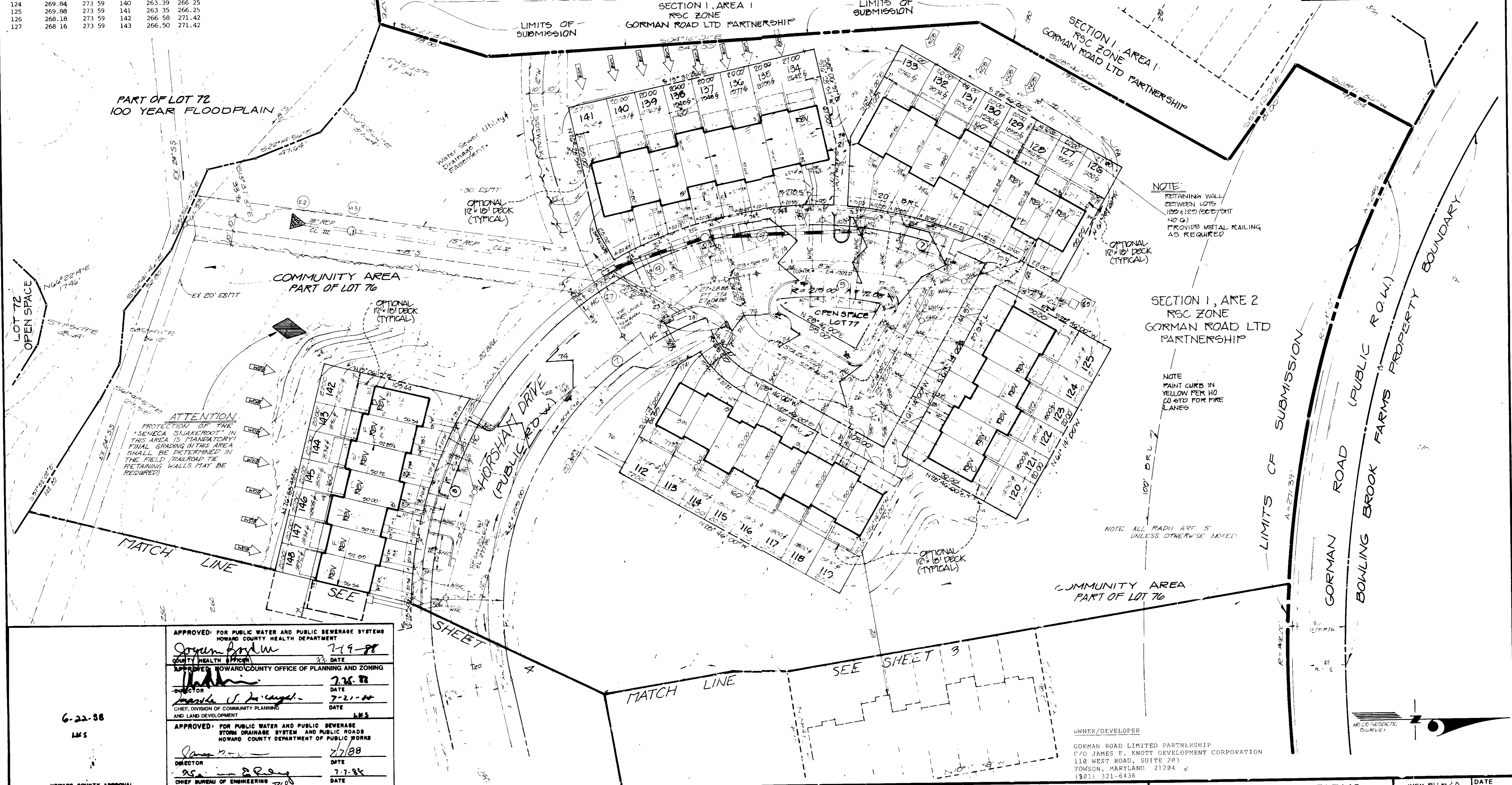
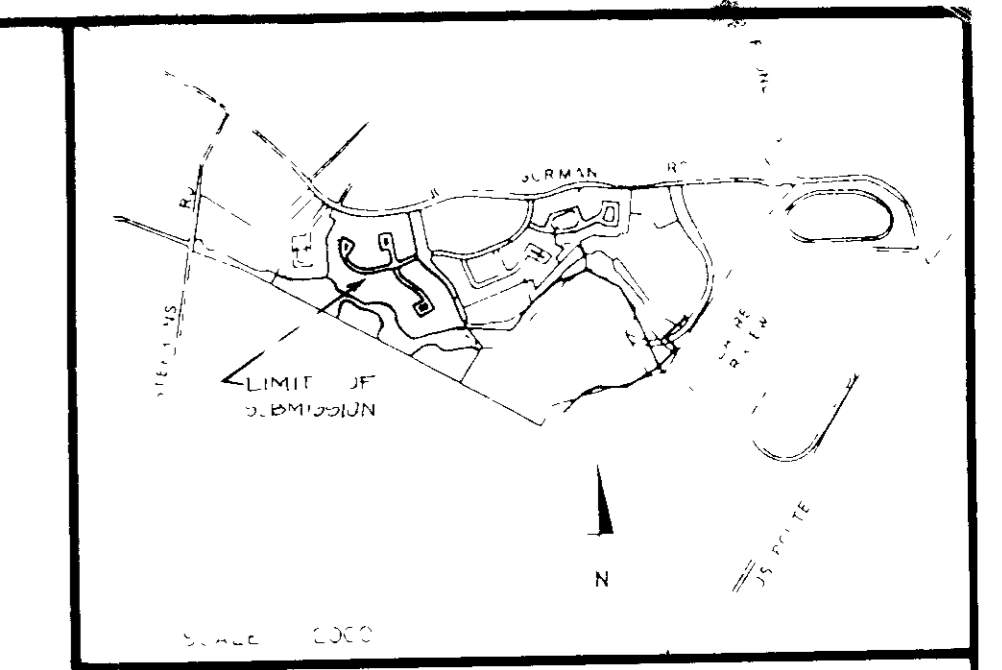


SECTION INVERTS AT PROPERTY LINE AND MINIMUM CELLAR ELEVATIONS

LOT NUMBER	INVERT	CELLAR	LOT NUMBER	INVERT	CELLAR	LOT NUMBER	INVERT	CELLAR
112	265.42	277.67	128	267.60	272.92	144	266.22	272.09
113	265.54	277.67	129	267.58	272.92	145	266.18	272.09
114	266.88	279.67	130	266.49	272.29	146	265.92	272.09
115	266.94	279.67	131	266.39	272.25	147	265.84	272.09
116	268.15	280.33	132	265.33	270.92	148	265.56	272.09
117	268.21	280.33	133	265.23	270.92			
118	269.12	281.00	134	264.32	269.59			
119	269.24	281.00	135	264.30	269.59			
120	269.20	274.25	136	264.12	268.25			
121	269.28	274.25	137	264.10	268.25			
122	269.54	274.25	138	263.91	267.59			
123	269.62	274.25	139	263.78	267.59			
124	269.84	273.59	140	263.39	266.25			
125	269.88	273.59	141	263.35	266.25			
126	268.18	273.59	142	266.58	271.42			
127	268.16	273.59	143	266.50	271.42			

112	0656 HORSHAM DRIVE
113	0656 HORSHAM DRIVE
114	0656 HORSHAM DRIVE
115	0656 HORSHAM DRIVE
116	0656 HORSHAM DRIVE
117	0656 HORSHAM DRIVE
118	0656 HORSHAM DRIVE
119	0656 HORSHAM DRIVE
120	0674 HORSHAM DRIVE
121	0676 HORSHAM DRIVE
122	0678 HORSHAM DRIVE
123	0680 HORSHAM DRIVE
124	0682 HORSHAM DRIVE
125	0684 HORSHAM DRIVE
126	0685 HORSHAM DRIVE
127	0685 HORSHAM DRIVE
128	0681 HORSHAM DRIVE
129	0670 HORSHAM DRIVE
130	0677 HORSHAM DRIVE
131	0675 HORSHAM DRIVE
132	0675 HORSHAM DRIVE
133	0671 HORSHAM DRIVE
134	0667 HORSHAM DRIVE
135	0665 HORSHAM DRIVE
136	0663 HORSHAM DRIVE
137	0661 HORSHAM DRIVE
138	0659 HORSHAM DRIVE
139	0657 HORSHAM DRIVE
140	0655 HORSHAM DRIVE
141	0653 HORSHAM DRIVE
142	0649 HORSHAM DRIVE
143	0647 HORSHAM DRIVE
144	0645 HORSHAM DRIVE
145	0643 HORSHAM DRIVE
146	0641 HORSHAM DRIVE
147	0639 HORSHAM DRIVE
148	0637 HORSHAM DRIVE



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 7-9-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 DIRECTOR: *[Signature]* DATE: 7-26-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEM AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 7-7-88
 CHIEF BUREAU OF ENGINEERING

6-22-88
 LMS

NO.	DESCRIPTION	DATE	APPROVED	DATE
1	REVISION FOR 112	4/12/88		
2	REVISION FOR 116	6-1-88		
3	ADD OPTIONAL DECKS & ADD REV TO UNITS	10-20-88		

REVISION APPROVED BY

SITE DEVELOPMENT PLAN

LOTS 112-148

Patton Harris Rust and Associates
 A Professional Corporation
 Engineers, Surveyors, Planners and Landscape Architects
 7609 Stanash Place, Rockville, MD 20855 (301)762-2220

BOWLING BROOK FARMS
 SECTION 1, AREA 2
 LOTS 72 THRU 211
 A RESUBDIVISION OF BOLLING BROOKE, LOT 2
 TAX MAP 47 PARCEL 141
 TOWNSHIP DISTRICT HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER
 GORMAN ROAD LIMITED PARTNERSHIP
 C/O JAMES F. KNOTT DEVELOPMENT CORPORATION
 118 WEST ROAD, SUITE 203
 TOWSON, MARYLAND 21284
 (301) 321-6436

DATE: 3/26/89
 SHEET: 2 of 14
 SCALE: 1" = 30'

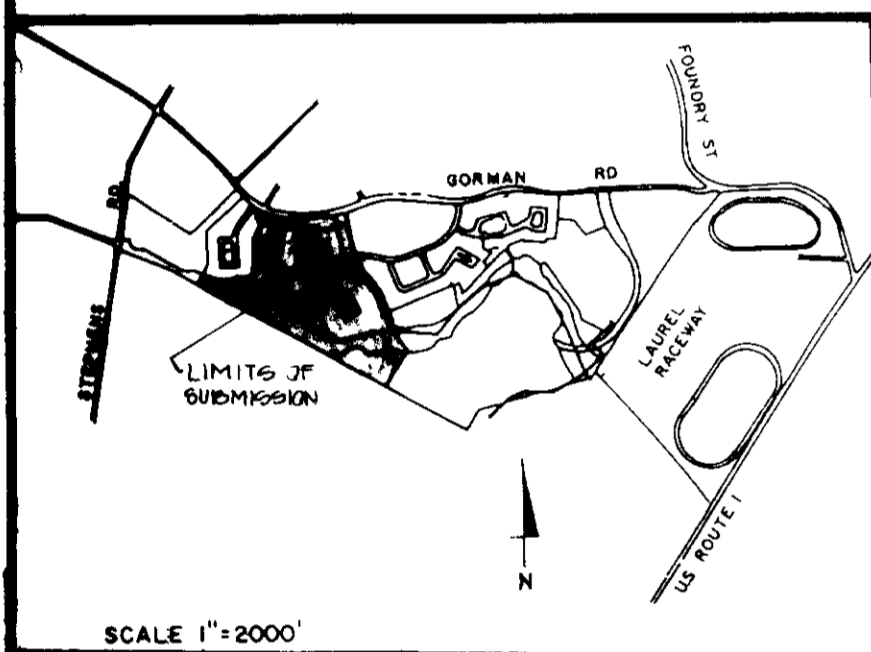
LOT NUMBER	STREET ADDRESS
80	0602 HADLEIGH COURT
81	0604 HADLEIGH COURT
82	0606 HADLEIGH COURT
83	0608 HADLEIGH COURT
84	0610 HADLEIGH COURT
85	0612 HADLEIGH COURT
86	0614 HADLEIGH COURT
87	0616 HADLEIGH COURT
88	0620 HADLEIGH COURT
89	0622 HADLEIGH COURT
90	0624 HADLEIGH COURT
91	0626 HADLEIGH COURT
92	0628 HADLEIGH COURT
93	0630 HADLEIGH COURT
94	0632 HADLEIGH COURT
95	0634 HADLEIGH COURT
96	0636 HADLEIGH COURT
97	0638 HADLEIGH COURT
98	0640 HADLEIGH COURT
99	0642 HADLEIGH COURT
100	0644 HADLEIGH COURT
101	0646 HADLEIGH COURT
102	0648 HADLEIGH COURT
103	0650 HADLEIGH COURT
104	0652 HADLEIGH COURT
105	0654 HADLEIGH COURT
106	0656 HADLEIGH COURT
107	0658 HADLEIGH COURT
108	0660 HADLEIGH COURT
109	0662 HADLEIGH COURT
110	0664 HADLEIGH COURT
111	0666 HADLEIGH COURT

OWNER/DEVELOPER
 GORMAN ROAD LIMITED PARTNERSHIP
 C/O JAMES F. KNOTT DEVELOPMENT CORPORATION
 118 WEST ROAD, SUITE 203
 TOWSON, MARYLAND 21284
 (801) 321-6436

SEWER HOUSE CONNECTION INVERTS AT PROPERTY LINE AND MINIMUM CELLAR ELEVATIONS

LOT NUMBER	INVERT	CELLAR	LOT NUMBER	INVERT	CELLAR
80	268.42	272.42	96	274.28	286.67
81	268.38	272.42	97	274.22	286.67
82	268.69	274.42	98	274.10	286.00
83	268.75	274.42	99	274.22	286.00
84	269.79	276.42	100	273.14	285.33
85	269.85	276.42	101	273.06	285.33
86	270.72	276.42	102	272.48	284.67
87	270.78	276.42	103	272.42	284.67
88	272.39	276.92	104	275.74	278.59
89	272.25	276.92	105	275.64	278.59
90	271.77	276.92	106	274.42	277.25
91	271.79	276.92	107	274.32	277.25
92	272.30	277.59	108	272.50	275.92
93	272.36	277.59	109	272.50	275.92
94	273.12	278.25	110	271.06	275.25
95	273.18	278.25	111	270.96	275.25

NOTE ALL RADII ARE 5' UNLESS OTHERWISE NOTED



SCALE 1"=2000'

APPROVED FOR PUBLIC WATER AND PUBLIC WASTEWATER SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 7-17-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR
 DATE 7-26-88

APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE 7-21-88

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR
 DATE 7-1-88

CHIEF, BUREAU OF ENGINEERING
 DATE 7-7-88

REVISION

SITE DEVELOPMENT PLAN LOTS 80-111



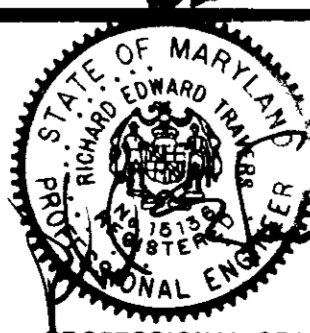
Patton Harris Rust and Associates
 A Professional Corporation
 Engineers, Surveyors, Planners and Landscape Architects
 7609 Standish Place, Rockville, MD 20855 (301)762-2220

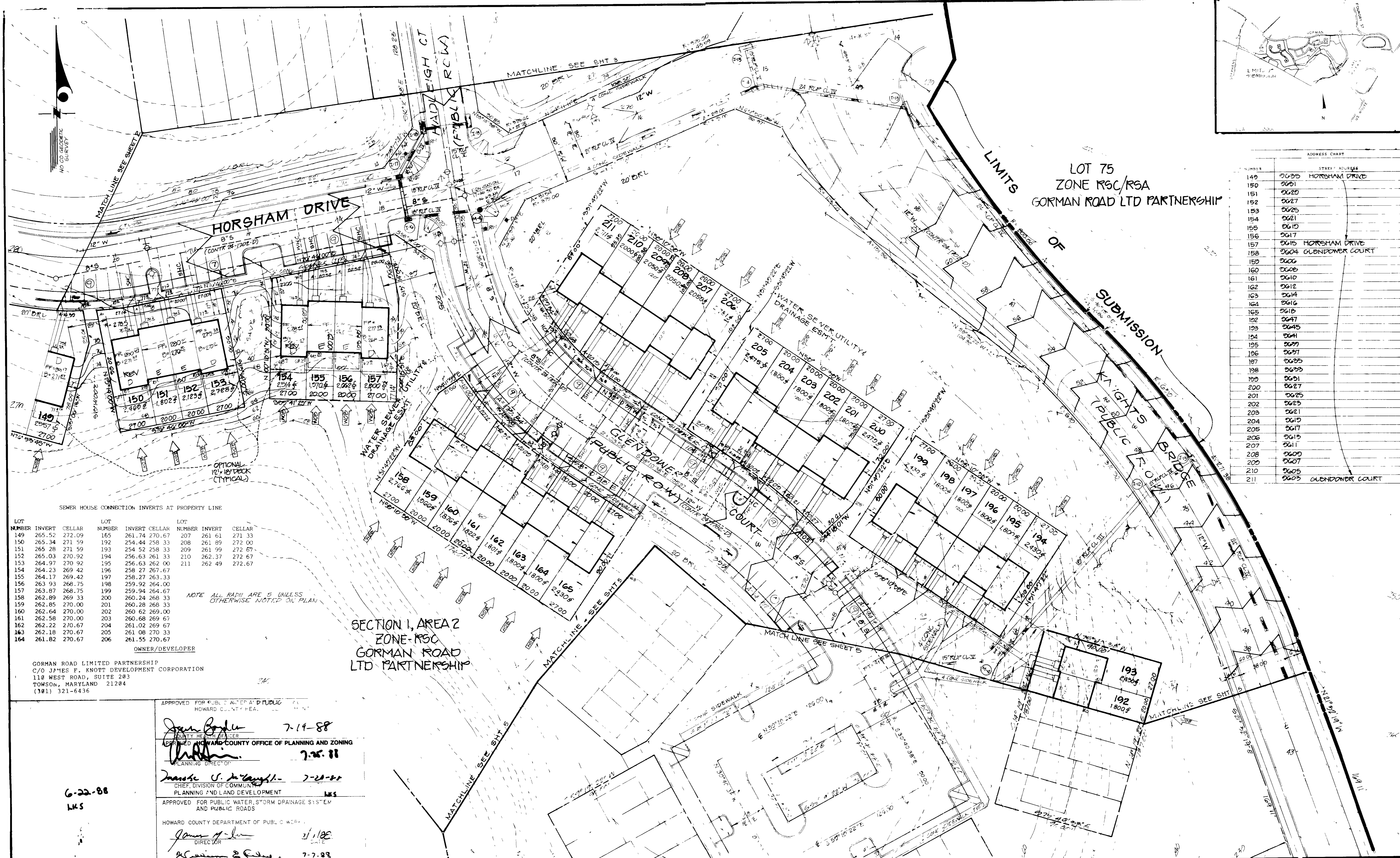
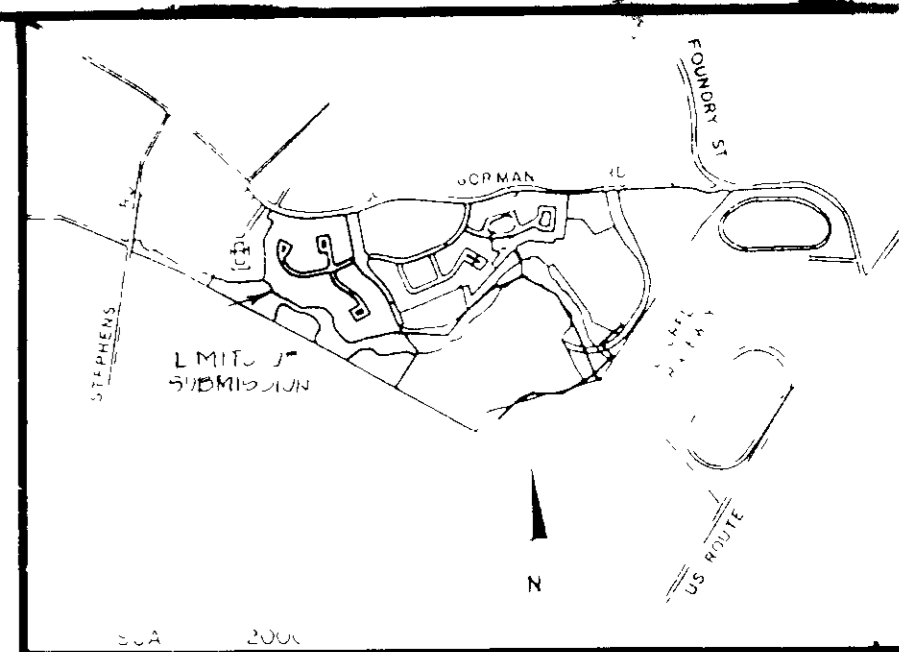
BOWLING BROOK FARMS
 SECTION I, AREA 2
 LOTS 72 THRU 211
 A RESUBDIVISION OF BOLLING BROOKE, LOT 2
 TAX MAP 47 PARCEL 141
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SURVEY PHR4A	DATE 3/26/87
DESIGN JOW	
DRAWN KNC/SRP	SHEET 3 of 14
CHECKED WJK	
SCALE 1"=30'	FILE NO 2184-1-0
CL 2	

NO.	DESCRIPTION	DATE	APPROVED	DATE
1	ADD ORIGINAL LOTS & ADD NEW TO UNITS	10/16/86		
2	REVISED FOR 100' CO.	6/1/87		
3	REVISED FOR 100' CO.	4/12/88		

REVISION APPROVED BY





ADDRESS CHART

NUMBER	STREET ADDRESS
149	0605 HORSHAM DRIVE
150	0601
151	0620
152	0627
153	0625
154	0621
155	0615
156	0617
157	0615 HORSHAM DRIVE
158	0604 GLENPOWER COURT
159	0600
160	0608
161	0610
162	0612
163	0614
164	0616
165	0618
166	0617
167	0615
168	0613
169	0611
170	0609
171	0607
172	0605
173	0603
174	0601
175	0599
176	0597
177	0595
178	0593
179	0591
180	0589
181	0587
182	0585
183	0583
184	0581
185	0579
186	0577
187	0575
188	0573
189	0571
190	0569
191	0567
192	0565
193	0563
194	0561
195	0559
196	0557
197	0555
198	0553
199	0551
200	0549
201	0547
202	0545
203	0543
204	0541
205	0539
206	0537
207	0535
208	0533
209	0531
210	0529
211	0527 GLENPOWER COURT

SEWER HOUSE CONNECTION INVERTS AT PROPERTY LINE

LOT NUMBER	INVERT	CELLAR	LOT NUMBER	INVERT	CELLAR	LOT NUMBER	INVERT	CELLAR
149	265.52	272.09	165	261.74	270.67	207	261.61	271.33
150	265.34	271.59	192	254.44	258.33	208	261.89	272.00
151	265.28	271.59	193	254.52	258.33	209	261.99	272.67
152	265.03	270.92	194	256.63	261.33	210	262.37	272.67
153	264.97	270.92	195	256.63	262.00	211	262.49	272.67
154	264.23	269.42	196	258.27	267.67			
155	264.17	269.42	197	258.27	263.33			
156	263.93	268.75	198	259.92	264.00			
157	263.87	268.75	199	259.94	264.67			
158	262.89	269.33	200	260.24	268.33			
159	262.85	270.00	201	260.28	268.33			
160	262.64	270.00	202	260.62	269.00			
161	262.58	270.00	203	260.68	269.67			
162	262.22	270.67	204	261.02	269.67			
163	262.18	270.67	205	261.08	270.33			
164	261.82	270.67	206	261.55	270.67			

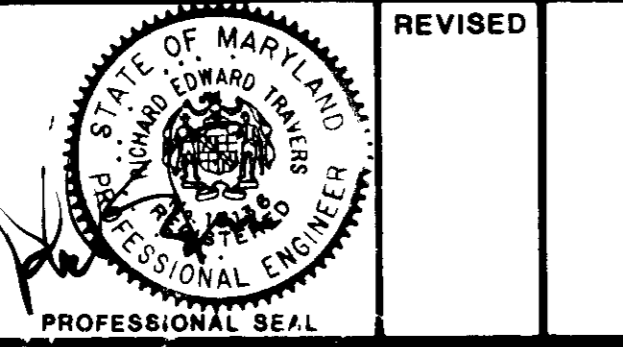
NOTE ALL RADII ARE 5 UNLESS OTHERWISE NOTED ON PLAN

OWNER/DEVELOPER
GORMAN ROAD LIMITED PARTNERSHIP
C/O JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD, SUITE 203
TOWSON, MARYLAND 21284
(301) 321-6436

APPROVED FOR PUBLIC WATER AND PUBLIC DRAINAGE HOWARD COUNTY, M.D.
Jan Boyle 7-19-88
COUNTY ENGINEER
APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
John 7-25-88
PLANNING DIRECTOR
APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS
James J. McLaughlin 7-28-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS
James J. McLaughlin 7-28-88
DIRECTOR
APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS
James J. McLaughlin 7-28-88
CHIEF, BUREAU OF ENGINEERING

HOWARD COUNTY APPROVAL

NO.	DESCRIPTION	DATE	APPROVED	DATE
1	ADD OPTIONAL DECKS	7-28-88		
2	REVISED PER HO CO	8-1-88		
3	REVISED PER HO CO	8-12-88		



REVISIONS

SITE DEVELOPMENT PLAN

LOTS 149-165 & 192-211

Patton Harris Rust and Associates
A Professional Corporation
Engineers, Surveyors, Planners and Landscape Architects
7609 Standish Place, Rockville, MD 20855 (301)762-2220

BOWLING BROOK FARMS
SECTION 1, AREA 2
LOTS 72 THRU 211
A RESUBDIVISION OF BOLLING BROOKE, LOT 2
TAX MAP 47 PARCEL 141
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SURVEY PHR 4A DATE 3-26-87
DESIGN JOW
DRAWN KHSR SHEET 4 of 14
CHECKED SCALE 1" = 30' FILE NO 218-1-1
C.I. 2

CONNECTION INVERTS AT PROPERTY LINE AND MINIMUM CELLAR ELEVATIONS

LOT NUMBER	INVERT	CELLAR	LOT NUMBER	INVERT	CELLAR
166	259.28	264.33	182	254.77	259.33
167	259.30	263.67	183	254.67	258.67
168	257.96	263.00	184	254.26	258.00
169	257.98	262.33	185	254.16	257.33
170	256.74	261.67	186	253.77	257.33
171	256.80	261.67	187	253.67	257.33
172	256.41	261.33	188	251.30	257.00
173	256.37	260.67	189	251.30	257.67
174	255.94	260.67	190	252.31	257.67
175	255.90	260.67	191	252.39	257.67
176	255.48	260.00			
177	255.42	260.00			
178	255.36	259.33			
179	255.40	259.33			
180	255.34	259.33			
181	255.30	259.33			

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
166	0622 GLENDOWER COURT
167	0624
168	0626
169	0628
170	0630
171	0632
172	0634
173	0636
174	0638
175	0640
176	0642
177	0644
178	0646
179	0648
180	0650
181	0652
182	0654
183	0656
184	0658
185	0660
186	0662
187	0664
188	0666
189	0668
190	0670
191	0672 GLENDOWER COURT

NOTE ALL RADII ARC 5' UNLESS NOTED OTHERWISE ON PLAN

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

James F. Rust 7-12-88
COUNTY HEALTH OFFICER DATE

John A. ... 7-26-88
PLANNING DIRECTOR DATE

David S. ... 7-28-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS.

James F. Rust 7/7/88
DIRECTOR DATE

McCrain & ... 7-7-88
CHIEF, BUREAU OF ENGINEERING DATE

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY APPROVAL

NO.	DESCRIPTION	DATE	APPROVED	DATE
2	REVISED FOR H.C.O.	6/1/88		
1	REVISED FOR H.C.O.	4/12/88		

REVISION APPROVED BY



SITE DEVELOPMENT PLAN

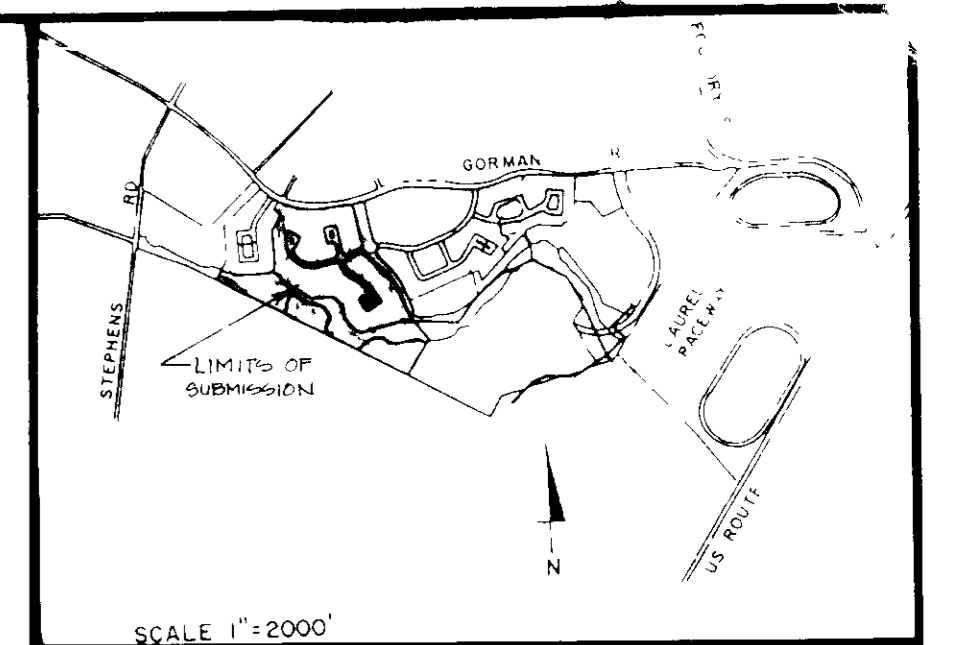
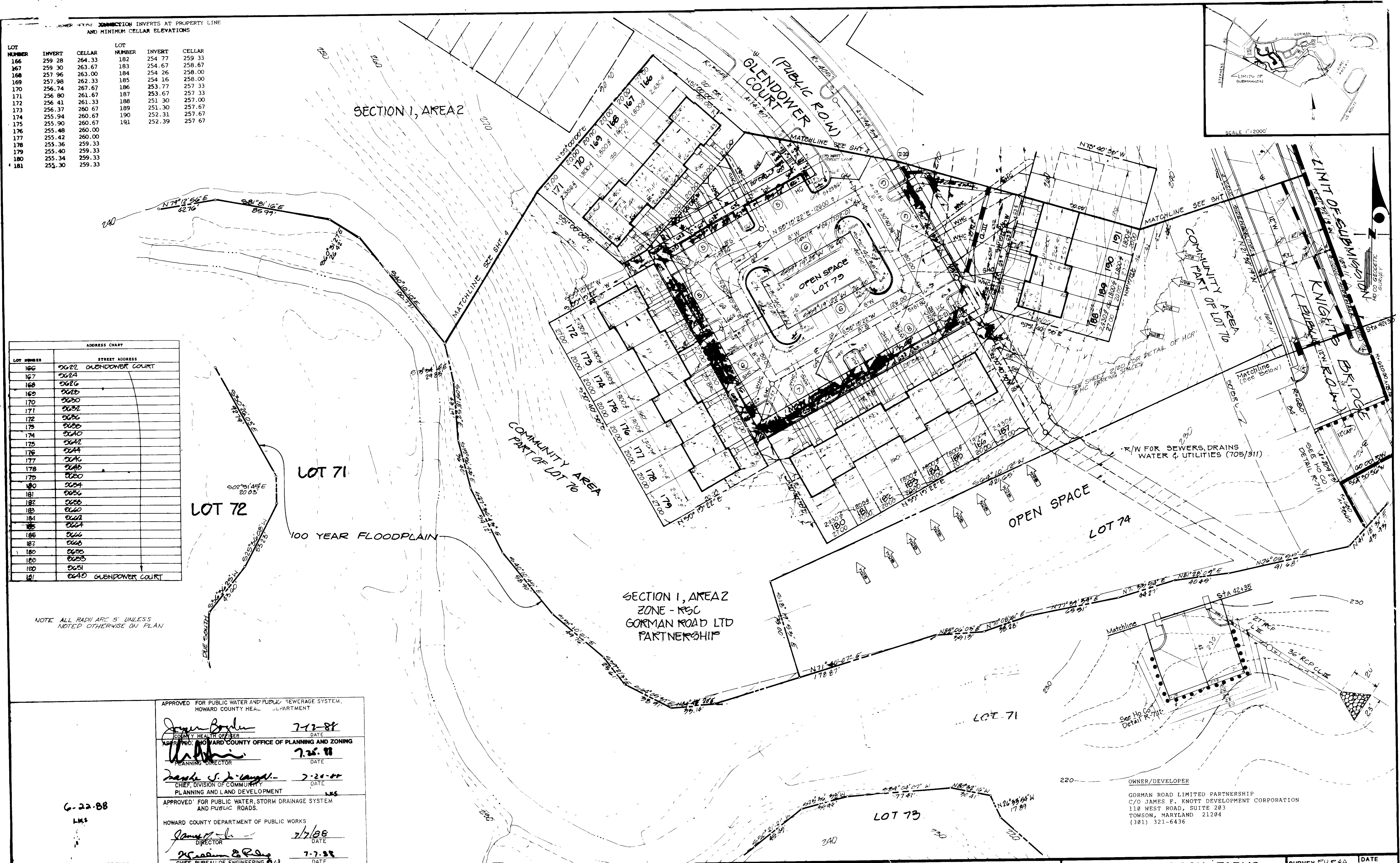
LOTS 166-191

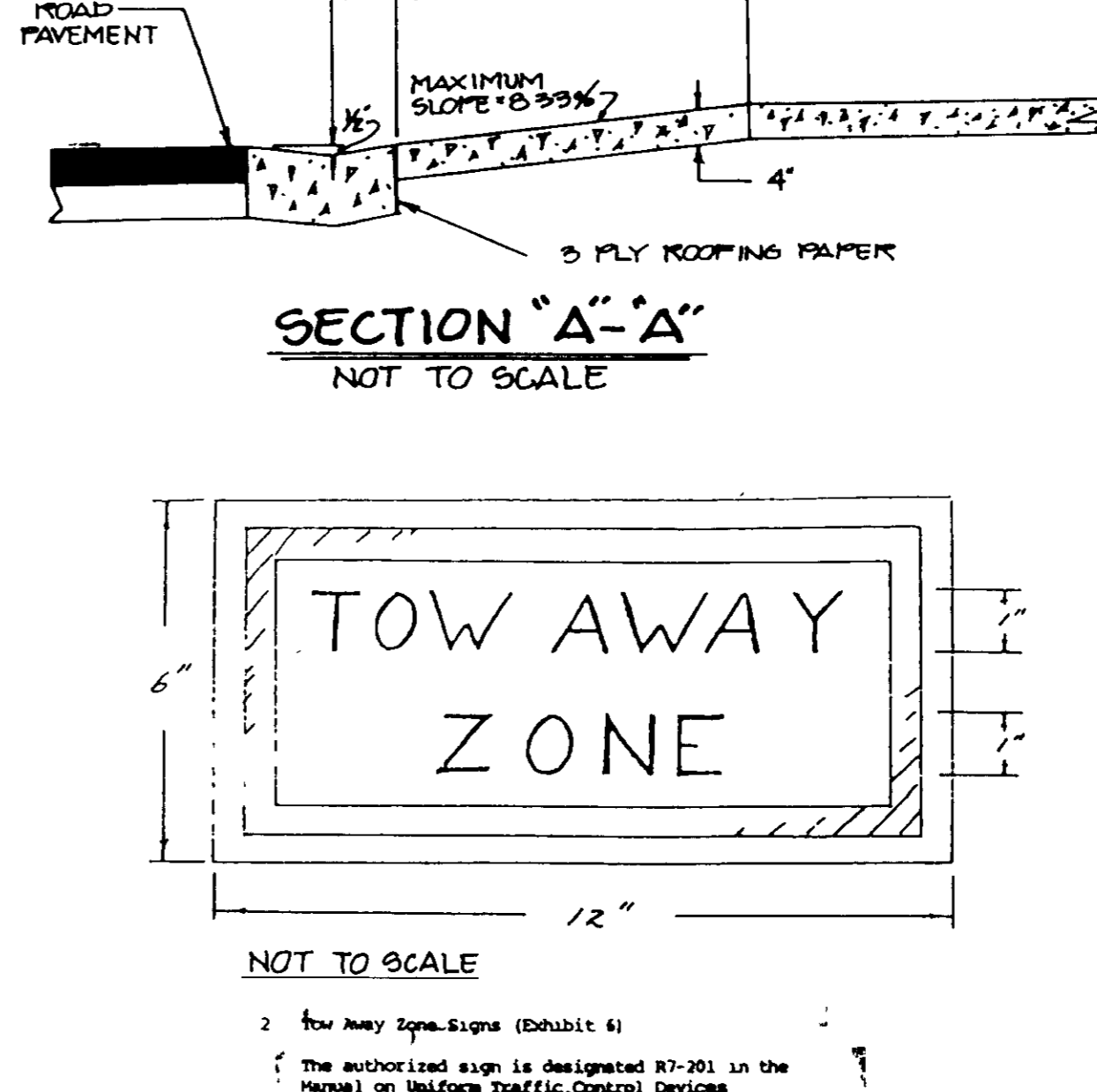
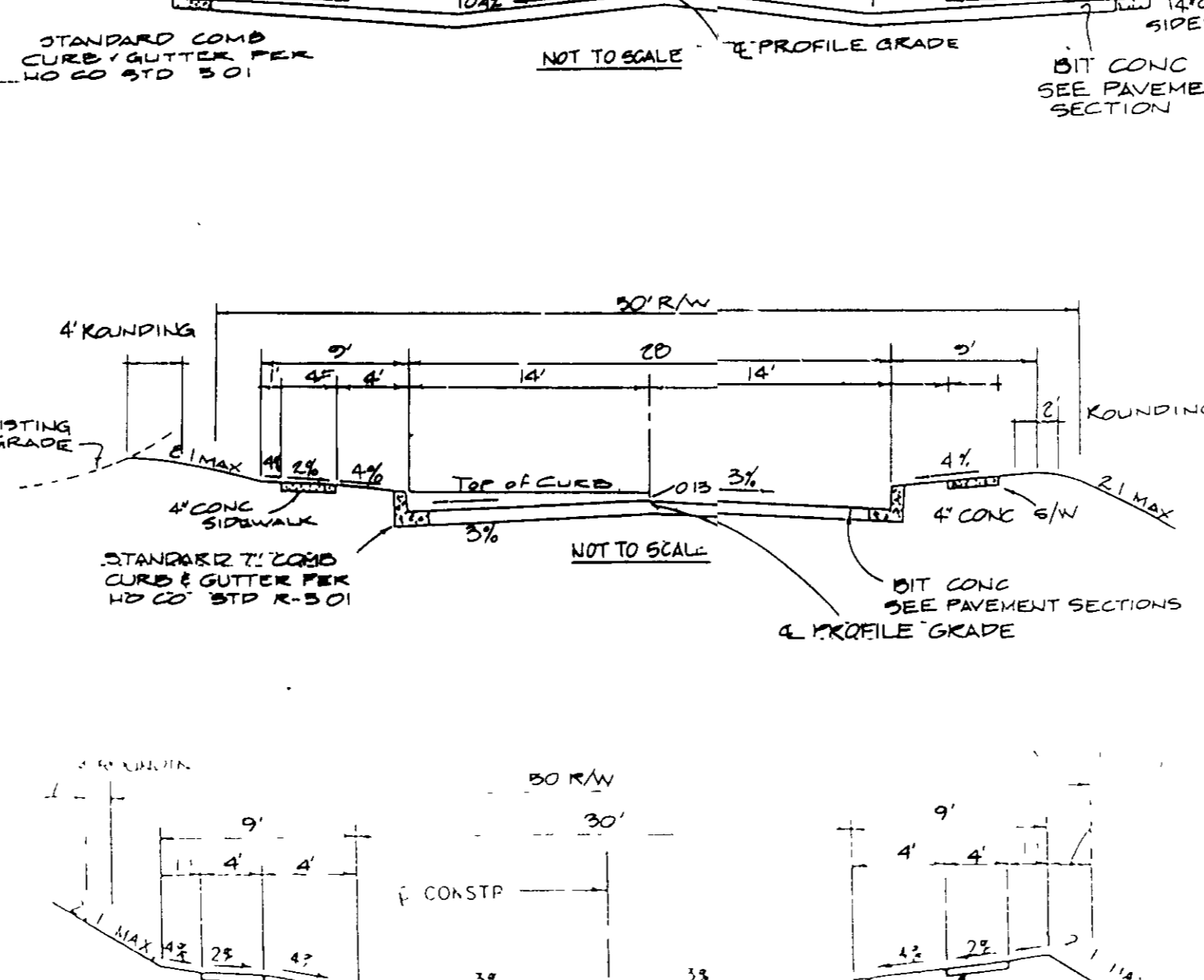
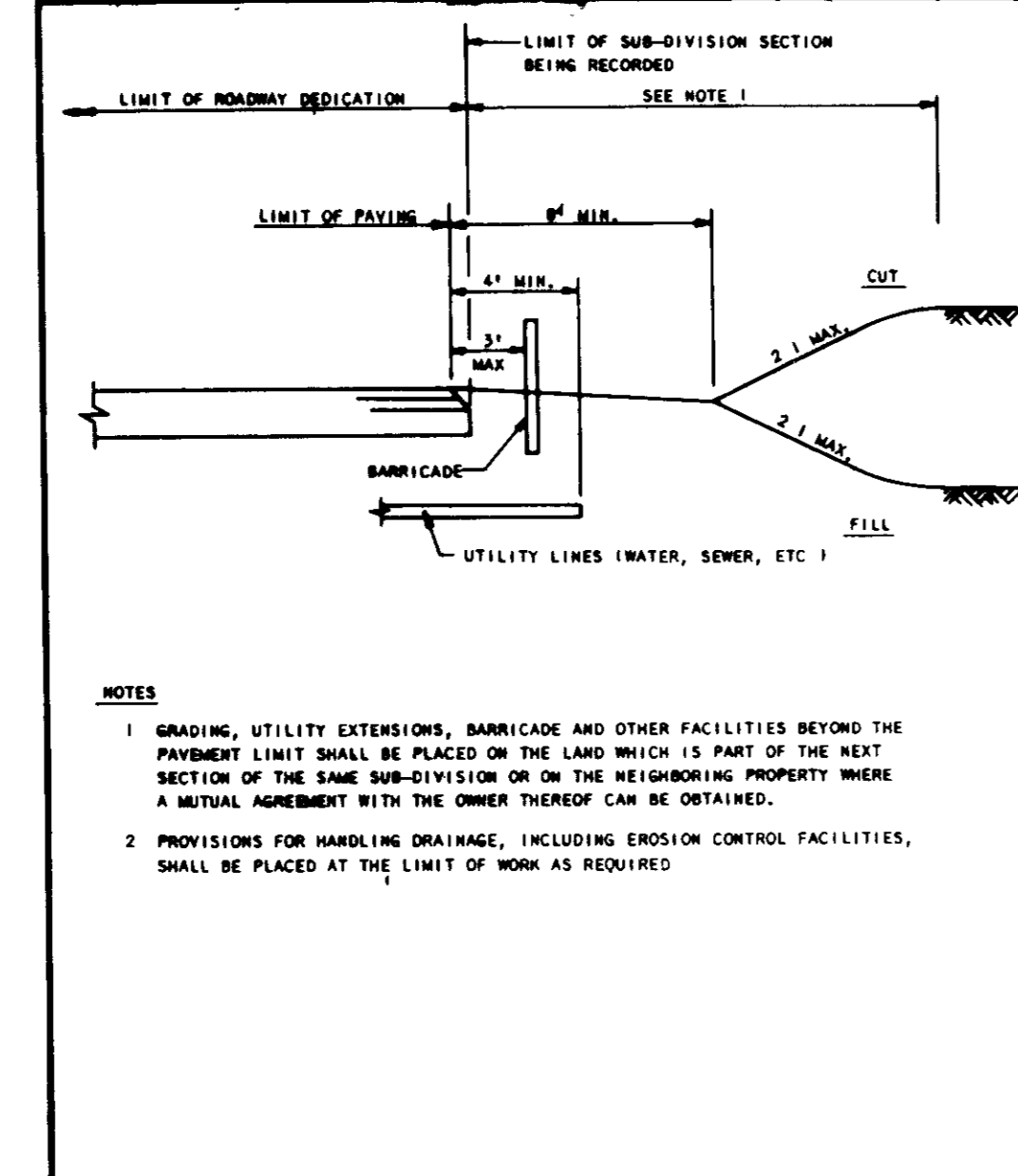
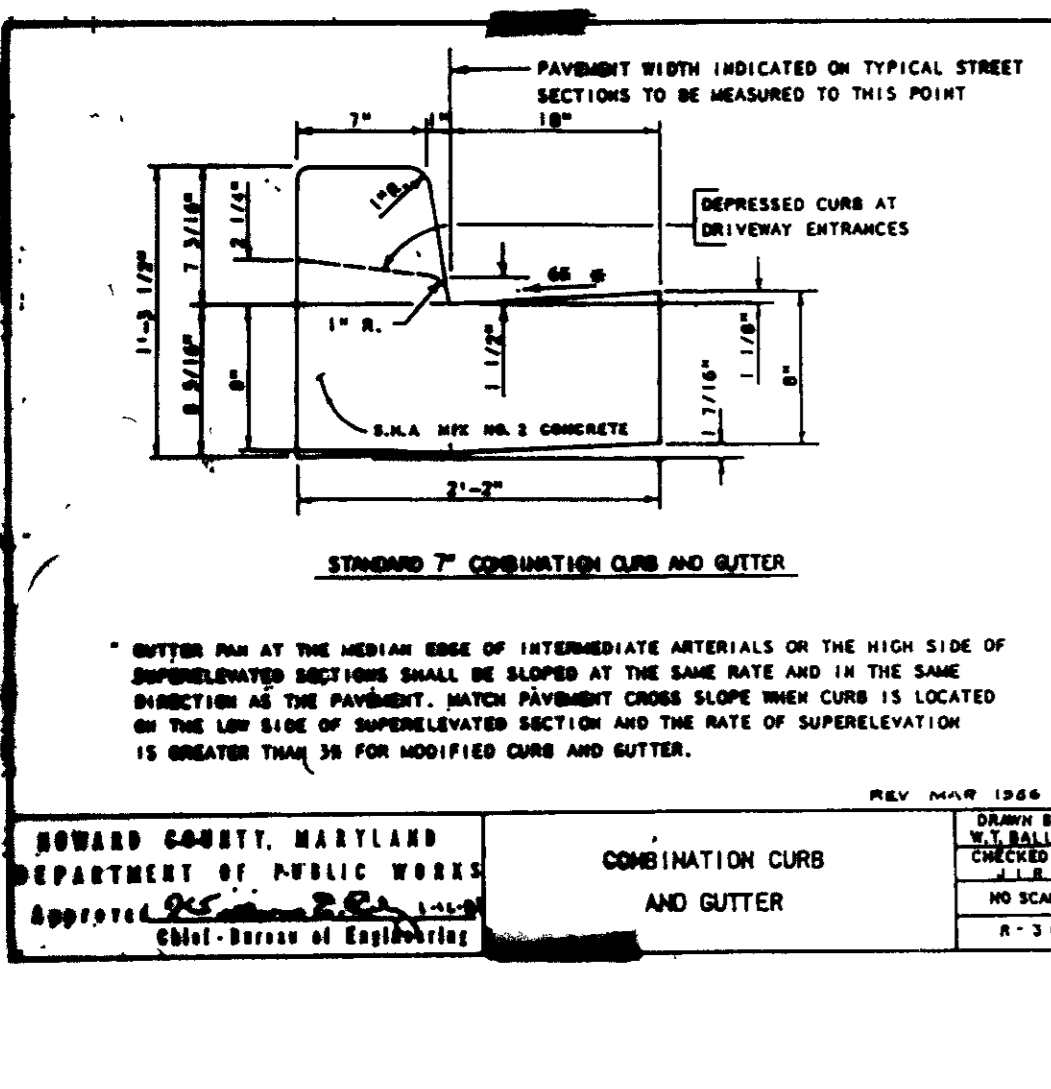
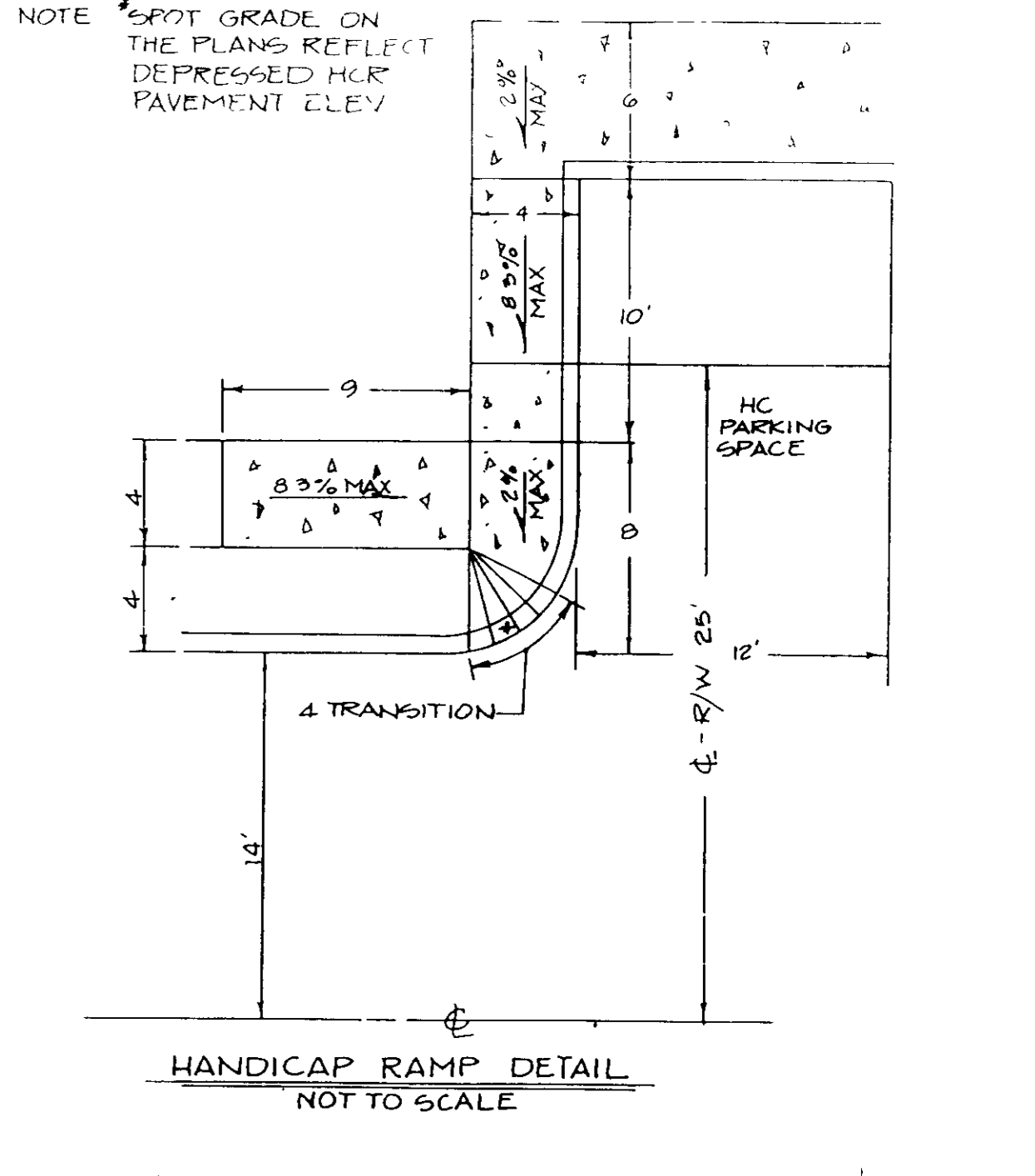
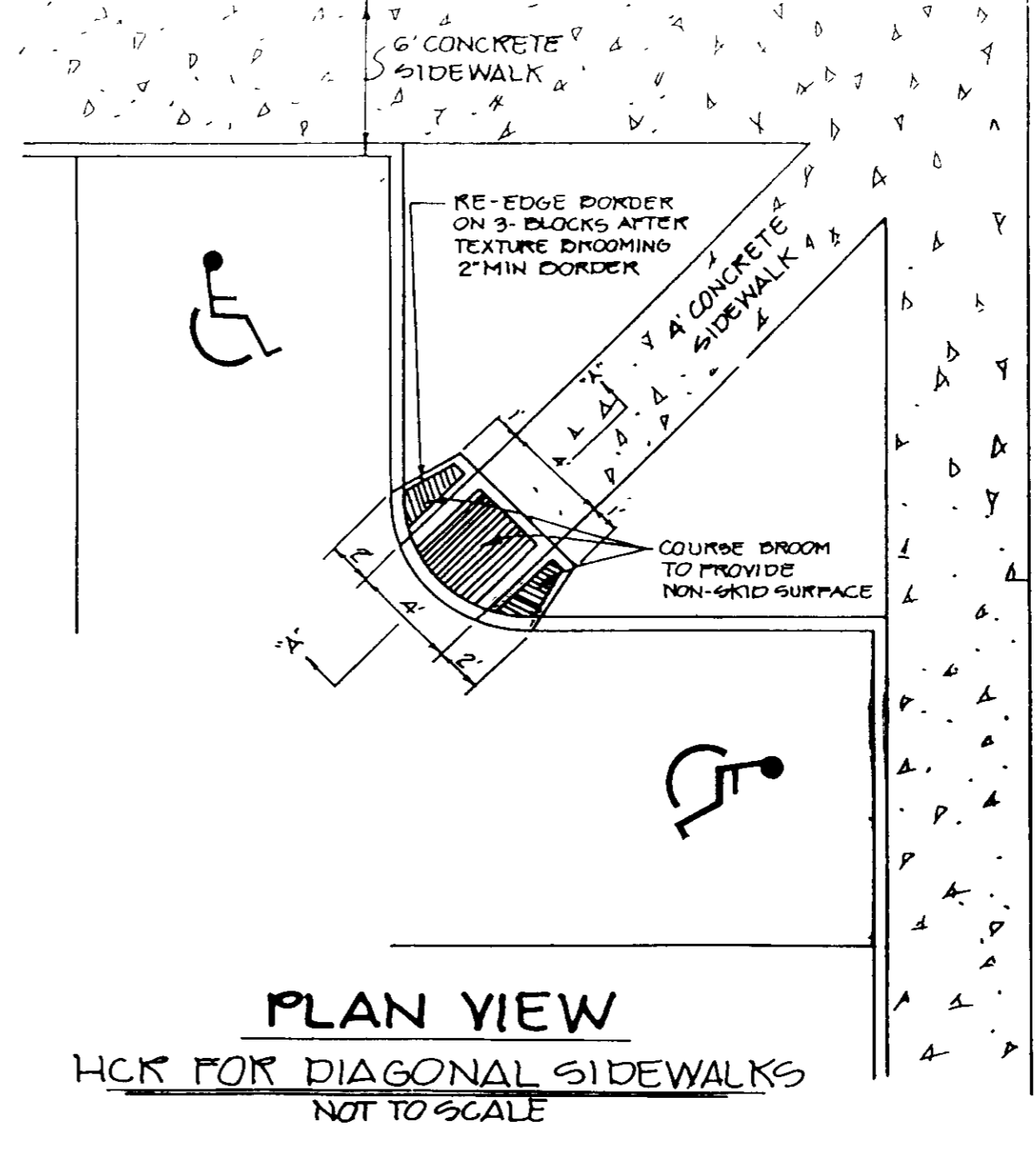
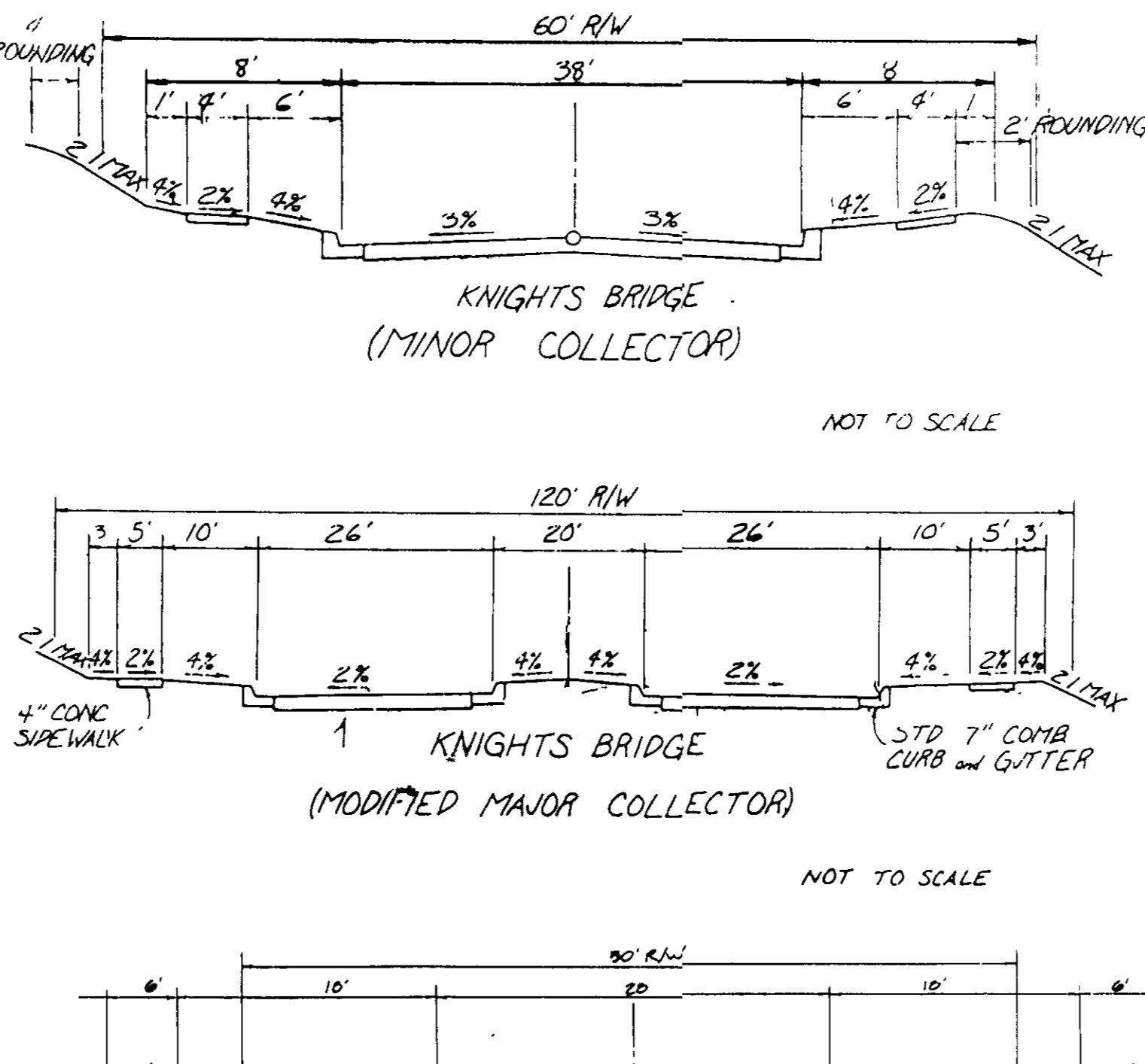
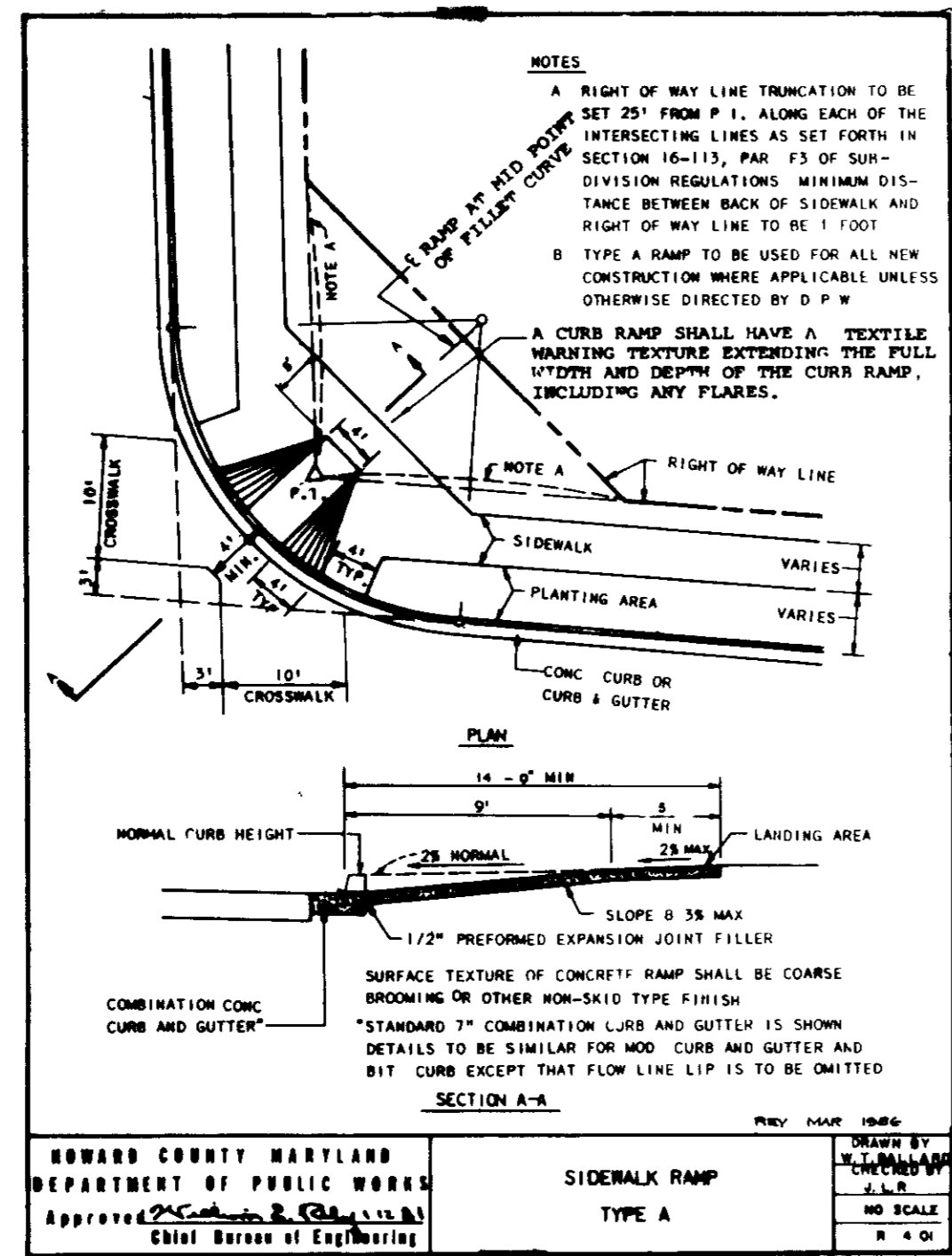
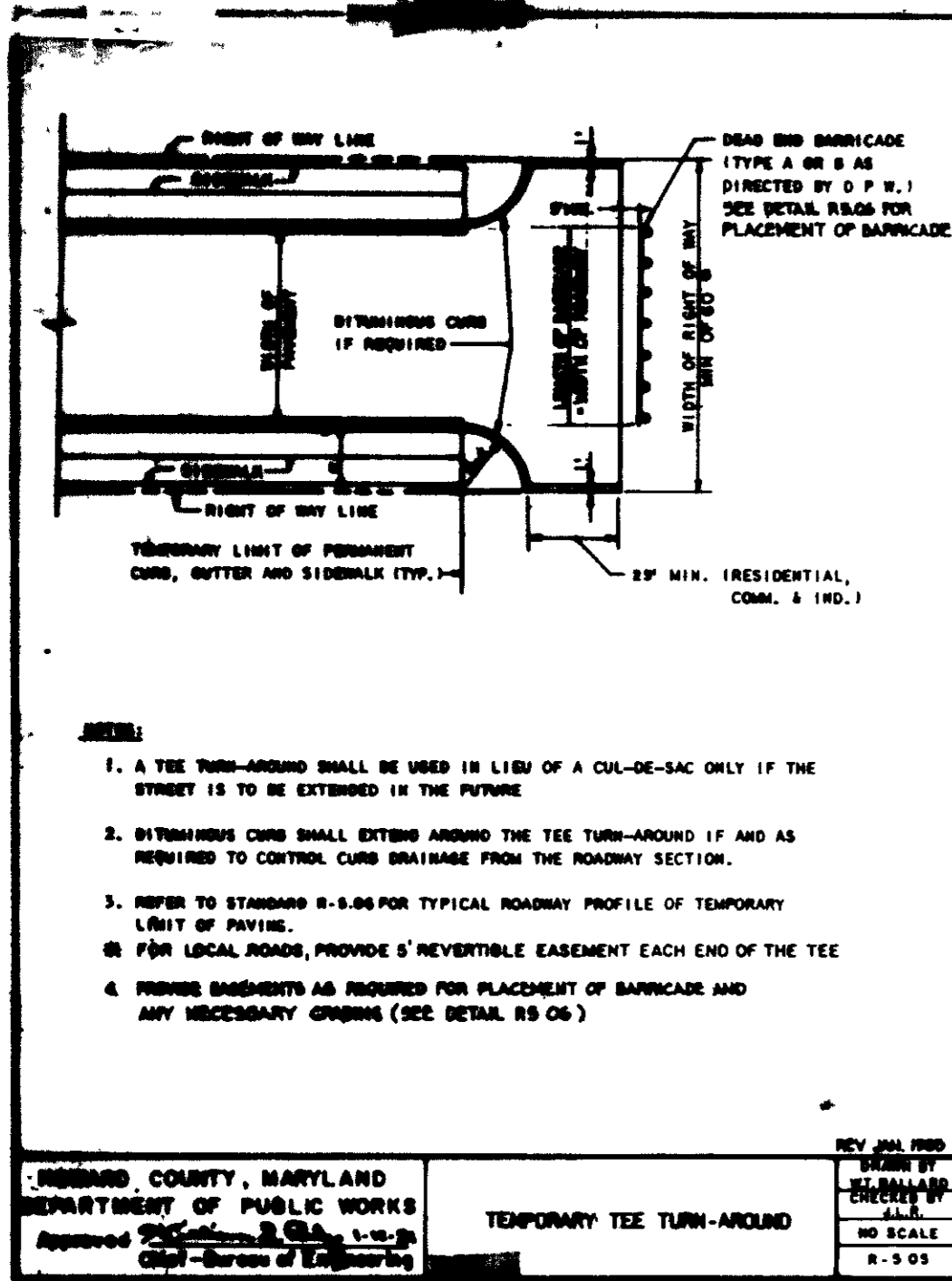
Patton Harris Rust and Associates
A Professional Corporation
Engineers, Surveyors, Planners and Landscape Architects
7609 Standish Place, Rockville, MD 20855 (301)762-2220

BOWLING BROOK FARMS
SECTION 1, AREA 2
LOTS 72 THRU 211
A RESUBDIVISION OF BOLLING BROOKE, LOT 2
TAX MAP 47 PARCEL 141
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SURVEY	CHK'd	DATE
DESIGN	JDW	3-26-87
DRAWN	KNICSR	SHEET
CHECKED		5 of 14
SCALE	1" = 30'	FILE NO.
		2184-1-C

SDP-88-183

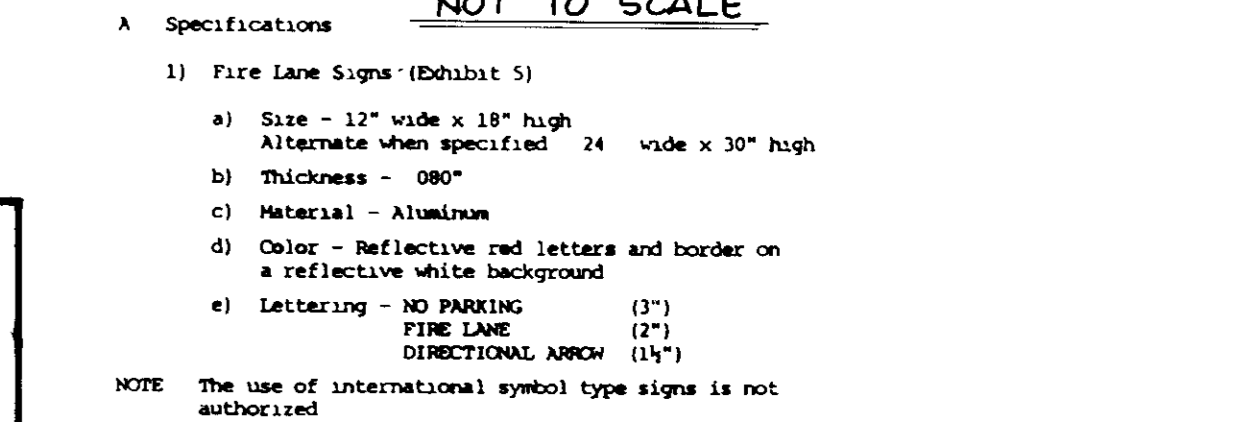
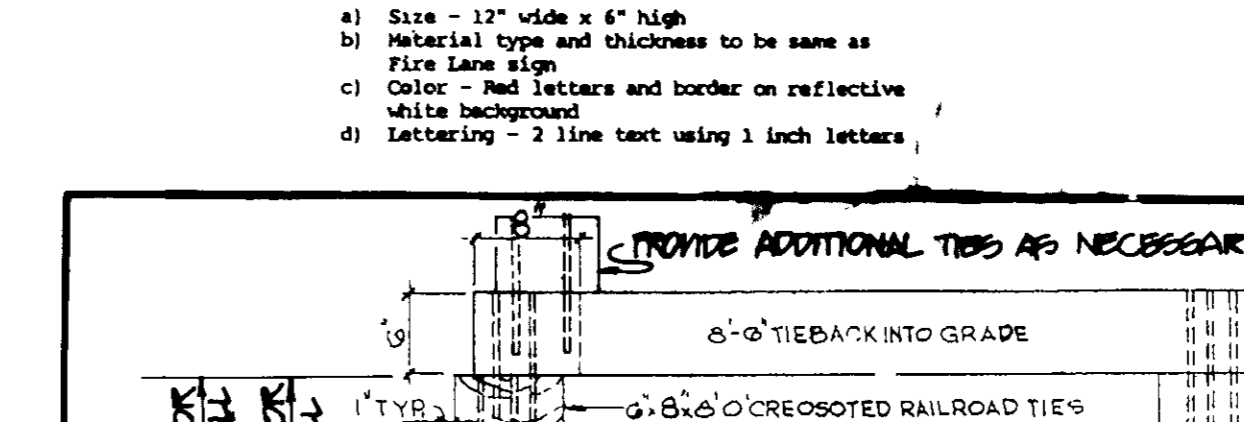
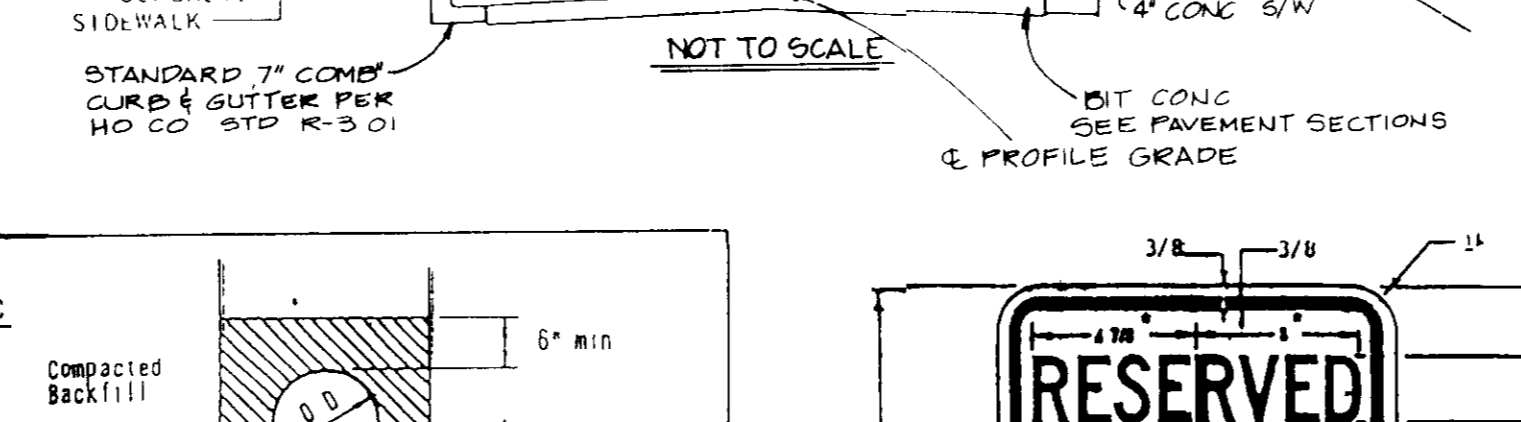




***NOTE: USE SECTION P-2 FOR ALL PARKING AND ROADWAY PAVING.**

RESIDENTIAL ZONES	CONCRETE SURFACE	CONCRETE SURFACE
LOCAL CUL-DE-SACS, ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL PARKING AREAS	1 1/2" x 21" CONC. SURFACE	1 1/2" x 21" CONC. SURFACE
APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	2 1/2" x 21" CONC. SURFACE	2 1/2" x 21" CONC. SURFACE

CLASS C	CLASS D
Compacted Backfill	Compacted Granular Material
6" MIN	6" MIN
1/8" O.D.	1/8" O.D.



APPROVED FOR PUBLIC WATER AND STORM DRAINAGE SYSTEM, HOWARD COUNTY HEALTH DEPARTMENT

APPROVED FOR PLANNING AND ZONING

APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

PIPE BEDDING CLASSES

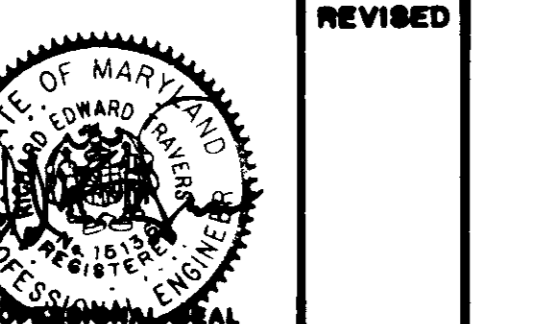
DEPTH OF BEDDING MATERIAL BELOW PIPE	D	d (min)
27" & smaller	3"	3"
30" thru 60"	4"	4"
66" & larger	6"	6"

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Figure 11.4
 Date 5-15-78
 Revised

OWNER/DEVELOPER

GORMAN ROAD LIMITED PARTNERSHIP
 C/O JAMES P. KNOTT DEVELOPMENT CORPORATION
 110 WEST ROAD, SUITE 203
 TOWSON, MARYLAND 21284

REVISION APPROVED BY	DATE	APPROVED	DATE
2	REVISED FOR NO CO	[Signature]	6/1/80
1	REVISED FOR 14"	[Signature]	4/12/80



DETAIL SHEET

Patton Harris Rust and Associates
 A Professional Corporation
 Engineers, Surveyors, Planners and Landscape Architects
 7609 Standish Place Rockville, Md. 20855 (301) 762-2220

BOWLING BROOK FARMS
 SECTION 1, AREA 2
 LOTS 72 THRU 211
 A RESUBDIVISION OF BOLLING BROOKE, LOT 2
 TAX MAP 47 PARCEL 141
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SURVEY	DATE
DESIGN MJK	3/20/87
DRAWN JDW	SHEET
CHECKED	6 OF 14
SCALE AS NOTED	FILE NO
C.L.	284-1-0

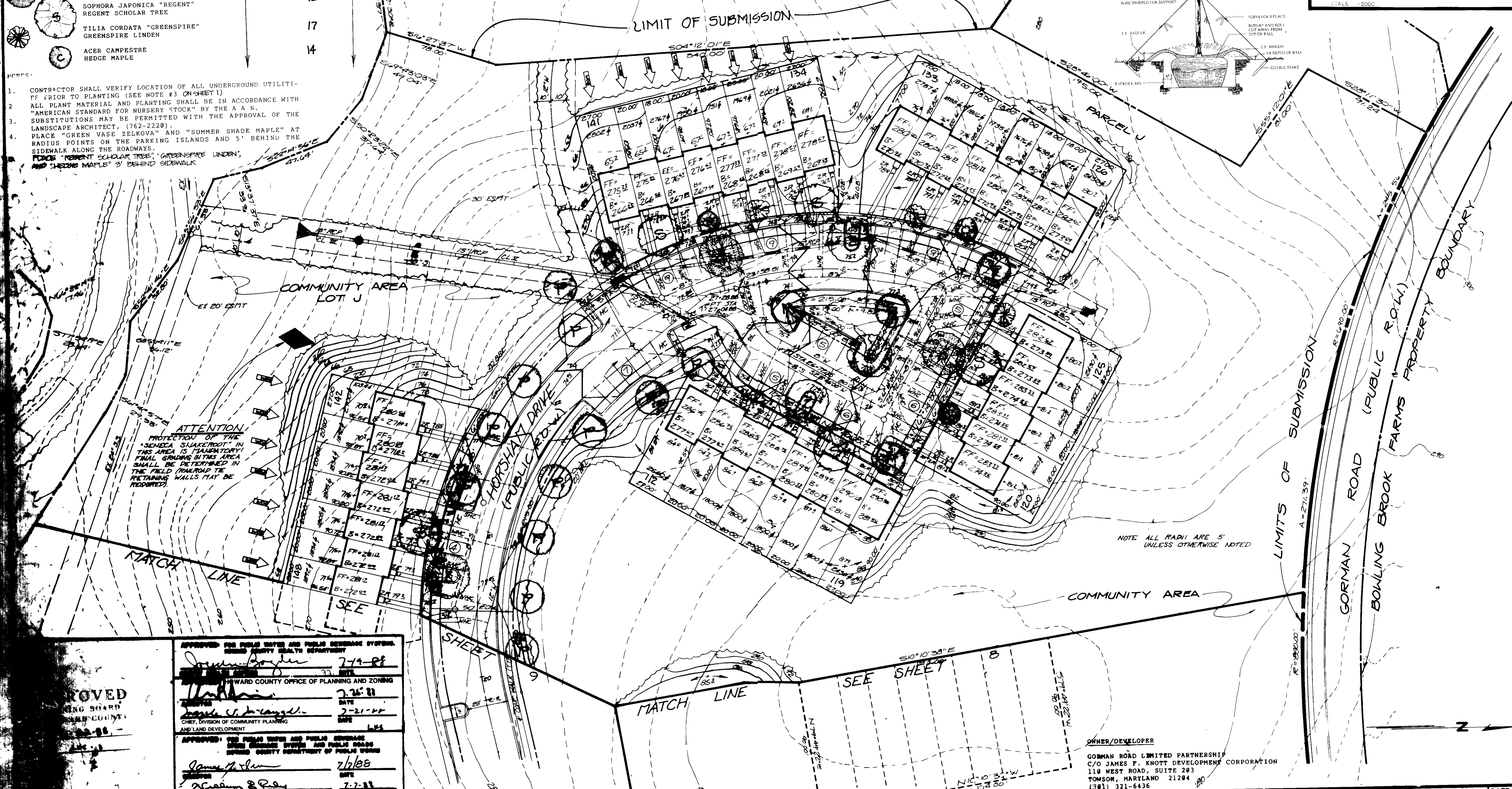
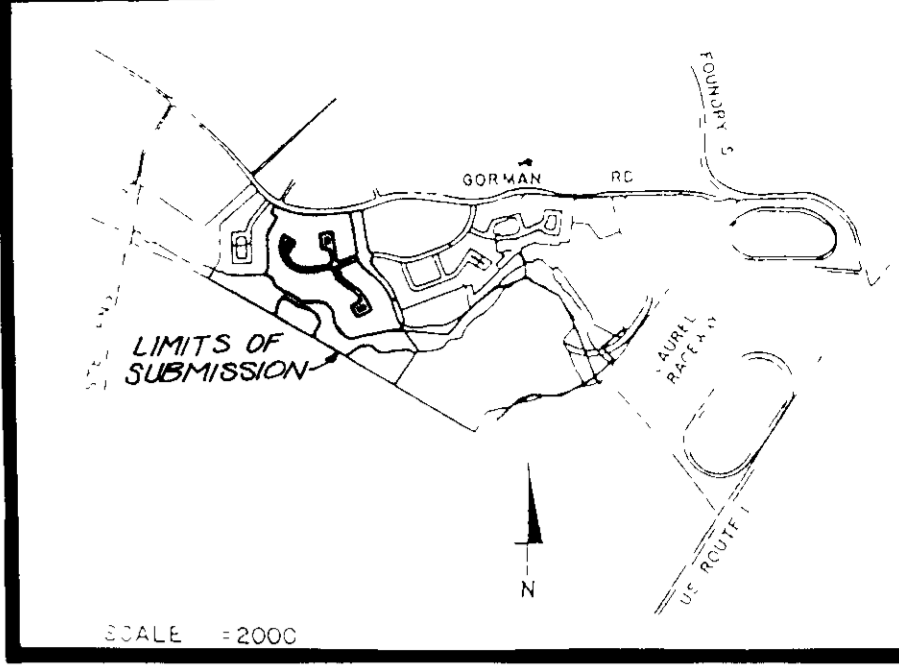
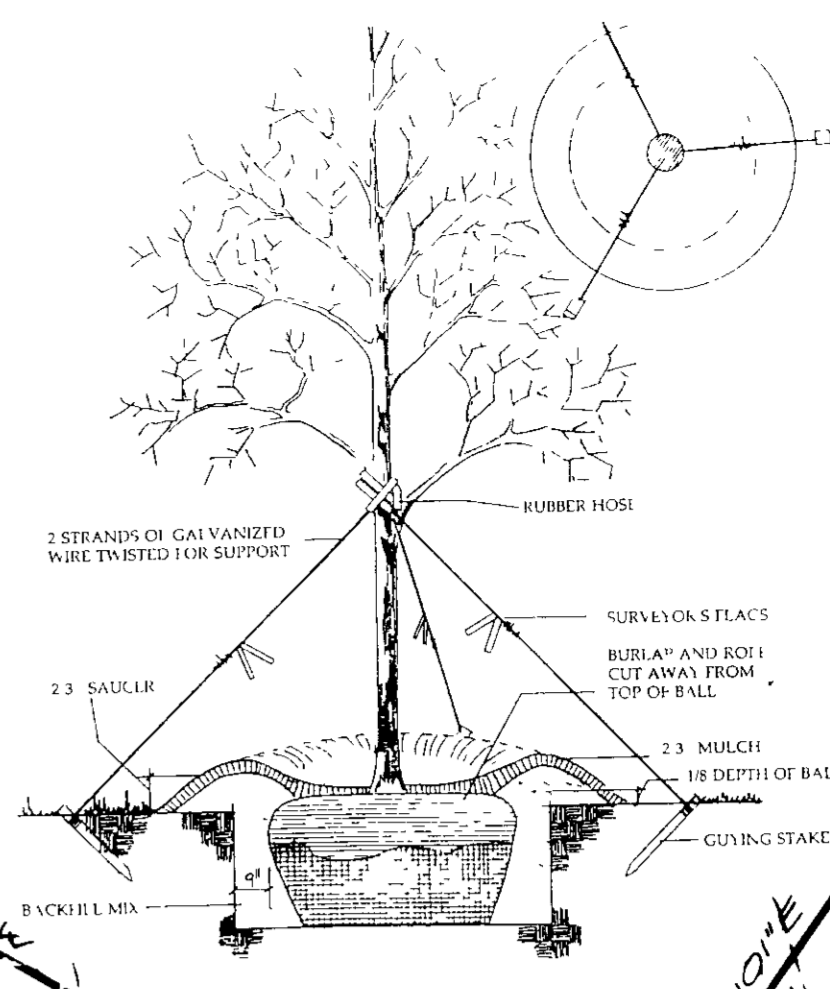
LANDSCAPE DEVELOPMENT INFORMATION
PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUANTITY	REMARKS
2	ZELKOVA SERRATA "GREEN VASE" GREEN VASE ZELKOVA	2 1/2"-3" CAL 12-14' HT	22	B & B
3	ACER PLATANOIDES "SUMMERSHADE" SUMMER SHADE MAPLE		86	
4	SOPHORA JAPONICA "REGENT" REGENT SCHOLAR TREE		16	
5	TILIA CORDATA "GREENSPIRE" GREENSPIRE LINDEN		17	
6	ACER CAMPESTRE HEDGE MAPLE		14	

- NOTES:
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO PLANTING (SEE NOTE #3 ON SHEET 1)
 - ALL PLANT MATERIAL AND PLANTING SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARD FOR NURSERY STOCK" BY THE A.A.N.
 - SUBSTITUTIONS MAY BE PERMITTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, (762-2220).
 - PLACE "GREEN VASE ZELKOVA" AND "SUMMER SHADE MAPLE" AT RADIUS POINTS ON THE PARKING ISLANDS AND 5' BEHIND THE SIDEWALK ALONG THE ROADWAYS.
PLACE "REGENT SCHOLAR TREE", "GREENSPIRE LINDEN", AND "HEDGE MAPLE" 3' BEHIND SIDEWALK

SECTION I, AREA I
R&C ZONE
GORMAN ROAD LTD.
PARTNERSHIP

TYPICAL TREE PLANTING DETAIL



ATTENTION:
PROTECTION OF THE "SENECA" SHAKEWOOD IN THIS AREA IS MANDATORY! FINAL GRADING IN THIS AREA SHALL BE DETERMINED IN THE FIELD (DRAINAGE TO RETAINING WALLS MAY BE REQUIRED).

NOTE: ALL RAPII ARE 5' UNLESS OTHERWISE NOTED

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	<i>[Signature]</i> DATE: 7-19-88
APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING	<i>[Signature]</i> DATE: 7-26-88
APPROVED FOR CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	<i>[Signature]</i> DATE: 7-21-88
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC WATERS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	<i>[Signature]</i> DATE: 7/16/88
APPROVED FOR	<i>[Signature]</i> DATE: 7-7-88

OWNER/DEVELOPER
GORMAN ROAD LIMITED PARTNERSHIP
C/O JAMES F. KNOTT DEVELOPMENT CORPORATION
110 WEST ROAD, SUITE 283
TOWSON, MARYLAND 21284
(301) 321-6436

APPROVED
PLANNING BOARD
HOWARD COUNTY
7-22-88



LANDSCAPE PLAN

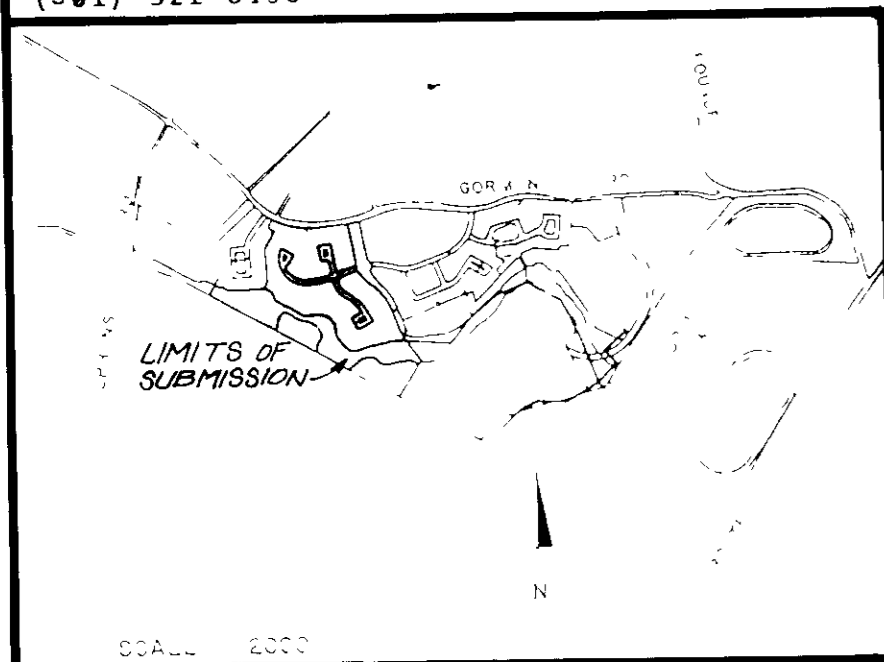
Patton Harris Rust and Associates
A Professional Corporation
Engineers, Surveyors, Planners and Landscape Architects
7809 Standish Place, Rockville, MD 20865 (301) 762-2220

BOWLING BROOK FARMS SECTION I, AREA 2 LOTS 72 THRU 211 A RESUBDIVISION OF BOLLING BROOKE, LOT 2 TAX MAP 47 PARCEL 141 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SURVEY DESIGN JOW DRAWN KNC/SR CHECKED SCALE 1" = 30' C.I. 2'	DATE 3/26/87 SHEET 7 OF 14 FILE NO. 2184-1-0
--	--	--	---

THESE PLANS ARE FOR LANDSCAPING ONLY REFER TO SITE DEVELOPMENT PLANS FOR OTHER INFORMATION.

OWNER/DEVELOPER

GORMAN ROAD LIMITED PARTNERSHIP
C/O JAMES F. KNOTT DEVELOPMENT CORPORATION
118 WEST ROAD, SUITE 203
TOWSON, MARYLAND 21284
(301) 321-6436



NOTE: ALL RADII ARE 5' UNLESS OTHERWISE NOTED

WATER, SEWER, UTILITY & DRAINAGE EASEMENT

MATCH LINE SEE SHEET 7

SEE SHEET 9

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 7-19-88
DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
[Signature] 7-26-88
DATE

DIRECTOR
[Signature] 7-21-88
DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
LUS

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 7/7/88
DATE

CHIEF BUREAU OF ENGINEERING
[Signature] 7-7-88
DATE

6-22-88
LKS

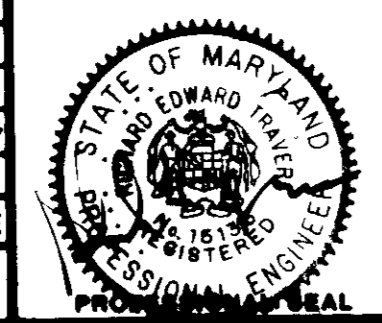
LANDSCAPE PLAN



Patton Harris Rust and Associates
A Professional Corporation
Engineers, Surveyors, Planners and Landscape Architects
7609 Standish Place, Rockville, MD 20855 (301) 788-2220

BOWLING BROOK FARMS
SECTION 1, AREA 2
LOTS 72 THRU 211
A RESUBDIVISION OF BOWLING BROOKE, LOT 2
TAX MAP 47 PARCEL 141
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

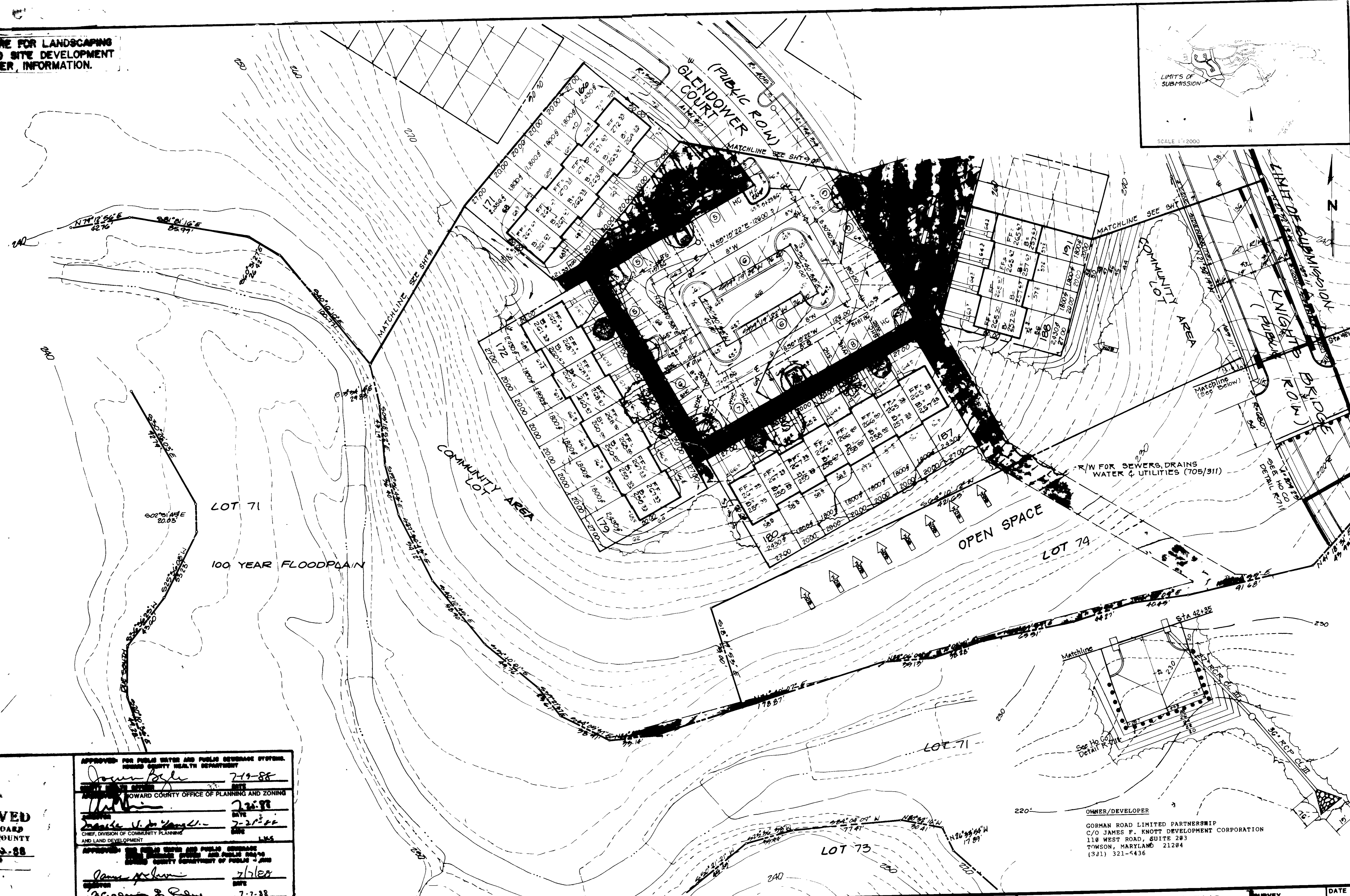
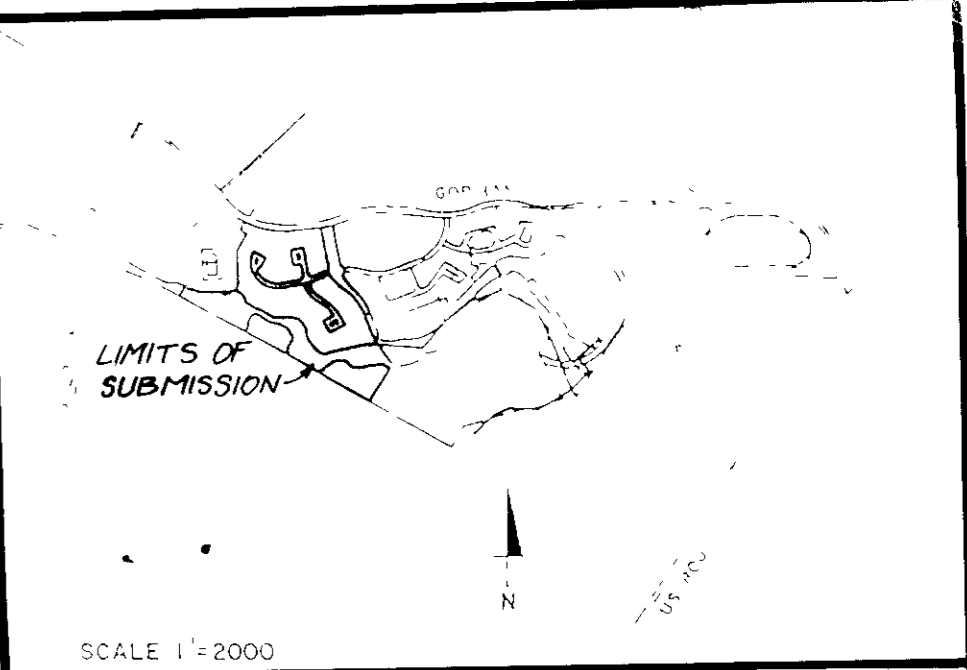
SURVEY	DATE
DRAWN	3/26/88
CHECKED	8/14
SCALE	1" = 50'



NO.	DESCRIPTION	DATE	APPROVED	DATE
2	REVISED PER HQ CO	6/1/88		
1	GENERATE PARCEL JTR	4/12/88		
1	REVISED PER HQ CO			

REVISION APPROVED BY

AREA FOR LANDSCAPING
TO SITE DEVELOPMENT
FOR OTHER INFORMATION.



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

James P. Kelly 7-19-88
DATE

APPROVED FOR ZONING
HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[Signature] 7-26-88
DATE

APPROVED FOR COMMUNITY PLANNING
AND LAND DEVELOPMENT

Charles V. DeYoung 7-27-88
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
SYSTEMS AND PUBLIC UTILITY
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James P. Kelly 7-19-88
DATE

William S. Ray 7-7-88
DATE

OWNER/DEVELOPER
GORMAN ROAD LIMITED PARTNERSHIP
C/O JAMES F. KNOTT DEVELOPMENT CORPORATION
118 WEST ROAD, SUITE 283
TOWSON, MARYLAND 21284
(301) 321-6436

REVISION APPROVED BY	DATE



REVISION

LANDSCAPE PLAN



Patton Harris Rust and Associates
A Professional Corporation
Engineers, Surveyors, Planners and Landscape Architects
7609 Standish Place, Rockville, MD 20855 (301)762-2220

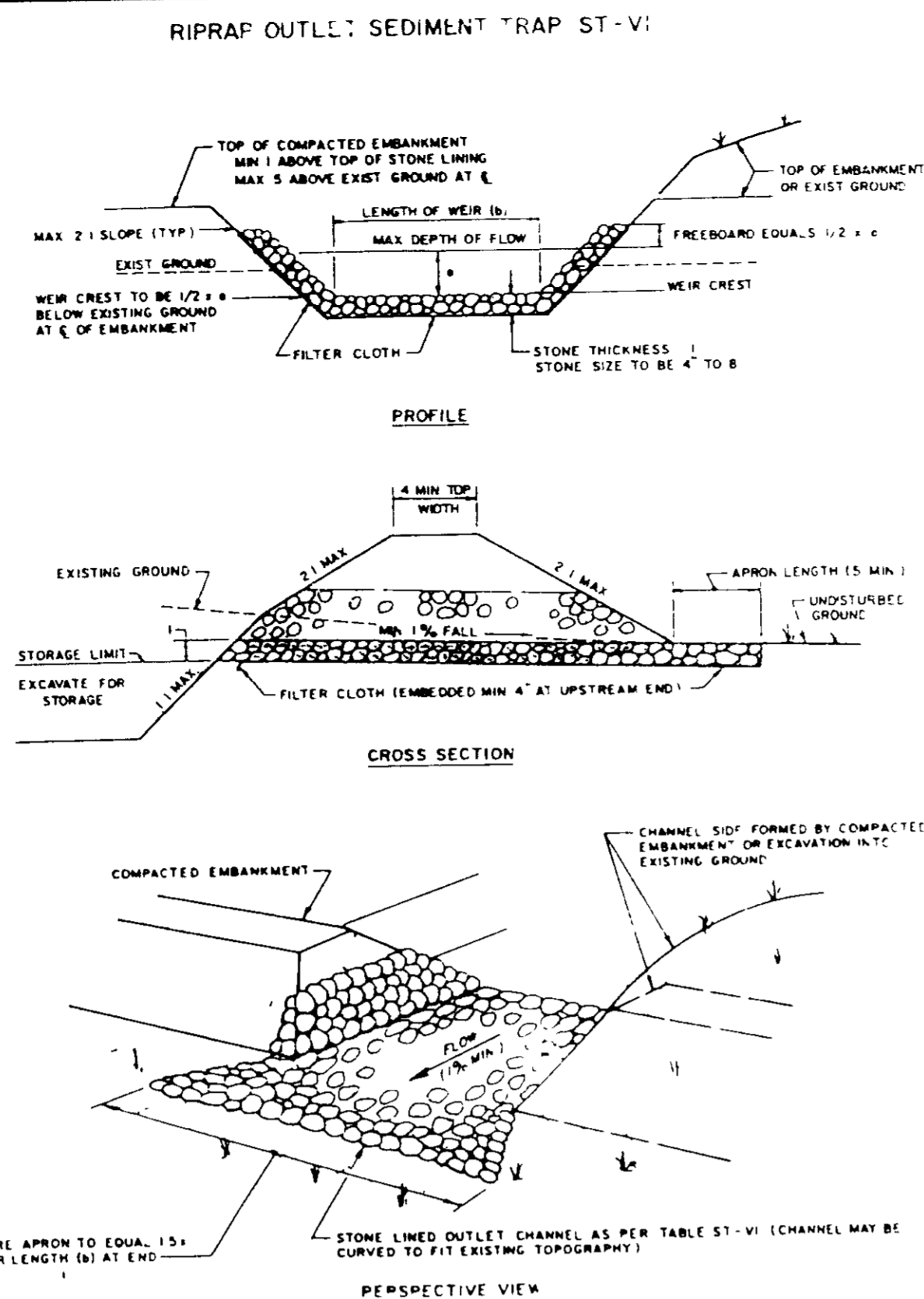
BOWLING BROOK FARMS
SECTION 1, AREA 2
LOTS 72 THRU 211
A RESUBDIVISION OF BOLLING BROOKE, LOT 2
TAX MAP 47 PARCEL 141
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SURVEY	DATE
DESIGN	9-26-87
DRAWN	SHEET
CHECKED	10 of 14
SCALE 1" = 30'	FILE NO.
C.L.	2184-1-0

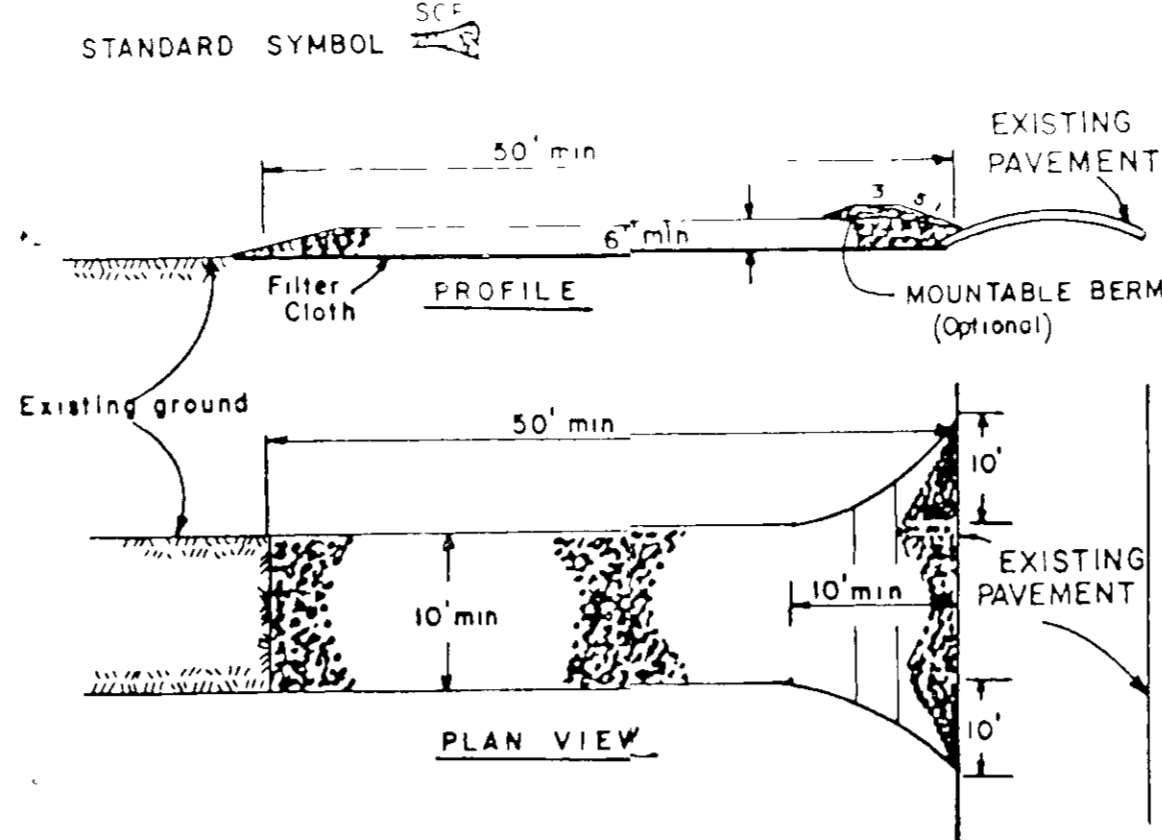
SDP-88-193

CONSTRUCTION SPECIFICATIONS FOR ST-VI

- The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized 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; cut slopes 1:1 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 near 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 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.
- 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.
- 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. 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.
- 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.



STABILIZED CONSTRUCTION ENTRANCE
not to scale

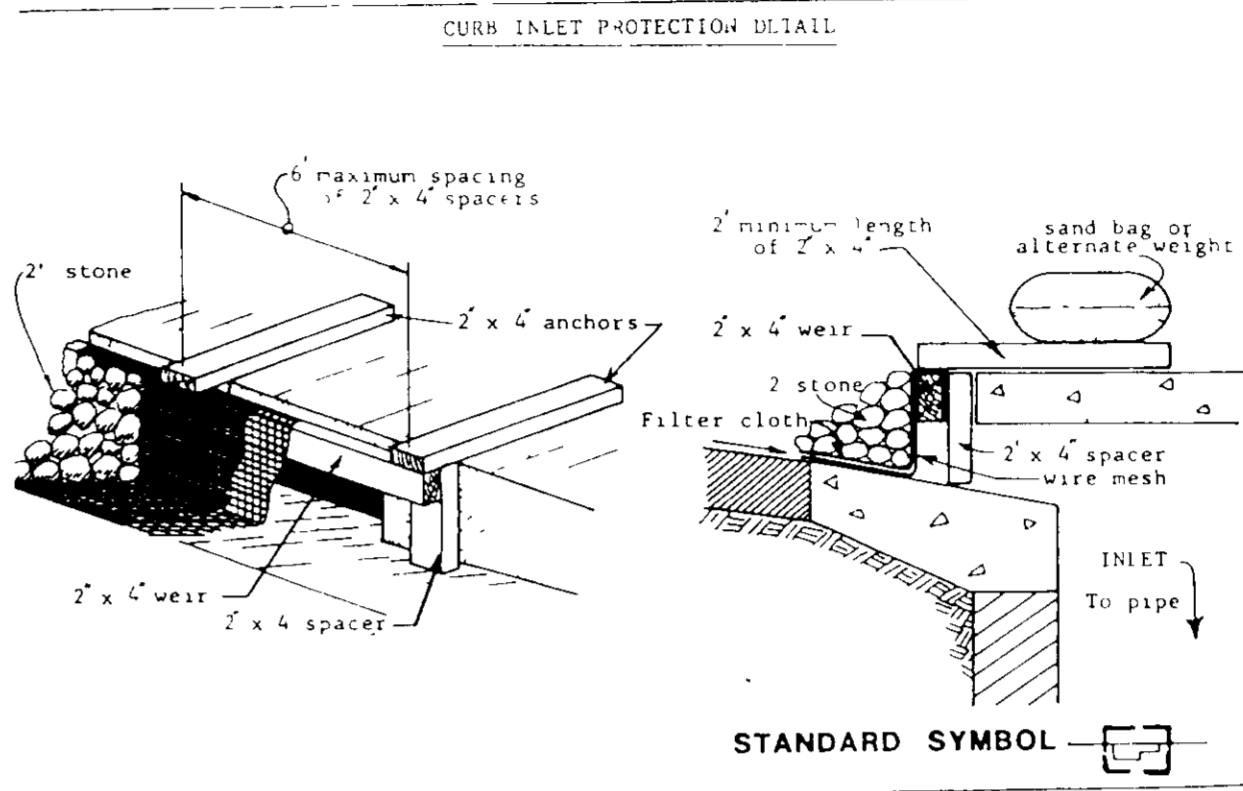
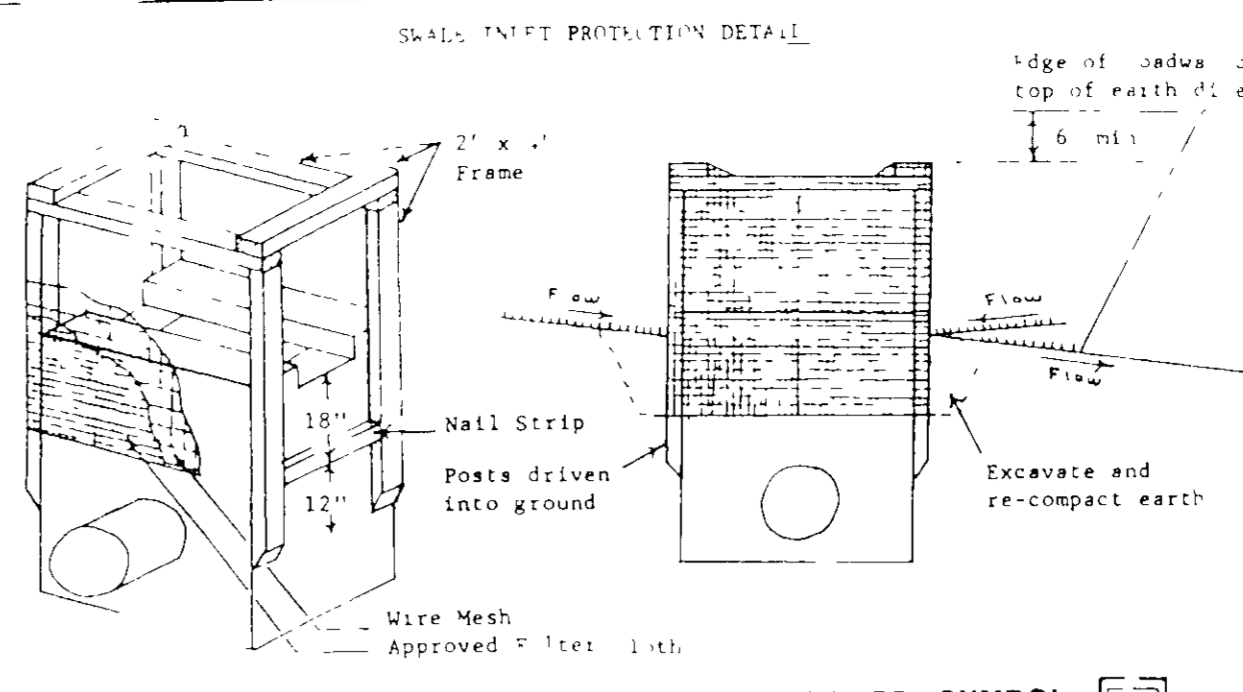


CONSTRUCTION SPECIFICATIONS

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

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
College Park, Md.

STABILIZED CONSTRUCTION
ENTRANCE
Standard
Drawing
SCE-1



U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
College Park, Maryland

INLET PROTECTION
DETAIL
Standard Drawing
IPD-1

PERMANENT SEEDING NOTES

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

Seeded Preparation - Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

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. Narrow or disc into upper three inches of soil. At time of seeding, apply 500 lbs per acre 10-0-0 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. Narrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (3.4 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 (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 to the spring. Option (2) Use seed - Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 368 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

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

Seeded Preparation - Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

Soil Amendments - Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

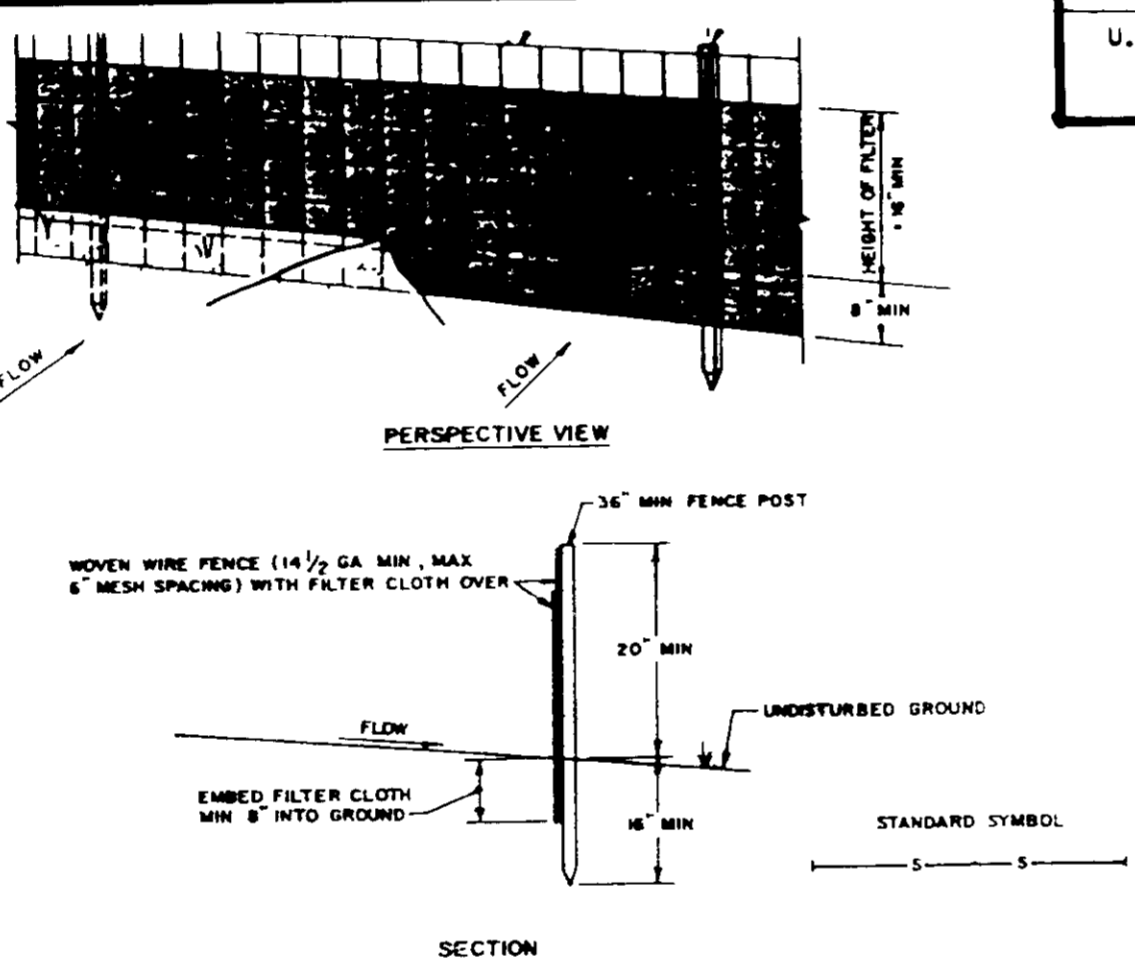
Seeding - For periods March 1 thru April 30 and from August 15 thru November 15, seed with 25 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (0.7 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 368 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.

SEQUENCE OF CONSTRUCTION

- OBTAIN REVISED GRADING PERMIT
- PROVIDE SEDIMENT CONTROL PROTECTION AT INLETS AS SHOWN ON PLAN. NOTE: BEFORE INLET PROTECTION DEVICES ARE INSTALLED, THE ROADS MUST BE PAVED AND THE R/W STABILIZED
- INSTALL STABILIZED CONSTRUCTION ENTRANCES
- ONCE ROADS ARE PAVED AND RIGHTS OF WAY ARE STABILIZED, REMOVE EXISTING EARTH DIKES & SEDIMENT TRAPS EXCEPT AS NOTED ON PLANS. INSTALL ADDITIONAL SILT FENCE AS SHOWN ON PLAN. NOTE: PERMISSION MUST BE OBTAINED FROM THE SEDIMENT CONTROL INSPECTOR TO REMOVE TRAPS.
- CONSTRUCT UNITS
- SILT FENCE IN FRONT OF UNITS MUST BE INSTALLED AS REQUIRED BY THE HOWARD COUNTY INSPECTOR.
- AS THEIR CONTRIBUTING DRAINAGE AREAS ARE BROUGHT TO FINAL GRADE AND PERMANENTLY STABILIZED, REMOVE SEDIMENT CONTROL MEASURES AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR. BRING AREAS TO FINAL GRADE AND APPLY PERMANENT STABILIZATION.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- NOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES
- FILTER CLOTH TO BE FASTENED SECURELY TO NOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILT UP DEVELOPER IN THE SILT FENCE

POSTS STEEL EITHER I OR U TYPE OR 2" HARDWOOD
FENCE NOVEN WIRE, 14" GA. 6" MAX. MESH OPENING
FILTER CLOTH FILTER X, MIRAFL 1000, STABIL LINA 1140N OR APPROVED EQUAL
PRE-FABRICATED UNIT Geofab, BVI/PROFENCE, OR APPROVED EQUAL.

SILT FENCE
STANDARD DRAWING
SF-1

DEVELOPER'S/BUILDER'S CERTIFICATE

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

Signature of Developer/Builder _____ Date _____

ENGINEER'S CERTIFICATE

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

Signature of Engineer _____ Date _____
Professional Engineer Seal

EQUIPMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction. (995-2137)
- All vegetative and structural materials 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 redisturbment 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) and (Sec. 56), 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: 4.0 Acres
Area Disturbed: 7.00 Acres
Area to be seeded or paved: 2.00 Acres
Area to be vegetatively stabilized: 2.75 Acres
Total Cut: Cu yds
Total Fill: 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 DWM 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 control. But before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this report is approved by the inspection agency.

SEDIMENT TRAP SCHEDULE

SEDIMENT TRAP #	5	6
TYPE OF TRAP - STD & SPEC #	ST-VI	ST-VII
DRAINAGE AREA (ACRES)	11.2	1.0
STORAGE REQUIRED (FT ³)	20,160	9,240
STORAGE PROVIDED (FT ³)	20,170	9,240
BASE DIMENSIONS & ELEV.	70' x 70' @ 214.82	10' x 20' @ 223.82
WEIR LENGTH & ELEV.	14' @ 218.82	8' @ 220.82
STORAGE DEPTH	3'	9'
EMBANKMENT HT & TOP ELEV.	3' @ 223.82	2' @ 220.82
MAX DEPTH OF FLOW OVER WEIR	2'0"	

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS.

U.S. Soil Conservation Service _____ Date _____

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

APPROVED: _____ Date _____
Howard S C D

PLAN NUMBER _____

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEM HOWARD COUNTY

James Boyde 7-19-88
PLANNING DIRECTOR

APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Marsha J. McLaughlin 7-28-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS

James McIlwain 7/18/88
DIRECTOR

Howard County Department of Public Works

Michael E. Reilly 7-7-88
CHIEF, BUREAU OF ENGINEERING

EROSION AND SEDIMENT CONTROL PLAN

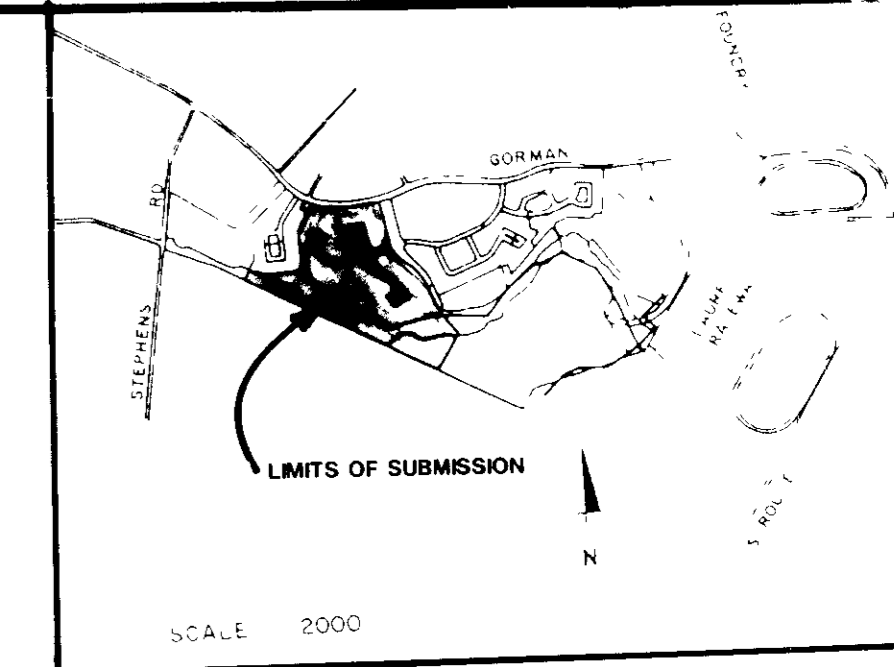
Patton Harris Rust and Associates
A Professional Corporation
Engineers, Surveyors, Planners and Landscape Architects
7609 Standish Place, Rockville Md 20855 (301) 762-2220

BOWLING BROOK FARMS
SECTION 1, AREA 2
LOTS 72 THRU 211
A RESUBDIVISION OF BOLLING BROOKE, LOT 2
TAX MAP 47 PARCEL 141
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

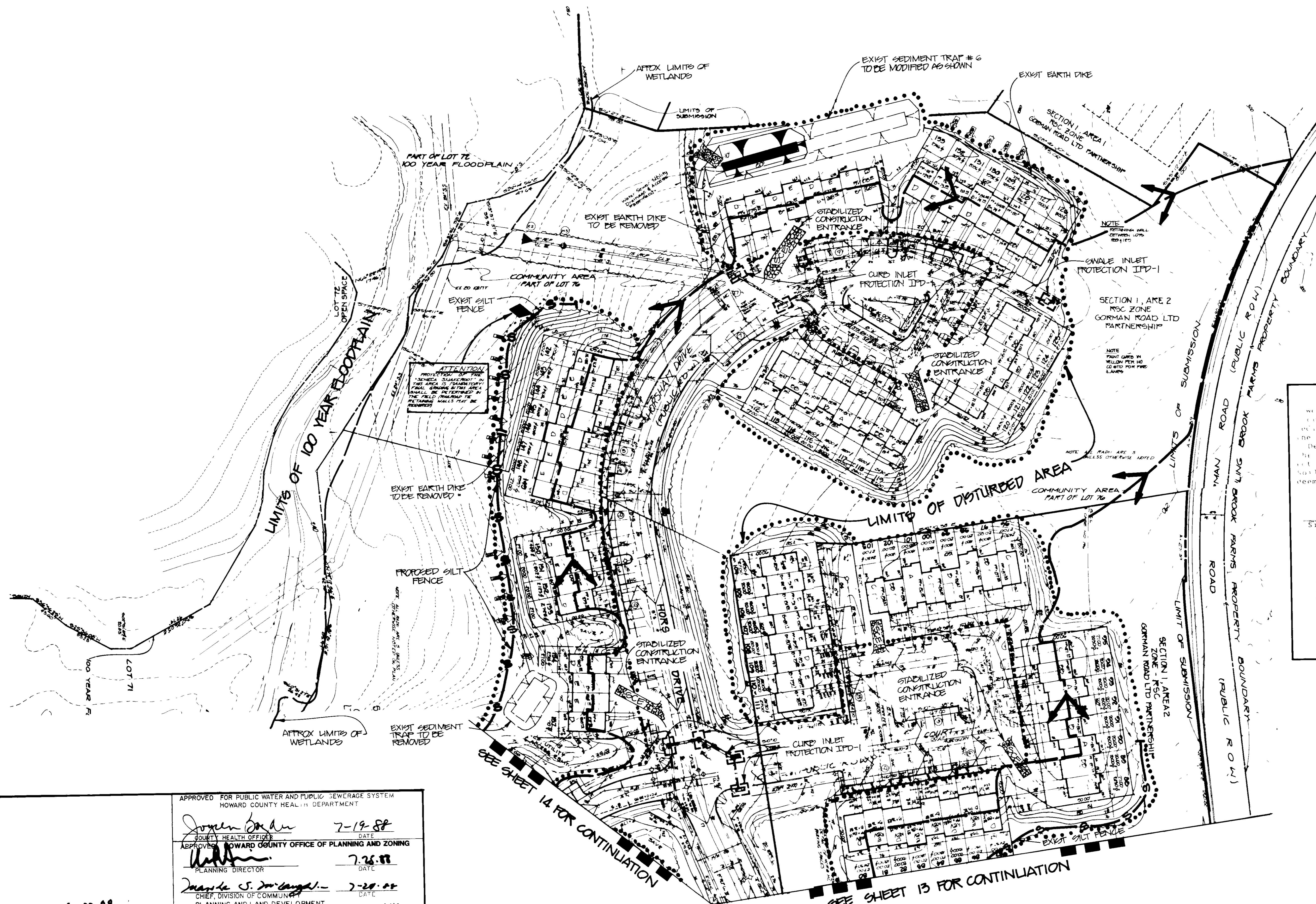
SURVEY _____ DATE _____
DESIGN JPC
DRAWN CSR SHEET 11 of 14
CHECKED JPC
SCALE _____ FILE NO. 2184-I-O
C.I.

NO	DESCRIPTION	DATE	APPROVED	DATE
1	REVISED FOR HOCO	6/1/88		
2	REVISED FOR HOCO	6/1/88		
3	REVISED FOR HOCO	6/1/88		
4	REVISED FOR HOCO	6/1/88		
5	REVISED FOR HOCO	6/1/88		
6	REVISED FOR HOCO	6/1/88		
7	REVISED FOR HOCO	6/1/88		
8	REVISED FOR HOCO	6/1/88		
9	REVISED FOR HOCO	6/1/88		
10	REVISED FOR HOCO	6/1/88		

SDP 88-183



VICINITY MAP



WHEREAS, not all of the applicant and contractor's obligations under this plan of development and construction and the construction project will be a Certificate of Approval of the Department of Natural Resources Approval. The plan of development of Sediment and Erosion before and during construction. I also authorize the site inspector of the Soil Conservation District to be authorized agent if deemed necessary.

Signature of Developer/Builder: _____ Date: _____

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and acceptable plan based on my personal knowledge of the site conditions and that it is in accordance with the requirements of the Howard County Department of Natural Resources.

M. Rust 7/28/88
 STATE OF MARYLAND
 REGISTERED PROFESSIONAL ENGINEER

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

James J. Baker 7-19-88
 COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

William 7-28-88
 PLANNING DIRECTOR DATE

Charles S. DeLong 7-28-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER, STORM DRAINAGE SYSTEM AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James J. Baker 7-28-88
 DIRECTOR DATE

William 7-28-88
 CHIEF, BUREAU OF ENGINEERING DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS

A. Helms 7-28-88
 U.S. Soil Conservation Service DATE

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

APPROVED *Stephen L. Helms* 7/28/88
 HOWARD S.C.D. DATE

PLAN NUMBER _____

NO.	DESCRIPTION	DATE	APPROVED	DATE
2	REVISED PER HO CO			6-1-88
1	SEPARATE LABEL JAK			4-12-88
	NO. DESCRIPTION	DATE	APPROVED	DATE

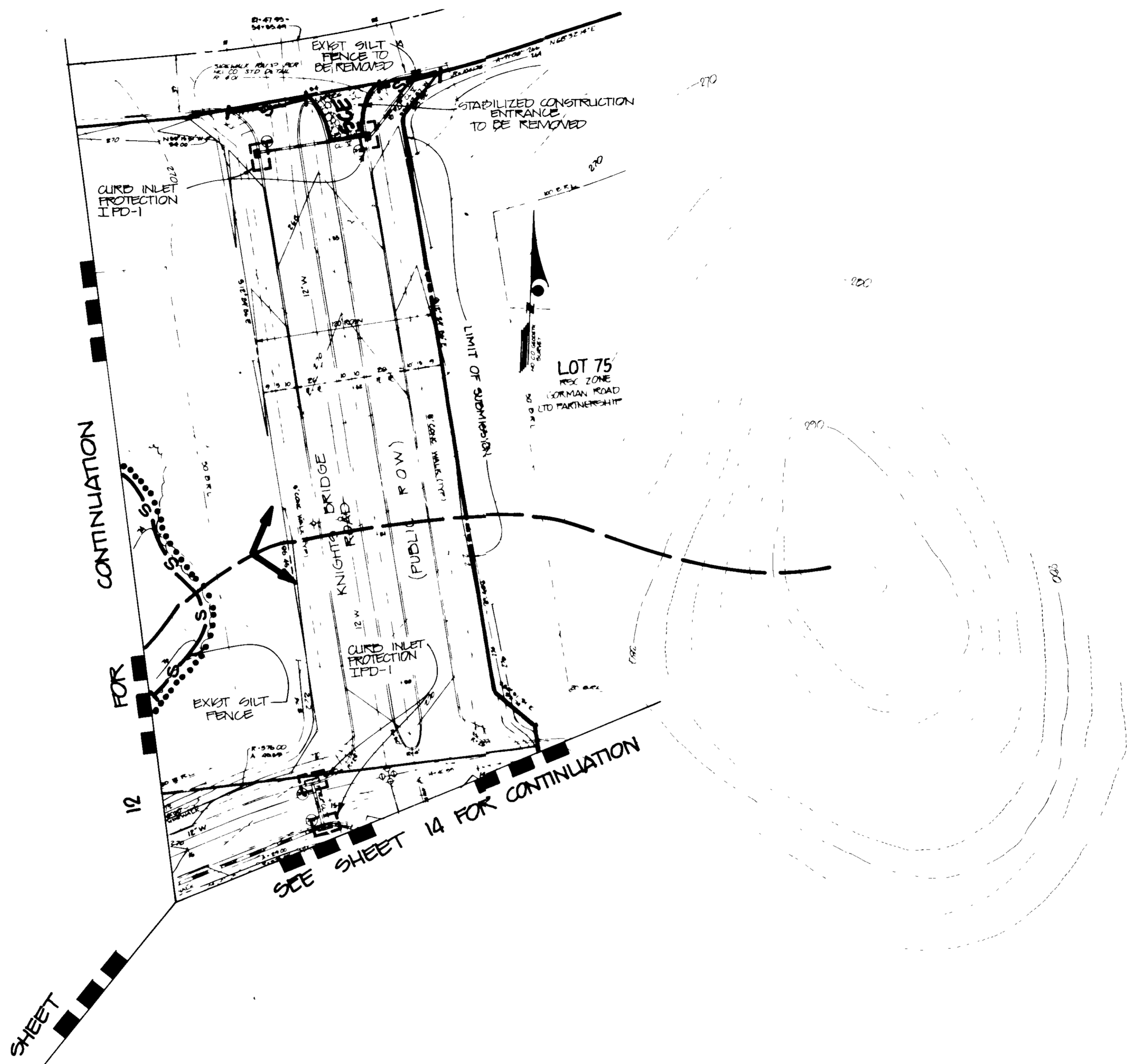
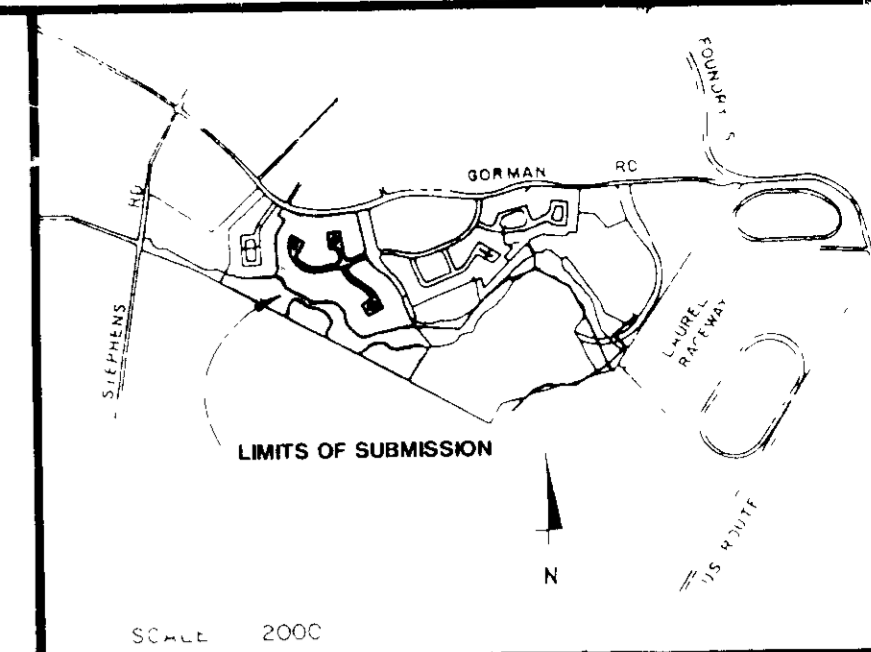
REVISION APPROVED BY _____

PROFESSIONAL SEAL

EROSION AND SEDIMENT CONTROL PLAN


Patton Harris Rust and Associates
 A Professional Corporation
 Engineers, Surveyors, Planners and Landscape Architects
 7609 Standish Place Rockville, Maryland 20855 (301)762-2220

BOWLING BROOK FARMS		SURVEY PHR&A	DATE
SECTION 1, AREA 2		DESIGN KOR	
LOTS 72 THRU 111		CHECKED JDW	SHEET 12 OF 14
		SCALE 1"=50'	FILE NO. 2104-1-0
		C.I. ?	



Signature: _____ Date: _____

Professional Engineer Seal: _____

6-22-88
LWS

7-19-88
HOWARD COUNTY OFFICE OF PLANNING AND ZONING

7-26-88

7-21-88
LWS

7-7-88

7-7-88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS

U.S. Soil Conservation Service Date: 7/1/88

APPROVED: _____ Date: _____

PLAN NUMBER: _____

NO.	DESCRIPTION	DATE	APPROVED	DATE
2	REVISED PER HOOD			6/1/88
1	REVISION PER LWS			4/18/88

REVISION APPROVED BY: _____

EROSION AND SEDIMENT CONTROL PLAN


Patton Harris Rust and Associates
 A Professional Corporation
 Engineers, Surveyors, Planners and Landscape Architects
 7609 Standish Place Rockville, Maryland 20855 (301)762-2220

BOWLING BROOK FARMS	
SECTION 1, AREA 2 LOTS 72 THRU 211	
SURVEY P.H.R. & A.	DATE
DESIGN K.O.R.	SHEET
DRAWN J.D.W.	13 OF 14
CHECKED	FILE NO.
SCALE 1"=50'	2104-1-C
C.I. 2'	

