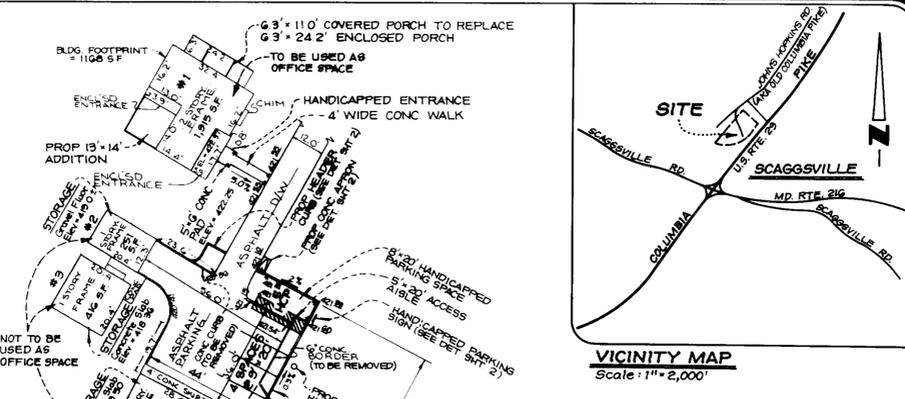
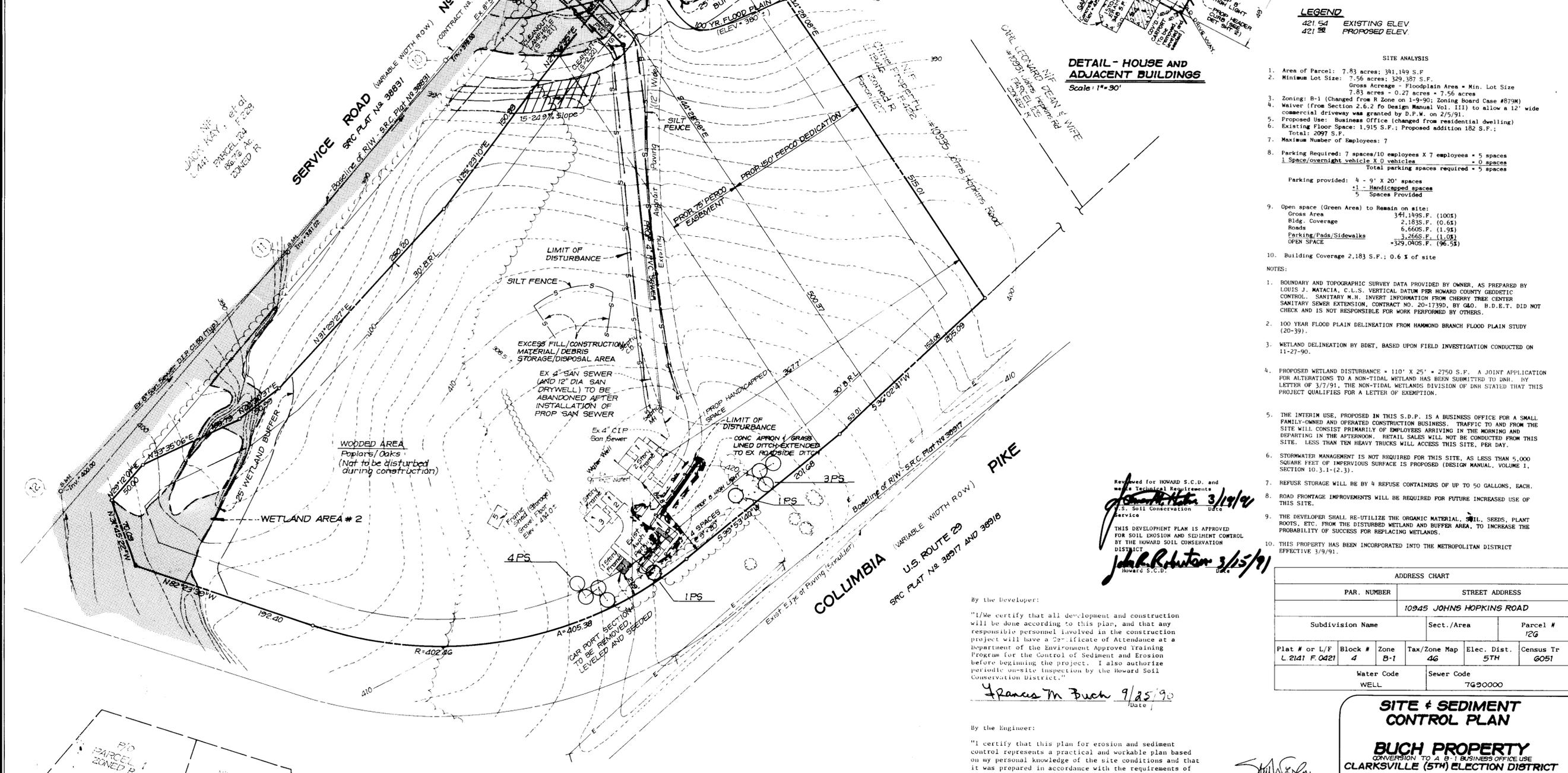


APPROVED: Storm Drainage Systems and Roads  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Director: *James M. Buch* DATE: 4/24/91  
 Chief, Bureau of Engineering: *James M. Buch* DATE: 4-26-91  
 APPROVED: For Private Water and Public Sewerage Systems  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer: *James M. Buch* DATE: 4-26-91  
 APPROVED: Howard County Department of Planning and Zoning  
 Planning Director: *James M. Buch* DATE: 5/6/91  
 Chief, Division of Community Planning and Land Development: *James M. Buch* DATE: 5/13/91



**LEGEND**  
 421.54 EXISTING ELEV.  
 421.58 PROPOSED ELEV.

**SITE ANALYSIS**

- Area of Parcel: 7.83 acres; 341,149 S.F.
- Minimum Lot Size: 7.56 acres; 329,387 S.F.
- Zoning: B-1 (Changed from R Zone on 1-9-90; Zoning Board Case #879M)
- Waiver (from Section 2.6.2 to Design Manual Vol. III) to allow a 12' wide commercial driveway was granted by D.P.W. on 2/5/91.
- Proposed Use: Business Office (changed from residential dwelling)
- Existing Floor Space: 1,915 S.F.; Proposed addition 182 S.F.; Total: 2097 S.F.
- Maximum Number of Employees: 7
- Parking Required: 7 spaces/10 employees X 7 employees = 5 spaces  
 1 Space/overnight vehicle X 0 vehicles = 0 spaces  
 Total parking spaces required = 5 spaces  
 Parking provided: 4 - 9' x 20' spaces  
 1 - Handicapped spaces  
 5 Spaces Provided
- Open space (Green Area) to remain on site:  
 Gross Area: 341,149 S.F. (100%)  
 Bldg. Coverage: 2,183 S.F. (0.6%)  
 Roads: 6,660 S.F. (1.9%)  
 Parking/Pads/Sidewalks: 3,266 S.F. (1.0%)  
 OPEN SPACE: =329,040 S.F. (96.5%)
- Building Coverage 2,183 S.F.; 0.6% of site

**NOTES:**

- BOUNDARY AND TOPOGRAPHIC SURVEY DATA PROVIDED BY OWNER, AS PREPARED BY LOUIS J. MATACTIA, C.L.S. VERTICAL DATUM PER HOWARD COUNTY GEODETIC CONTROL. SANITARY M.H. INVERT INFORMATION FROM CHERRY TREE CENTER SANITARY SEWER EXTENSION, CONTRACT NO. 20-1739D, BY G.O. B.D.E.T. DID NOT CHECK AND IS NOT RESPONSIBLE FOR WORK PERFORMED BY OTHERS.
- 100 YEAR FLOOD PLAIN DELINEATION FROM HAMMOND BRANCH FLOOD PLAIN STUDY (20-39).
- WETLAND DELINEATION BY BDET, BASED UPON FIELD INVESTIGATION CONDUCTED ON 11-27-90.
- PROPOSED WETLAND DISTURBANCE = 110' X 25' = 2750 S.F. A JOINT APPLICATION FOR ALTERATIONS TO A NON-TIDAL WETLAND HAS BEEN SUBMITTED TO DNH, BY LETTER OF 3/7/91. THE NON-TIDAL WETLANDS DIVISION OF DNH STATED THAT THIS PROJECT QUALIFIES FOR A LETTER OF EXEMPTION.
- THE INTERIM USE, PROPOSED IN THIS S.D.P. IS A BUSINESS OFFICE FOR A SMALL FAMILY-OWNED AND OPERATED CONSTRUCTION BUSINESS. TRAFFIC TO AND FROM THE SITE WILL CONSIST PRIMARILY OF EMPLOYEES ARRIVING IN THE MORNING AND DEPARTING IN THE AFTERNOON. RETAIL SALES WILL NOT BE CONDUCTED FROM THIS SITE. LESS THAN TEN HEAVY TRUCKS WILL ACCESS THIS SITE, PER DAY.
- STORMWATER MANAGEMENT IS NOT REQUIRED FOR THIS SITE, AS LESS THAN 5,000 SQUARE FEET OF IMPERVIOUS SURFACE IS PROPOSED (DESIGN MANUAL, VOLUME 1, SECTION 10.3.1-(2-3)).
- REFUSE STORAGE WILL BE BY 4 REFUSE CONTAINERS OF UP TO 50 GALLONS, EACH.
- ROAD FRONTAGE IMPROVEMENTS WILL BE REQUIRED FOR FUTURE INCREASED USE OF THIS SITE.
- THE DEVELOPER SHALL RE-UTILIZE THE ORGANIC MATERIAL, SOIL, SEEDS, PLANT ROOTS, ETC. FROM THE DISTURBED WETLAND AND BUFFER AREA, TO INCREASE THE PROBABILITY OF SUCCESS FOR REPLACING WETLANDS.
- THIS PROPERTY HAS BEEN INCORPORATED INTO THE METROPOLITAN DISTRICT EFFECTIVE 3/9/91.

**ADDRESS CHART**

PAR. NUMBER	STREET ADDRESS
	10945 JOHNS HOPKINS ROAD

Subdivision Name	Sec./Area	Parcel #
		126

Plat # or L/F	Block #	Zone	Tax/Zone Map	Elec. Dist.	Census Tr
L 2141 F.0421	4	B-1	4G	5TH	6051

Water Code	Sewer Code
WELL	7G90000

**SITE & SEDIMENT CONTROL PLAN**

**BUCH PROPERTY**  
 CONVERSION TO A B-1 BUSINESS OFFICE USE  
 CLARKSVILLE (5TH) ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CENSUS TRACT 6051 PARCEL 126  
 L 2141 F.0421 TAX MAP 4G

**OWNERS**  
 JAMES R. BUCH, JR. & FRANCES M. BUCH  
 13130 CLARKSVILLE PIKE  
 HIGHLAND, MARYLAND 20777  
 (301) 621-6000

DATE: JULY, 1990  
 SCALE: 1" = 50'  
 DESIGN: DRAWN: JEM  
 CHECK: CHECK:  
 JOB NO.:  
 PR. NO.: 590 9285000  
 SHEET 1 OF 4  
 FILE NO.:

**PLANT LIST**

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
PS	9	PIRUS STROBUS	WHITE PINE	5'-6" B & B	

By the Developer:  
 "I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment 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."  
 Francis M. Buch 9/25/90  
 Date

By the Engineer:  
 "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."  
 Steve A. Weisberger 3/13/91  
 Date



**BENGTSON, DEBELL, ELKIN & TITUS, LTD.**  
 ENGINEERS - SURVEYORS - PLANNERS - LANDSCAPE ARCHITECTS  
 10801 LOCKWOOD DRIVE, SILVER SPRING, MARYLAND 20901  
 (301) 881-8515

OFFICE LOCATIONS:  
 PRINCE WILLIAM COUNTY, VIRGINIA  
 VIRGINIA BEACH, VIRGINIA  
 MONTGOMERY COUNTY, MARYLAND  
 CHESTERFIELD COUNTY, VIRGINIA  
 FAIRFAX COUNTY, VIRGINIA  
 LOUDOUN COUNTY, VIRGINIA

**BUCH PROPERTY**  
 L 2141 F.0421 TAX MAP 4G  
 CLARKSVILLE ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND



APPROVED: Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James P. [Signature]* 4/24/91  
DIRECTOR DATE

*[Signature]* 4-12-91  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: For Private Water and Public Sewerage Systems

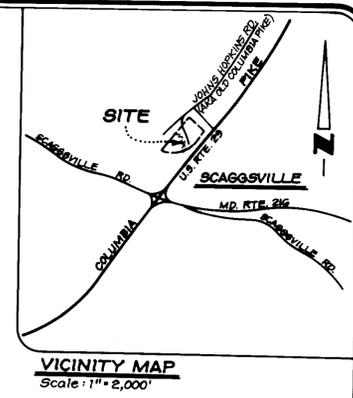
HOWARD COUNTY HEALTH DEPARTMENT

*[Signature]* 4-26-91  
COUNTY HEALTH OFFICER DATE

APPROVED: Howard County Department of Planning and Zoning

*[Signature]* 5/6/91  
PLANNING DIRECTOR DATE

*[Signature]* 5/2/91  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



**BENGTSON, DEBELL, ELKIN & TITUS, LTD.**  
ENGINEERS • SURVEYORS • PLANNERS • LANDSCAPE ARCHITECTS  
10801 LOCKWOOD DRIVE, SUITE 320, SILVER SPRING, MARYLAND 20901  
(301) 681-8515

OFFICE LOCATIONS:  
◆ PRINCE WILLIAM COUNTY, VIRGINIA  
◆ VIRGINIA BEACH, VIRGINIA  
◆ CHESTERFIELD COUNTY, VIRGINIA  
◆ FARMAX COUNTY, VIRGINIA  
◆ LOUDOUN COUNTY, VIRGINIA

SOILS		
SOIL SYMBOL	DEFINITION	HSG*
ChB2	Chester Silt Loam 3-8% mod. eroded	B
ChC2	Chester Silt Loam 8-15% mod. eroded	B
G1D2	Glennelg Loam 15-25% mod. eroded	B
Ba	Baile Silt Loam -----	D
ChC3	Chester Silt Loam 8-15% sev. eroded	B
GnB2	Glennville Silt Loam 3-8% mod. eroded	C

\* Hydraulic Soil Group

**NOTE:**  
Information provided on this soils map was taken from the Howard County Soil Survey, dated July, 1968.

ADDRESS CHART					
PAR. NUMBER		STREET ADDRESS			
		10945 OLD COLUMBIA PIKE			
Subdivision Name		Sect./Area	Parcel #		
			126		
Plat # or L/F	Block #	Zone	Tax/Zone Map	Elec. Dist.	Census Tr
L. 2141 F. 0421	4	B-1	4G	5TH	6051
Water Code		Sewer Code			
WELL		7690000			

**SOILS & DRAINAGE AREA MAP**  
CONVERSION TO A B-1 BUSINESS OFFICE USE

**BUCH PROPERTY**  
CLARKSVILLE (5TH) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

CENSUS TRACT 6051 PARCEL 126  
L. 2141 F. 0421 TAX MAP 4G

**OWNERS**  
JAMES R. BUCH, JR. & FRANCES M. BUCH  
13130 CLARKSVILLE PIKE  
HIGHLAND, MARYLAND 20777  
(301) - 621-6000

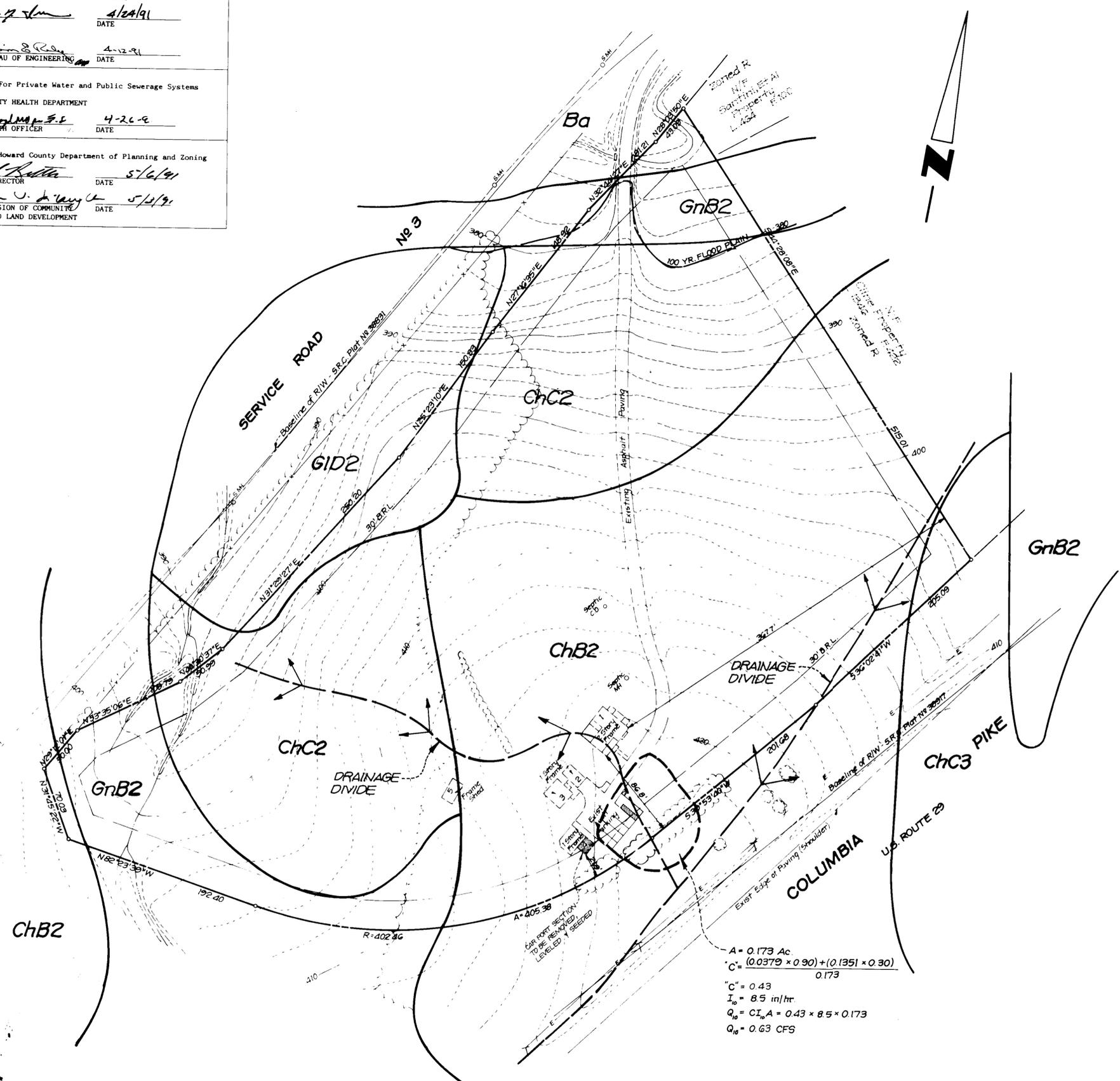


**BUCH PROPERTY**  
L. 2141 F. 0421 TAX MAP 4G  
CLARKSVILLE ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

DATE: JULY, 1990  
SCALE: 1" = 50'  
DESIGN: DRAWN: FEM  
CHECK: CHECK:  
JOB NO:  
PR. NO: 950 9285000  
SHEET 3 OF 4  
FILE NO:

A = 0.173 Ac.  
C = (0.0379 × 0.90) + (0.1351 × 0.30)  
0.173

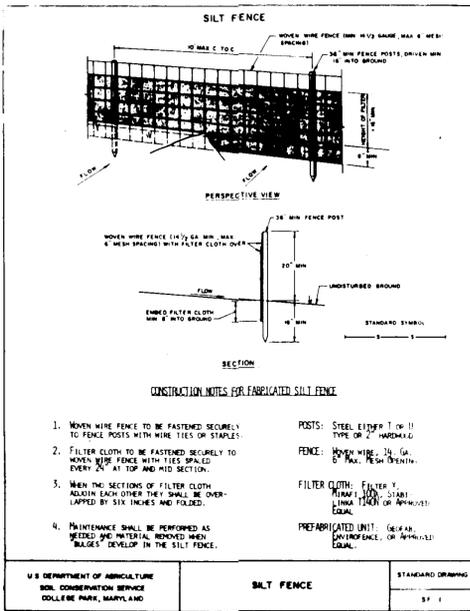
C = 0.43  
I<sub>0</sub> = 8.5 in/hr.  
Q<sub>0</sub> = C I<sub>0</sub> A = 0.43 × 8.5 × 0.173  
Q<sub>0</sub> = 0.63 CFS



APPROVED: Storm Drainage Systems and Roads  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Director: *James P. Stone* DATE: 4/24/91  
 Chief, Bureau of Engineering: *Chris...* DATE: 4-22-91

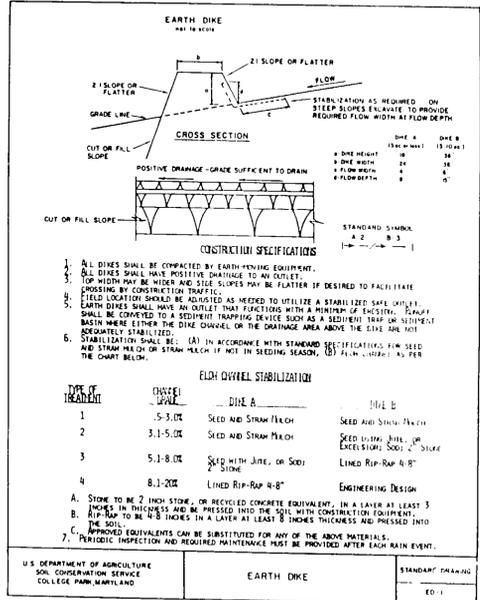
APPROVED: For Private Water and Public Sewerage Systems  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer: *James M. ...* DATE: 4-26-91

APPROVED: Howard County Department of Planning and Zoning  
 Planning Director: *James ...* DATE: 5/6/91  
 Chief, Division of Community Planning and Land Development: *Paul ...* DATE: 5/2/91



**SEDIMENT CONTROL NOTES**

- 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)
- 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.
- 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 as to all other disturbed or graded areas on the project site.
- 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.
- 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.
- 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
- Site Analysis:  
 Total Area of Site: 783 Acres  
 Area Disturbed: 244 Acres  
 Area to be roofed or paved: 2020 Acres  
 Area to be vegetatively stabilized: 241 Acres  
 Total Cut: 377 Cu. yds  
 Total Fill: 320 Cu. yds  
 Offsite waste/borrow area location: N/A
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- 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.
- INSTALL SILT FENCE ALONG THE ENTIRE LENGTH OF PROPOSED CONSTRUCTION. DISTURBED AREA TO BE BROUGHT BACK TO NORMAL AS SOON AS POSSIBLE.
- DISTURBED AREA TO BE SEEDED AND SODDED AS SOON AS CONSTRUCTION IS COMPLETE
- EXCAVATED MATERIAL FOR SEWER INSTALLATION SHALL BE PLACED IN THE UPHILL SIDE OF THE TRENCH.



**PERMANENT SEEDING NOTES**

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

**Soil 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:

- Preferred -- Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disk 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.)
- 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 disk 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 creeping 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 210 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.

**Maintenance:** -- Inspect all seeded areas and make needed repairs, replacements and reseedings.

**SEQUENCE OF CONSTRUCTION**

1. OBTAIN GRADING PERMIT	1 DAY
2. NOTIFY SEDIMENT CONTROL INSPECTOR PRIOR TO BEGINNING CONSTRUCTION.	1 DAYS
3. INSTALL EARTH DIKE AND SILT FENCE PRIOR TO ANY SITE DISTURBANCE.	2 DAYS
4. STABILIZE ROADSIDE DITCH. BEGIN GRADING FOR PARKING ADDITION INSTALLATION AND SEWER INSTALLATION. LENGTH OF OPEN TRENCH FOR SEWER IS LIMITED TO TWO LENGTHS OF PIPE AND/OR THAT WHICH CAN BE BACKFILLED AND STABILIZED IN ONE DAY, WHICHEVER IS SHORTER.	5 DAYS
5. AS PROPOSED PARKING AREAS ARE BROUGHT TO FINAL GRADE, BEGIN PAVING.	2 DAYS
6. ALL TEMPORARY FILLS SHALL BE REMOVED FROM THE WETLAND (AND BUFFER) AREAS, AND STORED/DISPOSED OF WITHIN THE AREA SHOWN ON SHEET 1 OF THE PLANS UPON COMPLETION OF SEWER AND PAVING INSTALLATION. PLACE TOP SOIL/SEED ON GRASSED AREAS WITHIN THE WETLAND (AND BUFFER) AREAS, POST CONSTRUCTION GRADING SHALL BE THE SAME AS PRECONSTRUCTION GRADING.	2 DAYS
7. UPON COMPLETION OF SITE STABILIZATION AND APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, ALL SEDIMENT CONTROL DEVICES TO BE REMOVED.	2 DAYS

- CONDITIONS AND MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS.**
- REMOVE EXCESS FILL OR CONSTRUCTION MATERIAL OR DEBRIS TO AN UPLAND STORAGE/DISPOSAL AREA AS IDENTIFIED ON THE PLAN SUBMITTED FOR APPROVAL AND PROPERLY MAINTAIN;
  - PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NONTIDAL WETLAND;
  - IF BACKFILL IS OBTAINED FROM OTHER THAN THE ORIGINALLY EXCAVATED MATERIAL, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE;
  - PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY DESIGN THE EQUIPMENT TO PREVENT DAMAGE TO THE NONTIDAL WETLANDS;
  - RECTIFY ANY NONTIDAL WETLANDS TEMPORARILY IMPACTED BY ANY PROPOSED REPAIR AND MAINTENANCE ACTIVITY OR INSTALLATION OF THE UTILITY LINE. ALL TEMPORARY FILLS SHALL BE REMOVED IN THEIR ENTIRETY ON OR BEFORE THE COMPLETION OF CONSTRUCTION;
  - REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS IN EXCESS OF NONTIDAL WETLANDS LOST UNDER THE ORIGINAL STRUCTURE OR FILL;
  - AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS OF NONTIDAL WETLANDS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS.
  - TO PROTECT IMPORTANT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM AS FOLLOWS:
    - CLASS I WATERS. IN-STREAM WORK MAY NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.

Reviewed for HOWARD S.C.U. and approved by: *James M. ...* 3/19/91  
 S. Soil Conservation District  
 Service  
 This DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*John R. ...* 3/23/91  
 Howard S.C.U. DATE

**ADDRESS CHART**

PAR. NUMBER	STREET ADDRESS				
	10945 OLD COLUMBIA PIKE				
Subdivision Name	Sect./Area	Parcel #			
		126			
Plat # or L/F	Block #	Zone	Tax/Zone Map	Elec. Dist.	Census Tr
L.2141 F.0421	4	B-1	46	5TH	6051
Water Code	Sewer Code				
WELL	7G00000				

**SEDIMENT CONTROL DETAIL SHEET**  
 CONVERSION TO A B-1 BUSINESS OFFICE USE

**BUCH PROPERTY**  
 CLARKSVILLE (5TH) ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CENSUS TRACT 6051 PARCEL 126  
 L. 2141 F. 0421 TAX MAP 46

**OWNERS**  
 JAMES R. BUCH, JR. & FRANCES M. BUCH  
 13130 CLARKSVILLE PIKE  
 HIGHLAND, MARYLAND 20777  
 (301) 421-6000



**BENGTSON, DEBELL, ELKIN & TITUS, LTD.**  
 ENGINEERS • SURVEYORS • PLANNERS • LANDSCAPE ARCHITECTS  
 10801 LOCKWOOD DRIVE, SUITE 320, SILVER SPRING, MARYLAND 20901  
 (301) 881-8515

OFFICE LOCATIONS:  
 ◆ ANNE ARUNDEL COUNTY, MARYLAND  
 ◆ BALTIMORE COUNTY, MARYLAND  
 ◆ CALVERT COUNTY, VIRGINIA  
 ◆ CHARLES COUNTY, VIRGINIA  
 ◆ HARRIS COUNTY, VIRGINIA  
 ◆ MONTGOMERY COUNTY, MARYLAND  
 ◆ WASHINGTON COUNTY, VIRGINIA  
 ◆ WOODBORO COUNTY, VIRGINIA

**BUCH PROPERTY**  
 L. 2141 F. 0421 TAX MAP 46  
 CLARKSVILLE ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

DATE: JULY, 1990  
 SCALE: AS SHOWN  
 DESIGN: DRAWN: WH  
 CHECK: CHECK:  
 JOB NO.:  
 PR. NO.: 8909285000  
 SHEET 4 OF 4  
 FILE NO.: