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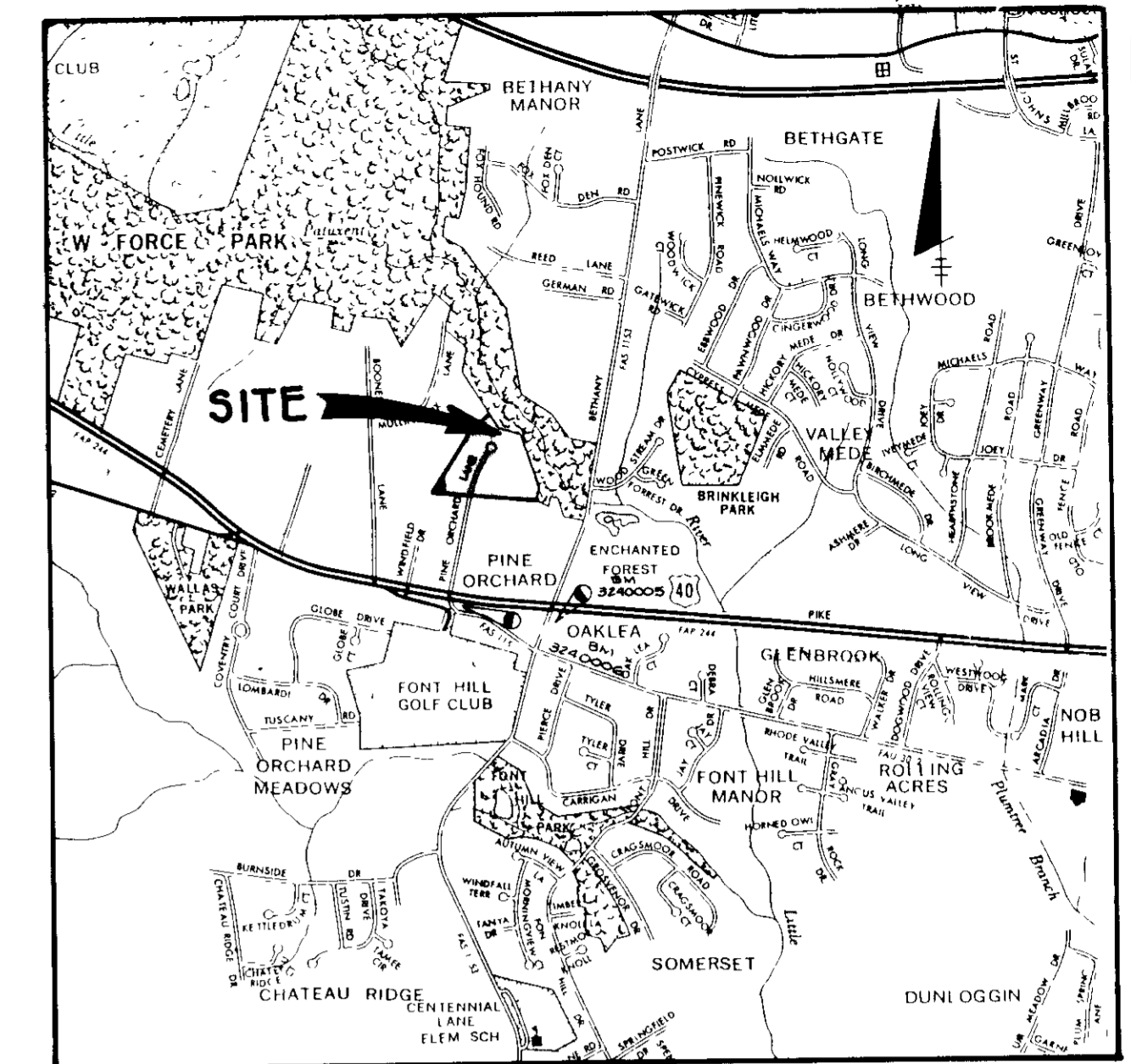
SITE DEVELOPMENT PLAN

ORCHARD HILL

SECTION 1, AREA 1

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE 1"=200'

HC BM# 3240005 NO ELEV
CONCRETE MONUMENT 04 BELOW SURFACE

HC BM# 3240006 ELEV 408.26
CONCRETE MONUMENT 02 BELOW SURFACE

GENERAL NOTES

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATER/TIGHT NEOPRENE GASKET. COMPLETED BAND CONNECTORS WILL NOT BE PERMITTED.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THIS/ THESE DRAWINGS:

C & P TELEPHONE COMPANY	725-9914
HOWARD COUNTY BUREAU OF UTILITIES	992-2364
AT&T CABLE LOCATION DIVISION	392-3553
BALTIMORE GAS AND ELECTRIC COMPANY	485-0123
STATE HIGHWAY ADMINISTRATION	511-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION	992-2417/2419
- ALL ALLEYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT (I) ELEVATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITH 2'-0" OF EXTERIOR MANHOLE WALLS.
- PROFILES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO WORK SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- DATA TAKEN FROM FIELD RUN SURVEY BY TRACY SCHULTE AND ASSOCIATES, INC.

SITE ANALYSIS

Area of Parcel: 637,112 square feet of 14.626 ac.
Zone: R-4-15
Floor Space: 1,480,000 sq ft

	Blocks 1 thru 3	Blocks 4 thru 14
Lower Level	4,800	4,800
Pilot Floor	4,800	4,800
Second Floor	4,800	4,800
Third Floor	N/A	4,800
Total	14,400	19,200

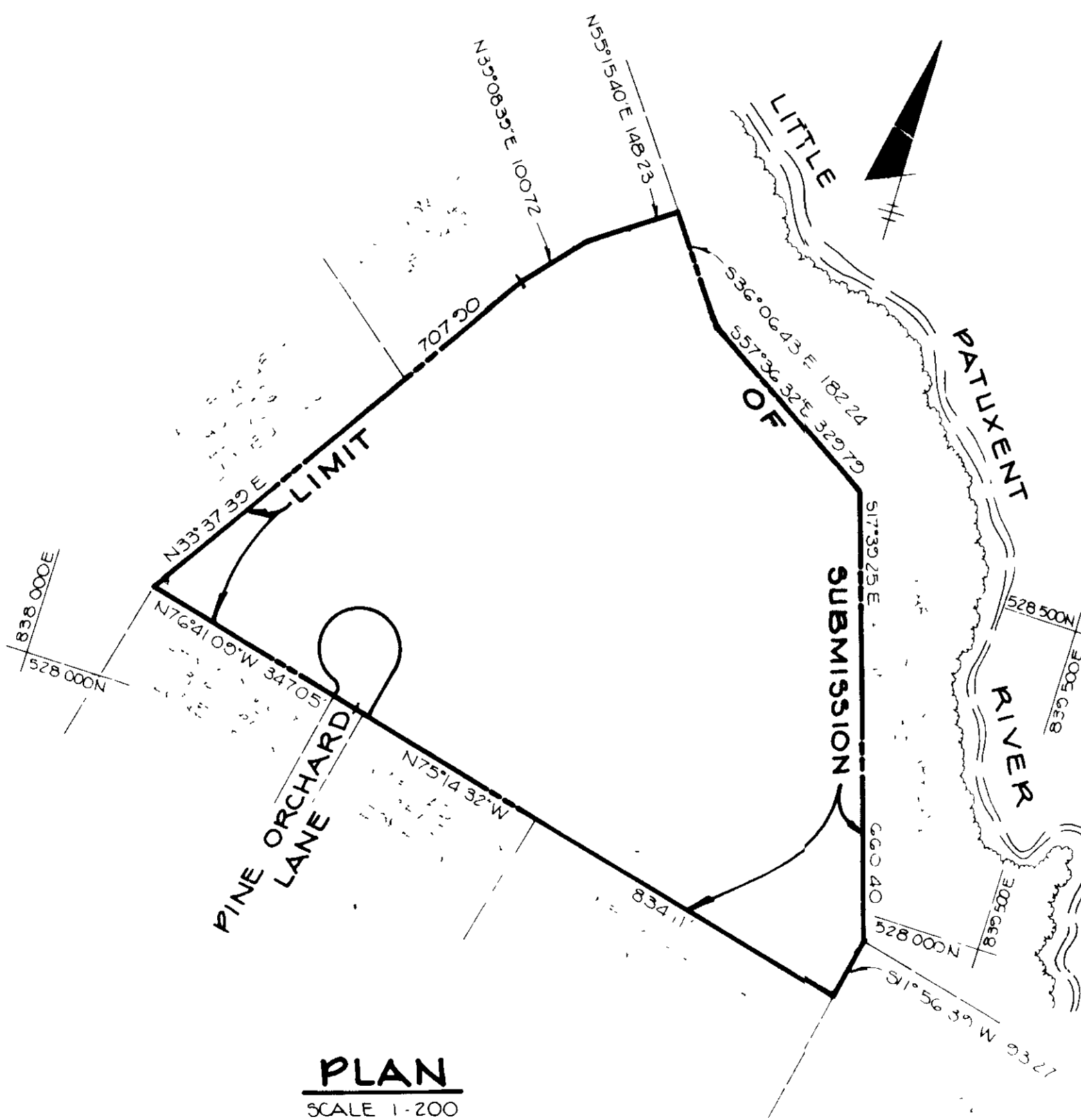
Total number of apartment units allowed: 265
Total number of apartments proposed: 124

Maximum number of tenants:
1 bedroom apartments - 2 ea.
2 bedroom apartments - 4 ea.
Parking spaces required - 488
Parking spaces provided: 522 carports, 366 common parking areas = 400 (INCLUDES 2 (5) PARKING SPACES)

Open space (green area) to remain on-site: 3.34 ac. of 66.67 ac.

Building coverage of site (res only): 67,200 sq ft

Roof	522*
Non-Residential	400*
Carports	1000*
Total	1922* or 12.42



APPROVED
11-3-88

LOT NO	STREET ADDRESS
BLDG 1	3165 PINE ORCHARD LANE
BLDG 2	3161 " "
BLDG 3	3172 " "
BLDG 4	3175 " "
BLDG 5	3173 " "
BLDG 6	3160 " "
BLDG 7	3167 " "
BLDG 8	3153 " "
BLDG 9	3151 " "
BLDG 10	3147 " "
BLDG 11	3143 " "
BLDG 12	3141 " "
BLDG 13	3137 " "
BLDG 14	3133 " "
BATH HOUSE	3113 " "

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

Joyce Broyler 5-23-89
COUNTY HEALTH OFFICER DATE

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

James A. ... 5/17/89
DIRECTOR DATE

Gregory S. ... 5-17-89
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Charles ... 6-14-89
PLANNING DIRECTOR DATE

David S. ... 4/2/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

TRACY SCHULTE & ASSOCIATES INC
planning • architecture • engineering

8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

OWNER
SECURITY DEVELOPMENT CORP
PO BOX 417
ELICOTT CITY, MARYLAND 21043

DEVELOPER
SECURITY DEVELOPMENT CORP
PO BOX 417
ELICOTT CITY, MARYLAND 21043

PROJECT
ORCHARD HILL
SECTION 1 LOT 14 PARCELS A & B
APARTMENT DWELLINGS
TAX MAP NOS 17 & 24
PARCELS 130 2044519
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE SHEET
GP-88-71
ZB 837M
SEP 29-07

DATE
JULY 8, 1988
APRIL 6, 1989

PROJECT NO
0052 SDP

SCALE
1"=200'

DRAWING
1 OF 13

SUBDIVISION NAME	SECTION	LOT/PARCEL#
ORCHARD HILL	1	PARCEL A
PLAT # OR LIF	BLOCK #	TAX / ZONE MAP
8530	10	24
WATER CODE	SEWER CODE	CENSUS TR
F 14	5580000	2

APR 1988 FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Jacques Boylen 5-23-89
 DATE

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

 DIRECTOR DATE

Richard E. Reddy 5/1/89
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Chad 6.14.89
 PLANNING DIRECTOR DATE

Mark S. Taylor 6/8/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



- NOTES
1. CONTRACTOR TO FURNISH AND INSTALL BACKWATER VALVES ON SEWER HOUSE CONNECTIONS SERVING BUILDINGS 2 THRU 15 IN ACCORDANCE WITH HC PLUMBING CODES.
 2. ALL SEWER MAINS ARE PRIVATELY MAINTAINED.
 3. ALL WATER MAINS ARE PUBLICLY MAINTAINED AND WERE BUILT UNDER CONTRACT NO 44-1764-D.
 4. ALL DUMPSTERS TO HAVE PRIVACY SCREENING.

APPROVED
 DIVISION
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY
 MARYLAND
 DATE: **11-3-88**

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
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 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

Dwight K. Truitt

OWNER
 SECURITY DEVELOPMENT CORP
 PO BOX 417
 ELLICOTT CITY, MARYLAND 21043

DEVELOPER
 SECURITY DEVELOPMENT CORP
 PO BOX 417
 ELLICOTT CITY, MARYLAND 21043

PROJECT
ORCHARD HILL
 SECTION I LOT 1 & PARCELS A & B
 APARTMENT DWELLINGS

LOCATION
 TAX MAP NO 17
 DEED REF 509437, PARCEL 130, 204, & 519
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN
 S-88-18 P-88-55 F-88-671 ZD837M

DATE
 JULY 8, 1988
 APRIL 6, 1988

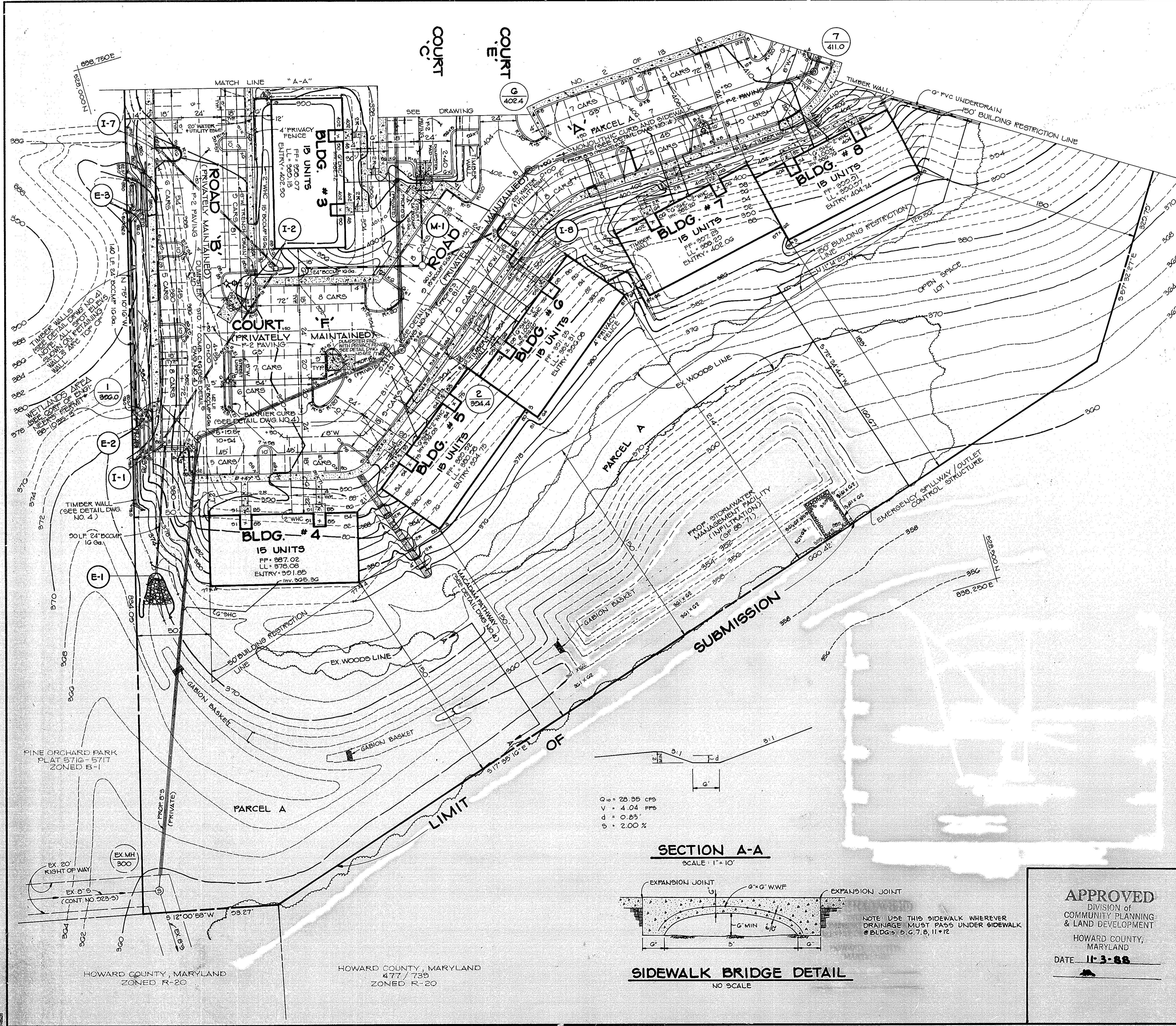
PROJECT NO 0002 SDP

SCALE 1"=30'

DRAWING 2 OF 13

DES: RJW DRN: EWM

SDP-89-01



STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
1-1	S	SEE PLAN	380.53	378.53	Ø GRATE 385.3	H.C. STD. SD 4.22
1-2	S	SEE PLAN	382.15	381.95	Ø GRATE 386.3	H.C. STD. SD 4.22 OPEN 4 SIDES
1-3	S	SEE PLAN	391.28	390.78	Ø GRATE 395.54	H.C. STD. SD 4.22
1-4	DOUBLE S	SEE PLAN	393.30	392.40	Ø GRATE 396.1	H.C. STD. SD 4.23
1-5	A-5	SEE PLAN	406.00	405.80	TOP SLAB 409.40	H.C. STD. SD 4.01
1-6	A-5	SEE PLAN	--	407.81	TOP SLAB 411.51	H.C. STD. SD 4.01
1-7	S	SEE PLAN	--	386.20	Ø GRATE 389.64	H.C. STD. SD 4.22
1-8	A-5	SEE PLAN	--	398.50	TOP SLAB 401.36	H.C. STD. SD 4.01
1-9	S	SEE PLAN	--	401.78	Ø GRATE 405.20	H.C. STD. SD 4.22
M-1	STD. M.H.	SEE PLAN	389.05	387.05	397.25	H.C. STD. G 5.01
M-2	STD. M.H.	SEE PLAN	401.28	396.00	406.10	H.C. STD. G 5.01
E-1	24" METAL END SECT.	SEE PLAN	368.20	367.81	--	H.C. STD. SD 5.61
E-2	24" METAL END SECT.	SEE PLAN	371.12	371.0	--	H.C. STD. SD 5.61
E-3	24" METAL END SECT.	SEE PLAN	376.0	375.88	--	H.C. STD. SD 5.61

Note: All storm drains to have class "C" bedding.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
James Byler
 COUNTY HEALTH OFFICER
 5-23-89 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James [Signature]
 DIRECTOR
 5/17/89 DATE

William E. [Signature]
 CHIEF, BUREAU OF ENGINEERING
 5-17-89 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Charles [Signature]
 PLANNING DIRECTOR
 6-11-89 DATE

Mark S. [Signature]
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 6/14/89 DATE

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
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8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

Tracy Schulte
 PROFESSIONAL ENGINEER

APPROVED
 DIVISION OF
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE: **11-3-88**

OWNER
 SECURITY DEVELOPMENT CORP
 PO BOX 417
 ELLICOTT CITY, MARYLAND 21043

DEVELOPER
 SECURITY DEVELOPMENT CORP
 PO BOX 417
 ELLICOTT CITY, MARYLAND 21043

DES: RJW **DRN:** JLR

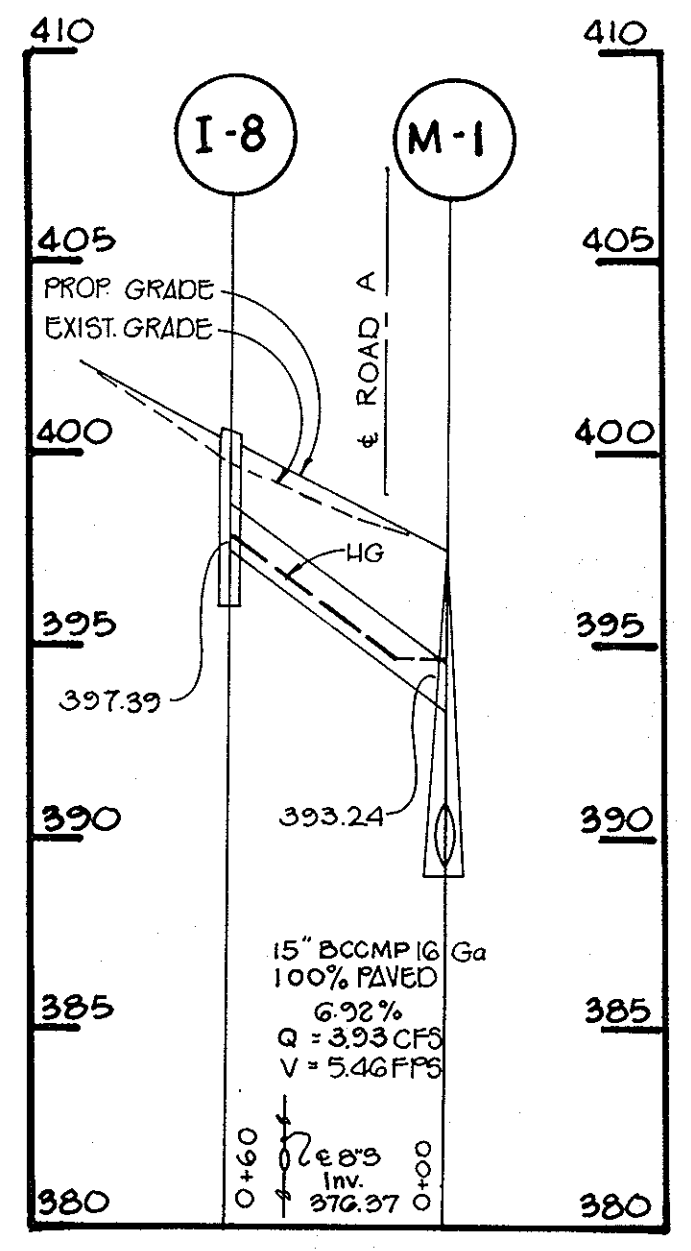
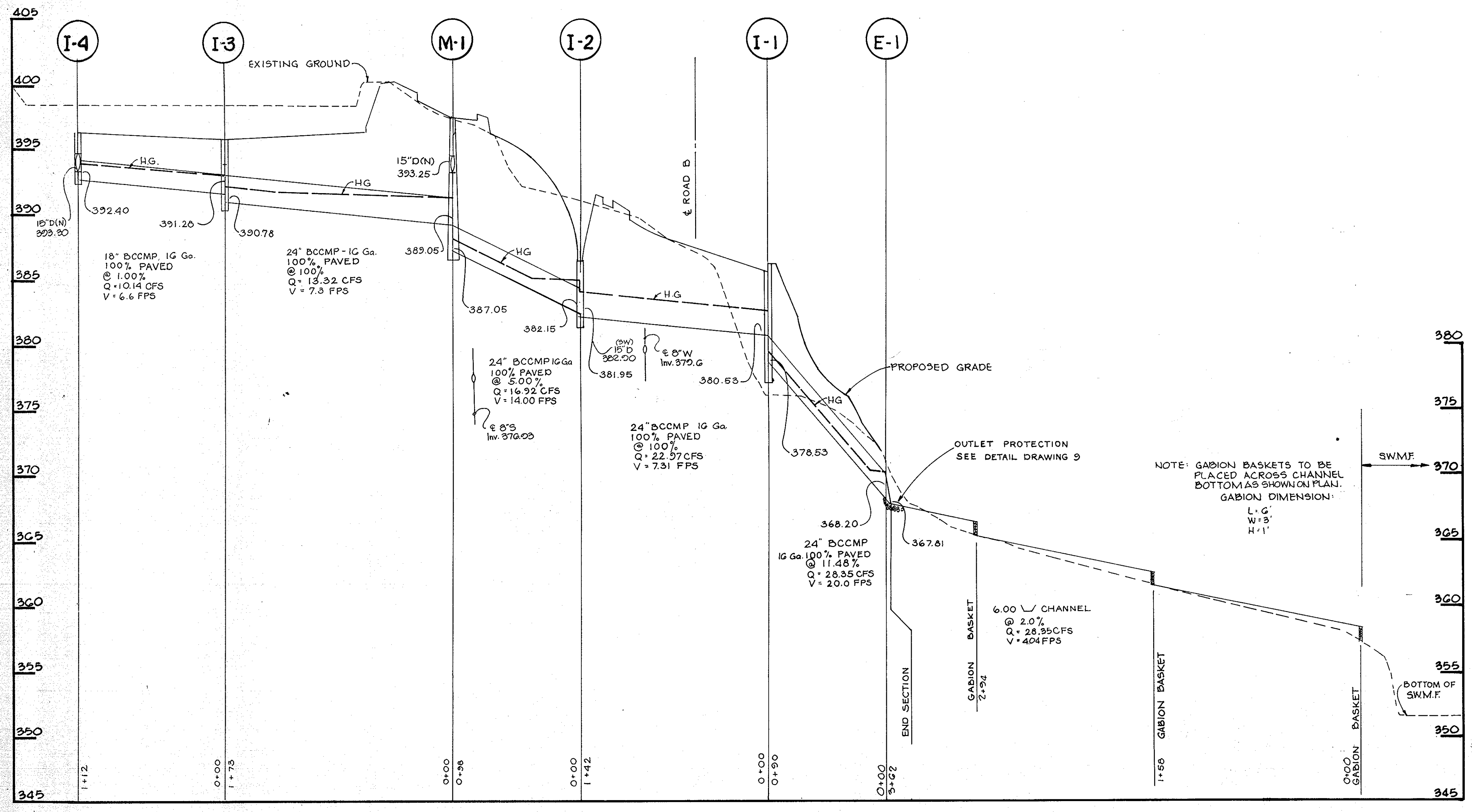
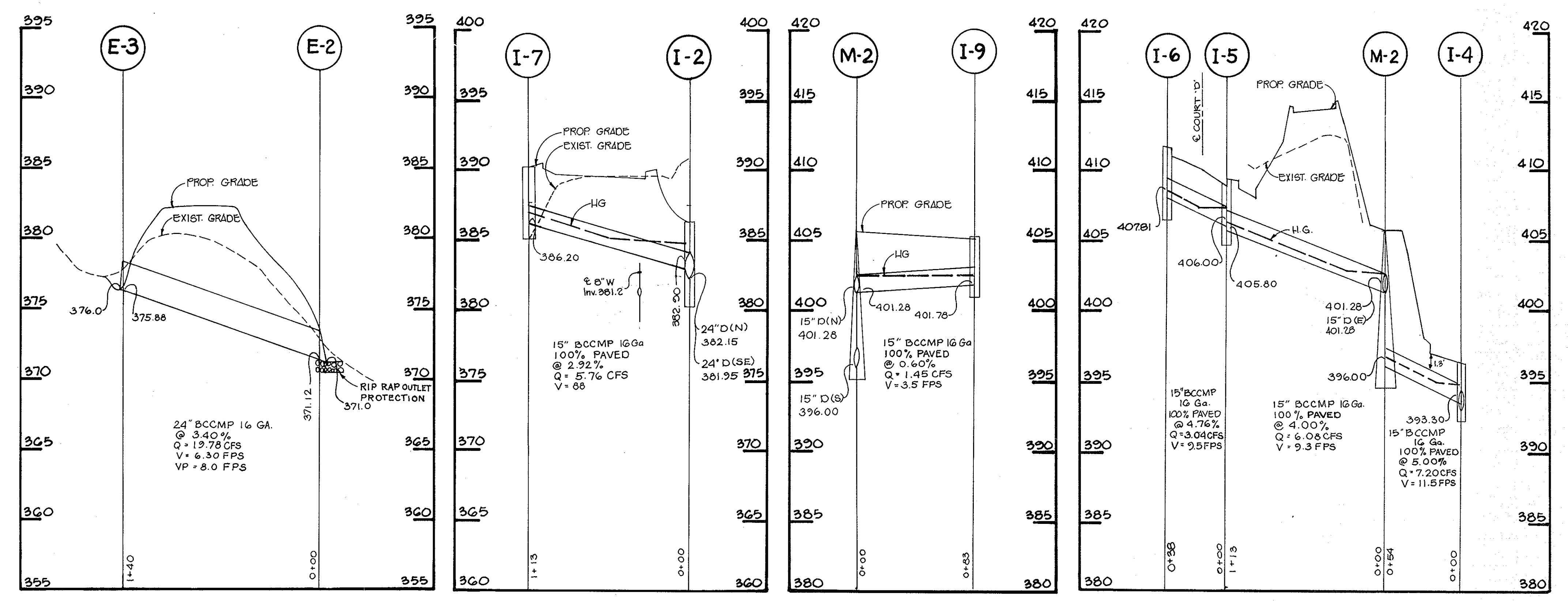
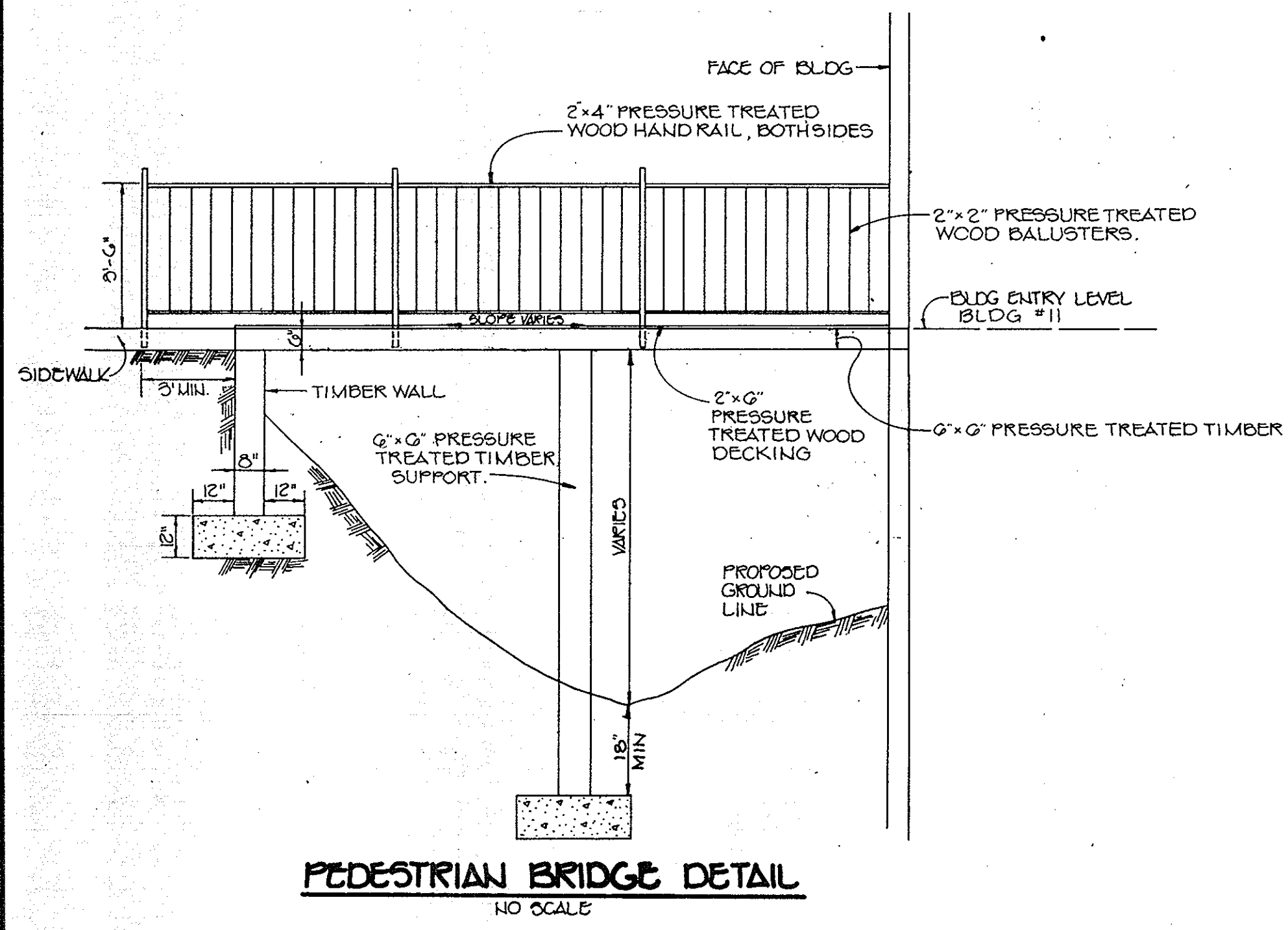
PROJECT
ORCHARD HILL
 SECTION 1, LOT 1 & PARCELS A & B
 APARTMENT DWELLINGS

LOCATION
 TAX MAP NO. 17
 DEED REF. 800/487 PARCEL 130, 204 & 510
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN

3-88-18 P. 88-25 F. 88-201 ZB897M
 DATE: JULY 8, 1988 PROJECT NO 0082 SDP
 APRIL 6, 1989

SCALE: 1" = 30' DRAWING: 3 OF 13



APPROVED
DIVISION OF
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY,
MARYLAND
DATE: 11-3-88

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
James Bayler COUNTY HEALTH OFFICER DATE: 5-23-89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James Bayler DIRECTOR DATE: 5/23/89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Alvin S. Taylor PLANNING DIRECTOR DATE: 6-14-89

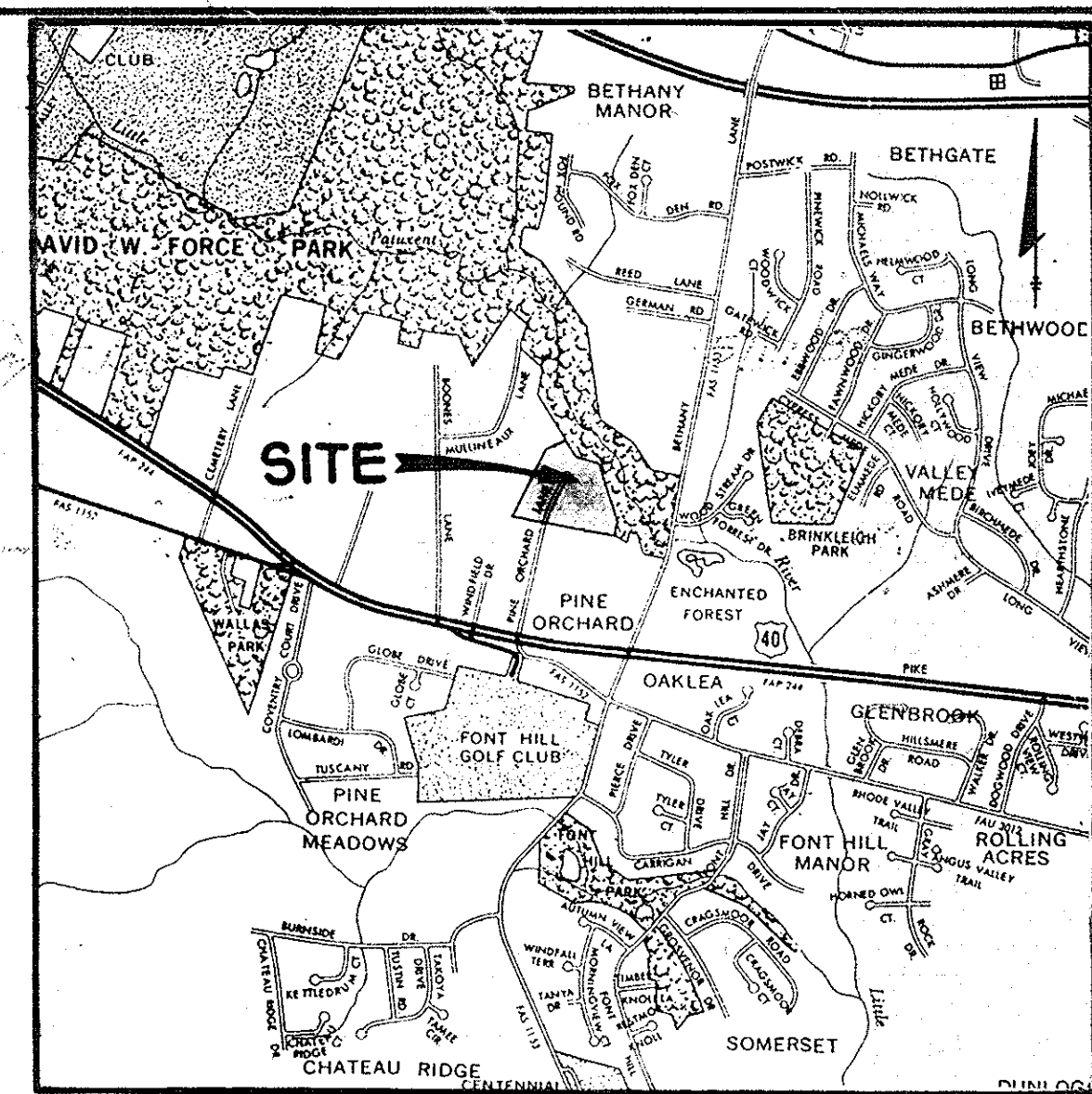
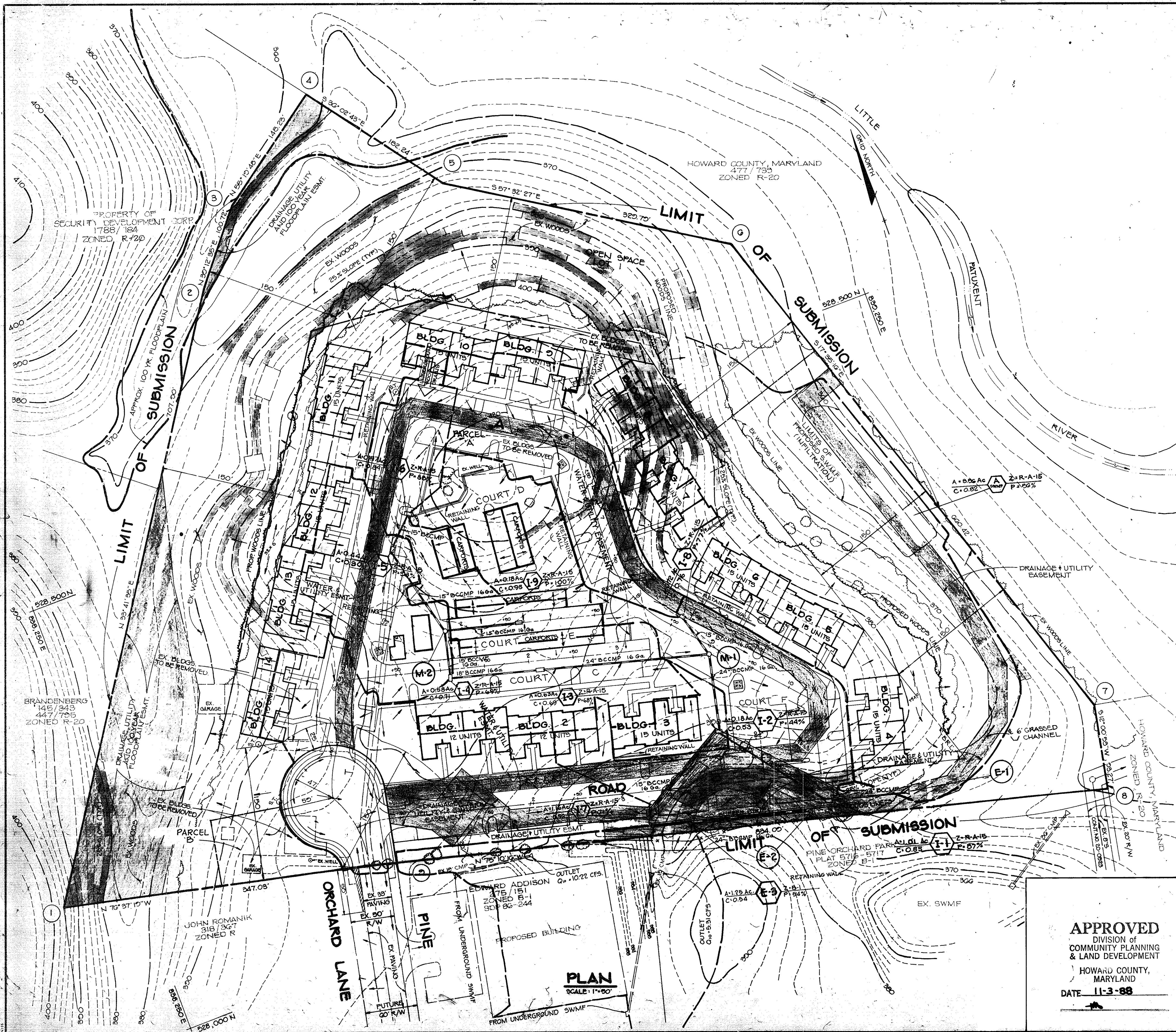
Marsha S. Taylor CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE: 6/14/89

NO	DATE	REVISION

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STATE OF MARYLAND
PROFESSIONAL ENGINEER
James K. Tracy

OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT ORCHARD HILL SECTION 1 LOT 1 PARCELS A & B APARTMENT DWELLINGS
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	LOCATION TAX MAP NO. 17 DEED REF. 502/437 PARCEL 130, 204 & 310 2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DES. RJW	DRN. JLR
TITLE STORM DRAIN PROFILES	DATE 5-28-88 JULY 8, 1988 APRIL 6, 1988
SCALE HORIZ: 1" = 50' VERT: 1" = 5'	PROJECT NO. 0052 SDP DRAWING 5 OF 13



VICINITY MAP
SCALE: 1" = 2000'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyen Boylan COUNTY HEALTH OFFICER 5-23-88 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James J. [Signature] DIRECTOR 5/17/88 DATE

William J. [Signature] CHIEF, BUREAU OF ENGINEERING 5/21/88 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Chris [Signature] PLANNING DIRECTOR 6.14.88 DATE

Frankie V. [Signature] CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 6/16/88 DATE

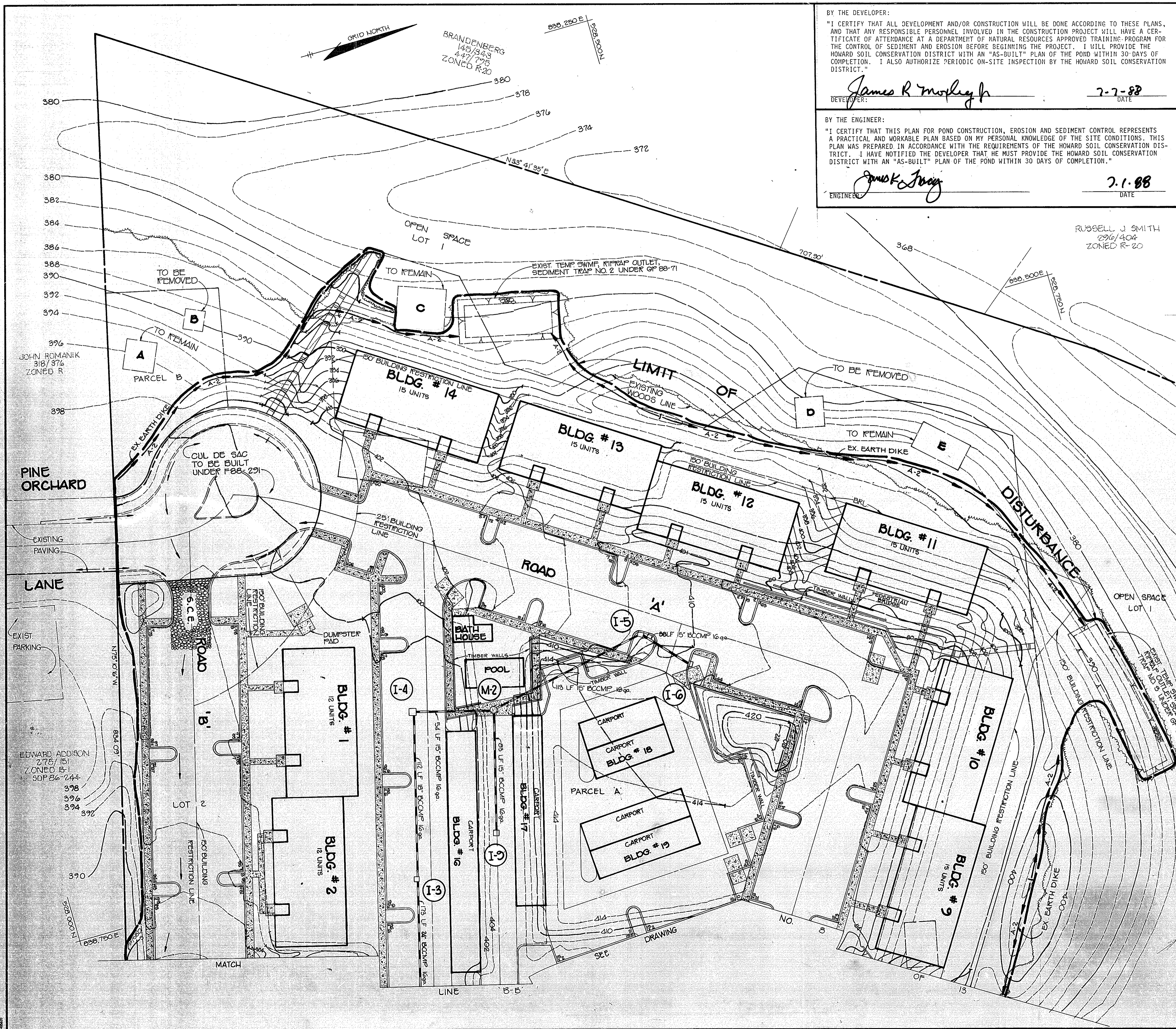
NO	DATE	REVISION

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APPROVED
 DIVISION OF
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE 11-3-88

OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD 21043	PROJECT ORCHARD HILL SECTION 1 LOT 14 PARCELS A & D APARTMENT - DWELLINGS LOCATION TAX MAP NO. 17 DEED REF. 509/457 PARCEL 130, 204 + 510 2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	TITLE DRAINAGE AREA MAP 9-88-18 P. 06-35 ZB 887M DATE JULY 8, 1988 APRIL 12, 1989 PROJECT NO 0052 SDP
DES. RJW DRN. JLR	SCALE: 1" = 50' DRAWING 6 OF 13

PLAN
SCALE: 1" = 50'



BY THE DEVELOPER:
 "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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POHD WITHIN 30-DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 DEVELOPER: James R. Moxley Jr. 7-7-88 DATE

BY THE ENGINEER:
 "I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS 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 AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 ENGINEER: James K. Tracy 7.1.88 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT:
John B... 5-23-89 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS:
James R. Ryan 5/17/89 DATE
 DIRECTOR

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING:
... 6.14.89 DATE
 PLANNING DIRECTOR

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING:
... 5/12/89 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
James K. Tracy 5-12-89 DATE
 U.S. SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT,
John K. Robertson 5/12/89 DATE
 HOWARD S.C.D.

APPROVED
 DIVISION OF
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE 11-3-88

NO	DATE	REVISION

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OWNER: SECURITY DEVELOPMENT CORP. P.O. BOX 417, ELLICOTT CITY, MARYLAND 21043

PROJECT: ORCHARD HILL SECTION 1, LOT 1 PARCELS AND APARTMENT DWELLINGS

LOCATION: TAX MAP NO. 17, DEED REF. 609/437 PARCEL 130, 204, & 519 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DEVELOPER: SECURITY DEVELOPMENT CORP. P.O. BOX 417, ELLICOTT CITY, MARYLAND 21043

TITLE: SEDIMENT CONTROL PLAN

S-88-18 P-88-35 F-88-201 ZB837M

DATE: JULY 8, 1988 PROJECT NO. 0052 SDP

APRIL 6, 1989

DES. RJW DRN. EWM SCALE 1"=30' DRAWING 7 OF 13

SDP-89-07

PERMANENT SEEDING PREPARATION

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCHING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES: 1) PREFERRED - APPLY 2 TONS PER ACRE DOLICLITIC LESTONITE (92 105/1000 SO F1) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 105/1000 SO F1) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 105/1000 SO F1) 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLICLITIC LESTONITE (92 105/1000 SO F1) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 105/1000 SO F1) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

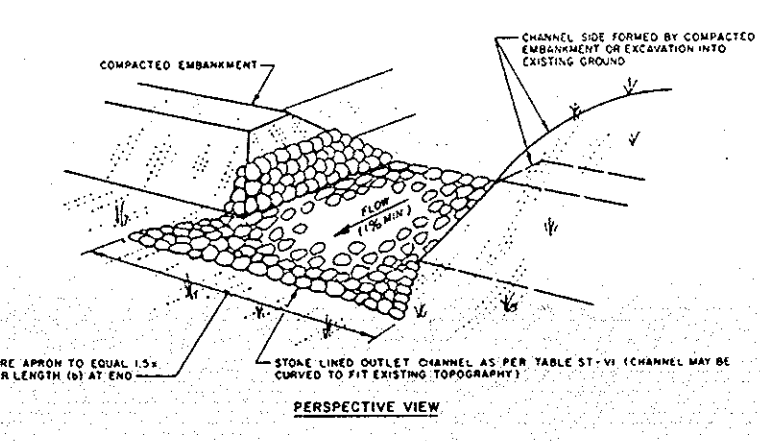
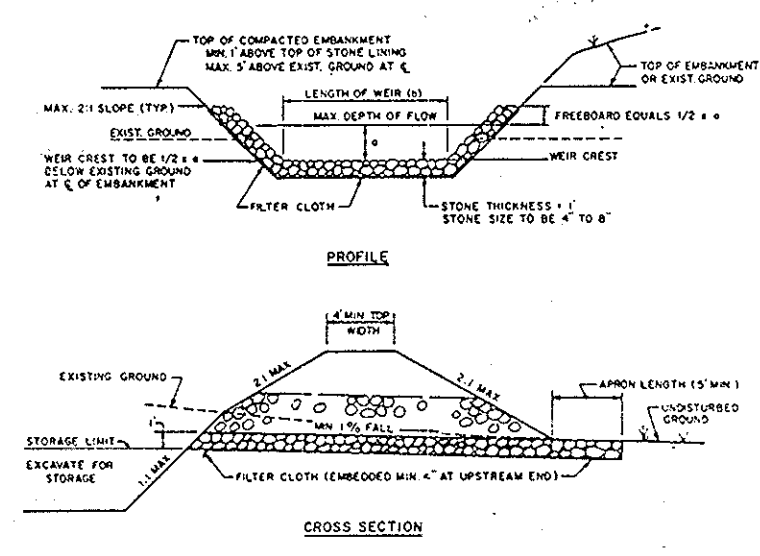
TEMPORARY SEEDING PREPARATION

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 40 LBS PER ACRE (14 105/1000 SO F1) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (14 105/1000 SO F1) OF SEEDING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROJECT SITE BY: OPTION (1) 2 TONS PER ACRE OF SELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF SELL ANCHORED STRAW. MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 105/1000 SO F1) OF CRUSHED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GALLONS PER ACRE (15 105/1000 SO F1) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 240 GALLONS PER ACRE (16 105/1000 SO F1) FOR ANCHORING. MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

SEQUENCE OF CONSTRUCTION

- DAY 1 1. OBTAIN A GRADING PERMIT. DAY 2-3 2. CLEAR AND GRUB AREA FOR AND INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE). DAY 3-7 3. MAKE ANY NECESSARY REPAIRS OR ADJUSTMENTS TO EXISTING SWP/TEMPORARY SEDIMENT BASIN AND EXISTING SEDIMENT TRAPS NUMBERED 2 & 3 TO RESTORE THEM TO PROPER FUNCTION. I.E., ADJUST RIPRAP OUTLET STRUCTURES TO PROPER SIZE AND CLEAN OUT ACCUMULATED SEDIMENT TO ELEVATION 955.0 IN SEDIMENT BASIN NUMBER 1. DAY 7-15 4. INSTALL REMAINING SEDIMENT CONTROL DEVICES. DAY 15-20 5. GRADE SITE. DAY 20-75 6. INSTALL UTILITIES (WATER, SEWER, AND STORM DRAINS). DAY 75-180 7. COMPLETE ALL CONSTRUCTION AND DISMISSED ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. DAY 180-199 8. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND EXCAVATE BOTTOM OF SWP TO ELEVATION 954.0 AND SPREAD SEDIMENT ACROSS AREA IN THE REAR OF BUILDINGS 4, 5, 6, AND 7.

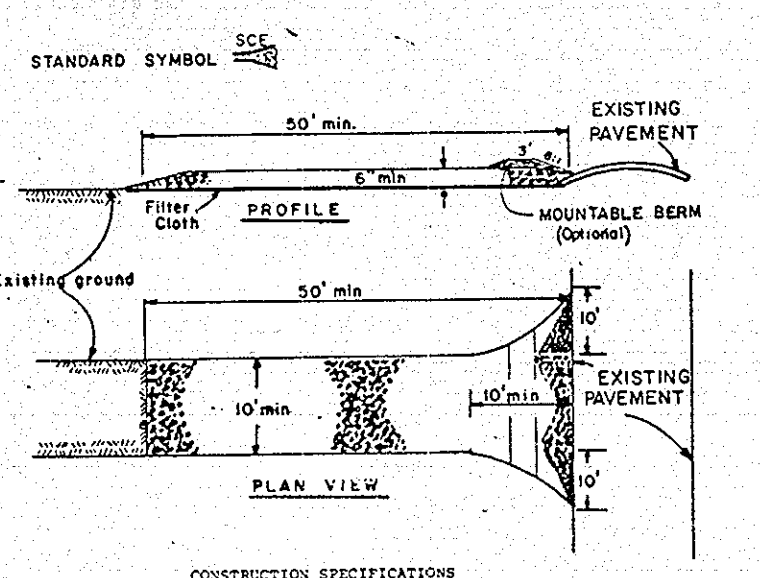
NOTE: ALL SEDIMENT CONTROL DEVICES LABELLED AS EXISTING WERE BUILT UNDER GP 80-71



CONSTRUCTION SPECIFICATIONS FOR ST-1

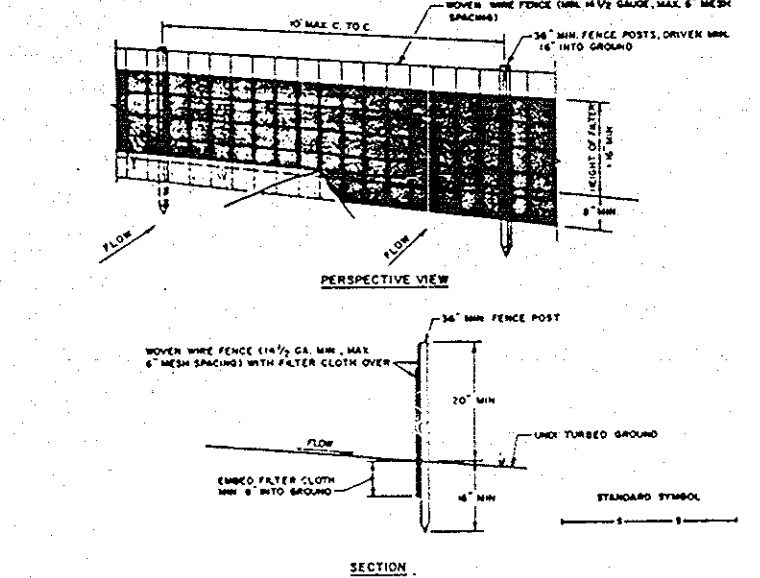
- 1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and foot mat. The pool area shall be cleared. 2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by treading with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at crestline of embankment. 3. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter. 4. Elevation of the top of any dike directing water into trap must equal or exceed the provided elevation. 5. Storage area height shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest. 6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel. 7. Stone used in the outlet channel shall be four (4) to eight(8) inches (ciprap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet. 8. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode. 9. The structure shall be inspected after each rain and repaired as needed. 10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized. 11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized. 12. Drainage area for this practice is limited to 15 acres or less.

RIPRAP OUTLET SEDIMENT TRAP NO SCALE



- 1. Stone size - Use 3" stone, or reclaimed or recycled concrete equivalent. 2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply). 3. Thickness - Not less than six (6) inches. 4. Width - Two (2) foot minimum, but not less than the full width of the points where ingress of water 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 entrance shall be stopped across the entrance. If required by inspection, a mounded berm with 3:1 slope will be permitted. 7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stones as conditions demand and repair and/or cleanup of any weirs used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately. 8. Washing - Weirs shall be washed to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trap. 9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE NO SCALE

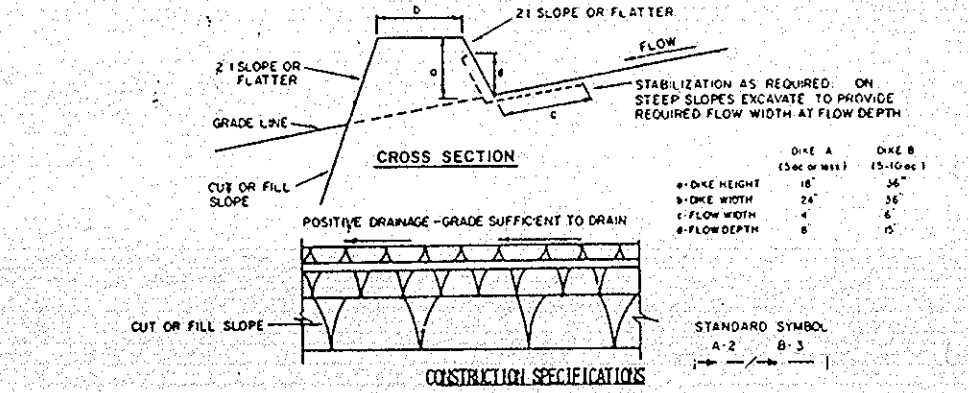


- 1. WOODEN FRAME SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STRAP. POSTS: STEEL EPIPE 3 OR 4 TYPE OF 4" DIAMETER. 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOODEN FRAME WITH STRAP EVERY 2' OF WOOD FRAME SECTION. FILTER CLOTH SHALL BE 1/2" THICK AND 10' WIDE. 3. WHEN TWO SECTIONS OF FILTER CLOTH MEET, EACH SECTION SHALL BE OVERLAPPED BY SIX INCHES AND BOLDED. FILTER CLOTH SHALL BE 1/2" THICK AND 10' WIDE. 4. MAINTENANCE SHALL BE PROVIDED AS NECESSARY TO KEEP STRUCTURE IN GOOD WORKING ORDER. PREPARATION UNIT: GEOTECHNICAL ENGINEER OR APPROVED SURV. DRAWING IN THE SILE FENCE.

SILT FENCE NO SCALE

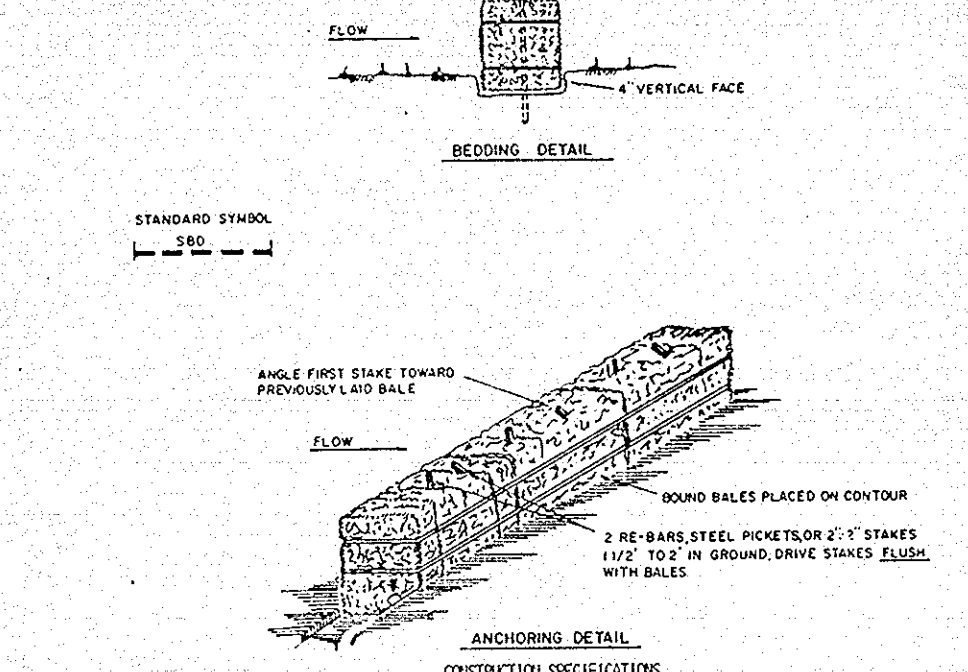
SEDIMENT CONTROL NOTES

- 1. A NOTICE OF THE ABOVE NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS 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 CONSERVATION AND SEDIMENT CONTROL. 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, 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 TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 4. ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND MARKING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 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 CONSERVATION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (Sec. 13) SOIL (Sec. 14). TEMPORARY SEEDING (Sec. 15) AND MULCHING (Sec. 23). TEMPORARY STABILIZATION WITH MULCH (ALSO) 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 BE MAINTAINED IN OPERATIVE CONDITION UNTIL PROVISIONS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. 7. SITE ANALYSIS: TOTAL AREA OF SITE: 14.62 ACRES AREA DISTURBED: 14.62 ACRES AREA TO BE REVEGETATED OR PAVED: 14.62 ACRES TOTAL "IT": 14.62 ACRES OFFSITE WASTE/STORAGE AREA LOCATION: ON SITE



- 1. ALL DIKES SHALL BE CONSTRUCTED BY EARTH-MOVING EQUIPMENT. 2. DIKE SLOPES SHALL BE 2:1 OR FLATTER. 3. TOP WIDTH MAY BE WIDER AND SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE PASSAGE OF CONSTRUCTION TRUCKS. 4. FIELD LOCATION SHOULD BE AS NEAR AS POSSIBLE TO THE CENTER LINE OF THE DRAINAGE AREA. 5. STABILIZATION SHALL BE: a) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND MULCHING (Sec. 13) SOIL (Sec. 14) AND MULCHING (Sec. 23). b) FLOW CHANNEL TO BE THE DOWN SLOPE. 6. DIKE SLOPES SHALL BE 2:1 OR FLATTER. 7. PERIODIC INSPECTION AND NEEDED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

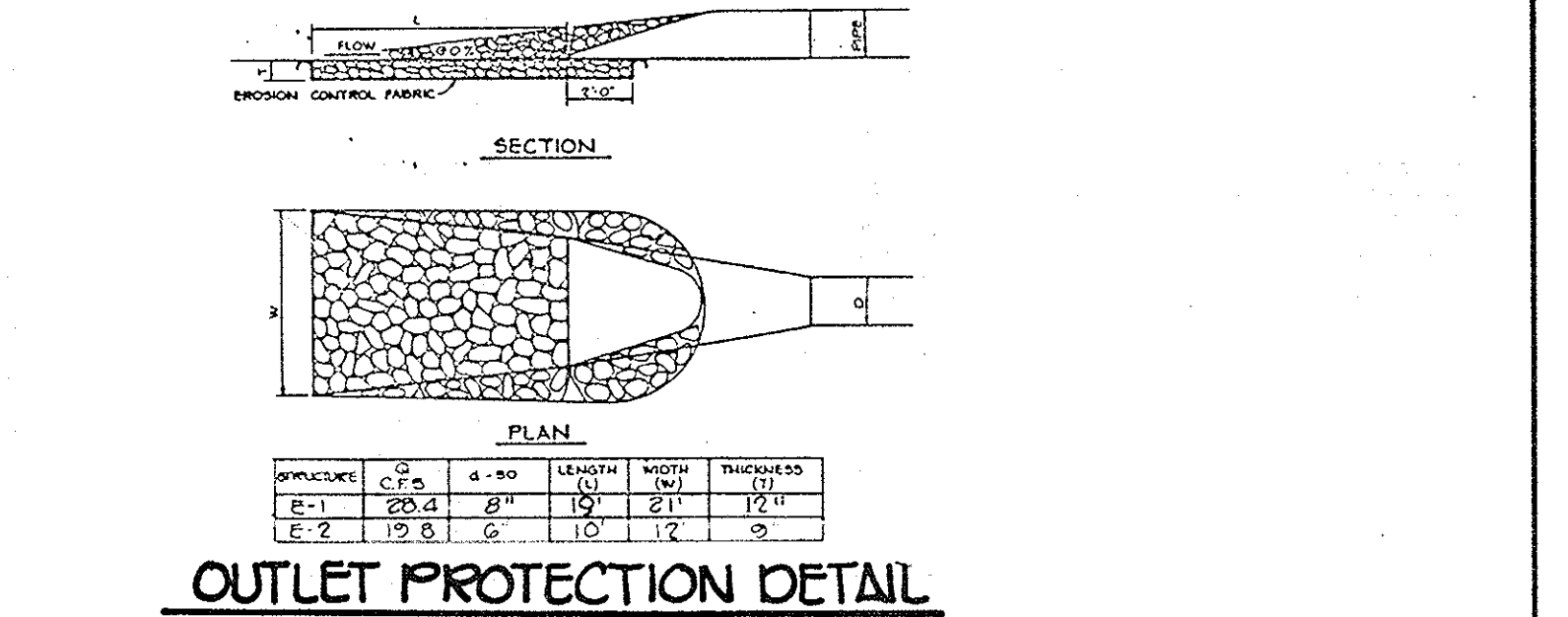
EARTH DIKE NO SCALE



- 1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH DICES TIGHTLY BUTTING THE ADJACENT BALES. 2. EACH BALE SHALL BE EXPOSED IN THE SOIL A MINIMUM OF (6) INCHES, AND PLACED SO THE ENDINGS ARE PARALLEL. 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER THE STAKES OR RE-BARS EXTENDING THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN THROUGH THE PROLONGED END BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE. 4. INSPECTION SHALL BE PROVIDED AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS AS NOT TO BLOCK THE DRAINAGE CHANNEL.

STRAW BALE DIKE NO SCALE

APPROVED DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT HOWARD COUNTY, MARYLAND DATE 11-3-88



OUTLET PROTECTION DETAIL NO SCALE BY THE ENGINEER: I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS 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 AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. DATE 5-1-89 ENGINEER: JAMES K. TRACY

BY THE DEVELOPER: 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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. DATE 7-2-88 DEVELOPER: JAMES R. WADLEY, JR., PRES. SECURITY DEVELOPMENT CORP.

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL. APPROVED: JAMES R. WADLEY, JR., PRES. SECURITY DEVELOPMENT CORP. DATE 5-12-89 U.S. SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. APPROVED: JOHN H. ROBERTSON, HOWARD S.C.D. DATE 5-12-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. APPROVED: JOSEPH BOYD, HOWARD COUNTY HEALTH DEPARTMENT. DATE 5-23-89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. APPROVED: JAMES R. WADLEY, JR., PRES. SECURITY DEVELOPMENT CORP. DATE 5-17-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING. APPROVED: JOHN H. ROBERTSON, CHIEF, BUREAU OF ENGINEERING. DATE 6-14-89

APPROVED: HARVEY S. J. LAMPHIER, CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT. DATE 6-16-89

Table with columns for NO, DATE, REVISION. Below the table is the TRACY, SCHULTE & ASSOCIATES INC. logo and address: 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105. A circular seal for the State of Maryland Professional Engineer is also present.

Table with columns for OWNER, PROJECT, LOCATION, DEVELOPER, TITLE, DATE, PROJECT NO, DES, DRN, SAB, SCALE, DRAWING. OWNER: SECURITY DEVELOPMENT CORP. PROJECT: ORCHARD HILL SECTION 1, LOT 11 PARCELS A1-D APARTMENT DWELLINGS. LOCATION: TAX MAP NO 5 17 & 24 PARCELS 130, 204, 513 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND. DEVELOPER: SECURITY DEVELOPMENT CORP. TITLE: SWM AND SEDIMENT CONTROL DETAILS. DATE: JULY 8 1988 APRIL 1989. PROJECT NO: 0052. SCALE: AS SHOWN. DRAWING: 9 OF 13. SDP-89-07

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

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 traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot roller tined or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

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 Specifications M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminized Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274-791 with watertight coupling bands or flanges.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

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 the 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.

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3", or as shown on the drawings.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. Backfilling shall conform to structural backfill as shown above.

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

- C. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

- a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
- b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
- d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
- e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/4 to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed. Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

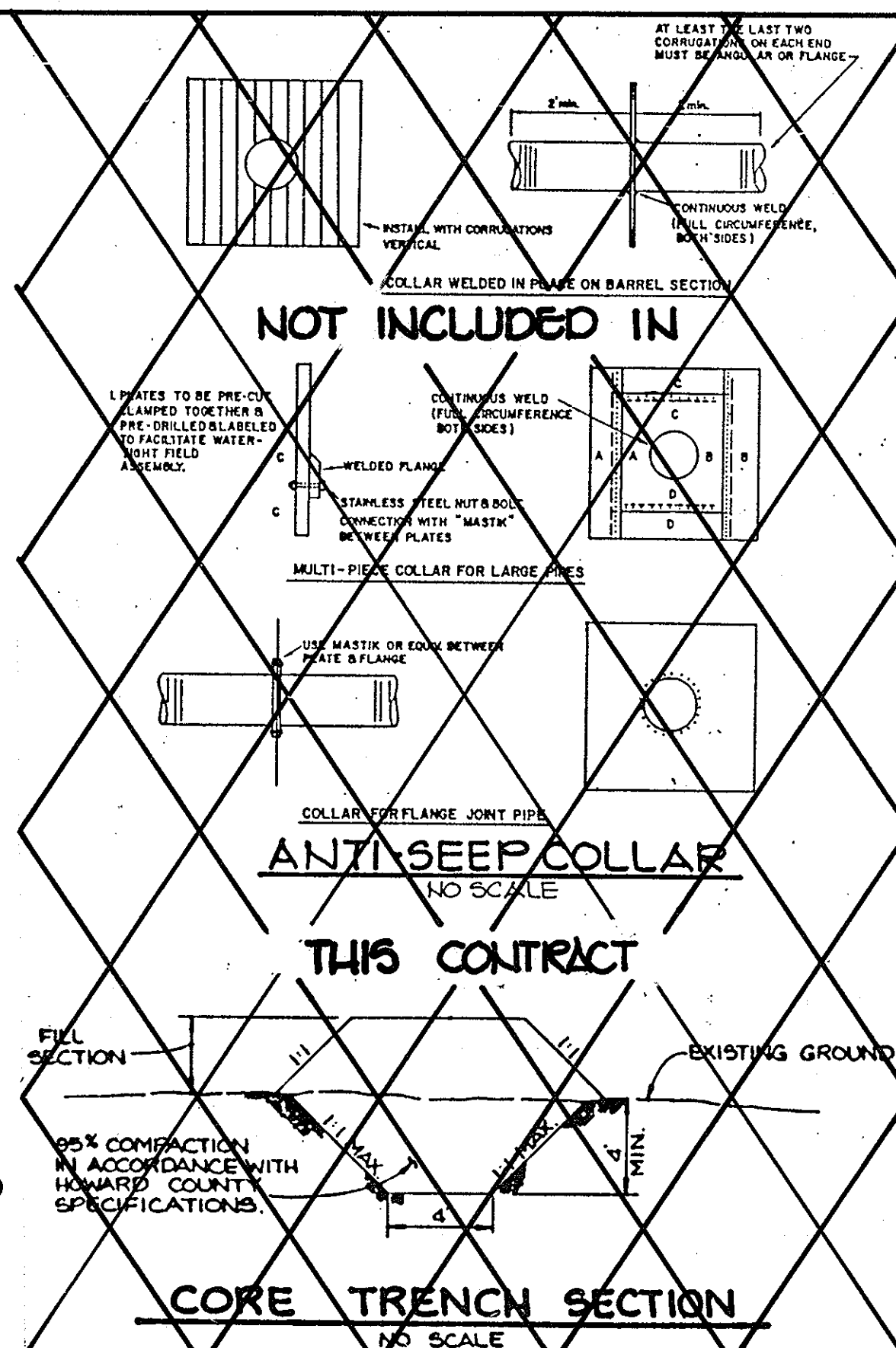
9. Placing Temperature - Concrete may not be placed at temperatures below 37°F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



BY THE ENGINEER:
 "I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS 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 AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

James K. Tracy
 ENGINEER: JAMES K. TRACY PE #9566
 7-1-88
 DATE

BY THE DEVELOPER:
 "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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

James R. Moxley, Jr.
 DEVELOPER: JAMES R. MOXLEY, JR. - PRESIDENT
 SECURITY DEVELOPMENT CORPORATION
 2-7-88
 DATE

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

James M. Helms
 U. S. SOIL CONSERVATION SERVICE
 5-12-87
 DATE

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

John H. Robertson
 HOWARD S.C.D.
 5/12/89
 DATE

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

Joyce L. Bogle
 COUNTY HEALTH OFFICER
 5-23-89
 DATE

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

James P. Shuman
 DIRECTOR
 5/17/89
 DATE

William E. Riley
 CHIEF, BUREAU OF ENGINEERING
 5-17-89
 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

William E. Riley
 PLANNING DIRECTOR
 6-14-89
 DATE

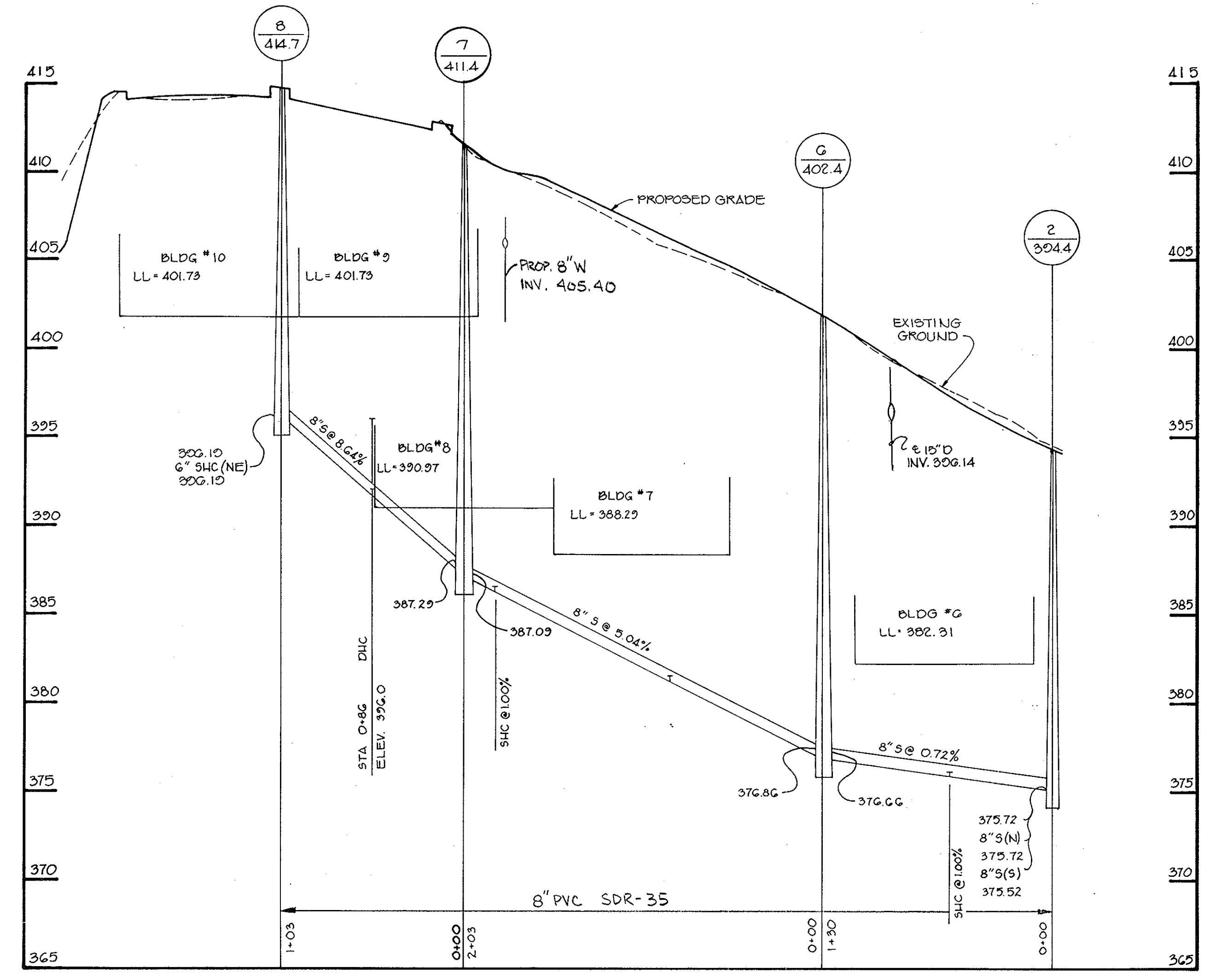
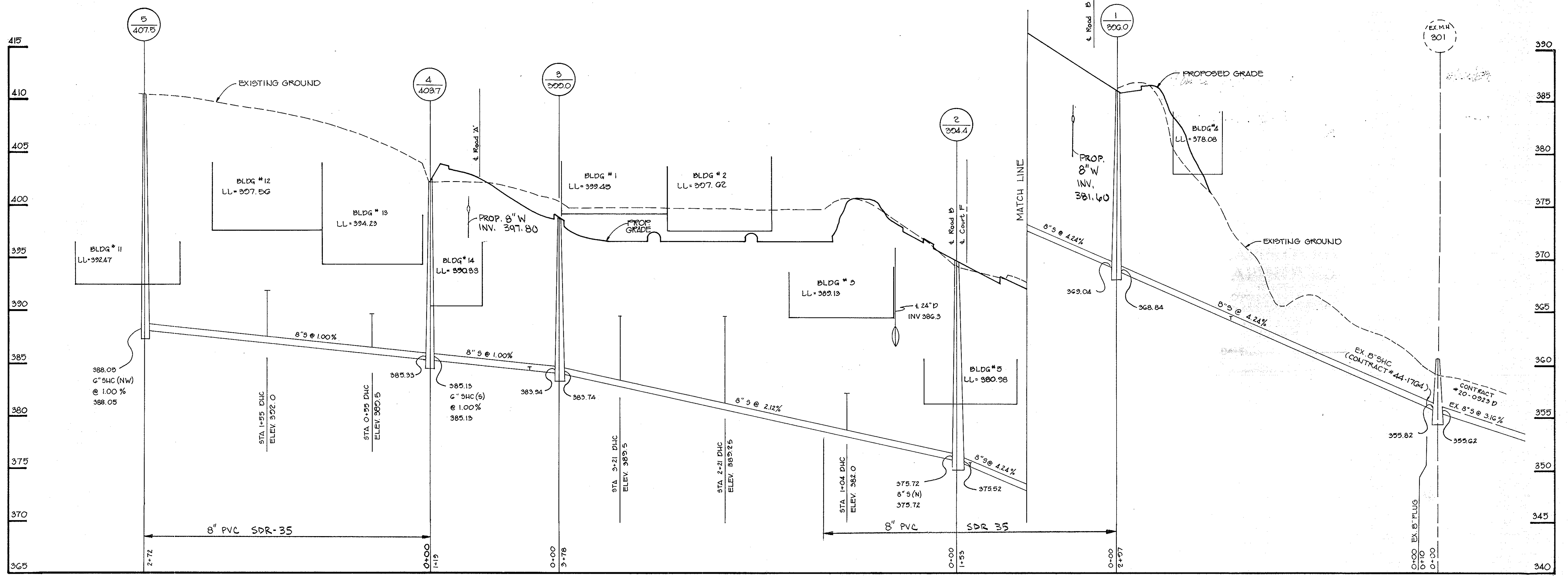
Mark S. DeCamp
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 6/14/89
 DATE

NO	DATE	REVISION

TRACY, SCHULTE & ASSOCIATES INC.
 planning • architecture • engineering
 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

APPROVED
 DIVISION of
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE **11-3-88**

OWNER SECURITY DEVELOPMENT CORP P.O. BOX 417 ELLCOTT CITY, MARYLAND 21043	PROJECT ORCHARD HILL SECTION 1, LOT 1, PARCELS A & B APARTMENT DWELLINGS LOCATION TAX MAP NOS. 17 & 24 PARCELS 130, 204 & 519 ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLCOTT CITY, MARYLAND 21043	TITLE SWM SPECIFICATIONS NOTES AND DETAILS
DATE JULY 9 1988 APRIL 6 1989	PROJECT NO 0052 SDP
DES RJW	DRN EWM
SCALE AS SHOWN	DRAWING 10 OF 13



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

James Boyden COUNTY HEALTH OFFICER 5-23-89 DATE

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

James Wilson DIRECTOR 5/17/89 DATE

William E. Rely CHIEF, BUREAU OF ENGINEERING 5-17-89 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

W. R. ... PLANNING DIRECTOR 6-14-89 DATE

Franklin ... CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 6/14/89 DATE

11-2-89 ADDED 8" PVC SDR-35

NO	DATE	REVISION

APPROVED
DIVISION OF
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY,
MARYLAND
DATE **11-3-89**

TRACY, SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

James K. Tracy

OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT ORCHARD HILL SECTION 1, LOT 1, PARCELS A & B APARTMENT DWELLINGS
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	LOCATION TAX MAP NO. 17 DEED REF. 509/437 PARCEL 150, 204 & 519 2 nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE JULY 8, 1986 APRIL 2, 1989	TITLE SEWER PROFILES 9-88-18 P-88-35 F-88-251 ZB 837M
DES. RJW	DRN. KLN
SCALE HORIZ. 1"=50' VERT. 1"=5'	PROJECT NO. 0052 SDP DRAWING 11 OF 15

J. Ryan Boyle
 COUNTY HEALTH OFFICER
 DATE 5-23-89

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

James H. ...
 DIRECTOR
 DATE 5-17-89

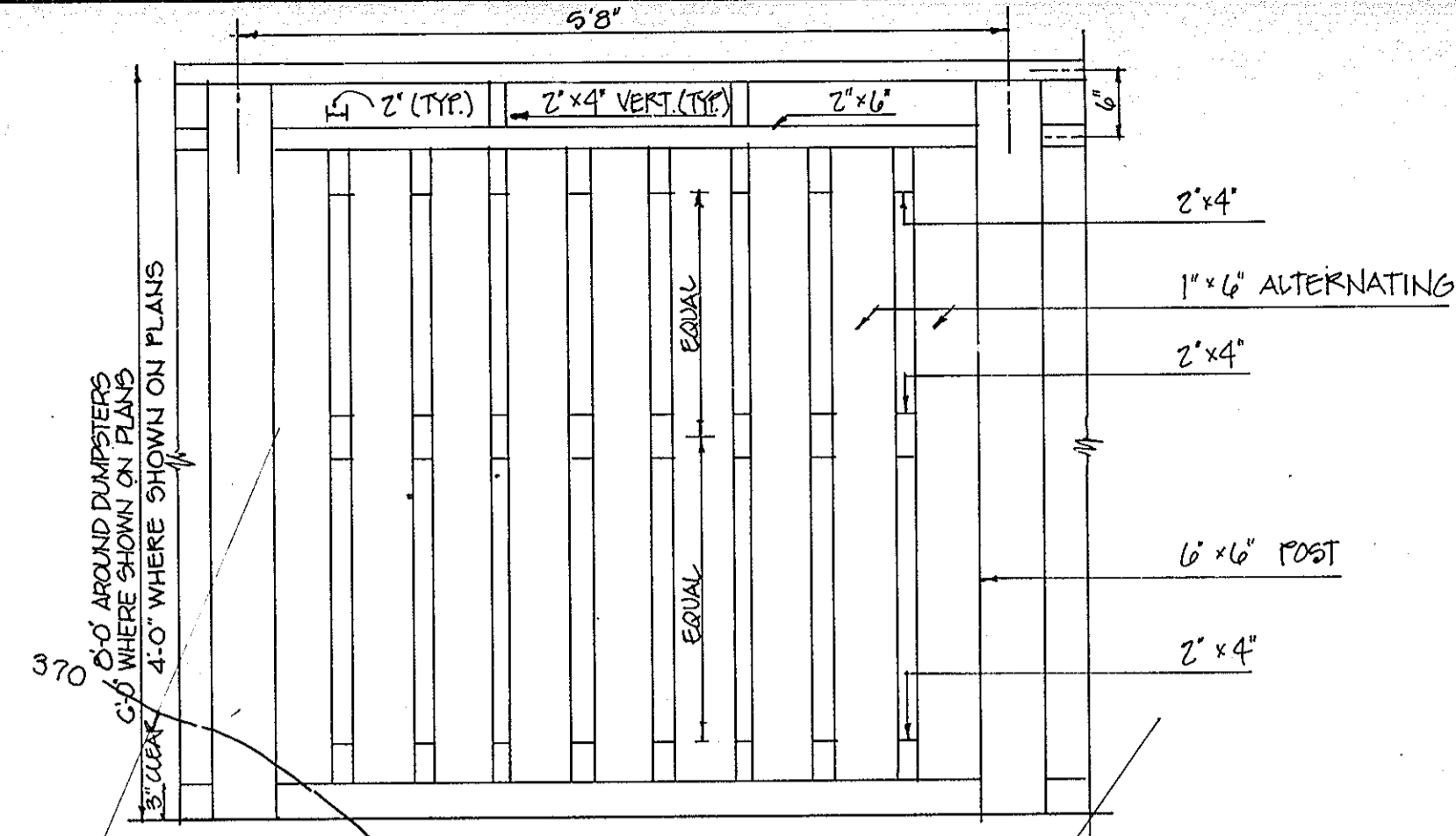
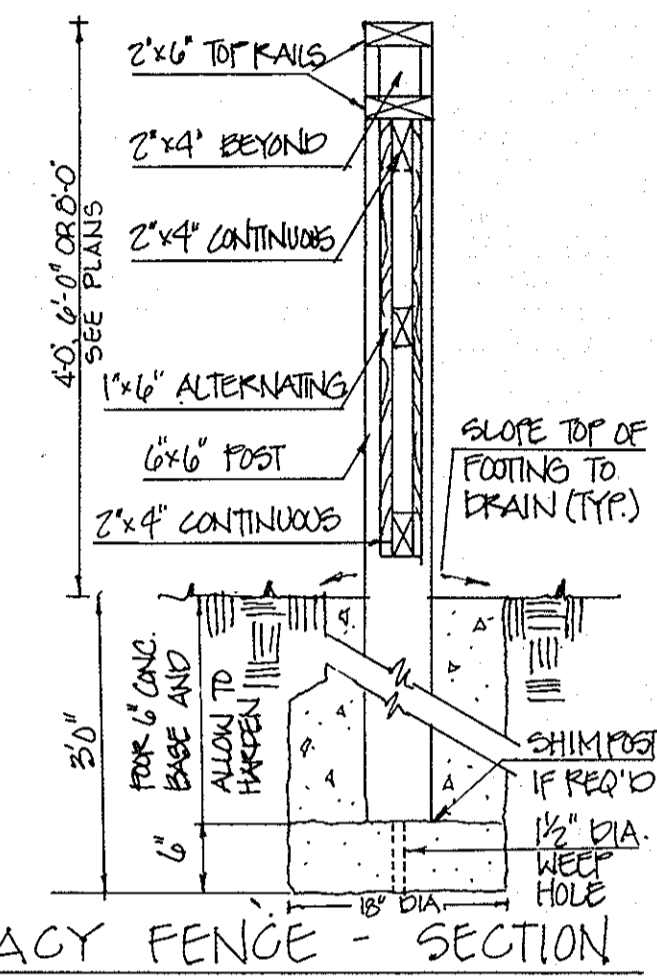
William E. ...
 CHIEF, BUREAU OF ENGINEERING
 DATE 5-17-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Mark S. ...
 PLANNING DIRECTOR
 DATE 6-14-89

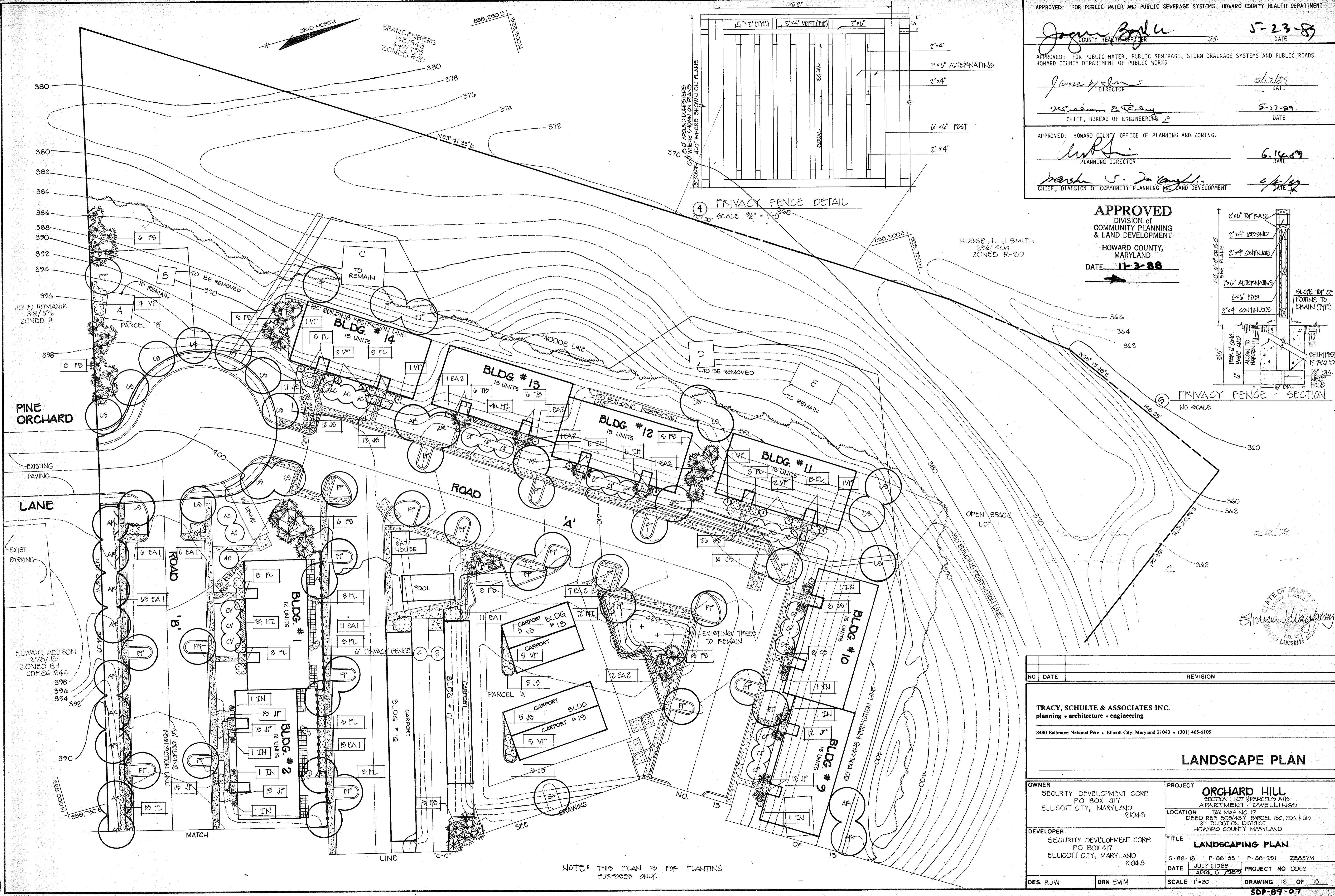
Mark S. ...
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE 6-14-89

APPROVED
 DIVISION OF
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE 11-3-88



4 PRIVACY FENCE DETAIL
 SCALE 3/4" = 1'-0"

5 PRIVACY FENCE - SECTION
 NO SCALE



NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY.

NO	DATE	REVISION
TRACY, SCHULTE & ASSOCIATES INC. planning • architecture • engineering 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105		
LANDSCAPE PLAN		
OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT ORCHARD HILL SECTION 1 LOT 1 PARCELS A-D APARTMENT DWELLINGS LOCATION TAX MAP NO. 17 DEED REF. 509/437 PARCEL 130, 204, 519 2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MARYLAND 21043	TITLE LANDSCAPING PLAN S-88-18 P-88-35 F-88-291 ZB887M DATE JULY 11, 1988 PROJECT NO. CO052 APRIL 6, 1989	
DES RJW	DRN EWM	SCALE 1" = 30' DRAWING 12 OF 13

STATE OF MARYLAND
 Elinora Mayberry
 LANDSCAPE ARCHITECT

PLANT LIST

KEY	QUANTITY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENTS
EVERGREEN TREES					
PS	71	Pinus Strobus/Eastern White Pine	6' - 8' ht.	BB	12' O.C.
DECIDUOUS TREES					
AR	35	Acer rubrum 'October Glory' / October Glory Red Maple	2-1/2" - 3" cal.	BB	Full crown, central leader
AC	15	Amblyclia canadensis / Shadblow Serviceberry	8' - 10' ht.	BB	Multi-stem (min. 5 stem) 15' O.C.
CP	15	Crataegus phaenopyrum/Washington Hawthorn	1-1/2" - 2" cal.	BB	Tree form, full crown, 15' O.C.
CV	9	Chioanthus virginicus/Fringetree	1-1/2" - 2" cal.	BB	Specimens; 15 O.C.
FP	47	Fraxinus pennsylvanica 'Marshall's Seedless' / Marshall's Seedless Green Ash	2-1/2" - 3" cal.	BB	Full crown, central leader
LS	22	Liquidambar styraciflua/American Sweetgum	2-1/2" - 3" cal.	BB	Full crown, central leader
SHRUBS					
AH	12	Azalea 'Hino Crismon' / Hino Crismon	18" - 24" sp.	BB/CG	2 1/2" O.C.
CS	44	Cotoneaster salicifolius 'Repens' / Willow Cotoneaster	18" - 24" sp.	BB/CG	2 1/2" O.C.
EAI	144	Euonymus alatus 'Compacta' / Dwarf Winged Euonymus	2" - 2-1/2" ht.	BB/CG	3" O.C.
EAZ	24	Euonymus alatus/Winged Euonymus	2" - 2-1/2" ht.	BB	6" O.C.
IH	34	Ilex crenata 'Helleri' / Helleri Holly	18" - 24" ht.	BB/CG	2 1/2" O.C.
IN	10	Ilex 'Nellie R. Stevens' / Nellie Stevens Holly	6' - 7' ht.	BB	
JP	4	Juniperus chinensis 'Pfitzeriana Compacta' / Compact Pfitzer Juniper	2' - 2-1/2' ht.	BB/CG	4" O.C.
JS	107	Juniperus chinensis 'Sargentii' / Sargent Juniper	18" - 24" sp.	BB/CG	2 1/2" O.C.
JP	84	Juniperus horizontalis 'plumosa' / Andorra Juniper	18" - 24" sp.	BB/CG	2 1/2" O.C.
PL	128	Prunus laurocerasus 'Otto Luyken' / Otto Luyken Cherry Laurel	24" - 30" sp.	BB/CG	3 1/2" O.C.
RC	5	Rhododendron catabiense 'Roseum elegans' / Roseum Elegans Rhododendron	2" - 2-1/2"	BB/CG	5" O.C.
TB	28	Taxus baccata 'Repandens' / Spreading English Yew	18" - 24" sp.	BB/CG	2 1/2" O.C.
VP	61	Viburnum plicatum 'Marlesii' / Marle's Doublefile Viburnum	2-1/2" - 3" ht.	BB/CG	
PERENNIALS					
HI	144	Hemerocallis 'Bright Banner' / Bright Banner Daylily	1 gal.	cont.	Double rows, 18" o.c.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
James J. Behm COUNTY HEALTH OFFICER 5-23-89 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James J. Behm DIRECTOR 5/27/89 DATE

William E. Riley CHIEF, BUREAU OF ENGINEERING 5/17/89 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
W. Schulte PLANNING DIRECTOR 6-14-89 DATE

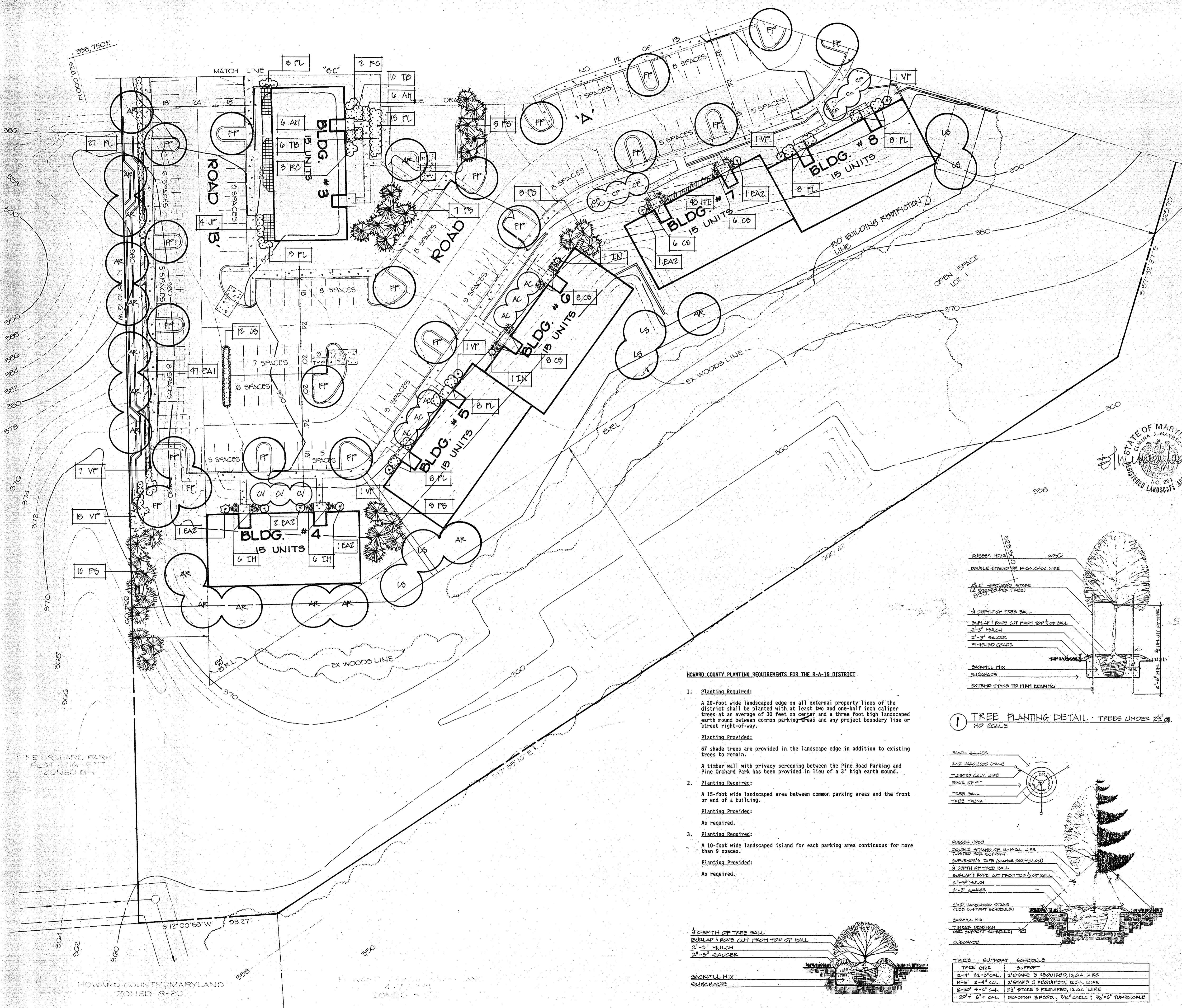
Tracy Schulte CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT 6/16/89 DATE

NO. DATE REVISION

TRACY SCHULTE & ASSOCIATES INC.
planning • architecture • engineering
8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465-6105

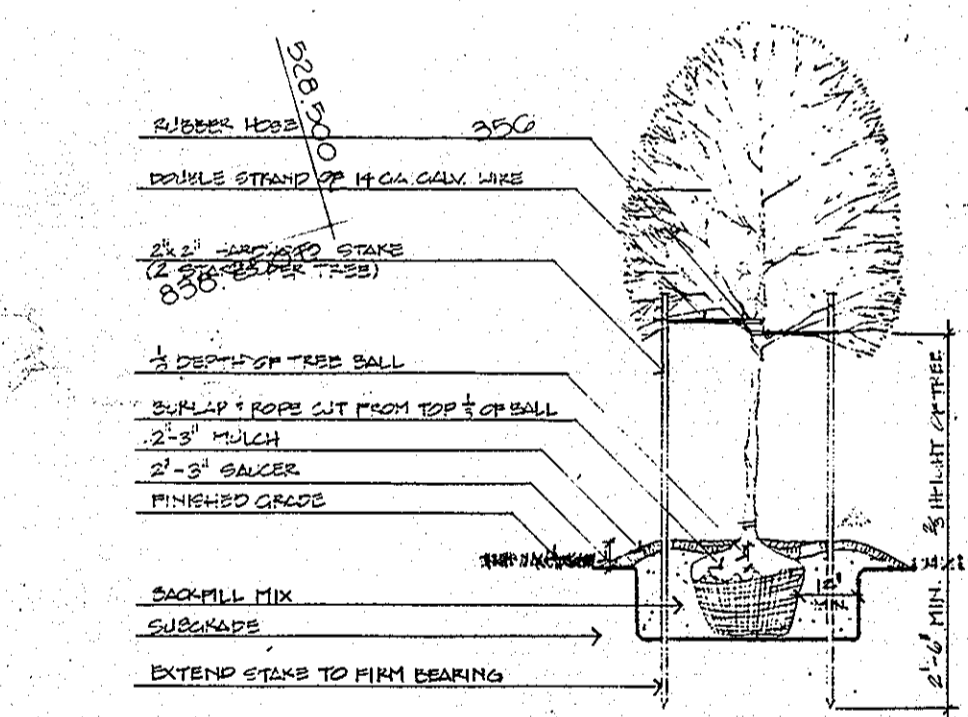
LANDSCAPE PLAN

OWNER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MARYLAND 21043	PROJECT ORCHARD HILL SECTION 1 LOT 14 PARCELS A & B APARTMENT DWELLINGS
DEVELOPER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MARYLAND 21043	LOCATION TAX MAP NO 17 DEED REF 500/437 PARCEL 130, 204 & 510 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DES RJW	DRN JLR
TITLE LANDSCAPING PLAN	DATE 9-88-10 P-88-35 F-88-291 ZB837M JULY 1, 1988 APRIL 6, 1989
SCALE 1" = 30'	PROJECT NO 0082 DRAWING 10 OF 13

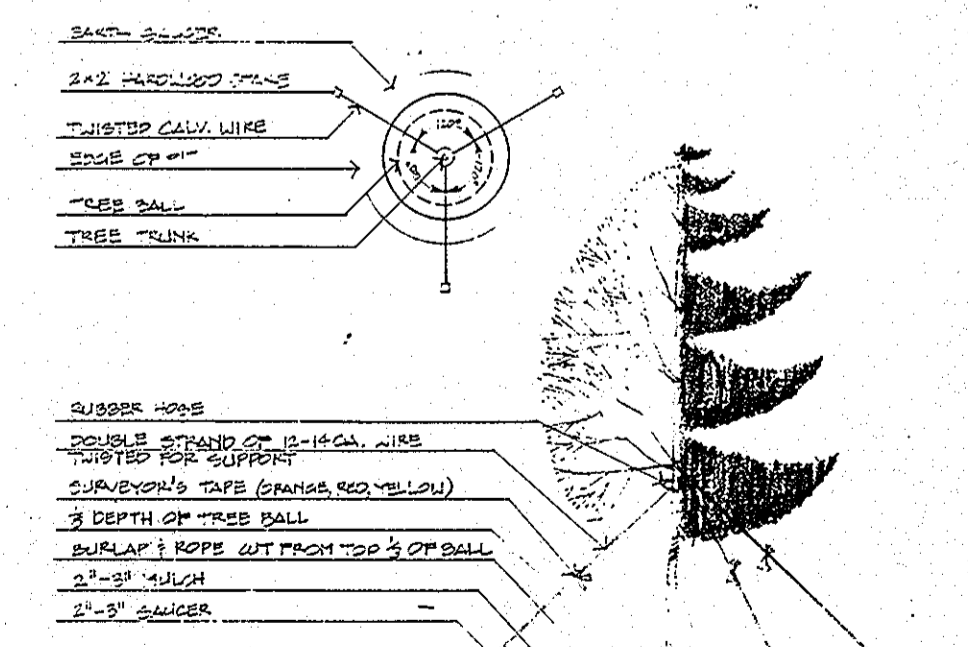


HOWARD COUNTY PLANTING REQUIREMENTS FOR THE R-A-15 DISTRICT

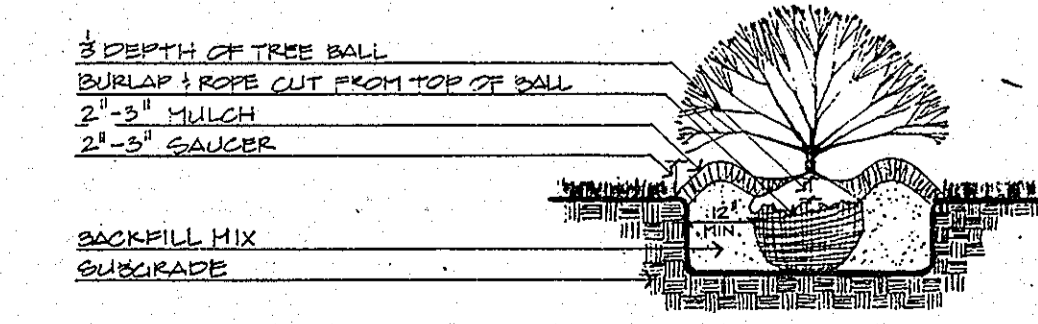
- Planting Required:**
A 20-foot wide landscaped edge on all external property lines of the district shall be planted with at least two and one-half inch caliper trees at an average of 30 feet on center and a three foot high landscaped earth mound between common parking areas and any project boundary line or street right-of-way.
Planting Provided:
67 shade trees are provided in the landscape edge in addition to existing trees to remain.
A timber wall with privacy screening between the Pine Road Parking and Pine Orchard Park has been provided in lieu of a 3' high earth mound.
- Planting Required:**
A 15-foot wide landscaped area between common parking areas and the front or end of a building.
Planting Provided:
As required.
- Planting Required:**
A 10-foot wide landscaped island for each parking area continuous for more than 9 spaces.
Planting Provided:
As required.



1 TREE PLANTING DETAIL - TREES UNDER 2 1/2\"/>



2 TREE PLANTING DETAIL - TREES OVER 2 1/2\"/>

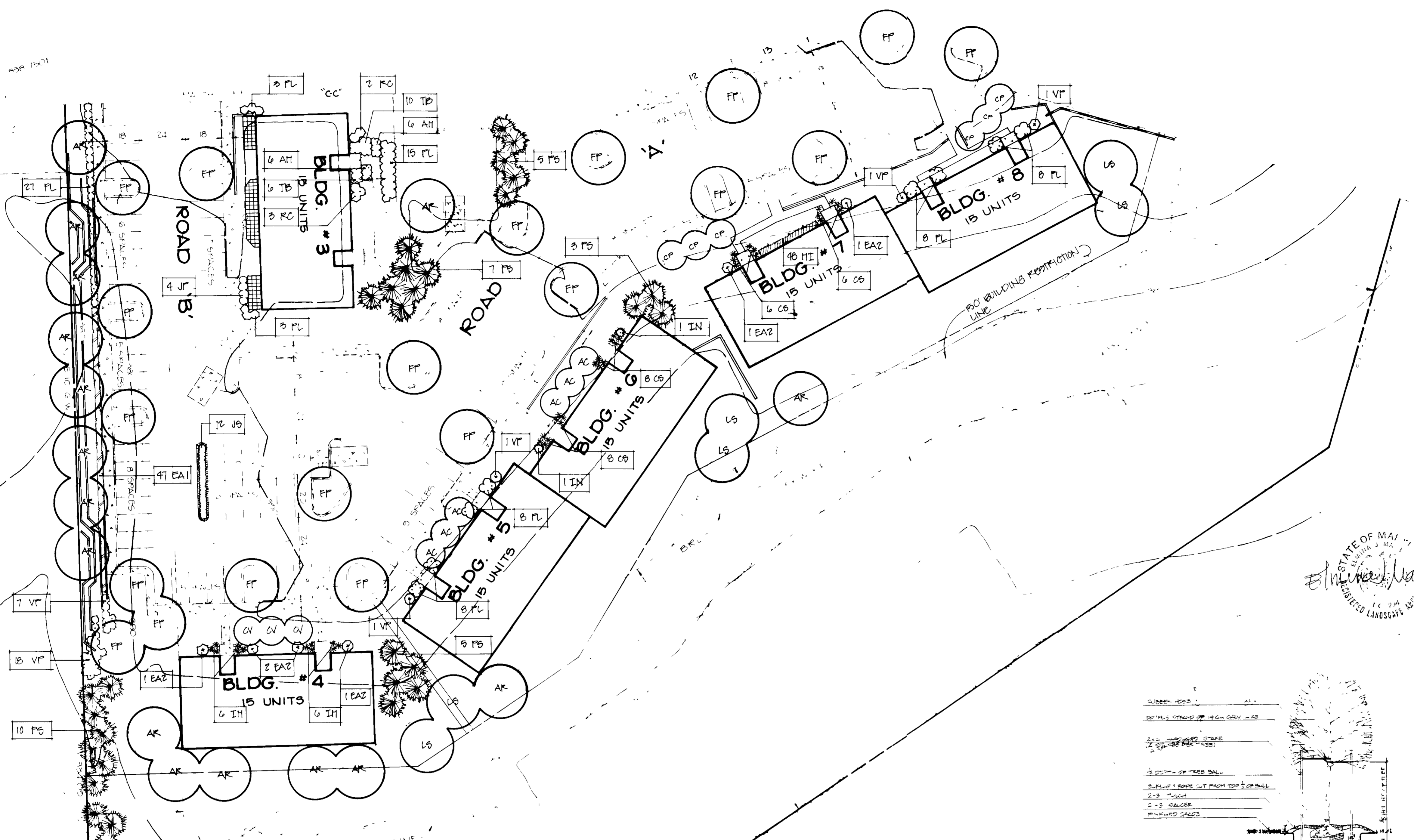


3 SHRUB PLANTING DETAIL - NO SCALE

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY.

PLANT LIST

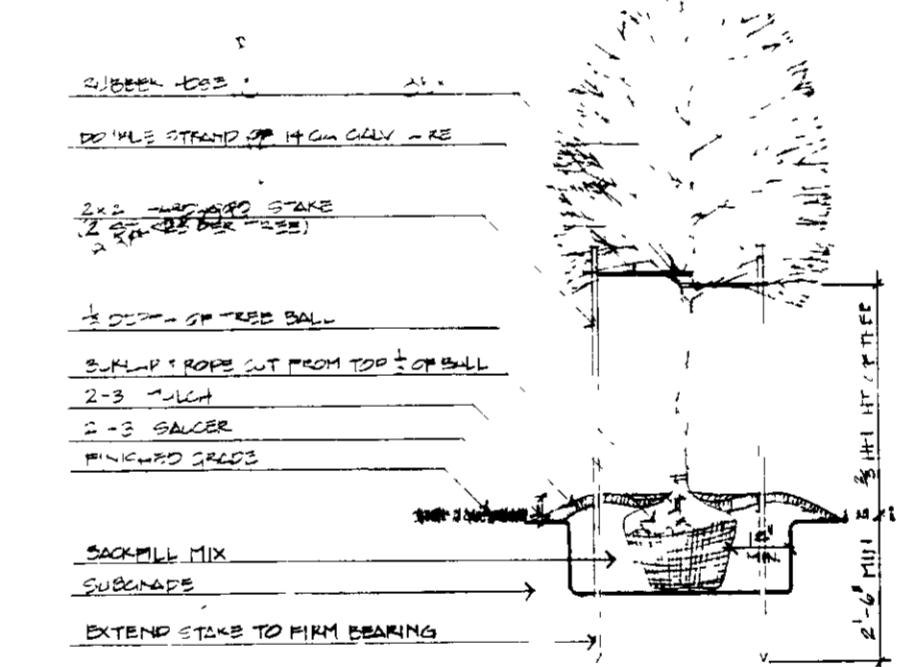
KEY	QUANTITY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENTS
EVERGREEN TREES					
PS	71	Pinus Strobus/Eastern White Pine	6' 8" ht	BB	12" O.C.
DECIDUOUS TREES					
AR	35	Acer rubrum 'October Glory' / October Glory Red Maple	2 1/2" - 3" cal	BB	Full crown, central leader
AC	15	Amelechier canadensis / Shadow Serviceberry	8' - 10' ht	BB	Multistem (w/ 5 stem) 15' O.C.
CP	15	Crataegus phoenopyrum/Washington Hawthorn	1 1/2" - 2" cal	BB	Tree form, full crown, 15' O.C.
CV	9	Chionanthus virginicus / Fringetree	1-1/2" 2" cal	BB	Specimens, 15 O.C.
FP	47	Fraxinus pennsylvanica 'Marshall's Seedling' / Marshall's Seedless Green Ash	2-1/2" - 3" cal	BB	Full crown, central leader
LS	22	Liquidambar styraciflua/American Sweetgum	2-1/2" 3" cal	BB	Full crown, central leader
SHRUBS					
AH	12	Azalea 'Hino Crimson' / Hino Crimson	18" - 24" sp	BB/CG	2 1/2" O.C.
CS	44	Cotoneaster salicifolius 'Repens' / Willowleaf Cotoneaster	18" - 24" sp	BB/CG	2 1/2" O.C.
EAI	144	Euonymus alatus 'Compacta' / Dwarf Winged Euonymus	2' - 2 1/2' ht	BB/CG	3" O.C.
EA2	24	Euonymus alatus/Winged Euonymus	2' 2 1/2' ht	BB	6" O.C.
IH	34	Ilex crenata 'Helleri' / Helleri Holly	18" - 24" ht	BB/CG	2 1/2" O.C.
IN	10	Ilex 'Helle R. Stevens' / Helle Stevens Holly	6' - 7' ht	BB	
JP	4	Juniperus chinensis 'Pfitzeriana Compacta' / Compact Pfitzer Juniper	2' - 2 1/2' ht	BB/CG	4" O.C.
JS	107	Juniperus chinensis 'Sargentii' / Sargent Juniper	18" - 24" sp	BB/CG	2 1/2" O.C.
JP	84	Juniperus horizontalis 'plumosa' / Andorra Juniper	18" - 24" sp	BB/CG	2 1/2" O.C.
PL	150	Prunus laurocerasus 'Otto Luyken' / Otto Luyken Cherry Laurel	24" - 30" sp	BB/CG	3 1/2" O.C.
RC	5	Rhododendron catawbiense 'Rossum elegans' / Roseum Elegans Rhododendron	2' - 2 1/2'	BB/CG	5" O.C.
VB	28	Viburnum baccata 'Repandens' / Spreading English Viburnum	18" - 24" sp	BB/CG	2 1/2" O.C.
VB	64	Viburnum plicatum 'Marliesii' / Marie's Doublefile Viburnum	2 1/2" - 3" ht	BB/CG	
PERENNIALS					
HI	144	Heimericallis 'Bright Banner' / Bright Banner Daylily	1 gal	cont	Double rows, 18" o.c.



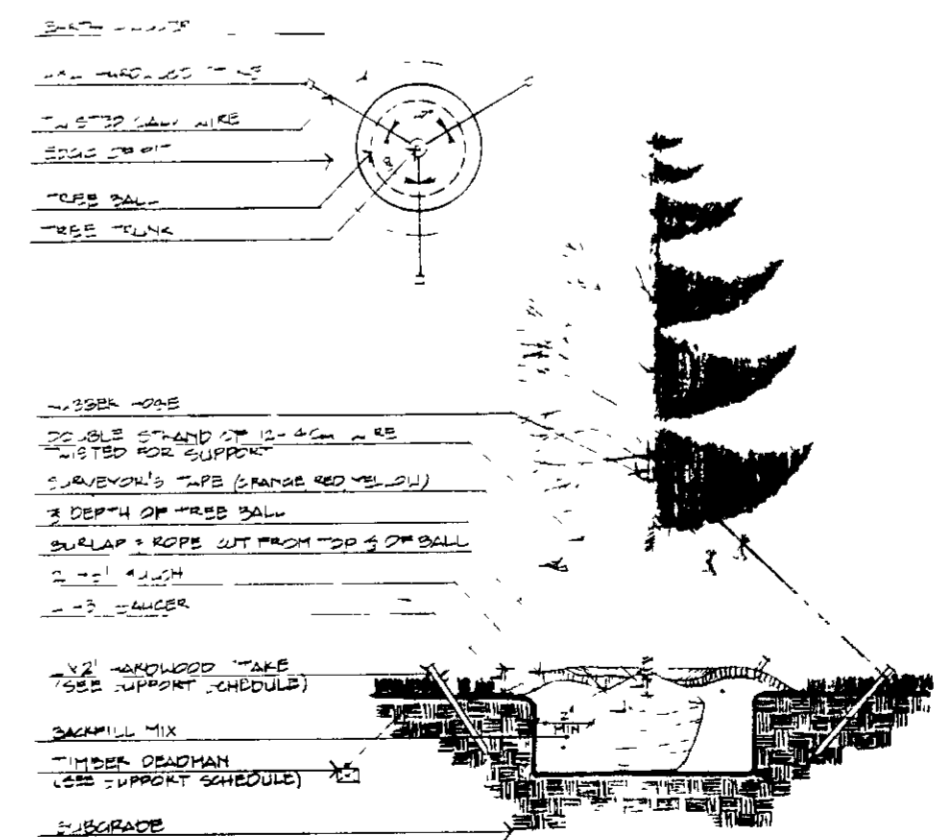
STATE OF MARYLAND
 REGISTERED LANDSCAPE ARCHITECT
 E. H. [Signature]

HOWARD COUNTY PLANTING REQUIREMENTS FOR THE R-A-15 DISTRICT

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- Planting Required:**
 A 15-foot wide landscaped area between common parking areas and the front or end of a building.
Planting Provided:
 As required.
- Planting Required:**
 A 10-foot wide landscaped island for each parking area continuous for more than 9 spaces.
Planting Provided:
 As required.



1 TREE PLANTING DETAIL - TREES UNDER 2 1/2" CALIPER



2 SHRUB PLANTING DETAIL

3 TREE PLANTING DETAIL - TREES OVER 2 1/2" CALIPER & ALL 1/2" GREEN TREES - NO SCALE

NOTE: THIS PLAN IS FOR PLANTING PURPOSES ONLY

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

<i>John Zedler</i> COUNTY HEALTH OFFICER	5-23-89 DATE
<i>June H. [Signature]</i>	5/12/89
<i>William B. [Signature]</i>	5/12/89
<i>W. [Signature]</i>	6-14-89
<i>W. [Signature]</i>	6/14/89

NO. DATE REVISION

TRACY SCHULTE & ASSOCIATES INC.
 planning • architecture • engineering
 4401 Baltimore National Pike • Ellicott City, Maryland • 410-411-8111

LANDSCAPE PLAN

OWNER SECURITY DEVELOPMENT CORP PO BOX 417 ELLCOTT CITY MARYLAND 21043	PROJECT ORCHARD HILL SECTIONAL LOT 14 PARCELS A/D APARTMENT DWELLINGS LOCATION TAX MAP NO 17 FED. REF. 600/437 PARCEL 190 204 #510 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER SECURITY DEVELOPMENT CORP PO BOX 417 ELLCOTT CITY MARYLAND 21043	TITLE LANDSCAPING PLAN DATE APRIL 6, 1988 PROJECT NO 0052
DES. REV. DRN. ILLR	SCALE 30 DRAWING 13 OF 13