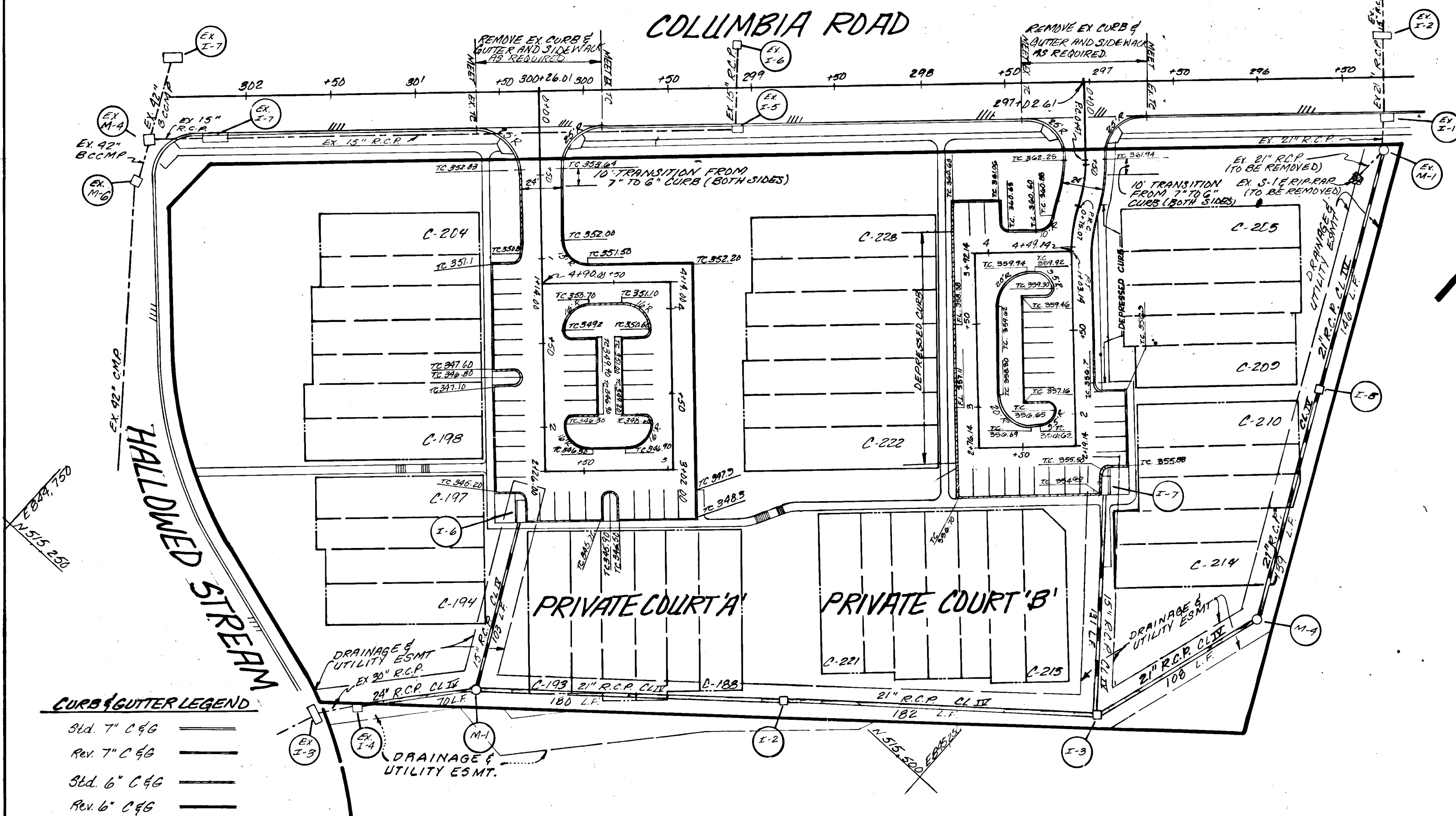


CENTERLINE CURVE DATA-PRIVATE COURT 'B'					
STATION	RADIUS	Δ	TAN	CHORD	BEARING
P.C. 0+75.20	80.00	20° 20'	14.18	27.93	S 24° 15' E
P.C. 0+75.20	80.00	20° 20'	14.18	27.93	S 24° 15' E

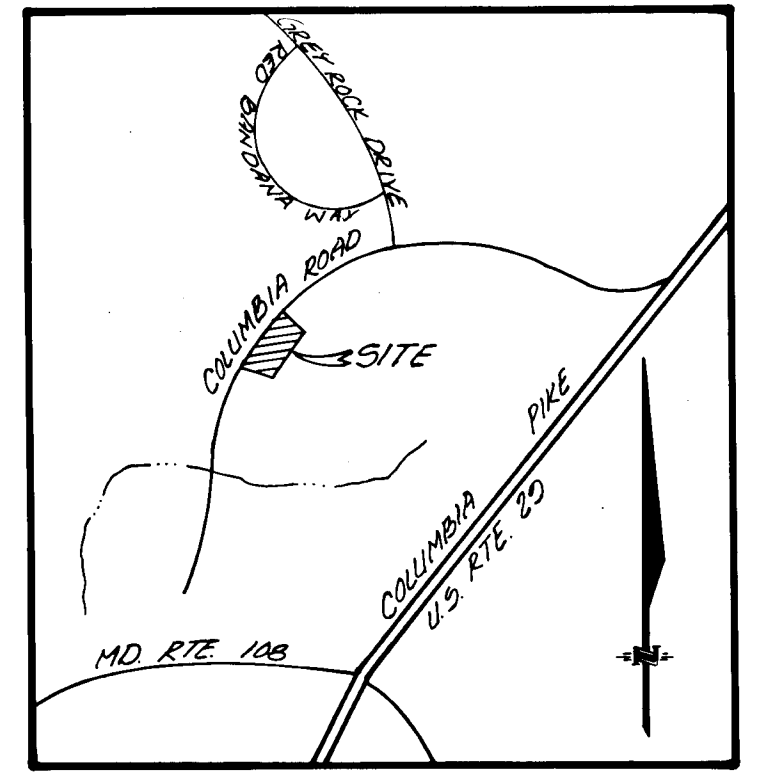


CURB & GUTTER LEGEND

- Std. 7" C & G
- Rev. 7" C & G
- Std. 6" C & G
- Rev. 6" C & G

GENERAL NOTES

- All storm drain paving shall be constructed in accordance with the latest edition and specifications of Howard County & MDSHA.
- Types of storm drainage refer to the standard details of Howard County and MDSHA.
- Trench compacting for storm drains within road or street right of way limits shall be in accordance with "Howard County Design Manual Vol. II" Class C Trench Bedding to be used for all storm drains except where shown otherwise.
- Information concerning underground utilities was obtained from available records but the contractor must determine the exact location and elevation of mains by digging test pits by hand, at all utility crossings, well in advance of construction.
- All utility companies shall be notified 24 hours in advance of construction.
- All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices," 1978 Edition.
- Eng and Crest vertical curves were designed in accordance with Howard County Design Manual Vol. III. (Also see note 11)
- Provide concrete sidewalk ramps Howard County Std. Type A, R-401 where shown in plan. For grades on walks, see Site Development Plan.
- The contractor or developer shall contact the construction inspection/survey Division 24 hours in advance of commencement of work. Ph. 772-7272.
- Storm Water Management provided in central facility in Dorsey Hall Section 2 area. 1 F. 85/16.
- Stopping site distances are not shown in cut-de-sac area since turns, parking and travel speed dictate the conditions for stopping rather than the standard stopping sight distance of a traveled way.



OWNER: CAPITAL HOMES, INC.
10200 GORMAN ROAD
LAUREL, MD 20707

APPROVED: DEPARTMENT OF PUBLIC WORKS
Wesley J. ...
 CHIEF LAND DEVELOPMENT DIVISION
Bravelle W. Welland
 CHIEF BUREAU OF HIGHWAYS
 DATE: 3/14/88

APPROVED: DEPARTMENT OF PUBLIC WORKS
...
 CHIEF, Bureau of Engineering
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
...
 CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
 DATE: 3/18/88



Carlton K. ...
12-22-86

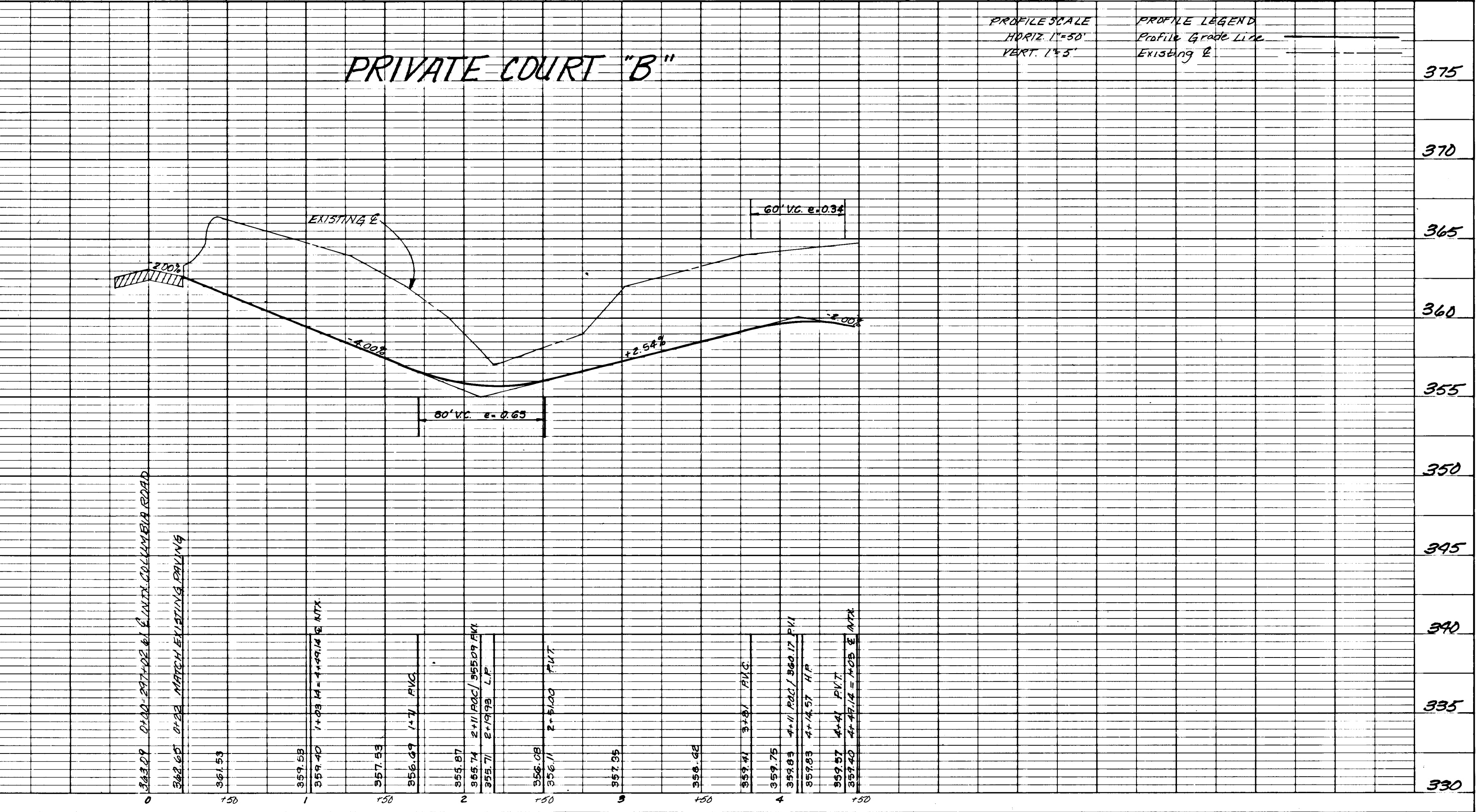
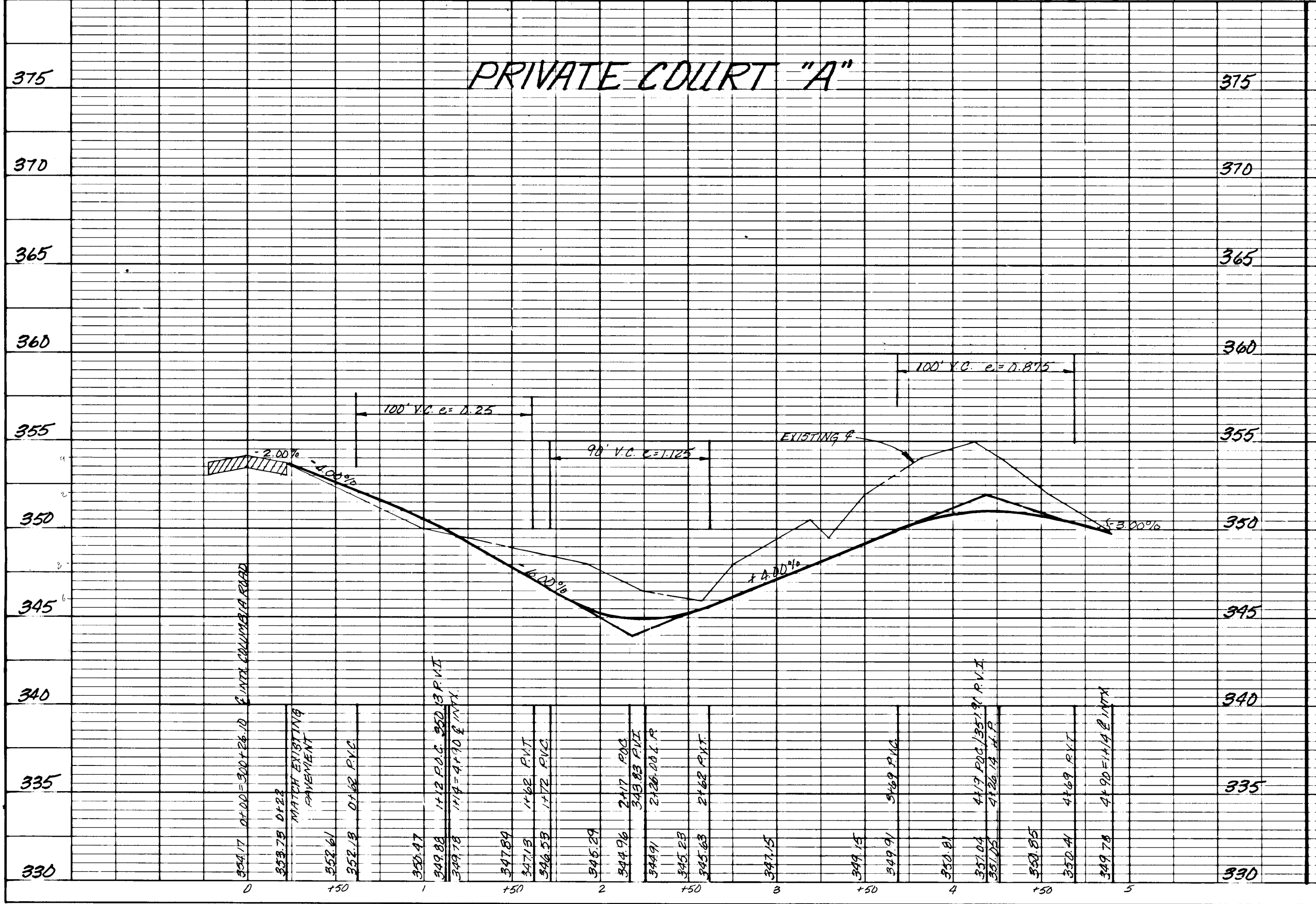
G&W GUTSCHICK LITTLE & WEBER, P.A.
 ENGINEERS, PLANNERS, SURVEYORS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD 20866
 TEL.: (301) 421-4024

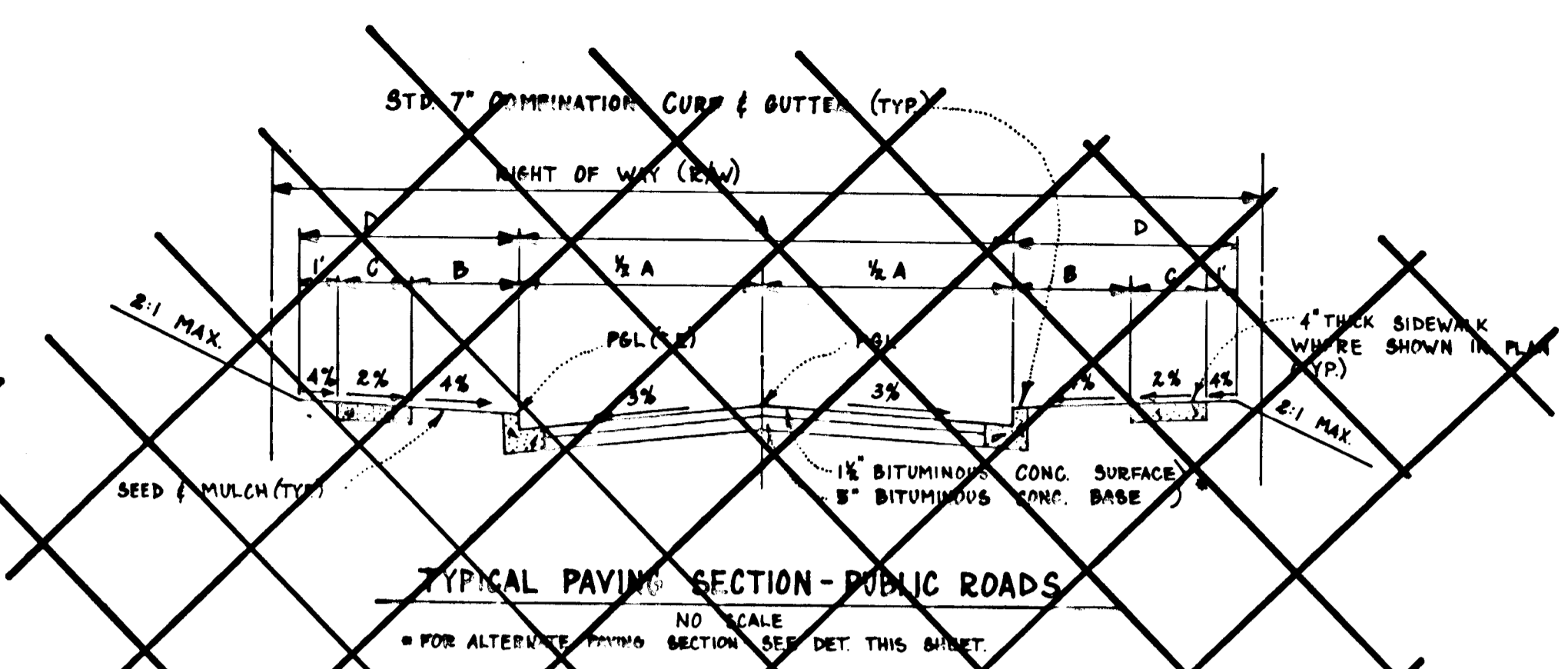
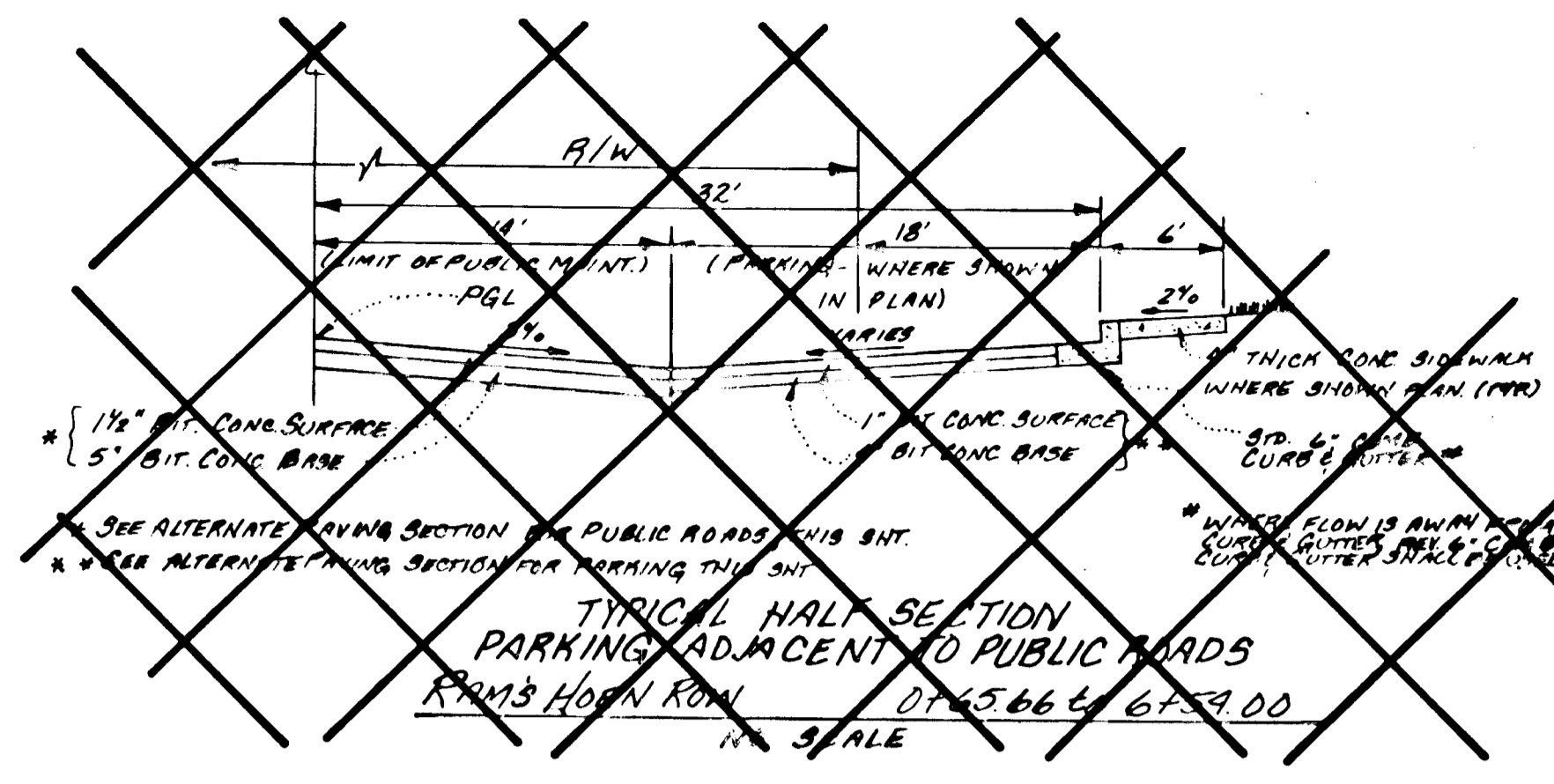
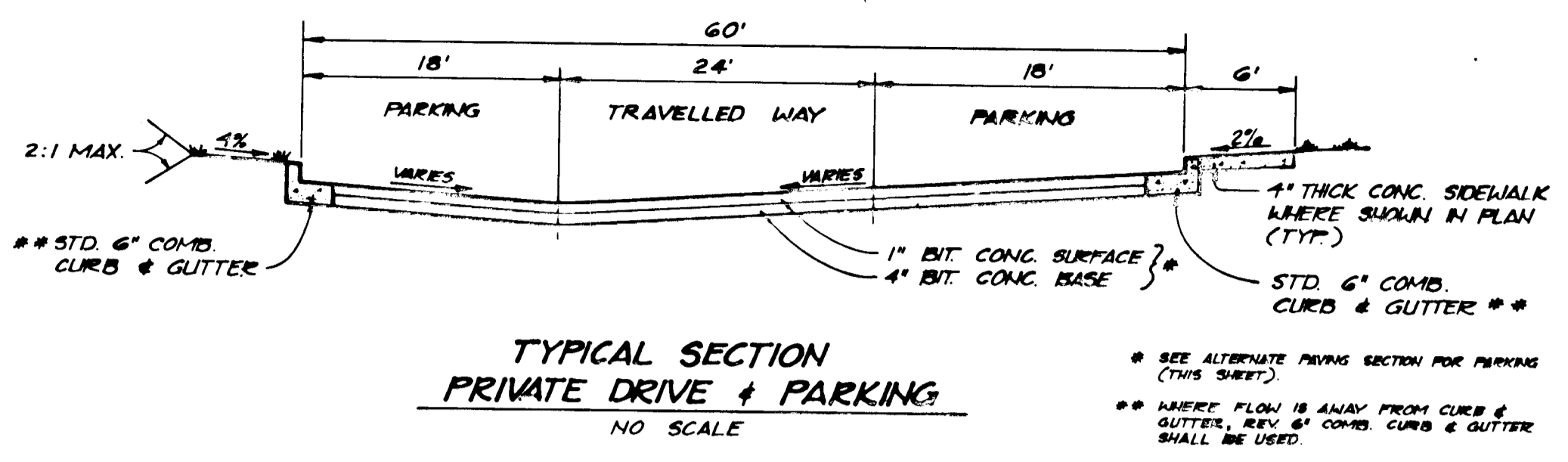
DESIGNED: TOC/mst
 DRAWN: 4
 CHECKED: CKG
 DATE: FEB 1988

SCALE: As Shown
 DRAWING: 1 of 5

DORSEY HALL
 SECTION 2 AREA 2
 2ND ELECTION DISTRICT
 LOTS C-188 TO C-229
 MARYLAND

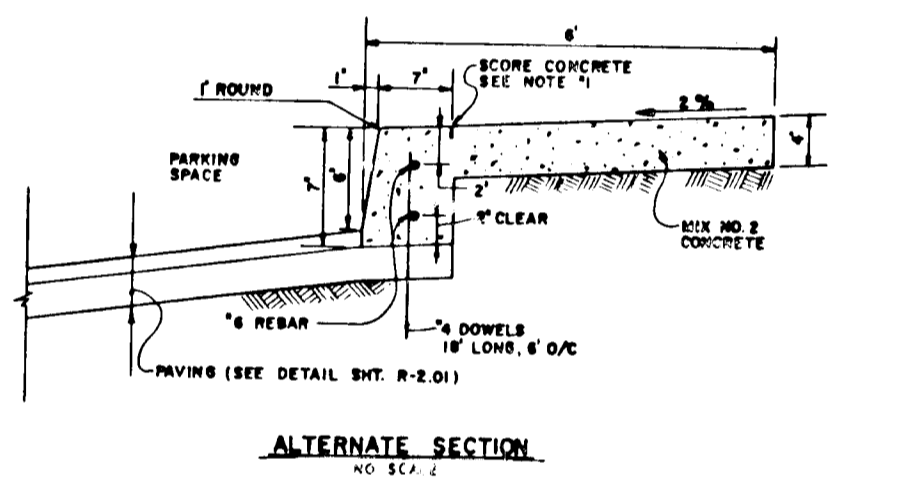
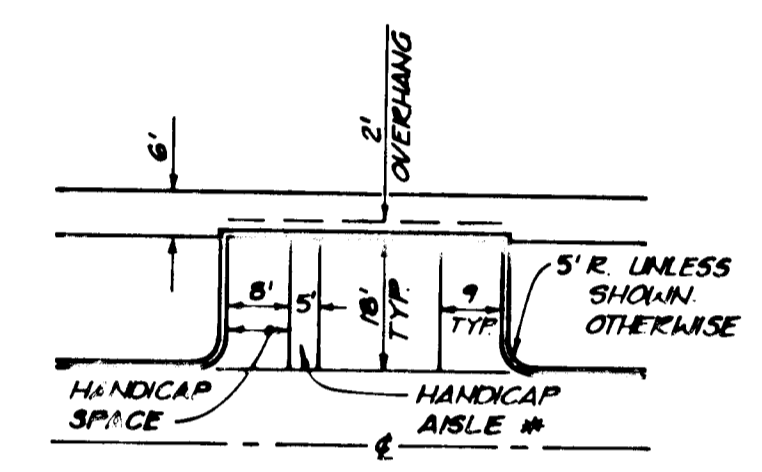
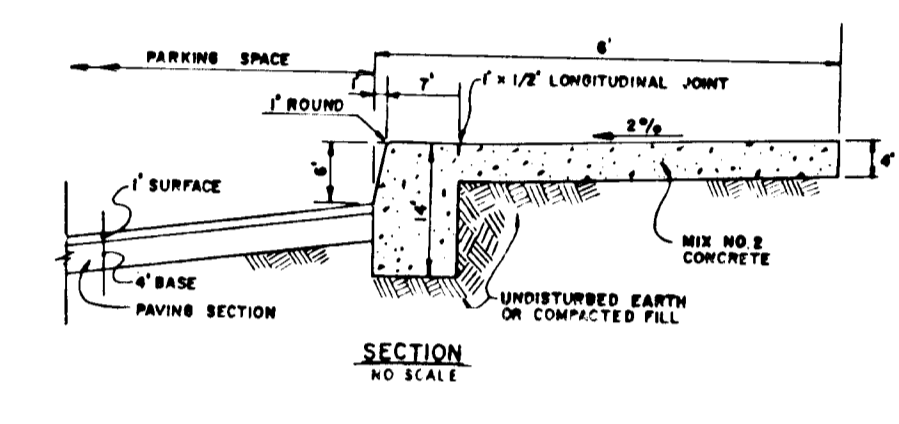
JOB NO. 86-016



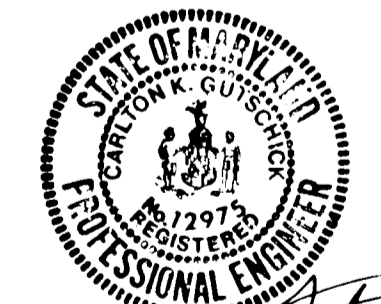
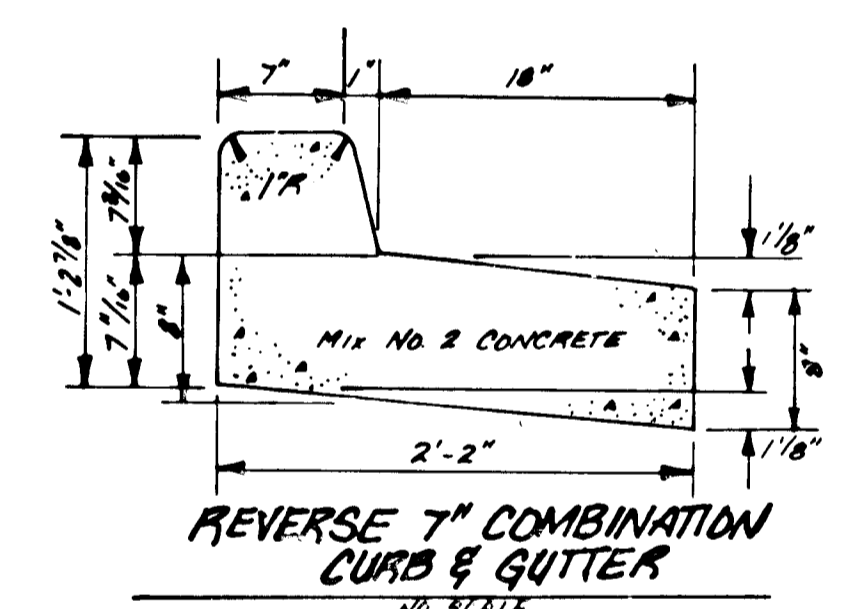
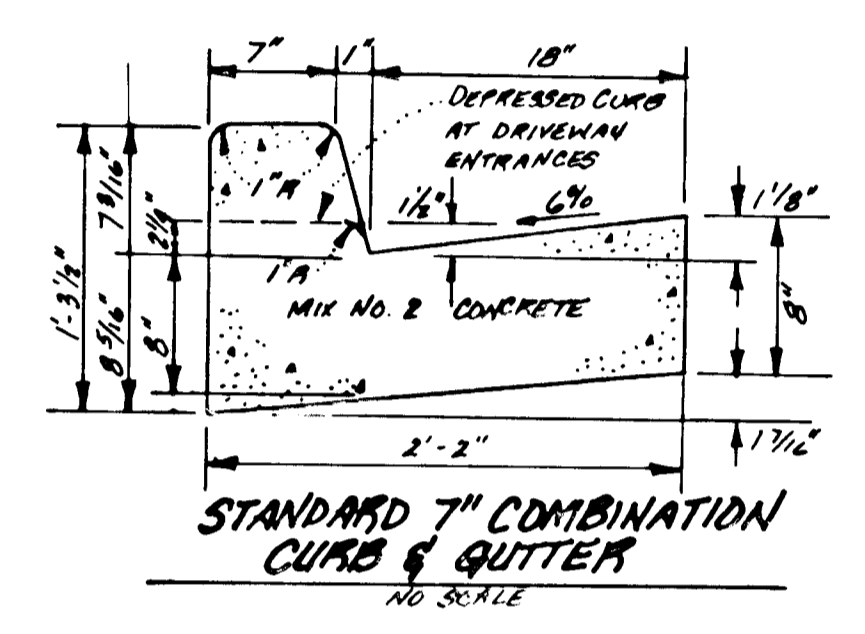
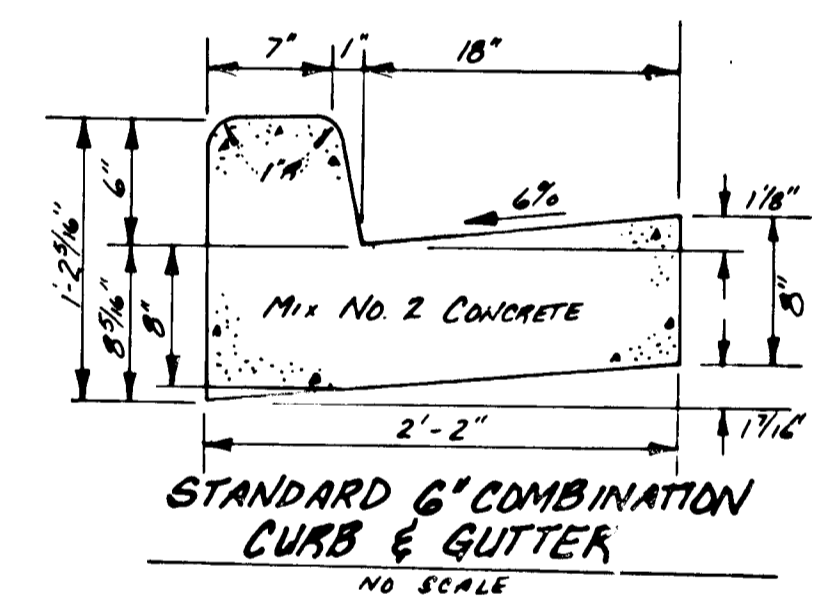
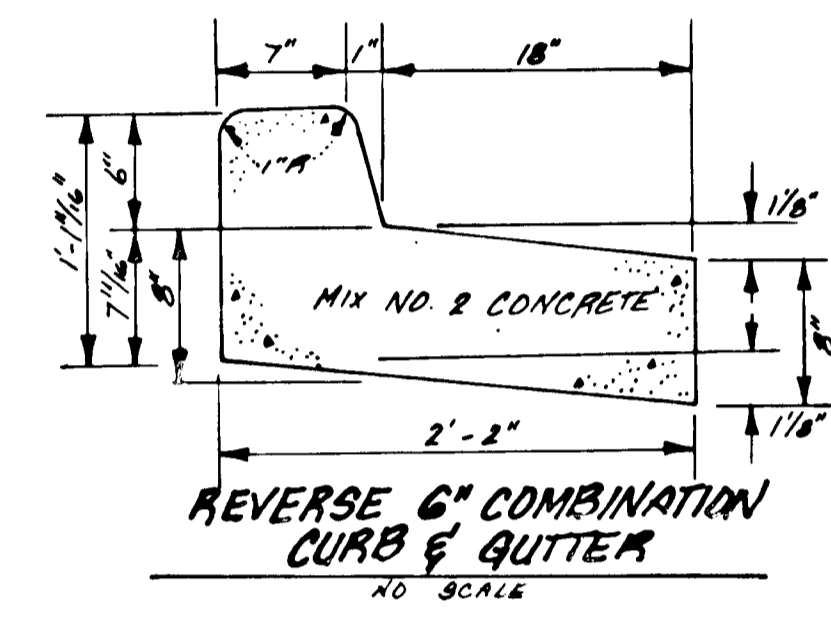
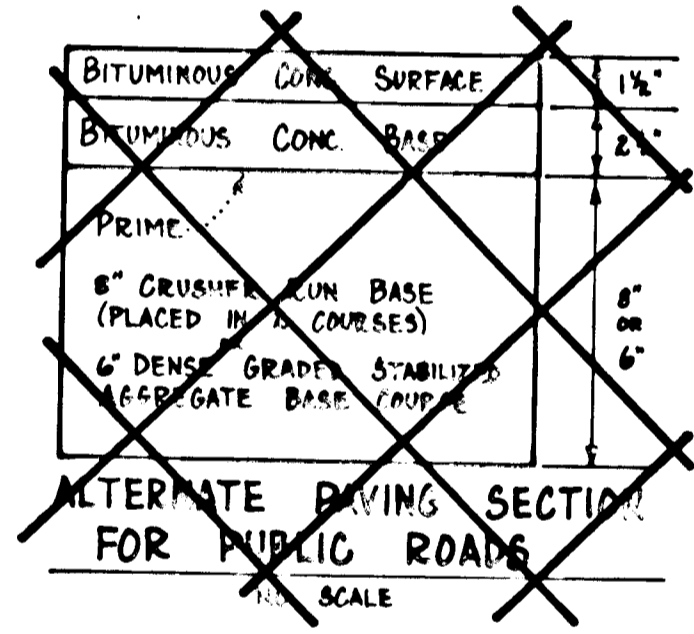
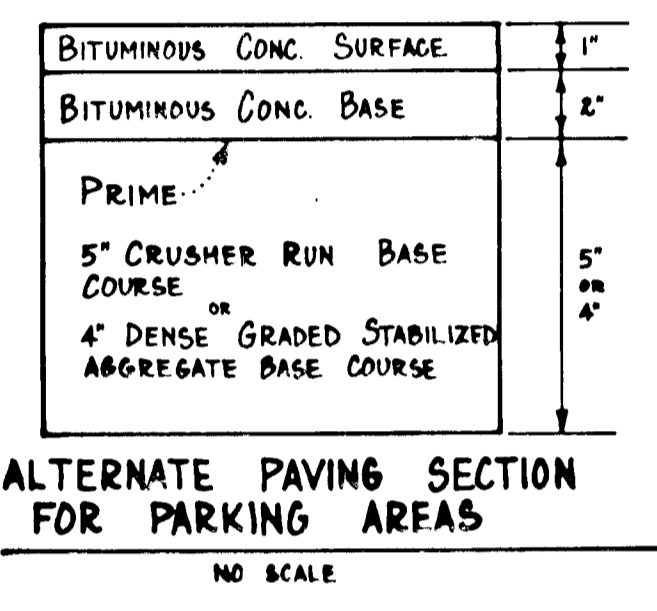


STREET NAME & STATION	TYPE OF TRAFFIC	A	B	C	D	R/W	ZONING	DESIGN SPEED
RAMS HORN RD/0100+1122	CUL-DE-SAC	20'	4'	9'	0'	R.S.C.	25 MPH	1A

- NOTES:
- LONGITUDINAL JOINT BETWEEN SIDEWALK AND CURB SHALL BE CONTINUOUS AND TO A DEPTH OF 1/4 THE SIDEWALK THICKNESS OR 1" MAX. LATITUDINAL JOINTS SHALL RUN FROM BACK EDGE OF SIDEWALK, CONTINUOUS TO THE BOTTOM FACE OF CURB TO A DEPTH OF 1/4" AND SPACED 5' APART.
 - PROVIDE 1/2" EXPANSION JOINTS AT 15' INTERVALS IN LATITUDINAL JOINTS TO FULL CROSS-SECTION.



MONOLITHIC CURB & SIDEWALK PRIVATE PARKING AREA



Carlton J. Tuttle
12-22-86

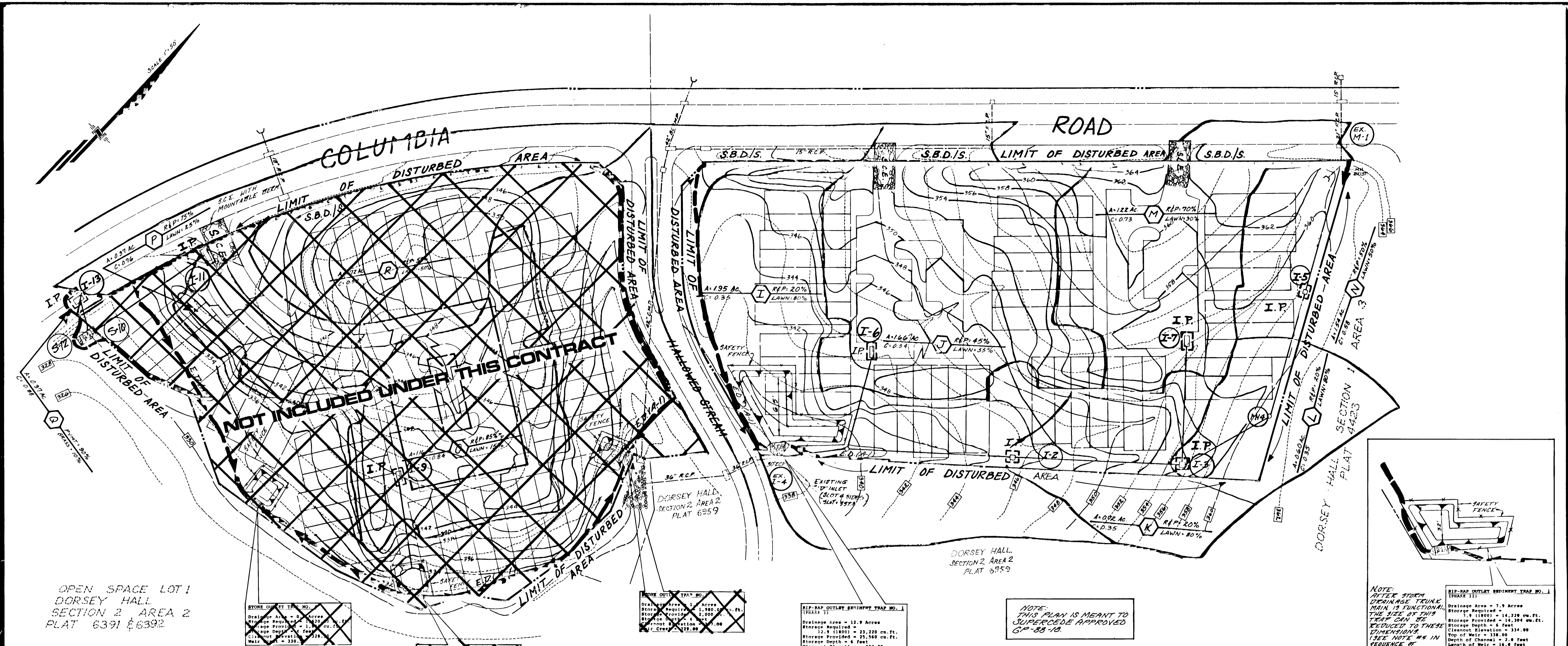
APPROVED: DEPARTMENT OF PUBLIC WORKS <i>[Signature]</i> CHIEF, LAND DEVELOPMENT DIVISION	3/11/88 DATE	APPROVED: DEPARTMENT OF PUBLIC WORKS <i>[Signature]</i> CHIEF, BUREAU OF ENGINEERING	3-14-88 DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING <i>[Signature]</i>	3/14/88 DATE	APPROVED: DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT <i>[Signature]</i>	3/18/88 DATE

GLW GUTSCHICK LITTLE & WEBER, PA. ENGINEERS, PLANNERS, SURVEYORS 3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866 TEL. (301) 421-4024		DES. TOC	DRN. LH	CHK. CKG	DATE	REVISION	BY	APP'R.
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OWNER: CAPITAL HOMES, INC.
10200 GORDMAN ROAD
LAUREL, MD. 20707

ROAD CONSTRUCTION PLANS — PAVING DETAILS
DORSEY HALL
SECTION 2 AREA 2
2ND ELECTION DISTRICT
LOTS C-188 TO C-229
HOWARD COUNTY, MARYLAND

SCALE As Shown	CONTOUR INTERVAL —	G.L.W. FILE NO. 86-016
DATE FEB, 1988	TAX MAP NO. —	SHEET 3 OF 5



OPEN SPACE LOT 1
DORSEY HALL
SECTION 2 AREA 2
PLAT 6391 & 6392

STONE OUTLET TRAP NO. 1

Drainage Area = 0.076 Acres
Storage Required = 1,300 cu. ft.
Storage Provided = 1,300 cu. ft.
Storage Depth = 6 feet
Clearout Elevation = 334.00
Top of Weir = 338.00
Length of Weir = 16.8 feet

STONE OUTLET TRAP NO. 3

Drainage Area = 1.200 Acres
Storage Required = 10,000 cu. ft.
Storage Provided = 10,000 cu. ft.
Storage Depth = 6 feet
Clearout Elevation = 334.00
Top of Weir = 338.00
Length of Weir = 16.8 feet

STONE OUTLET TRAP NO. 4

Drainage Area = 1.200 Acres
Storage Required = 10,000 cu. ft.
Storage Provided = 10,000 cu. ft.
Storage Depth = 6 feet
Clearout Elevation = 334.00
Top of Weir = 338.00
Length of Weir = 16.8 feet

RIP-RAP OUTLET SEDIMENT TRAP NO. 1 (PHASE I)

Drainage Area = 12.9 Acres
Storage Required = 21,220 cu. ft.
Storage Provided = 21,220 cu. ft.
Storage Depth = 6 feet
Clearout Elevation = 334.00
Top of Weir = 338.00

NOTE: THIS PLAN IS MEANT TO SUPERCEDE APPROVED GP-88-18.

RIP-RAP OUTLET SEDIMENT TRAP NO. 1 (PHASE II)

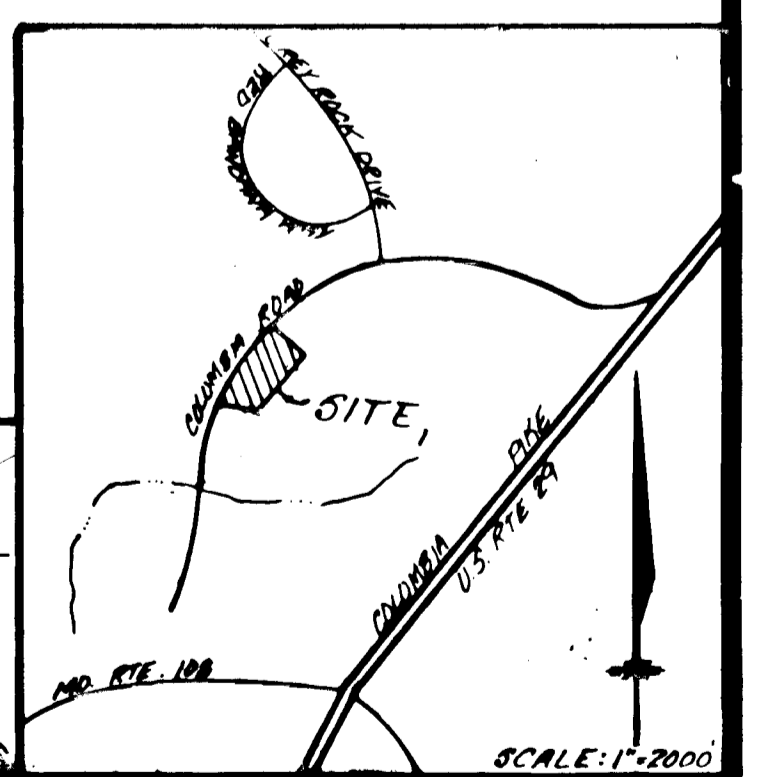
Drainage Area = 7.9 Acres
Storage Required = 14,220 cu. ft.
Storage Provided = 14,220 cu. ft.
Storage Depth = 6 feet
Clearout Elevation = 334.00
Top of Weir = 338.00
Length of Weir = 16.8 feet

LEGEND

S.B.D./S	STRAW BALE DIKE OR SILT FENCE
E.D. (A-1)	EARTH DIKE
I.P.	INLET PROTECTION
344	EXISTING CONTOUR
344	PROPOSED CONTOUR
P.D.	PERIMETER DIKE
---	LIMIT OF DISTURBED AREA

- SEQUENCE OF CONSTRUCTION**
1. Obtain Grading Permit.
 2. Install stabilized construction entrances.
 3. Install perimeter dike/swale, earth dikes, sediment traps, and strawbale dikes/silt fences as shown on the plan.
 4. Clear and grade the site.
 5. Install utilities - Note: After storm drainage trunk main from existing inlet I-4 (F-86-219) to existing Manhole M-1 (F-85-16) is functional the size of the Rip-Rap Outlet Sediment Trap No. 1 can be reduced as shown on the plans.
 6. Install inlet protection devices around all the inlets as soon as they are completed.
 7. Stabilize the site with buildings, paving and seeding/sodding per the Site Plan.
 8. Remove sediment traps and other sediment control measures only after those areas which are served by these measures have been stabilized AND permission has been granted by the Sediment Control Inspector.

- EXPLANATORY NOTES:**
1. CREST OF EXISTING INLET I-4 IS 337.0.
 2. TRAP NO. 1 IS EXISTING PER GP-88-18, AS FEB. 1988. TRAP WAS INSTALLED WITHOUT ENCRoACHING ON PARCEL TO THE SOUTHEAST.
 3. CURB OPENINGS SHALL BE PROVIDED AT I-6 AND I-7.
 4. FLOW SHALL BE DIRECTED AROUND ALL INLETS TOWARDS TRAP NO. 1.



ENGINEER'S CERTIFICATE

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

Robert L. Galt 12-22-86
DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

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 Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project.

Robert L. Galt 12/22/86
DATE

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

Howard L. Galt 3/8/88
DATE

Reviewed for *Howard* S.C.D. Name and meets Technical Requirements.

Robert L. Galt 5/8/88
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

William L. L. 3/11/88
CHIEF, LAND DEVELOPMENT DATE

Braville W. Weiland 3/11/88
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

Robert L. Galt 3-14-88
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Robert L. Galt 3/18/88
CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT DATE

GW GUTSCHICK LITTLE & WEBER, PA.
ENGINEERS, PLANNERS, SURVEYORS
3905 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD. 20866
TELEPHONE (301) 421-4024

DES. TOC	DRN. HK	CHK. CKS	DATE	REVISION	BY	APPR.

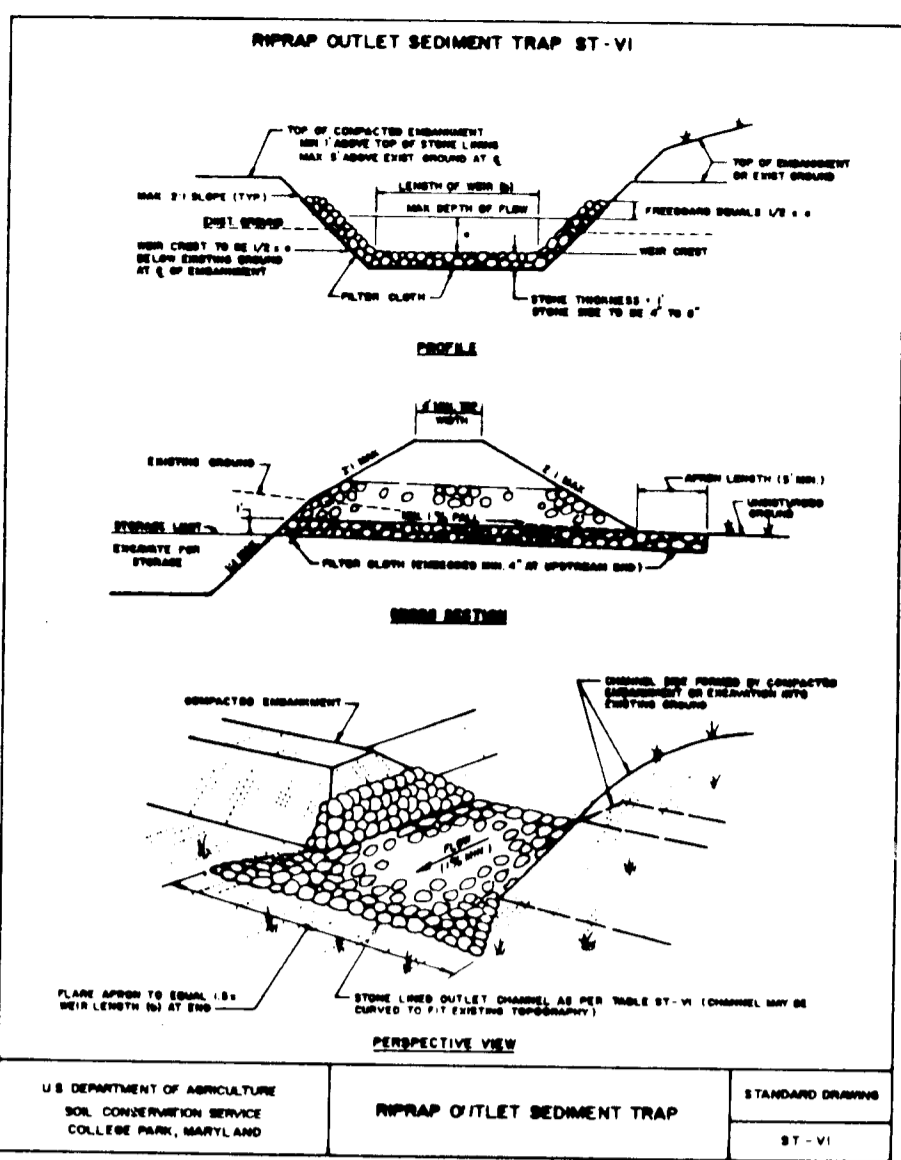
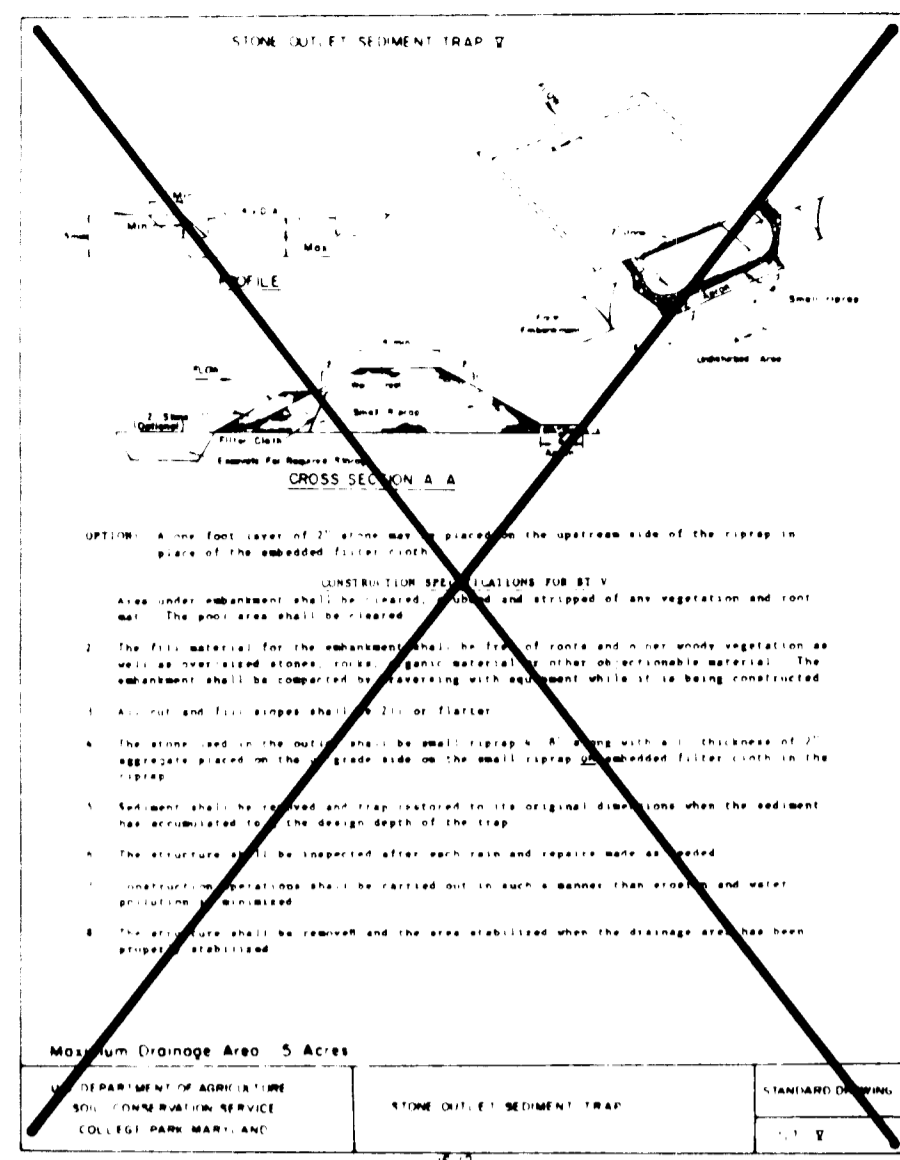
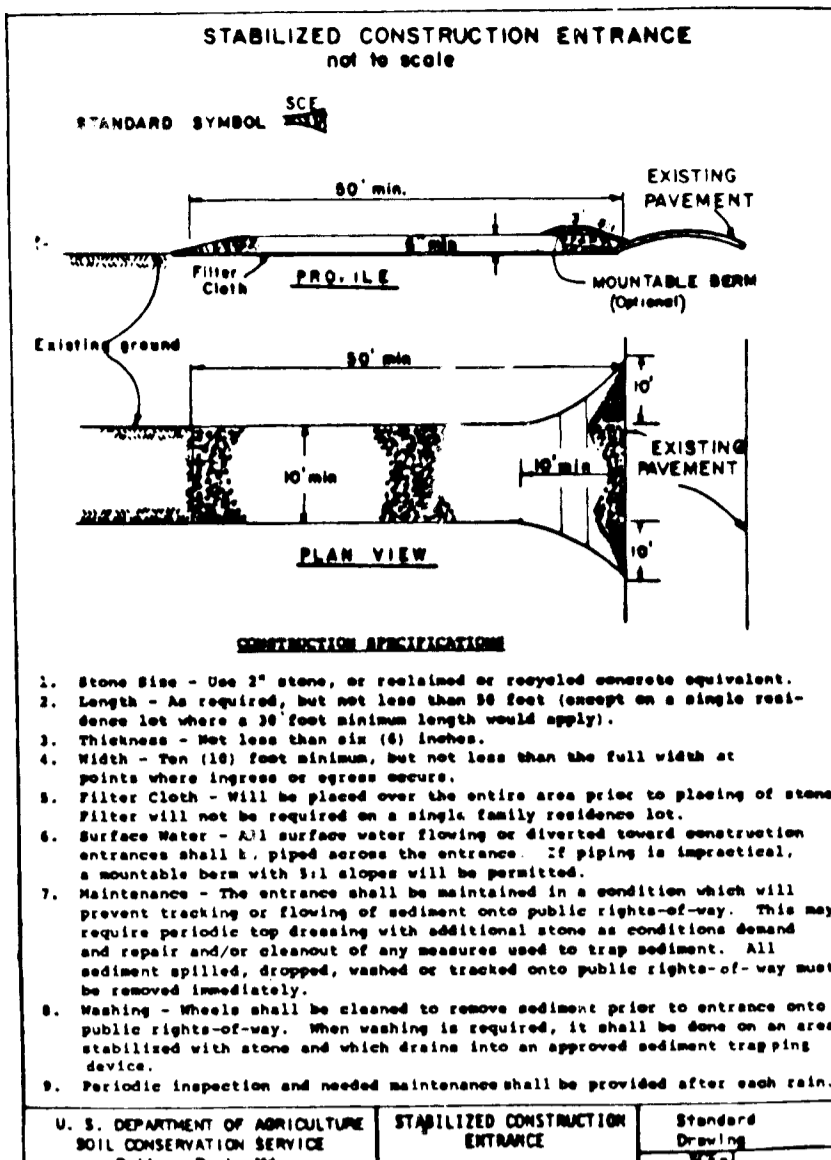
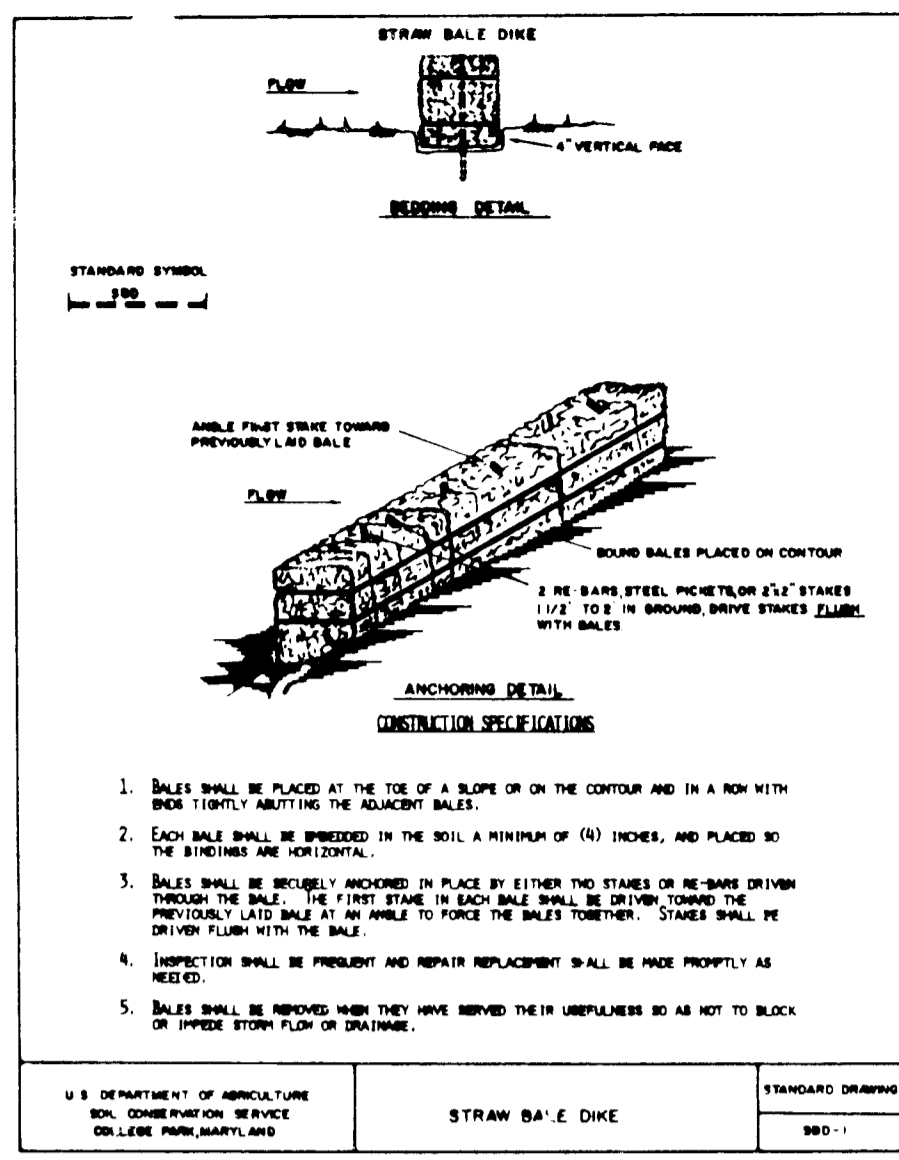
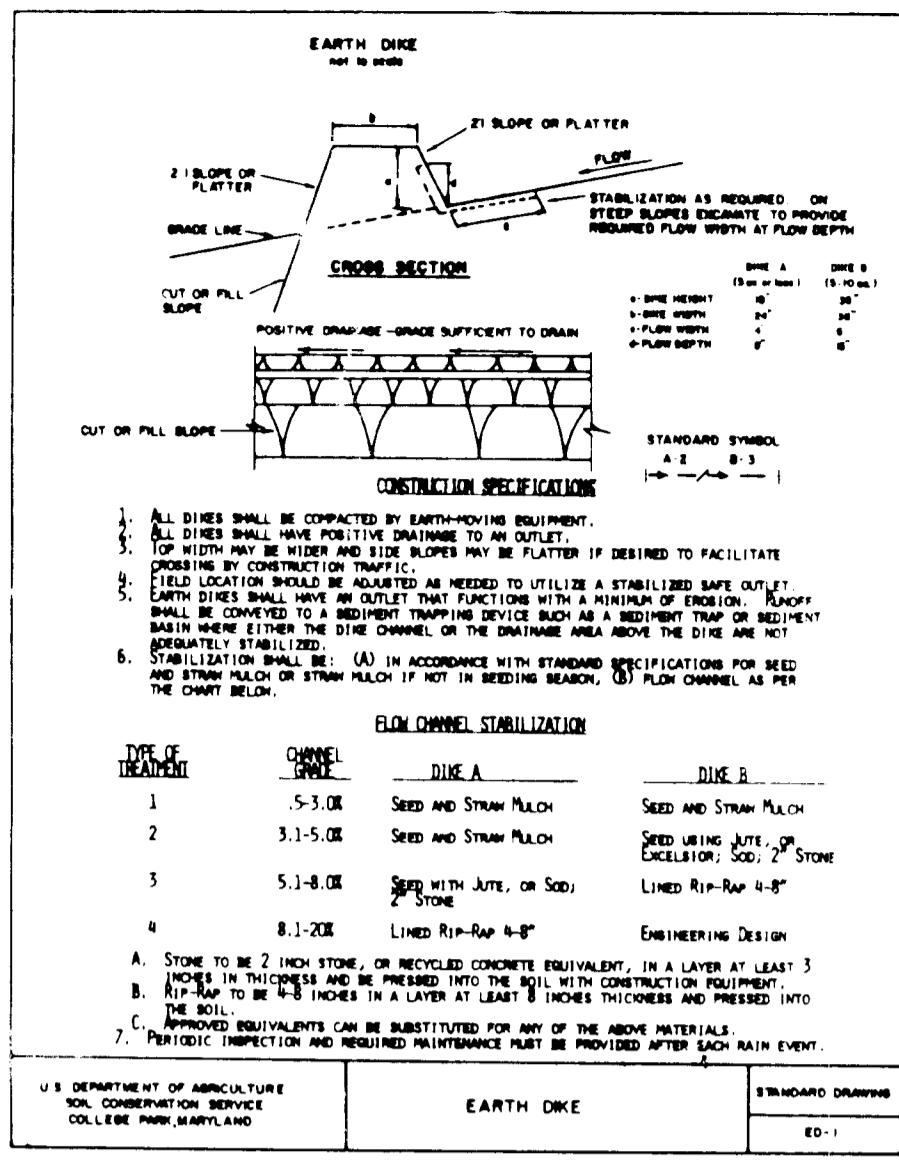
OWNER: CAPITAL HOMES INC.
10200 GORDIAN ROAD
LAUREL, MD. 20707

ROAD CONSTRUCTION PLANS - SEDIMENT & EROSION CONTROL PLAN & DRAINAGE AREA MAP

DORSEY HALL
SECTION 2 AREA 2
LOTS C-188 TO C-229
2ND ELECTION DISTRICT

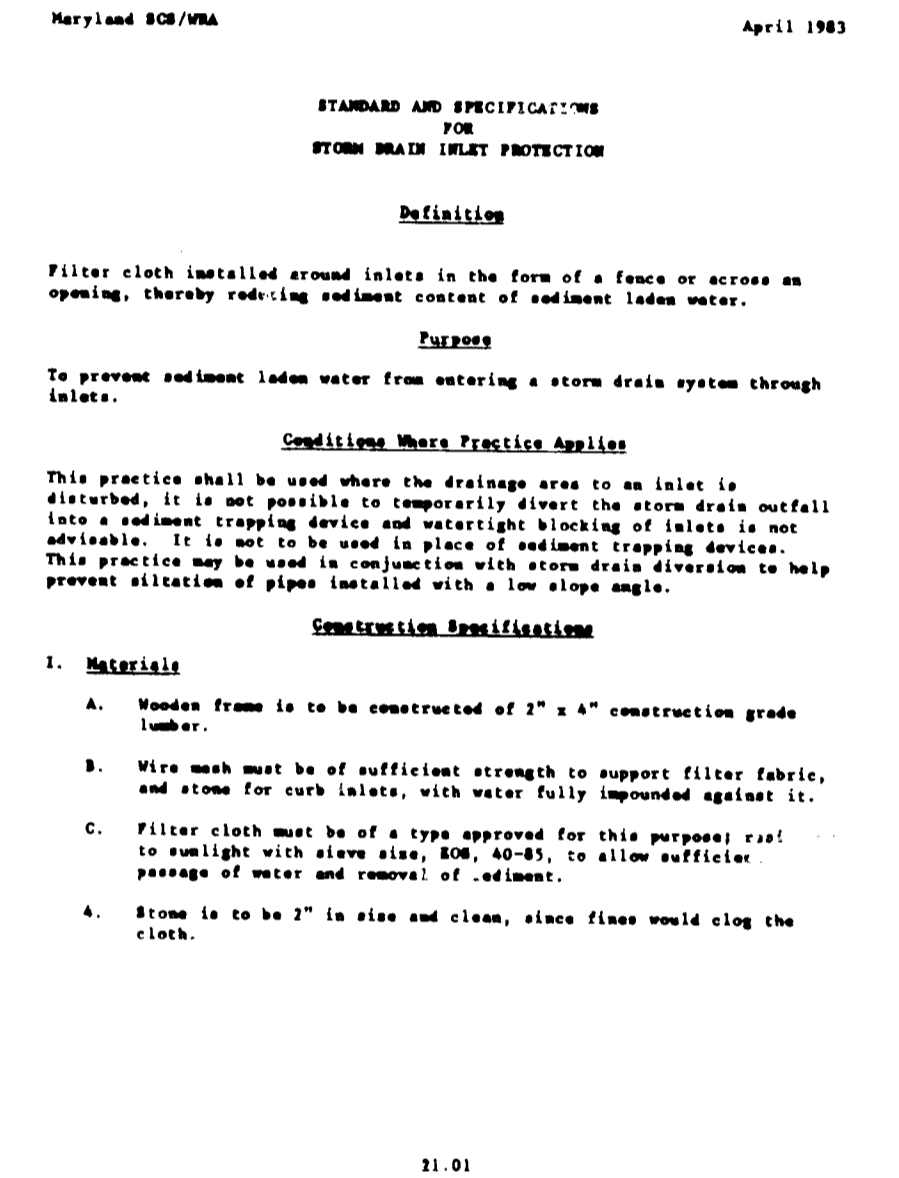
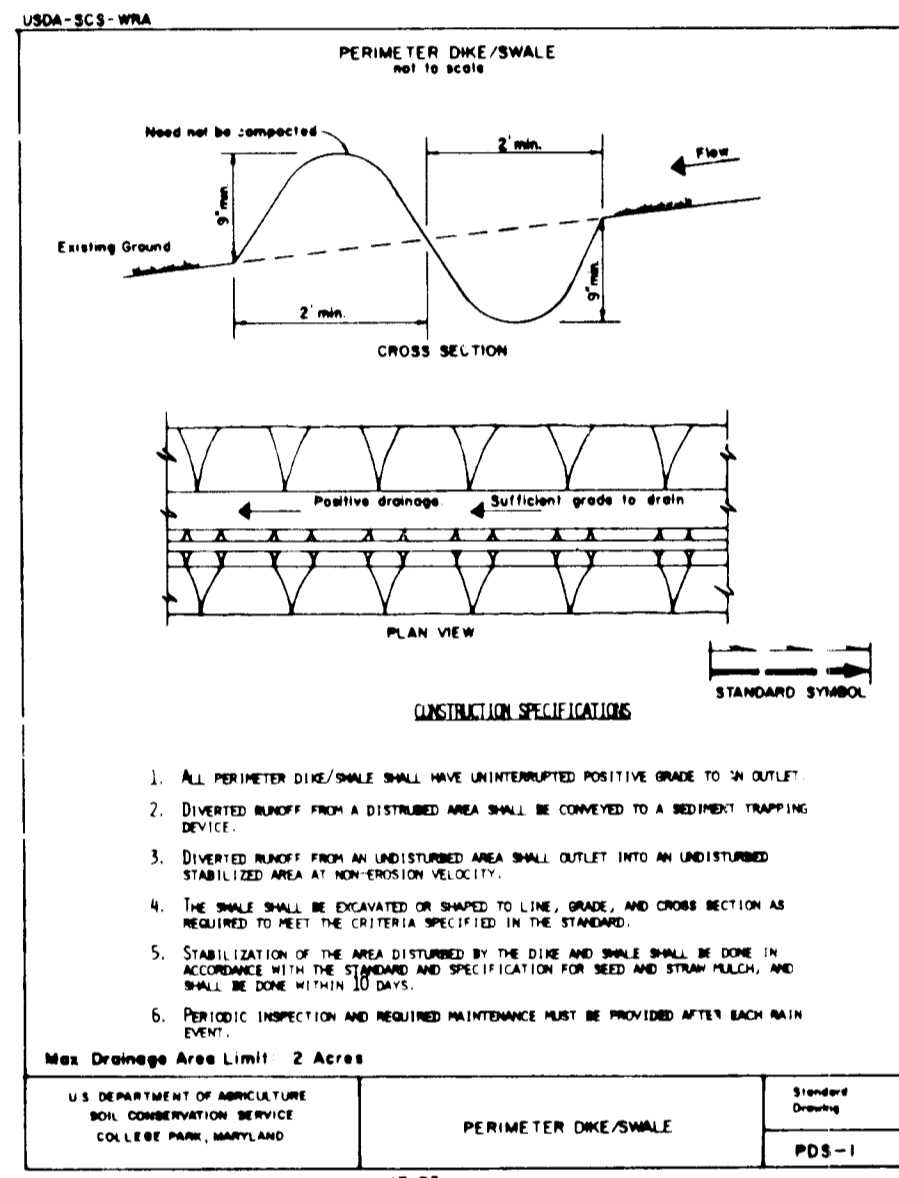
HOWARD COUNTY, MARYLAND

SCALE 1" = 50'	CONTOUR INTERVAL 2 FT.	G.L.W. FILE NO. 86-016
DATE FEB, 1988	TAX MAP No.	SHEET 4 OF 5



CONSTRUCTION SPECIFICATIONS FOR ST-VI

- The area under embankment shall be cleared, grubbed and stripped of any vegetation and rock material. The soil shall be cleared.
- 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 compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
- All fill slopes shall be 2:1 or flatter (out slopes 3:1) or flatter.
- Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
- 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.
- 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 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.
- Stone used in the outlet channel shall be four (4) to eight (8) inches (larger). 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.
- Sediment shall be removed and trap returned to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected after each rain and repaired as needed when the sediment has accumulated to 1/2 the design depth of the trap.
- Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
- Drainage area for this practice is limited to 15 acres or less.

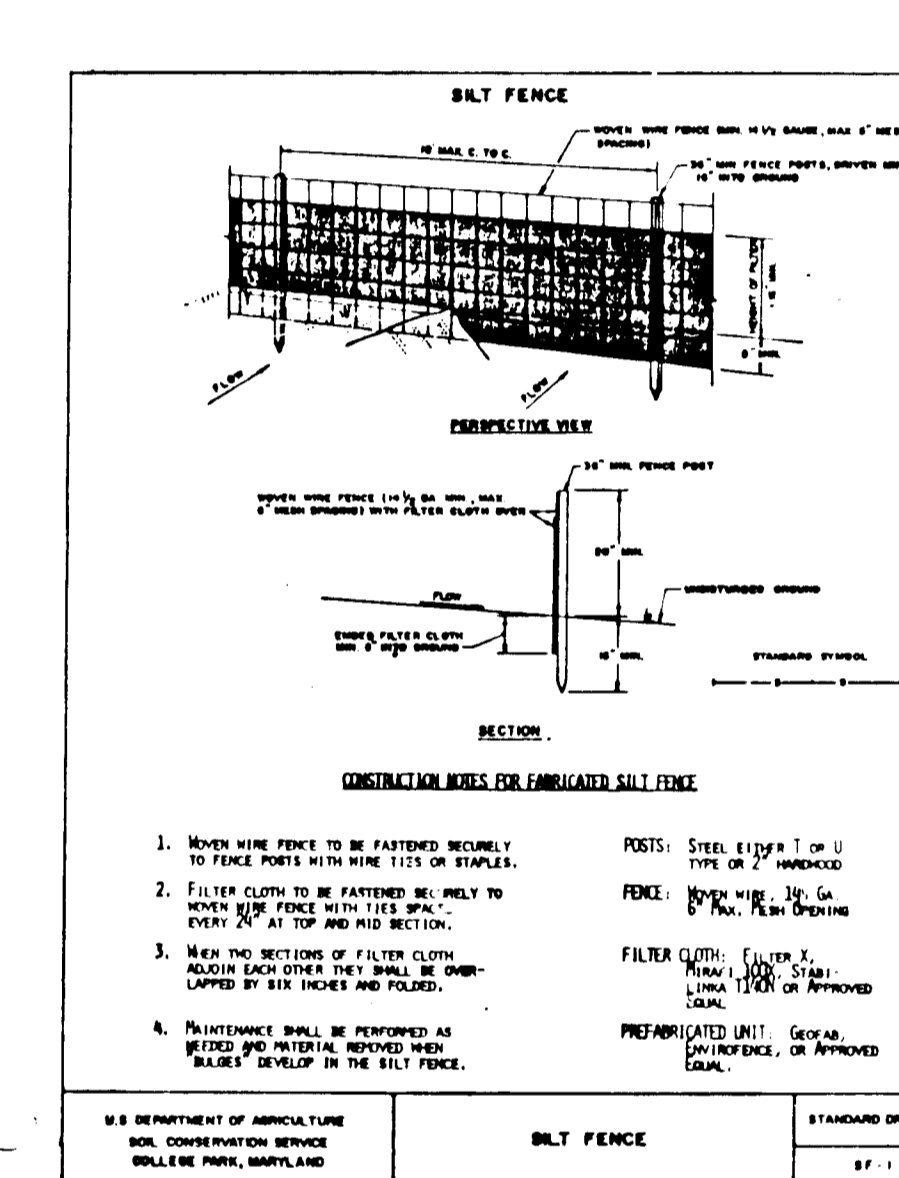
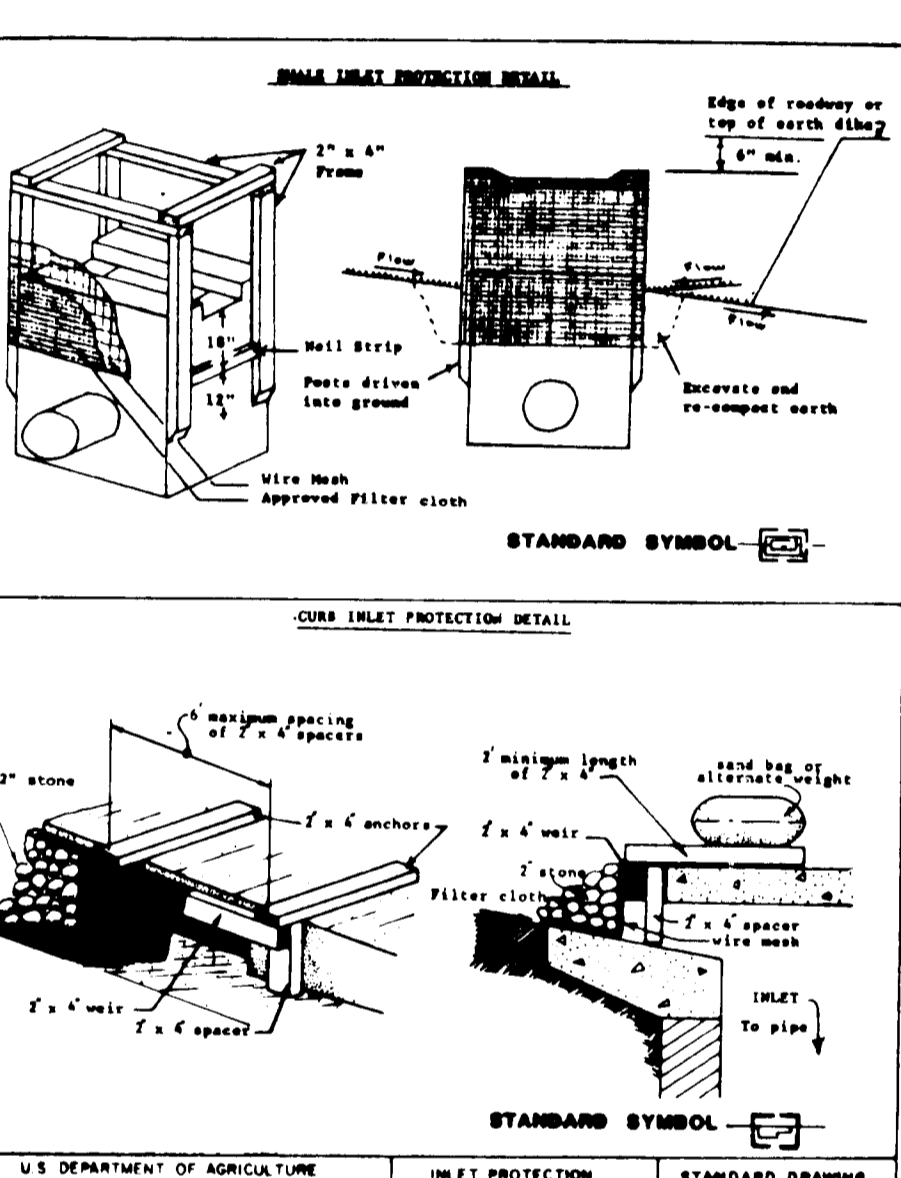


II. Procedures

- A small, ditchless or yard inlet protection.
- Remove completely around inlet to a depth of 18" below notch elevation.
- Drive 2 x 4 post 1' into ground at four corners of inlet. Place metal strip between posts on ends of inlet. Assemble top section of 2 x 4 frame using existing inlet channel. Top of frame (raft) must be 4" below edge of roadway adjacent to inlet.
- Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
- Stretch filter cloth tightly over wire mesh. The cloth must extend from top of frame to 18" below inlet notch also. Fasten securely to frame. Ends must meet at post, be overlapped and fastened, then fastened down.
- Backfill around inlet in compacted 4" layers until level of earth is 1/2" below notch elevation on ends and top elevation on sides.
- If the inlet is set in a low point, construct a compacted earth dike to the ditchline below it. The top of this dike to be at least 4" higher than the top of frame (raft).
- This structure must be inspected frequently and the filter fabric replaced when clogged.
- Curb Inlet Protection.
- Attach a continuous piece of wire mesh (30" dia. with 1/2" mesh) to the curb (2" x 4" wire) (fastening length 2" x 4" as shown on the standard drawing).
- Place a piece of approved filter cloth (40-85 stone) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" wire.
- Securely nail the 2" x 4" wire to 9" long vertical spacers to be located between the curb and inlet face (max. 6" apart).
- Place the assembly against the inlet throat and nail (minimum 2" length) to 2" x 4" to the top of the curb at spacer locations. These 2" x 4" members shall extend over the inlet and be held in place by curbings or alternate weight.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permit 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 temporary stabilization shall be completed within: at 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1, or 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) and (Sec. 54), temporary seedings (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: 3.1 Acres
 - Area Disturbed: 2.0 Acres
 - Area to be seeded or paved: 4.0 Acres
 - Area to be vegetatively stabilized: 3.4 Acres
 - Total Cut: 25,800 Cu. Yds.
 - Total Fill: 15,800 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 control must be provided, if deemed necessary by the Howard County DPM approved control inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspecting agency shall be requested upon completion of installation of perimeter erosion and earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspecting agency is made.
- If it is necessary to be constructed on an "As-Built" basis, at present, Single Lot Sediment Control as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail below).
- The total amount of straw bale dikes/silt fences equals 300 L.F.



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, harrow or other acceptable means before seed.

Soil Amendments: Apply 500 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 ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of creeping lovegrass (.07 lbs/1000 sq ft). For the period November 15 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch 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 mulchified 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.

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, harrow or other acceptable means before seed.

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 square feet) and 800 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 or similar 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 disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru November 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 October 15 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch 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 mulchified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replace sod and reseedings.

ENGINEER'S CERTIFICATE

"I certify that this plan represents a practical and sound sediment control plan for the site conditions shown and was prepared in accordance with the requirements of the Maryland Soil Conservation District."

Carlton K. Feltner 12-22-86
Professional Engineer

APPROVED: DEPARTMENT OF PUBLIC WORKS

Richard W. Lockman 12/22/86
Signature of Developer/Builder Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Richard W. Lockman 12/22/86
Signature of Developer/Builder Date

SEDIMENT EROSION CONTROL DETAILS

DORSEY HALL

SECTION 2 AREA 2

LOTS C-188 TO C-229 HUNARD COUNTY, MARYLAND

DATE: FEB, 1988

TAX MAP NO. SHEET: 86-016 5 OF 5

SEDIMENT EROSION CONTROL DETAILS

DORSEY HALL

SECTION 2 AREA 2

LOTS C-188 TO C-229 HUNARD COUNTY, MARYLAND

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GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD 20866
PHONE: (301) 521-4024

DES: TOC DRN: JHJ CHR: CKG

DATE: REVISION: BY: APPR:

INVOICE: CAPITAL HOMES INC. 10200 GORMAN ROAD LAUREL, MD 20707

2ND ELECTION DISTRICT

SEDIMENT EROSION CONTROL DETAILS

SCALE: CONTOUR INTERVAL: 86-016

DATE: TAX MAP NO. SHEET: FEB, 1988 5 OF 5

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