

| SHEET INDEX | |
|-------------|--|
| NO | DESCRIPTION |
| 1 | TITLE SHEET |
| 2 | PLAN OF KINGS GRANT ROAD, KNIGHTS COURT, WOODSONG COURT, AND HARMONY LANE. |
| 3 | DRAINAGE AREA MAP AND ROAD PROFILES OF KINGS GRANT ROAD AND HARMONY LANE. |
| 4 | DETAILS |
| 5 | STORM DRAIN PROFILES |
| 6 | GRADING AND SEDIMENT CONTROL PLAN |
| 7 | SEDIMENT CONTROL DETAILS AND ROAD PROFILE. |
| 8 | PLANTING PLAN |

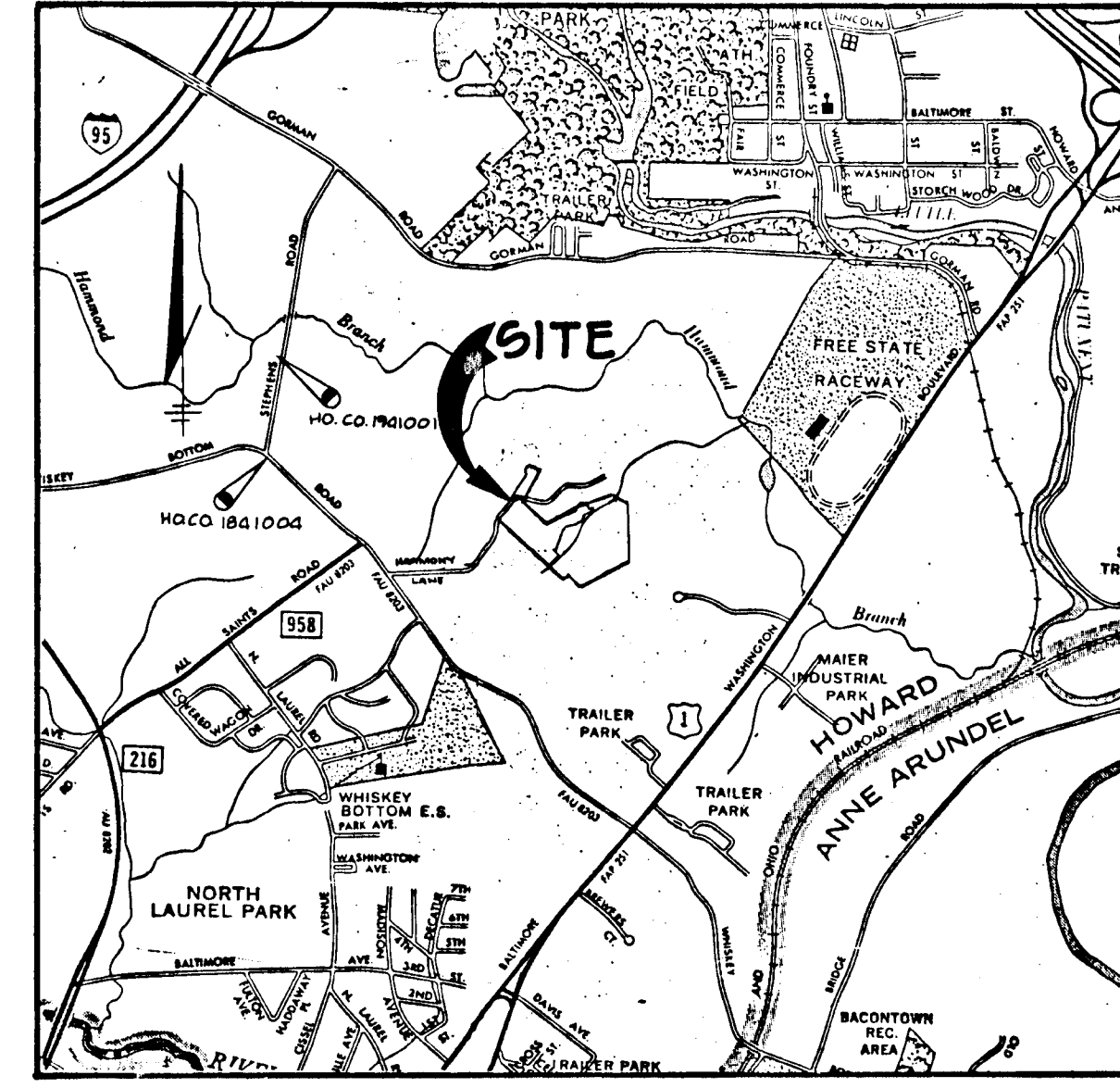
ROADWAY, STORM DRAINS & STORM WATER MANAGEMENT

KING'S WOODS

SECTION 1, AREA 2

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=2000

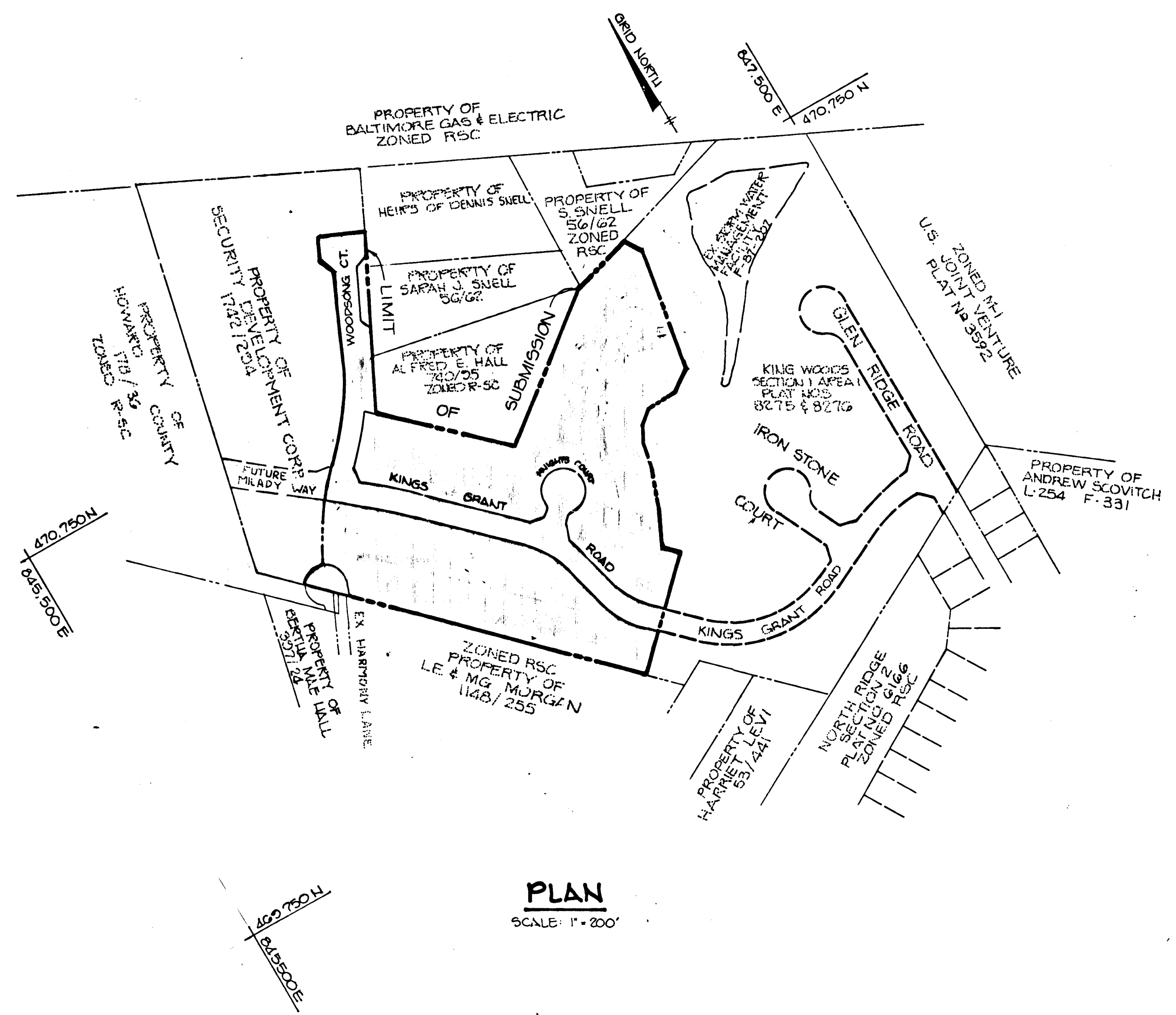
BENCH MARKS

- Ho Co #1841004 ELEV. 295.924
REBAR 6 ± SOUTH OF SOUTH EDGE OF WHISKEY BOTTOM ROAD NEAR THE INTERSECTION OF STEPHENS ROAD N 471079.018 E 843657.878
- Ho Co #1941001 ELEV. 277.873
REBAR 4 ± WEST EDGE OF STEPHENS ROAD IN FRONT OF HOUSE No 8820 0.3' BELOW SURFACE N 472223.119 E 843797.549

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR ROAD CONSTRUCTION.
2. 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.
3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

| | |
|---|-------------------|
| BELL TELEPHONE SYSTEM | 393-3649 |
| LONG DISTANCE CABLE DIVISION | 393-3553 OR 3554 |
| BALTIMORE GAS AND ELECTRIC | 539-8000 EXT. 691 |
| HOWARD COUNTY BUREAU OF UTILITIES | 992-2366 |
| HOWARD COUNTY CONSTRUCTION INSPECTION SURVEY DIVISION | 992-2417/2418 |
5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
6. ALL STREET CURB RETURNS SHALL HAVE 25.0' RADII UNLESS OTHERWISE NOTED.
7. STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1984 EDITION.
9. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:
ALL CUL-DE-SAC DESIGNED FOR 25 M.P.H., ALL LOCAL STREETS DESIGNED FOR 30 M.P.H.
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
12. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% OF MAXIMUM OBTAINABLE DENSITY DETERMINED BY MARSHALL PROCTOR.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED R-SC PER 8-2-85 COMPREHENSIVE ZONING PLAN.
16. TOPO TAKEN FROM HOWARD COUNTY AERIAL TOPO SUPPLEMENTED BY FIELD RUN TOPO.
17. STORM WATER MANAGEMENT FOR THIS SITE IS PROVIDED UNDER KING'S WOODS SECTION 1, AREA 1 F-87-207
18. CLOSURE OF HARMONY LANE IS IN ACCORDANCE WITH COUNTY COUNCIL RESOLUTION 80-1980 APPROVED ON JULY 24, 1980.



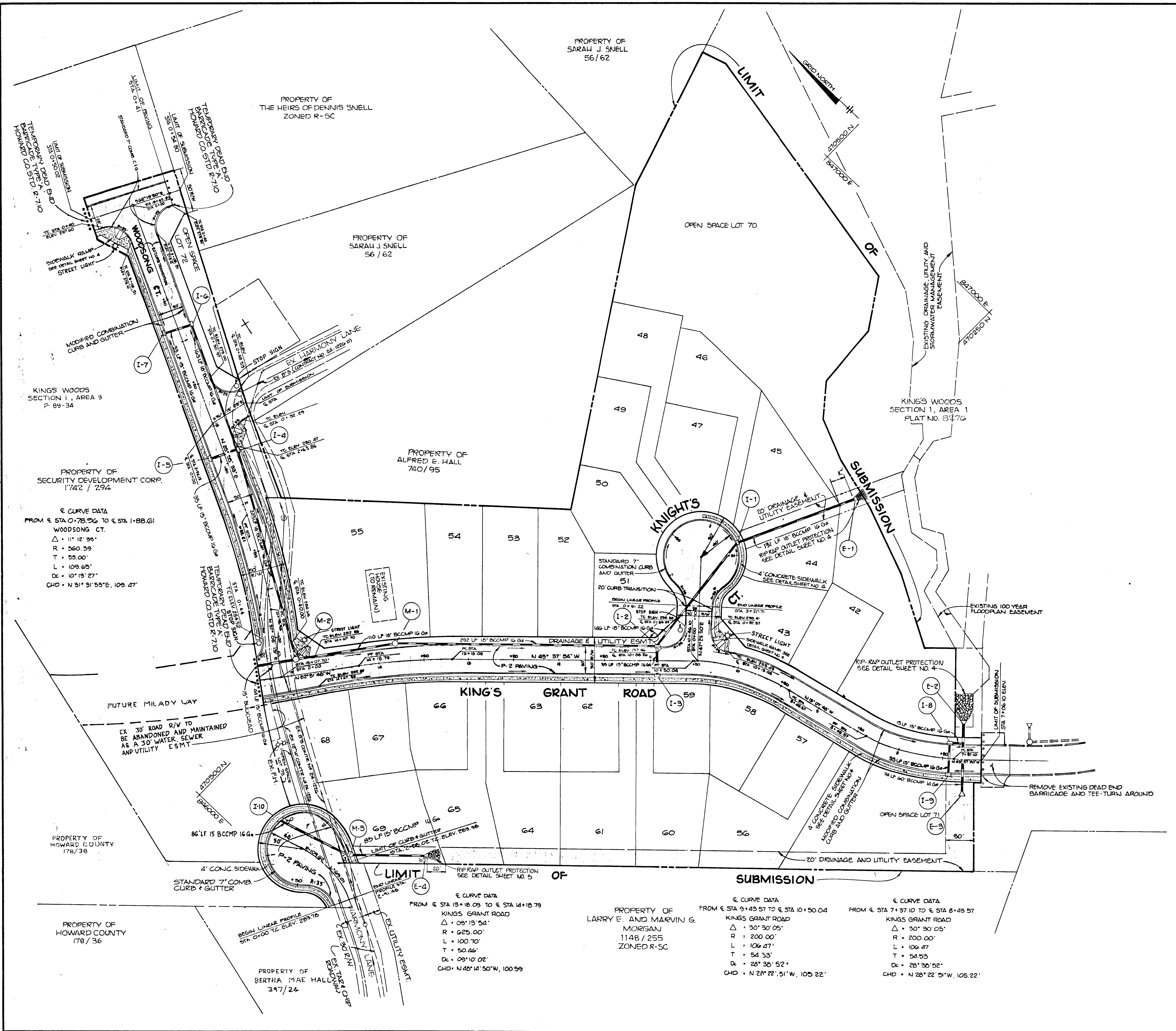
| | | |
|--|-----------------|----------|
| APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING <i>Mark C. ...</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT | 7/1/89 DATE | |
| APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Donald ...</i> CHIEF, LAND DEVELOPMENT DIVISION | 8/28/89 DATE | |
| <i>Thomas W. ...</i> CHIEF, BUREAU OF HIGHWAYS | 8/22/89 DATE | |
| <i>William B. ...</i> CHIEF, BUREAU OF ENGINEERING | 9-1-89 DATE | |
| NO | DATE | REVISION |

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| | |
|---|--|
| OWNER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MD 21043 | PROJECT KING'S WOODS SECTION 1, AREA 2 |
| DEVELOPER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MD 21043 | LOCATION TAX MAP NO. 47 PARCEL NO. 756 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| TITLE TITLE SHEET S-88-35 F-88-83 F-89-103 | DATE DECEMBER 1, 1989 JULY 24, 1989 |
| DES: CDT | DRN: JH/MM |
| SCALE: AS SHOWN | PROJECT NO: 8725 R9D DRAWING 1 CF 8 |

987



| STRUCTURE SCHEDULE | | | | | | |
|--------------------|------------|---|-------------|----------|----------|---------------------|
| NO. | TYPE | LOCATION | INV. IN | INV. OUT | TC ELEV. | REMARKS |
| I-1 | A-5 | 1.92' LP STA 2+33 KNIGHTS CT | 244.51 | 244.0 | 252.54 | HO. CO. STD SD 4.01 |
| I-2 | A-5 W/DEFL | 17.36' RT CL STA 10+93 KINGS GRANT RD | 15'D 253.25 | 252.80 | 257.74 | HO. CO. STD SD 4.01 |
| I-3 | A-5 W/DEFL | 17.36' LT CL STA 10+93 KINGS GRANT RD | --- | 253.60 | 257.74 | HO. CO. STD SD 4.01 |
| I-4 | A-5 | 17.36' RT CL STA 2+59 WOODSONG CT | 15'D 274.11 | 279.00 | 280.61 | HO. CO. STD SD 4.01 |
| I-5 | A-5 | 17.36' LT CL STA 2+59 WOODSONG CT | --- | 276.40 | 280.61 | HO. CO. STD SD 4.01 |
| I-6 | A-5 | 16.36' RT CL STA 4+08 WOODSONG CT | --- | 274.77 | 278.33 | HO. CO. STD SD 4.01 |
| I-7 | A-5 | 16.36' LT CL STA 4+08 WOODSONG CT | --- | 275.00 | 278.33 | HO. CO. STD SD 4.01 |
| I-8 | A-5 | 17.36' RT CL STA 7+41 KINGS GRANT RD | --- | 240.50 | 246.92 | HO. CO. STD SD 4.01 |
| I-9 | A-5 | 17.36' LT CL STA 7+41 KINGS GRANT RD | --- | 241.90 | 246.92 | HO. CO. STD SD 4.01 |
| I-10 | A-5 | LP STA 1+45.74 HARMONY LANE | --- | --- | 282.57 | HO. CO. STD SD 4.01 |
| M-1 | 4'-0" DIA | 20' RT CL STA 13+85 KINGS GRANT RD | 268.39 | 268.08 | *279.34 | HO. CO. STD G 5.12 |
| M-2 | 4'-0" DIA | 15' RT CL STA 14+95 KINGS GRANT RD | 15'D 272.80 | 271.49 | *283.48 | HO. CO. STD G 5.12 |
| M-3 | 4'-0" DIA | LP STA 2+44.48 HARMONY LANE | 276.75 | 276.50 | *283.3 | HO. CO. STD G 5.12 |
| E-1 | 15" METAL | SEE PLAN END SECTION | --- | 240.0 | --- | HO. CO. STD SD 5.61 |
| E-2 | 60" METAL | 39' RT CL STA END SECTION 7+26 KINGS GRANT RD | --- | --- | 237.34 | HO. CO. STD SD 5.61 |
| E-3 | 60" METAL | 35' LT CL STA END SECTION 7+26 KINGS GRANT RD | --- | --- | 238.22 | HO. CO. STD SD 5.61 |
| E-4 | 18" METAL | SEE PLAN END SECTION | --- | --- | 274.15 | HO. CO. STD SD 5.61 |

* ELEVATION AT RIM
NOTE: ALL STORM DRAIN BEDDING SHALL BE CLASS "C"

◻ CURVE DATA
FROM ◻ STA 0+78.26 TO ◻ STA 1+88.61
WOODSONG CT.
Δ = 11° 12' 55"
R = 560.39'
T = 53.00'
L = 109.63'
DC = 10° 13' 27"
CHD = N 31° 31' 55"E, 109.47'

◻ CURVE DATA
FROM ◻ STA 13+18.09 TO ◻ STA 14+10.79
KINGS GRANT ROAD
Δ = 09° 13' 54"
R = 625.00'
L = 100.70'
T = 50.46'
DC = 09° 10' 02"
CHD = N 48° 14' 50"W, 100.59'

PROPERTY OF
LARRY E. AND MARVIN G.
MORGAN
1148 / 255
ZONED R-5C

◻ CURVE DATA
FROM ◻ STA 9+45.57 TO ◻ STA 10+50.04
KINGS GRANT ROAD
Δ = 30° 30' 05"
R = 200.00'
L = 106.47'
T = 54.53'
DC = 28° 30' 52"
CHD = N 28° 22' 51"W, 105.22'

◻ CURVE DATA
FROM ◻ STA 7+37.10 TO ◻ STA 8+45.57
KINGS GRANT ROAD
Δ = 30° 30' 05"
R = 200.00'
L = 106.47'
T = 54.53'
DC = 28° 30' 52"
CHD = N 28° 22' 51"W, 105.22'

APPROVED: HOWARD COUNTY DEPT OF PLANNING AND ZONING
Frank J. ... 7/2/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Draville W. Welland 8/28/89
CHIEF, LAND DEVELOPMENT DIVISION
DATE

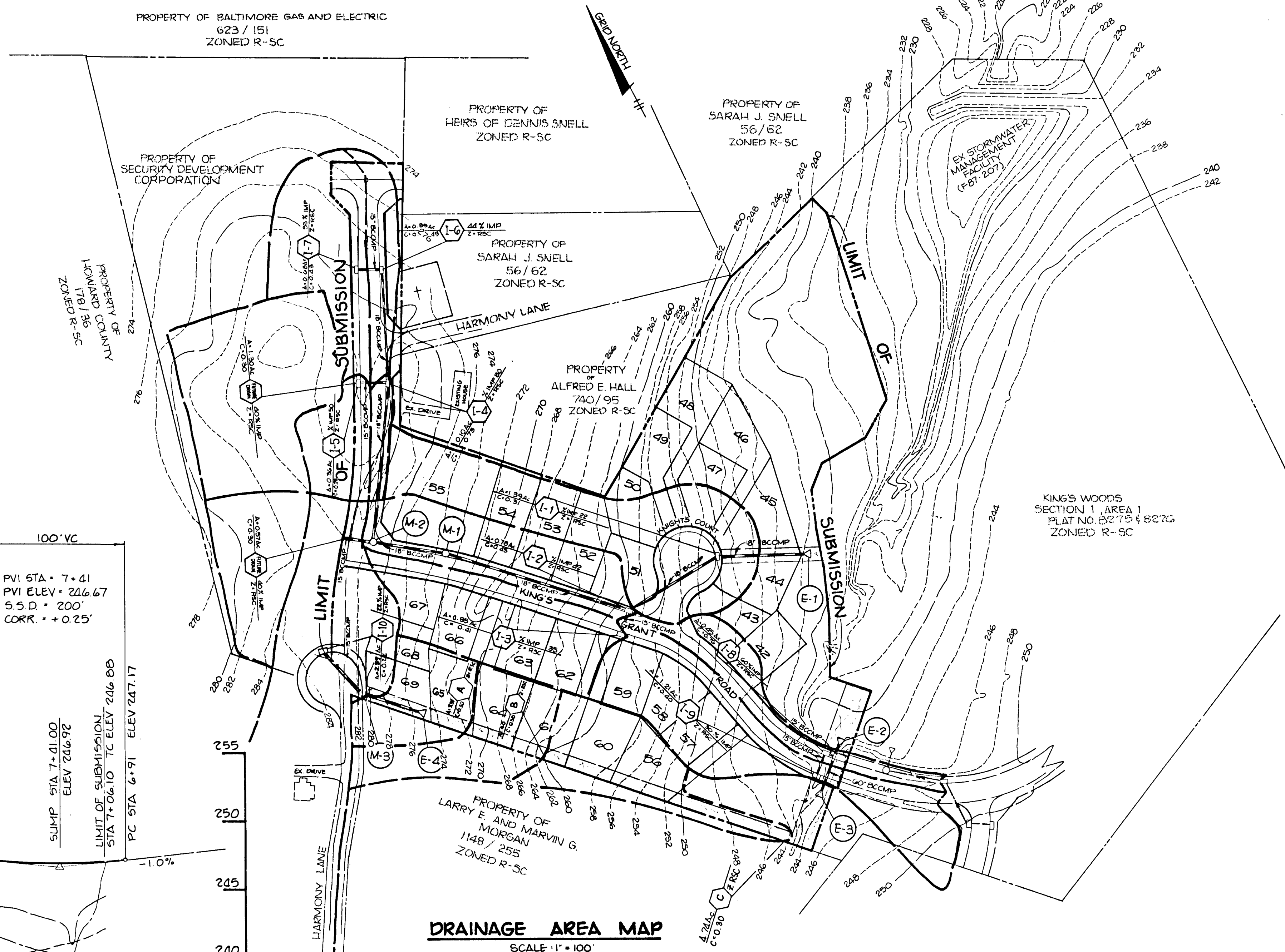
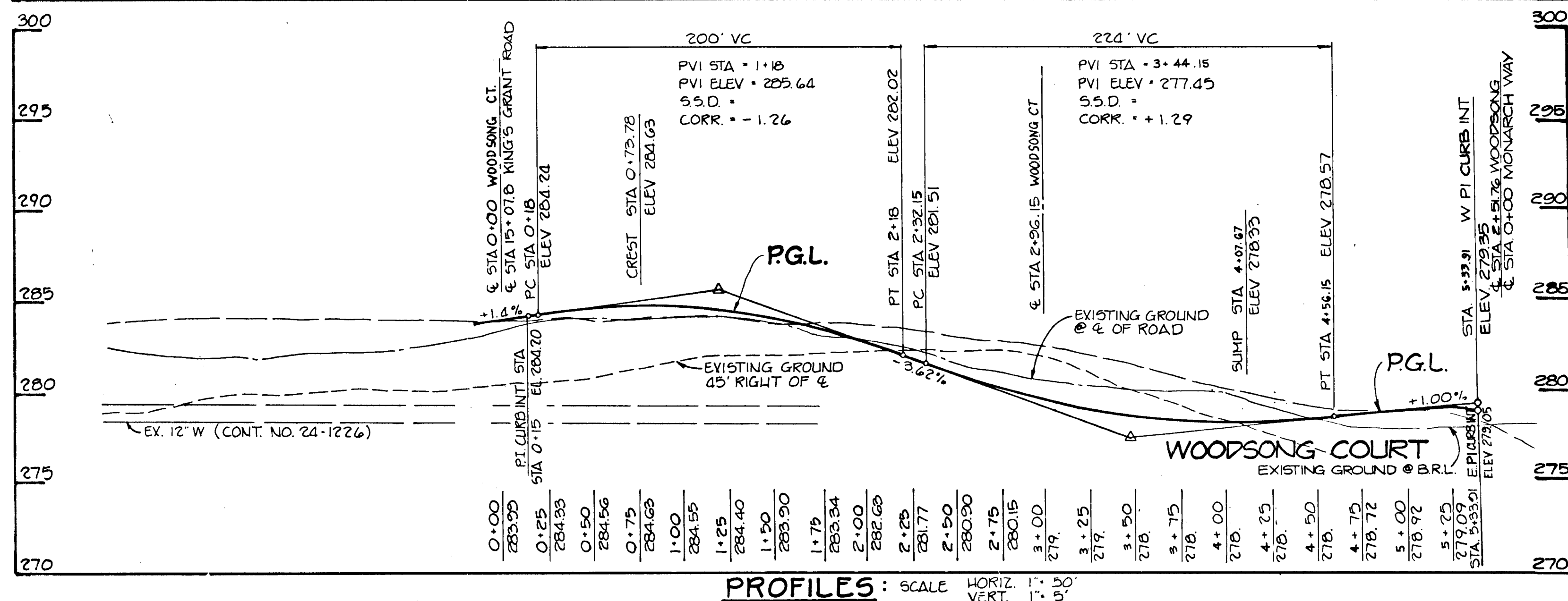
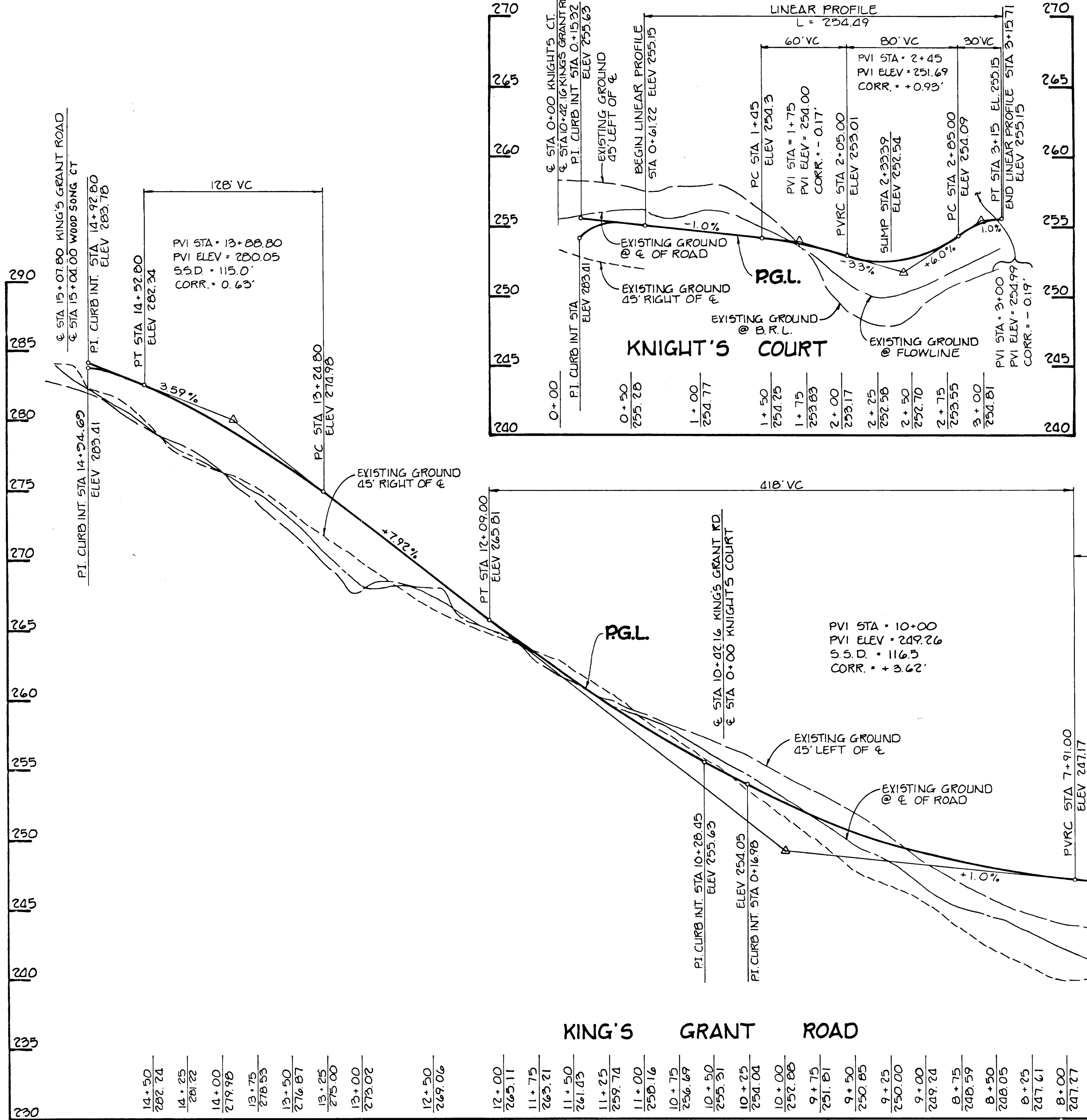
Draville W. Welland 8/22/89
CHIEF, BUREAU OF HIGHWAYS
DATE

William B. ... 9-1-89
CHIEF, BUREAU OF ENGINEERING
DATE

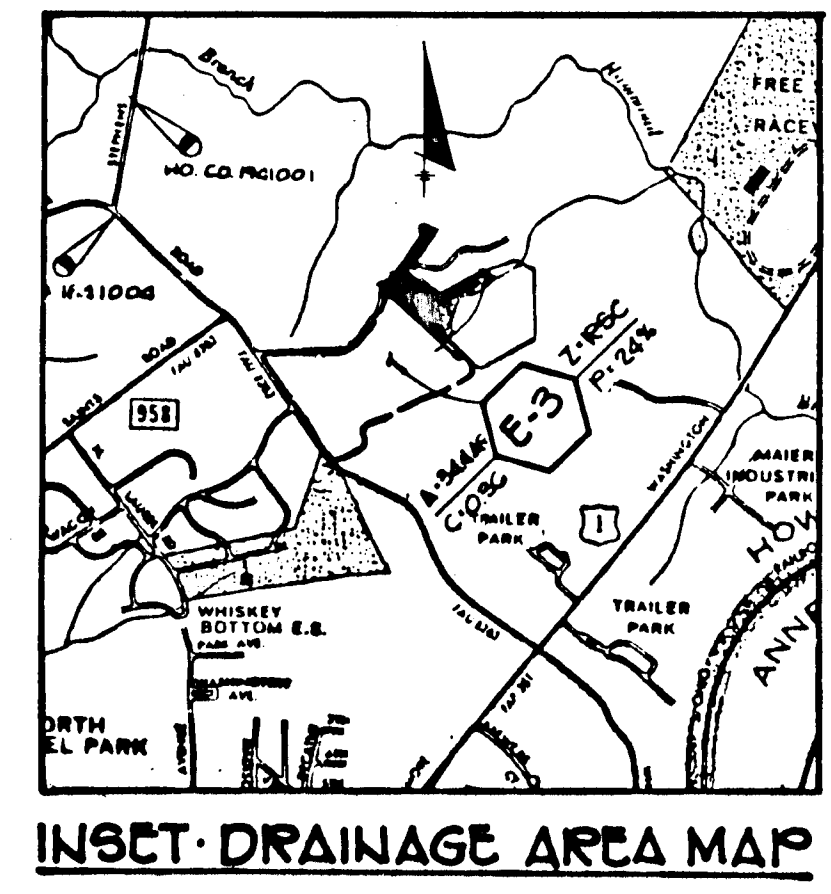
| NO | DATE | REVISION |
|----|------|----------|
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| DEVELOPER SECURITY DEVELOPMENT CORP. PO BOX 417 ELICOTT CITY, MARYLAND 21043 | LOCATION TAX MAP NO 47 PARCEL NO 756 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| DES. D.A.M. | DRN. M.M. |
| DATE DECEMBER 12, 1988 AUG. 11, 1989 | TITLE PLAN OF KINGS GRANT ROAD, HARMONY LANE, WOODSONG COURT, AND KNIGHTS COURT SCALE 1" = 50' DRAWING 2 OF 8 |



DRAINAGE AREA MAP
SCALE: 1" = 100'



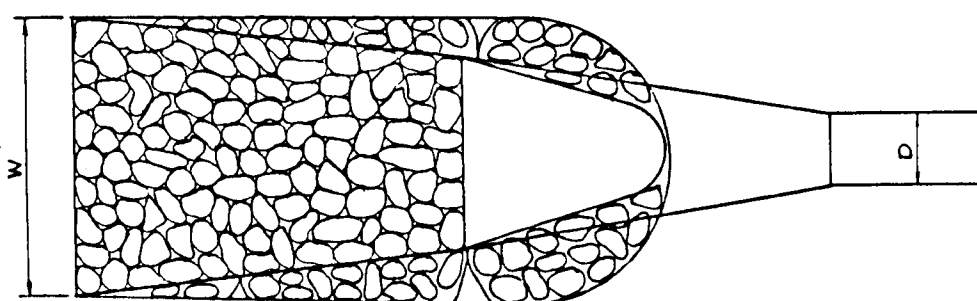
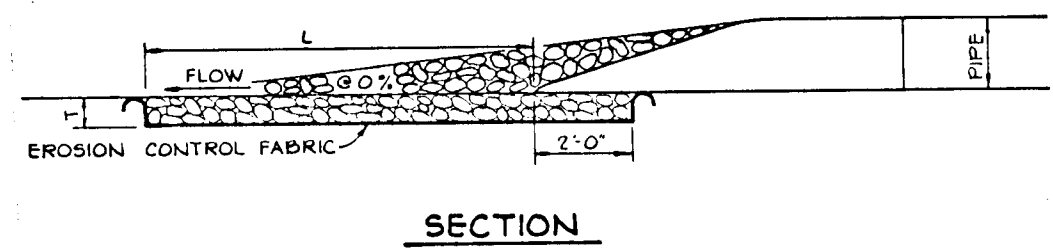
| | |
|--|----------|
| APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING | |
| <i>Mark J. ...</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT | 7/2/89 |
| APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS | |
| <i>James M. ...</i> CHIEF, LAND DEVELOPMENT DIVISION | 8/20/89 |
| <i>James M. ...</i> CHIEF, BUREAU OF HIGHWAYS | 8/22/89 |
| <i>William B. ...</i> CHIEF, BUREAU OF ENGINEERING | 9-1-89 |
| NO. DATE | REVISION |

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|--|---|
| OWNER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD 21043 | PROJECT KING'S WOODS SECTION 1, AREA 2 |
| DEVELOPER SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELLICOTT CITY, MD 21043 | LOCATION TAX MAP NO. 47 PARCEL NO. 756 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| DATE DECEMBER 19, 1988 JULY 24, 1989 | TITLE DRAINAGE AREA MAP AND ROAD PROFILES OF KING'S GRANT ROAD AND HARMONY LANE |
| DES. D.A.M. / J.H. | DRN. M.M. / J.H. |
| SCALE AS SHOWN | PROJECT NO 0064 DRAWING 3 OF 8 |

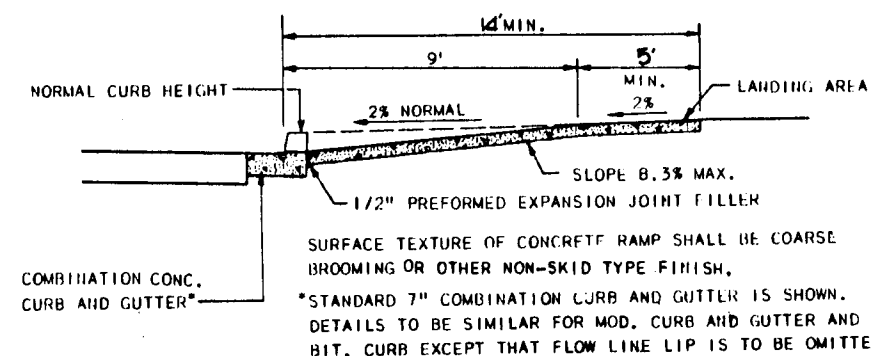
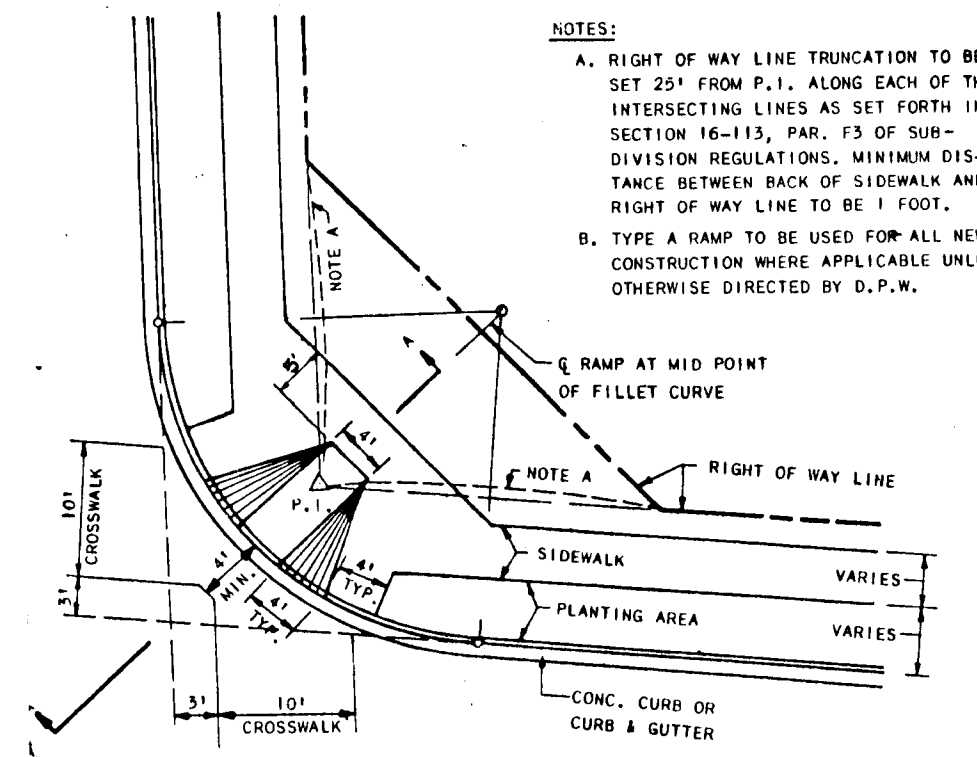
186



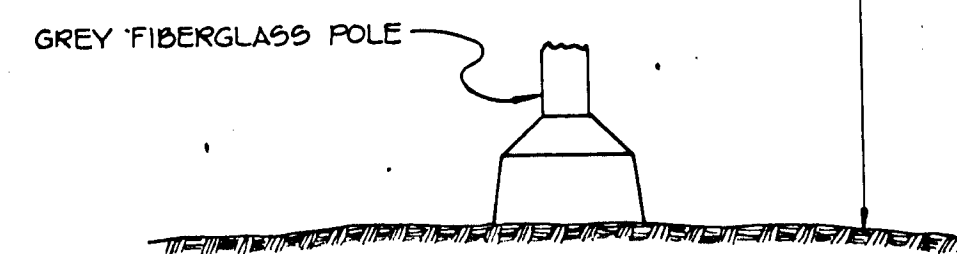
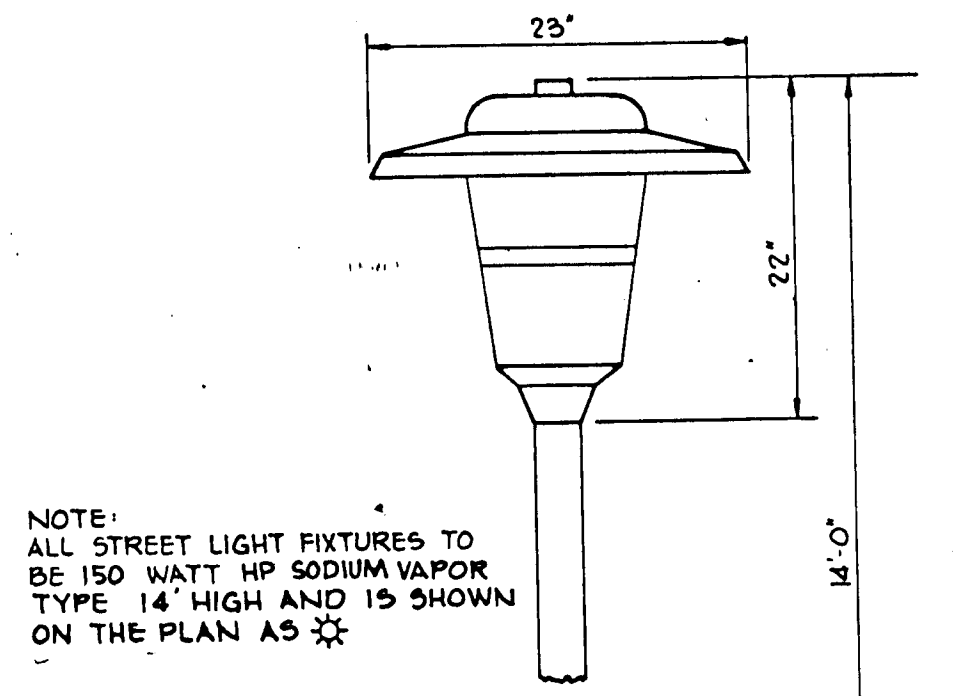
PLAN

| STRUCTURE | d - SO | LENGTH (L) | WIDTH (W) | THICKNESS (T) |
|-----------|--------|------------|-----------|---------------|
| E-1 | 0.5 | 10' | 10' | 1.13' |
| E-2 | 0.5 | 25' | 30' | 1.13' |
| E-4 | 0.5 | 10' | 10' | 1.13' |

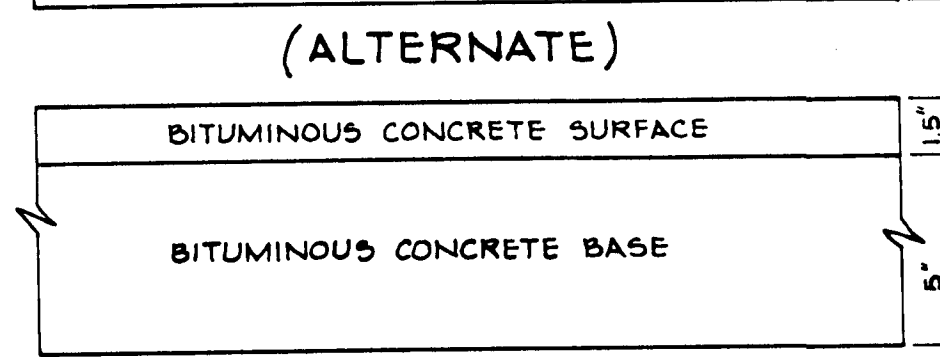
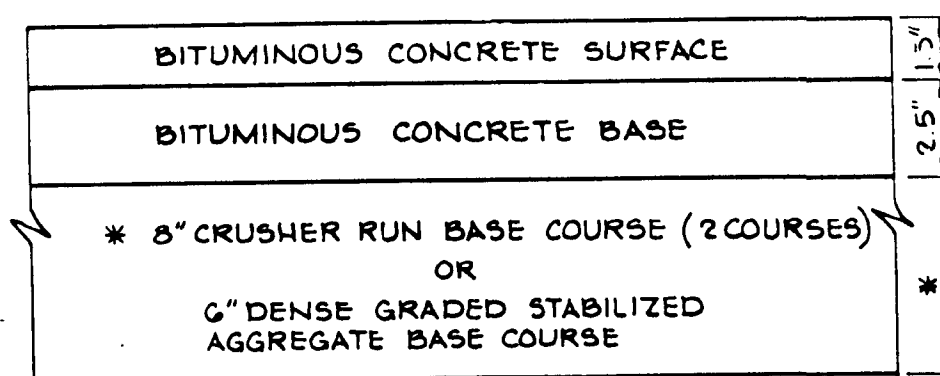
OUTLET PROTECTION DETAIL
NO SCALE



SIDEWALK RAMP
NO SCALE



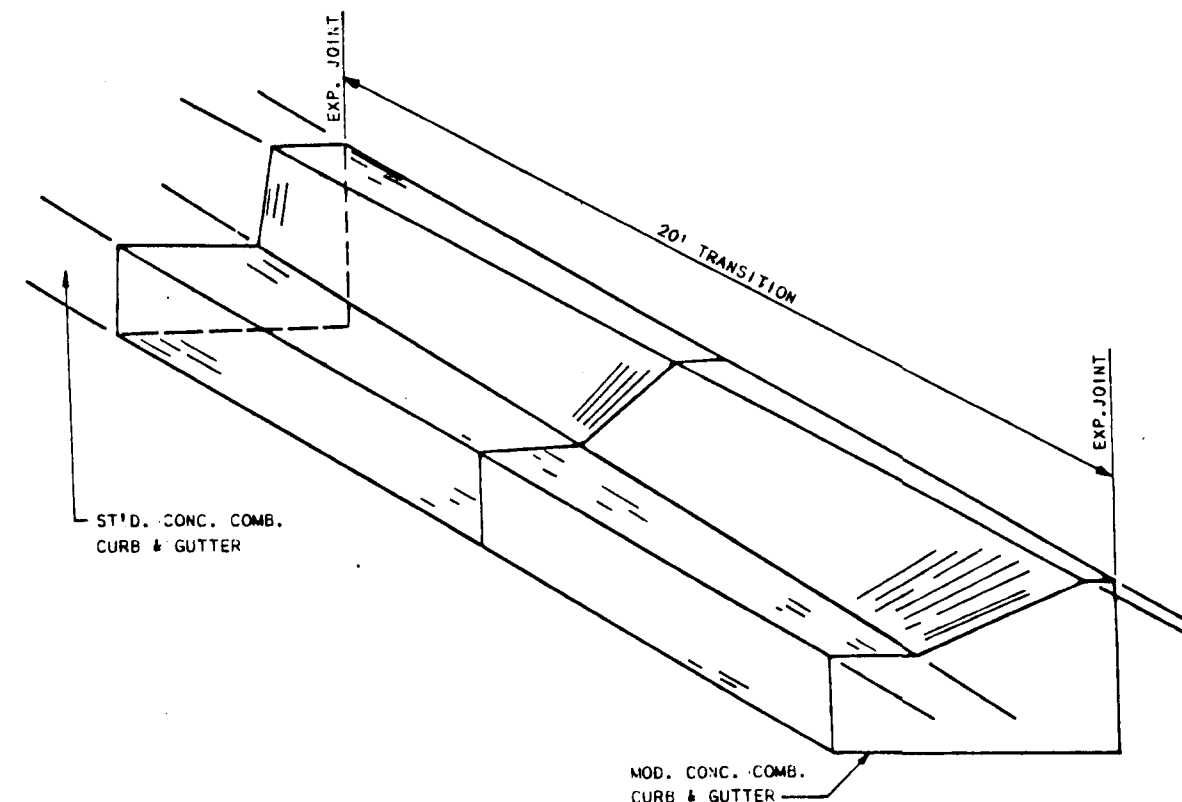
MODERN LIGHTING FIXTURE
NO SCALE



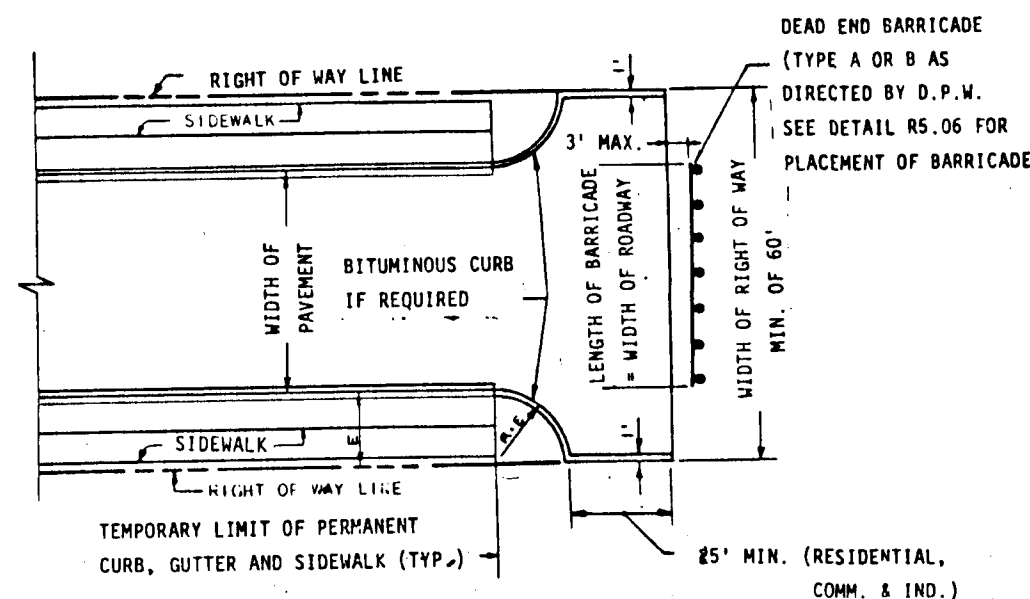
HOWARD COUNTY DESIGN MANUAL VOLUME IV
STANDARD SPECIFICATIONS AND DETAILS FOR
CONSTRUCTION (DRAWING R-2.01)

HARMONY LANE
KINGS GRANT ROAD
WOODSONG CT.
KNIGHTS CT.

6 1/2\"/>

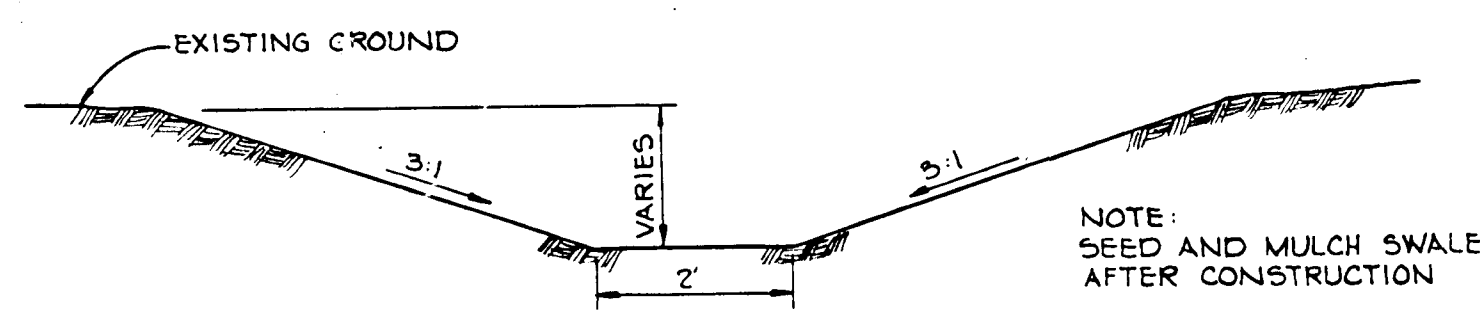


TYPICAL CURB TRANSITION
NO SCALE

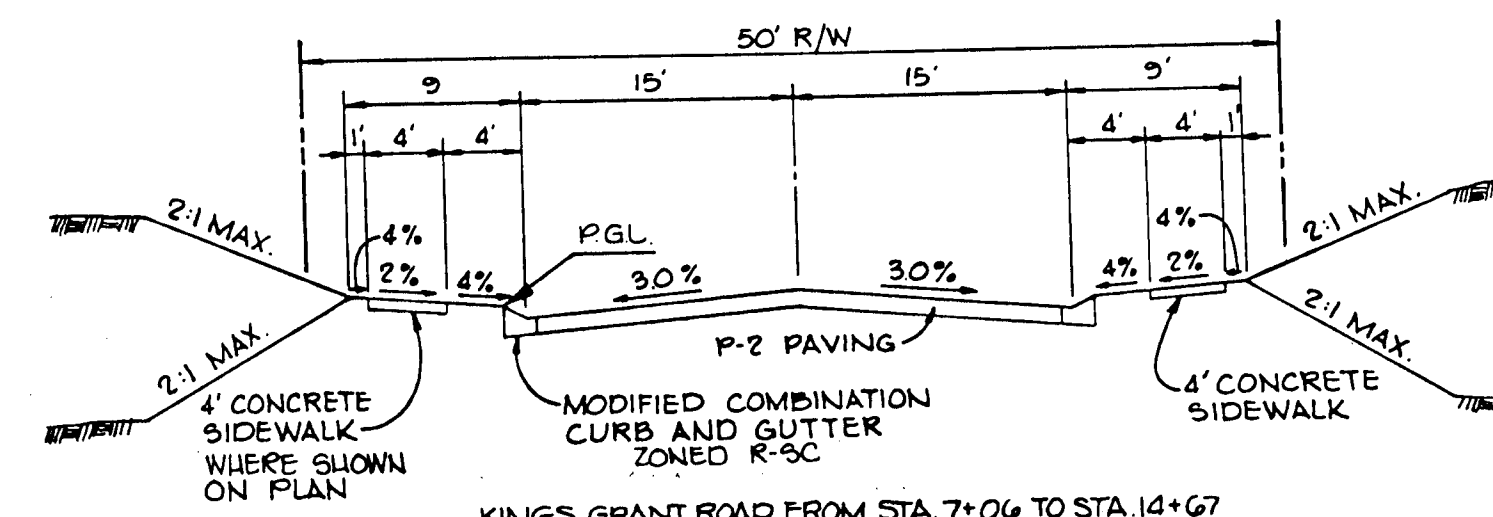


- NOTES:
1. A TEE TURN-AROUND SHALL BE USED IN LIEU OF A CUL-DE-SAC ONLY IF THE STREET IS TO BE EXTENDED IN THE FUTURE.
 2. BITUMINOUS CURB SHALL EXTEND AROUND THE TEE TURN-AROUND IF AND AS REQUIRED TO CONTROL CURB DRAINAGE FROM THE ROADWAY SECTION.
 3. REFER TO STANDARD R-5.06 FOR TYPICAL ROADWAY PROFILE OF TEMPORARY LIMIT OF PAVING.
 4. FOR LOCAL ROADS, PROVIDE 5' REVERTIBLE EASEMENT EACH END OF THE TEE.
 5. PROVIDE EASEMENTS AS REQUIRED FOR PLACEMENT OF BARRICADE AND ANY NECESSARY GRADING (SEE DETAIL R5.06)

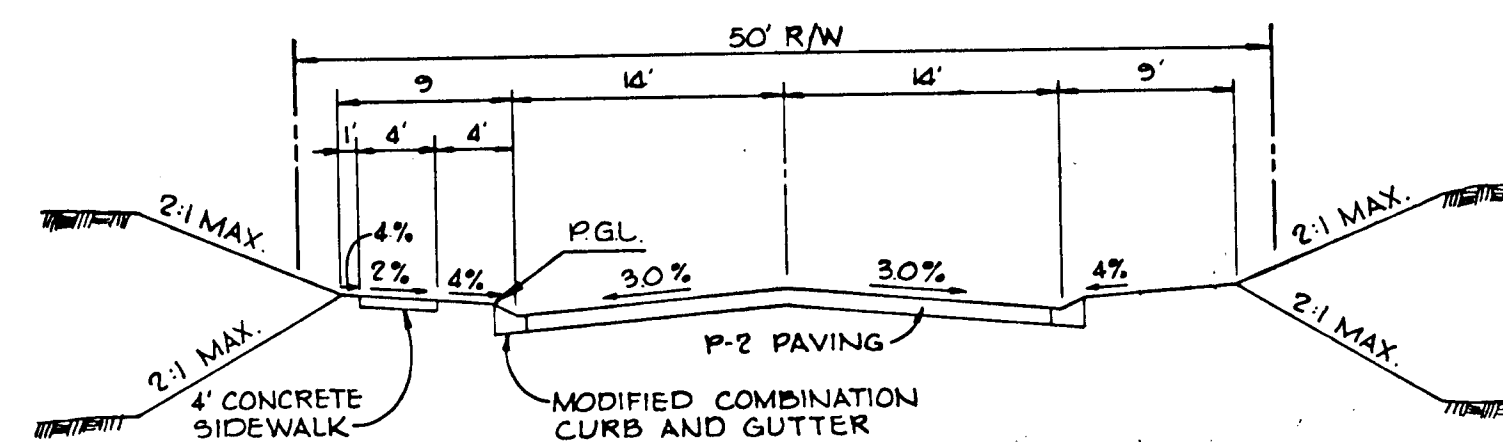
TEMPORARY TEE-TURN AROUND
NO SCALE



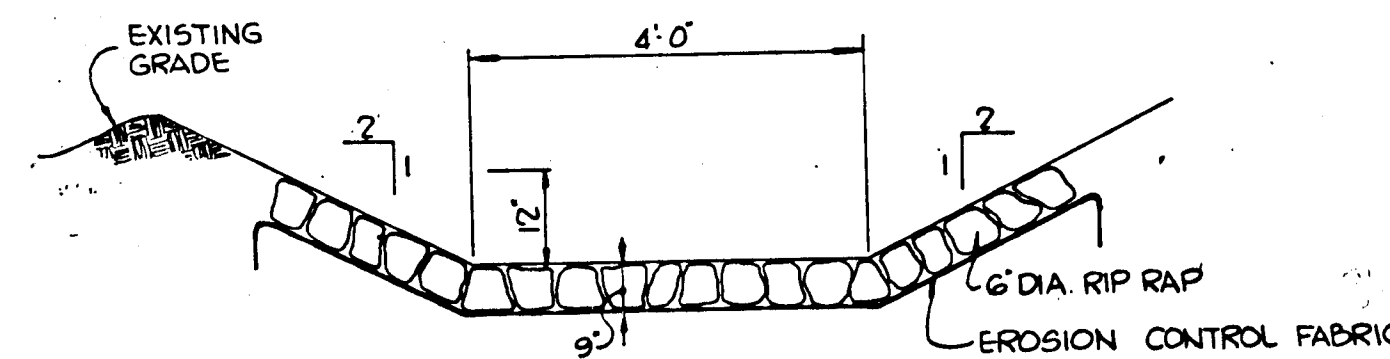
GRASSED SWALE
NO SCALE



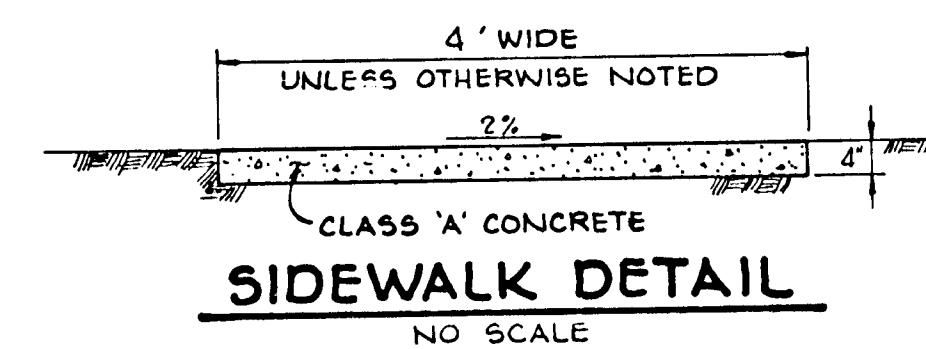
TYPICAL SECTION
NO SCALE



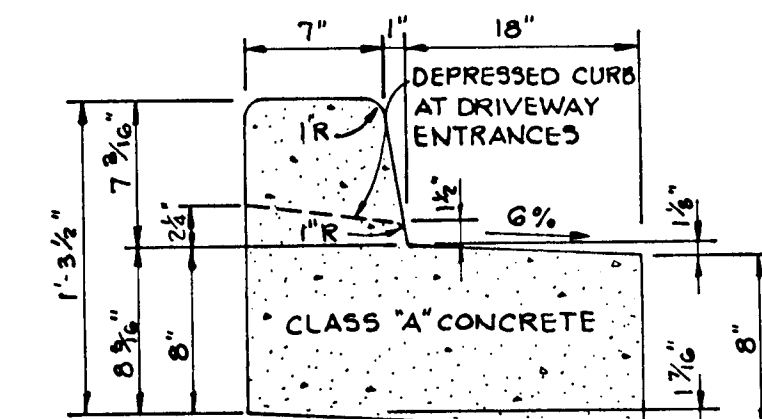
TYPICAL SECTION
NO SCALE



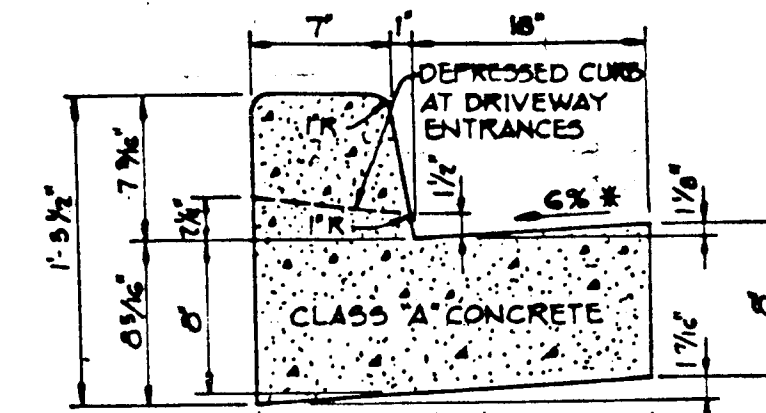
RIP RAP DETAIL
NO SCALE



SIDEWALK DETAIL
NO SCALE



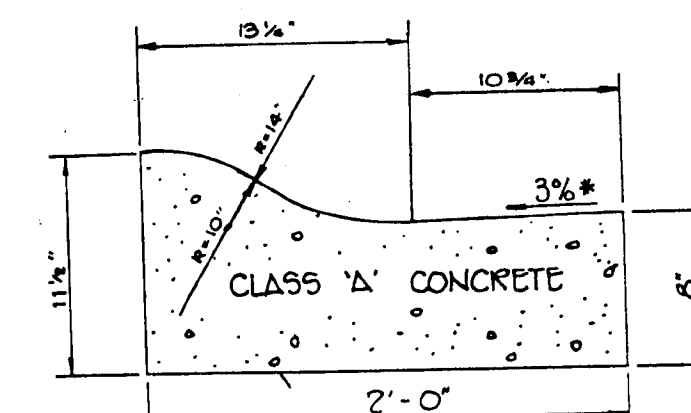
REVERSE



HOWARD COUNTY DESIGN MANUAL VOLUME IX -
STANDARD SPECIFICATIONS AND DETAILS FOR
CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7\"/>



HOWARD COUNTY DESIGN MANUAL VOLUME IV -
STANDARD SPECIFICATIONS AND DETAILS FOR
CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF THE SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

MODIFIED COMBINATION CURB AND GUTTER
NO SCALE

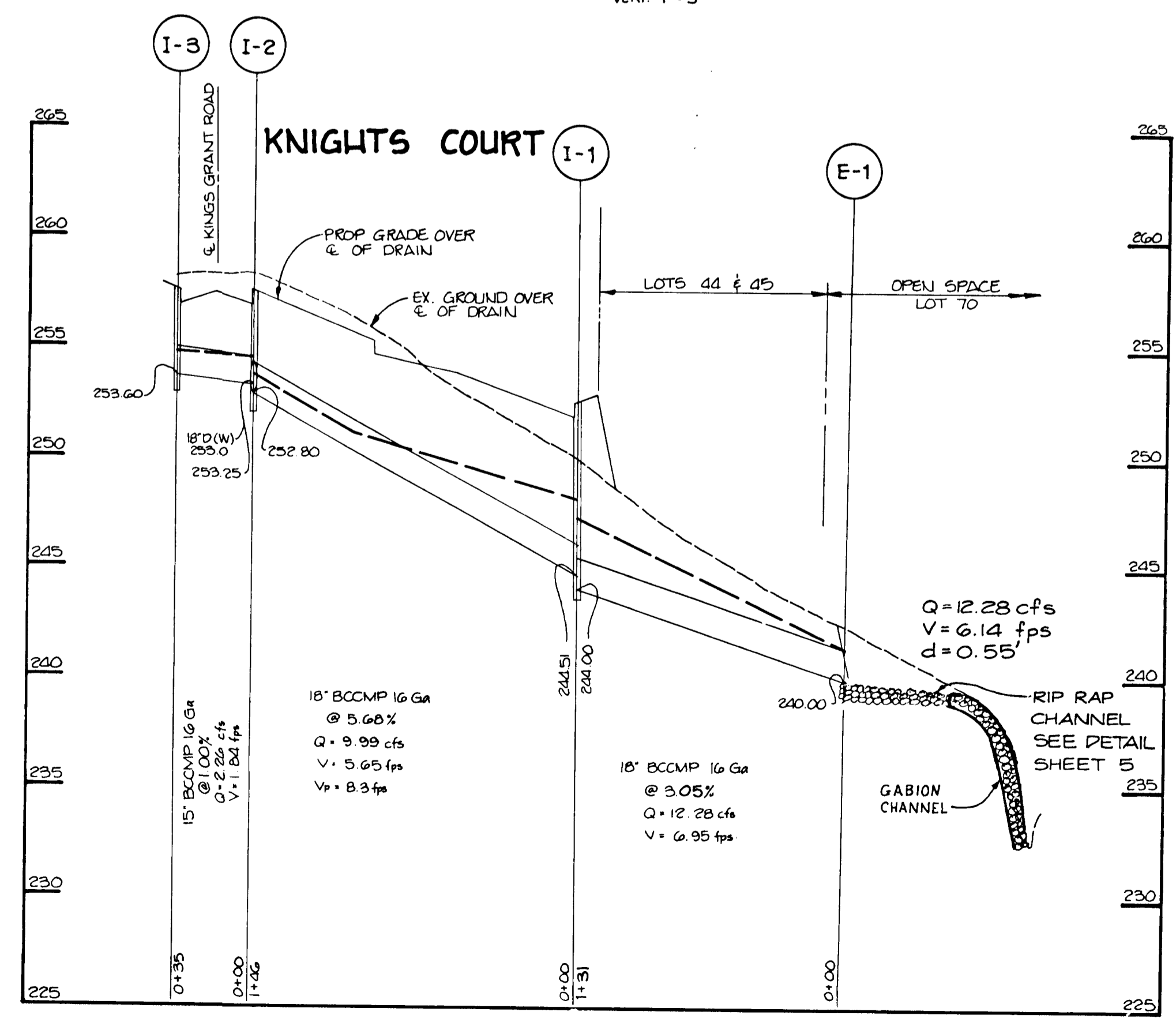
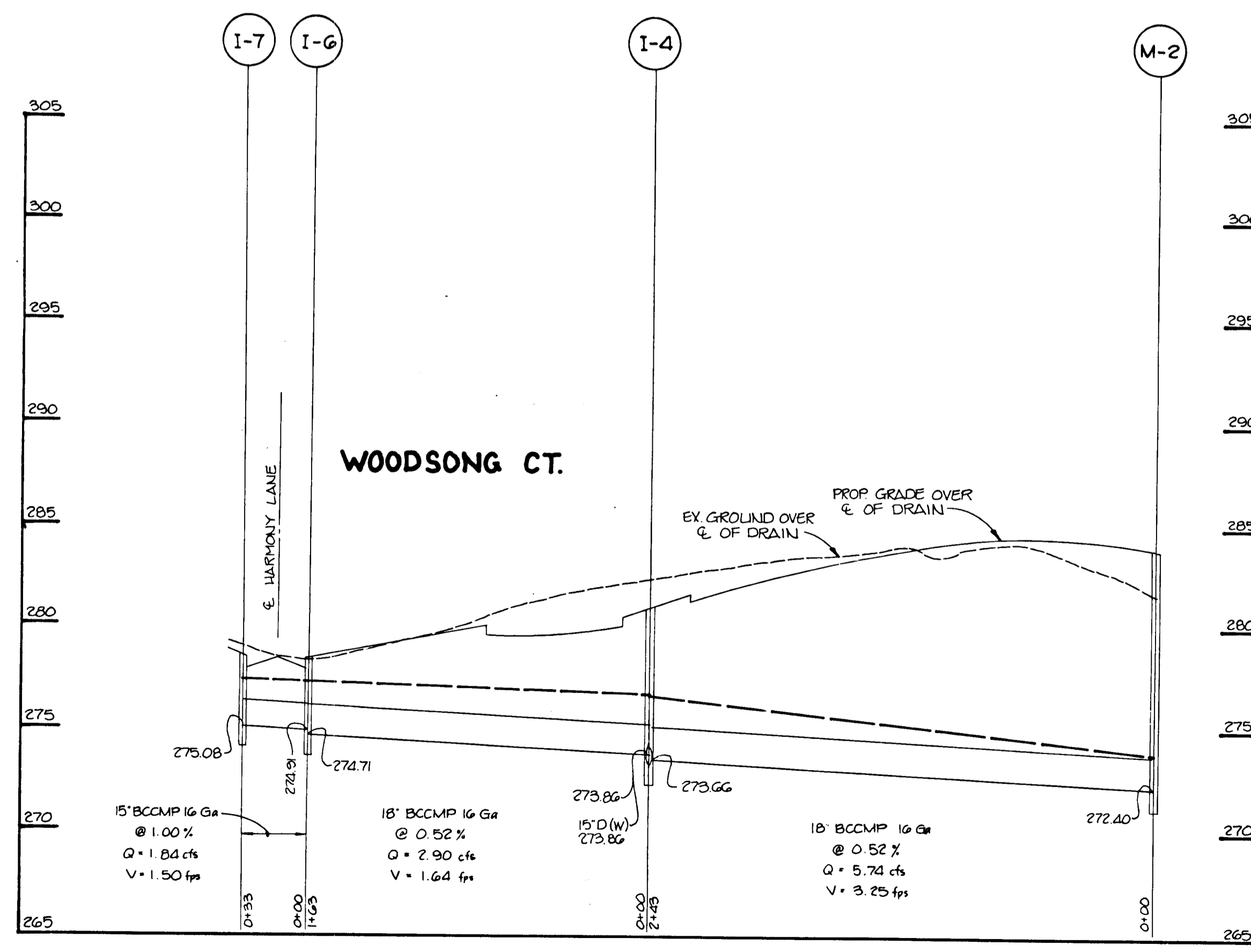
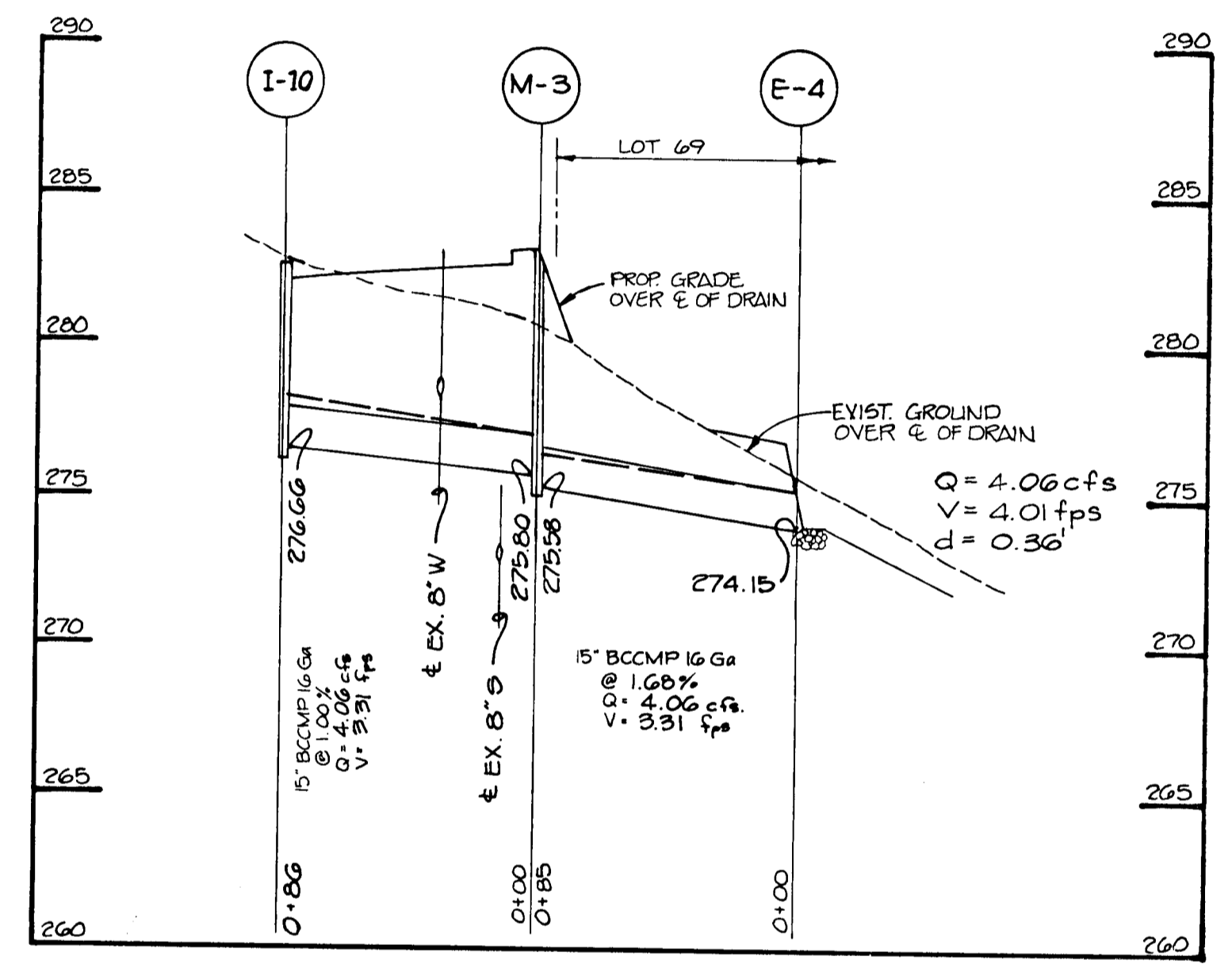
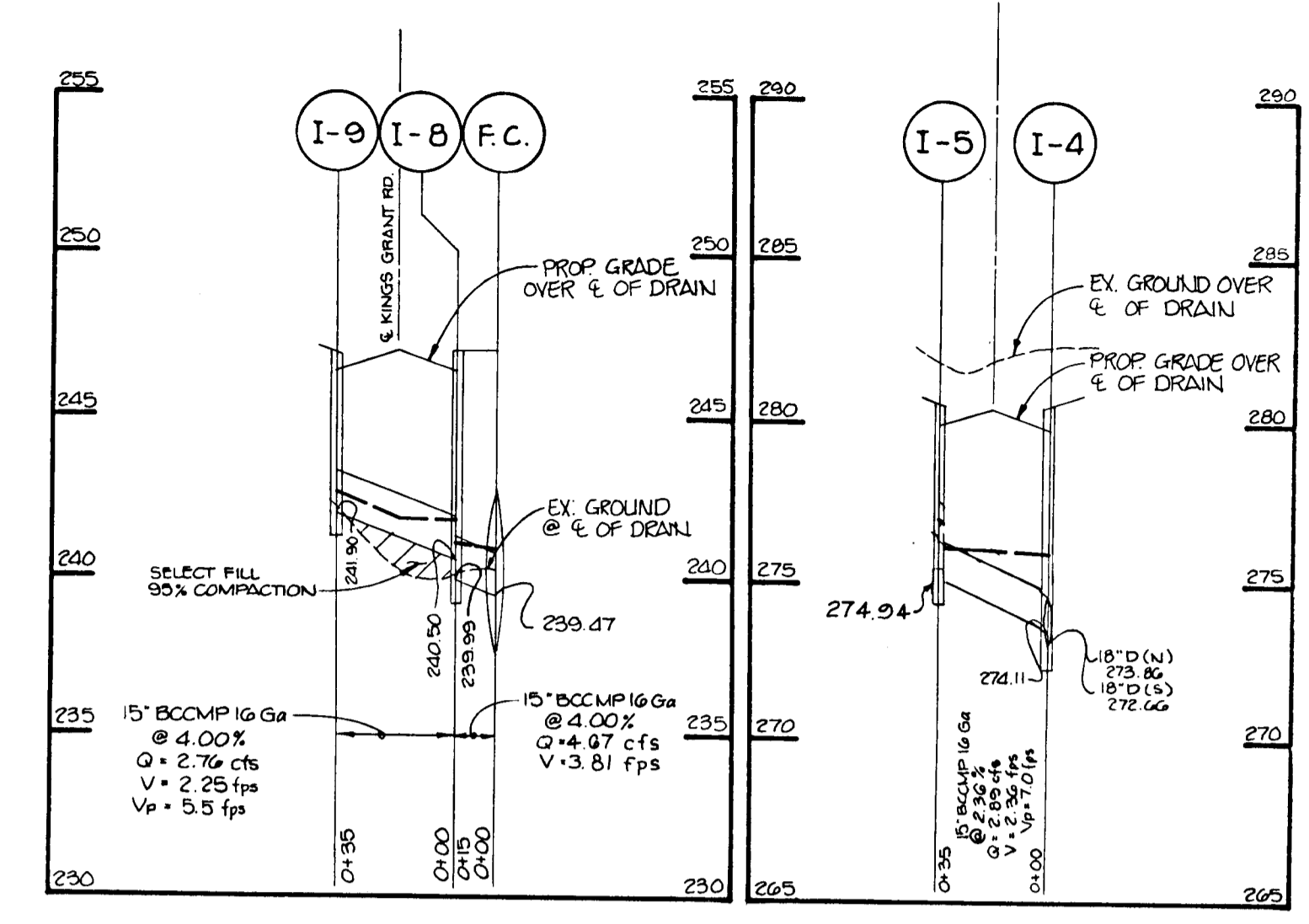
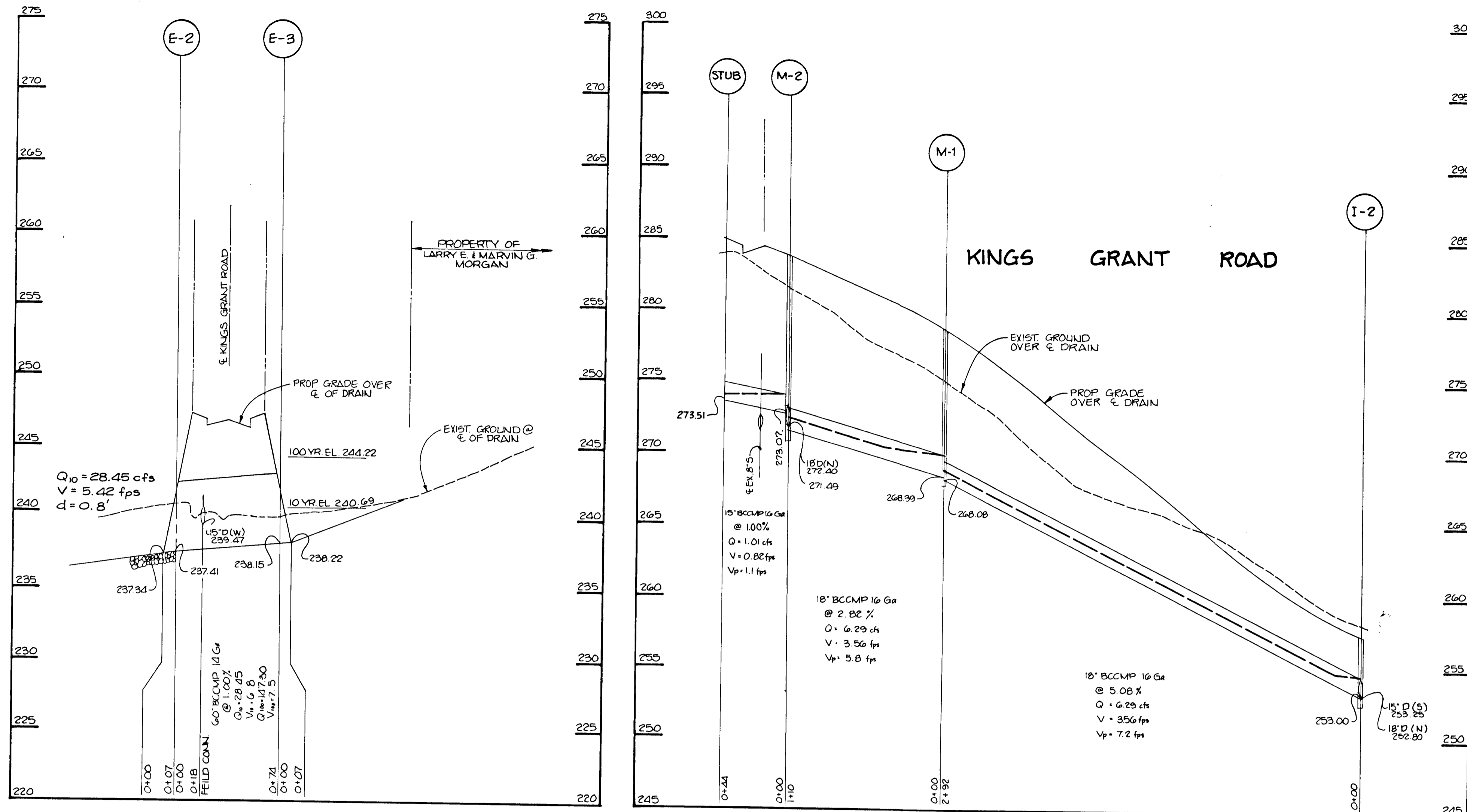
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul D. Sporn 8/28/89 DATE
 CHIEF, LAND DEVELOPMENT DIVISION
Branville W. Helmsland 8/28/89 DATE
 CHIEF, BUREAU OF HIGHWAYS
W. S. ... 9-1-89 DATE
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Mark ... 7/2/89 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

| NO | DATE | REVISION |
|----|------|----------|
| | | |

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| OWNER SECURITY DEVELOPMENT CORP. PO BOX 417 ELICOTT CITY, MARYLAND 21043 | PROJECT KING'S WOODS SECTION 1, AREA 2 |
| DEVELOPER SECURITY DEVELOPMENT CORP. PO BOX 417 ELICOTT CITY, MARYLAND 21043 | LOCATION TAX MAP NO. 47 PARCEL NO. 756 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| DES. DAM | DRN JCA |
| TITLE DETAILS | |
| S-88-35 P-88-83 F-89-103 | |
| DATE DECEMBER 12, 1988 JULY 24, 1989 | PROJECT NO. 0064 |
| SCALE AS SHOWN | DRAWING 4 OF 8 |



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Mark S. J. [Signature]
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE: 7/1/89

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul [Signature]
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE: 8/28/89

Lawrence W. [Signature]
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 8/22/89

William B. [Signature]
 CHIEF, BUREAU OF ENGINEERING
 DATE: 9-1-89

| NO | DATE | REVISION |
|----|------|----------|
| | | |

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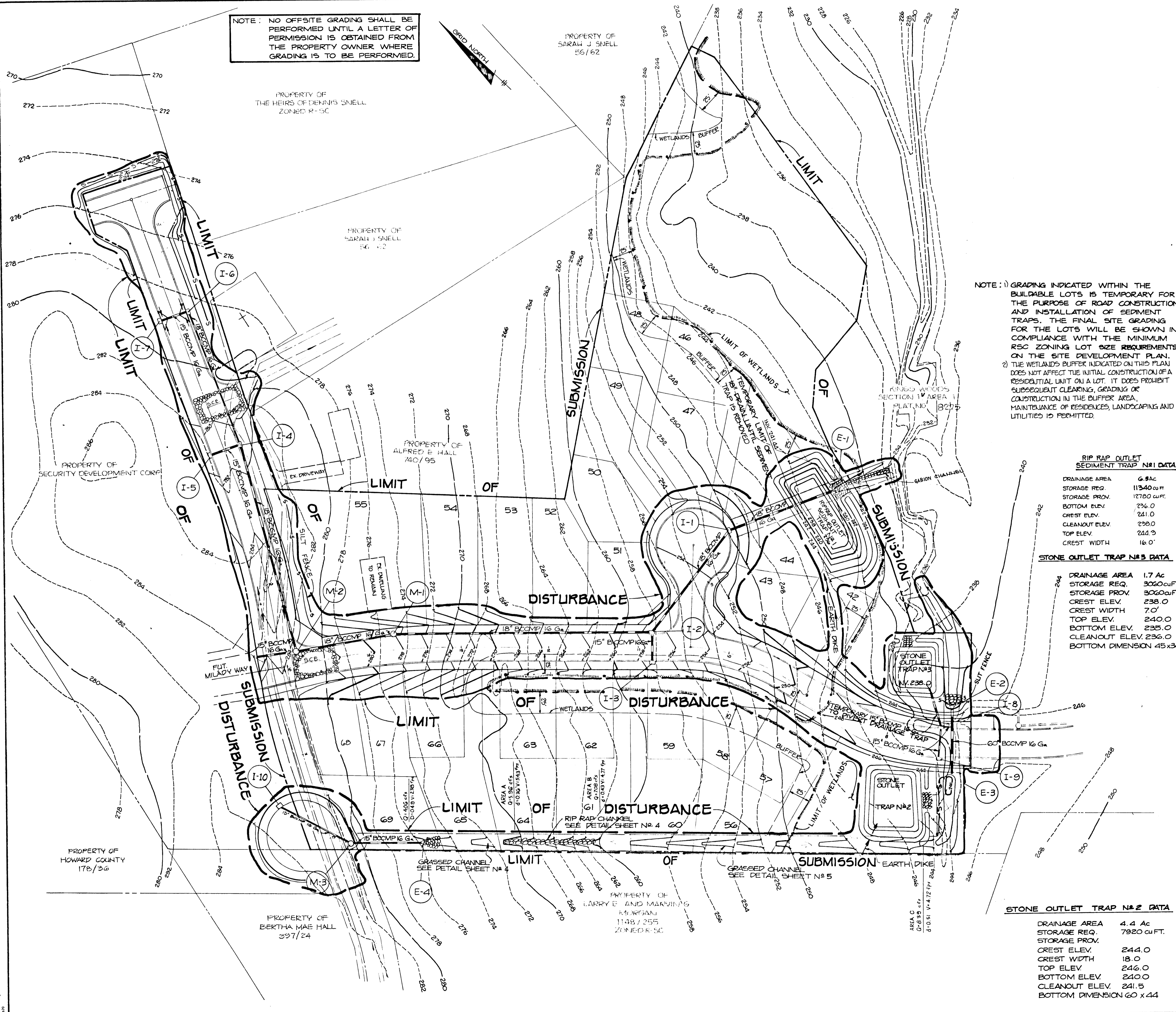
Daniel K. [Signature]

| | |
|---|--|
| OWNER / DEVELOPER: SECURITY DEVELOPMENT CORP. P.O. BOX 417 ELlicOTT CITY, MARYLAND 21043 | PROJECT KINGS WOODS SECTION 1 AREA 2 |
| LOCATION TAX MAP NO. 47 PARCEL NO. 756 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND | TITLE STORM DRAIN PROFILES S-88-35 P-88-83 F-89-103 |
| DATE DECEMBER 12, 1988 JULY 24, 1989 | PROJECT NO 0064 |
| DES. DAM | DRN. MM |
| SCALE HORIZ. 1"=50' VERT. 1"=5' | DRAWING 5 OF 8 |

NOTE: NO OFFSITE GRADING SHALL BE PERFORMED UNTIL A LETTER OF PERMISSION IS OBTAINED FROM THE PROPERTY OWNER WHERE GRADING IS TO BE PERFORMED.

SEQUENCE OF CONSTRUCTION

- DAY 1 1. OBTAIN A GRADING PERMIT.
- DAY 2-5 2. INSTALL STABILIZED CONSTRUCTION ENTRANCES, SEDIMENT TRAP AND ALL OTHER EROSION CONTROL DEVICES.
- DAY 6-12 3. CLEAR AND GRUB AREA OF DISTURBANCE.
- DAY 13-17 4. GRADE AREA OF HARMONY LANE INSIDE SITE AND LAY GRAVEL BASE MAINTAINING ACCESS FOR RESIDENTS TO THE NORTH OF THE SITE ALONG HARMONY LANE.
- DAY 18-25 5. GRADE SITE TO SUBGRADE.
- DAY 26-56 6. INSTALL WATER, SEWER, STORM DRAINS AND OTHER UTILITIES OUTLETTING STORM DRAIN FROM I-3 TO E-3 INTO SEDIMENT TRAP. AND INSTALL TEMPORARY PIPE FROM I-8 TO SEDIMENT TRAP. COMPLETE ROAD CONSTRUCTION ON SITE AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.
- DAY 57-67 8.
- DAY 68-75 11. UPON THE APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES, INSTALL REMAINING STORM DRAIN FROM TRAP TO E-3 AND STABILIZE ANY DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.



NOTE: 1) GRADING INDICATED WITHIN THE BUILDABLE LOTS IS TEMPORARY FOR THE PURPOSE OF ROAD CONSTRUCTION AND INSTALLATION OF SEDIMENT TRAPS. THE FINAL SITE GRADING FOR THE LOTS WILL BE SHOWN IN COMPLIANCE WITH THE MINIMUM RSC ZONING LOT SIZE REQUIREMENTS ON THE SITE DEVELOPMENT PLAN. THE WETLANDS BUFFER INDICATED ON THIS PLAN DOES NOT AFFECT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON A LOT. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENCES, LANDSCAPING AND UTILITIES IS PERMITTED.

RIP RAP OUTLET SEDIMENT TRAP #1 DATA

| | |
|----------------|-------------|
| DRAINAGE AREA | 6.8 AC |
| STORAGE REQ. | 11340 cu ft |
| STORAGE PROV. | 12700 cu ft |
| BOTTOM ELEV. | 236.0 |
| CREST ELEV. | 241.0 |
| CLEANOUT ELEV. | 238.0 |
| TOP ELEV. | 244.0 |
| CREST WIDTH | 16.0' |

STONE OUTLET TRAP #3 DATA

| | |
|------------------|------------|
| DRAINAGE AREA | 1.7 AC |
| STORAGE REQ. | 3060 cu ft |
| STORAGE PROV. | 3060 cu ft |
| CREST ELEV. | 238.0 |
| CREST WIDTH | 7.0' |
| TOP ELEV. | 240.0 |
| BOTTOM ELEV. | 235.0 |
| CLEANOUT ELEV. | 236.0 |
| BOTTOM DIMENSION | 45 X 34 |

STONE OUTLET TRAP #2 DATA

| | |
|------------------|------------|
| DRAINAGE AREA | 4.4 AC |
| STORAGE REQ. | 7920 cu ft |
| STORAGE PROV. | |
| CREST ELEV. | 244.0 |
| CREST WIDTH | 18.0 |
| TOP ELEV. | 246.0 |
| BOTTOM ELEV. | 240.0 |
| CLEANOUT ELEV. | 241.5 |
| BOTTOM DIMENSION | 60 X 44 |

BY THE ENGINEER:
 "I 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."
 James K. Tracy, P.E.
 ENGINEER
 12-9-88
 DATE

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 James R. Ruxley, Jr.
 DEVELOPER
 SECURITY DEVELOPMENT CORPORATION - PRESIDENT
 12-2-88
 DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 James M. Helm
 U.S. SOIL CONSERVATION SERVICE
 1-17-89
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 Stephen L. Helm
 HOWARD S.C.D.
 8/18/89
 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Mark J. DeLoach
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 7/1/89
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Donald L. Spon
 CHIEF, LAND DEVELOPMENT DIVISION
 8/20/89
 DATE

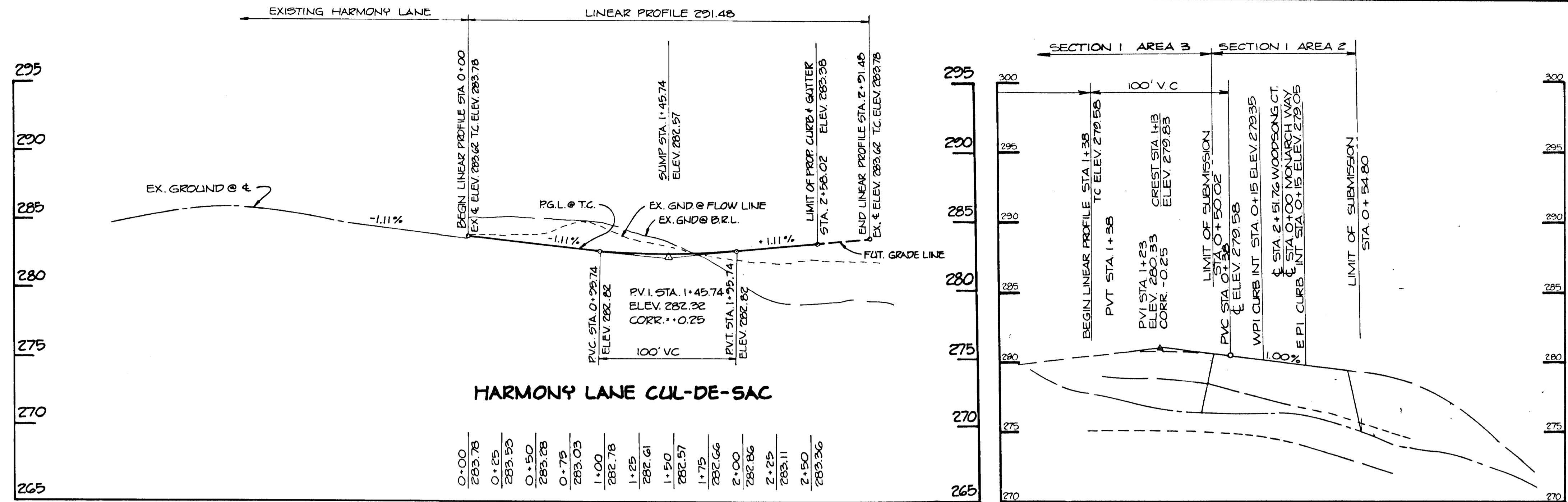
Traveller W. Chelmond
 CHIEF, BUREAU OF HIGHWAYS
 8/30/89
 DATE

William B. Reid
 CHIEF, BUREAU OF ENGINEERING
 9-1-89
 DATE

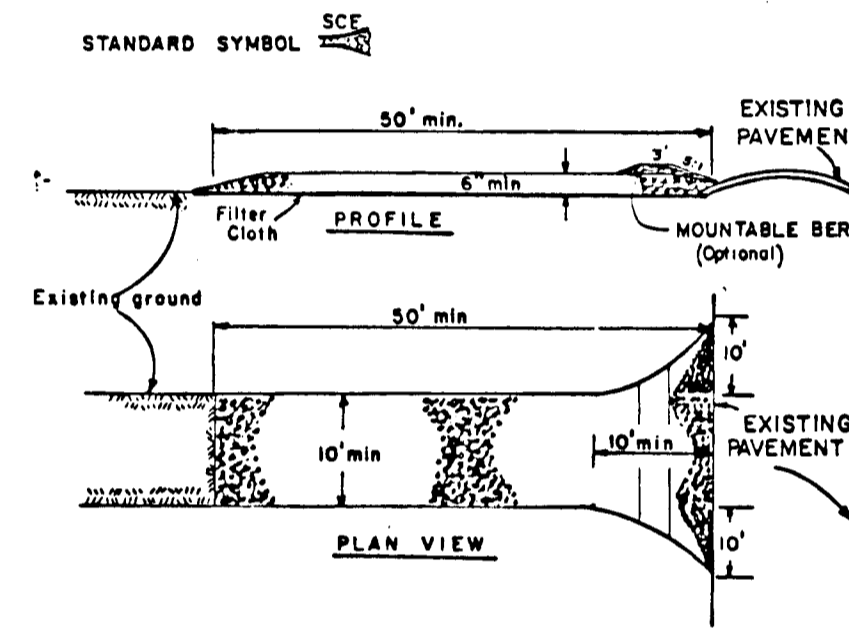
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| | |
|---|--|
| OWNER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MARYLAND 21043 | PROJECT KING'S WOODS SECTION 1, AREA 2 |
| DEVELOPER SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY, MARYLAND 21043 | LOCATION TAX MAP NO 47 PARCEL NO 756 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| DES. DAM DRN. M.M. | TITLE GRADING AND SEDIMENT CONTROL PLAN S-88-35 P-88-83 F-89-103 DATE: DECEMBER 12, 1988 AUG. 11, 1989 |
| SCALE 1" = 50' | PROJECT NO 0064 |
| DRAWING OF 8 | |

987

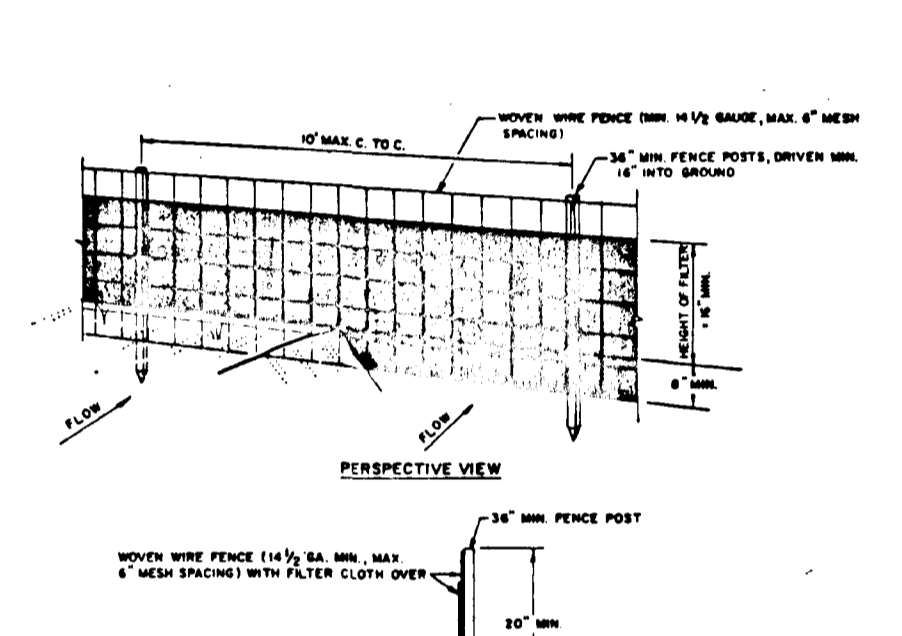


PROFILES
SCALE: 1" = 5' VERT.
1" = 50' HOR.



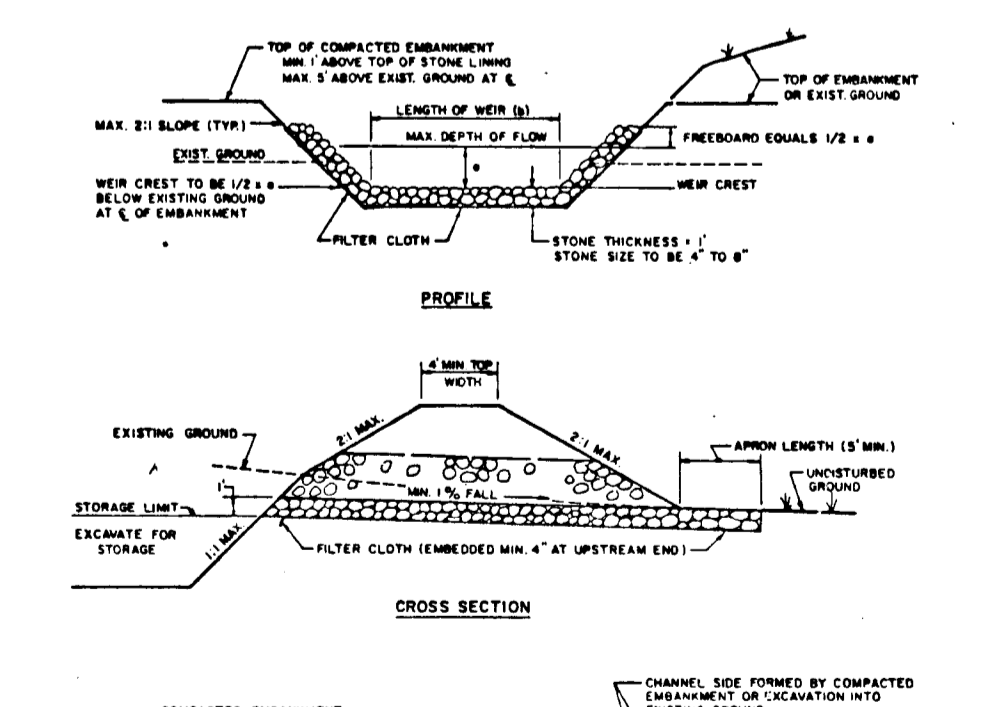
- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (except on a single residence lot where a 20 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 - Surface Water - All surface water flowing or diverting toward construction entrance shall be piped across the entrance. If piping is impractical, a mounded berm with 5:1 slope will be permitted.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediments 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.
 - Washing - Washes shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE
NO SCALE



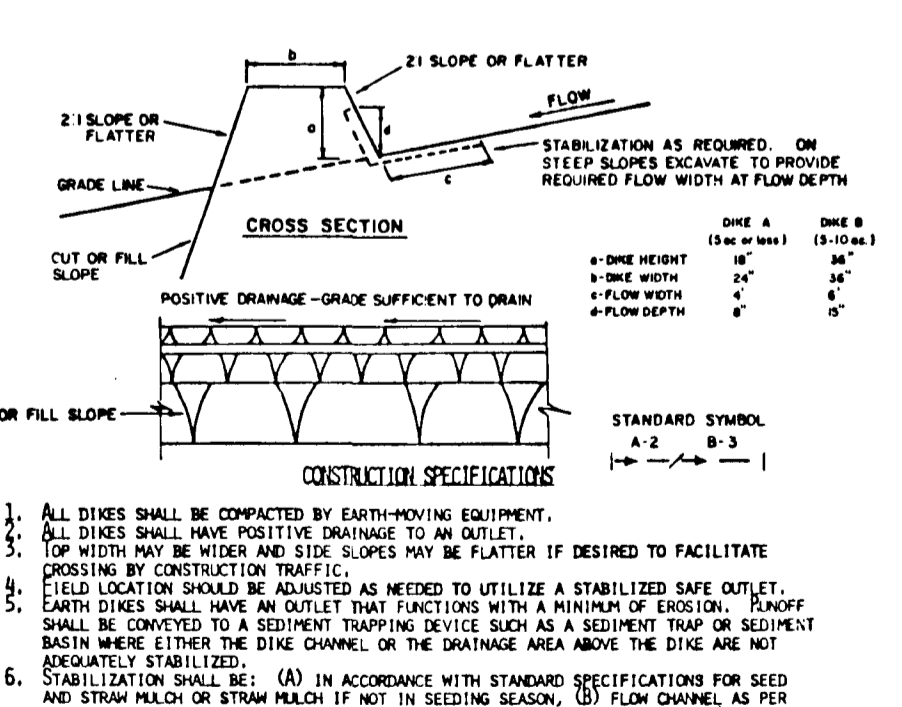
- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to woven wire fence with ties spaced every 2' at top and mid section.
 - When two sections of filter cloth abut, each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed and material provided when "mounds" develop in the silt fence.

SILT FENCE
NO SCALE



- CONSTRUCTION SPECIFICATIONS**
- All dikes shall be compacted by earth-moving equipment.
 - Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
 - Field location should be adjusted as needed to utilize a stabilized safe outlet. 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.
 - 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 dike chart.

RIP RAP OUTLET TRAP
NO SCALE



- CONSTRUCTION SPECIFICATIONS**
- 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.
 - Rip-rap to be 4 inches in a layer at least 8 inches thickness and pressed into the soil.
 - Approved equivalents can be substituted for any of the above materials.
 - Periodic inspection and required maintenance must be provided after each rain event.

EARTH DIKE
NO SCALE

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (991-2437).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the Howard County Design Manual, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for permanent seedings (Sec. 51) 500' (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be used when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

PERMANENT SEEDBED PREPARATION

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

- SOIL AMENDMENTS:** IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:
- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 1b5/1000 sq ft) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 1b5/1000 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-NITROGEN FERTILIZER (9 1b5/1000 sq ft).
 - ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 1b5/1000 sq ft) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (22 1b5/1000 sq ft) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIOD MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 1b5/1000 sq ft) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 3 LBS PER ACRE OF KEEPING 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 SOIL. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 1b5/1000 sq ft) OF UNKILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GALLONS PER ACRE (5 9a/1000 sq ft) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (8 9a/1000 sq ft) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDBED PREPARATION

APPLY TO COVER OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE 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 1b5/1000 sq ft)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 1b5/1000 sq ft). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF KEEPING LOVEGRASS (2.0 1b5/1000 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 SOIL.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

"I 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."

James K. Tracy, P.E.
ENGINEER JAMES K. TRACY, P.E. 12-9-88 DATE

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

James R. Moxley, Jr.
DEVELOPER: JAMES R. MOXLEY, JR. SECURITY DEVELOPMENT CORPORATION - PRESIDENT 12-9-88 DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James M. Helms
U.S. SOIL CONSERVATION SERVICE 8-18-89 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stephen C. Fisher
HOWARD S.C.D. 8/12/89 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul H. Brown
CHIEF, LAND DEVELOPMENT DIVISION 8/28/89 DATE

Doravette H. McKeand
CHIEF, BUREAU OF HIGHWAYS 8/22/89 DATE

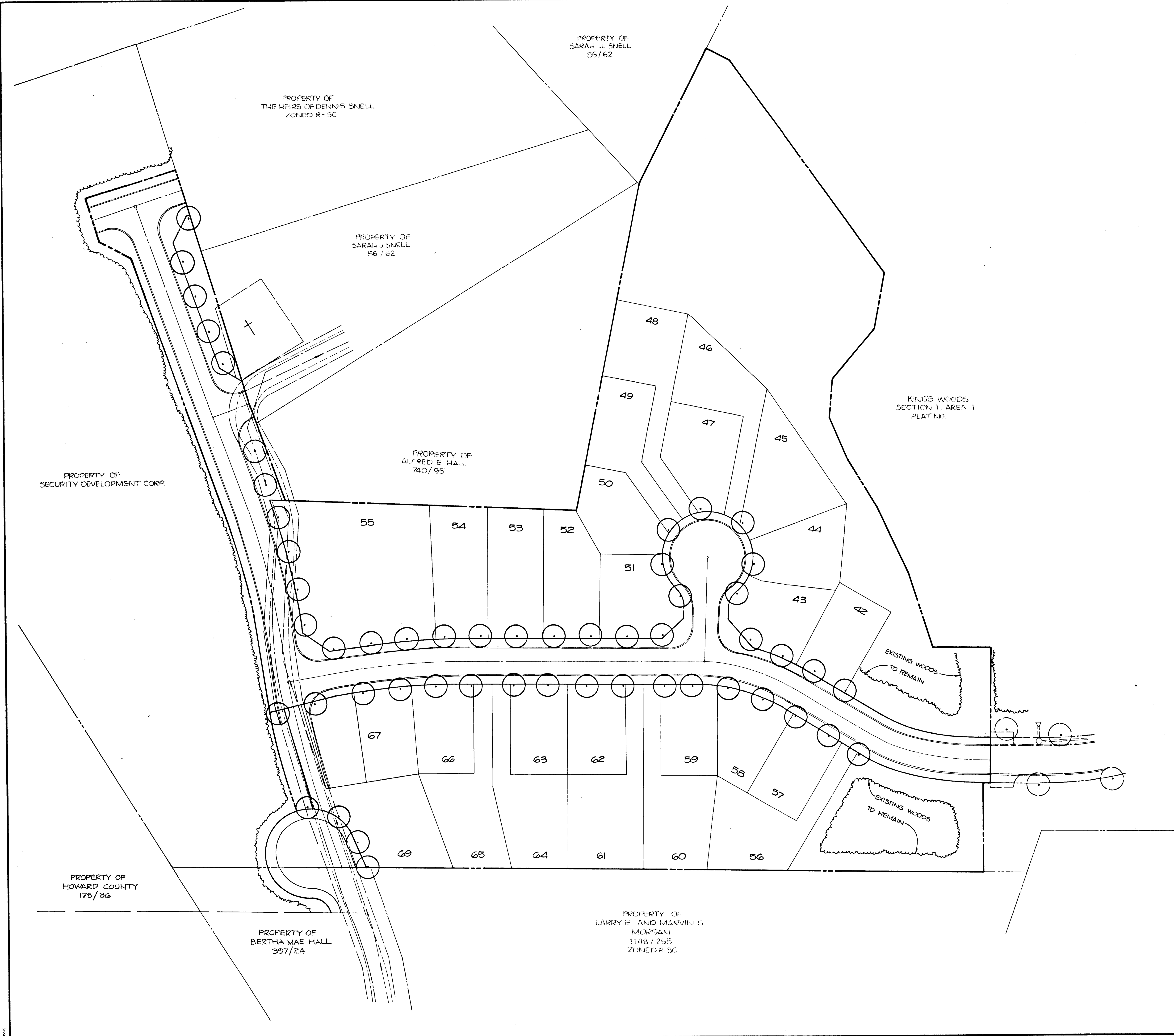
William B. Day
CHIEF, BUREAU OF ENGINEERING 7-9-89 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Martha J. McLaughlin
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 9/1/89 DATE

| NO | DATE | REVISION |
|----|------|----------|
| | | |

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| OWNER | PROJECT |
|---|---|
| SECURITY DEVELOPMENT CORP P.O. BOX 417 ELLCOTT CITY, MD 21043 | KING'S WOODS SECTION I, AREA 2 |
| DEVELOPER | LOCATION |
| SECURITY DEVELOPMENT CORP P.O. BOX 417 ELLCOTT CITY, MD 21043 | TAX MAP NO. 47 PARCEL NO. 756 GTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| TITLE | DATE |
| SEDIMENT CONTROL DETAILS AND ROAD PROFILES | 5-88-35 F-88-85 F-89-103 |
| DATE | PROJECT NO. |
| MARCH 21, 1989 JULY 24, 1989 | 00G4 |
| SCALE | DRAWING |
| AS SHOWN | 7 OF 8 |



| PLANT LIST | | | |
|------------|----------|---|---------------------------------------|
| SYMBOL | QUANTITY | NAME | REMARKS |
| ○ | | ACER RUBRUM RED MAPLE OCTOBER GLORY | 2 1/2 Min. Cal. B + B FULL HEAD |
| TOTAL | 53 | | |

○ EXISTING STREET TREES INSTALLED UNDER F-87-207

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Frank J. ... 9/1/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul ... 8/28/89
 CHIEF, LAND DEVELOPMENT DIVISION

Draville O. ... 8/22/89
 CHIEF, BUREAU OF HIGHWAYS

W. ... 9-1-89
 CHIEF, BUREAU OF ENGINEERING

| NO. | DATE | REVISION |
|-----|------|----------|
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| OWNER SECURITY DEVELOPMENT CORP. PO BOX 417 ELLICOTT CITY, MARYLAND 21043 | PROJECT KING'S WOODS SECTION 1, AREA 2 |
| DEVELOPER SECURITY DEVELOPMENT CORP. PO BOX 417 ELLICOTT CITY, MARYLAND 21043 | LOCATION TAX MAP NO 47 PARCEL NO 756 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND |
| TITLE PLANTING PLAN S-88-35 P-88-83 F-89-103 | DATE DECEMBER 10, 1989 JULY 24, 1989 |
| DES. D.A.M. | DRN. M.M. |
| SCALE 1" = 50' | DRAWING 8 OF 8 |

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