

STORM DRAINAGE NOTES

1. All storm drainage shall be constructed in accordance with the latest edition of the Standard Specifications of Howard County.
2. Types of structures refer to the Standard Storm Drainage Details of Howard County unless otherwise noted.
3. Where the drop in the main line thru a structure can be accommodated by an invert slope of 1/4 to 1 or flatter, a rounded channel with sewer brick on an edge shall be built to the crown of the pipes.
4. All storm drainage elevations are invert elevations unless otherwise noted.
5. Information concerning underground utilities was obtained from available records but the Contractor must determine the exact locations and elevations of the mains by digging test pits by hand at all crossings well in advance of trenching. If clearances are less than shown on plans or six inches, whichever is less, contact Howard County before proceeding with construction.
6. Adjustments or repair to utilities due to Contractor's negligence or method of operation will be made at his expense.

PAVING NOTES

1. No construction shall be undertaken until the proper permits have been obtained from the supervising agencies.
2. All work shall be done in accordance with the Howard County Road Construction Code & Standard Specifications.
3. Trim edge of existing paving to form a clean, straight, vertical joint.
4. For typical paving sections see Howard County Road Construction Code Drawing No. D-13, Pg. 68.
5. All parking spaces to be 10'x20', or 12'x20' handicapped, or 7'x29' parallel.
6. Concrete curb and gutter shall be used throughout the area in Dwg. D-40, Pg. 95 Howard County road code.
7. Dumpster location, 6'x10' concrete slab (construction to match sidewalks).
8. For storm drainage, interrupt walk 4" width, and cut top of curb 1/4" wide x 5" deep, recess edges of curb to receive 4" x 16" x 3/8" steel bridge plate with skid resistant raised pattern top face.

Note: Area of one bedroom apartments = 708 sq. ft.
Area of two bedroom apartments = 950 sq. ft.

Note: Traffic control devices, including location, types, styles, installation, marking and signing shall be in accordance with the "Manual of Uniform Traffic Control Devices", 1971 Edition.

Note: Sidewalks adjacent to parking shall have 2' grass strip between curb and walk.

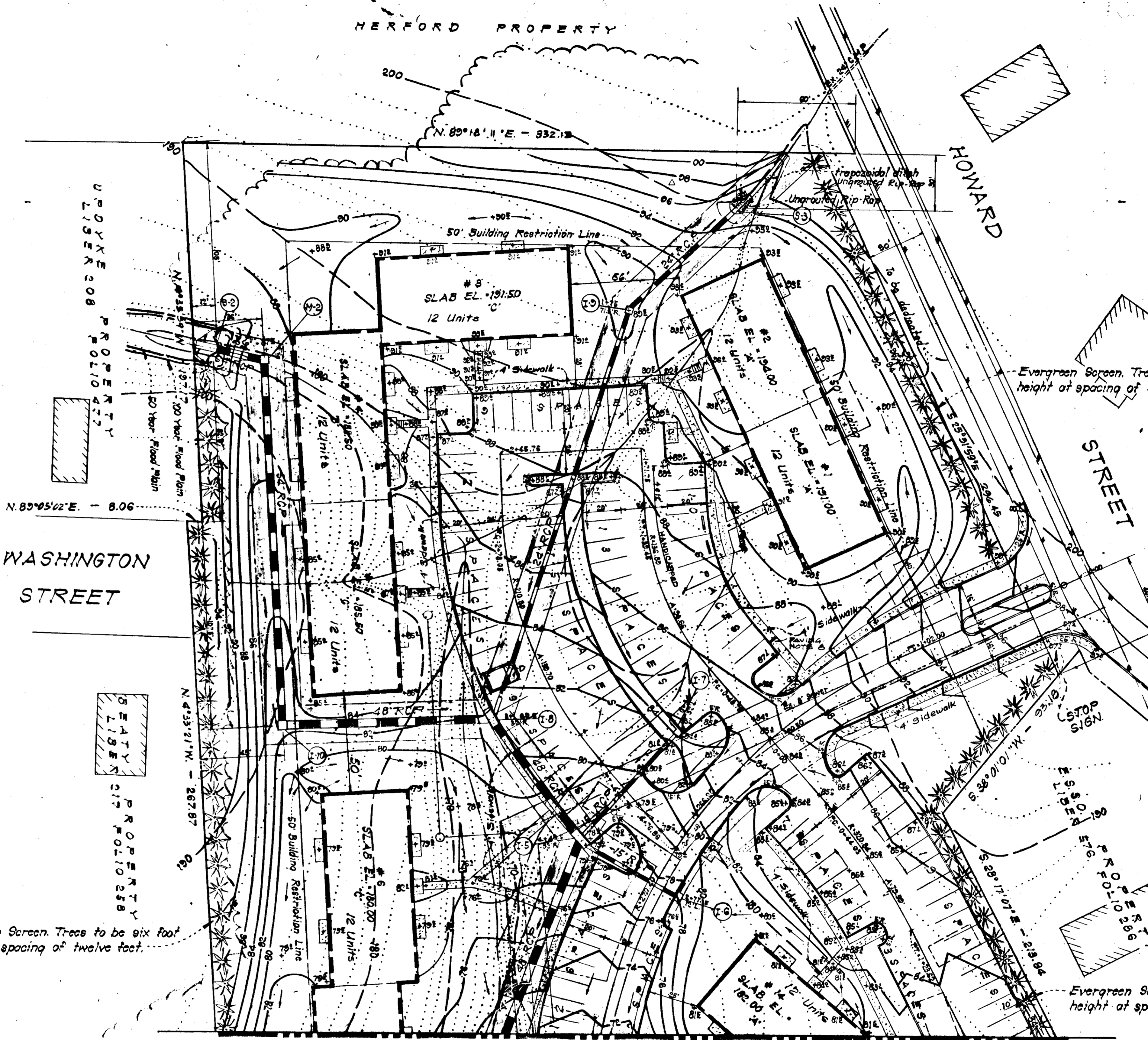
NOTE: ALL DRIVEWAYS AND PARKING FACILITIES WITHIN THIS SUBDIVISION ARE PRIVATE.

ENGINEER'S CERTIFICATE

I hereby certify that this plan is correct and that it has been designed in accordance with the latest Road Construction Code and storm drainage criteria of Howard County.

R. Wayne Keeler
R. Wayne Keeler
Md. Reg. # 5730

Evergreen Screen. Trees to be six foot height at spacing of twelve feet.



GENERAL

1. AREA OF PARCEL "A" = 11.3966 Acre
2. TOTAL NO. OF APARTMENT UNITS ALLOWED = 169
3. TOTAL NO. OF APARTMENT UNITS PROVIDED = 168
4. TOTAL NO. OF PARKING SPACES PROVIDED = 252
SPACES REQUIRED = 252
5. ALL STREETS ARE PRIVATE
6. EXISTING ZONING = RA-1 (EXCEPT FOR ONE AREA AS NOTED)
7. COVERAGE = 11.95 %

Evergreen Screen. Trees to be six foot height at spacing of twelve feet.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12-22-76

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY, HEALTH DEPARTMENT
Jayce M. Bond
COUNTY HEALTH OFFICER
DATE 2-2-77

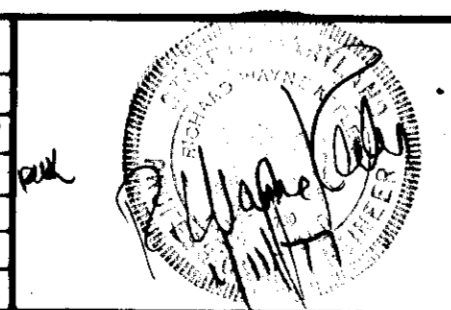
APPROVED: HOWARD COUNTY OFFICE OF PLANNING ZONING
Daniel Danig
PLANNING DIRECTOR
John A. ...
CHIEF DIVISION OF LAND DEVELOPMENT
DATE 2-3-77

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
D. M. ...
DIRECTOR
CHIEF BUREAU OF HIGHWAYS
DATE 1-31-77

OWNER:
Borough Storch of ux, et al
L 620 FT, L 700, F 259

DEVELOPER
STORCH WOOD ASSOCIATES
8930 Baltimore St.
Savage, Maryland 20863
501-725-6300

NO.	REVISIONS	DATE
1	Boops 3, 2, 5, 6, 14 Types 1 Drawing Revised	5-8-74
2	Extended S.D. 5, 8, 12 @ Str # 5, 2 to 2	7-26-74
3	Handicap Pk, Dumpster, Spot Elev's (Add)	9-11-76
4	CHANGE DEVELOPER, PROPERTY LINE PLANNING	12-2-76

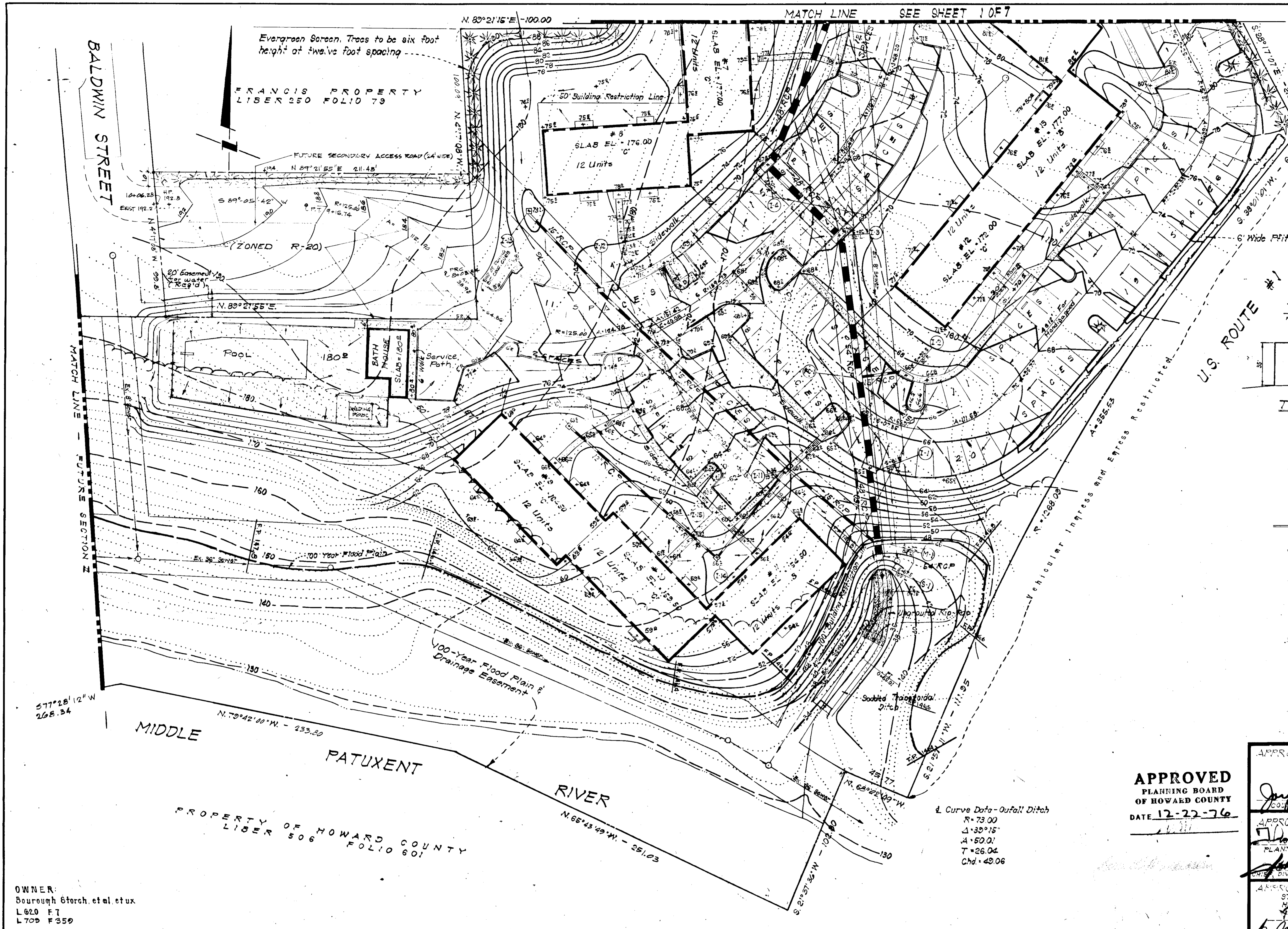


R. WAYNE KEELER & ASSOCIATES INC.
CONSULTING ENGINEERS
9408 UNION PLACE
GAITHERSBURG, MD 20878

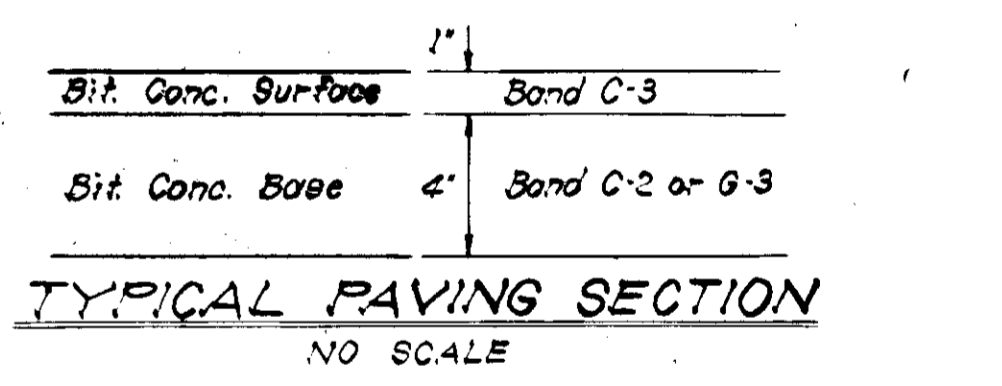
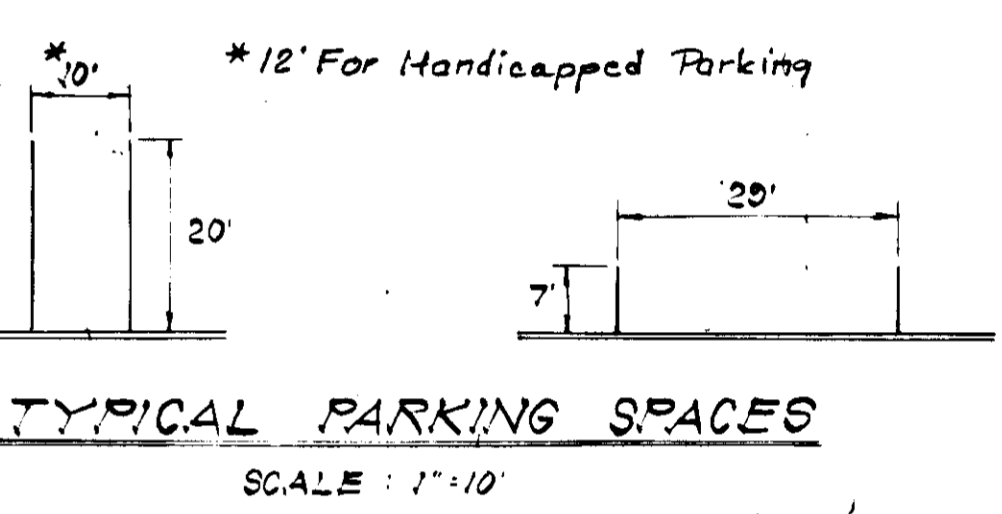
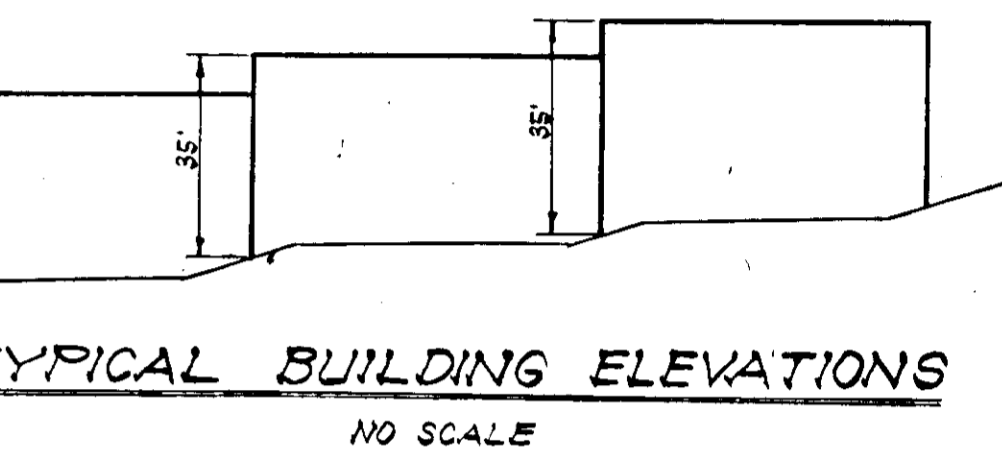
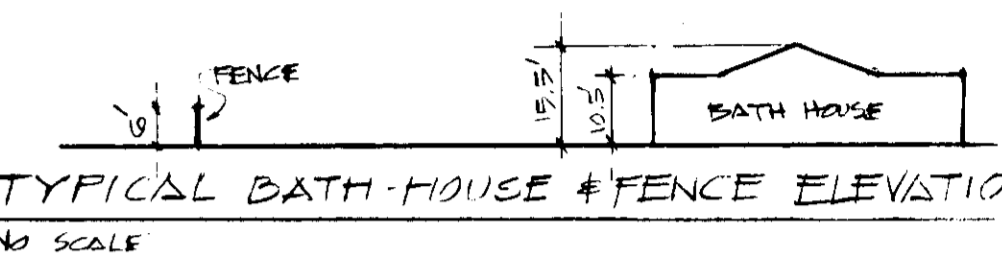
"SECTION 1, AREA 1, PARCEL 'A'"
SITE & STORM DRAIN PLAN
STORCH WOODS
SIXTH ELECTION DISTRICT
SAVAGE, MARYLAND

RECORDED AS PLAT NO 3590
DATE: DECEMBER 29, 1976

SCALE	SHEET
1" = 30'	1 OF 7
DATE FEB, 76	FILE NO. 72-088
DESIGN W.E.J.	
DRAWN W.E.J.	



Evergreen Screen Trees to be six foot height at spacing of twelve feet.



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12-22-76

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joseph M. Boyd
COUNTY HEALTH OFFICER
DATE 2-2-77

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Thomas S. Harris
PLANNING DIRECTOR
DATE 2-5-77

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John W. McKeon
DIRECTOR
DATE 11-27-77

RECORDED AS PLAT NO 3950
DATE: DECEMBER 27, 1976
SCALE 1"=30'
DATE FEB., '76
DESIGN W.E.
DRAWN W.E.U.
SHEET 2 OF 7
FILE NO 72-038

Curve Data - Outfall Ditch
R=73.00
Δ=30°15'
A=50.0'
T=26.04
Chd.=49.06

OWNER:
Borough Storch, et al, et ux
L 620 FT
L 700 F359

PROPERTY OF HOWARD COUNTY
LIBER 506 FOLIO 601

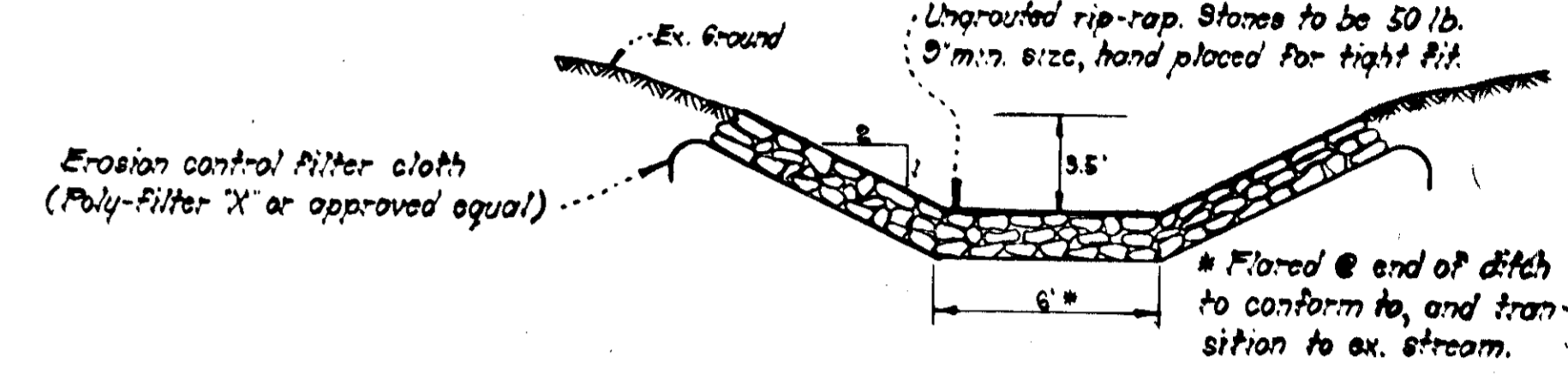
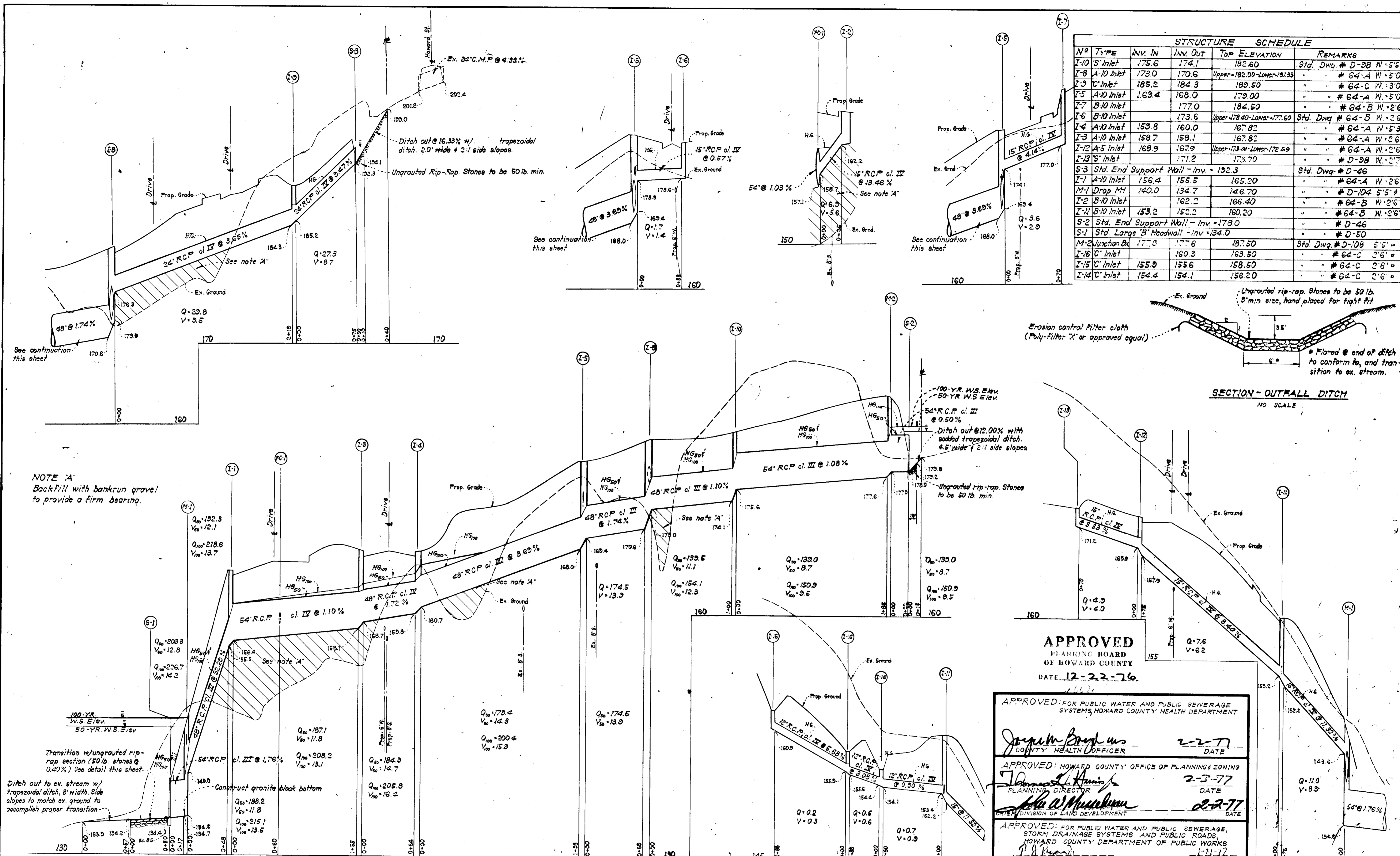
DEVELOPER	NO.	REVISIONS	DATE
STORCH WOODS ASSOCIATES 8930 Baltimore St. Savage, Maryland 20865 301-725-6300	1	Blkg. 7, 3 of 10 Types Changed	6-9-74
	2	100 yr Flood Plain ESD Estms. Revised	7-26-74
	3	Handicap Pl; Dumpster; Sped Elev; Pool. (Add)	9-11-74
	4	CHANGE DEVELOPER PROPERTY LINE DRAWING	12-6-76

Philip Keeler
Philip Keeler

R. WAYNE KEELER & ASSOCIATES INC.
CONSULTING ENGINEERS
9408 UNION PLACE
GAITHERSBURG, MD 20760

"SECTION 1, AREA 1, PARCEL 'A'"
SITE & STORM DRAIN PLAN,
STORCH WOODS
SIXTH ELECTION DISTRICT
SAVAGE, MARYLAND

STRUCTURE SCHEDULE					
NO	TYPE	INV. IN	INV. OUT	TOP ELEVATION	REMARKS
I-10	5" Inlet	175.6	174.1	182.60	Std. Dwg. # D-38 W=5'5"
I-8	A-10 Inlet	173.0	170.6	Upper=182.00-Lower=181.33	" " # 64-A W=5'0"
I-9	C Inlet	185.2	184.3	189.50	" " # 64-C W=3'0"
I-5	A-10 Inlet	169.4	168.0	179.00	" " # 64-A W=5'0"
I-7	B-10 Inlet		177.0	184.50	" " # 64-B W=2'6"
I-6	B-10 Inlet		173.6	Upper=178.40-Lower=177.60	Std. Dwg. # 64-B W=2'6"
I-4	A-10 Inlet	159.8	160.0	167.82	" " # 64-A W=5'3"
I-3	A-10 Inlet	158.7	158.1	167.82	" " # 64-A W=5'0"
I-12	A-5 Inlet	168.9	167.9	Upper=173.00-Lower=172.69	" " # 64-A W=2'6"
I-13	5" Inlet		171.2	173.70	" " # D-39 W=5'0"
S-3	Std. End Support Wall - Inv.		192.3		Std. Dwg. # D-46
I-1	A-10 Inlet	156.4	155.5	165.20	" " # 64-A W=2'6"
M-1	Drop MH	140.0	134.7	146.70	" " # D-104 5'5" #
I-2	B-10 Inlet		162.2	166.40	" " # 64-B W=2'6"
I-11	B-10 Inlet	153.2	152.2	160.20	" " # 64-B W=2'6"
S-2	Std. End Support Wall - Inv.		178.0		" " # D-46
S-1	Std. Large B' Headwall - Inv.		134.0		" " # D-50
M-2	Junction Box	177.0	177.6	187.50	Std. Dwg. # D-108 5'5" =
I-16	C Inlet		160.9	163.50	" " # 64-C 2'6"
I-15	C Inlet	155.9	155.6	158.50	" " # 64-C 2'6"
I-14	C Inlet	154.4	154.1	158.20	" " # 64-C 2'6"



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 12-22-76

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 Joseph M. Boydus
COUNTY HEALTH OFFICER
DATE: 2-2-77

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Thomas L. Amis Jr.
PLANNING DIRECTOR
DATE: 2-3-77

APPROVED: DIVISION OF LAND DEVELOPMENT
 John W. Muschman
DATE: 2-2-77

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 P. J. [Signature]
DIRECTOR
DATE: 1-31-77

D. M. [Signature]
CHIEF BUREAU OF HIGHWAYS
DATE: 1/27/77

OWNER: Borough Storch, et ux, et al; L 620, F7; L 703, F359

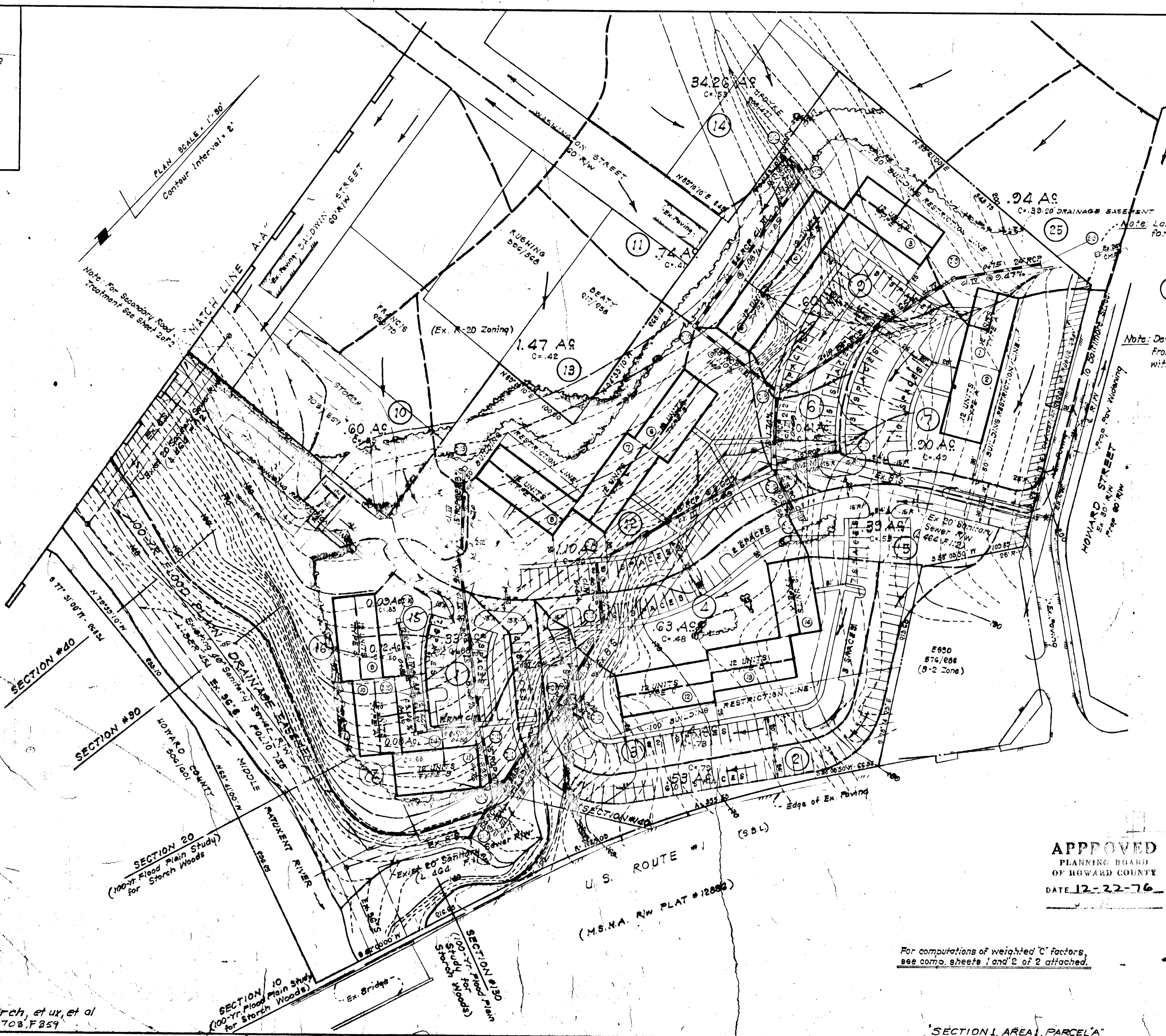
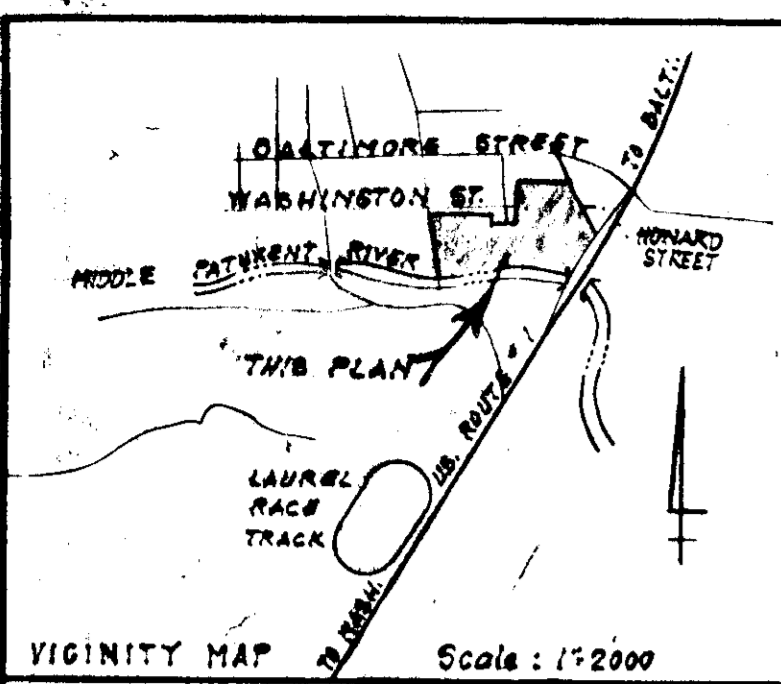
DEVELOPER	NO.	REVISIONS	DATE
STORCH WOODS ASSOCIATES 8930 Baltimore St. Savage, Maryland 2863 301-725-6300	1	Stn. #24 Deleted, Stn. #10, #18 Added	5-9-74
	2	NEW DEVELOPER'S NAME, RELIABLE 1/2 LOCATION A DATA	12-6-76

R. WAYNE KEELER & ASSOCIATES INC.
CONSULTING ENGINEERS
1408 UNION PLACE
GAITHERSBURG, MD 20760

STORM DRAIN PROFILES
SECTION I, AREA I, PARCEL A
STORCH WOODS
SIXTH ELECTION DISTRICT
SAVAGE, MARYLAND

SCALE: AS SHOWN
DATE: APRIL 1974
DESIGN: WEJ
DRAWN: WEJ

SHEET: 3 OF 7
FILE NO: 72-038



PLAN SCALE: 1"=50'
Contour Interval: 2'

Note: For Secondary Road Treatment see Sheet 2 of 2

Note: Land dedicated to Howard County, Maryland for purpose of Public Road.

Note: Developer to widen paving in Howard Street from project site to Baltimore Street to 30' within Public R/W, using like paving material.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 12-22-76

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

Jaym Bredius COUNTY HEALTH OFFICER 2-2-77 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Thomas S. Keener PLANNING DIRECTOR DATE

John W. Musick CHIEF, DIVISION OF LAND DEVELOPMENT 2-2-77 DATE

For computations of weighted 'C' factors, see comp. sheets 1 and 2 of 2 attached.

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

D. W. P. [Signature] DIRECTOR DATE 11-27-77

[Signature] CHIEF BUREAU OF HIGHWAYS

OWNER: Borough Storch, et ux, et al
L 620, F 7, L 708, F 859

DEVELOPER
STORCH REALTY
8030 Baltimore St.
Bowie, Maryland 20865
301-785-6800

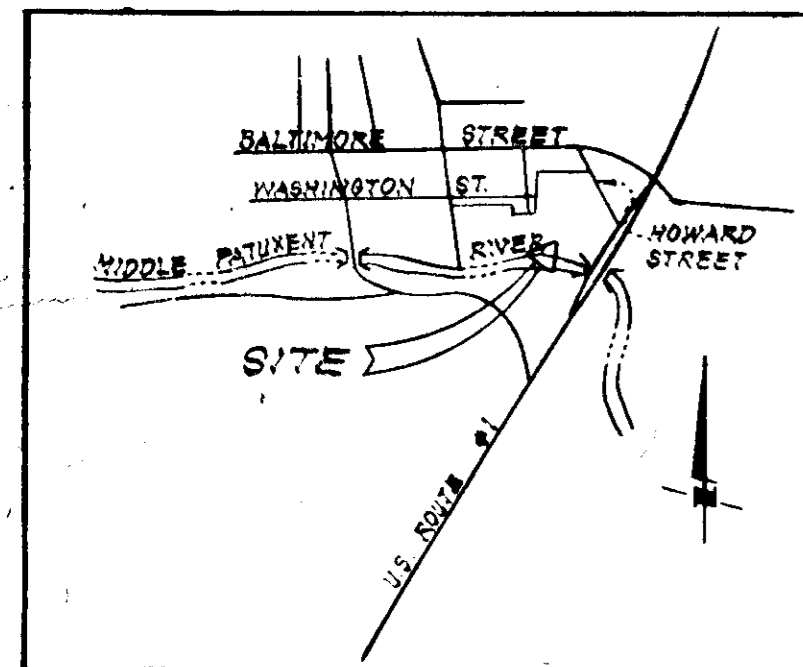
NO.	REVISIONS	DATE
1	NEW ADDRESS AT ENGINEER	11/27/76
2	NEW DEVELOPER'S NAME, TYP. WITH A BATH HOUSE	12/24/76

[Handwritten signatures and initials]

R. WAYNE KEELER & ASSOCIATES INC.
CONSULTING ENGINEERS

SECTION 1, AREA, PARCELA
DRAINAGE STUDY
STORCH WOODS
SAVAGE, HOWARD COUNTY, MARYLAND
6TH ELECTION DISTRICT

SCALE: 1"=50'	SHEET
DATE: Sept. 1975	4 OF 7
DESIGN: R.W.K.	FILE NO.
DRAWN: D.E.F.	



VICINITY MAP
SCALE 1"=2000'

CONSTRUCTION SEQUENCE

1. Obtain Grading Permit.
2. Construct Sediment Basin complete and stabilize.
3. Construct major Storm Drain System.
4. Begin grading operation, and construct all necessary Dikes and Diversions.
5. Stabilize immediately all areas disturbed by grading, for Specifications, see General Notes.
6. Remove all sediment control devices when approved by H.S.C.D.

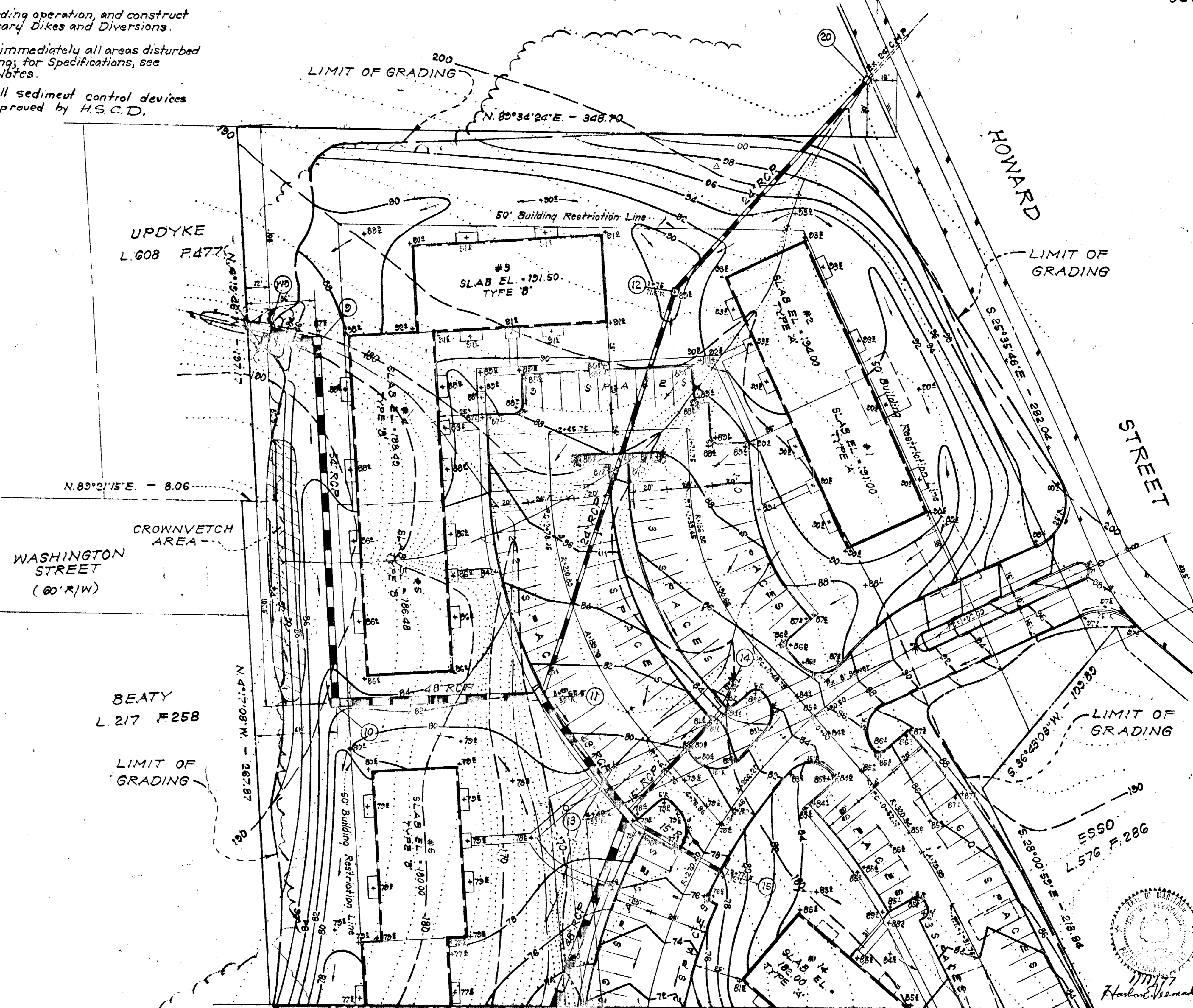
CUT AND FILL EARTHWORK QUANTITIES

TOTAL CUBIC YARDS:
FILL : 55,000 C.Y.
CUT : 40,000 C.Y.

GENERAL NOTES

1. TOTAL AREA OF SITE = 9.89 ACRES
AREA THIS SUBMISSION = 11.60 ACRES
2. TOTAL DISTURBED AREA = 9.1 ACRES
TOTAL ACREAGE TO BE PAVED = 2.9 ACRES
TOTAL ACREAGE TO BE ROOFED = 1.3 ACRES
TOTAL ACREAGE TO BE SOILED = 0 ACRES
TOTAL ACREAGE TO BE SEIDED = 4.9 ACRES
3. STRUCTURAL MEASURES, SUCH AS BERMS, DIKES, TRAPS, BASINS, ETC. WILL BE INSTALLED AND STABILIZED ACCORDING TO THIS PLAN PRIOR TO ANY OTHER GRADING, FITTING, OR DISTURBANCE OF THE EXISTING SURFACE OF THE SITE.
4. ALL STRUCTURAL SEDIMENT CONTROL MEASURES ARE TO REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD SOIL CONSERVATION DISTRICT, PHONE 465-3180 or 465-5000, EXTENSION 328.
5. NOTIFY THE HOWARD SOIL CONSERVATION DISTRICT AT LEAST 24 HOURS BEFORE STARTING ANY WORK, PHONE 465-3180 or 465-5000, EXT. 328.
6. ON-SITE INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES, INCLUDING CLEAN OUT OF SEDIMENT TRAPS AND BERMS, AND PROPER ESTABLISHMENT OF ALL PLANNED VEGETATIVE MEASURES WILL BE THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVES ON THE SITE, ON A CONTINUING, DAY TO DAY BASIS.
7. PROTECT ALL TOPSOIL STOCKPILES WITH 2' HIGH TEMPORARY BERM AROUND BASE OF STOCKPILE WITH MINIMUM 25' LONG STONE OVERFLOW BERM AT LOW POINT. CLEAN AREA BACK OF BERM AS REQUIRED TO MAINTAIN AN AREA FOR STORAGE OF SEDIMENT.
8. LARGE STORM DRAINAGE PIPE SYSTEM TO BE CONSTRUCTED DURING INITIAL OPERATIONS. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL CONSTRUCT A PLYWOOD PLATE WITH SAND BAGS AT THE END OF THE PIPE'S UPPER END (SEE SHEET 3 OF 3 FOR DETAILS OF THIS INSTALLATION).
9. THE OUTFALL TREATMENT FOR THE PERMANENT 54" RCP STORM DRAIN SHALL BE PERFORMED AFTER THE SEDIMENT BASIN HAS BEEN REMOVED. FOR DETAILS OF THIS CONSTRUCTION, INCLUDING RIP-RAP AND EROSION CONTROL CLOTH, REFER TO THE STORM DRAINAGE CONSTRUCTION PLANS.
10. ALL FILL MATERIAL SHALL BE FREE OF DECOMPOSABLE MATERIAL.
11. ALL STORM DRAINAGE INLETS, ARE TO BE TEMPORARILY CAPPED TO PREVENT ENTRY OF SEDIMENT CARRYING RUNOFF WATER UNTIL VEGETATIVE MEASURES AND/OR PAVING IS ESTABLISHED AS PLANNED.
12. ALL EXISTING TREES TO BE SAVED SHALL BE FLAGGED AND/OR ENCLOSED BY FENCING.
13. CONTRACTOR SHALL PROVIDE A SEDIMENT AND EROSION CONTROL PLAN FOR ANY REQUIRED BORROW AREAS WITHIN HOWARD COUNTY PRIOR TO OBTAINING SUCH BORROW.
14. ALL PROPOSED BERMS, DIPS, SEDIMENT BASINS, WATERWAYS, AREAS DISTURBED BY GRADING, AND FILL SLOPES CREATED (3:1 OR LESS) SHALL BE STABILIZED BY SEEDING AND MULCHING AS SOON AFTER COMPLETION, AS WEATHER WILL PERMIT, AT THE FOLLOWING MIXTURE AND TOTAL TREATMENT:
 1. SEEDBED PREPARATION:
 - a) LIME - 1.0 TON/ACRE
 - b) FERTILIZER - (5-10-10) - 1,000#/ACRE
 2. SEEDING:
 - a) KENTUCKY 31 TALL FESCUE 60#/ACRE - ROADWAY AND SIMILAR AREAS NOT TO BE MOWED
 - b) 220#/ACRE - YARD AREAS TO BE MAINTAINED AND MOWED
 3. MULCHING:
 - a) 1 1/2 TO 2 TONS/ACRE OF STRAW ANCHORED WITH ASPHALT AS PER STD. SPECS.
15. ALL GRADED SLOPES (GREATER THAN 3:1) SHALL BE STABILIZED BY SEEDING AS SOON AS POSSIBLE, TO THE FOLLOWING SPECIFICATION:
 1. SEEDBED PREPARATION:
 - a) LIME - 1.0 TON/ACRE
 - b) FERTILIZER - (0-20-20) - 1,000#/ACRE
 2. SEEDING:
 - a) CROWN VETCH - 20#/ACRE, KY 31 TALL FESCUE - 40 #/ACRE
 3. MULCHING:
 - a) 1 1/2 TO 2 TONS/ACRE OF STRAW ANCHORED WITH ASPHALT AS PER STD. SPECS.

OWNER
Borough Storch et ux et al
L.620 F.7, L.709, F.359



Reviewed for HOWARD S.C.D.
and meets Technical Requirements
Eric V. Herman Date 1/26/77
Signature
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved R.W. Keeler Date 1-26-77
Howard S.C.D.

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENT, AS ARE DEEMED NECESSARY, AND THAT THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT."
Harlan E. Vermeulen 1/11/77
Signature

"I 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."
Harlan E. Vermeulen 4-28-78
Signature

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M. Boyd
COUNTY HEALTH OFFICER
DATE 2-2-77

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR
DATE 2-5-77

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROAD
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR
DATE 1/27/77

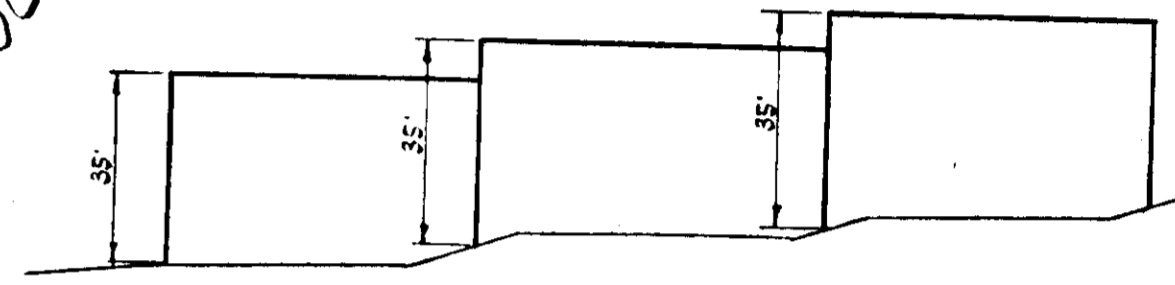
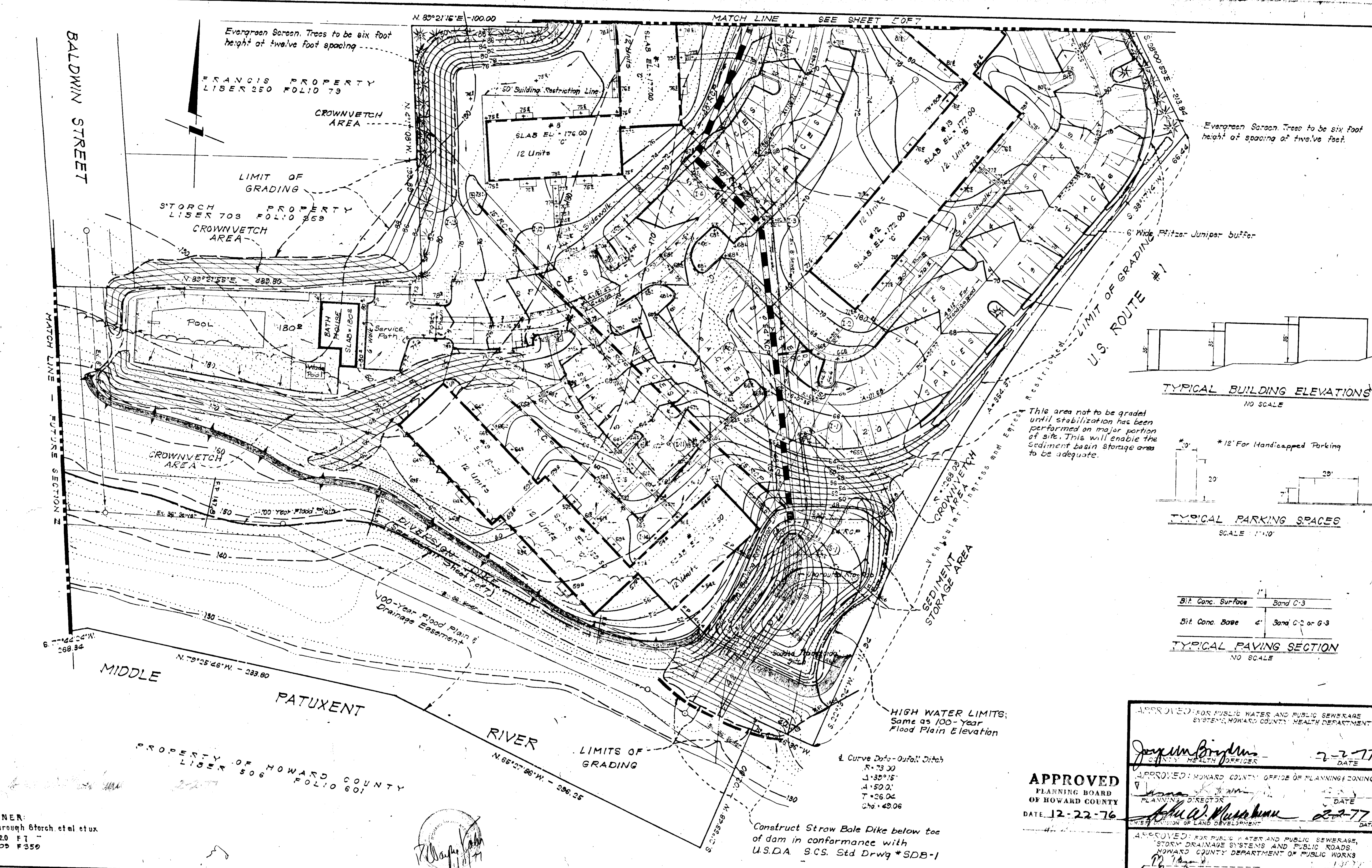
DEVELOPER
STORCH REALTY
8930 Baltimore St
Savage, Maryland 20863
301-725-6300

NO.	REVISIONS	DATE
1	Rev. Const. Sequence Dates	11-7-76
2	NEW DEVELOPER NAME	12-6-76

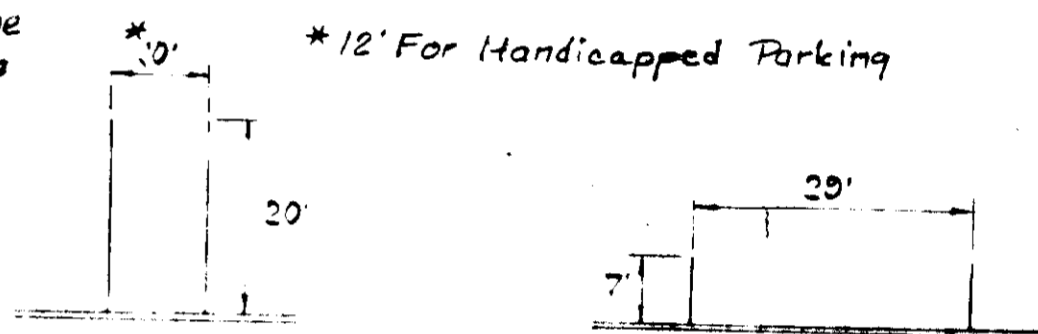
R. WAYNE KEELER & ASSOCIATES, INC.
CONSULTING ENGINEERS
44 GAITHERSBURG, MD 20760

"SECTION 1, AREA, PARCEL A"
SEDIMENT AND EROSION CONTROL PLAN
STORCH WOODS
SIXTH ELECTION DISTRICT
SAVAGE, MARYLAND

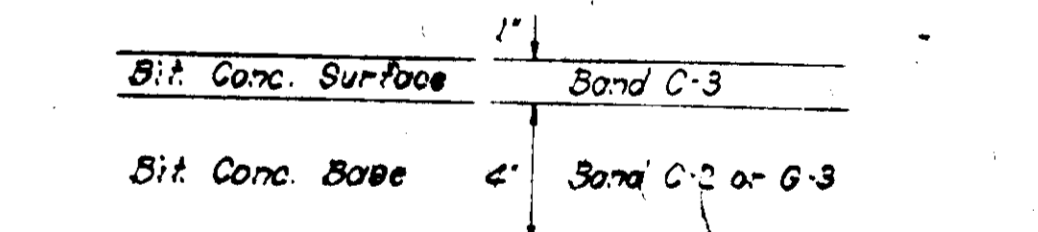
DATE 12-22-76
507
SDP-74-109



TYPICAL BUILDING ELEVATIONS
NO SCALE



TYPICAL PARKING SPACES
SCALE 1/4" = 10'



TYPICAL PAVING SECTION
NO SCALE

This area not to be graded until stabilization has been performed on major portion of site. This will enable the sediment basin storage area to be adequate.

HIGH WATER LIMITS:
Same as 100-Year Flood Plain Elevation

Curve Data - Outer Ditch
R = 73.00
L = 30.15'
A = 50.0'
T = 26.04
Chg = 49.06

Construct Straw Bale Dike below toe of dam in conformance with U.S.D.A. S.C.S. Std Drwg *SDB-1

OWNER:
Dorough Storch et al et ux
L 620 F 1
L 705 F 359

DEVELOPER	NO.	REVISIONS	DATE
STORCH REALTY 8930 Baltimore St Savage, Maryland 301-735-6300	1	Bldg 7, 3, 10 Types Changed	5-9-74
	2	100-yr Flood Plain ESD ESDs Revised	7-20-74
	3	Handicap Pk, Dumpster, Spd Elev, Pool (Add)	9-11-74
	4	Add ADA Access to Walkways & Dike	7-17-76
	5	Add Straw Bale Dike @ toe of dam	11-7-76
	6	NE & SE 1/4 of 1/4 Sec 16, T14N, R10E, C1E	11-20-76

R. WAYNE KEFLER & ASSOCIATES INC.
CONSULTING ENGINEERS
7455 WOODBURN BLVD
GAITHERSBURG, MD 20878

"SECTION 1, AREA 1, PARCEL 'A'"
SEDIMENT AND EROSION CONTROL PLAN
STORCH WOODS
SIXTH ELECTION DISTRICT
SAVAGE, MARYLAND

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joeym Brydson
COUNTY HEALTH OFFICER
DATE 2-2-77

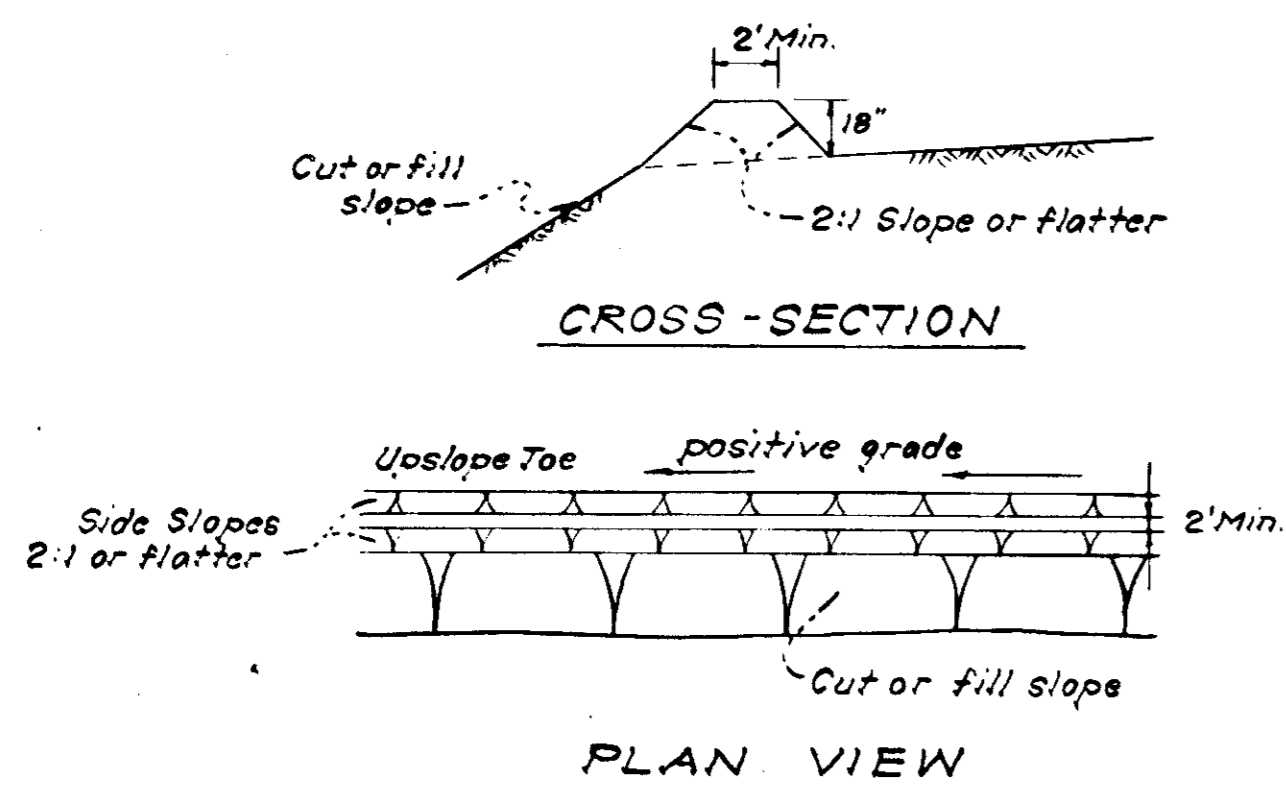
APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
James J. ...
PLANNING DIRECTOR
DATE 12-22-76

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John W. ...
DIRECTOR
DATE 11/27/77

SCALE	1" = 30'	SHEET	60 OF 7
DATE	FEB 74	DESIGN	K.E.L.
DRAWN	W.E.U.	FILE NO.	72-036

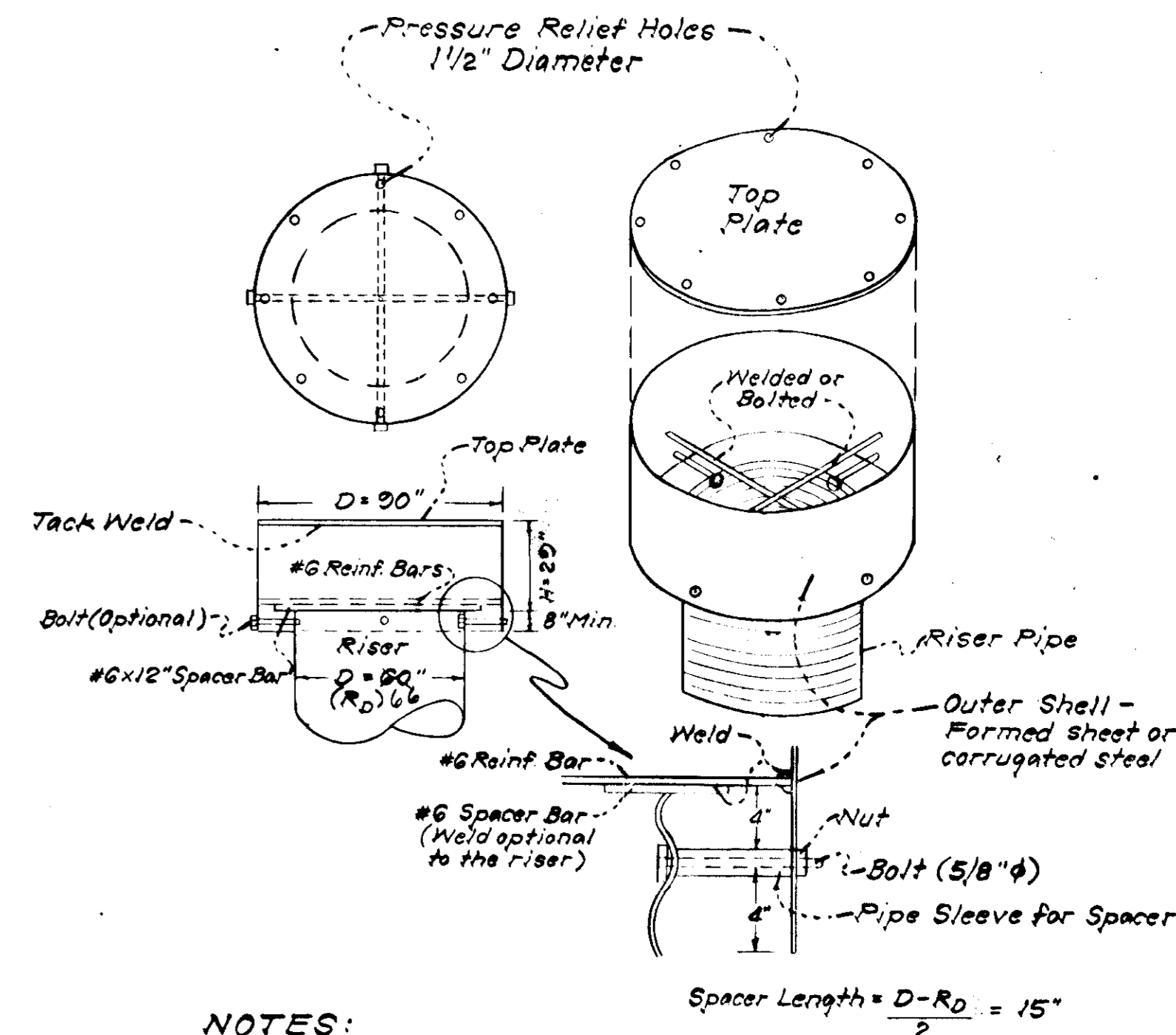
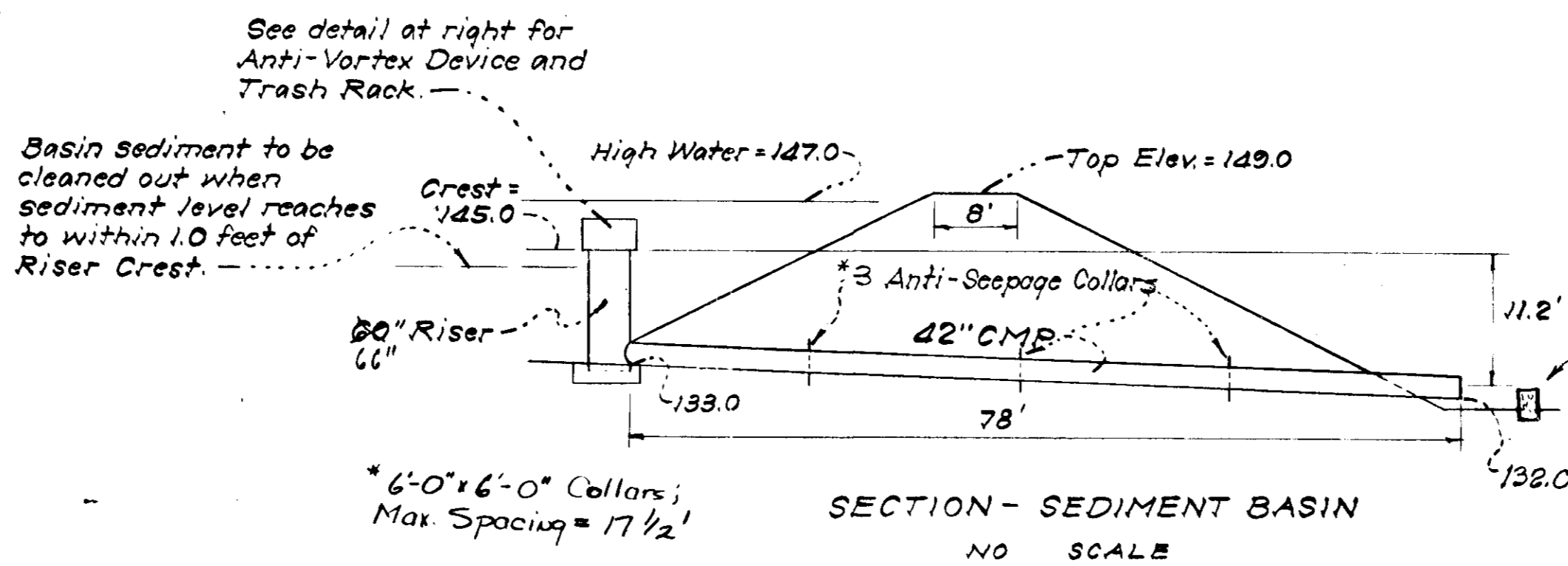
SDP-74-109

TEMPORARY DIVERSION DIKE



GENERAL NOTES:

1. All drawings *Not to Scale*.
2. All dikes must be machine compacted.
3. All diversion dikes must have positive grade draining to a stabilized outlet.
4. Diverted runoff will outlet onto a stabilized undisturbed area, a prepared level spreader, or into a grade stabilization structure. Periodic inspection and required maintenance must be provided.
5. Dikes to be compacted by several passes with the constructing equipment (bulldozer, backhoe or other heavy equipment/or by use of a suitable roller).

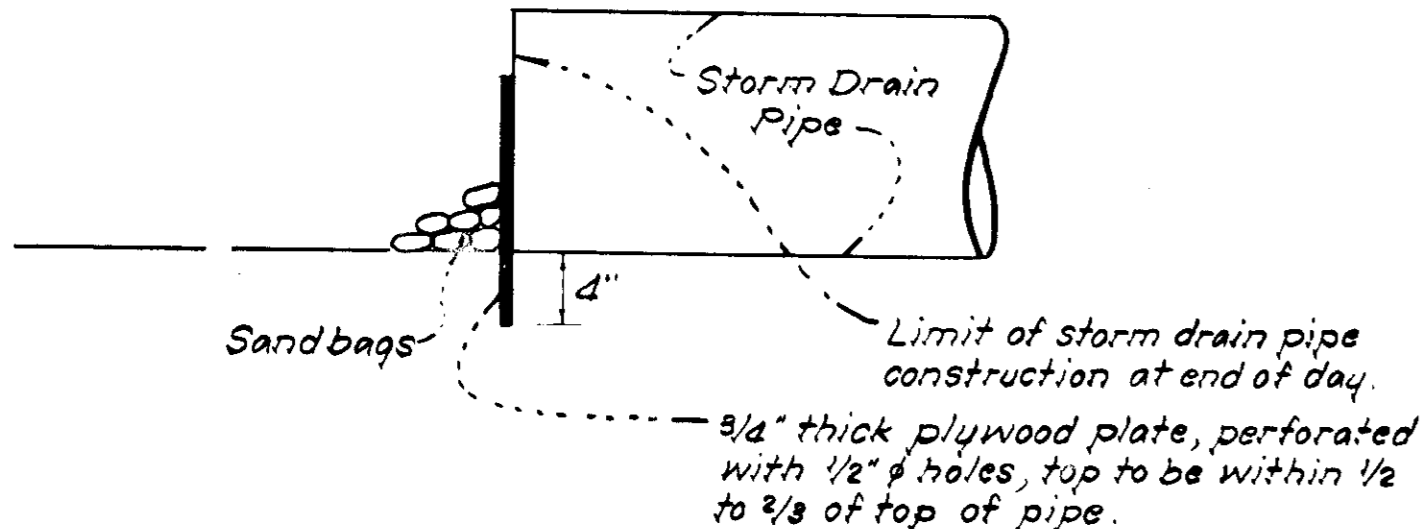


NOTES:

1. Top Plate to be 1/8" steel plate.
2. Outer Shell to be of same gauge metal as the riser; may be formed sheet steel or corrugated steel.
3. Attachment to Riser may be welded, but recommend bolts as shown with bolts directly under the reinforcing rods as shown for maintenance reasons.
4. Bituminous coat all surfaces after fabrication and attachment to the riser.

CONCENTRIC ANTI-VORTEX DEVICE & TRASH RACK

NO SCALE



DETAIL - END TREATMENT OF STORM DRAIN PIPES

NO SCALE

SEDIMENT BASIN

SPECIFICATIONS AND CONSTRUCTION NOTES:

1. SEDIMENT BASIN TO BE CONSTRUCTED IN ACCORDANCE WITH THE SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS BOOKLET - PAGES 2,600 to 2,605.
2. BASIN TO BE MAINTAINED IN AN EFFECTIVE OPERATION UNTIL COMPLETE STABILIZATION OF GRADED AREAS IS ACCOMPLISHED, OR UNTIL CONSTRUCTION OF LARGE DRAIN IF SUCH CONSTRUCTION IS IN CONFLICT WITH EXISTING BASIN. INSTALL AND MAINTAIN SEDIMENT BASIN AT THE VERY OUTSET OF CLEARING AND GRADING OF STREETS.
3. RISER BASE SHALL CONSIST OF CONCRETE AT LEAST 18" THICK WITH THE RISER EMBEDDED 6" IN THE BASE. THE BASE SHALL BE SQUARE WITH EACH DIMENSION AT LEAST ONE (1) FOOT GREATER THAN THE RISER DIAMETER. THE UPPER PORTION OF THE RISER SHALL BE PERFORATED WITH 1 1/2" DIAMETER HOLES SPACED 8" VERTICALLY AND 10" - 12" HORIZONTALLY ALL AROUND. THIS PORTION SHALL BE THE TOP 1/2 TO 2/3 OF THE RISER.
4. SECURELY AND RIGIDLY FASTEN THE COLLAR CONNECTING THE RISER TO THE BARREL (AS WELL AS COLLARS CONNECTING SECTIONS OF THE BARREL) OF THE PIPE SPILLWAY. INSURE A WATERTIGHT BOTTOM ON THE RISER. HAND TAMP FILL UNDER SHOULDERS AND AROUND THE PIPE. INSURE THAT OUTLET INVERT OF PIPE SPILLWAY IS NOT MORE THAN ONE FOOT ABOVE STREAMBED.
5. PLACE THE FILL IN NOT MORE THAN 6" LIFTS COMPACTED BY CONSTRUCTION EQUIPMENT. A MINIMUM OF TWO (2) FEET OF HAND COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. FILL MATERIALS SHOULD BE FREE FROM ROOTS, WOODY VEGETATION, OVERSIZE STONES, ROCKS OR OTHER OBJECTIONABLE MATERIAL. FROZEN MATERIAL SHOULD NOT BE USED.
6. AREAS UNDER THE EMBANKMENT AND ANY STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND THE TOPSOIL STRIPPED TO REMOVE ALL TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. IN ORDER TO FACILITATE CLEAN OUT AND RESTORATION, IT IS RECOMMENDED THAT THE POOL AREA (MEASURED AT THE TOP OF THE PIPE SPILLWAY) BE CLEARED OF ALL BRUSH AND TREES.
7. THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREA OR AREAS. IT SHOULD BE FREE OF ROOTS, WOODY VEGETATION, OVERSIZE STONES, ROCKS OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE RAISED TO AN ELEVATION WHICH PROVIDES FOR ANTICIPATED SETTLEMENT TO DESIGN ELEVATION (ALLOW 10% FOR SETTLEMENT).
8. AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL.
9. THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHOULD BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT WILL BE TRAVERSED BY NOT LESS THAN ONE TREAD PRACT OF THE EQUIPMENT OR COMPACTION SHALL BE ACHIEVED THROUGH USE OF A ROLLER.

OWNER:
BOUROUGH STORCH, et ux, et al
L 620/F 7, L 703/F 55

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

Jayme Bredeno 2-2-77
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
Thomas J. Hamling 2-5-77
PLANNING DIRECTOR DATE

John W. Marshall 2-2-77
CHIEF DIVISION OF LAND DEVELOPMENT DATE

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

J. W. Keeland 1/27/77
DIRECTOR DATE
CHIEF BUREAU OF HIGHWAYS

DEVELOPER	NO.	REVISIONS	DATE
STORCH WOOD ASSOCIATES			
8930 Baltimore St.	2	NEW DEVELOPER'S NAME	12-6-76
Savage, Maryland 20625	2	Straw Bale Dike, Anti Seep Coll Data, RPK	11-7-76
301-725-6300	1	66" Riser	2-2-77

John W. Keeland
1/17/77

John W. Keeland
4/1/77

R. WAYNE KEELER & ASSOCIATES INC.
CONSULTING ENGINEERS
9418 UNION PLACE
GANTHERSBURG, MD. 20760

"SECTION 1, AREA 1, PARCEL 'A'"
SEDIMENT AND EROSION CONTROL PLAN
STORCH WOODS
SIXTH ELECTION DISTRICT
SAVAGE, MARYLAND

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12-22-76

SCALE	SHEET
As Shown	7 OF 7
DATE April, 1974	
DESIGN PV	
DRAWN WEF	FILE NO. 72-038

SDP-74.109