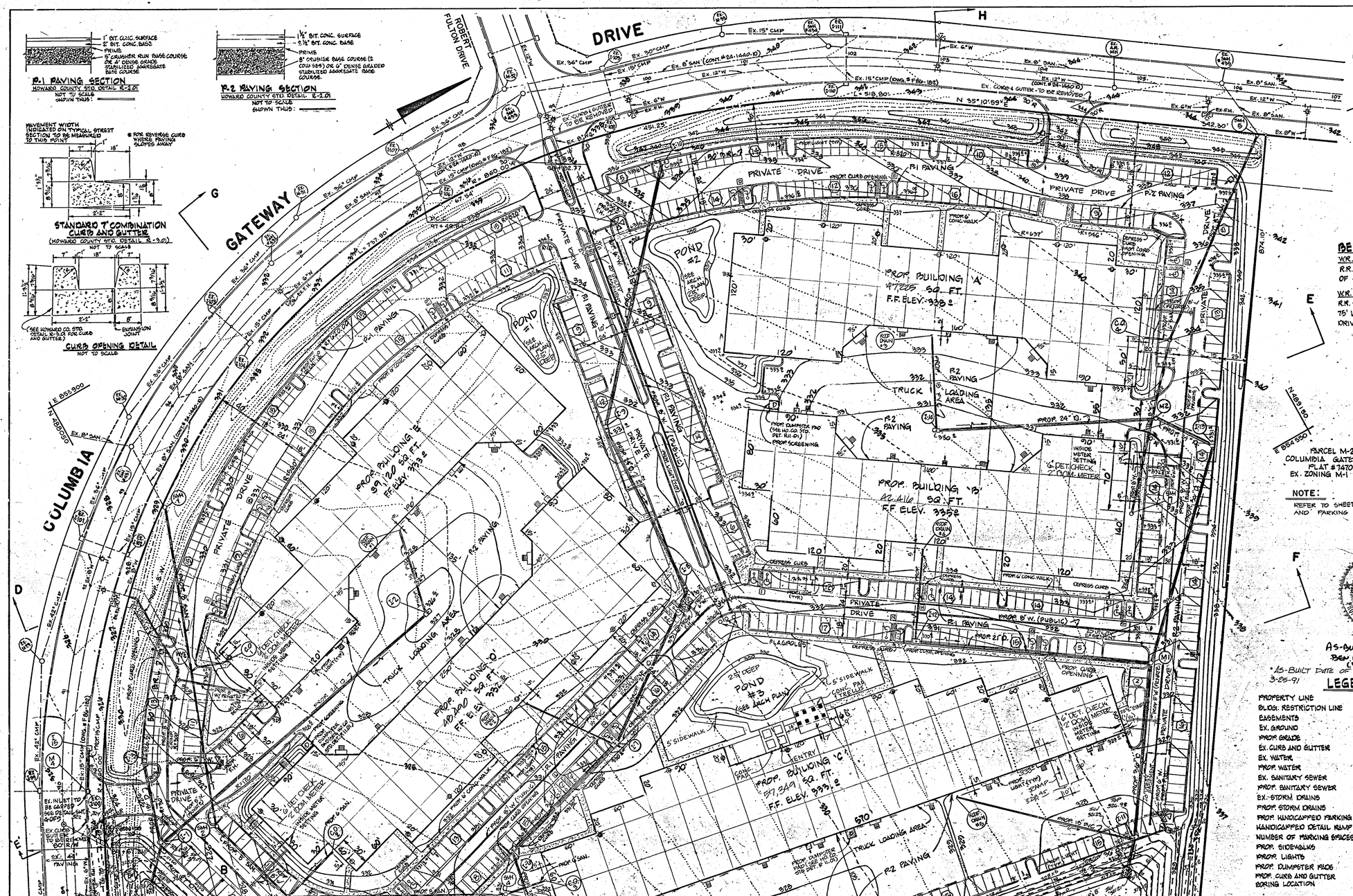
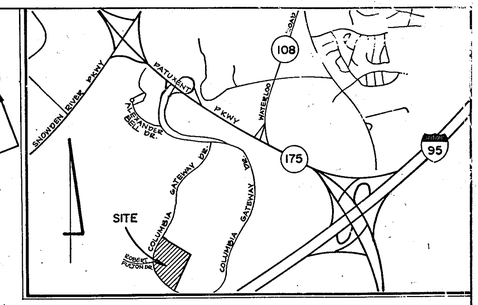


PLAN

SCALE: 1" = 50'



VICINITY MAP

SCALE: 1" = 2000'

BENCH MARKS:

WR. & A. #9: ELEV. 338.05
R.R. SPIKE IN BASE OF 14" OAK, 45' LEFT OF ℄ COLUMBIA GATEWAY DRIVE. STA. 113+40

WR. & A. #8: ELEV. 351.66
R.R. SPIKE IN BASE OF 10" TWIN POPLAR, 75' LEFT OF ℄ COLUMBIA GATEWAY DRIVE STA. 129+45.

NOTE:
REFER TO SHEET 2 OF 9 FOR SITE AND PARKING DATA.

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88
PLAN NUMBER

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 6-16-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
DIRECTOR — DATE 6.27.88
CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — 6/22/88

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 6/15/88
CHIEF BUREAU OF ENGINEERING — DATE 6-15-88
REV. 6/14/88

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — No. 12281
5/12/91
AS-BUILT INFO BY BEN DYER ASSOC. INC. (301) 997-9200
*AS-BUILT DATE OF SURVEY 3-25-91

LEGEND

PROPERTY LINE
BLDG. RESTRICTION LINE
EASEMENTS
EX. GROUND — 100
PROP. GRADE — 100
EX. CURB AND GUTTER
EX. WATER
PROP. WATER
EX. SANITARY SEWER
PROP. SANITARY SEWER
EX. STORM DRAINS
PROP. STORM DRAINS
PROP. HANDICAPPED PARKING
HANDICAPPED DETAIL RAMP
NUMBER OF PARKING SPACES
PROP. SIDEWALKS
PROP. LIGHTS
PROP. DUMPSTER PADS
PROP. CURB AND GUTTER
BORING LOCATION

NOTES:
* FOR GENERAL NOTES SEE SHEET 2 OF 9.
* ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
* DUMPSTER PAD ENCLOSURES SHALL BE 6 FEET HIGH AND CONSTRUCTED OF THE SAME BRICK AS THE ADJACENT BUILDING.

12/31/90 - ADDED CONC. PADS, TRELLIS SYSTEM AND SIDEWALKS
2/9/90 ADD RAMP TO BLDG. 'C'

ADDRESS CHART		
BUILDING #	STREET ADDRESS	
A	7120	COLUMBIA GATEWAY DRIVE
B	7110	COLUMBIA GATEWAY DRIVE
C	7100	COLUMBIA GATEWAY DRIVE
D	7090	COLUMBIA GATEWAY DRIVE
E	7080	COLUMBIA GATEWAY DRIVE

SUBDIVISION NAME			SECT./AREA	LOT/PARCEL #
COLUMBIA GATEWAY				M-1
PLAT # OR L/F	BLOCK #	ZONE	TAX/ZONE MAP	ELECT. DIST.	CENSUS TRACT
7470	7	M-1	43	6	6065.02
WATER CODE			SEWER CODE	
E-06			490 0000	

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — TAPOBRATA CHAKRABARTI — No. 8936 — REGISTERED PROFESSIONAL ENGINEER — 2/18/88

ENGINEER'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFY THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.
ENGINEER: Tapobrata Chakrabarti
REG. NO. 8936 — TAPOBRATA CHAKRABARTI — DATE: 2/18/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA, MD. 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE:
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.
DEVELOPER: — DATE: 5-17-88

DESIGNED: K.B.
DRAWN: J.W./K.B.
CHECKED: N.B.

REVISIONS
Changed building square footing; Changed water house connection to Bldg. A, C & D. Changed sewer profile — 9-15-88

SITE AND STORM WATER MANAGEMENT PLAN FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

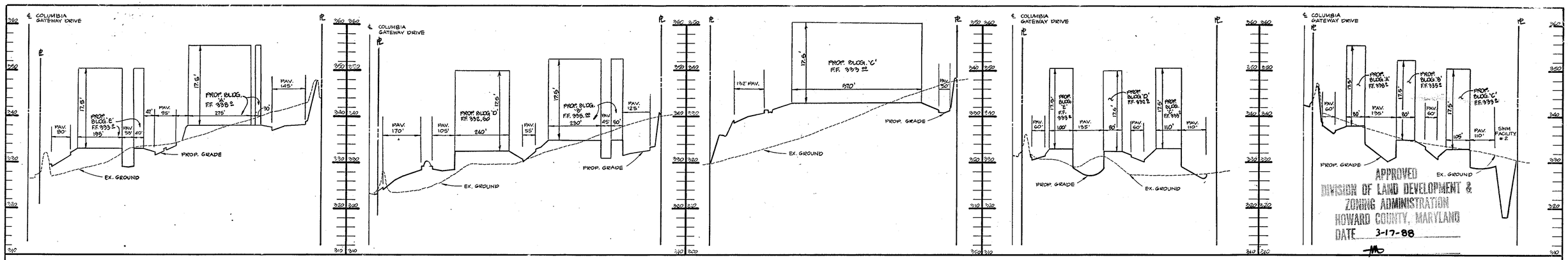
TAX MAP 43
HOWARD CO. MD.
SCALE 1" = 50'

AS-BUILT

PARCEL #587
ELECTION DIST. #6
FEBRUARY 16, 1988
SHEET 1 OF 9

AS-BUILT 5-14-91

SDP-88-145



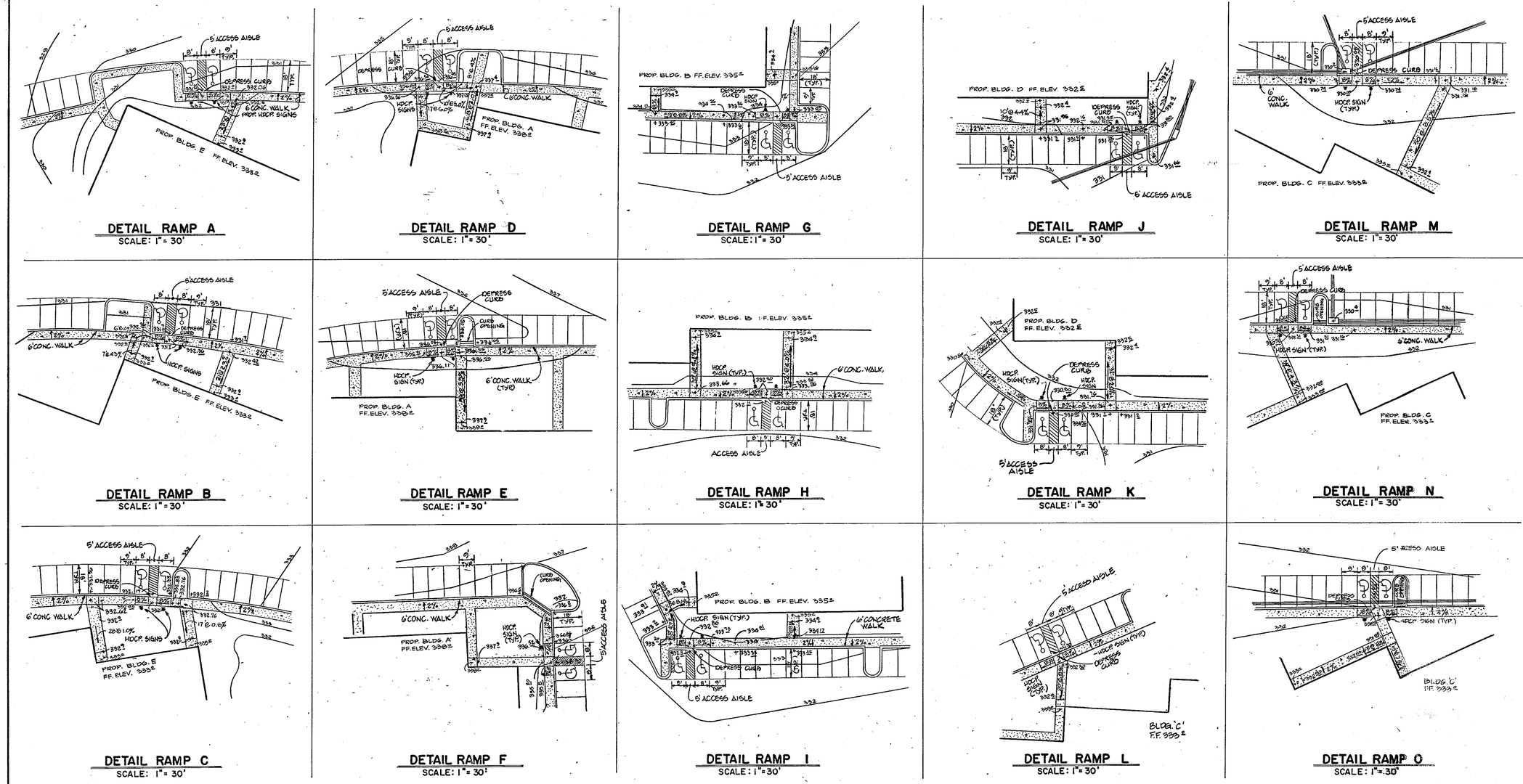
SECTION D-D SCALE: HORZ. 1"= 200' VERT. 1"= 10'

SECTION E-E SCALE: HORZ. 1"= 200' VERT. 1"= 10'

SECTION F-F SCALE: HORZ. 1"=200' VERT. 1"= 10'

SECTION G-G SCALE: HORZ. 1"= 200' VERT. 1"= 10'

SECTION H-H SCALE: HORZ. 1"= 200' VERT. 1"=10'



DETAIL RAMP A SCALE: 1"= 30'

DETAIL RAMP D SCALE: 1"= 30'

DETAIL RAMP G SCALE: 1"= 30'

DETAIL RAMP J SCALE: 1"= 30'

DETAIL RAMP M SCALE: 1"= 30'

DETAIL RAMP B SCALE: 1"= 30'

DETAIL RAMP E SCALE: 1"= 30'

DETAIL RAMP H SCALE: 1"= 30'

DETAIL RAMP K SCALE: 1"= 30'

DETAIL RAMP N SCALE: 1"= 30'

DETAIL RAMP C SCALE: 1"= 30'

DETAIL RAMP F SCALE: 1"= 30'

DETAIL RAMP I SCALE: 1"=30'

DETAIL RAMP L SCALE: 1"= 30'

DETAIL RAMP O SCALE: 1"= 30'

SITE DATA

AREA OF SITE: 21.062 AC.
EXISTING ZONING: M-1
PROPERTY REFERENCE: PLAT 07470
EXISTING USE: VACANT
PROPOSED USE: OFFICE/WAREHOUSE
TOTAL FLOOR AREA: 234,600 S.F. (5.39 AC.)
PARKING REQUIRED: 600 SPACES
PARKING PROVIDED: 685 SPACES (INCLUDING 30 HANDICAPPED)
FLOOR AREA RATIO: 5.39 AC./21.062 AC. = 25.6%
% OPEN SPACE: 6.33 AC./21.062 AC. = 30.1%
% BUILDING COVERAGE WITH PAVING: 14.73 AC./21.062 AC. = 69.9%
AREA TO BE DISTURBED: 20.47 AC.
AREA TO VEGETATIVELY STABILIZED: 5.74 AC.
% BUILDING COVERAGE: 25.6%
TOTAL AREA OF PARKING LOT: 5.21 AC.
TOTAL AREA OF LANDSCAPED ISLANDS: 0.35 AC.
% LANDSCAPED ISLANDS AND PARKING: 6.7%

PARKING TABULATION

PARKING REQUIRED:

BUILDING A = 47,225 S.F. 60% OFFICE: 28,335 S.F./142 EMP. 87 P.S./10 EMP. = 160 P.S.
40% WAREHOUSE: 19,320 S.F./ 500 = 38 P.S.
TOTAL = 198 P.S.

BUILDING B = 42,416 S.F. 50% OFFICE: 21,208 S.F./107 EMP. 87 P.S./10 EMP. = 93 P.S.
50% WAREHOUSE: 21,208 S.F./500 = 43 P.S.
TOTAL = 136 P.S.

BUILDING C = 57,334 S.F. 50% OFFICE: 28,667 S.F./144 EMP. 87 P.S./10 EMP. = 101 P.S.
50% WAREHOUSE: 28,667 S.F./500 = 58 P.S.
TOTAL = 159 P.S.

BUILDING D = 48,498 S.F. 50% OFFICE: 24,249 S.F./122 EMP. 87 P.S./10 EMP. = 106 P.S.
50% WAREHOUSE: 24,249 S.F./500 = 49 P.S.
TOTAL = 155 P.S.

BUILDING E = 39,128 S.F. 60% OFFICE: 23,478 S.F./118 EMP. 87 P.S./10 EMP. = 103 P.S.
40% WAREHOUSE: 15,650 S.F./500 = 32 P.S.
TOTAL = 135 P.S.

TOTAL PARKING REQUIRED ALL BUILDINGS: 668 P.S.

TOTAL PARKING SPACES PROVIDED: 685 P.S. (INCLUDING 30 HANDICAPPED SPACES)

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-8-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

DIRECTOR — 6.27.88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

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

DIRECTOR — 2/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

ENGINEER'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

ENGINEER: Prabhabrata Chakrabarti — REG. NO. 18930 — DATE: 2/18/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD, 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER: — DATE: 5-17-88

DESIGNED: N.B./K.B.
DRAWN: J.W.
CHECKED: N.B.

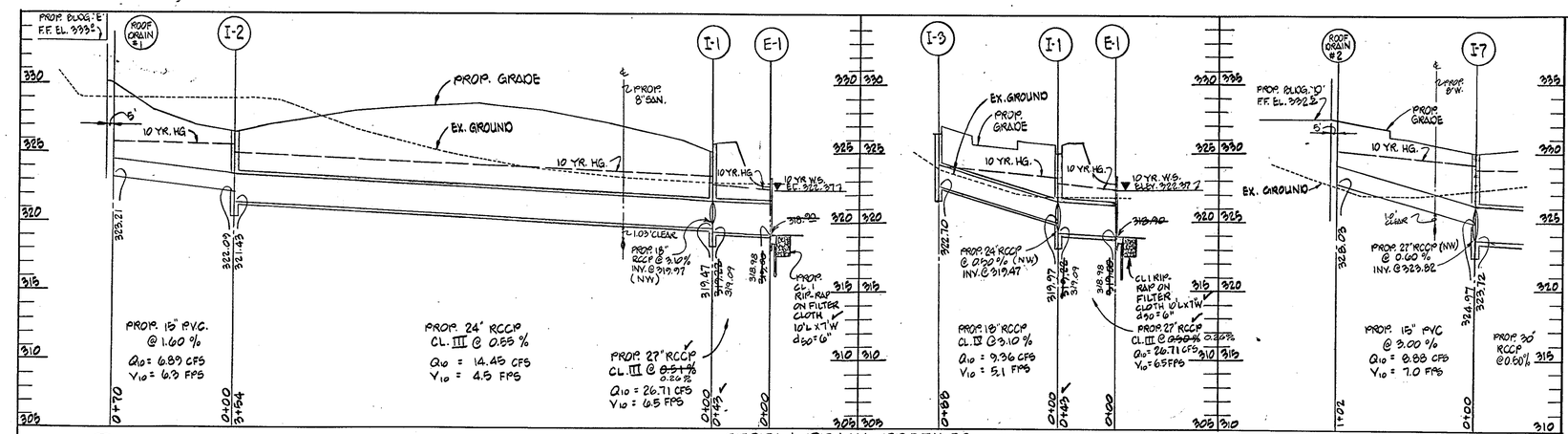
REVISIONS
Changed building square footage. Changed water house connection to Bldg. A. 6-15-88
Changed sewer profile

PROFILES AND DETAILS
FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD
SCALE: AS SHOWN

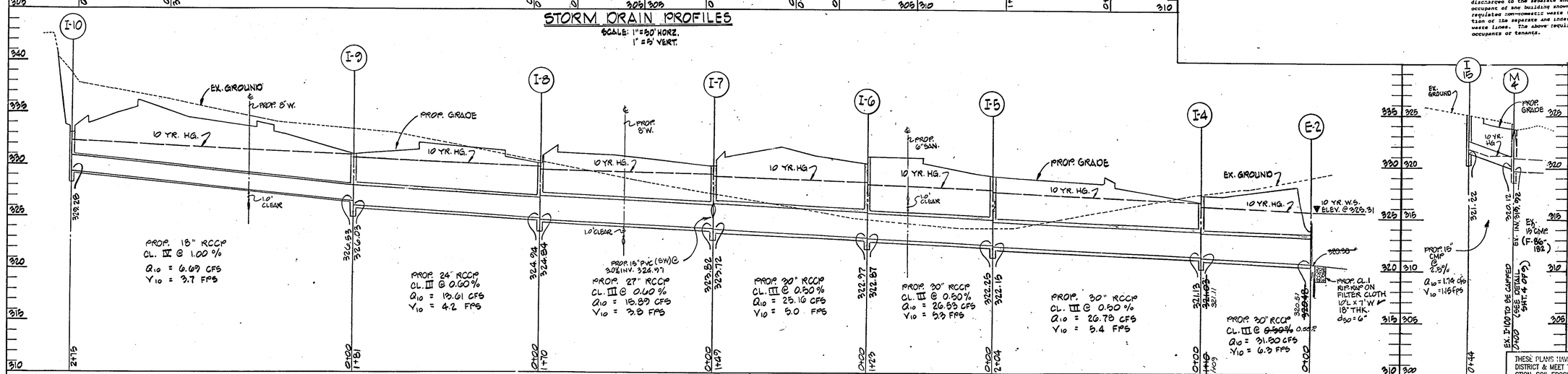
PARCEL "587"
ELECTION DIST. "6"
FEBRUARY 16, 1988
SHEET 2 OF 9

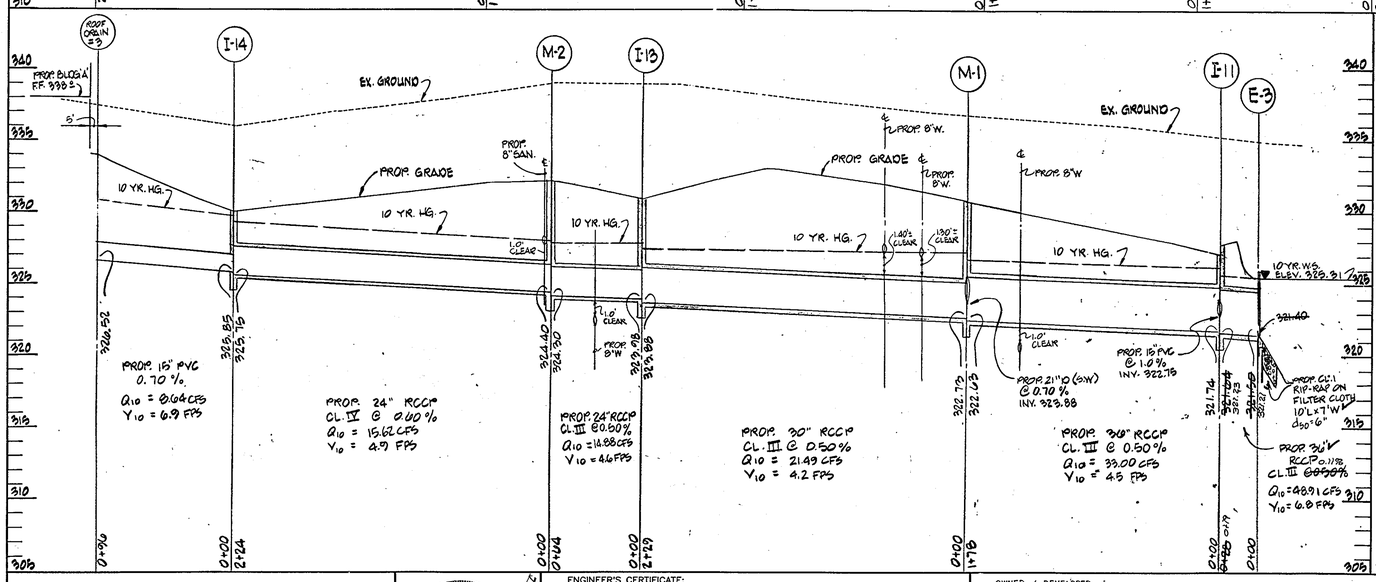
SDP-88-145

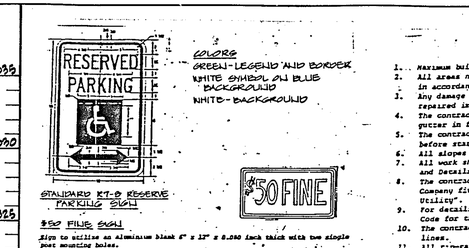


STORM DRAIN PROFILES

SCALE: 1" = 50' HORZ.
1' = 5' VERT.







GENERAL NOTES

1. Maximum building height = 50'.
2. All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by Howard Soil Conservation District.
3. Any damage to public-rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least a 2' level bench behind all curb and gutter in fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 3:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C&P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility", Call collect 1-559-0100.
9. For details of rampa and signs for the handicapped see the Maryland Building Code for the Handicapped and Aged and as shown hereon. See Sheet of
10. The contractor shall maintain a minimum of 4' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-7272.
13. The contractor shall remove all existing paving, curb and gutter, etc. that interferes with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.
16. All sidewalks will be 4' wide (see architectural plans for details).
17. The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building, shown on this site development plan, who will discharge non-domestic waste to the public sewerage system if this waste is regulated under Section 18.122 of the Howard County Code. Each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above requirements shall apply to all initial and future occupants or tenants.

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/23/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-8-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

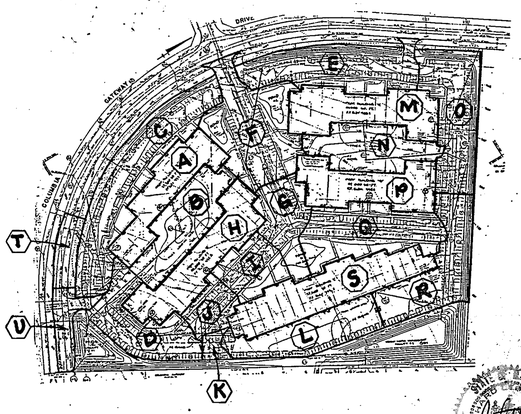
DIRECTOR — 6.27.88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

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

DIRECTOR — 6/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88



	AREA	'C'
A	0.85 Ac±	0.95
B	0.97 Ac±	0.94
C	1.67 Ac±	0.71
D	0.91 Ac±	0.84
E	1.24 Ac±	0.71
F	1.46 Ac±	0.69
G	0.60 Ac±	0.84
H	1.10 Ac±	0.95
I	0.56 Ac±	0.68
J	0.36 Ac±	0.83
K	0.12 Ac±	0.85
L	0.34 Ac±	0.94
M	1.07 Ac±	0.95
N	0.85 Ac±	0.94
O	1.18 Ac±	0.73
P	0.96 Ac±	0.95
Q	1.27 Ac±	0.65
R	1.11 Ac±	0.91
S	1.92 Ac±	0.95
T	0.28 Ac±	0.61
U	0.31 Ac±	0.69

STORM DRAIN DRAINAGE AREA MAP

SCALE: 1" = 200'

STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER No. 17281 — AS-BUILT INFO BY BEN DYER ASSOC. INC. (301) 459-7220 — 5/14/91

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — TAPOBRATA CHAKRABARTI — No. 19930 — PROFESSIONAL ENGINEER — 2/18/88

ENGINEER'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

ENGINEER: TAPOBRATA CHAKRABARTI
REG. NO. 19930 DATE: 2/18/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD. 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER: Alison M. Carr — DATE: 5-17-88

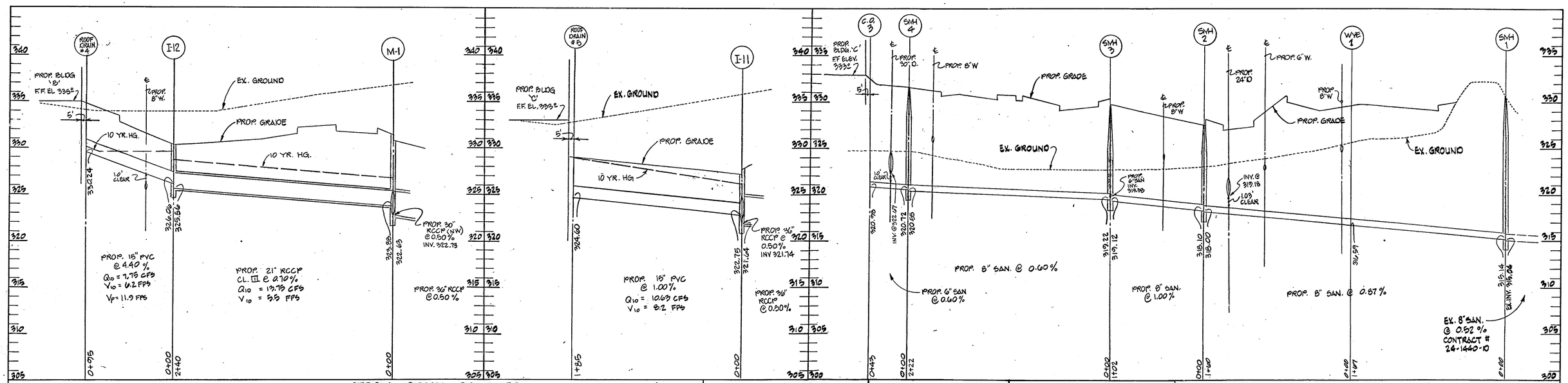
DESIGNED BY: K.B.
DRAWN BY: K.B.
CHECKED BY: N.B.
REVISIONS

PROFILES AND DETAILS
FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD
SCALE: AS SHOWN

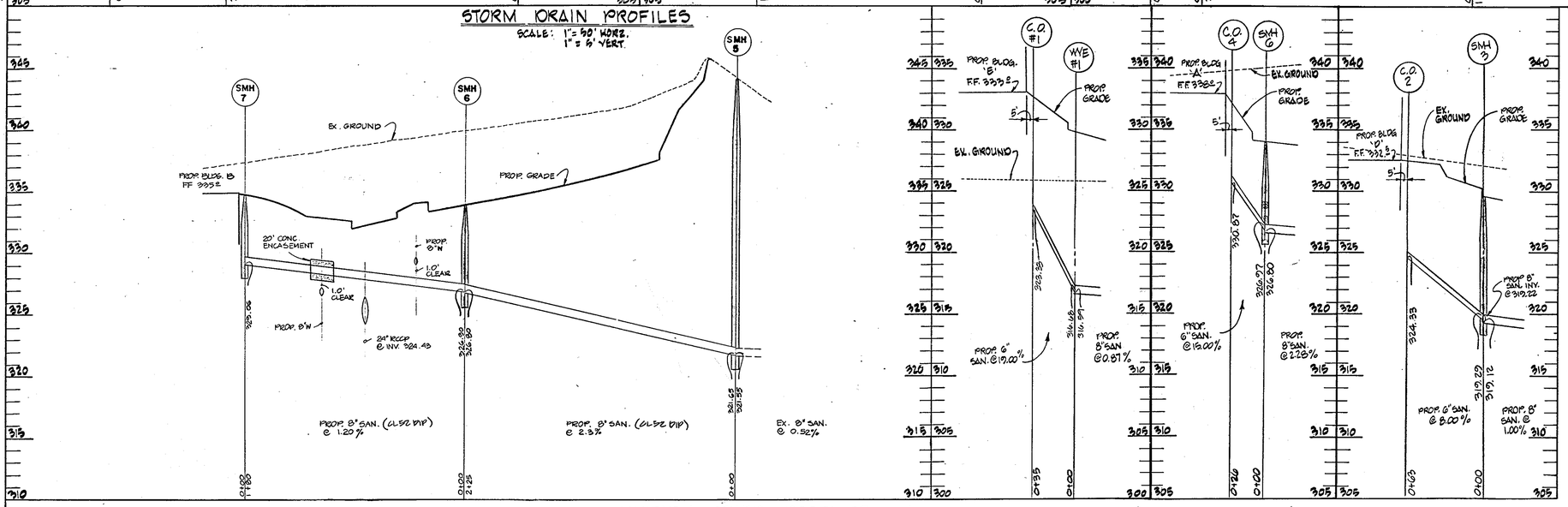
PARCEL 587
ELECTION DIST. 6
FEBRUARY 16 1988
SHEET 3 OF 9
SDP-88-145

AS-BUILT 5-14-91



STORM DRAIN PROFILES

SCALE: 1" = 50' HORZ.
1" = 5' VERT.



SANITARY SEWER PROFILE

SCALE: 1" = 50' HORZ.
1" = 5' VERT.

SANITARY SEWER PROFILES

SCALE: 1" = 50' HORZ.
1" = 5' VERT.

STRUCTURE SCHEDULE

NO.	TYPE	ELEVATION TOP	ELEVATION INV. IN	ELEVATION INV. OUT	REMARKS
SMH 1	BRICK MANHOLE	332.80	315.14	315.04	SEE HO.CO STD DETAIL G. 5.01
SMH 2	BRICK MANHOLE	327.40	318.10	318.00	SEE HO.CO. STD. DETAIL G 5.01
SMH 3	BRICK MANHOLE	329.20	319.22 / 319.33	319.21	SEE HO.CO. STD. DETAIL G 5.01
SMH 4	BRICK MANHOLE	331.00	320.72	320.62	SEE HO.CO. STD. DETAIL G 5.01
SMH 5	BRICK MANHOLE	333.50	321.65	321.55	SEE HO.CO. STD. DETAIL G 5.01
SMH 6	BRICK MANHOLE	334.00	326.97 / 326.90	326.80	SEE HO.CO. STD. DETAIL G 5.01
SMH 7	BRICK MANHOLE	333.20	328.84	328.67	SEE HO.CO. STD. DETAIL G 5.01

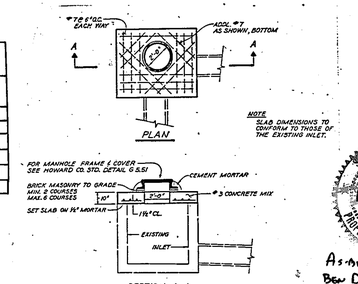
INLET SCHEDULE

NO.	TYPE	ELEVATION TOP #	ELEVATION INV. IN	ELEVATION INV. OUT	REMARKS
I-1	DBLE. 'S' COMB.	~~323.80~~	~~319.00~~	~~319.70~~	SEE HO.CO STD. DETAIL SD 4.24
I-2	DBLE. 'S'	326.50	322.09	321.49	SEE HO.CO STD. DETAIL SD 4.23
I-3	DBLE. 'S' COMB.	326.50	—	322.70	SEE HO.CO STD. DETAIL SD 4.24
I-4	DBLE. 'S' COMB.	~~326.50~~	321.13	~~321.03~~ 321.03	SEE HO. CO. STD. DETAIL SD 4.24
I-5	SINGLE 'S' COMB.	329.00	322.25	322.15	SEE HO.CO STD. DETAIL SD 4.32
I-6	DBLE. 'S' COMB.	330.30	322.97	322.87	SEE HO.CO. STD. DETAIL SD 4.24
I-7	DBLE. 'S' COMB.	330.00	~~324.75~~ 325.81	323.73	SEE HO.CO STD. DETAIL SD 4.24
I-8	DBLE. 'S' COMB.	330.20	326.94	326.84	SEE HO.CO STD. DETAIL SD 4.24
I-9	DBLE. 'S' COMB.	331.00	326.53	326.43	SEE HO.CO STD. DETAIL SD 4.24
I-10	DBLE. 'S' COMB.	333.00	—	329.28	SEE HO.CO STD. DETAIL SD 4.24
I-11	DBLE. 'S' COMB.	~~327.55~~	321.74 / 321.64	~~321.64~~	SEE HO.CO. STD. DETAIL SD 4.24
I-12	DBLE. 'S' COMB.	330.00	322.73	322.63	SEE HO.CO STD. DETAIL SD 4.24
I-13	DBLE. 'S' COMB.	331.00	323.98	323.88	SEE HO.CO STD. DETAIL SD 4.24
I-14	DBLE. 'S'	330.00	325.88	325.75	SEE HO.CO STD. DETAIL SD 4.23
I-15	A-5 INLET	325.00	—	324.22	SEE HO.CO STD. DETAIL SD 4.01

AS-BUILT DATE OF SURVEY, 3-25-91

STRUCTURE SCHEDULE

NO.	TYPE	ELEVATION TOP	ELEVATION INV. IN	ELEVATION INV. OUT	REMARKS
E-1	TYPE 'A' HEADWALL	—	~~319.89~~	318.90	SEE HO.CO. STD. DETAIL SD. 5.11
E-2	TYPE 'A' HEADWALL	—	~~320.38~~	320.38	SEE HO.CO. STD. DETAIL SD 5.11
E-3	TYPE 'A' HEADWALL	—	~~321.50~~	321.40	SEE HO.CO. STD. DETAIL SD 5.11
M-1	BRICK MANHOLE	331.17	322.63 / 322.53	322.63	SEE HO.CO. STD. DETAIL G-5.01
M-2	BRICK MANHOLE	322.21	324.40	324.30	SEE HO.CO STD. DETAIL G-5.01
M-4	MANHOLE	EX. INLET	323.75	320.12	319.92	SEE DETAIL THIS SHEET



AS-BUILT INFO BY BEN DYER ASSOC. INC. (301) 459-9200

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/27/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-18-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

DIRECTOR — 6.27.88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

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

DIRECTOR — 6/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

ENGINEER'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

ENGINEER: Paporata Chakraborti — DATE: 2/18/88
REG. NO. 18930 PAPORATA CHAKRABORTI

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD, 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER: Wilson M. Carr III — DATE: 5.17.88

DESIGNED: K.B.
DRAWN: K.B.
CHECKED: N.B.

REVISIONS
Changed Bldg. square footage. Changed water house connection to Bldg A. 6-13-88. Changed sewer profile.

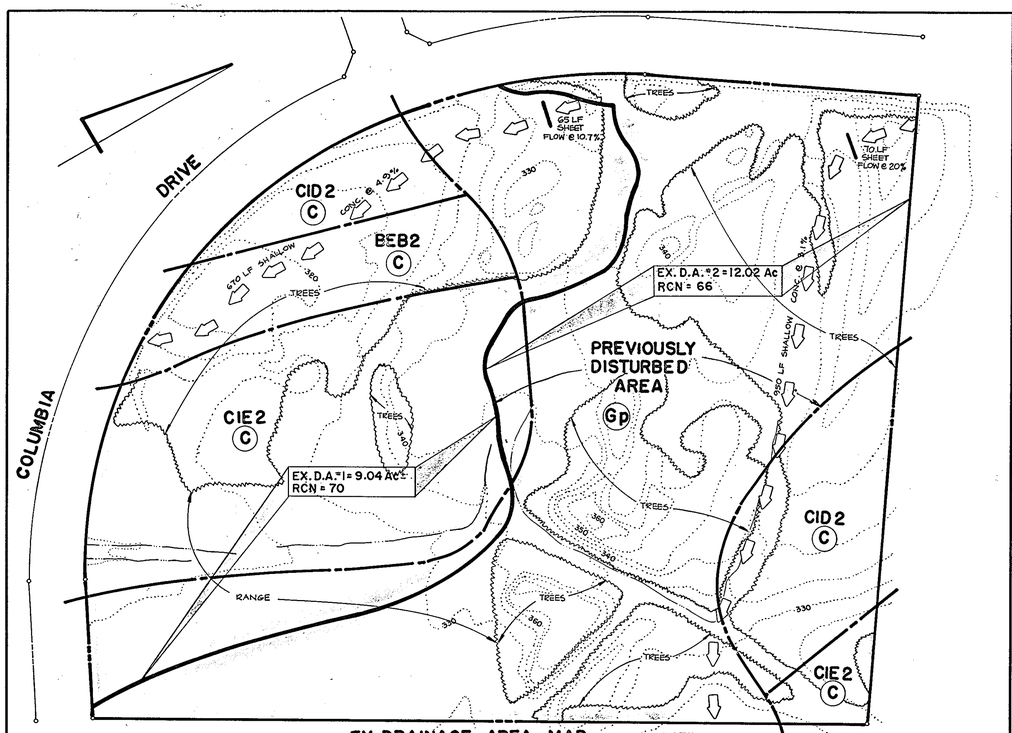
PROFILES AND DETAILS
FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD
SCALE: AS SHOWN

PARCEL "587"
ELECTION DIST. "6"
FEBRUARY 16, 1988
SHEET 4 OF 7

AS-BUILT 5-14-91

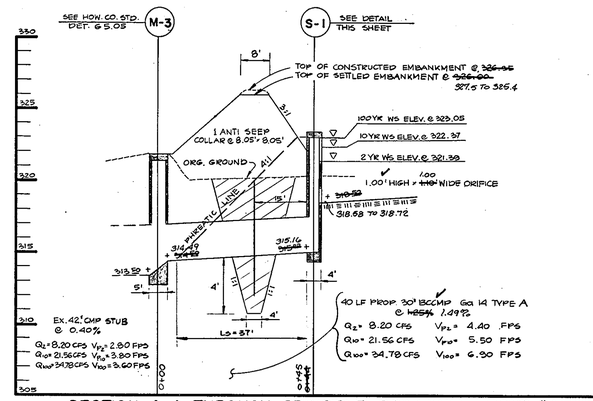
SDP-88-145



EX. DRAINAGE AREA MAP

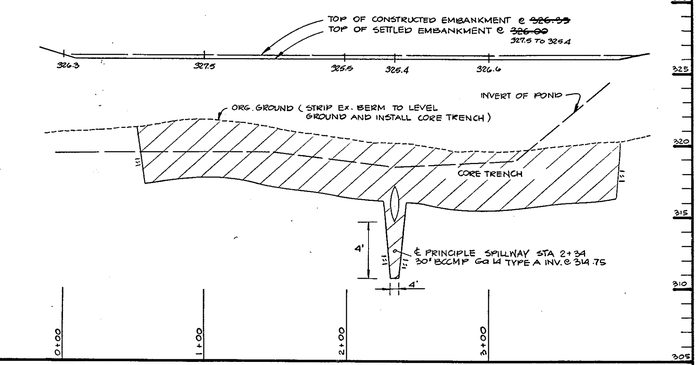
SCALE: 1" = 100'

NOTE: EX. D.A. MAP DEPITS ORIGINAL CONDITIONS AS SHOWN ON THE MASS GRADING PLANS FOR COLUMBIA GATEWAY.



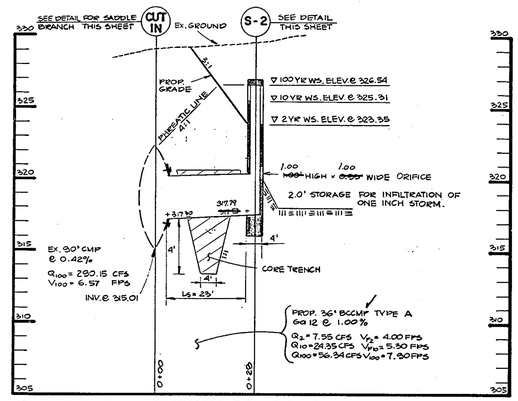
SECTION A-A THROUGH PRINCIPLE SPILLWAY POND #1

SCALE: HORZ. 1" = 20' VERT. 1" = 5'



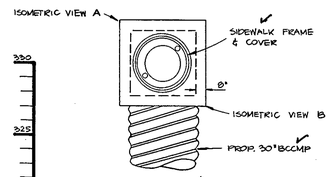
SECTION B-B THROUGH CENTERLINE OF EMBANKMENT POND #1

SCALE: HORZ. 1" = 50' VERT. 1" = 5'



SECTION C-C THROUGH PRINCIPLE SPILLWAY POND #2

SCALE: HORZ. 1" = 20' VERT. 1" = 5'

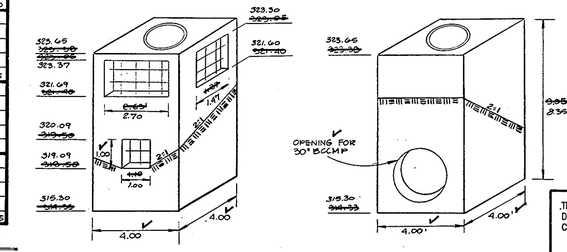


DETAIL FOR RELEASE STRUCTURE S-1

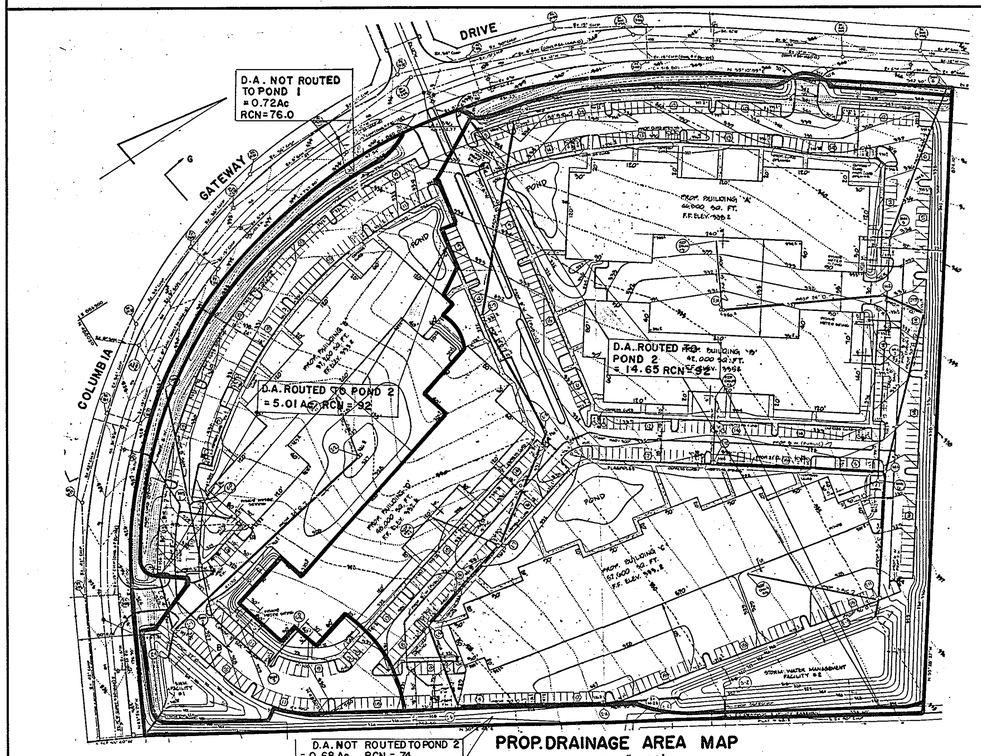
(MODIFIED TYPE 5 INLET - SEE HOW. CO. STD. DET. SD. 4.22)
NOT TO SCALE

NOTES:

1. REINFORCEMENT IN SLAB SHALL BE AS SHOWN IN HOW. CO. STD. DET. SD 4.01
2. TRASH RACK SHALL BE #6 REBAR @ 6" O.C. OR AS SHOWN.
3. TOP SLAB SHALL BE A MIN OF 4" THICK. BOTTOM SLAB SHALL BE A MIN OF 8" THICK.
4. STRUCTURE SHALL BE MADE OF REINFORCED CONCRETE.
5. PROVIDE MANHOLE STEPS AS PER HOW. CO. STD. DET. G 5.21

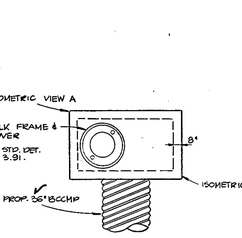


APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88



PROP. DRAINAGE AREA MAP

SCALE: 1" = 100'

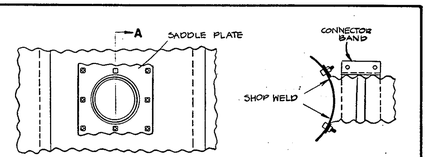


DETAIL RELEASE STRUCTURE S-2

MODIFIED DBL. 5' INLET - HOW. CO. STD. DET. SD 4.23
NO SCALE

NOTES:

1. REINFORCEMENT IN SLAB SHALL BE AS SHOWN IN HOW. CO. STD. DET. PLATE SD 4.01.
2. TRASH RACK SHALL BE #6 REBAR @ 6" O.C. OR AS SHOWN.
3. TOP SLAB SHALL BE A MIN OF 4" THICK. BOTTOM SLAB SHALL BE A MIN. OF 8" THICK.
4. STRUCTURE SHALL BE MADE OF REINFORCED CONCRETE.
5. PROVIDE MANHOLE STEPS AS PER HOW. CO. STD. DET. G 5.21.



SIDE VIEW OF PIPE WITH SADDLE BRANCH IN PLACE

SECTION A-A

SADDLE BRANCH

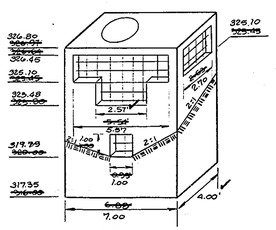
NO SCALE

* ALL CONNECTIONS TO BE GALVANIZED AND BITUMINOUS COATED

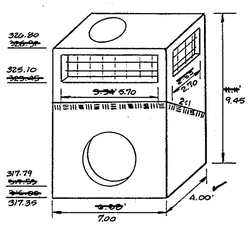
AS-BUILT DATE OF SURVEY 3-25-91

STATE OF MARYLAND — No. 12281 — REGISTERED PROFESSIONAL ENGINEER

5/14/91
AS-BUILT INFO BY BEN DYER ASSOC. INC (301) 459-9200



ISOMETRIC VIEW A



ISOMETRIC VIEW B

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-18-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

DIRECTOR — 6-27-88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

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

DIRECTOR — DATE 6/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWNSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — PAPOBRATA CHAKRABARTI — No. 19930 — PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

ENGINEER: Paprabrata Chakrabarti — REG. NO. 19930 — DATE: 2/10/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD, 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER: Richard M. Carr — DATE: 5.12.88

DESIGNED: N.B.	
DRAWN: J.W.	
CHECKED: N.B.	

STORM WATER MANAGEMENT PROFILES DETAILS FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD
SCALE: AS SHOWN

PARCEL #587
ELECTION DIST. #6
FEBRUARY 16, 1988
SHEET 6 OF 9

AS-BUILT 5-14-91

SDP-88-145

CONSTRUCTION SPECIFICATIONS

I. SITE PREPARATION
The fill area and borrow area shall be cleared and grubbed to remove all trees, vegetation, roots and other objectionable material. The topsoil from the embankment area and borrow area shall be removed and stockpiled. The topsoil shall be spread on the completed fill area.

II. EARTH FILL
A) FILL MATERIAL shall be obtained from on-site under the supervision of a soils engineer. It shall be free from roots, stumps, wood rubbish, oversized stones frozen or other objectionable material. Fill areas shall be constructed to the elevation shown on the plan to allow for anticipated settlement.
B) PLACEMENT: Areas on which fill will be placed shall be scarified prior to placement of fill. Fill materials shall be placed in layers 6" thick maximum (before compaction) and shall be continuous over the entire length of fill. The most porous material shall be placed in areas not adjacent to ponded water.
C) COMPACTION: The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be compacted to the specified density. Fill material shall contain sufficient moisture so that the required degree of compaction can be obtained with the equipment used.
D) CORE TRENCH shall be made of SC or CL material compacted to 95% of A.A.S.H.T.O. T-99 density.

III STRUCTURAL BACKFILL
Backfill material shall be the type and quality specified for the adjoining fill material. The fill shall be placed in horizontal layers 4" thick maximum and compacted by hand tamping or manually directed power tampers or plate vibrators. At no time during backfilling operations shall driven equipment by allowed to operate any closer than four feet measured horizontally to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Materials shall fill completely all spaces under and adjacent to newly installed pipe.

IV. CONCRETE
Concrete shall meet the minimum requirements set forth in the Maryland State Highway Administration "Specifications for Construction and Materials" January 1982 Section 918.06 - "Portland Cement Concrete Mixtures", Mix No. 3 Reinforcing steel shall be A.S.T.M. A 615, Grade 60.

V. STABILIZATION
The storm water management facility will be stabilized with "Permanent Slope Seeding" as follows:
After spreading 4" topsoil seed with a mixture of 30% innoculated crown vetch and 70% Kentucky 31 Tall Fescue applied at a rate of 60 lbs./Ac., 10-20-20 fertilizer shall be applied at a rate of 25 lbs./1000 square feet, lime at a rate of 92 lbs./1000 square feet, mulch area with unweathered small grain straw at a rate of 1.5 T/Ac., anchor with rapid curing asphalt (R.C.-70, R.C.-250 or R.C.-800) at a rate of 0.1 Gal. S.Y.

VI. PIPE CONDUITS
30 B.C.C.M.P., Type A- POND #1 36" BCCMP, TYPE A - POND #2
A. Corrugated Metal Pipe
1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-90 with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.
2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
5. Backfilling shall conform to structural backfill as shown above.
6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

VII. FILTER CLOTH
MIRAFI 1405 or equivalent shall be used.

VIII. SEDIMENT CONTROL.
Construction to be in accordance with "1983 Maryland Standards and Specifications For Soil Erosion and Sediment Control". In release structure install dewatering device by connecting 25 L.F. of 12" perforated underdrain to the low flow pipe. The 12" underdrain shall be wrapped in filter cloth and covered with minimum 12" thick #2 stone.

NOTE: (SPECIFIED DENSITY)
SUITABLE MATERIAL SHALL BE USED FOR THE EMBANKMENT AND ROLLED TO A MINIMUM DEGREE OF COMPACTION OF 95% OF THE DRY UNIT WEIGHT AS DETERMINED BY A.A.S.H.T.O. T-99. CONSTRUCTION OF SWM POND SHALL BE PERFORMED UNDER STRICT SUPERVISION OF A SOILS ENGINEER.

PERMANENT SEEDING NOTES

Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding, IF NOT PREVIOUSLY LOOSENED.

Soil Amendments: Use one of the following schedules:

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 square ft.) and 600 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 urea form fertilizer (9 lbs./1000 sq. ft.)

2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23lbs./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 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 weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs./acre Kentucky 31 tall fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ 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 ga./1000 sq.ft.) of emulsified saphalt 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.

TEMPORARY SEEDING NOTES

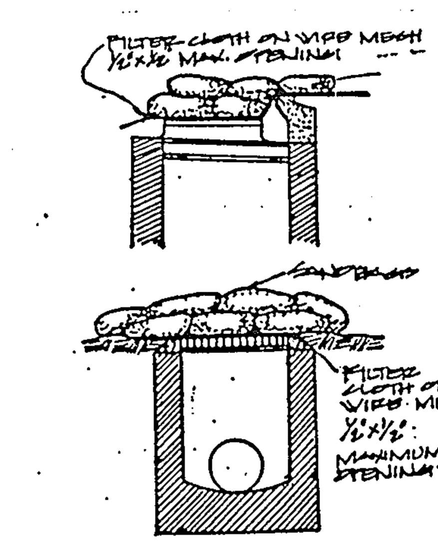
Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding, IF NOT PREVIOUSLY LOOSENED.

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs/1000 sq.ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru Nov. 15, seed with 2½ bu. 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 (.07 lbs./1000 sq. ft.) For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1½ to 2 tons per acre (70-90 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 (5gal./1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq.ft.) for anchoring.

INLET PLUGGING DETAILS



INLET PLUGGING DETAILS
NOT TO SCALE

1. PLACE WIRE MESH OVER INLET GRATE AND THROAT OPENING. OVERLAP 2 FEET AT ALL ENDS.
2. PLACE A PEICE OF APPROVED FILTER CLOTH (40-85 SIEVE) OF THE SAME DIMENSIONS AS THE WIRE MESH) OVER THE WIRE MESH.
3. PLACE SANDBAGS OVER FILTER CLOTH AND WIRE MESH. SANDBAGS SHOULD OVERLAP AND COVER COMPLETE SURFACE OF THE WIRE MESH.
4. INSPECT FREQUENTLY TO INSURE SANDBAGS ARE SECURE AND FILTER CLOTH IS FREE OF SEDIMENT. REPLACE FILTER CLOTH IF CLOGGED.

STORM WATER MANAGEMENT DATA

POND #2

SOIL GROUP: B & C

EXISTING CONDITION: (PRIOR TO MASS GRADING)

D.A. = 12.02±
RCN = 66
2 Yr. Flow = 8.88 CFS
10 Yr. Flow = 27.32 CFS
100 Yr. Flow = 51.59 CFS

PROPOSED CONDITION:

A) Not Routed
D.A. = 0.68 AC±
RCN = 74
2 Yr. Flow = 1.03 CFS
10 Yr. Flow = 2.42 CFS
100 Yr. Flow = 4.08 CFS

B) Routed
S.W.M. Facility - Pond
D.A. = 14.65 AC±
RCN = 92

BEFORE MANAGEMENT		AFTER MANAGEMENT (ROUTING)
2 Yr. Flow =	46.58 CFS	7.55 CFS(w.s. elev. @ 323.35)
10 Yr. Flow =	79.59 CFS	24.35 CFS(w.s. elev. @ 325.31)
100 Yr. Flow =	115.56 CFS	56.34 CFS(w.s. elev. @ 326.54)

ALLOWABLE RELEASES:		NOT ROUTED & ROUTED HYDROGRAPHS ADDED	
For 2 Yr. Storm =	8.88 CFS	For 2 yr. Storm:	8.06 CFS
For 10 Yr. Storm =	27.32 CFS	For 10 yr. Storm:	25.06 CFS
For 100 Yr. Storm =	51.59 CFS	For 100 yr. Storm:	58.25 CFS

HYDROLOGIC CRITERIA:

Required - 2 & 10 yr. Management
Provided - 2 & 10 yr. Management

Structure Classification - A
Maximum Depth of Water - 8.54'

STORAGE REQUIREMENT:

For 2 Yr. Storm - 53174 CF (1.22 AC-Ft.)
For 10 Yr. Storm - 92174 CF (2.12 AC-Ft.)
For 100 Yr. Storm - 122174 CF (2.80 AC-Ft.)
Storage Height Product = 23.91 AC-Ft²

STORM WATER MANAGEMENT DATA

POND #1

SOIL GROUP: B,C.

EXISTING CONDITION:

D.A. = 9.04 AC±
RCN = 70
2 Yr. Flow = 9.12 CFS
10 Yr. Flow = 24.34 CFS
100 Yr. Flow = 43.52 CFS

PROPOSED CONDITION:

A) Not Routed
D.A. = 0.72 AC±
RCN = 76
2 Yr. Flow = 1.22 CFS
10 Yr. Flow = 2.72 CFS
100 Yr. Flow = 4.50 CFS

B) Routed
S.W.M. Facility - Pond
D.A. = 5.01
RCN = 92

BEFORE MANAGEMENT		AFTER MANAGEMENT (ROUTING)
2 Yr. Flow =	15.93 CFS	8.20 CFS(w.s. elev. @ 321.39)
10 Yr. Flow =	27.22 CFS	21.56 CFS(w.s. elev. @ 322.37)
100 Yr. Flow =	39.52 CFS	34.78 CFS(w.s. elev. @ 323.05)

ALLOWABLE RELEASES:		NOT ROUTED & ROUTED HYDROGRAPHS ADDED	
For 2 Yr. Storm =	9.12 CFS	For 2 yr. Storm:	9.14 CFS
For 10 Yr. Storm =	24.34 CFS	For 10 yr. Storm:	23.90 CFS
For 100 Yr. Storm =	43.52 CFS	For 100 yr. Storm:	38.70 CFS

HYDROLOGIC CRITERIA:

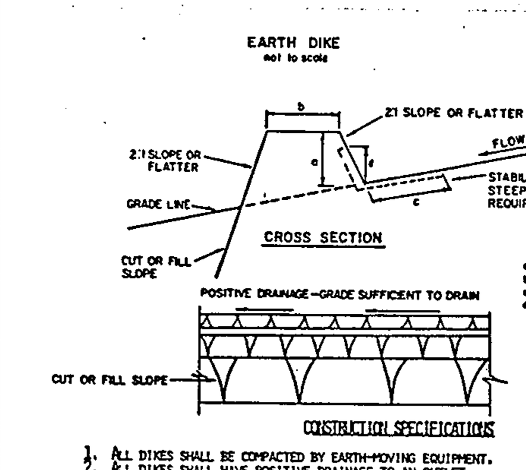
Required - 2 & 10 yr. Management
Provided - 2, 10 & 100 yr. Management

Structure Classification - A
Maximum Depth of Water - 5.05'

STORAGE REQUIREMENT:

For 2 Yr. Storm - 8800 CF (0.20 AC-Ft)
For 10 Yr. Storm - 1400 CF (0.32 AC-Ft)
For 100 Yr. Storm - 18500 CF (0.42 AC-Ft)
Storage Height Product - 2.12 AC-Ft²

EARTH DIKE
not to scale



CONSTRUCTION SPECIFICATIONS

1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per the chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	Seed and Straw Mulch	Seed and Straw Mulch
2	3.1-5.0%	Seed and Straw Mulch	Seed using Jute, or Excelsior; Sod; 2" Stone
3	5.1-8.0%	Seed with Jute, or Sod; 2" Stone	Lined Rip-Rap 4-8"
4	8.1-20%	Lined Rip-Rap 4-8"	Engineering Design

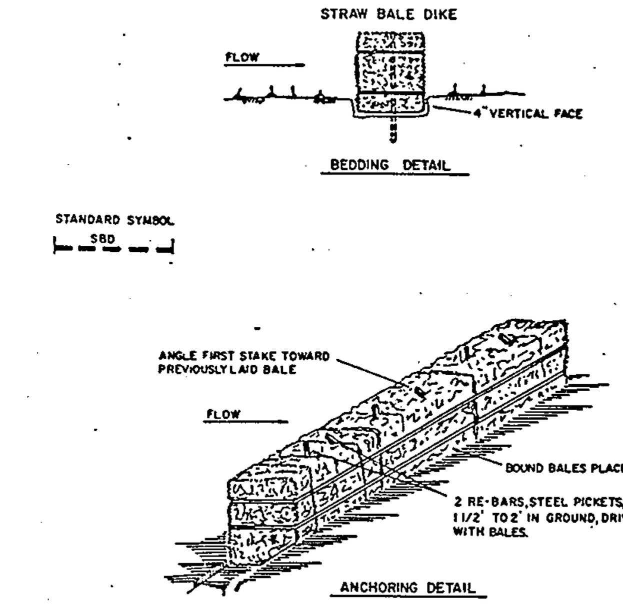
A. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
B. Rip-Rap to be 4-8 inches in a layer at least 8 inches thickness and pressed into the soil.
C. Approved equivalents can be substituted for any of the above materials.
7. Periodic inspection and required maintenance must be provided after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	EARTH DIKE	STANDARD DRAWING ED-1

SEQUENCE OF OPERATION

1. OBTAIN GRADING PERMIT,
2. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, PERMIT INSPECTOR 48 HOURS PRIOR TO BEGINNING WORK. (2 DAYS)
3. CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES ONLY. (5 DAYS)
4. INSTALL STABILIZED CONSTRUCTION ENTRANCES. PLUG EXISTING INLET I-100 AS SHOWN ON THE DETAIL ON SHEET 6 OF . (1 DAY)
5. CONSTRUCT SEDIMENT BASINS 1 & 2 . THE SEDIMENT BASINS SHALL BE CONSTRUCTED ACCORDING TO THE "CONSTRUCTION SPECIFICATIONS" FOR STORM WATER MANAGEMENT PONDS AS SHOWN ON SHEET 6 OF . (14 DAYS)
6. INSTALL ALL EARTH DIKES AND STRAW BALE DIKES MAINTAINING POSITIVE DRAINAGE TO THE SEDIMENT BASINS AT ALL TIMES. INSTALL MOUNTABLE BERMS AS NEEDED TO CROSS THE EARTH DIKE RUNNING THROUGH THE MIDDLE OF THE SITE. (5 DAYS)
7. BEGIN MAJOR GRADING OPERATIONS; ADJUST EARTH DIKES AS WORK PROGRESSES SO THAT POSITIVE DRAINAGE IS MAINTAINED TOWARDS THE SEDIMENT BASINS AT ALL TIMES. AS FILL MATERIAL IS PLACED IN THE AREA OF BUILDING C, A TEMPORARY DITCH (INDICATED BY THE CROSS HATCHED AREA ON THE PLAN) SHALL CARRY RUNOFF FROM THE NORTHERN HALF OF THE SITE TOWARDS SEDIMENT BASIN #2. AESTHETIC PONDS 1,2&3 WILL BE CONSTRUCTED AFTER THE MAJOR GRADING OPERATIONS. (21 DAYS)
8. INSTALL STORM DRAINS AND OTHER UTILITIES. AS SOON AS THE STORM DRAINS AND SUPPORTING GRADES ARE INSTALLED, THE EARTH DIKE FROM POINT A TO POINT B CAN BE REMOVED. PROVIDE ADEQUATE PROTECTION FOR ALL INLETS. (21 DAYS)
9. FINE GRADE AND INSTALL SUBBASE IN PARKING AND BUILDING AREAS. (14 DAYS)
10. STABILIZE ANY AREAS NOT RECEIVING PAVING. (3 DAYS)
11. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR CLEAN OUT AND CONVERT THE SEDIMENT BASINS TO STORM WATER MANAGEMENT FACILITIES. MAKE THE NECESSARY CHANGES TO BASINS 1&2 SO THAT IT CONFORMS TO THE SIZE AND SHAPE AS SHOWN ON THE STORM WATER MANAGEMENT PLAN. MAKE THE NECESSARY CHANGES TO BOTH RELEASE STRUCTURES SO THEY CONFORM TO THE STORM WATER PLANS. (7 DAYS)
12. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE THE REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE. (5 DAYS)

STRAW BALE DIKE

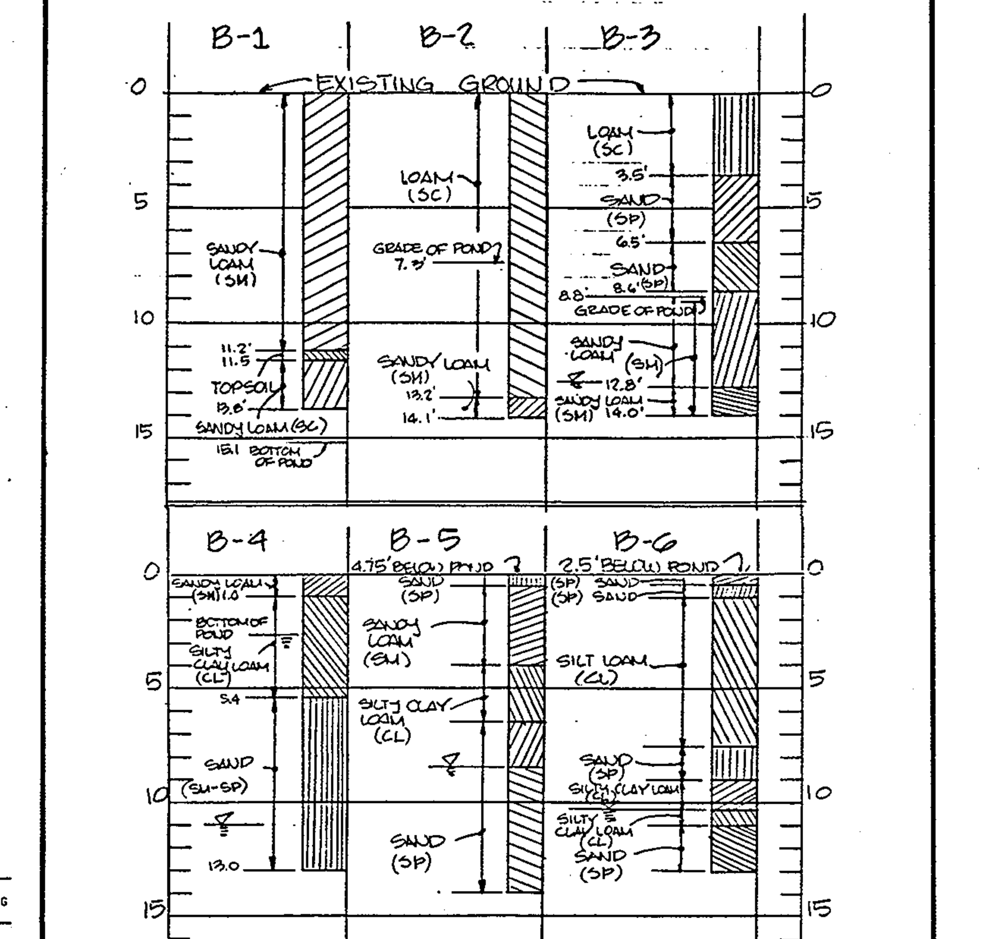


CONSTRUCTION SPECIFICATIONS

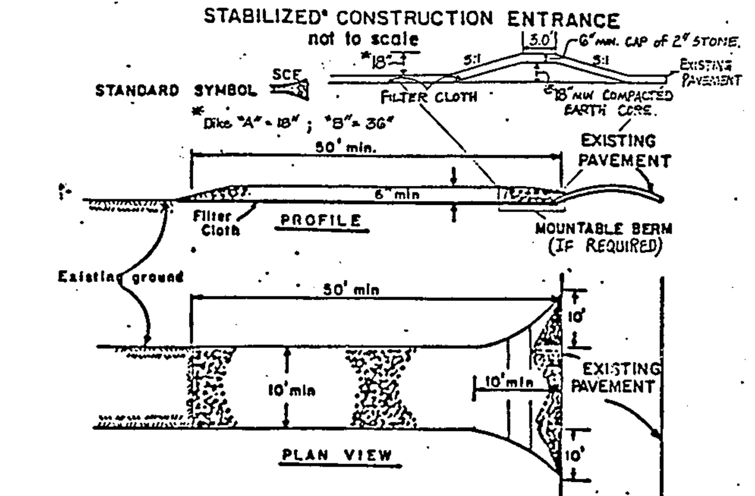
1. Bales shall be placed at the toe of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of (4) inches, and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STRAW BALE DIKE	STANDARD DRAWING SBD-1

SOIL BORINGS



STABILIZED* CONSTRUCTION ENTRANCE
not to scale

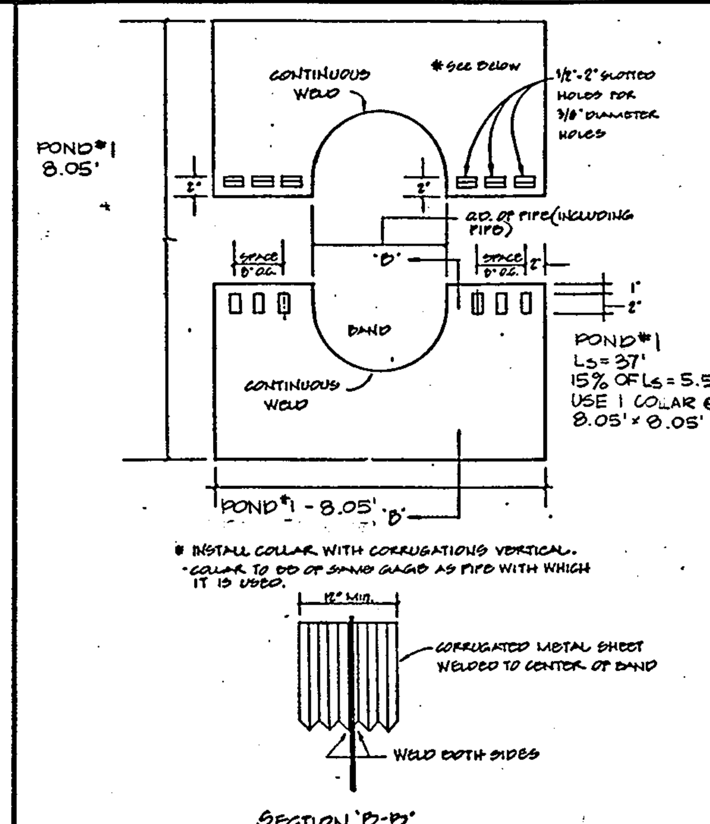


CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 ft. (except on a single residence lot where a 30 ft minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) ft. minimum, but not less than the full width at points where ingress or egress occurs.
5. 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.
6. 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.
7. 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 cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. 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.
9. 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

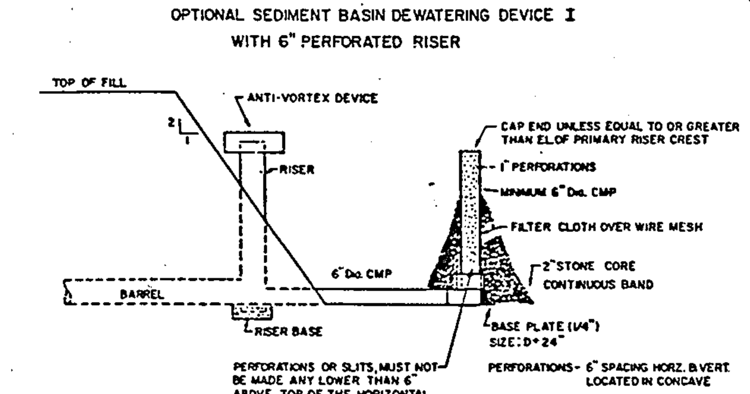
ANTI-SEEP COLLAR DETAIL



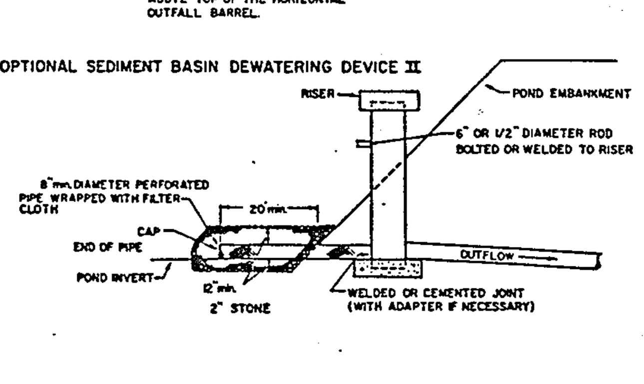
Notes:
1. All materials to be in accordance with Construction and Construction Material Specifications
2. When specified on plans, coating of collars shall be in accordance with Construction and Construction Material Specifications
3. Unassembled collars shall be marked by painting or tagging to identify matching pairs
4. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at time of installation
5. Each collar shall be furnished with 2 (two) 1/2" diameter rods with standard tank lugs for connecting collars to pipe
6. Collars shall be located 2' min. from all pipe joints

ANTI-SEEP COLLAR DETAIL

OPTIONAL SEDIMENT BASIN DEWATERING DEVICE I
WITH 6" PERFORATED RISER



OPTIONAL SEDIMENT BASIN DEWATERING DEVICE II



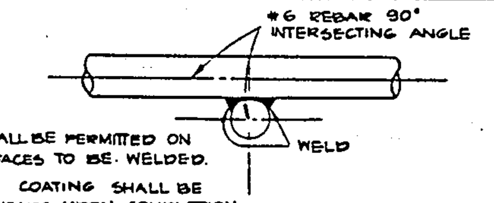
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	OPTIONAL SEDIMENT BASIN DEWATERING DEVICES	STANDARD DRAWING SB

MAINTENANCE SCHEDULE

MAINTENANCE ITEM	1	2	3	4	5
MAINTENANCE FREQUENCY	7	6	7	7	7
REPAIR DURATION	9	10	9	9	9

1. CLEAN OUT SILT
2. CLEAN OUT TRASH
3. CHECK WEIR CLOGGING
4. CHECK SLOPE STABILIZATION
5. CHECK STRUCTURAL INTEGRITY
6. EVERY TWO WEEKS
7. EVERY THREE MONTHS
8. ONE WEEK MAXIMUM
9. TWO DAY

* ALL MAINTENANCE INSPECTIONS AND REPAIR, SHALL BE THE RESPONSIBILITY OF THE OWNER.
* INSPECT ALL ABOVE ITEMS AFTER EACH MAJOR RAINFALL AND REPAIR IF REQUIRED.



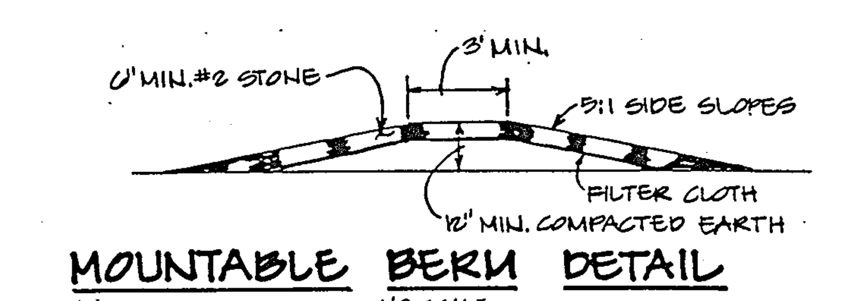
NOTES:
1. NO RUST SHALL BE PERMITTED ON REBAR SURFACES TO BE WELDED.
2. BITUMINOUS COATING SHALL BE APLIED TO BARS UPON COMPLETION OF WELDING.

WELDING DETAIL
NO SCALE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

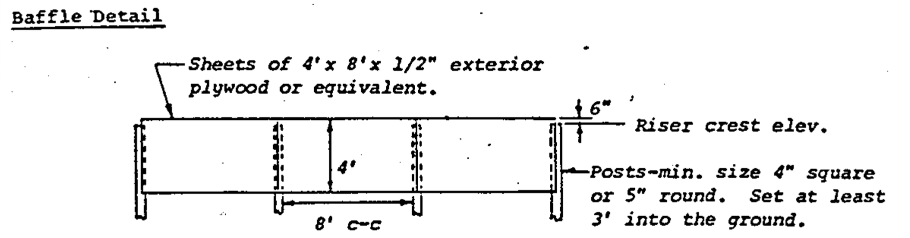
STATE OF MARYLAND RICHARD LESLIE SMITH No. 12281 REGISTERED PROFESSIONAL ENGINEER
5/14/91
AS-BUILT INFO BY BEN DYER ASSOC. INC. (301) 439-9200
AS-BUILT DATE OF SURVEY 3-25-91

MOUNTABLE BERM DETAIL



MOUNTABLE BERM DETAIL
NO SCALE

Baffle Detail



THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-18-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

DIRECTOR — 6.27.88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

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

DIRECTOR — 6/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88 — RQL 6/14/88

GWS
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND TAPOBRATA CHAKRABARTI 8936 REGISTERED PROFESSIONAL ENGINEER 2/18/88

ENGINEERS'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.
ENGINEER: TAPOBRATA CHAKRABARTI
REG. NO. 8936 DATE: 2/18/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD, 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.
DEVELOPER: DATE: 3.17.88

DESIGNED: N.B.
DRAWN: J.W.
CHECKED: N.B.

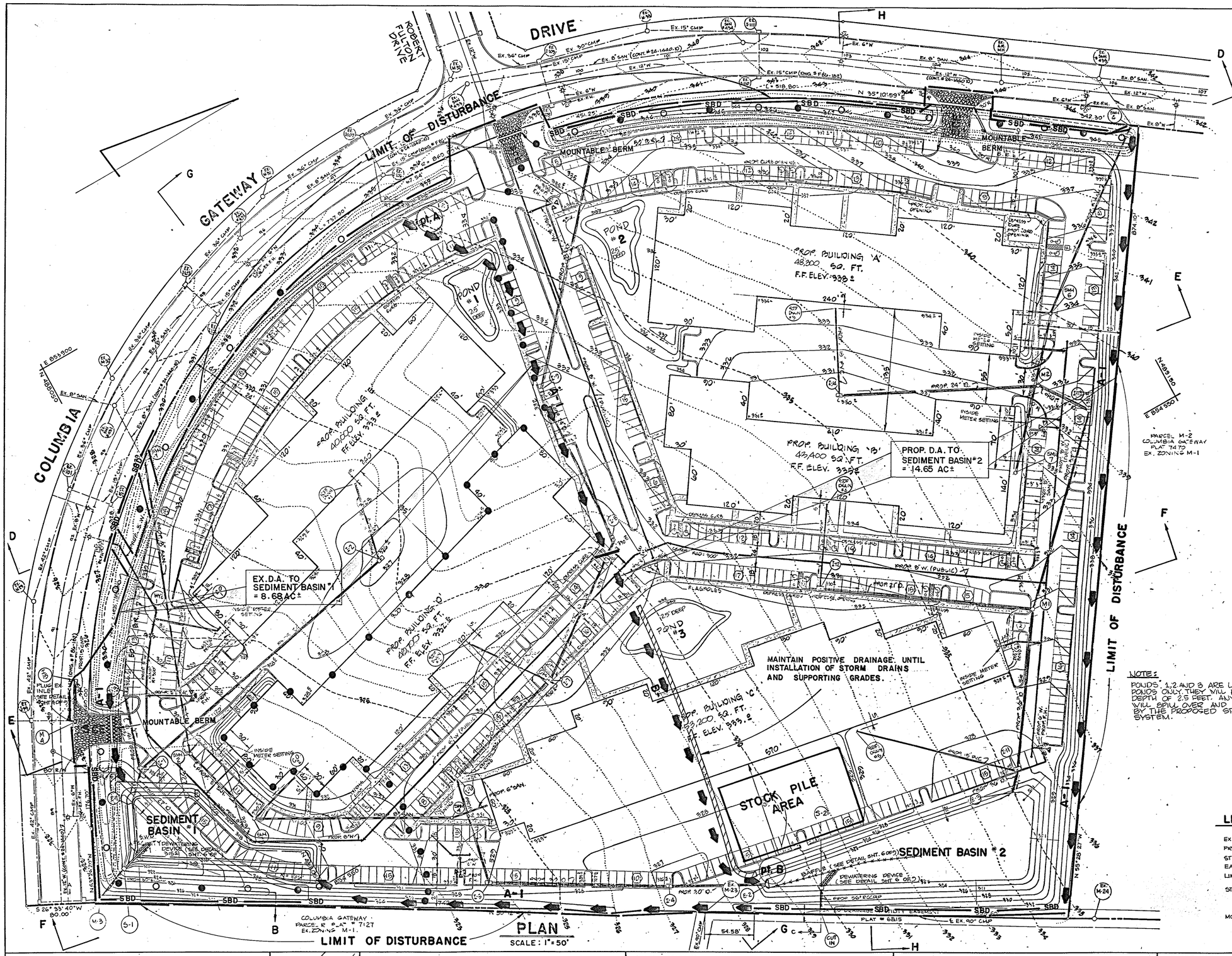
STORM WATER MANAGEMENT - SEDIMENT & EROSION CONTROL DETAILS & NOTES FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD.

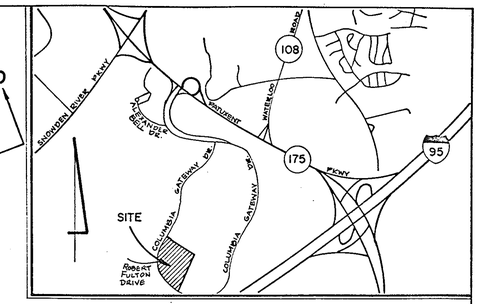
PARCEL # 587
ELECTION DIST. #6
FEBRUARY 16, 1988
SHEET 6 OF 9

AS-BUILT 5-14-91

SDP-88-145



PLAN
SCALE: 1"=50'



VICINITY MAP
SCALE: 1"=2000'

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-18-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

DIRECTOR — DATE 6.27.88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — 6/22/88

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

DIRECTOR — 6/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88

NOTE:
POUNDS #1, 2 AND 3 ARE LANDSCAPING POUNDS ONLY. THEY WILL HAVE A MAXIMUM DEPTH OF 2.5 FEET. ANY EXCESS WATER WILL SPILL OVER AND BE PICKED UP BY THE PROPOSED STORM DRAIN SYSTEM.

LEGEND

- EX. DRAINAGE AREA
- PROP. DRAINAGE AREA
- STRAW BALE DIKE — SBD
- EARTH DIKE
- LIMIT OF DISTURBANCE
- STABILIZED CONSTR. ENTRANCE — SCE
- MOUNTABLE BERM

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWNSON, MARYLAND 21204
(301) 825-8120

ENGINEERS'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION

ENGINEER: Jaydeepta Chakrabarti
REG. NO. 19936 JAYDEEPTA CHAKRABARTI DATE: 4/19/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD, 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE:
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER: William M. Rouse — DATE: 5.17.88

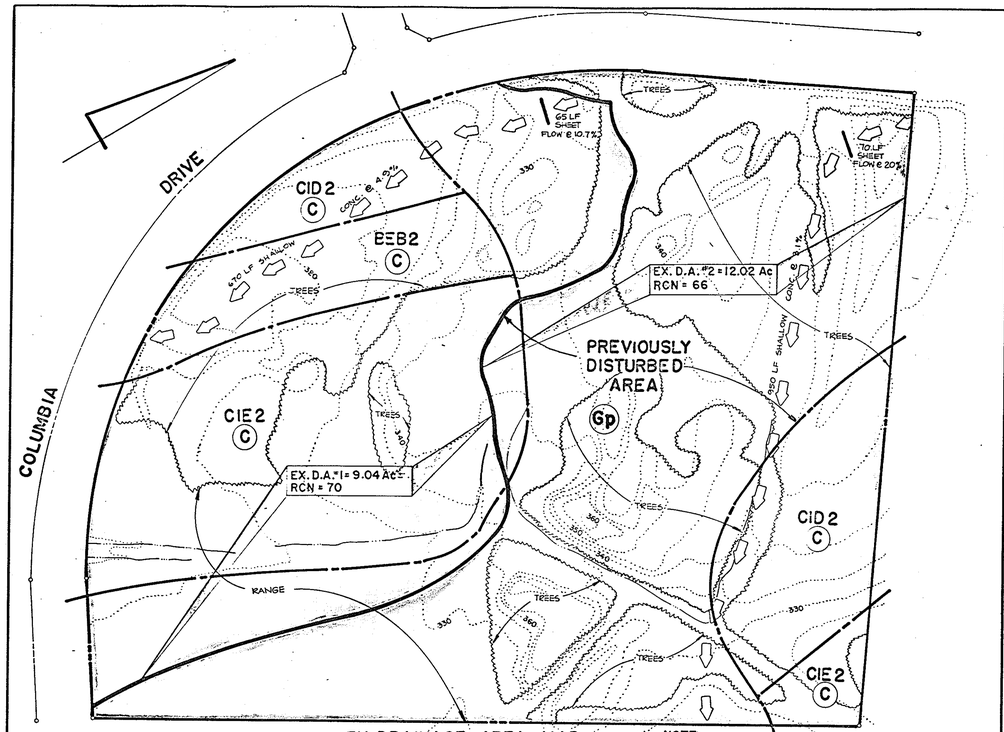
DESIGNED: N.B.
DRAWN: J.W.
CHECKED: N.B.

SEDIMENT & EROSION CONTROL PLAN
FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD
SCALE 1"= 50'

PARCEL "587
ELECTION DIST. "6
FEBRUARY 16, 1988
SHEET 1 OF 9

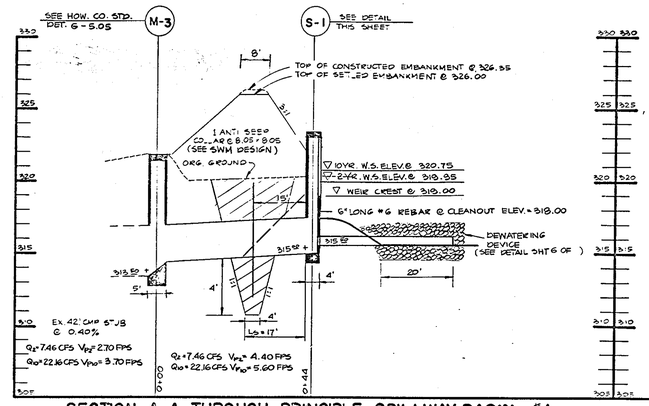
SDP-88-145



EX. DRAINAGE AREA MAP

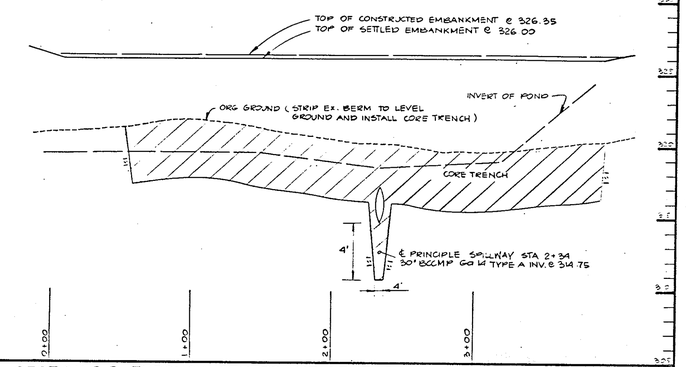
SCALE: 1" = 100'

NOTE:
EX. D.A. MAP DEPICTS ORIGINAL CONDITIONS AS SHOWN ON THE MASSGRADING PLANS FOR COLUMBIA GATEWAY.



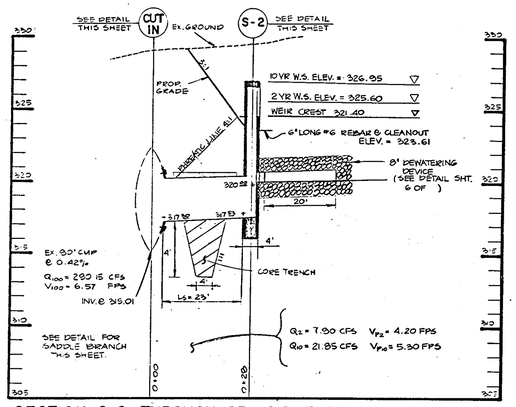
SECTION A-A THROUGH PRINCIPLE SPILLWAY BASIN #1

SCALE: HORZ. 1" = 20' VERT. 1" = 5'



SECTION B-B THROUGH CENTERLINE OF EMBANKMENT BASIN #1

SCALE: HORZ. 1" = 50' VERT. 1" = 5'



SECTION C-C THROUGH PRINCIPLE SPILLWAY BASIN #2

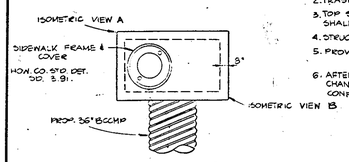
SCALE: HORZ. 1" = 20' VERT. 1" = 5'

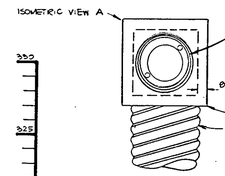
DETAIL RELEASE STRUCTURE S-2

(MODIFIED DBL. S INLET - HOW. CO. STD. DET. STD. 3.23)
NO SCALE

NOTES:

1. REINFORCEMENT IN SLAB SHALL BE AS SHOWN IN HOW. CO. STD. DET. PLATE STD 4.01.
2. TRASH RACK SHALL BE #6 REBAR @ 6" O.C. OR AS SHOWN.
3. TOP SLAB SHALL BE A MIN OF 4" THICK. BOTTOM SLAB SHALL BE A MIN OF 8" THICK.
4. STRUCTURE SHALL BE MADE OF REINFORCED CONCRETE.
5. PROVIDE MANHOLE STEPS AS PER HOW. CO. STD. DET. G 5.21.
6. AFTER SEDIMENT CONTROL PHASE MAKE THE NECESSARY CHANGES TO THE APPROVED SWM PLANS. (SEE SHEET OF).



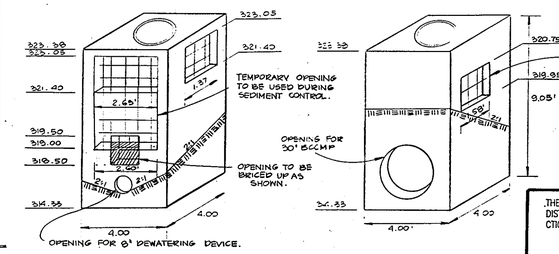


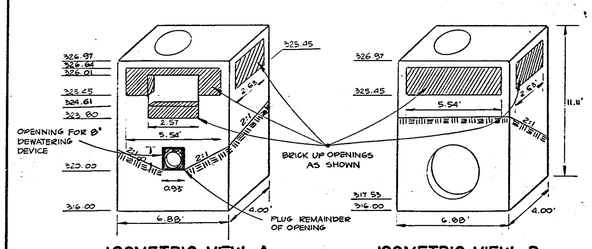
DETAIL FOR RELEASE STRUCTURE S-1

(MODIFIED TYPE S INLET - SEE HOW CO STD DET STD. 3.01)
NOT TO SCALE

NOTES:

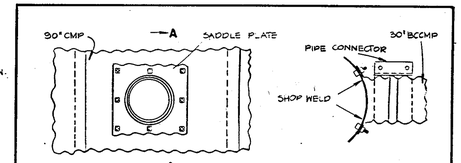
1. REINFORCEMENT IN SLAB SHALL BE AS SHOWN IN HOW. CO. STD. DET. STD 4.01
2. TRASH RACK SHALL BE #6 REBAR @ 6" O.C. OR AS SHOWN.
3. TOP SLAB SHALL BE A MIN OF 4" THICK. BOTTOM SLAB SHALL BE A MIN OF 8" THICK.
4. STRUCTURE SHALL BE MADE OF REINFORCED CONCRETE.
5. PROVIDE MANHOLE STEPS AS PER HOW. CO. STD. DET. G 5.21
6. AFTER SEDIMENT CONTROL PHASE MAKE THE NECESSARY CHANGES TO THE APPROVED SWM PLANS. (SEE SHEET OF).





ISOMETRIC VIEW A

ISOMETRIC VIEW B



SIDE VIEW OF DRAIN WITH SADDLE BRANCH IN PLACE

SECTION A-A

SADDLE BRANCH

NO SCALE

* ALL CONNECTIONS TO BE GALVANIZED AND BITUMINOUS COATED.

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

SEDIMENT CONTROL NOTES

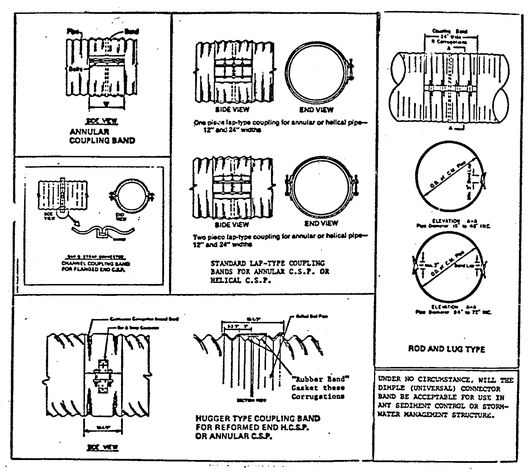
1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, 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.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis:

Total Area of Site	21.062	Acres
Area Disturbed	20.47	Acres
Area to be roofed or paved	4.73	Acres
Area to be vegetatively stabilized	5.74	Acres
Total Cut	559,000	Cu. yds * INCLUDES 10%
Total Fill	559,000	Cu. yds COMPACTION.
Offsite waste/borrow area location		

8) Any sediment-control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector
10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

TYPES OF COUPLERS FOR CORRUGATED STEEL PIPE

(All connector bands require neoprene gaskets)



UNDER NO CIRCUMSTANCE, WILL THE DIMPLE (UNIVERSAL) CONNECTOR BAND BE ACCEPTABLE FOR USE IN ANY SEDIMENT CONTROL OR STORM-WATER MANAGEMENT STRUCTURE.

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 5/20/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88

PLAN NUMBER

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

COUNTY HEALTH OFFICER — DATE 6-15-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

DIRECTOR — 6.27.88

CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

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

DIRECTOR — 6/15/88

CHIEF BUREAU OF ENGINEERING — DATE 6-15-88

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWNSON, MARYLAND 21204
(301) 825-8120

ENGINEER'S CERTIFICATE:
I CERTIFY THAT THIS PLAN FOR S.W.M. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

ENGINEER: Taporata Chakraborty
REG. NO. 8920 TAPORATA CHAKRABORTY — DATE: 2/18/88

OWNER / DEVELOPER
COLUMBIA GATEWAY DRIVE LTD. PARTNERSHIP
C/O ROUSE & ASSOCIATES
5950 SYMPHONY WOODS RD.
COLUMBIA MD. 21044
(301) 740-0200

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED 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 OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINE "AS-BUILT" OF THE S.W.M. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER: Don M. Cain — DATE: 5-17-88

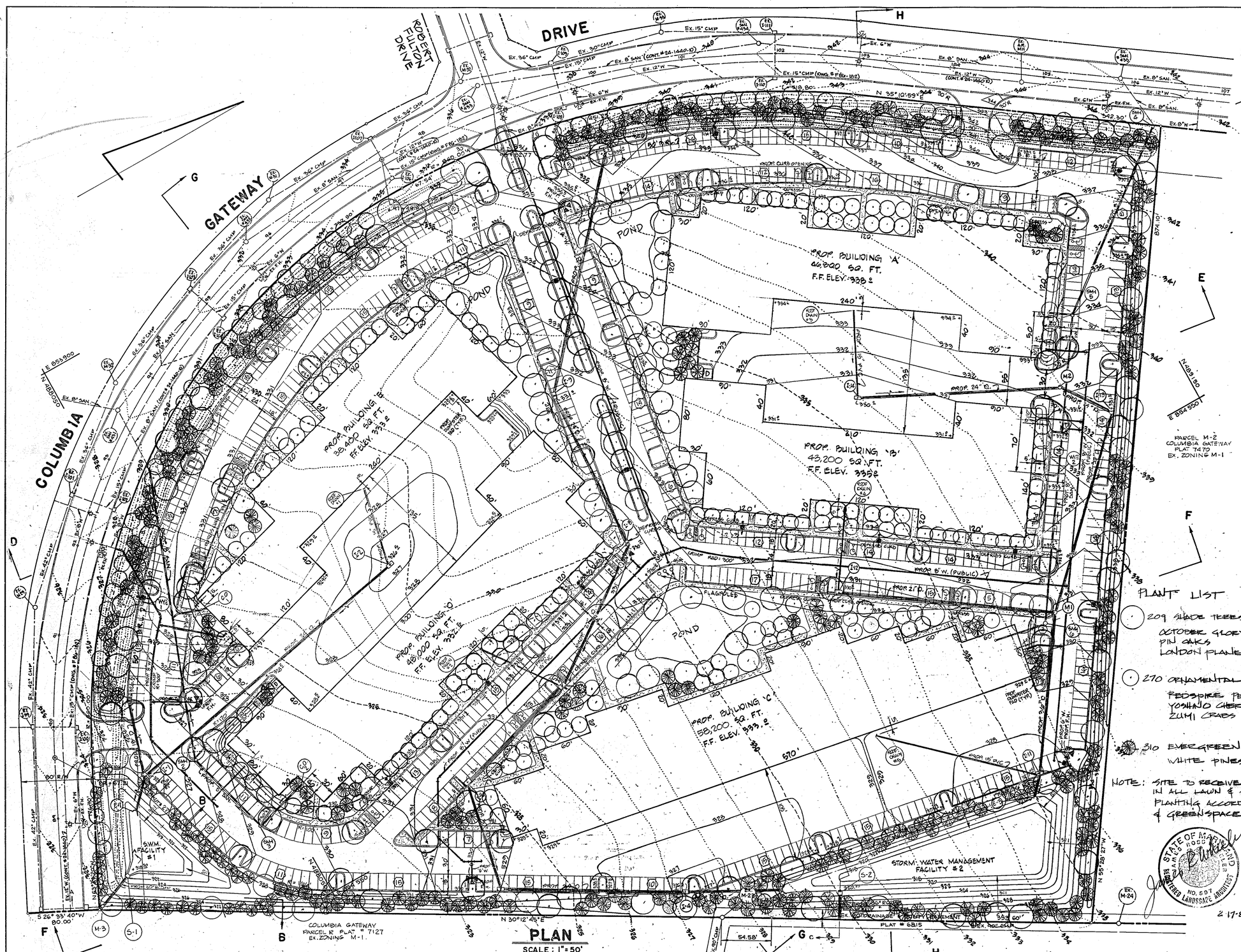
DESIGNED: N.B.	
DRAWN: J.W.	
CHECKED: N.B.	

SEDIMENT AND EROSION CONTROL — DETAILS AND PROFILES
FOR
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD

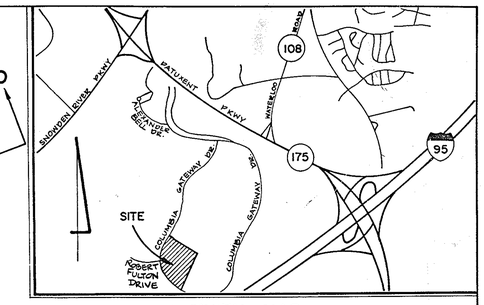
PARCEL "587
ELECTION DIST. #6
FEBRUARY 16, 1988
SHEET 8 OF 9

SDP-88-145



PLAN

SCALE: 1"=50'



VICINITY MAP

SCALE: 1"=2000'

PLANT LIST

209 SHADE TREES 2½-3" CAL
OCTOBER GLORY MAPLES
PIN OAKS
LONDON PLANE

270 ORNAMENTAL TREES 8-10' HGT
REDBUDS PEARS
YOSHINO CHERRIES
ZUMI CRABS

310 EVERGREEN TREES 6-8' HGT
WHITE PINES

NOTE: SITE TO RECEIVE 4-6" OF TOPSOIL IN ALL LAWN & PLANTING AREAS PLANTING ACCORDING TO HRD & GREENSPACE, INC. SPECIFICATIONS

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-17-88

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
U.S. SOIL CONSERVATION SERVICE — DATE 5/27/88

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 5/27/88
PLAN NUMBER

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — DATE 6-15-88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.
DIRECTOR — DATE 6.27.88.
CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE 6/22/88

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
DIRECTOR — DATE 6/15/88
CHIEF BUREAU OF ENGINEERING — DATE 6-15-88

STATE OF MARYLAND — JAMES P. SHEELER — REGISTERED LANDSCAPE ARCHITECT — NO. 507
2-17-88

ADDRESS CHART	
BUILDING #	STREET ADDRESS
A	
B	
C	
D	
E	

SUBDIVISION NAME: COLUMBIA GATEWAY			SECT./AREA	LOT/PARCEL # M-1
PLAT # OR L/F 7470	BLOCK # 1	ZONE M-1	TAX/ZONE MAP 43	ELECT. DIST. 6 — CENSUS TRACT 6064
WATER CODE E-06			SEWER CODE 490 0000	

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
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ENGINEER: _____
REG. NO. _____ DATE: _____

OWNER / DEVELOPER
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DEVELOPER: _____ DATE: 5-17-88

DESIGNED: K.B.
DRAWN: J.W./K.B.
CHECKED: N.B.

LANDSCAPING PLAN
- FOR -
THREE PONDS BUSINESS PARK
COLUMBIA GATEWAY PARCEL M-1

TAX MAP 43
HOWARD CO. MD
SCALE 1"=50'

PARCEL # 587
ELECTION DIST. # 6
FEBRUARY 16 1988
SHEET 9 OF 9
SDP-88-145

5972