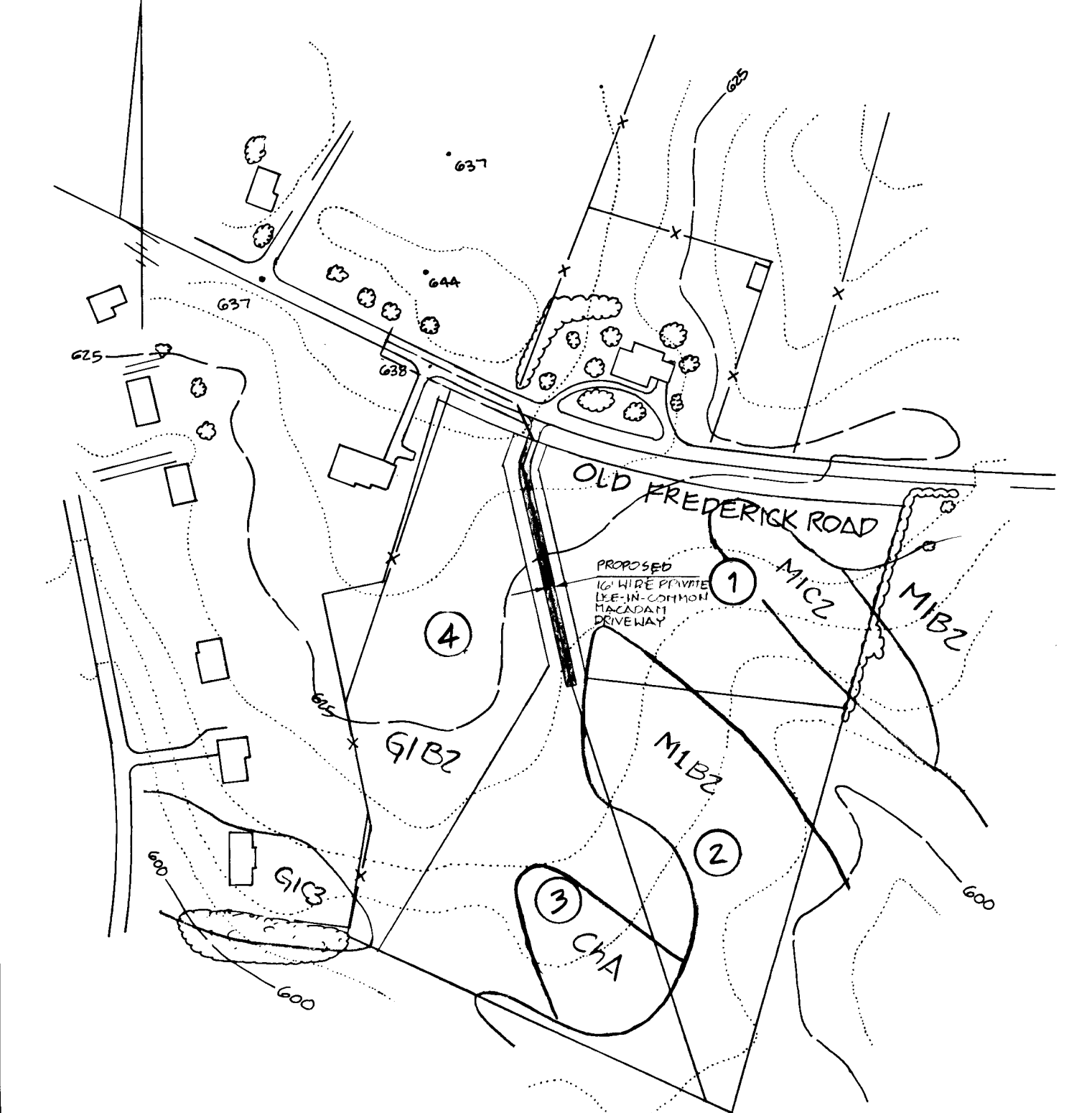
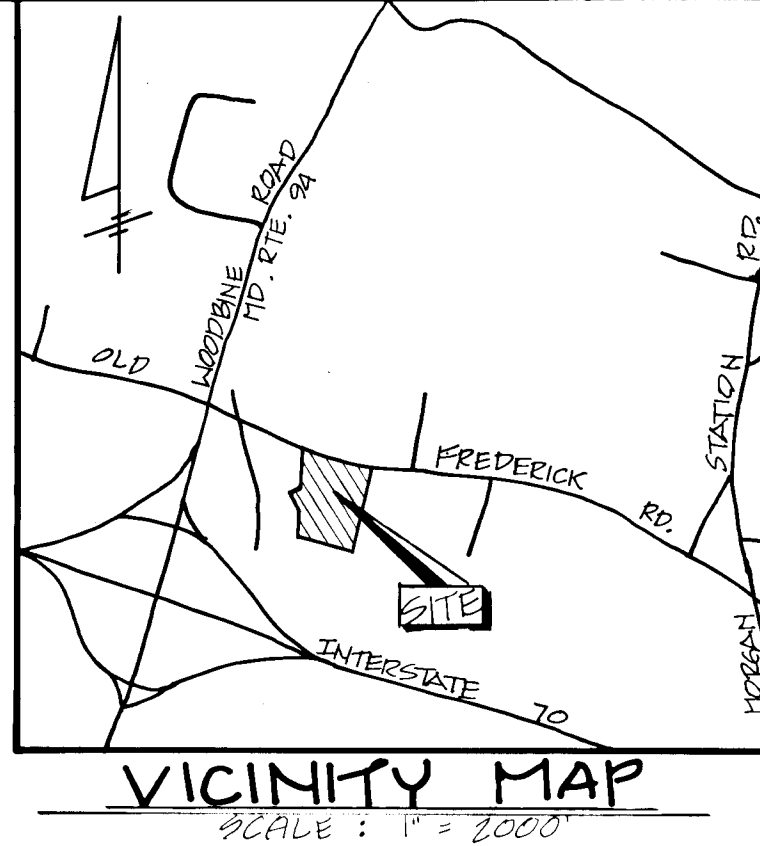
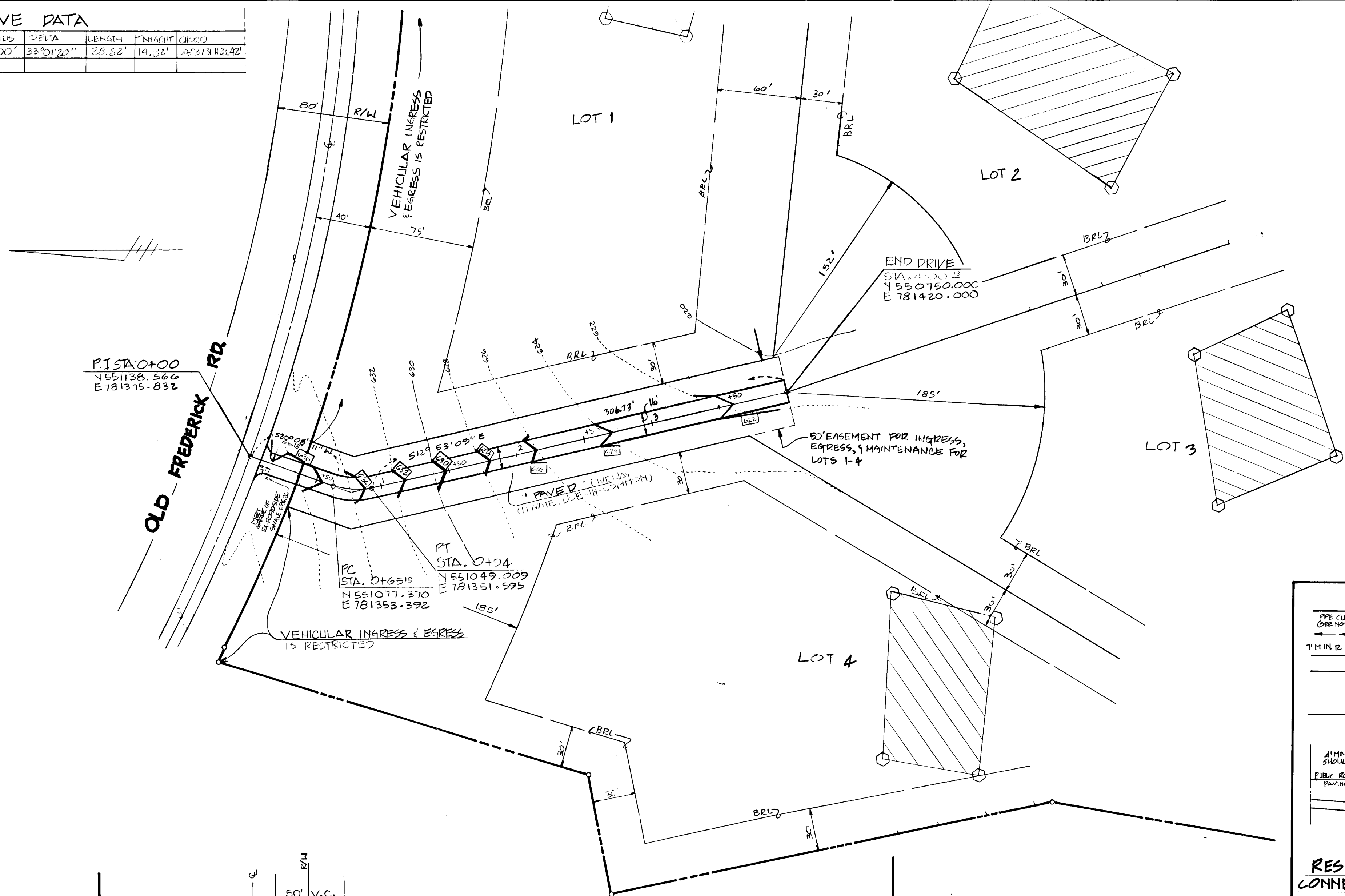


FROM	TO	RADIUS	DETA	LENGTH	TANGENT	CHORD
CHG52	CHG54	50.00'	33°01'20"	75.62'	14.33'	78.2194282

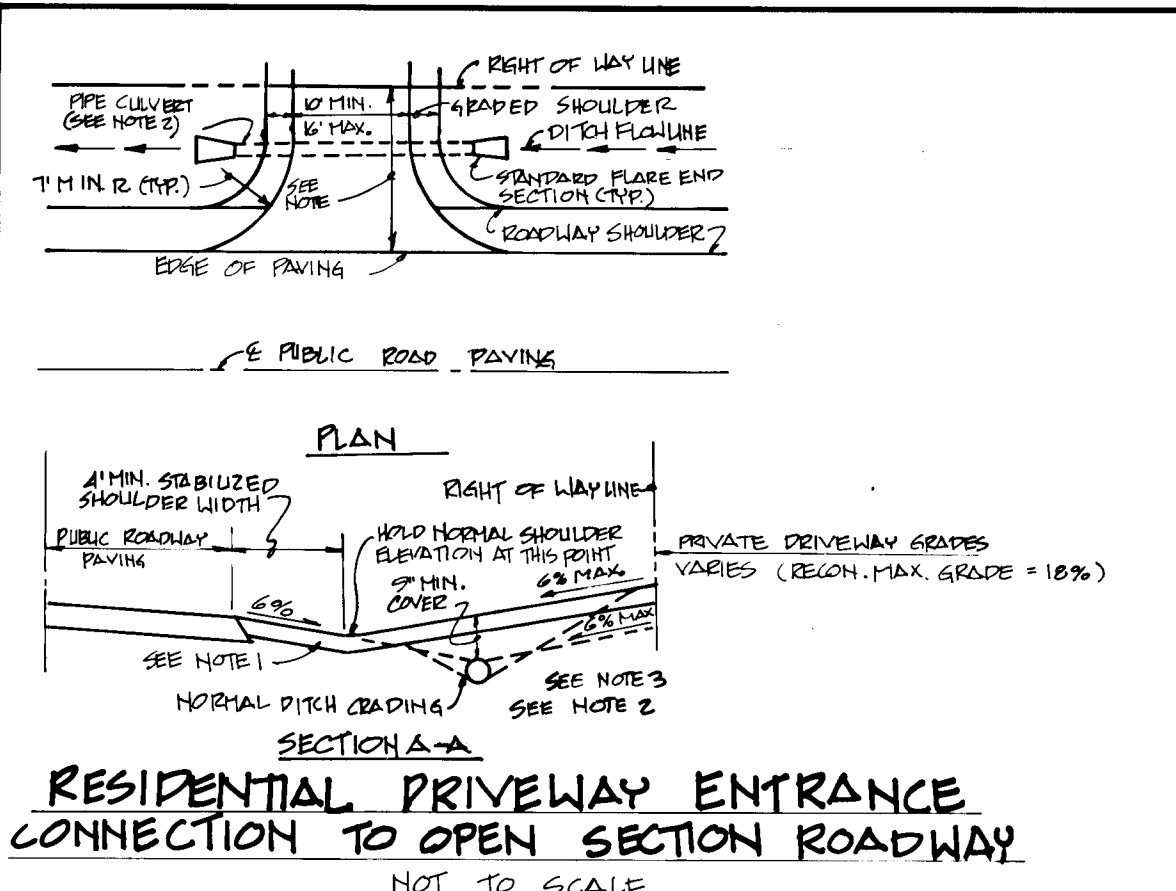


DRAINAGE AREA MAP
SCALE 1"=200'

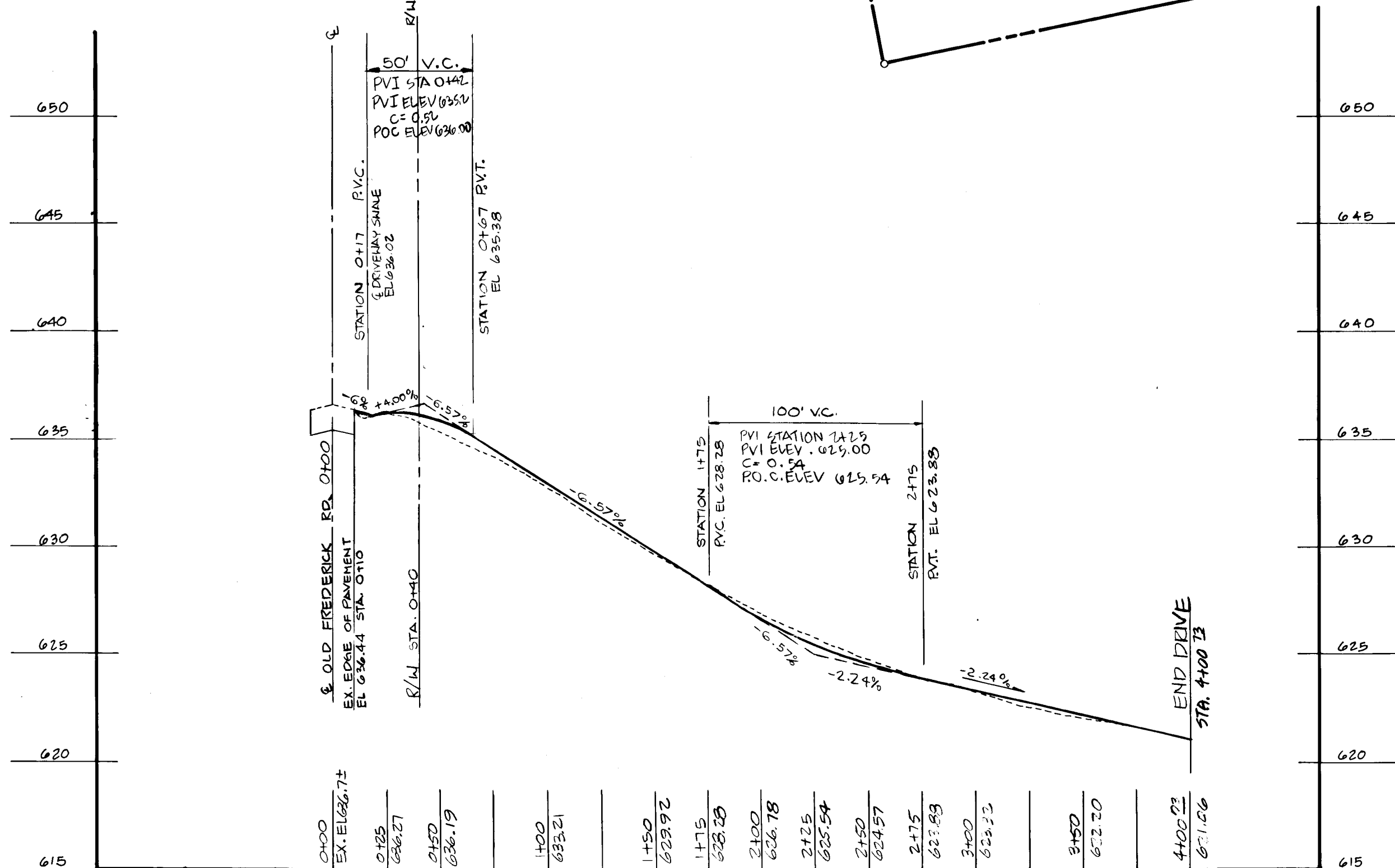


SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS
P1	PARKING AREAS AND TRAVELWAYS, APARTMENTS AND COMMERCIAL INDUSTRIAL ZONES WITH NO HEAVY TRUCKS.	1" BIT CONC SURFACE 2" BIT CONC BASE PEME 15" DRAINAGE RIN ROSE COURSE OR AT DENSE GRADED STABILIZED AGGREGATE BASE COURSE
TYPICAL PAVING SECTION FOR USE-IN-COMMON DRIVE*		4" BIT CONC SURFACE 4" BIT CONC BASE

* SEE ALTERNATE 1/2" TAR & CHIP PAVING SECTION ON THIS SHEET



- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT.
 - CONTRACTOR MUST SUBMIT WRITTEN NOTIFICATION 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES TO THE HOWARD COUNTY SEDIMENT CONTROL SECTION STATING:
 - WHEN CONTRACTOR INTENDS TO BEGIN INSTRUCTION.
 - CONTRACTOR'S TENTATIVE COMPLETION DATE.
 - INSTALL STABILIZED CONSTRUCTION, PDS, AND SILT FENCE.
 - GRADE DRIVEWAY.
 - APPLY TEMPORARY STABILIZATION.
 - PAVE DRIVEWAY.
 - PAVE GRADE REMAINING AREA.
 - APPLY PERMANENT STABILIZATION.
 - UPON RECEIPT OF WRITTEN APPROVAL FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS.



PAVEMENT MATERIALS	
1/2" #1 STONE, ROLLED IN	3" #3 STONE, TREATED WITH EMULSIFIED ASPHALT @ A RATE OF 0.4 GAL/60 YD
3" #4 STONE, TREATED WITH EMULSIFIED ASPHALT @ A RATE OF 0.4 GAL/60 YD	

ALTERNATE 1/2" TAR & CHIP PAVING SECTION FOR USE-IN-COMMON DRIVE

DEVELOPER'S CERTIFICATE

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

Carol S. Hong 1/10/90
NAME DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING.
Frank J. Coughlin 2/15/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS.
William J. Riley 2-12-91
CHIEF, BUREAU OF ENGINEERING DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
John J. Kuntz 4/5/91
SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
John J. Kuntz 2/6/91
SOIL CONSERVATION DISTRICT DATE

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 106 & 107
ELLCOTT CITY, MARYLAND 21043
(301) 461-9563



DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
GSS	ECF	SA5	5/31/90
BY	NO.	REVISION	DATE

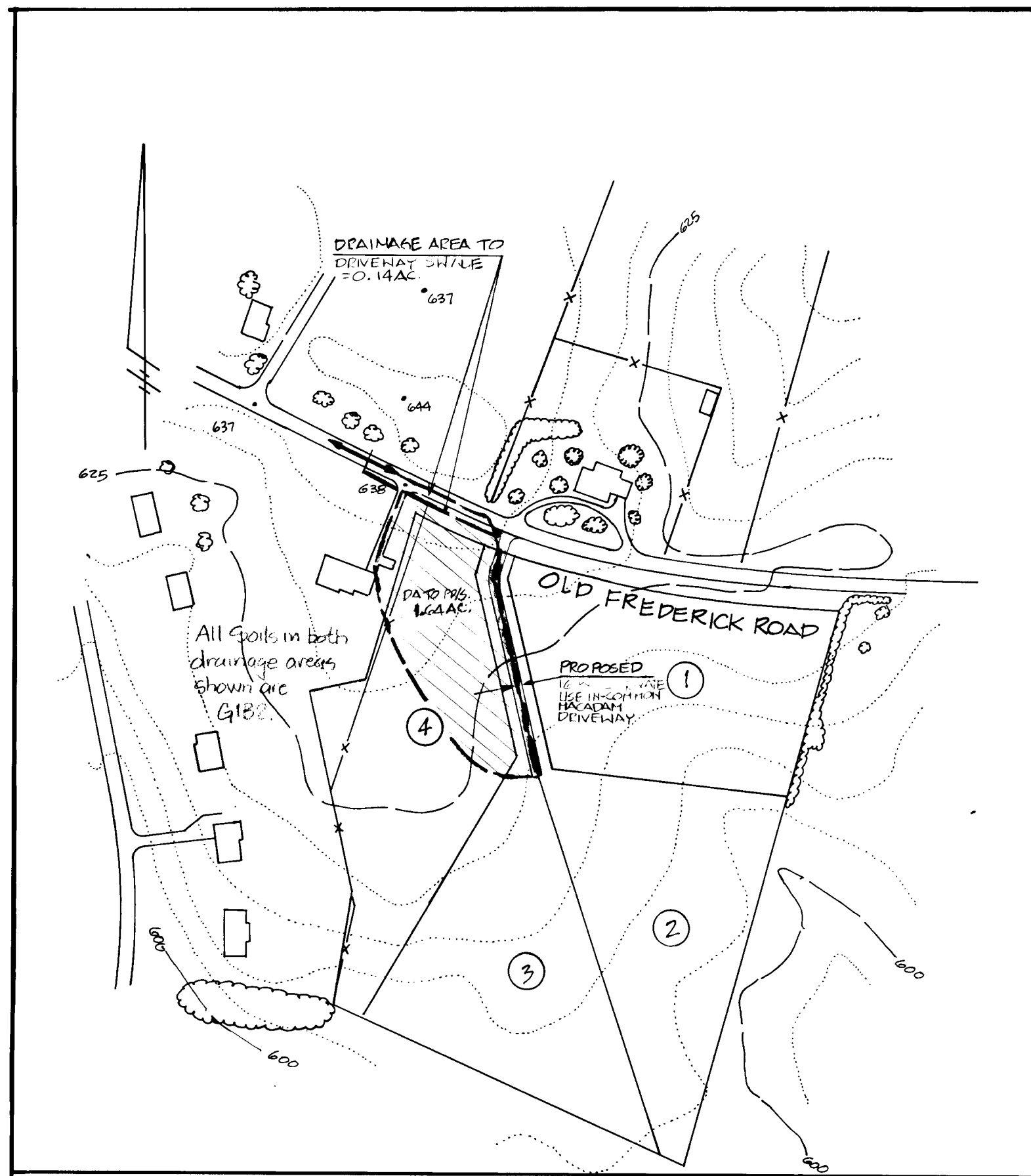
OWNER:
MRS SARAH STOUT
15802 OLD FREDERICK RD.
WOODBINE, MD.
21191

DEVELOPER:
MRS SARAH STOUT
15802 OLD FREDERICK RD.
WOODBINE, MD.
21191

DRIVEWAY CONSTRUCTION PLAN
HONG PROPERTY
LOTS 1-4
4TH ELECTION DISTRICT
HOWARD COUNTY, MD.
TAX MAP 3, PARCEL 5
ZONING MAP 3

SCALE: 1"=50'
SHEET 1
OF 2

1615



AREA MAP
SCALE 1"=50'

PERMANENT SEEDING NOTES

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (4 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (91 LBS./1000 SQ. FT.).
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESUKE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESUKE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESUKE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL 218 GALLONS PER ACRE (5 GAL./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS DISCING OR OTHER RESEEDINGS.

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. /PER ACRE 10-10-10 FERTILIZER (4 LBS./1000 SQ. FT.).

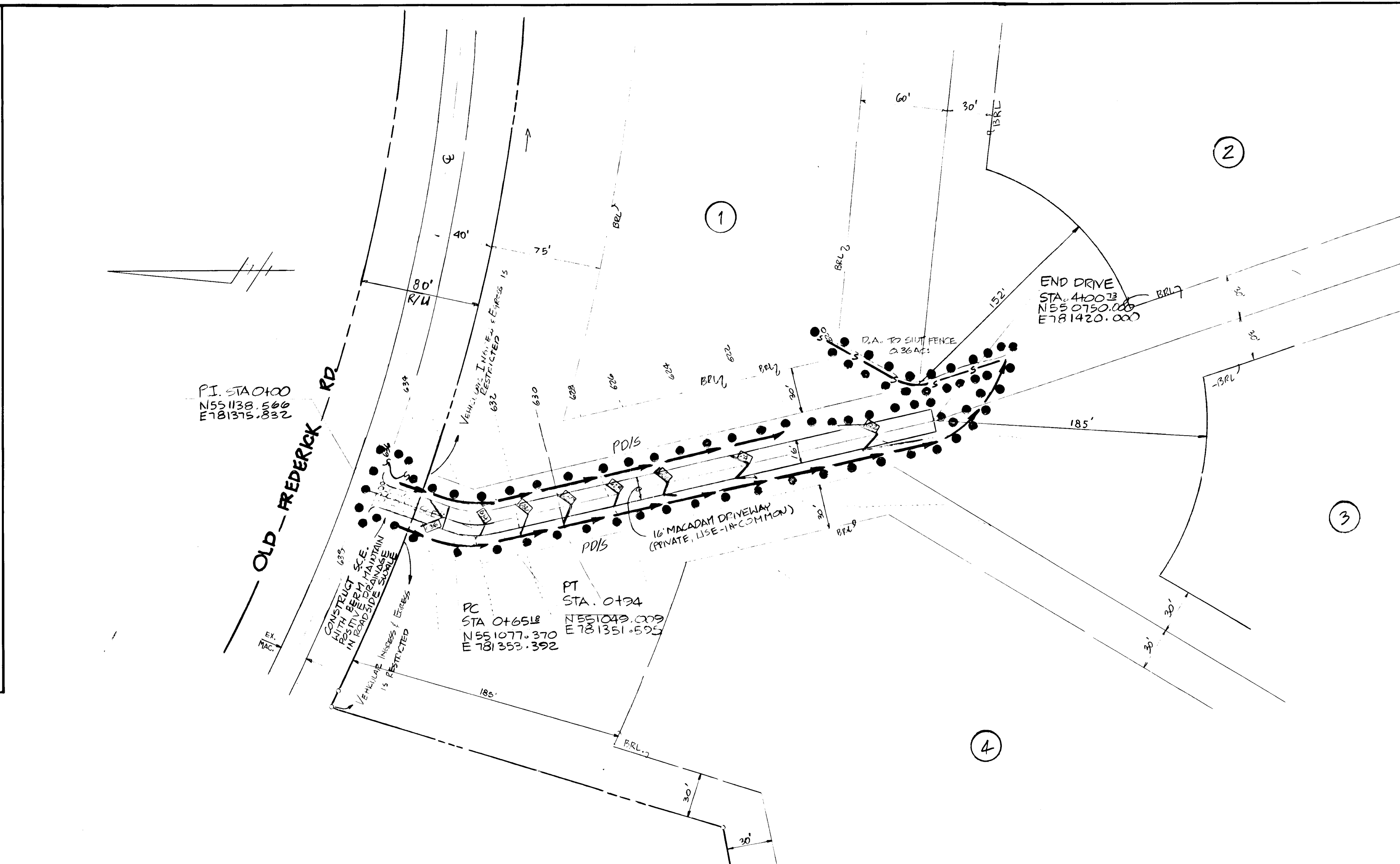
SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 LBS. PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ. FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Mark J. ... 2/15/91
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: DEPARTMENT OF PUBLIC WORKS
 ... 2-12-91
 CHIEF, BUREAU OF ENGINEERING

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
 ... 2/5/91
 SOIL CONSERVATION SERVICE

THESE PLANS FOR SOIL EROSION, MEET THE REQUIREMENTS OF HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 ... 2/5/91
 HOWARD COUNTY SOIL CONSERVATION DISTRICT



PERMANENT SEEDING

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL 218 GALLONS PER ACRE (5 GAL./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
SOIL AMENDMENTS: APPLY 2 TONS/ACRE DOLOMITIC LIMESTONE AND 600 LBS./ACRE 10-10-10 FERTILIZER. HARROW OR DISC LIME AND FERTILIZER INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS./ACRE OF 38-0-0 UREAFORM FERTILIZER AND 500 LBS./ACRE OF 10-20-20 FERTILIZER.

SEDIMENT CONTROL NOTES

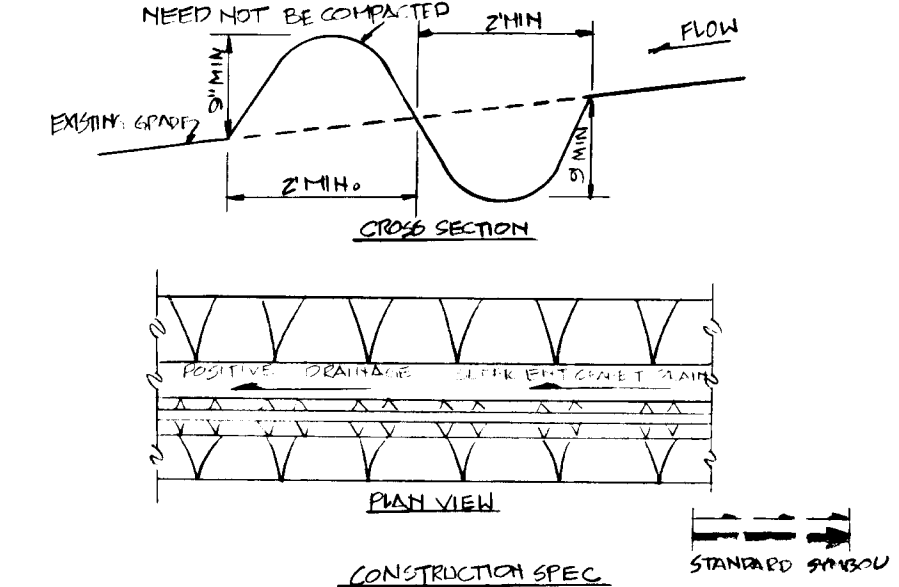
- 1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (902-2437)
- 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- 3) FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; (B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4) ALL SEDIMENT TRAPS/BASINS SHOULD BE FENCED AND WARNING 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 EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC 50) AND MULCHING (SEC 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7) SITE ANALYSIS:

TOTAL AREA OF SITE	13.1960 ACRES
AREA DISTURBED	0.3600 ACRES
AREA TO BE ROOFED OR PAVED	0.1478 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.1478 ACRES
TOTAL CUT	261 CU. YDS.
TOTAL FILL	261 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	N/A

- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DRN SEDIMENT CONTROL INSPECTOR.
- 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11) DURING CONSTRUCTION OF FUTURE DWELLING ON LOT
- 12) ALL PIPES TO BE BLOCKED AT THE END OF EACH DAY
- 13) THE TOTAL AMOUNT OF STRAW BALE DIKES/SILT FENCE EQUALS 150 L.F.

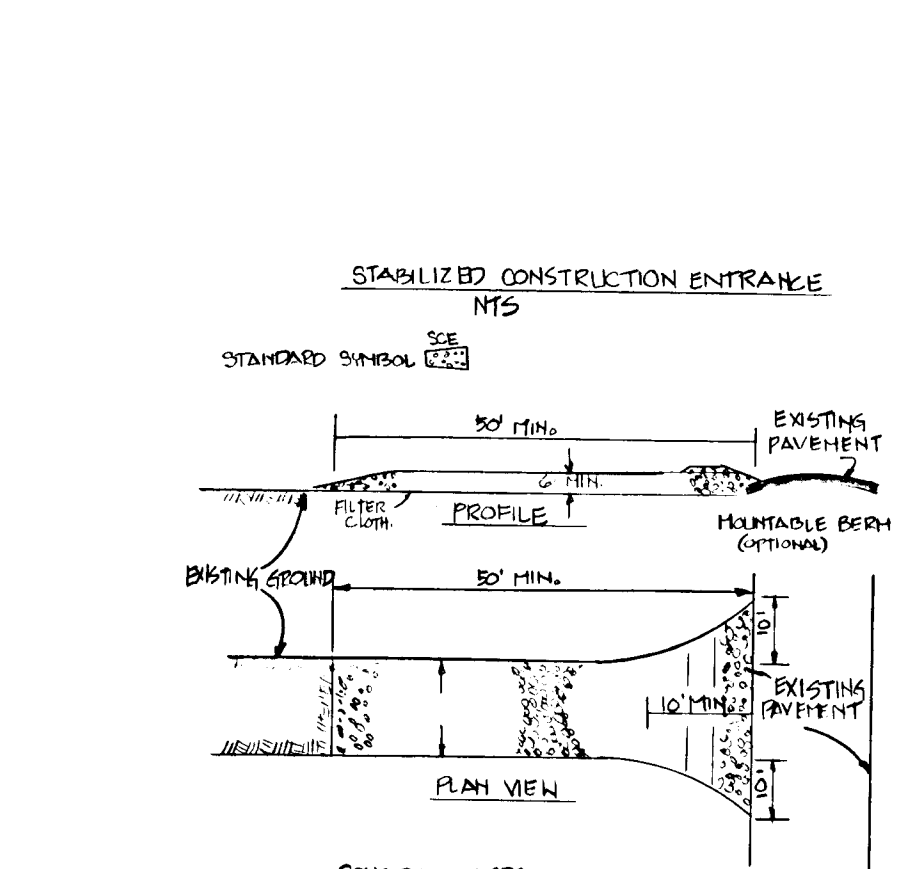


1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED PROTECTIVE COVER TO AN OUTSIDE
2. OVERFLOW CHANNEL FROM AN UNDISTURBED AREA SHALL CONNECT TO A SEDIMENT TRAPPING DEVICE.
3. OVERFLOW CHANNEL FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT AN EROSION VELOCITY.
4. THE SHALE SHALL BE ENCAUSTED OR SHAPED TO MAINTAIN A PROTECTIVE COVER AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE SPECIFICATIONS.
5. STABILIZATION OF THE AREA COVERED BY THE DIKE AND SHALE SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SEED AND STRAW MULCH, AND SHALL BE COMPLETED IMMEDIATELY.
6. PERIODIC INSPECTIONS AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

LEGEND

- STABILIZED CONSTRUCTION ENTRANCE
- S-S-S SILT FENCE
- EXISTING CONTOUR
- B.R.L. BUILDING RESTRICTION LINE
- UNIT OF DISTURBANCE
- DIKE/SWALE

- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE:**
1. UPDOWN LINE FENCE TO BE INSTALLED STRICTLY TO FENCE POSTS WITH LINE TIGHT AND SQUARE.
 2. FILTER CLOTH TO BE POSITIONED SEPARATE TO A DOWNLINE FENCE WITH THIS SPACED EVERY 24" AT TOP AND MID SECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH MEET EACH OTHER THEY SHALL BE OVERLAPPED BY 24" AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "WINDUP" DEVELOPS IN THE SILT FENCE.



- CONSTRUCTION SPECIFICATIONS:**
1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE BRICK/VAULT.
 2. SLOPE - AS SHOWN, BUT NOT LESS THAN 50 FEET PERCENT (50% SLOPE) UNLESS OTHERWISE SPECIFIED.
 3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
 4. LENGTH - TEN (10) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INCREASES OR DECREASES OCCUR.
 5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REMOVED ON A SINGLE RAINY AFTER RAIN.
 6. SLOPE - ALL SLOPES SHALL BE PLANTED OR COVERED WITH SOD OR CONSTRUCTION ENTRANCE SHALL BE RIPPED ACROSS THE ENTRANCE. TO FURNISH A PROTECTIVE COVER UNTIL 90% SOD IS IN PLACE.
 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS-OF-WAY OR INTO PERIODIC CHECKS WITH APPROPRIATE STATE AGENCIES TO BE MADE AND RECORDS KEPT OF ANY TRACKING OF TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 8. SIGNAGE - SIGNAGE SHALL BE PLACED TO REMIND OPERATOR TO BEYOND THE ENTRANCE TO AN APPROVED SEEDING LEVEL. SIGNAGE SHALL BE PLACED TO REMIND OPERATOR TO BEYOND THE ENTRANCE TO AN APPROVED SEEDING LEVEL. SIGNAGE SHALL BE PLACED TO REMIND OPERATOR TO BEYOND THE ENTRANCE TO AN APPROVED SEEDING LEVEL. SIGNAGE SHALL BE PLACED TO REMIND OPERATOR TO BEYOND THE ENTRANCE TO AN APPROVED SEEDING LEVEL.

DEVELOPER'S CERTIFICATE

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

Carol S. Hong 7/10/90
 NAME DATE

CONSULTANT'S CERTIFICATION

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

Seyed A. Saadati 5/1/90
 SEYED A. SAADATI PROR. ENR # 16493 DATE

SHANABERGER LANE
 8726 TOWN & COUNTRY BLVD.
 SUITES 106 & 107
 ELLICOTT CITY, MARYLAND 21043
 (301) 461-9563

DESIGNED BY: GSS
 DRAWN BY: ECF
 CHECKED BY: SAS
 DATE: 5/31/90

OWNER: MRS. SARAH SEIT 15802 OLD FREDERICK RD. WOODBANE, MD. 21797

DEVELOPER: MRS. SARAH SEIT 15802 OLD FREDERICK RD. WOODBANE, MD. 21797

EROSION AND SEDIMENT CONTROL PLAN
HONG PROPERTY
 LOTS 1-4
 ATTENTION DISTRICT HOWARD COUNTY, MD. TAX MAP 2 PARCEL 5 ZONING MAP 3

SCALE: 1"=50'
 SHEET 2 OF 2

1615