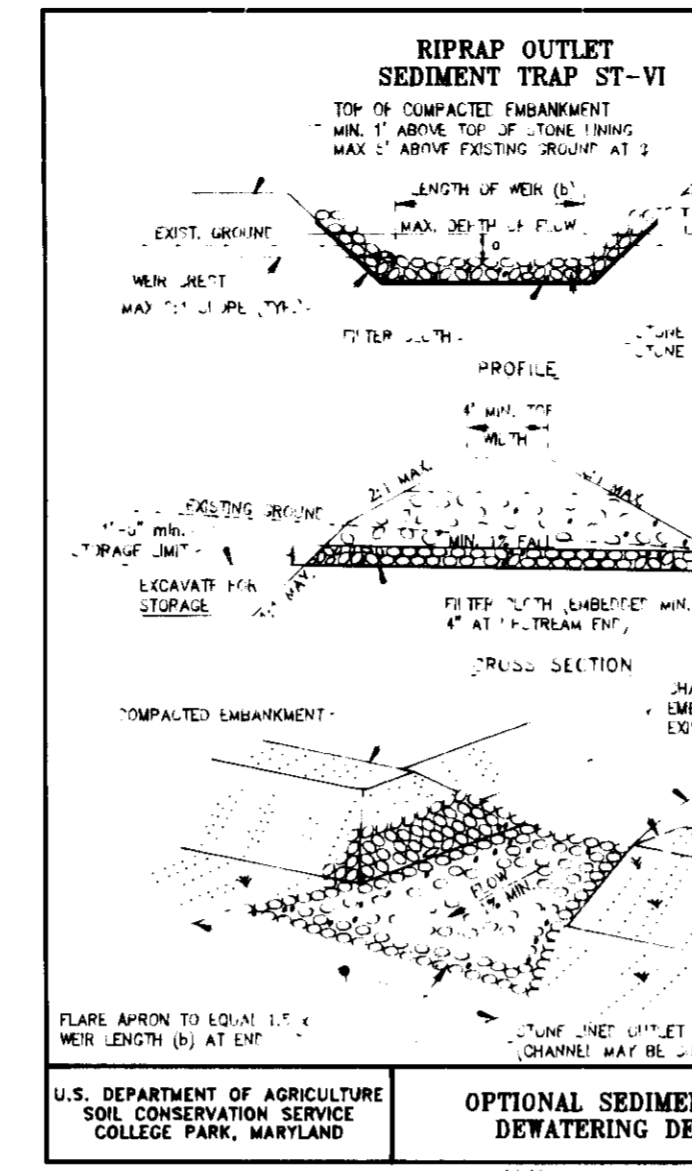
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment controls 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.

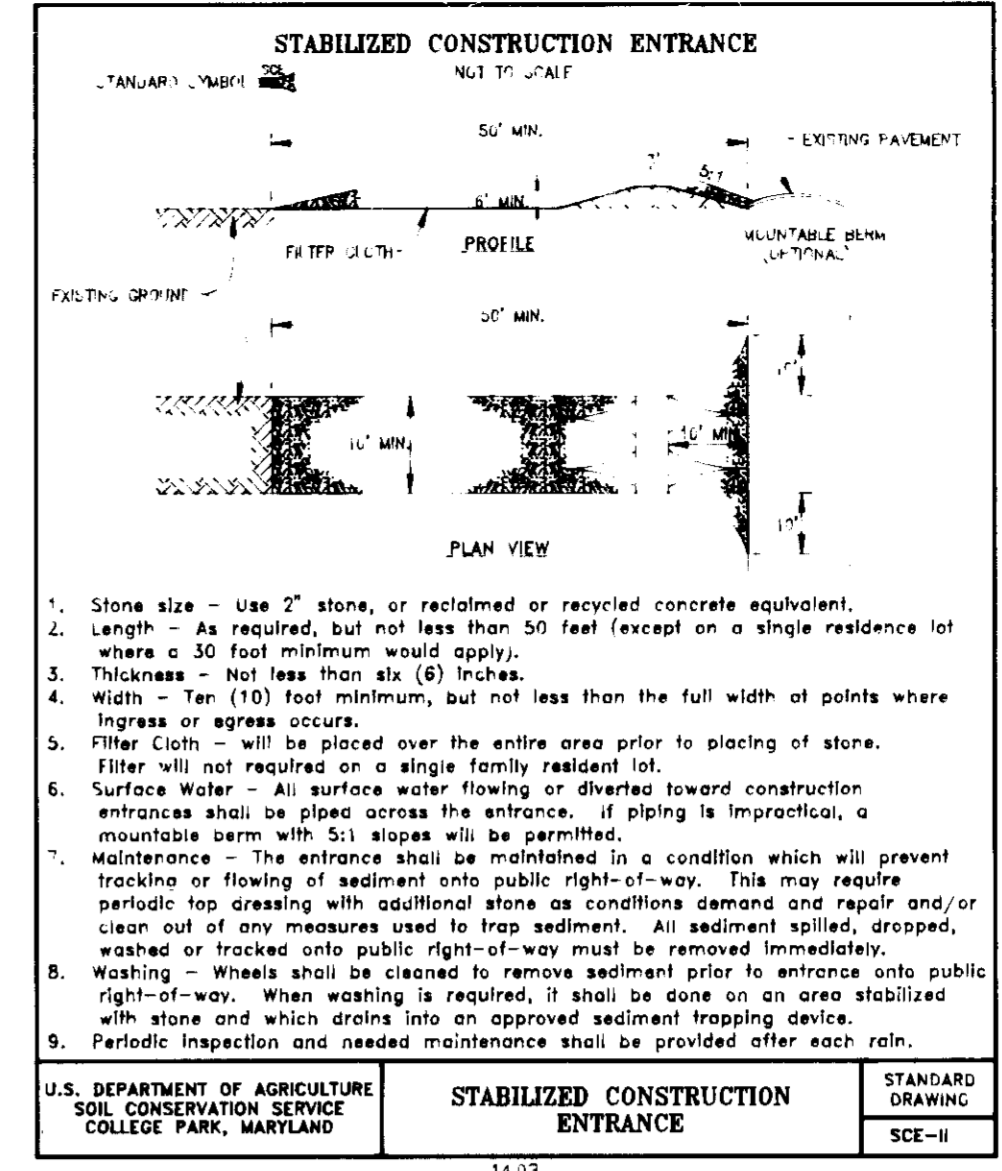
SEQUENCE OF CONSTRUCTION

1. Obtain grading and building permits.
 2. Install tree protection fencing & stabilized construction entrance.
 3. Install remaining sediment control measures.
 4. Clean and grub site.
 5. Grade site.
 6. Construct private road, driveway culverts, and check dams.
 7. Construct houses and appurtenances.
 8. Stabilize all disturbed areas.
 9. Flush storm drain pipes and install dry wells.
 10. Remove sediment control devices with permission of the Howard County Sediment Control Inspector.
- * These items can be done concurrently.



CONSTRUCTION SPECIFICATIONS FOR ST-VI

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and soil mat. The plan area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be constructed by traversing with equipment while it is being constructed. Maximum height of embankment shall be 15 feet, measured at centerline of embankment.
3. All fill slopes shall be 2:1 or flatter. Cut slopes 1:1 or flatter.
4. Location of the top of any dike directing water into trap must equal or exceed the height of embankment.
5. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be four (4) to eight (8) inches (riprap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
8. 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. Remove sediment shall be deposited in a suitable area and in such a manner that it will not erode.
9. The structure shall be inspected after each rain and repaired as needed.
10. Construction operations shall be carried out in such a manner that erosion and soil pollution are minimized.
11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
12. Drainage area for this practice is limited to 15 acres or less.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width of points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not require on a single family residential lot.
6. Surface Water - All surface water flowing or directed toward construction entrances shall be placed across the entrance. If piping is impractical, a mounds berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flooding of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or clean out of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard 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: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days for 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 are not allowed 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. The Analysis: Total area of site 4.65 Acres, Area disturbed 2.15 Acres, Area to be roofed or paved 0.65 Acres, Area to be vegetatively stabilized 1.49 Acres, Total fill 6577 Cu. Yds., Total cut 2089 Cu. Yds., Waste/borrow area location Approved by SCS.

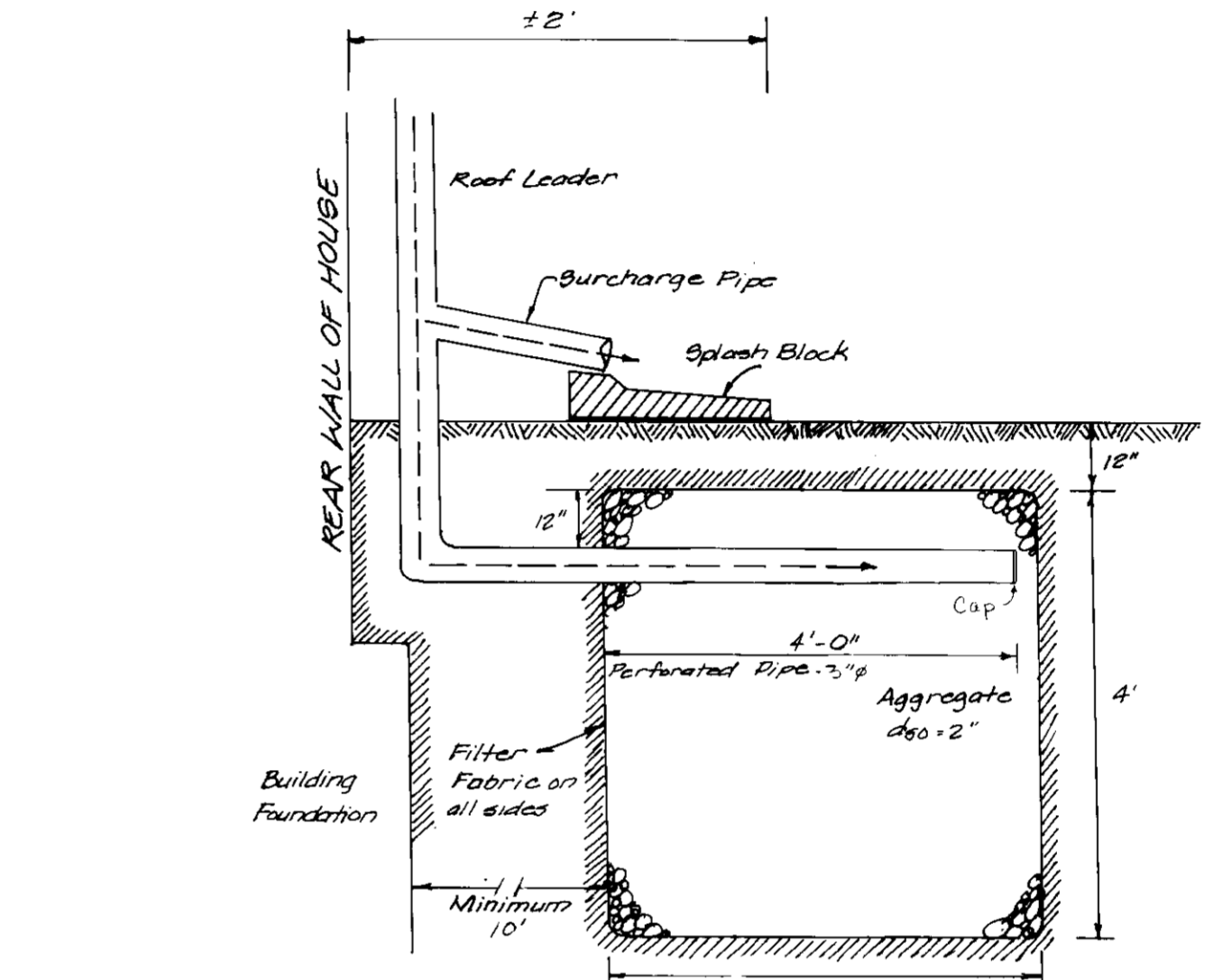
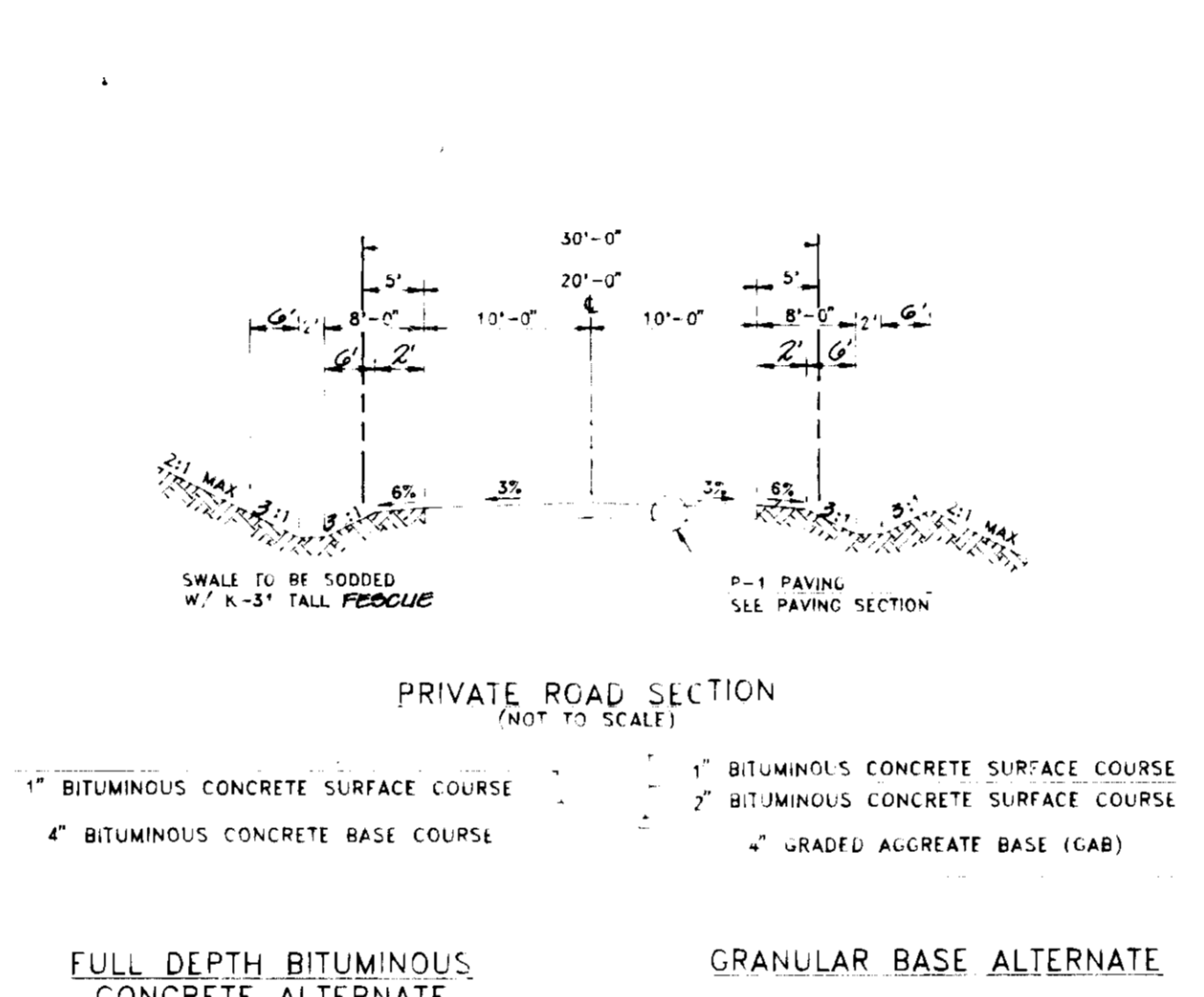
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment controls 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.

SEQUENCE OF CONSTRUCTION

1. Obtain grading and building permits.
 2. Install tree protection fencing & stabilized construction entrance.
 3. Install remaining sediment control measures.
 4. Clean and grub site.
 5. Grade site.
 6. Construct private road, driveway culverts, and check dams.
 7. Construct houses and appurtenances.
 8. Stabilize all disturbed areas.
 9. Flush storm drain pipes and install dry wells.
 10. Remove sediment control devices with permission of the Howard County Sediment Control Inspector.
- * These items can be done concurrently.



CONSTRUCTION SPECIFICATIONS

1. All dikes shall be constructed by earth-moving equipment.
2. Filter cloth to be fastened securely to wooden posts with wire ties or staples.
3. When two sections of filter cloth adjoin, each other they shall be overlapped by six inches and folded.
4. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

FLOW CHANNEL STABILIZATION

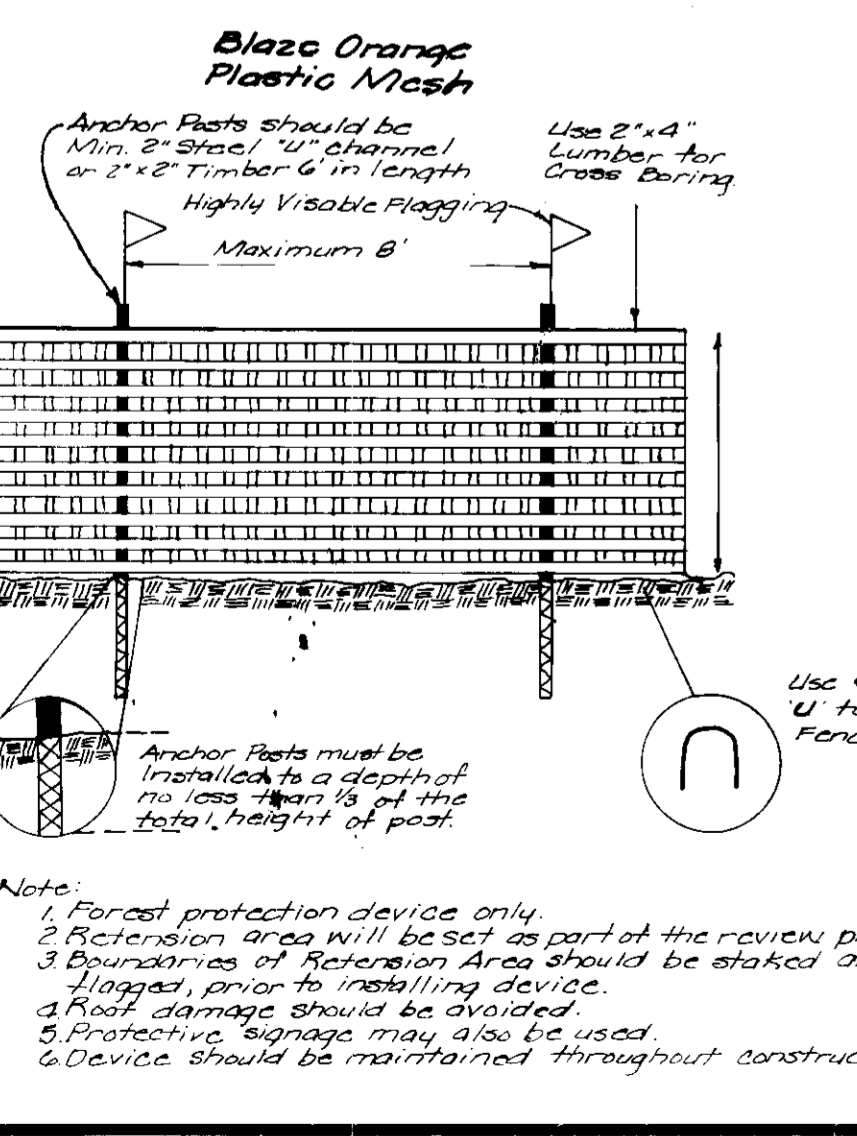
TYPE OF CHANNEL	TREATMENT	SEED AND STRAW MULCH	SEED AND STRAW MULCH
1	1.0-5.0%	SEED WITH MULCH	SEED AND STRAW MULCH
2	5.1-8.0%	SEED WITH MULCH	EXCESSIVE SEED; 2" STRAW
3	8.1-10.0%	SEED WITH MULCH OR SOIL	UNDER SEED - 4" ST
4	10.1-15.0%	2" STONE	PERMANENT SEED
5	15.1-20.0%	1/2" LIME RIP-RAP 4" ST	PERMANENT SEED

6. Stone to be 2" in thickness or recycled concrete equivalent, in a layer of at least 3 inches in thickness and be placed into the soil with construction equipment.

7. Rip-rap to be 4" in thickness or a layer of at least 8 inches in thickness and placed into the soil.

8. Approved equivalents can be substituted for any of the above materials.

9. Periodic inspection and required maintenance must be provided after each rain event.



Reviewed for Howard S.C.D. and meets technical Requirements.

J. M. H. Hester 12/9/92
Soil Conservation Service Date

This development is approved Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John L. Robertson 12/9/92
Soil Conservation District Date

Approved: For public water and public sewerage systems. Howard County Health Department.

John M. G. Jones 2-19-93
County Health Officer Date

Approved: Howard County Department of Planning and Zoning.

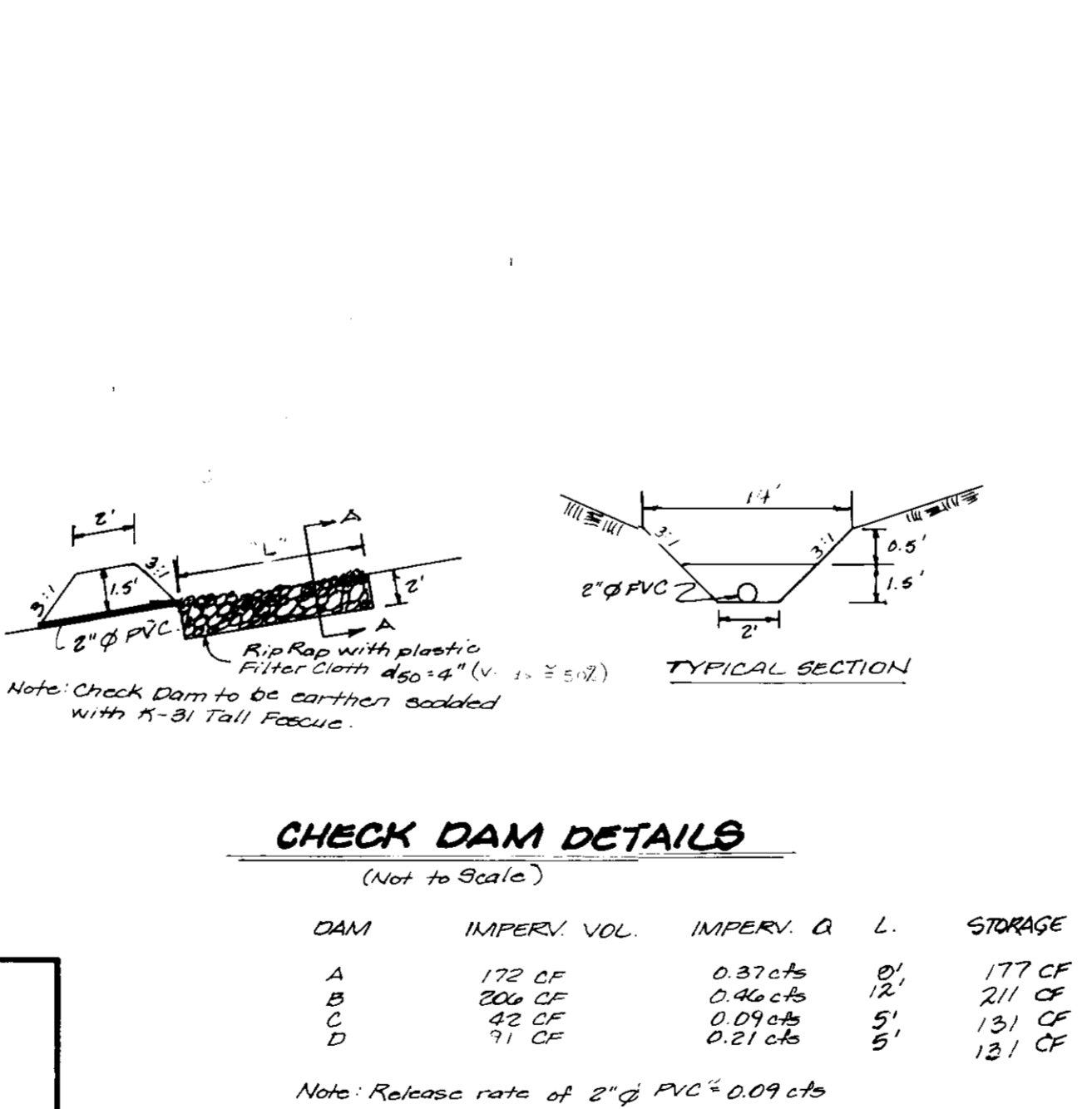
James S. Rothman 2/24/93
Director Date

Edmund H. Hornath 2/26/93
Chief Division of Community Planning & Land Development Date

Approved for public water and public sewerage, storm drainage systems and public roads. Howard County Department of Public Works.

James P. Plum 2/16/93
Director Date

William S. P. Day 12-28-92
City Engineer of Engineering M.K. Date



DEVELOPERS CERTIFICATE

I 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 of this project will have a certification of attendance at a Maryland Department of Government approved training program for the periodic on-site inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Emmanuel 3/10/92
Date

ENGINEERS CERTIFICATE

I certify that this plan for erosion and sediment control represents a practical and workable plan based on personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

James S. Rothman 3-10-92
Date

CHECK DAM DETAILS
(Not to Scale)

DAM	IMPERV. VOL.	IMPERV. Q.	L.	STORAGE
A	172 CF	0.37 cfs	8'	177 CF
B	206 CF	0.46 cfs	12'	211 CF
C	82 CF	0.19 cfs	5'	131 CF
D	91 CF	0.21 cfs	5'	121 CF

Note: Release rate of 2" PVC = 0.09 cfs

DETAILS

PROJECT: ANNAPOLIS/WOODLAND STATIONS

LOCATION: 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: DESIGNED DRAWN BY: CHECKED BY: DATE: 1992

AS SHOWN: S.K.V. M.B.B.

FIELD BOOK: PAGE NO. 3 OF 3

Boender Associates

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BETHESDA, MARYLAND 20814
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