

OWNER AND DEVELOPER
 K AND H PARTNERSHIP
 401 WASHINGTON AVE. SUITE 501
 TOWSON, MARYLAND 21284

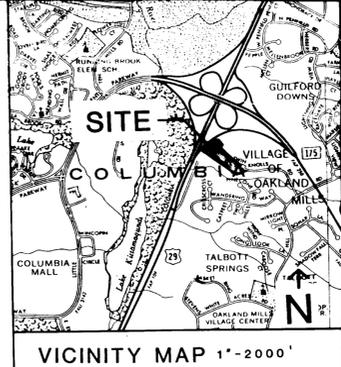
REVISIONS

NO.	DATE	ITEM
1	3-18-84	SIDEWALKS & DUMPSTER PAD LOCATION

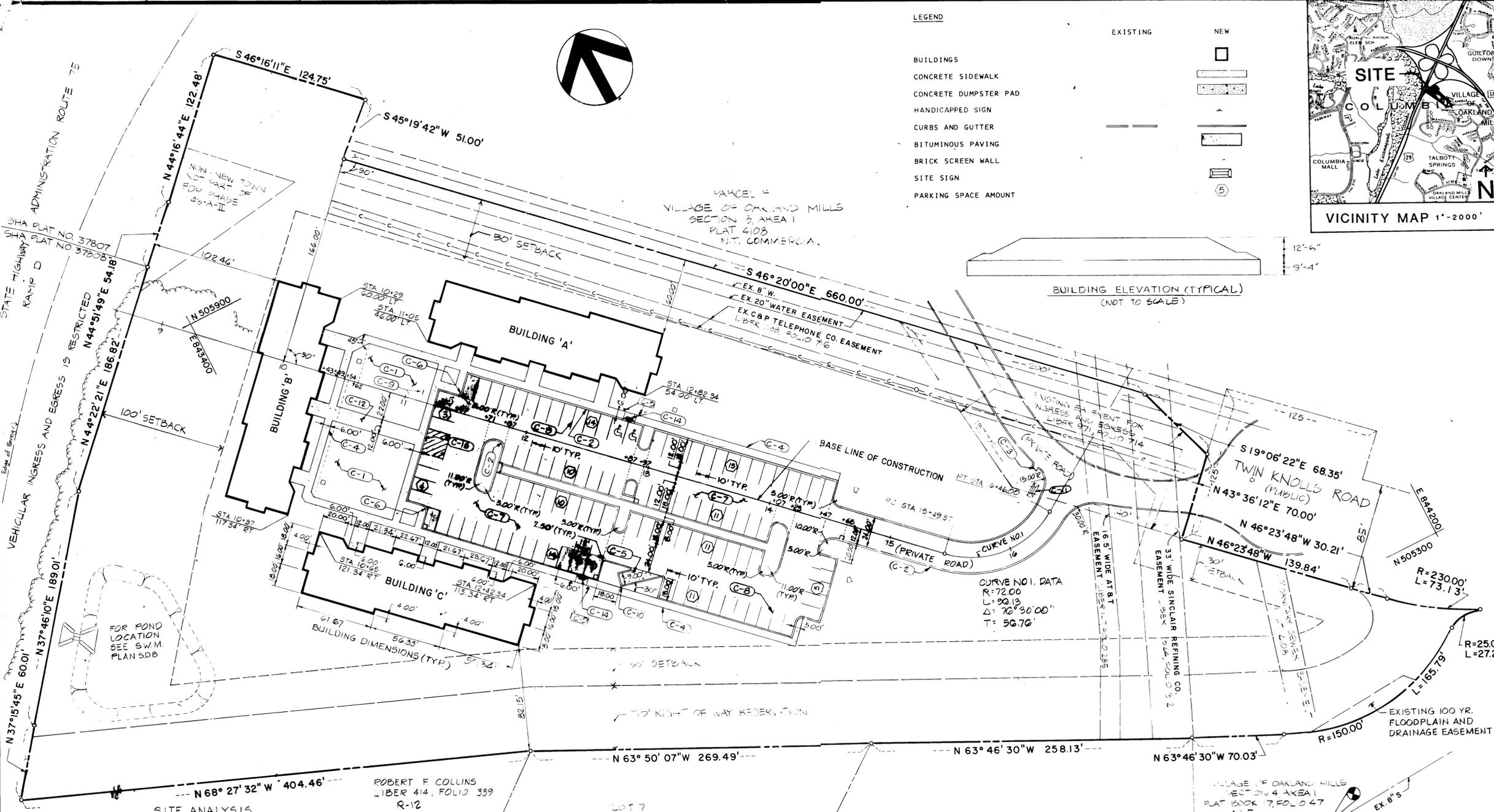
THE CLUSTERS AT TWIN KNOLLS
 COLUMBIA
 VILLAGE OF OAKLAND MILLS
 SECTION 3 AREA 1
 PARCEL G-1
 RB567B 6TH ELECT. DISTRICT
 HOWARD CO. MARYLAND

LAYOUT PLAN

PROJECT NUMBER 23-136	DRAWING NUMBER SD-2
PRELIMINARY ISSUE FEB 1, 1984	CONSTRUCTION ISSUE
SCALE 1" = 40'	1 OF 9



- LEGEND**
- EXISTING
 - NEW
 - BUILDINGS
 - CONCRETE SIDEWALK
 - CONCRETE DUMPSTER PAD
 - HANDICAPPED SIGN
 - CURBS AND GUTTER
 - BITUMINOUS PAVING
 - BRICK SCREEN WALL
 - SITE SIGN
 - PARKING SPACE AMOUNT



SITE ANALYSIS

A. AREA OF PARCEL: 3.629 ACRES = 157,587 SQ. FT.
 B. PRESENT ZONING: NT COMMERCIAL, FDP-43-A-II
 C. GROSS FLOOR AREA: 9,114 SQ. FT. x 3 = 27,342 SQ. FT.
 D. NET FLOOR AREA = 20,000 MAX
 E. PARKING REQUIRED: 20,000 ÷ 250 = 104 PARKING SPACES
 F. PARKING PROVIDED: 103 PARKING SPACES
 G. HANDICAP PARKING SPACES: 108 TOTAL PARKING SPACES

G. LOT ADDRESS: 5397 TWIN KNOLLS ROAD
 H. USE: CONDO OFFICES
 I. BUILDING COVERAGE: 29,470 SQ. FT. = 7.8% OF SITE AREA

CONSTRUCTION NOTES

- C-1 SELECTIVELY CLEAR AREA, SEE SPECIFICATIONS.
- C-2 INSTALL STANDARD 7" COMBINATION CONCRETE CURB AND GUTTER, SEE HOWARD COUNTY STANDARD R-3.01.
- C-3 INSTALL STANDARD CURB OPENING, SEE MSHA STANDARD MD-640.02.
- C-4 INSTALL CONCRETE SIDEWALK, SEE HOWARD COUNTY STANDARD R-3.05.
- C-5 INSTALL CONCRETE DUMPSTER PAD, SEE DETAIL 1, SHEET SD-10.
- C-6 INSTALL PEDESTRIAN RAMP, SEE DETAIL 3, SHEET SD-10.
- C-7 INSTALL BITUMINOUS PAVING, SEE DETAIL 2, SHEET SD-10.
- C-8 INSTALL PAVEMENT MARKINGS, SEE DETAIL 4, SHEET SD-10.
- C-9 INSTALL HANDICAP PARKING SIGN, SEE DETAIL 6, SHEET SD-10.
- C-10 INSTALL BRICK SCREEN WALL, SEE DETAIL 1, SHEET A.
- C-11 INSTALL SITE SIGN, SEE DETAIL 1, SHEET A.
- C-12 INSTALL CONCRETE PAVING, SEE DETAIL 7, SHEET SD-10.
- C-13 INSTALL 12' WIDE DRIVEWAY ENTRANCE, SEE HOWARD COUNTY STANDARD DETAIL 12-5.02.
- C-14 INSTALL PEDESTRIAN RAMP 'B', SEE DETAIL 8, SHEET SD-10.

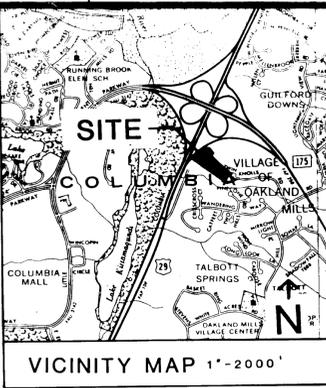
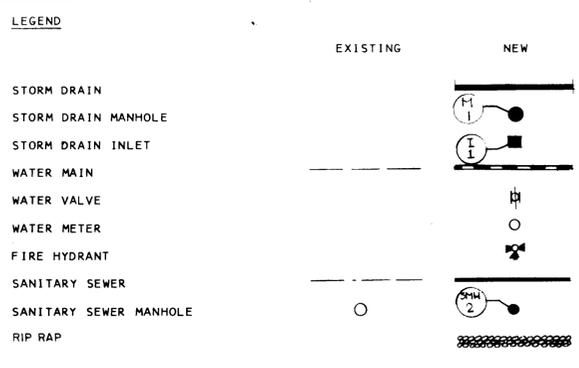
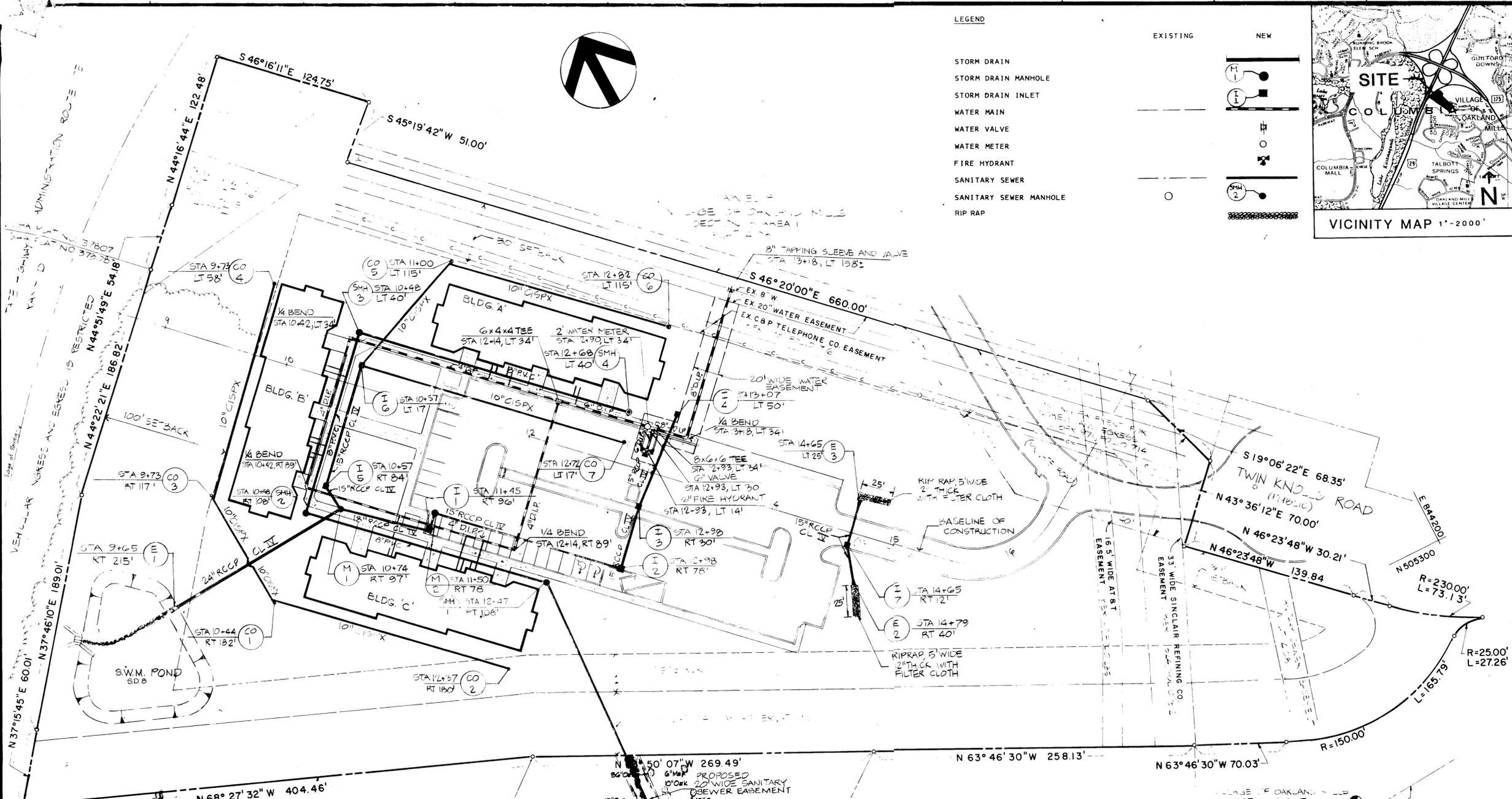
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 3-21-84

NOTE: THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT 702-7272

BLDG NUMBER	ADDRESS CHART	STREET ADDRESS
C	5397 TWIN KNOLLS DRIVE	
B	5401 TWIN KNOLLS DRIVE	
A	5405 TWIN KNOLLS DRIVE	

- GENERAL NOTES**
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT TELEPHONE NO. (301) 599-0100 AT LEAST 72 HOURS PRIOR TO STARTING EXCAVATION TO VERIFY ALL LOCATIONS OF EXISTING UTILITIES.
 - ADJUTING PROPERTIES TO BE PROTECTED FROM DAMAGE. REPAIRS ARE AN OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO EXISTING VEGETATION AND ANY VIOLATIONS OF THE PROTECTED AREAS.
 - ALL CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH HOWARD COUNTY, DEPARTMENT OF PUBLIC WORK STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
 - THE INFORMATION SHOWN ON THESE PLANS IS FOR THE CONVENIENCE OF THOSE CONCERNED ONLY. THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION SHOWN IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS OWN SATISFACTION.
 - THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 - ALL DISTURBED AREAS NOT STABILIZED WITH PAVING, BUILDING, SODDING OR MULCH IN PLANTING AREAS SHALL BE SEEDDED AND MULCHED IN ACCORDANCE WITH THE SPECIFICATIONS AND SEDIMENT CONTROL PLAN, PRIOR TO CONTRACT COMPLETION.

SUBDIVISION NAME VILLAGE OF OAKLAND MILLS EMPLOYMENT CENTER	SECT./AREA 3/1	LOT/PARCEL # PARCEL G-1
PLAT # 5678	BLOCK # 21	ZONE NT/COMM
TAX/ZONE MAP 30	ELEC. DIST. 6TH	CENSUS TR. 6061.01
WATER CODE N/A	SEWER CODE N/A	
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS Director: James M. ... DATE: 4-18-84		
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT Chief, Bureau of Engineering: ... DATE: 5-12-84		
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING Planning Director: ... DATE: 5-22-84		
APPROVED: CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION ... DATE: 5-22-84		



WHITNEY SAILEY FOX MAGNANI CONSULTING ENGINEERS
 Suite 311 Green Spring Station
 2360 West Joppa Road
 Lutherville, Maryland 21093
 301-296-4200



OWNER DEVELOPER
 K AND H PARTNERSHIP
 401 WASHINGTON AVE. SUITE 501
 TOWSON, MARYLAND 21284

REVISIONS

NO.	DATE	ITEM
1	3/14/84	REV. SANITARY AND STORM DRAIN ALIGNMENT

THE CLUSTERS AT TWIN KNOLLS
 COLUMBIA
 VILLAGE OF OAKLAND MILLS
 SECTION 3 AREA 1
 PARCEL G-1
 RBS67B 6TH ELECT. DISTRICT
 HOWARD CO. MARYLAND

UTILITY PLAN

PROJECT NUMBER 23-150	DRAWING NUMBER SD-3
PRELIMINARY ISSUE FEB 1, 1984	
CONSTRUCTION ISSUE	

INLET, MANHOLE AND STRUCTURE SCHEDULE *TOP OF GATE

NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.
INLETS & MANHOLES				
I-1	TYPE 'D' COMBINATION HO. CO. PLATE SD-4.32	335.45	335.20	332.23*
I-2	"	337.17	336.97	340.87*
I-3	"	338.35	338.15	342.43*
I-4	TYPE 'B' INLET, HO. CO. PLATE SD-4.22	-	339.95	343.50*
I-5	"	333.00	332.80	337.00*
I-6	"	333.91	333.50	337.06*
I-7	TYPE 'G' COMBINATION HO. CO. PLATE SD-4.32	343.04	342.84	346.42*
M-1	PRECAST MANHOLE HO. CO. PLATE GS.12	332.63	331.86	333.33
M-2	PRECAST MANHOLE HO. CO. PLATE GS.12	335.63	335.63	339.75
SMH-1	PRECAST SANITARY MANHOLE HO. CO. PLATE GS.12	327.62	327.92	342.72
SMH-2	"	329.70	329.60	338.50
SMH-3	"	331.30	331.20	333.30
SMH-4	"	-	339.00	344.90
END SECTIONS				
E-1	"CONCRETE END SECTION HO. CO. PLATE SD-551	-	331.00	-
E-2	"	-	342.00	-
E-3	"	344.03	-	-
CLEANOUTS				
CO-1	MAIN LINE CLEANOUT, HO. CO. PLATE S3.21	332.43	332.23	336.50
CO-2	"	-	334.35	342.50
CO-3	"	332.45	332.25	334.00
CO-4	"	-	333.25	338.20
CO-5	"	335.21	335.01	342.00
CO-6	"	-	340.43	346.00
CO-7	"	333.14	-	343.58

ROBERT F COLLINS
 LIBER 414, FOLIO 339

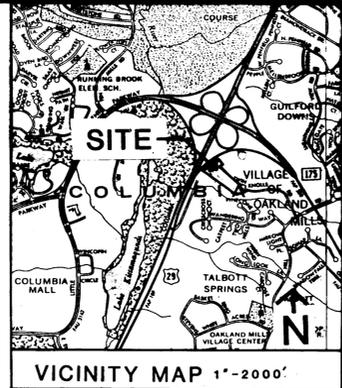
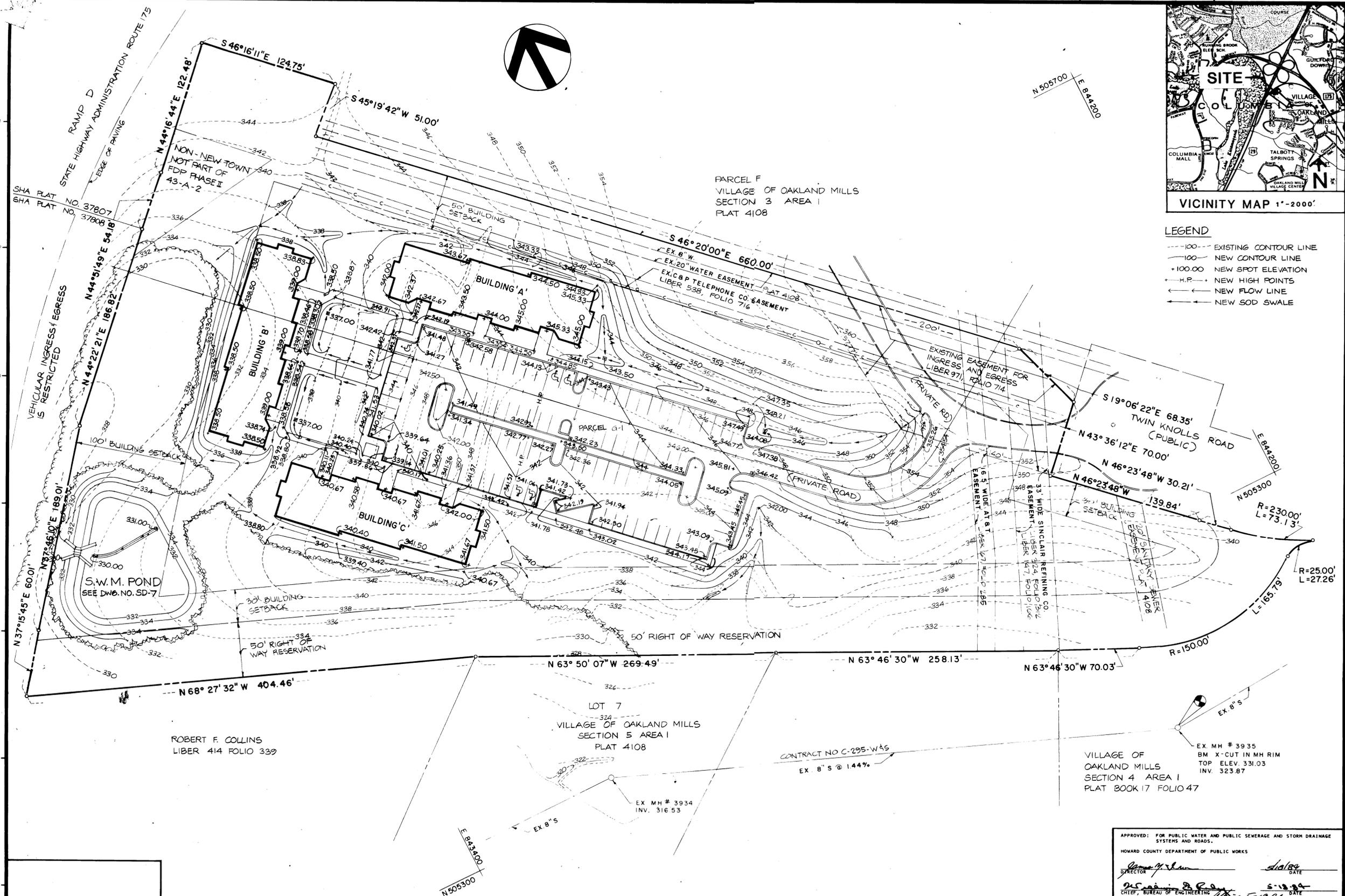
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 3-21-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: [Signature] DATE: 5/10/84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer: [Signature] DATE: 5-22-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 Planning Director: [Signature] DATE: 5-22-84

Chief, Division of Land Development and Zoning Administration: [Signature] DATE: 5-22-84



gva
 george vaeth
 associates, inc.
 architect
 5501 twin knolls road suite 108
 columbia, maryland 21045

- LEGEND**
- 100 --- EXISTING CONTOUR LINE
 - 100 --- NEW CONTOUR LINE
 - +100.00 NEW SPOT ELEVATION
 - H.P. NEW HIGH POINTS
 - ← NEW FLOW LINE
 - NEW SOD SWALE

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REVISIONS

NO.	DATE	ITEM
1	3/14/84	REV. PER WALKS AND PAVING REV.

THE CLUSTERS AT TWIN KNOLLS COLUMBIA
 VILLAGE OF OAKLAND MILLS SECTION 3 AREA 1
 PARCEL G-1
 RB 567B 6TH ELECT. DISTRICT HOWARD CO. MARYLAND

GRADING PLAN

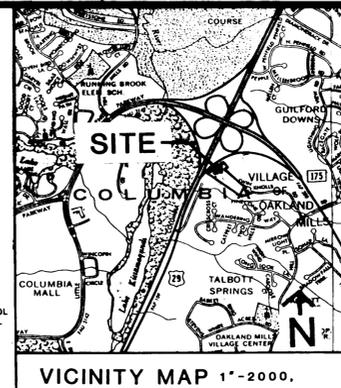
PROJECT NUMBER 83136	DRAWING NUMBER SD-4
PRELIMINARY ISSUE FEB 1, 1984	CONSTRUCTION ISSUE
SCALE 1"=40'	?

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 3-21-84
[Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR *[Signature]* DATE 4-10-84
 CHIEF, BUREAU OF ENGINEERING *[Signature]* DATE 5-18-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *[Signature]* DATE 5-22-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR *[Signature]* DATE 5-22-84
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION *[Signature]* DATE 5-22-84



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 architect
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 columbia, maryland 21045

WHITNEY CONSULTING ENGINEERS
BAILEY
FOX
MAGNANI
 Suite 311 Green Spring Station
 2360 West Joppo Road
 Lutherville, Maryland 21093
 301-296-4200



OWNER DEVELOPER
 K AND H PARTNERSHIP
 401 WASHINGTON AVE SUITE 501
 TOWSON, MARYLAND 21284

REVISIONS

NO.	DATE	DESCRIPTION
1	3/4/84	RELOCATED SILT TRAP

THE CLUSTERS AT TWIN KNOLLS
 COLUMBIA
 VILLAGE OF OAKLAND MILLS
 SECTION 3 AREA 1
 PARCEL G-1
 RB 5075 6TH FLECT. DISTRICT
 HOWARD CO. MARYLAND

SEDIMENT CONTROL PLAN

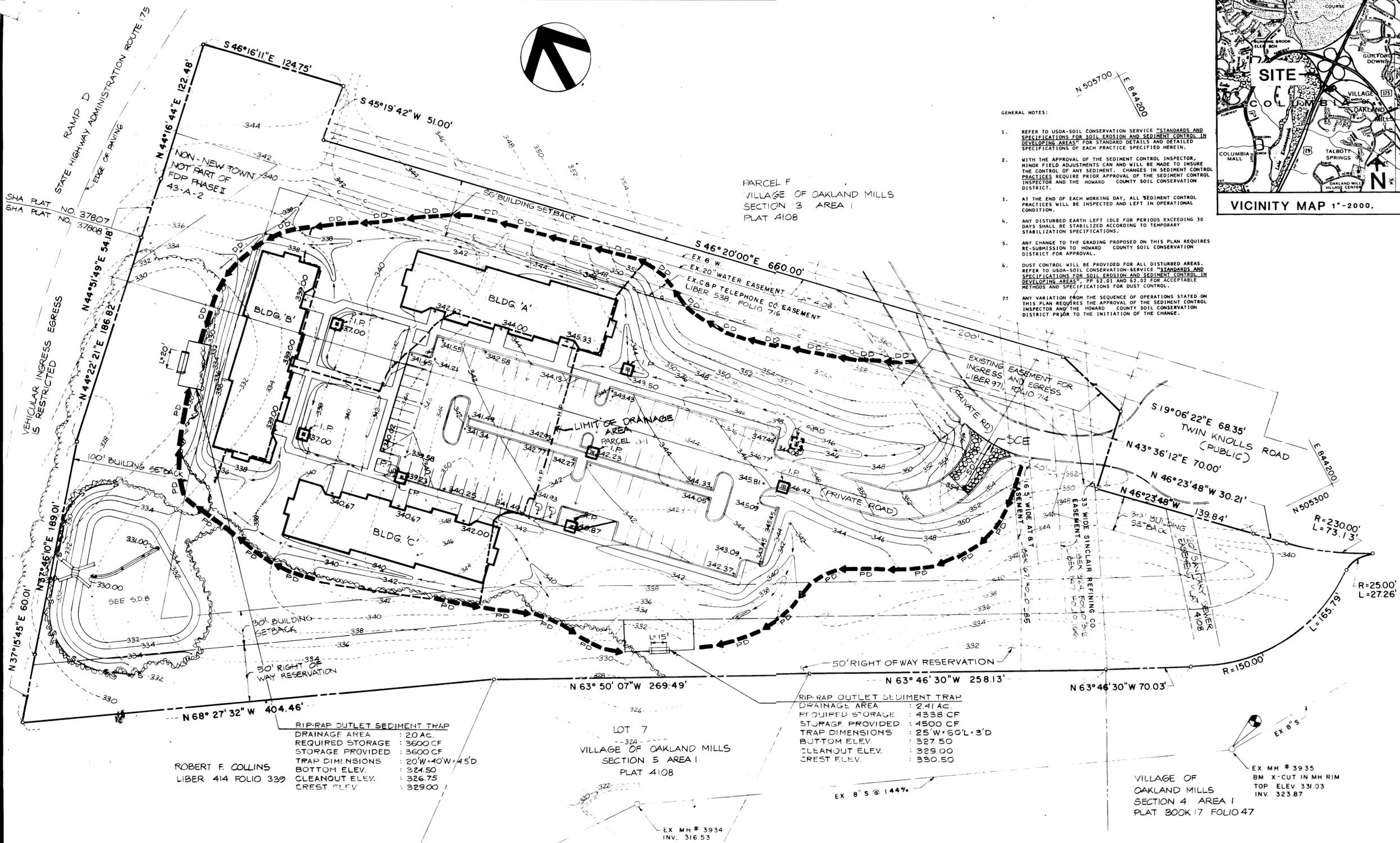
PROJECT NUMBER 83136	DRAWN BY
PRELIMINARY ISSUE FEB 1, 1984	SCALE 1"=40'
CONSTRUCTION ISSUE	4 OF 9

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 5/10/84
 CHIEF, BUREAU OF ENGINEERING: [Signature] DATE: 5-12-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 5-22-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: [Signature] DATE: 5-22-84
 CHIEF, BUREAU OF PLANNING AND ZONING ADMINISTRATION: [Signature] DATE: 5-22-84

- GENERAL NOTES:
- REFER TO USDA-SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
 - WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 - AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
 - ANY DISTURBED EARTH LEFT IDLE FOR PERIODS EXCEEDING 30 DAYS SHALL BE STABILIZED ACCORDING TO TEMPORARY STABILIZATION SPECIFICATIONS.
 - ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
 - DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO USDA-SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" PP 82.81 AND 82.82 FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
 - ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.



RIP-RAP OUTLET SEDIMENT TRAP
 DRAINAGE AREA: 20 AC
 REQUIRED STORAGE: 3600 CF
 STORAGE PROVIDED: 3600 CF
 TRAP DIMENSIONS: 20'W x 40'W x 4.5'D
 BOTTOM ELEV.: 324.50
 CLEANOUT ELEV.: 326.75
 CREST ELEV.: 329.00

RIP-RAP OUTLET SEDIMENT TRAP
 DRAINAGE AREA: 2.41 AC
 REQUIRED STORAGE: 4338 CF
 STORAGE PROVIDED: 4500 CF
 TRAP DIMENSIONS: 25'W x 60'L x 3'D
 BOTTOM ELEV.: 327.50
 CLEANOUT ELEV.: 329.00
 CREST ELEV.: 330.50

ROBERT F. COLLINS
 LIBER 414 FOLIO 339

LOT 7
 VILLAGE OF OAKLAND MILLS
 SECTION 5 AREA 1
 PLAT 4108

VILLAGE OF OAKLAND MILLS
 SECTION 4 AREA 1
 PLAT BOOK 17 FOLIO 47

SEQUENCE OF OPERATIONS FOR EROSION AND SEDIMENT CONTROL

NO.	DESCRIPTION	TIME FOR COMPLETION
1.	NOTIFY HOWARD COUNTY SEDIMENT CONTROL INSPECTOR TWO WORKING DAYS PRIOR TO BEGINNING ANY WORK.	
2.	BEGIN MINOR CLEARING OPERATIONS FOR CONSTRUCTION OF SEDIMENT CONTROL MEASURES.	2 DAYS
3.	BEGIN MINOR GRADING AS REQUIRED FOR SEDIMENT CONTROL.	1 DAY
4.	INSTALL SILT FENCES, DIVERSION DIKES, STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER DIKES.	1 WEEK
5.	CLEAR & GRUB SITE, STRIP TOPSOIL.	2 WEEKS
6.	GRADE SITE.	2 WEEKS
7.	INSTALL STORM DRAINS AND INLET PROTECTION.	3 WEEKS
8.	CONSTRUCTION.	3 MONTHS
9.	SEED AND MULCH OR SOO ALL DISTURBED AREAS OUTSIDE BUILDING AND PAVING AREAS, UNLESS NOTED OTHERWISE ON THE PLANS.	3 DAYS
10.	REMOVE ALL SEDIMENT CONTROL MEASURES PRIOR TO SUBSTANTIAL COMPLETION.	1 WEEK
11.	ALL TIMES FOR COMPLETION ARE SUBJECT TO MODIFICATION.	

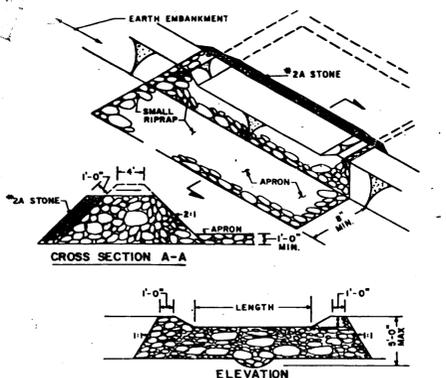
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature] DATE: 4-24-84
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: [Signature] DATE: 4-24-84
 DISTRICT COORDINATOR
 HOWARD SOIL CONSERVATION DISTRICT

DEVELOPER'S CERTIFICATE
 "I HEREBY 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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
 [Signature] DATE: 3/31/1984

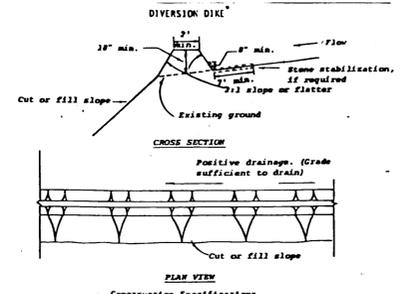
ENGINEER'S CERTIFICATE
 "I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 [Signature] DATE: Jan 31, 1984
 SIGNATURE OF ENGINEER

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 3-21-84
 [Signature]



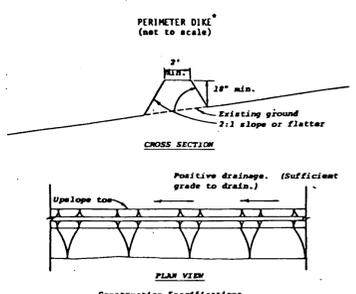
- Construction Specifications**
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
 - The fill material for the embankment shall be free of roots or other woody vegetation as well as over sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 - 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 repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 - The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
 - All cut and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be small riprap 3" - 2 1/2", with a 1" thickness of #20 crushed stone placed on the upgrade side of the small riprap.
 - Drainage area for this practice is limited to 3 acres or less.

1 RIPRAP OUTLET TRAP



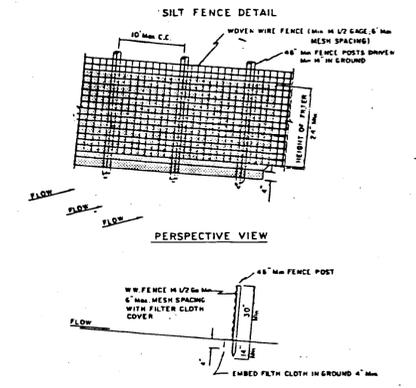
- Construction Specifications**
- All dikes shall be machine compacted.
 - All diversion dikes shall have positive drainage to an outlet.
 - A. Diverted runoff from a protected or stabilized area shall outlet directly to an undisturbed stabilized area or into a level spreader or grade stabilization structure.
B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or to an area protected by any of these practices.
 - Stabilization shall be temporary seeding, in accordance with Article 36.12 temporary-seeding of City of Baltimore, "Specifications For Materials, Highways, Bridges, Utilities, and Incidental Structures" Dated 1979.
 - Periodic inspection and required maintenance must be provided.

2 DIVERSION DIKE



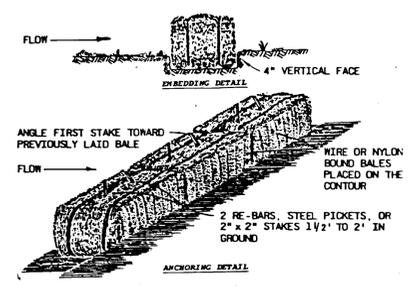
- Construction Specifications**
- All dikes shall be machine compacted.
 - All perimeter dikes shall have positive drainage to an outlet.
 - A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or into a level spreader or grade stabilization structure.
B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or to an area protected by any of these practices.
 - Stabilization shall be temporary seeding, in accordance with Article 36.12 temporary-seeding of City of Baltimore, "Specifications For Materials, Highways, Bridges, Utilities, and Incidental Structures" Dated 1979.
 - Periodic inspection and required maintenance must be provided.

3 PERIMETER DIKE



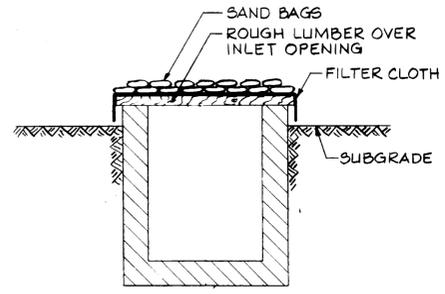
- CONSTRUCTION NOTES**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES
 - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH WIRE TIES SPACED EVERY 24" AT TOP AND MID SECTION
 - SEE STEP BY STEP PROCEDURE ON BACK OF THIS SHEET.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 1/2" x 6" 6" MESH OPENING
FILTER CLOTH: FILTER # 200 100% POLYPROPYLENE, LAUREL EROSION CONTROL, CLOTH BARRIER POLYFIBER 2 OR EQUAL

4 SILT FENCE



- CONSTRUCTION SPECIFICATIONS**
- BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
 - EACH BALE SHALL BE EMBEDDED IN THE SOIL OF 4".
 - BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID TO FORCE BALES TOGETHER.
 - INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

5 STRAW BALE DIKE



6 INLET PROTECTION DETAIL

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE **3-21-84**
[Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR *[Signature]* DATE **3-14-84**

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER *[Signature]* DATE **5-22-84**

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
PLANNING DIRECTOR *[Signature]* DATE **5-22-84**
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION *[Signature]* DATE **5-22-84**

gva
george vaeth
associates, inc
architect
5501 twin knolls road . suite 108
columbia, maryland 21045

WHITNEY CONSULTING ENGINEERS
BAILEY Suite 311 Green Spring Station
FOX 2360 West Joppa Road
MAGNANI Lutherville, Maryland 21093
301-296-4200



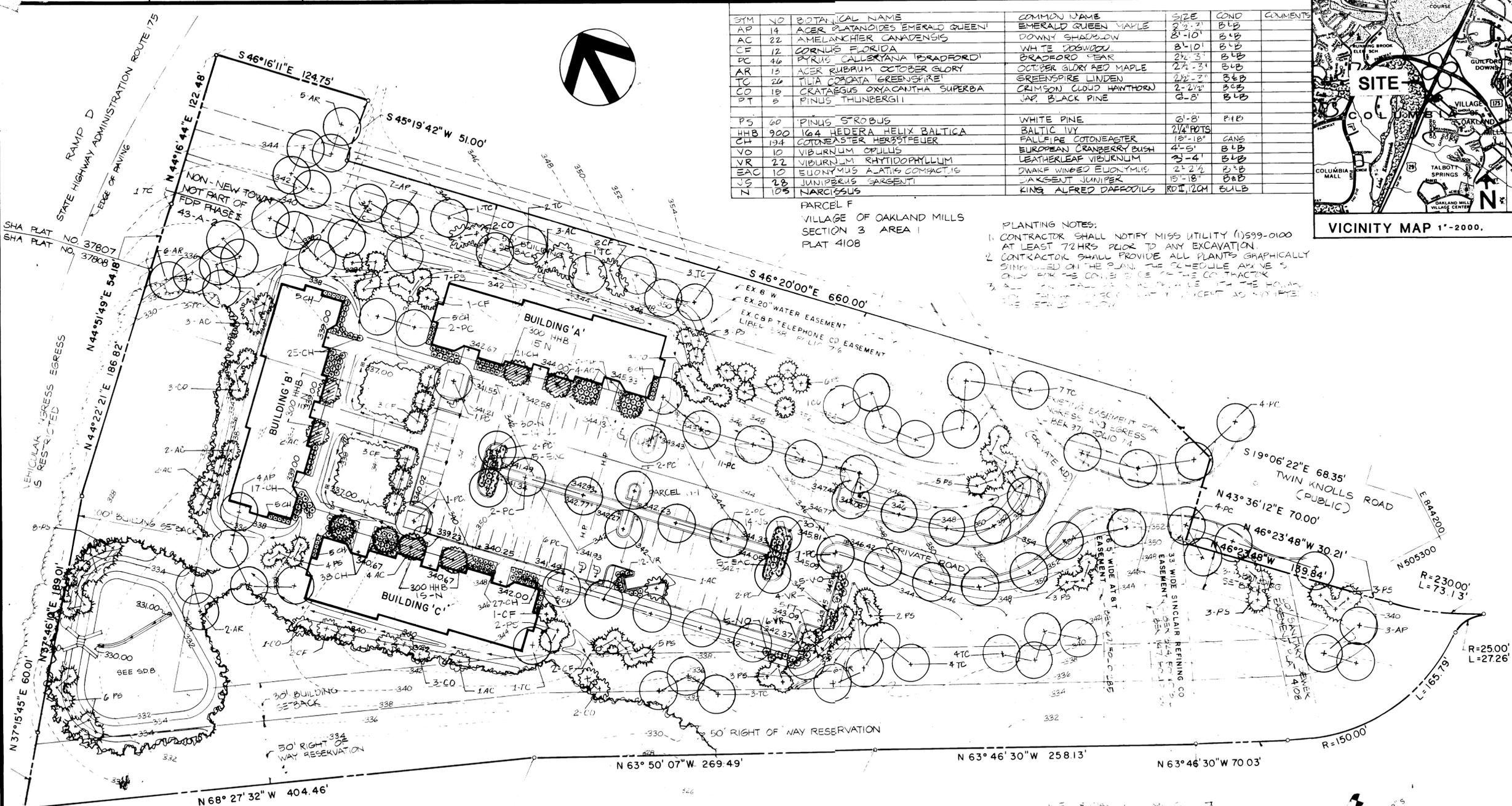
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401 WASHINGTON AVE SUITE 501
TOWSON, MARYLAND 21284

REVISIONS		
NO.	DATE	ITEM
1	3/14/84	NEW DETAIL #6

THE CLUSTERS
AT TWIN KNOLLS
COLUMBIA
VILLAGE OF OAKLAND MILLS
SECTION 3 AREA 1
PARCEL G-1
RB567B 6TH ELEC. DISTRICT
HOWARD CO. MARYLAND

SEDIMENT CONTROL DETAILS

PROJECT NUMBER: 83-136
DRAWING NUMBER: SD-6
PRELIMINARY ISSUE: FEB 1, 1984
CONSTRUCTION ISSUE: **SD-6**
SCALE: 1" = 20'
5 OF 9



SYM	NO	BOTANICAL NAME	COMMON NAME	SIZE	COND	COMMENTS
AP	14	ACER PLATANOIDES EMERALD QUEEN	EMERALD QUEEN MAPLE	2 1/2'-3'	B LB	
AC	22	AMELANCHIER CANADENSIS	DOWNY SHADYLOW	8'-10'	B LB	
CF	12	CORNUS FLORIDA	WHITE DOGWOOD	8'-10'	B LB	
PC	46	PYRUS CALLERIANA 'BRADFORD'	BRADFORD PEAR	2 1/2'-3'	B LB	
AR	13	ACER RUBRUM OCTOBER GLORY	OCTOBER GLORY RED MAPLE	2 1/2'-3'	B LB	
TC	24	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2 1/2'-3'	B LB	
CO	18	CRATAEGUS OXYACANTHA SUPERBA	CRIMSON CLOUD HAWTHORN	2'-2 1/2'	B LB	
PT	8	FINLIS THUNBERGII	JAP. BLACK PINE	8'-8'	B LB	
PS	60	PINUS STROBUS	WHITE PINE	6'-8'	B 10	
HNB	900	164 HEDERA HELIX BALTICA	BALTIC IVY	2 1/2' PROTS		
CH	194	COTONEASTER HERBSTFEUER	FALLIFE COTONEASTER	18'-18'	CANS	
VO	10	VIBURNUM OPULIS	EUROPEAN CRANBERRY BUSH	4'-5'	B LB	
VR	22	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	2'-4'	B LB	
EAC	10	EUONYMUS ALATIS COMPACTUS	DWARF WINGED EUONYMUS	2'-2 1/2'	B LB	
JS	78	JUNIPERUS SARGENTI	SARGENT JUNIPER	15'-18'	B LB	
N	108	NARCISSUS	KING ALFRED DAFFODILS	ROLL 12CH	BULB	



PARCEL F
VILLAGE OF OAKLAND MILLS
SECTION 3 AREA 1
PLAT 4108

- PLANTING NOTES:
- CONTRACTOR SHALL NOTIFY MISS UTILITY (1)599-0100 AT LEAST 72 HRS PRIOR TO ANY EXCAVATION.
 - CONTRACTOR SHALL PROVIDE ALL PLANTS GRAPHICALLY SHOWN ON THE PLAN. THE SCHEDULE ABOVE IS ONLY FOR THE CONVEYANCE OF THE CONTRACTOR.
 - ALL PLANTS SHALL BE DELIVERED TO THE JOB SITE WITH PROPER TAGS AND PROTECTION.

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george vaeth
associates, inc
architect

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columbia, maryland 21045

WHITNEY BAILEY FOX MAGNANI CONSULTING ENGINEERS
Suite 311 Green Spring Station
2360 West Joppa Road
Lutherville, Maryland 21093
301-296-4200

OWNER AND DEVELOPER
K AND H PARTNERSHIP
401 WASHINGTON AVE. SUITE 501
TOWSON, MARYLAND 21204

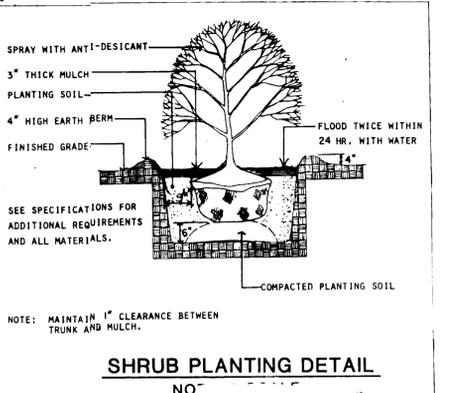
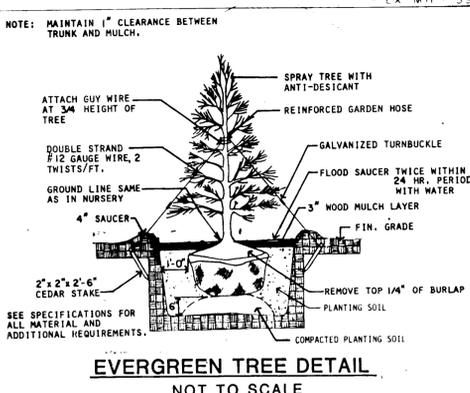
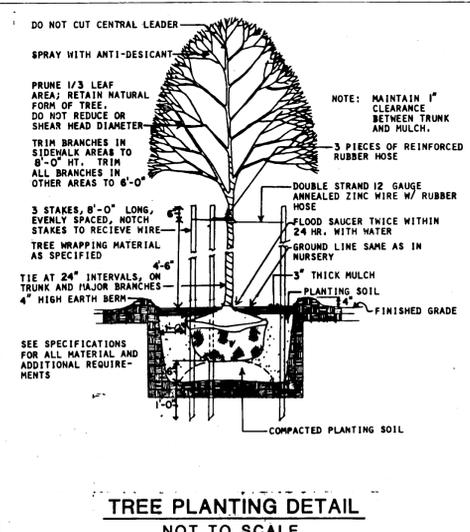
REVISIONS

NO.	DATE	DESCRIPTION
1	3/14/84	NEW PLANTING
2	4/16/84	REVISIONS TO PLAN

THE CLUSTERS
AT TWIN KNOLLS
COLUMBIA
VILLAGE OF OAKLAND MILLS
SECTION 3 AREA 1
PLAT 4108
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

PLANTING PLAN

DATE	NO.
3-21-84	984
DATE	NO.
5-22-84	984
DATE	NO.
5-22-84	984

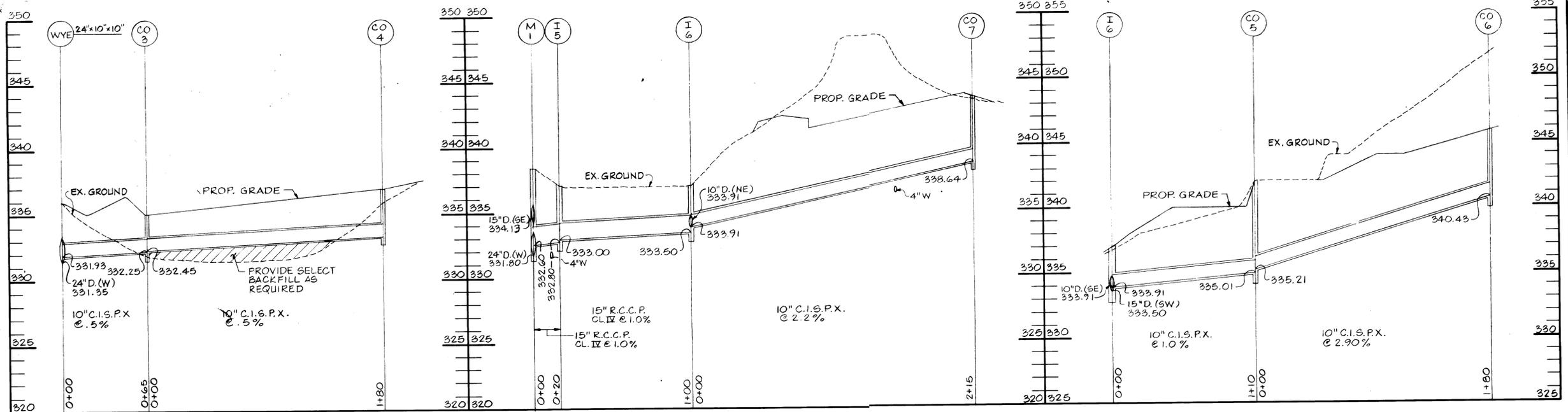


APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-21-84
[Signature]

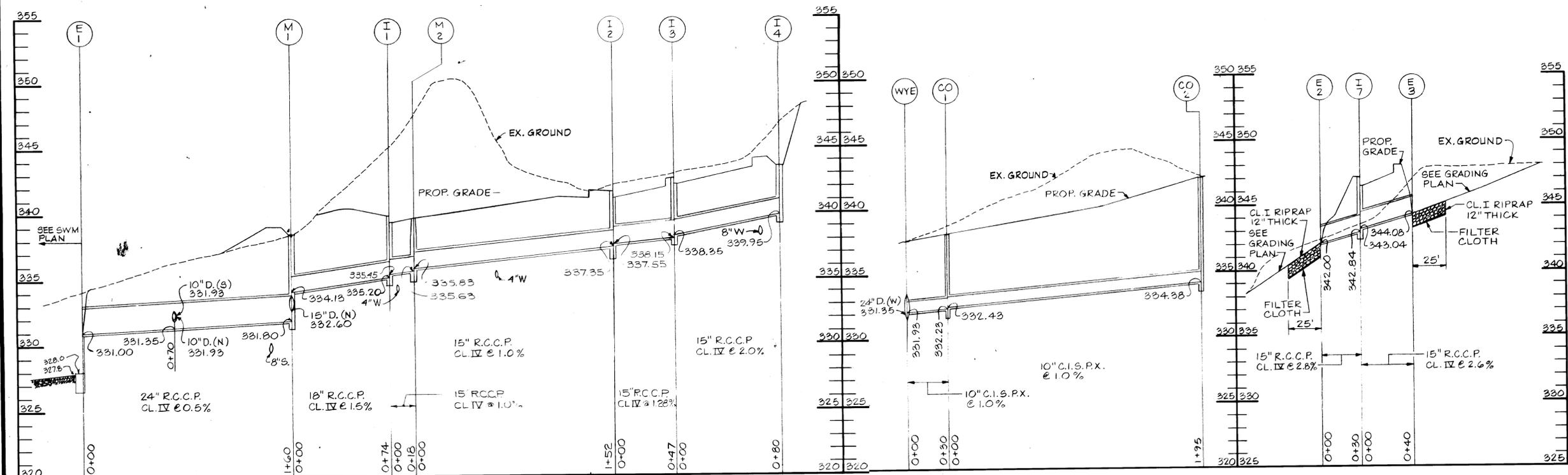
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 5-18-84
DIRECTOR

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 5-22-84
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
[Signature] 5-22-84
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION



STORM DRAIN PROFILES
SCALE: 1" = 40' HORZ.
1" = 4' VERT.



STORM DRAIN PROFILES
SCALE: 1" = 40' HORZ.
1" = 4' VERT.

NOTE:
SEE UTILITY PLAN (SD-3) FOR INLET
SCHEDULE, MANHOLE SCHEDULE AND
CLEANOUT SCHEDULE.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE **3-21-84**
MA/AMM

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Thomas J. Harris 5-22-84
PLANNING DIRECTOR
John W. Mumford 5-22-84
CHIEF, DIVISION OF LAND DEVELOPMENT
AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE
SYSTEMS AND ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James P. ... 5/10/84
DIRECTOR
... 5-22-84
CHIEF, BUREAU OF ENGINEERING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
... 5-22-84
COUNTY HEALTH OFFICER

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REVISIONS

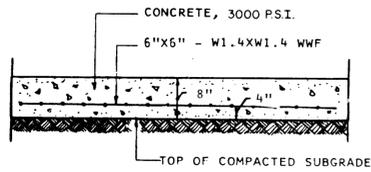
NO.	DATE	ITEM
1	3/14/84	REVISED DRAINS
2	8/17/84	REVISED OUTFALL @ E-1

**THE CLUSTERS
AT TWIN KNOLLS**
COLUMBIA
VILLAGE OF OAKLAND MILLS
SECTION 3 AREA 1
PARCEL G-1
RB5678 GW DISTRICT,
HOWARD CO, MARYLAND

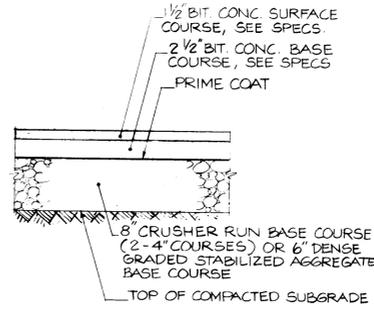
STORM DRAIN PROFILES

PROJECT NUMBER 83-136	DRAWING NUMBER SD-9
PRELIMINARY ISSUE FEB. 1, 1984	CONSTRUCTION ISSUE
SCALE AS SHOWN	8 OF 9

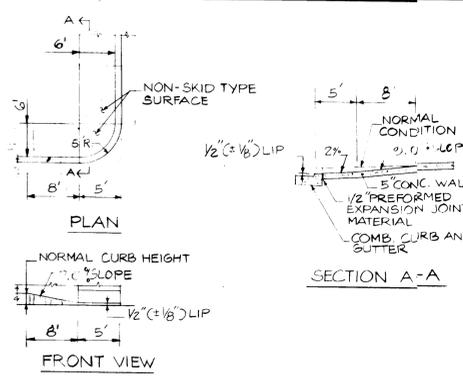
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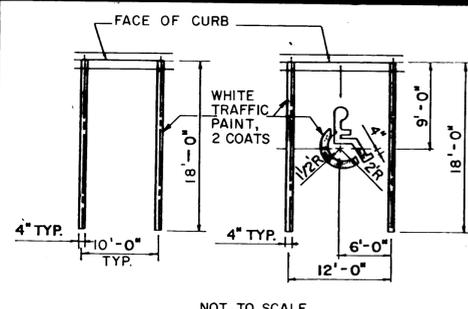
SECTION
NOT TO SCALE



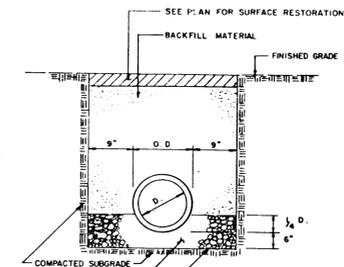
SECTION
NOT TO SCALE



NOT TO SCALE



PERPENDICULAR
PARKING
PLAN
HANDICAPPED
PARKING
PLAN



SECTION
NOT TO SCALE

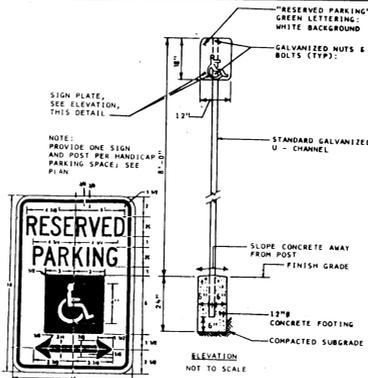
1 CONCRETE DUMPSTER PAD

2 BIT. CONCRETE PAVING

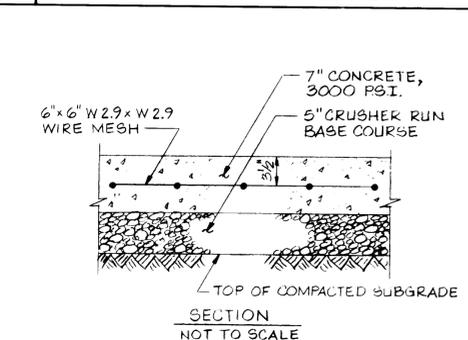
3 PEDESTRIAN RAMP 'A'

4 PAVEMENT MARKINGS

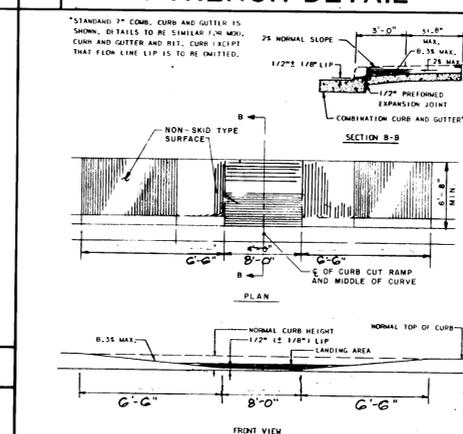
5 TYP. TRENCH DETAIL



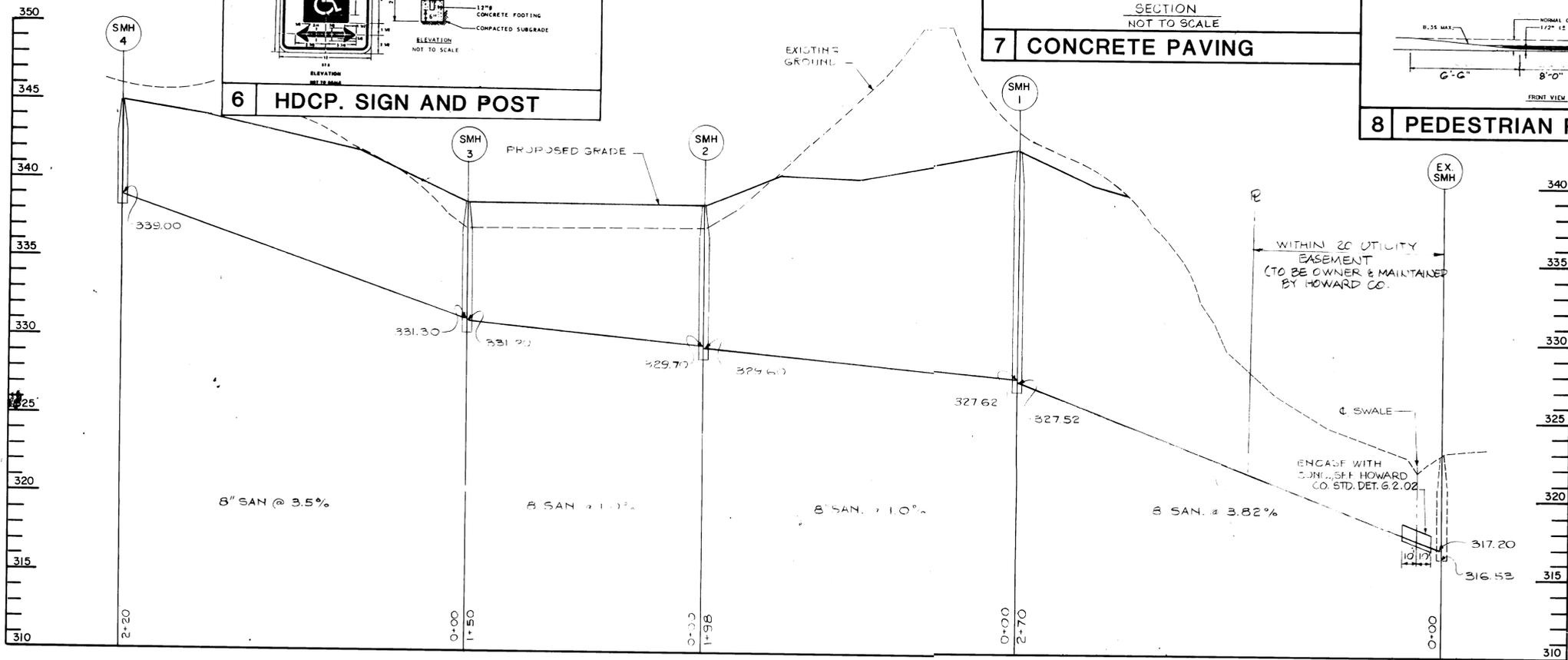
6 HDCP. SIGN AND POST



7 CONCRETE PAVING



8 PEDESTRIAN RAMP 'B'



SANITARY SEWER PROFILE
SCALE: HORZ. 1"=40'
VERT. 1"=4'

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 3-21-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
PLANNING DIRECTOR: [Signature] DATE: 5-22-84
CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 5-22-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: [Signature] DATE: 5/18/84
CHIEF, BUREAU OF ENGINEERING: [Signature] DATE: 5-18-84
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: [Signature] DATE: 5-22-84

REVISIONS		
NO.	DATE	ITEM
		REVISED SAN. PROFILE
Δ	8-13-84	Revised Handicapped Ramp

THE CLUSTERS
AT TWIN KNOLLS
COLUMBIA
VILLAGE OF OAKLAND MILLS
SECTION 3 AREA 1
PARCEL 6-1
RB 5678 6TH ELECTION DISTRICT
HOWARD CO., MARYLAND

SITE DETAILS
SAN. SEWER PROFILE
PROJECT NUMBER: 83-136
DRAWING NUMBER: SD-10
PRELIMINARY ISSUE: FEB 1, 1984
CONSTRUCTION ISSUE: []
SCALE: 1"=40'
DATE: 5-22-84

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