



HOWARD COUNTY HEALTH DEPARTMENT

25597

DATE
10/11/06

AS

Received From

JM Contracting LLC

PHONE #16-549-483

- CASH
- CHECK

For pers app - ~~Lot 22~~ Lot 22.
11640 West Waverchester Ln.

NO.
3002

five hundred six dollars even

Dollars

\$ 506.00

Received By

[Signature]



Howard County
Health Department

7178 Columbia Gateway Drive, Columbia, MD 21046
(410) 313-6300 Fax (410) 313-6303
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

December 4, 2006

June Holmes
7 Mainview Ct
Randallstown, Maryland 21133

RE: PERCOLATION TEST RESULTS - 525597
11640 West Winchester Lane
Re-certification perc test

Dear Ms. Holmes:

Percolation testing conducted November 27, 2006 on the referenced property confirmed satisfactory soil conditions for the previously approved sewage disposal area (SDA). Copies of the test results are enclosed. Currently, additional percolation certification plans are not required to be submitted to the Health Department for approval. If a modification is made to the current approved sewage disposal area, a revised percolation certification plan is required; requirements are included below. Additionally, at the building site plan stage, three complete septic systems need to be shown within the approved septic area to verify the adequacy of the SDA to support a >5 bedroom home.

A modified sewage disposal area will require the following:

- 1) Actual locations and elevations of all excavated test holes
- 2) Proposed house site (55' x 70') or footprint, including building restriction lines as determined by other county agencies
- 3) Existing and proposed property lines
- 4) Proposed well sites. Either 3 well sites with 100-foot setback for each, or one 1500 sq. ft. well box w/elliptical radius of 100' around the entire zone for each proposed lot
- 5) Proposed minimum 10,000 sq. ft. SDA for each lot
- 6) A note must be included certifying that all existing wells and septic systems within 100 feet of property boundaries have been shown
- 7) Topography at 2-contour intervals and a note indicating that depicted topography reflects field-matched information
- 8) A note stating, "All wells to be drilled prior to building permit approval. It is the developer's responsibility to schedule the well drilling prior to building permit submission. It will not be considered 'government delay' if the well drilling holds-up the Health Department signature of the permit."
- 9) A MDE sewage disposal area statement is required
- 10) MDE minimum lot width statement
- 11) Identification of streams, ponds, wetlands, floodplains, slopes >25%, soil types and soil type boundaries
- 12) Legend symbols to distinguish between new holes and any existing holes previously documented (by the HCHD)
- 13) A health officer signature block stating "approved for private water and private sewer systems."
- 14) Professional seal or signed statement that "I certify that the information shown heron is based on field work performed by me or under my direct supervision, and is correct, to the best of my knowledge and belief."

- 15) Identification of the property, road, street address if applicable, tax map page, parcel number, subdivision name (if appropriate); add purpose statement as appropriate, e.g. subdivision, SDA adjustment, percolation certification plan etc
- 16) Name, address and telephone number of each owner, developer and the plan author.
- 17) The date the plan was drawn, the plan scale (1:30 - 1:100), a scaled vicinity map and, the A # (percolation test fee receipt number, referenced in the HCHD correspondence)
- 18) If adjustment of previously approved SDA, show area gained, area lost, and final
- 19) SDA; calculate square footage for each; and shade any area to be abandoned differently than any new SDA to be established
- 20) Minimum required distances - well to house = 30'; well to SDA or SWM controls = 100'; SDA to house = 20'; well or SDA to lots lines = 10'; SDA to slopes >25% = 25'; SDA to water bodies = 100'

If you have any questions regarding this matter, please contact me at the above address or by calling (410) 313-4261.

Sincerely,

Sara Fegel, R. S.
Well and Septic Program
Development Coordination Section

SF
Enclosures
Cc. JM Contracting
File



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____ AP 525597

AGENCY REVIEW: _____ DATE 10/11/06

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH UNKNOWN PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE UNKNOWN IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) Jane Holmes (seller)

DAYTIME PHONE _____ CELL _____ FAX _____

MAILING ADDRESS 7 Manview Ct Randallstown MD 21133
STREET CITY/TOWN STATE ZIP

APPLICANT J.M. Contracting LLC / Ron HEAPS

DAYTIME PHONE 443-277-7526 CELL SAME FAX _____

MAILING ADDRESS 309 Saddleback Trail Mt. Airy MD 21771
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONTRACTOR CONSULTANT


PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME Kings Gift LOT NO. 22

PROPERTY ADDRESS 11640 West Winchester Lane Ellicott City MD 21042
STREET TOWN/POST OFFICE

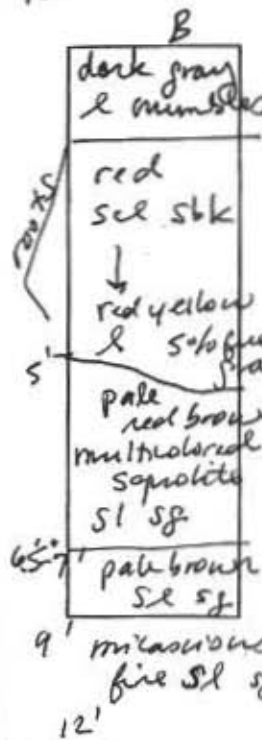
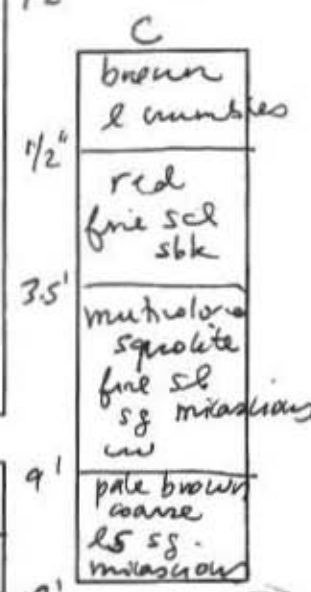
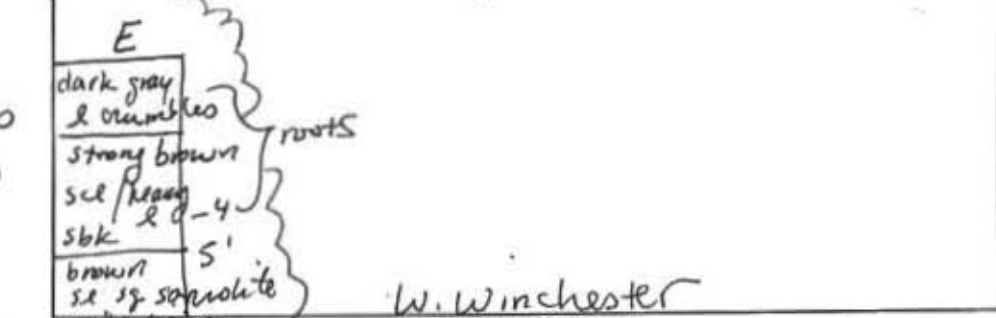
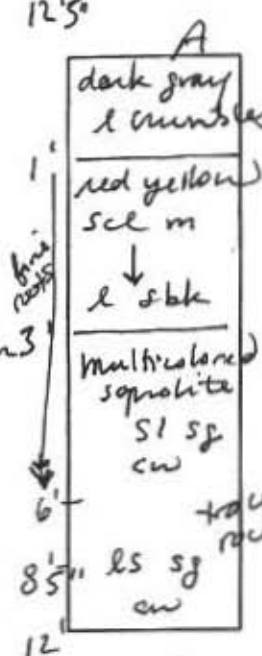
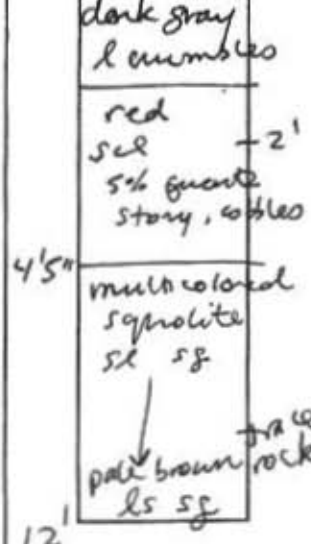
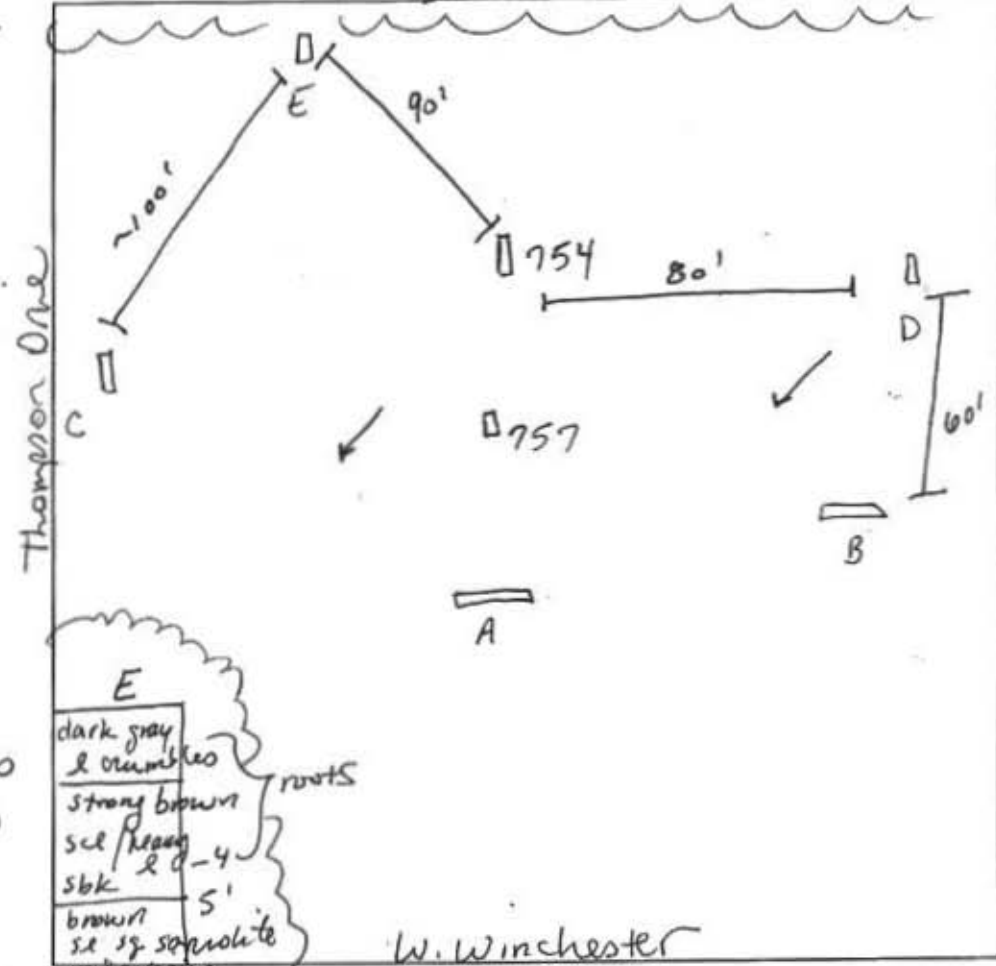
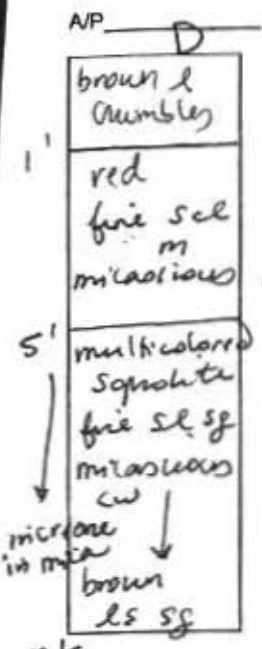
TAX MAP PAGE(S) 16 GRID 8 PARCEL(S) 339 PROPOSED LOT SIZE 5.77 acres

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

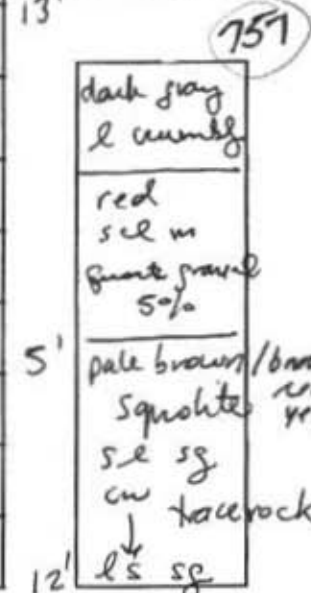
TEST RESULTS WILL BE MAILED TO APPLICANT.


SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
3525-H ELLICOTT MILLS DRIVE, ELLICOTT CITY, MARYLAND 21043-4544 (410) 313-1771 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2nd INCH	P/F/H
11/27/06	A	4' / 12'	10:43	10:47	10:55	8	P
	B	5'5" / 12'	11:04	11:14	11:27	13	P
	754	5' / 12'	11:31				F
	"	6'8" / 12'	12:06	12:06 ⁵¹	12:08 ⁵¹	2	P
	C	4'5" / 13'	11:52	11:55	11:59	4	P
	D	12'5"					P
	E	5' / 12'	1:12	1:25	1:44	19	P
	757	12'					P



REMARKS holes per original percent plan, E + D new field located.

SANITARIAN SF BACKHOE SM contracting OTHERS _____

TEST HOLES USED IN SDA _____ AVG. PERC TIME 0.8 SQ. FT/BR _____

TRENCH WIDTH 2 INLET DEPTH 4 MAX. BOT DEPTH 8 EFFECTIVE SW 1.5

start 76.5

WET SEASON
RETEST
OK LOW HOLE
14" deep

APPLICATION

PERCOLATION TESTING

A 41426

P _____

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
P.O. BOX 476 ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 461-9933

DISTRICT 3

DATE 4/6/88
~~10 March, 1988~~

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY, APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Jean R. Dickey, Individually; Jean R. Dickey, Trustee Jean R. Dickey Inter-Vivos Trust
ADDRESS 13850 Foursythe Rd., Sykesville, Md 21784 PHONE (301) 442-2226

PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION King's Gift LOT NO. 22

ROAD AND DESCRIPTION North on Route 144, East of Thompson Drive

TAX MAP 16 PARCEL # 339

SIZE OF LOT 5.230 Ac± TYPE BLDG. Single Family Dwelling
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

Richard F. Lume (Agent)
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

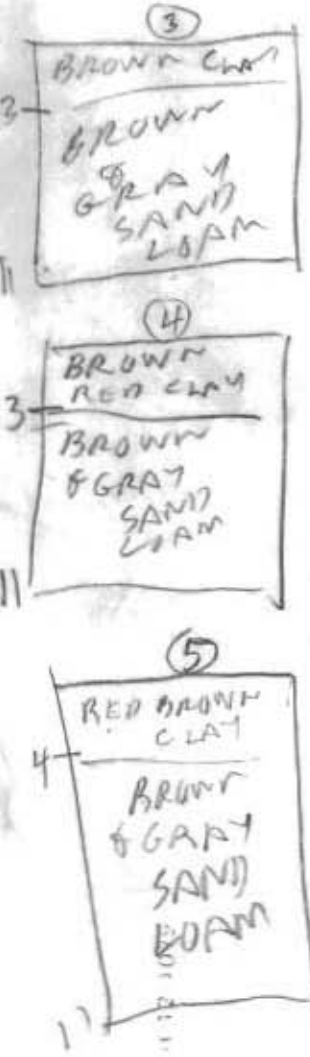
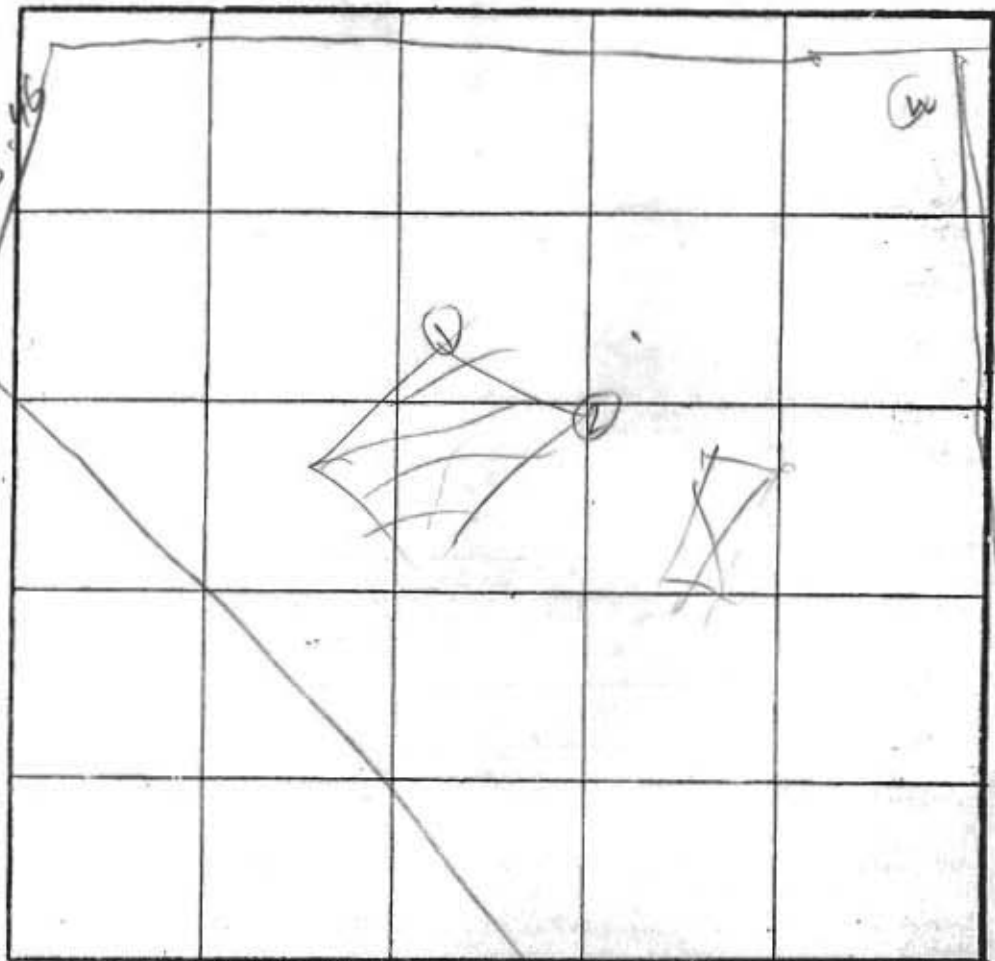
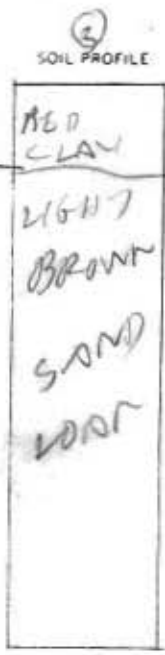
REJECTED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING 6/24/88 DIG MORE HOLES THAT PASSED
WERE ACTUALLY DONE ON LOT 23 RH

THIS IS NOT A PERMIT

KING'S GIFT LOT 22



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
6/24/88	1V	8	WATER 7F-7				
	2V	9	WATER 9F7 TO 65F CLAY				
	3S	4	1144	1146	1146	1148	2
	3D	8	1144	1146	1146	1149	2
	3V	11	OK				
	4S	4	1149	1155	1155	1157	2
	4V	11	OK				
	5S		1200	1201	1201	1203	2
	5V	11	OK				
	6V	12	OK				

REMARKS: Holes ① & ② dug near survey on Plat
 HOLE ③ ④ ⑤ ⑥ WERE DUG ON LOT 23
 TYPE OF SOIL: TALKED WITH SURVEYOR
 TESTED BY: B. Hodges ALSO PRESENT: O. Kellerman, Soz



NEW DIMENSIONS

Plumbing & Excavating, Inc.
3018 Bachman Rd.
Manchester, MD 21102

PHONE (410) 239-4359
TOLL FREE (800) 788-8744
FAX (410) 374-6219
EMAIL: ndplumbing@hotmail.com

Ubuildit
Khan Residence

October 2, 2007
Re: 11640 W. Winchester

Gentlemen:

New Dimensions Plumbing and Excavating, Inc. is pleased to quote the following work for the septic system:

The following conditions and terms will apply:

The quoted price is given that no rock be encountered during the excavation, no dewatering of the ditch required, no shoring of the ditch (if ground is stable) and no ditch to exceed 10' in depth for sewers and 4' in depth for water lines. Should these problems arise, it will be done as an extra to this proposal. All excavation to be open ditching to the angle of repose to comply with the OSHA safety code.

- We will not ramp any backfill or remove any excess soil from the property.
- Rough grading only. No seeding or straw work is included in this price.
- We will not be responsible for any damage done to utility lines, (gas, electric, and/or telephone), installed prior to our work.
- All permits and area changes will be furnished by the contractor.
- Any water encountered will be at an extra fee.
- If any frozen ground, rock or mud is encountered it will be invoiced at a rate of \$90.00 per hour and no blasting will be done by us.
- Pricing based on trenches being within 100' of the house.

Septic System:

Digging and installation of a septic system will include the following specifications:

- 1 - 2000 gallon septic tank.
- 1 - 1500 gallon top seam pump chamber.
- 1 - 7 hole distribution box.
- 1 - Pump and alarm system
- 6 - Absorption trenches- 52' long, 2' wide, 8' deep, with 4' of stone.

Tom-
Spager

946089yibord, cl, Laup, 78346 16819. <http://www.mspqhs.com/2008/08/08/main.asp?do=prt&no=mmc.ca...>

Khan Residence
11648 West Winchester Lane, Lot 23

Khan Residence-Water Connection

Dear Gentlemen,

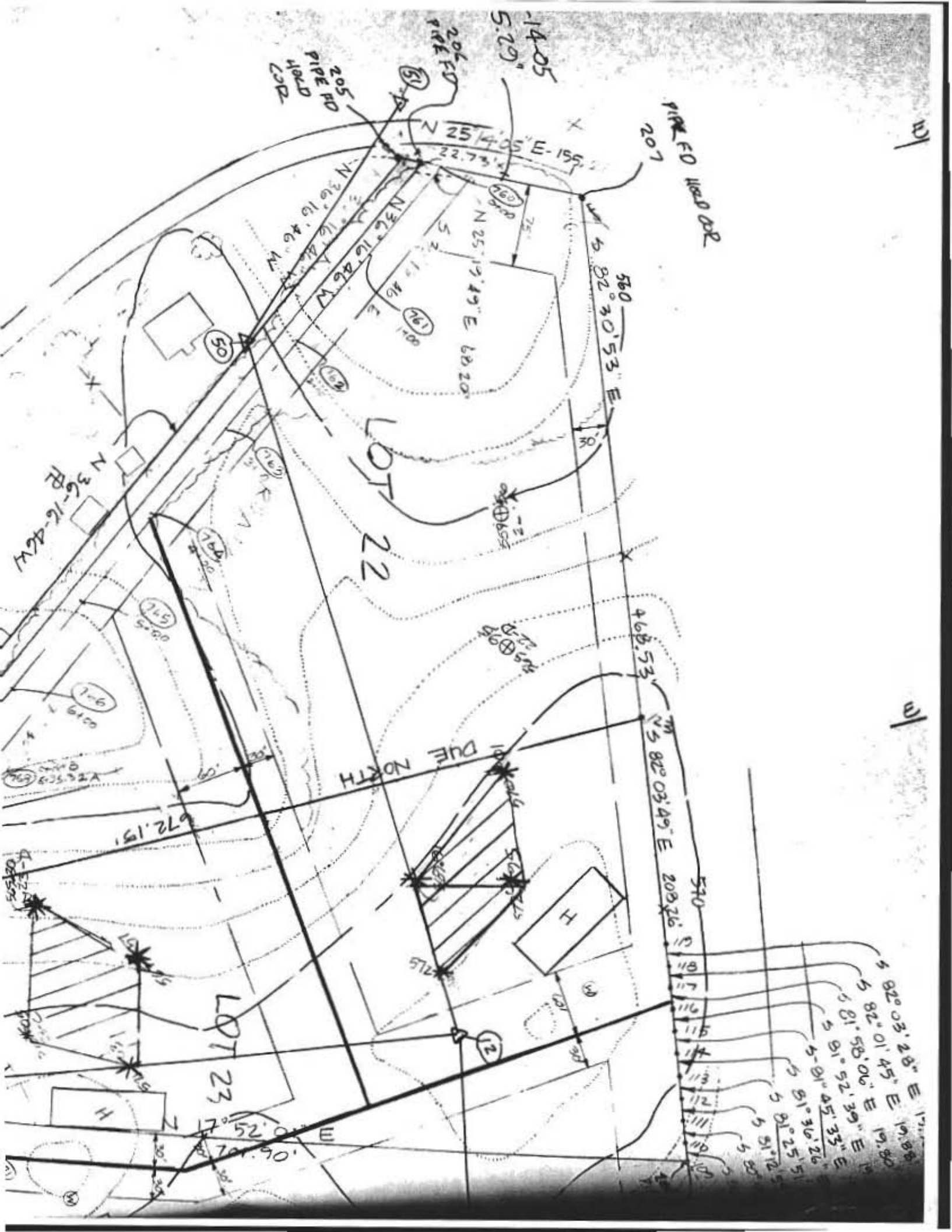
The quoted price is given that no rock be encountered during the excavation, no dewatering of the ditch required, no shoring of the ditch (if ground is stable) and no ditch to exceed 10' in depth for sewers and 4' in depth for waterlines. Should these problems arise, it will be done at an extra to this proposal. All excavation to be open ditching to the angle of repose to comply with the OSHA safety code.

- o We will not tarp any backfill or remove any excess soil from the property.
- o Rough grading only. No seeding or straw work is included in this price.
- o We will not be responsible for any damage done to utility lines, (gas, electric, and/or telephone), installed prior to our work.
- o All permits and area charges will be furnished by the contractor.
- o Any water encountered will be at an extra fee.
- o If any frozen ground, rock, or mud is encountered it will be invoiced at a rate of \$90.00 per hour and no blasting will be done by us.
- o Stone for bedding will be supplied by builder.

Sewer/Water

Digging and installation of the water will include the following specifications:

- o 400' of 1 1/2" 200 PSI Plastic from meter to house.
- o We will provide permit & an inspection upon completion of job.



101

101

205
PIPE HD
CORD

206
PIPE HD

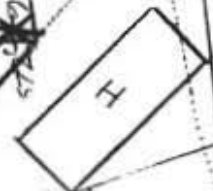
207
PIPE HD
CORD

N 36° 16' 46\"/>

LOT 22

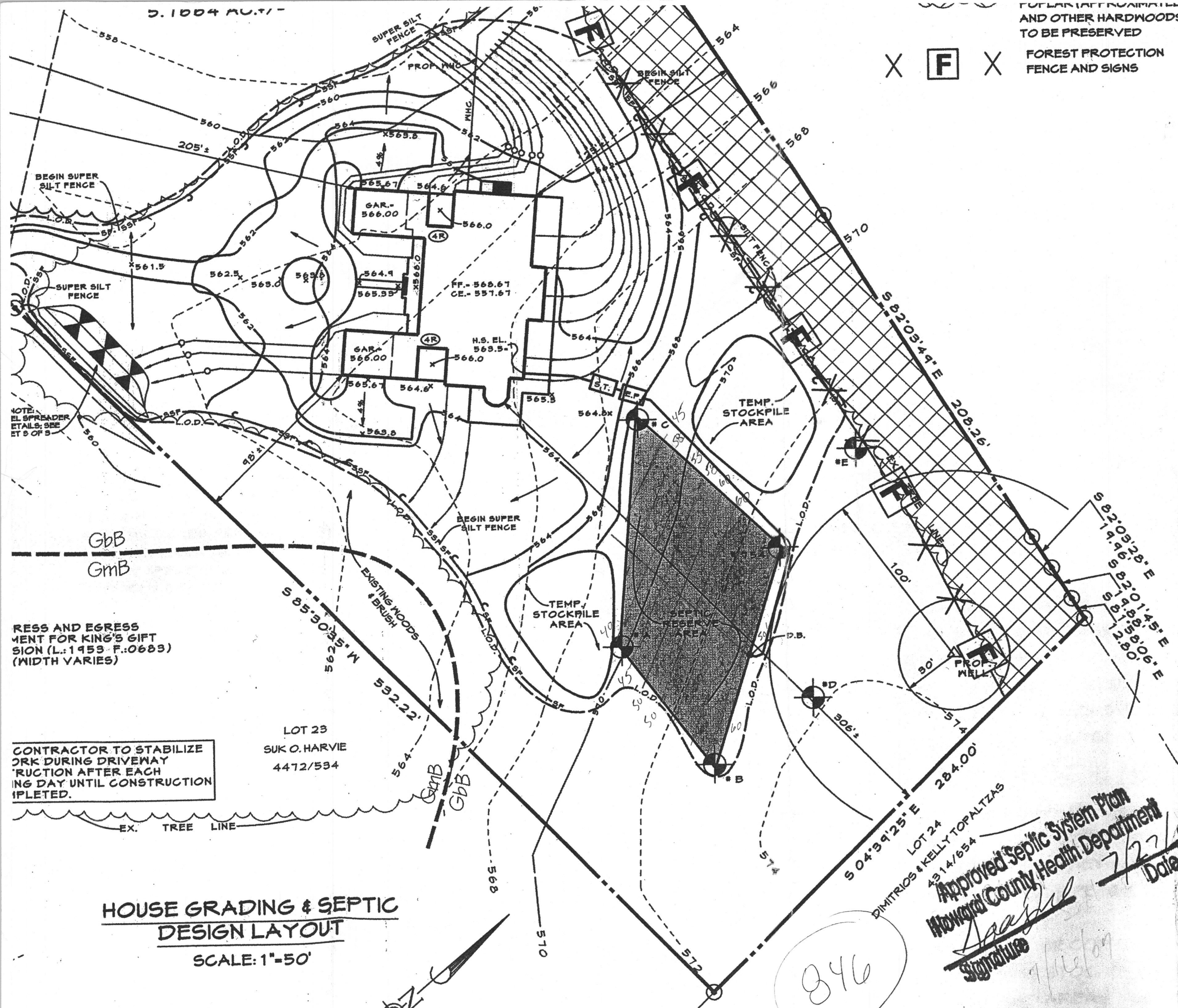
LOT 23

DUE NORTH



- 5 82° 03' 28\"/>
- 5 82° 01' 45\"/>
- 5 81° 58' 06\"/>
- 5 81° 52' 39\"/>
- 5 81° 45' 33\"/>
- 5 81° 36' 26\"/>
- 5 81° 25' 51\"/>
- 5 81° 12' 51\"/>





FOR PLANT APPROXIMATELY 17' AND OTHER HARDWOODS TO BE PRESERVED

X [F] X

FOREST PROTECTION FENCE AND SIGNS

- DECKS, OPEN OR ENCLOSED PATIO PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDP'S)
3. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
4. A DRIVEWAY SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH-12'
 - SURFACE-6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.)
 - GEOMETRY- MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS.
 - MAINTENANCE- SUFFICIENT TO INSURE ALL WEATHER USE.
5. THE CONTACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
6. THE CONTRACTOR SHALL NOTIFY MISS UTILIT AT 1-800-257-7177 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DO
7. THE EXISTING TOPOGRAPHY WAS SURVEYED BY CLS1
8. THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY MONUMENT #5 AND (SEE VICINITY MAP FOR LOCATION)
9. STORMWATER MANAGEMENT IS PROVIDED UNDER ENVIRONMENTALLY SENSITIVE DEVELOPMENT CREDIT.
10. EXISTING UTILITIES ARE BASED UPON FIELD RUN TOPO AND AERIAL TOPOGRAPHY

RESS AND EGRESS
MENT FOR KING'S GIFT
SION (L.:1453 F.:0683)
(WIDTH VARIES)

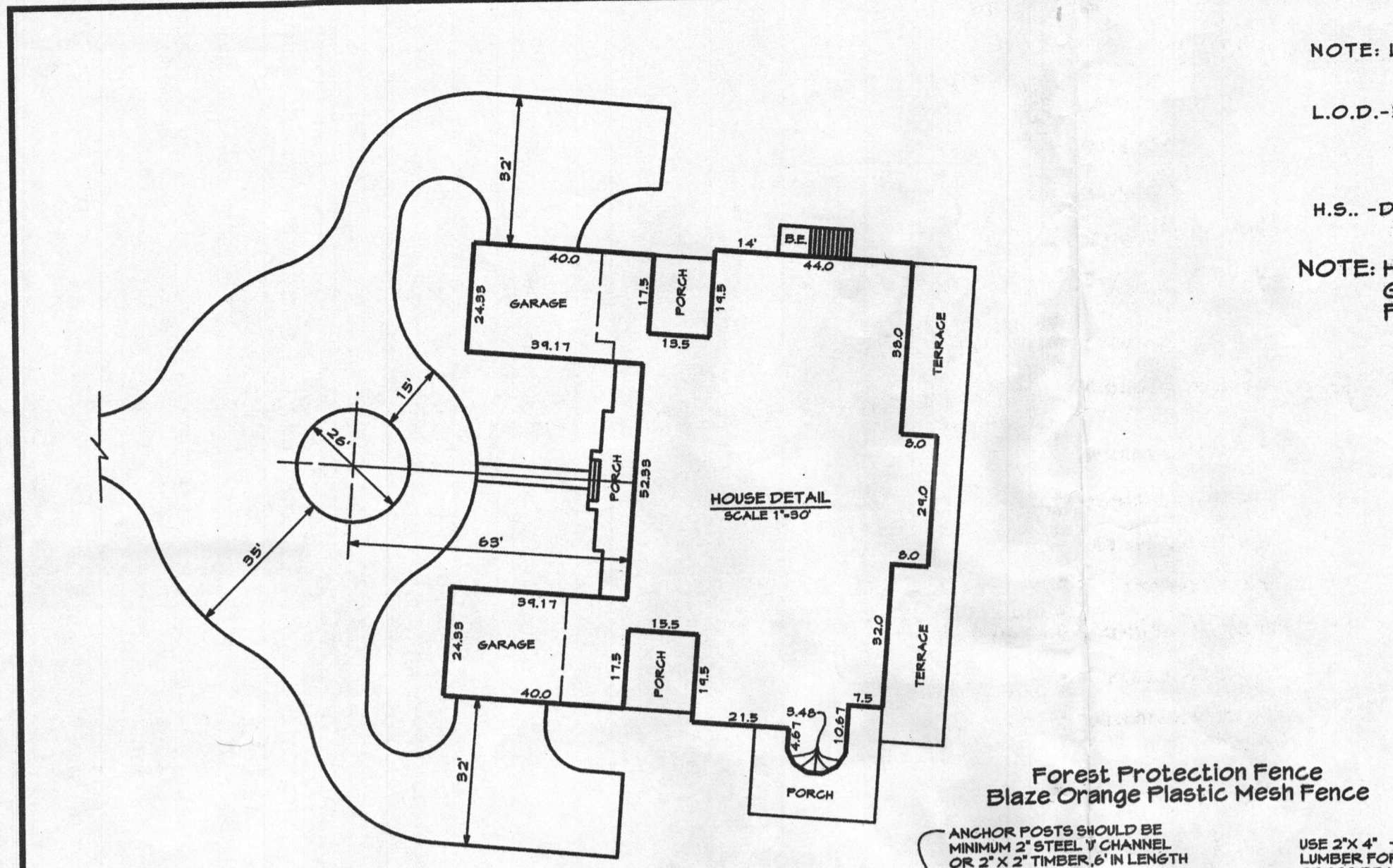
CONTRACTOR TO STABILIZE
ORK DURING DRIVEWAY
RUCTION AFTER EACH
ING DAY UNTIL CONSTRUCTION
PLETED.

**HOUSE GRADING & SEPTIC
DESIGN LAYOUT**
SCALE: 1"=50'

Approved Septic System Plan
Howard County Health Department
Signature
Date 7/27/07

PERCOLATION	
ADI	
LOT/PARCEL NO.	
22/339	

846



SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES		ADJACENT TO ROADWAYS	
	N/A REAR	N/A SIDE	N/A SIDE	B FRONT
LINEAR FT. OF ROADWAY FRONTAGE/PERIMETER	0	0	0	0
CREDIT FOR EXISTING VEGETATION	N/A	N/A	N/A	YES (6'17')
CREDIT FOR WALL, FENCE OR BERM	N/A	N/A	N/A	N/A
# OF PLANTS REQ. SHADE TREES	0	0	3	0
EVERGREENS	0	0	0	0
SHRUBS	0	0	0	0
# OF PLANTS PROVIDED SHADE TREES	0	0	0	0
EVERGREENS	0	0	0	0
SHRUBS	0	0	0	0
OTHER TREES(2:1 SUBSTITUTION SHRUBS(10:1 SUBSTITUTION	N/A	N/A	N/A	N/A

TABLE 1 PERIMETER LANDSCAPE TREES-BASED ON ADJACENT USE

LANDSCAPE EDGE TYPE	LANDSCAPE CHARACTER	SHADE TREES/ LINEAR FEET (1:50)	EVERGREEN TREES/ LINEAR FEET (1:40)	SHRUBS/ LINEAR FEET (1:20)
B	MODERATE BUFFER			

TABLE 2 LANDSCAPE EDGES ADJACENT TO ROADWAYS

LAND USE	ORIENTATION OF STRUCTURE OR USE TO ROADWAY	LANDSCAPE EDGE TYPE
SINGLE FAMILY DETACHED	SIDE/REAR	B

LANDSCAPING NOTES

- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and the Landscape Manual. Financial Surety for the required landscaping has been posted as part of the builder's grading permit application in the amount of \$40,000 for trees (5) shade trees.
- At the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from the approved Landscape Plan may result in denial or delay in the release of land scape surety until such time as all required materials are planted and/or revisions are made to the applicable plans.

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Mays 6/14/07
USDA - NATURAL RESOURCE CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SCD

Paul Robinson 6/14/07
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER SYSTEM

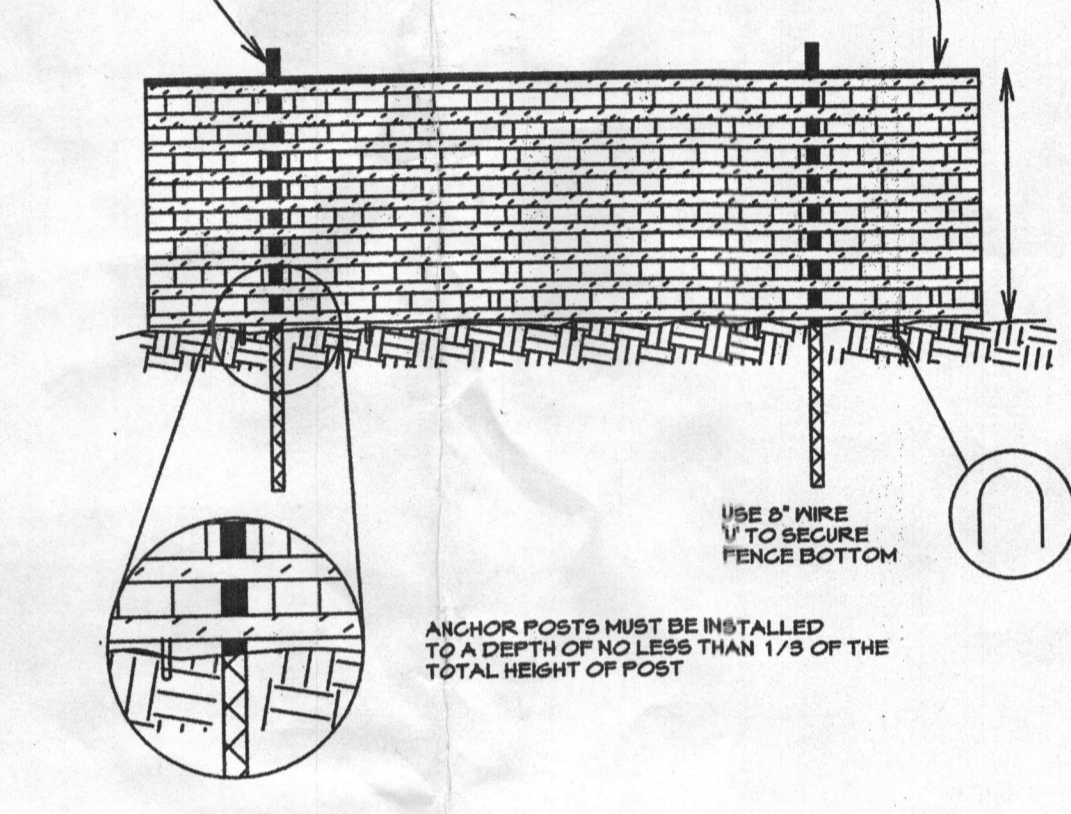
DATE

COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR



NOTES:

- FOREST PROTECTION DEVICE ONLY.
- RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
- BOUNDARIES OF RETENTION AREA SHOULD BE STAKED PRIOR TO INSTALLING DEVICE.
- ROOT DAMAGE SHOULD BE AVOIDED.
- PROTECTIVE SIGNAGE MAY ALSO BE USED.
- DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

FOREST RETENTION AREA

MACHINERY, DRIPPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

VIOLATIONS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

PLACED APPROXIMATELY EVERY 100 FT.

LANDSCAPE REQUIREMENTS

BUFFER 1-TO 4 ROUTE 40	SHADE TREES	EVERGREEN TREES
6'17'/50'	13.54 (14)	16.93 (17)

NOTE: PRESERVATION OF EXISTING TREES WILL EXCEED BUFFER PLANTING REQUIREMENT- NO NEW PLANTING PROPOSED.

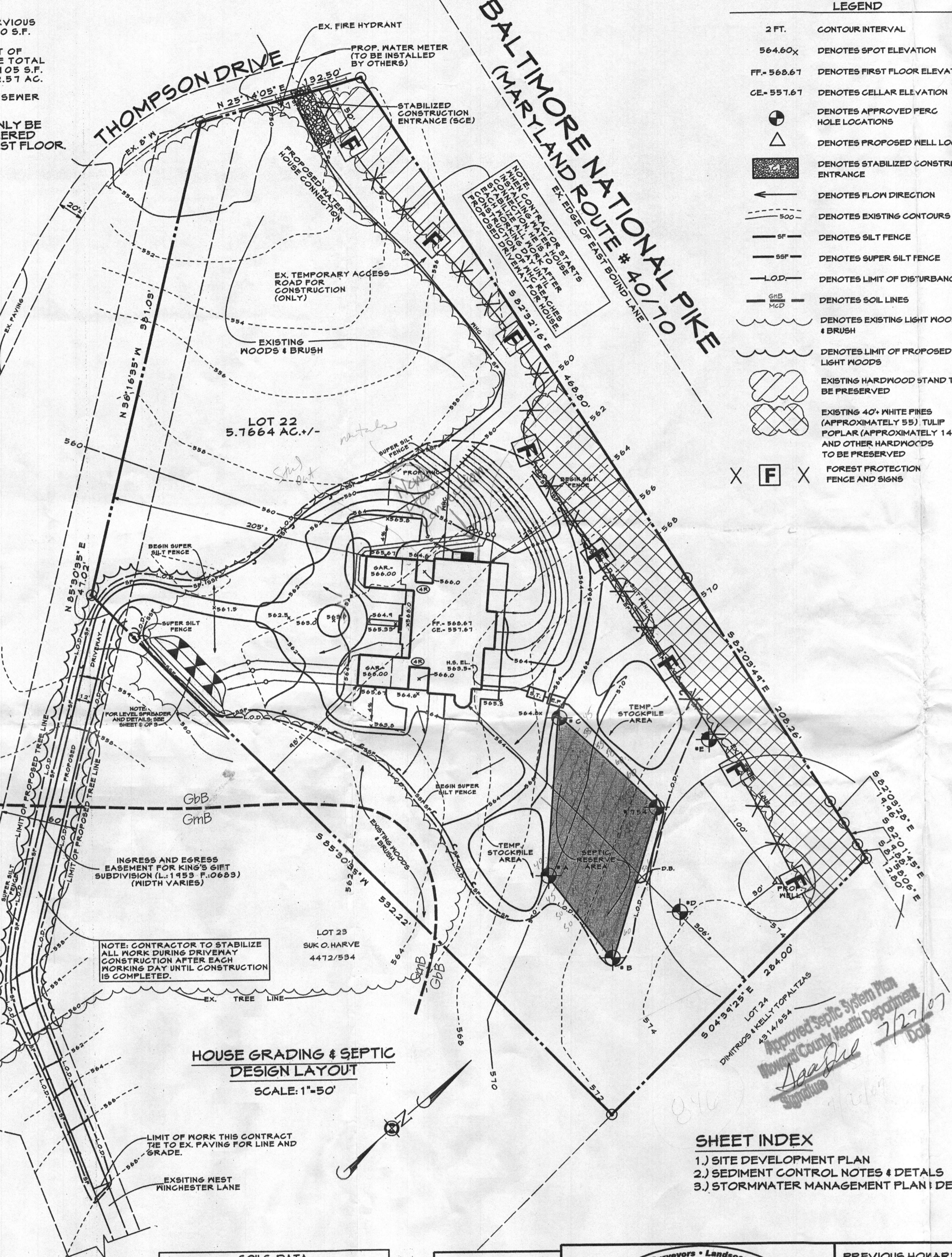
- GENERAL NOTES**
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - THERE ARE NO OTHER EXISTING WELLS AND/OR SEPTIC AREAS WITHIN 100 FEET OF THIS PROPERTY, FROM FIELD INSPECTION BY CLS/I.
 - ALL HOUSE SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
 - ALL EXISTING TOPO ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON FIELD RUN SURVEY PREPARED BY CLS/I, INC. AND ALSO HOWARD COUNTY 2004 TOPOGRAPHY MAP. THE HORIZONTAL DATUM IS THE MARYLAND COORDINATE SYSTEM N.A.D. 1483 AND VERTICAL DATUM IS BASED ON N.A.V.D. 1985.
 - "ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN."

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. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred L. Hansard 6-14-07
ALFRED L. HANSARD
PROFESSIONAL ENGINEER REG. NO. 23446

DEVELOPERS CERTIFICATE
I 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 RECEIVED APPROVED TRAINING PROGRAM AT THE DEPARTMENT OF THE ENVIRONMENT CERTIFIED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENTATION. I AM SIGNING THE PRO SET ALSO AUTHORIZE ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEMAND NECESSARY.

Kashif Khan 6/14/07
SIGNATURE OF THE DEVELOPER



SOILS DATA

SOIL SYMBOL	SOIL SERIES	SOIL HSG
GbB	GLADSTONE LOAM	3
GmB	GLENVILLE LOAM	3

THIS AREA DESIGNATES A PRIVATE SEPTIC RESERVE AREA OF 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THIS RESERVE AREA SHALL BECOME NULL AND VOID UPON CONNECTION OF PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE RESERVE AREA. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.

STATE OF MARYLAND
Professional Engineer
Alfred L. Hansard
Registration No. 23446
Date: JUNE 2007
Drawing No.: 882540
County File No.:

CLSI
www.clsi-civileng.com
Engineers • Surveyors • Landscape Architects
Land Planning & Environmental Consultants

FREDERICK OFFICE: 8445 Progress Drive, Suite 88, Frederick, MD 21701-4879 (301) 662-1799 FAX (301) 662-8004
WESTMINSTER OFFICE: 439 East Main Street, Westminster, MD 21157-5539 (410) 848-1799 FAX (410) 848-1791

Surveyed By: CLSI
Computed By: JEP
Drawn By: CDD, JM
Checked By: JEP

- LEGEND**
- 2 FT. CONTOUR INTERVAL
 - 564.60x DENOTES SPOT ELEVATION
 - FF= 569.67 DENOTES FIRST FLOOR ELEVATION
 - CE= 557.67 DENOTES CELLAR ELEVATION
 - DENOTES APPROVED PERC HOLE LOCATIONS
 - DENOTES PROPOSED WELL LOCATION
 - DENOTES STABILIZED CONSTRUCTION ENTRANCE
 - DENOTES FLOW DIRECTION
 - DENOTES EXISTING CONTOURS
 - DENOTES SILT FENCE
 - DENOTES SUPER SILT FENCE
 - DENOTES LIMIT OF DISTURBANCE
 - DENOTES SOIL LINES
 - DENOTES EXISTING LIGHT WOODS & BRUSH
 - DENOTES LIMIT OF PROPOSED LIGHT WOODS
 - EXISTING HARDWOOD STAND TO BE PRESERVED
 - EXISTING 40' WHITE PINES (APPROXIMATELY 55) TULIP POPULAR (APPROXIMATELY 14) AND OTHER HARDWOODS TO BE PRESERVED
 - FOREST PROTECTION FENCE AND SIGNS

BENCHMARKS:

NO. CO. MON. 16DC ELEV. 528.170
Concrete Monument 0.3 FT. below surface
NS 93045.45; E 159346.110

NO. CO. MON. 16DA ELEV. 468.35
Concrete Monument 0.3 FT. below surface
NS 9317.124; E 1592952.02

- GENERAL NOTES**
- THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 2/2/04 COMPREHENSIVE ZONING PLAN.
 - IN ACCORDANCE WITH SECTION 12B OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN HEIGHT MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDPS)
 - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
 - A DRIVEWAY SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH-12'
 - SURFACE-6" OF COMPACTED CRUSHER RUN BASE P/AT/AR AND CHIP COATINGS (1-1/2" MIN)
 - GEOMETRY- MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS.
 - MAINTENANCE- SUFFICIENT TO INSURE ALL WEATHER USE.
 - THE CONTACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 315-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7117 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - THE EXISTING TOPOGRAPHY HAS SURVEYED BY CLS/I
 - THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY MONUMENT #5 AND (SEE VICINITY MAP FOR LOCATION)
 - STORMWATER MANAGEMENT IS PROVIDED UNDER ENVIRONMENTALLY SENSITIVE DEVELOPMENT CREDIT.
 - EXISTING UTILITIES ARE BASED UPON FIELD RUN TOPO AND AERIAL TOPOGRAPHY ETC.
- GENERAL NOTES (continued)**
- ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY SHALL BE CORRECTED AT THE DEVELOPERS EXPENSE.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
 - THERE ARE NO STREAMS, WETLANDS OR THEIR BUFFERS ON SITE.
 - THERE ARE NO FLOODPLAINS ON SITE
 - THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS AMENDED BY COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 15-2003. CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
 - NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.
 - THE FOREST CONSERVATION OBLIGATION FOR THIS SITE DEVELOPMENT PLAN IS EXEMPT UNDER HOWARD COUNTY ORDINANCE.
 - THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.

GP-07-90

PERCOLATION TEST RESULTS, A-4 1426

ADDRESS CHART

LOT/PARCEL NO.	STREET ADDRESS
22/339	11640 WEST WINCHESTER LANE

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA	LOT NO.		
KINGS GIFT		N/A	LOT 22		
PLAT NO.	BLOCK NO.	ZONE	TAX MAP NO.	ELECT. DISTR.	CENSUS TRACT
	B	RC-DEO	16	THIRD	603000
WATER CODE		SEWER CODE		PRIVATE	

SITE DEVELOPMENT PLAN
SINGLE FAMILY RESIDENTIAL
KINGS GIFT
LOT 22
PLAN & GENERAL NOTES

DEED REFERENCE: 10676/306
TAX MAP: 16, BLOCK: 08, PARCEL: 339
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DATE: MAY 2007 SHEET: 1/3

County File No. SDP--

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.

Alfred L. Harnack #23446 6-14-07
 SIGNATURE OF ENGINEER DATE

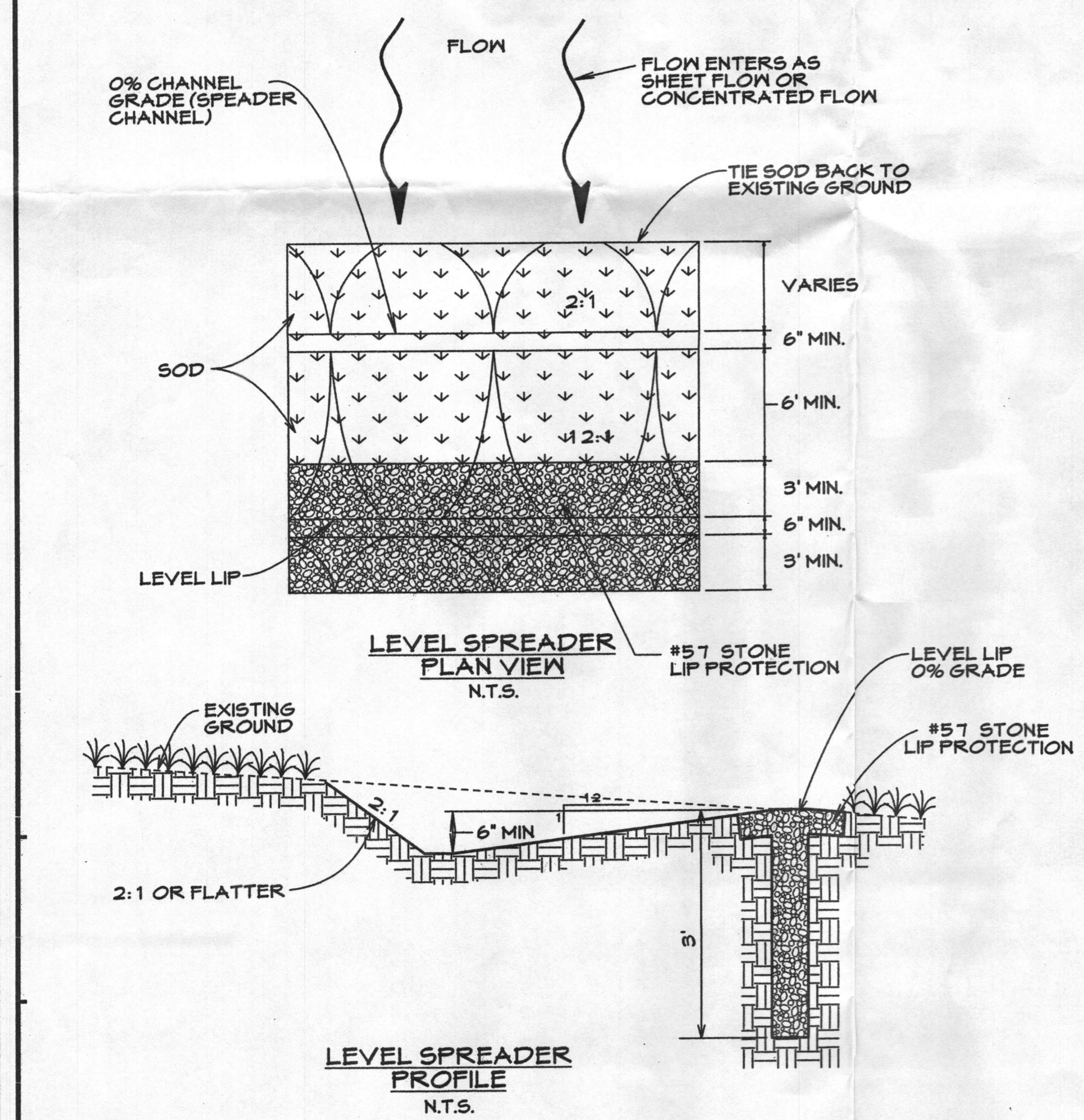
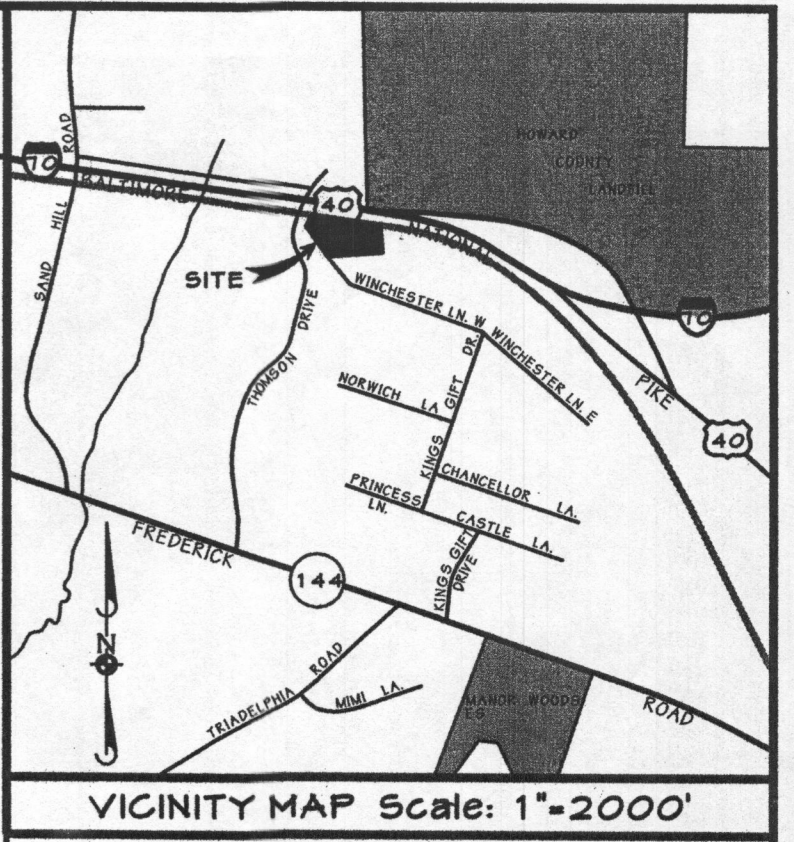
DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Kashif Khan 6/14/07
 SIGNATURE OF DEVELOPER DATE

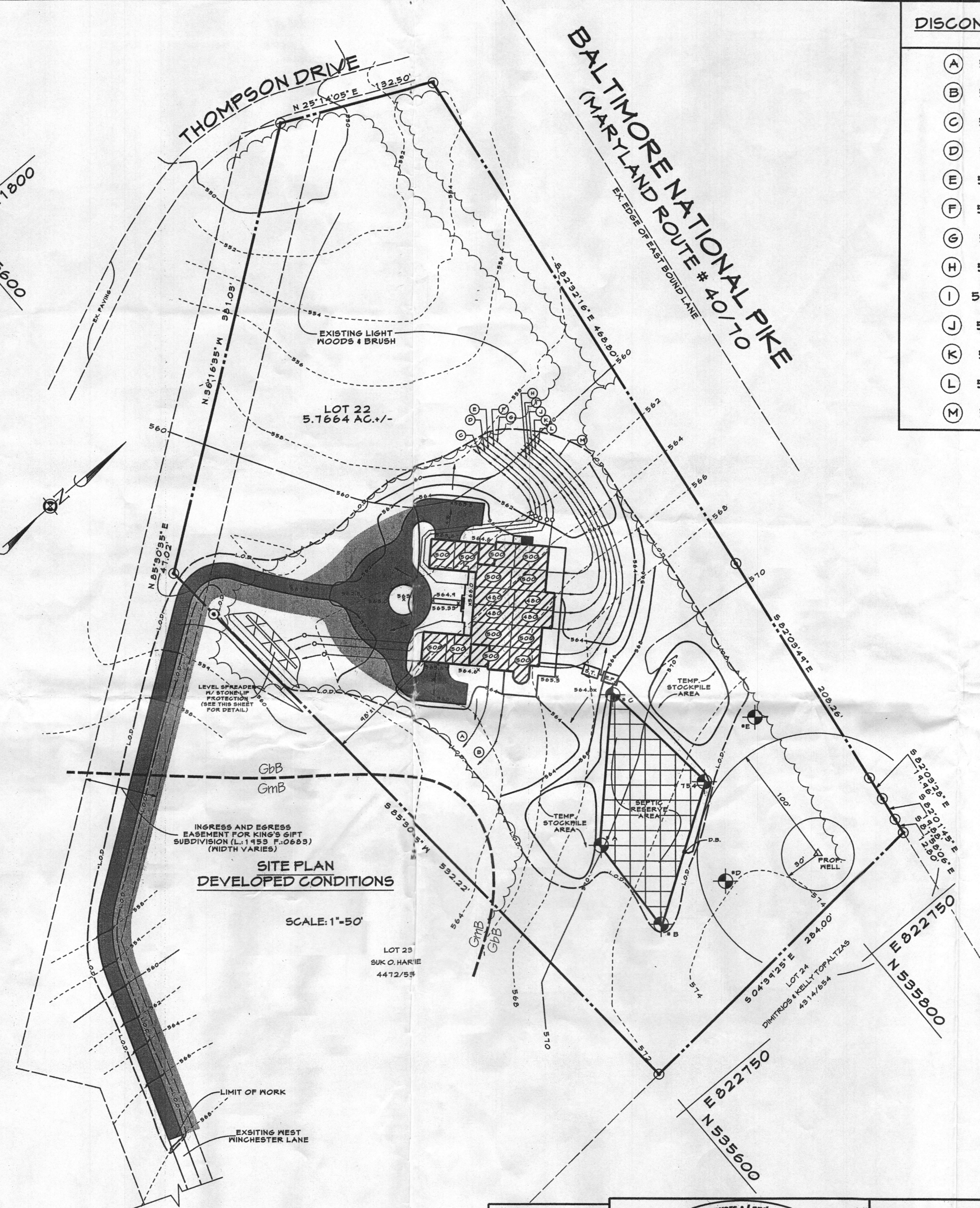
- LEGEND**
- NON-ROOFTOP IMPERVIOUS
 - EQUAL AREA NON-ROOFTOP IMPERVIOUS DISCONNECT (5% OR LESS)
 - ROOFTOP IMPERVIOUS
 - EXISTING GROUND
 - ROOF LEADERS
 - ROOFTOP IMPERVIOUS DISCONNECT PATHS
 - AREA TO ROOF LEADERS
 - LIMIT OF DISTURBANCE (L.O.D.)
 - SEPTIC AREA
 - FOREST BUFFER EASEMENT LINE

DISCONNECT FLOW PATH CHART

(A)	564.5 - 562.0 / 80' = 3.1%
(B)	564.0 - 562.0 / 80' = 2.5%
(C)	561.0 - 558.0 / 75' = 4.0%
(D)	561.0 - 558.0 / 80' = 3.8%
(E)	561.0 - 558.0 / 85' = 3.5%
(F)	561.0 - 558.0 / 90' = 3.3%
(G)	561.0 - 558.0 / 95' = 3.2%
(H)	563.0 - 559.0 / 140' = 2.9%
(I)	564.0 - 559.0 / 170' = 2.9%
(J)	564.2 - 559.0 / 220' = 2.7%
(K)	564.5 - 559.0 / 245' = 2.5%
(L)	564.7 - 559.0 / 245' = 2.3%
(M)	564.8 - 559.0 / 260' = 2.2%



- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT.
 - INSTALL SEDIMENT CONTROLS AS SHOWN ON PLAN. (1 DAY)
 - PERFORM NECESSARY GRADING AND STABILIZE THE SITE. BUILD HOUSE (6 MOS.)
 - AFTER THE SITE IS STABILIZED AND PERMISSION IS GRANTED FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE ANY REMAINING DISTURBED AREAS. (2 DAYS)



STORM WATER MANAGEMENT ANALYSIS

TOTAL LOT AREA = 5.76 AC.

PROPOSED ON SITE IMPERVIOUS AREA = 0.54 AC.
 0.54 / 5.76 LOT AREA = 9.40% OF LOT

PER 2000 MD. SWM DESIGN MANUAL UNDER CHAPTER FIVE (5) SECTION SIX (6) 5.6 -

ENVIRONMENTALLY SENSITIVE DEVELOPMENT CREDIT FOR SINGLE LOT DEVELOPMENT THE FOLLOWING CRITERIA IS MEET

- TOTAL SITE IMPERVIOUS < 15%
- LOT SIZE > (2) TWO ACRES
- ROOFTOP RUNOFF IS DISCONNECTED
- CURB AND GUTTER IS NOT USED

DUE TO ABOVE THIS SITE MEETS ALL APPLICABLE SWM / WQ REQUIREMENTS

CAD Drawing File Name: G:/88/88254/DGN/PLOTPLAN/SHT/LOT22.DGN

		PREVIOUS HOWARD COUNTY FILES	SITE DEVELOPMENT PLAN SINGLE FAMILY RESIDENTIAL KINGS GIFT LOT 22 STORMWATER MANAGEMENT PLAN & DETAILS
		WATER CONTRACT NO. 44-3479	
Date: JUNE 2007 Drawing No.: 88254D County File No.:	Surveyed By: CLSI Computed By:	OWNER/DEVELOPER KASHIF KHAN 14608 AYLESFORD CIRCLE LAUREL, MD. 20707	TAX MAP: 16 . BLOCK: 08 . PARCEL: 339 3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"=50' DATE: MAY 2007 SHEET: 3 / 3

County File No. 5DP--

Standard Sediment Control Notes

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (9-13-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 5.1), sod (Sec. 5.4), temporary seeding (Sec. 5.0) and mulching (Sec. 5.2). Temporary stabilization with mulch alone can only be done 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.
- Site Analysis:
Total Area of Site- 5.7644 Acres
Area Disturbed- 2.57 Acres/ 112,105 S.F.
Area to be roofed or paved- 0.5416 Acres/ 23,590 S.F.
Area to be vegetatively stabilized- 2.03 Acres/ 88,559 S.F.
Total Cut- 750 Cu Yds.
Total Fill- 750 Cu Yds.
Offsite waste/borrow area location- NONE
- Any sediment control practice, which is disturbed by grading activity for placement of utilities, must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized by the end of each workday, whichever is shorter.

STANDARDS AND SPECIFICATIONS FOR TOPSOIL CONSTRUCTION AND MATERIAL SPECIFICATIONS

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4"-8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4"-8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil.
 - preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
 - Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

SEPTIC SYSTEM NOTES

- SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT NO.
- PROPOSED 2000 GALLON SEPTIC TANK (FOR 5 BEDROOM HOUSE)
- A. FIRST FLOOR ELEVATION: 568.67
- B. BASEMENT ELEVATION: 557.67
- C. INVERT OF SEPTIC SYSTEM AT HOUSE: 563.5
- D. INVERT IN AT SEPTIC TANK: 562.5
- E. INVERT OUT AT SEPTIC TANK: 562.5
- F. PROPOSED GRADE OVER SEPTIC TANK: 564.5
- G. INVERT AT DISTRIBUTION BOX: 570.3
- H. EXISTING GROUND OVER DISTRIBUTION BOX: 572.3
- LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
- CONTRACTOR / BUILDER TO VERIFY ELEVATIONS IN FIELD BEFORE BEGINNING ANY CONSTRUCTION.

NOTE: BUILDER TO VERIFY AVAILABILITY OF BASEMENT SEWER SERVICE PRIOR TO DWELLING STAKEOUT.

PUMP CHAMBER NOTES

- PUMP CHAMBER SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT NO.
- PROPOSED 2000-GALLON CHAMBER.
- INVERT AT PUMP CHAMBER 562.2
- INVERT OUT OF PUMP CHAMBER 561.4
- PROPOSED GRADE OVER PUMP CHAMBER 566.5

HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONGLIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING 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 (42 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) BEFORE SEEDING. HARRON OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (4 LBS./1000 SQ. FT.)
- ACCEPTABLE- APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (42 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARRON OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING- FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS./1000 SQ. FT.) OF KENTUCKY 3 1" TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. KENTUCKY 3 1" TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.5 LBS./1000 SQ.FT.) OF KEEFING LOVEGRASS, DURING THE PERIOD OF OCTOBER 16 THROUGH 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 3 1" TALL FESCUE AND MULCH WITH 2 TON/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 OR 2 1/2 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS ON SLOPES OF 8 FEET OR HIGHER, USE 3.48 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE- INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES

APPLY TO GRADED 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, DISKING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING IF NOT PREVIOUSLY LOOSENED.

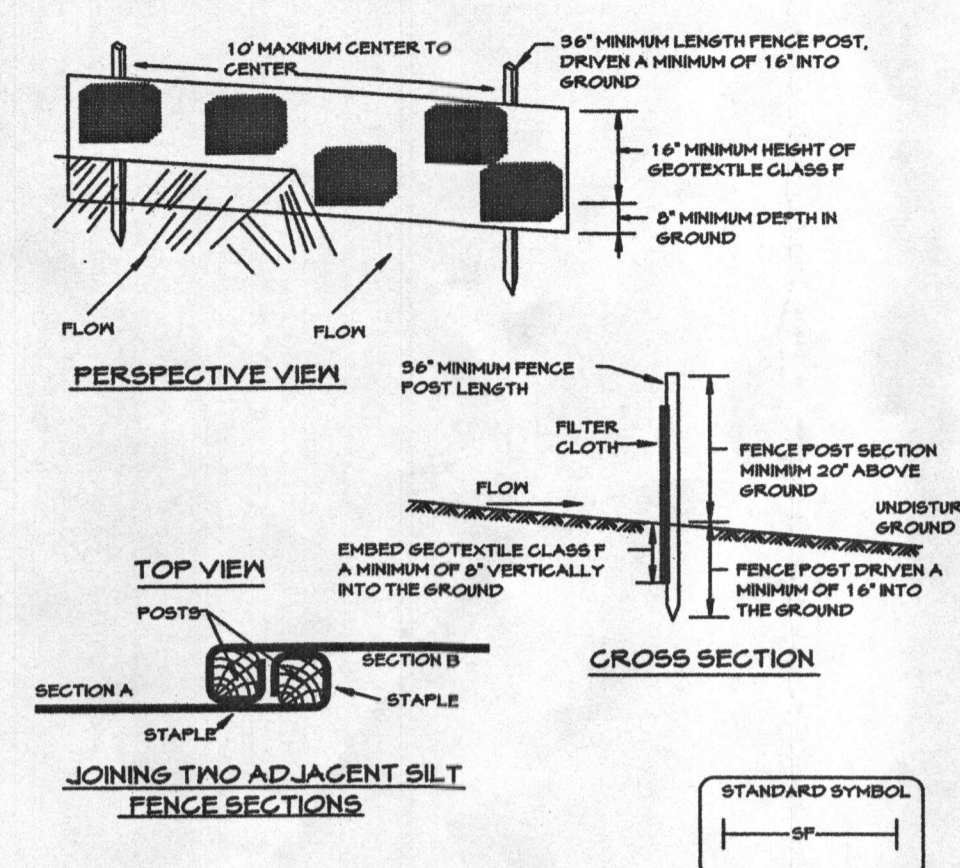
SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.) FOR THE PERIOD OF MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF KEEFING LOVEGRASS (0.7 LBS./1000 SQ.FT.) FOR THE PERIOD OF NOVEMBER 16 THROUGH NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED NEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 3.48 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

DETAIL 22 - SILT FENCE



Construction Specifications

- FENCE POSTS SHALL BE A MINIMUM OF 3/4" LONG DRIVEN 1/2" MINIMUM INTO THE GROUND. POSTS SHALL BE 1 1/2" X 1 1/2" SQUARE (MINIMUM) CUT, OR 1 1/2" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION HEIGHTS NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
- GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH NINE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS P:
TENSILE STRENGTH 50 LBS./IN (MIN) TEST HEIGHT 504
TENSILE MODULUS 20 LBS./IN (MIN) TEST HEIGHT 504
FLOW RATE 0.5 GAL/FT²/MINUTE (MAX) TEST HEIGHT 3.22
FILTERING EFFICIENCY 75% (MIN) TEST HEIGHT 3.22
- FREE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
- SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 5:1	unlimited	unlimited
5:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (BDDA GENERAL CLASSIFICATION SYSTEM SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.

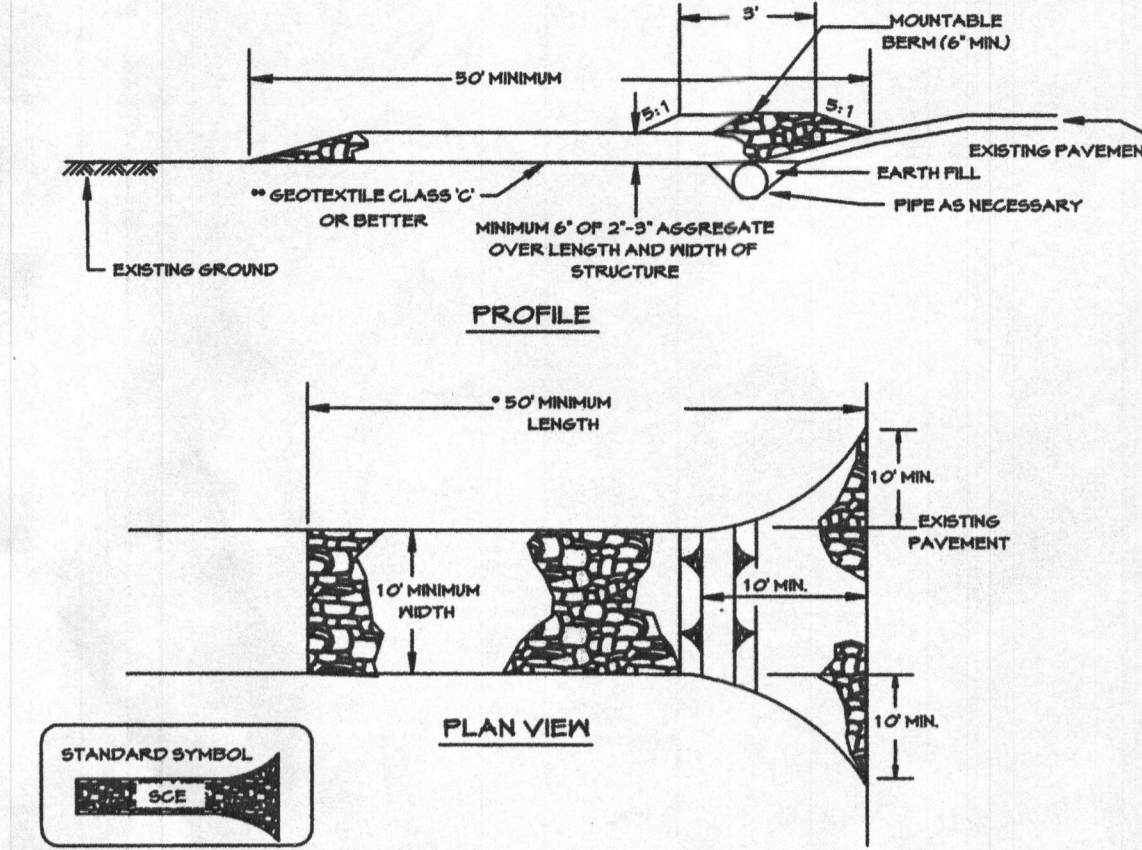
CONSTRUCTION SEQUENCE

- OBTAIN GRADING PERMIT. (1 DAY)
- INSTALL ALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN. (1 DAY)
- CONSTRUCT DWELLING. (90 DAYS)
- FINE GRADE LOT AND INSTALL DRIVEWAY. (1 DAY)
- INSTALL PERMANENT SEEDING AND MULCHING. (1 DAY)
- ONCE LOT IS PERMANENTLY STABILIZED AND PERMISSION IS GRANTED BY E & S INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES. (2 DAYS)

STOCKPILE / TOPSOIL NOTES

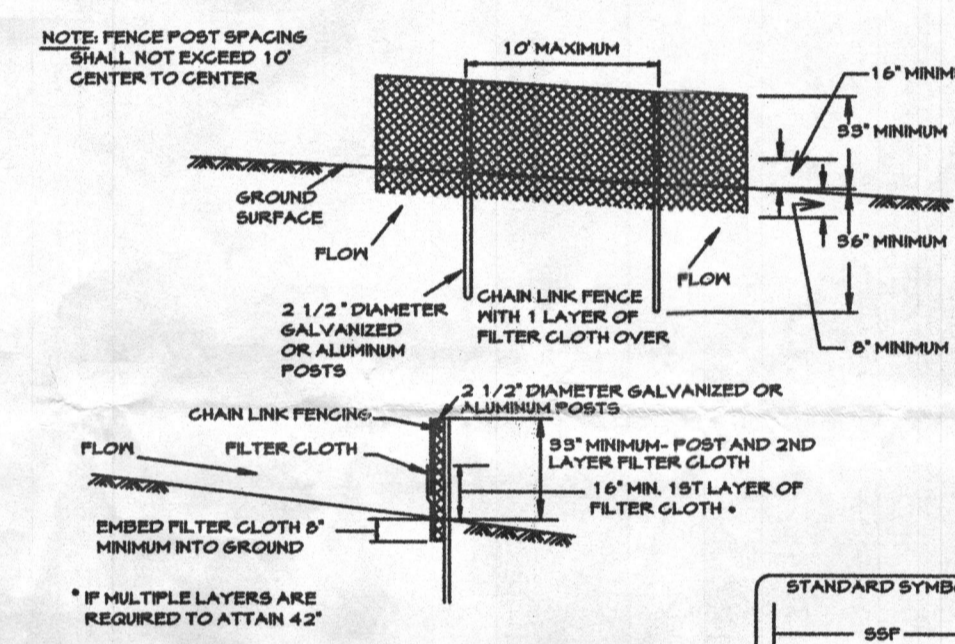
- STOCKPILING WILL NOT BE ALLOWED ON ANY IMPERVIOUS AREA.
- ALL STOCKPILES LEFT AT THE END OF THE DAY WILL NEED TO BE TEMPORARILY STABILIZED UNTIL THEY ARE AGAIN DISTURBED UNLESS THEY ARE WITHIN EXISTING PERIMETER SEDIMENT CONTROLS.
- ALL STOCKPILE AREAS SHALL BE CONTAINED WITHIN PERIMETER CONTROLS. IN THE EVENT THAT STOCKPILE AREAS MUST BE LOCATED OUTSIDE DISTURBED AREAS, THE LOCATION SHALL BE AS DIRECTED BY THE INSPECTOR IN THE FIELD.

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



- LENGTH - MINIMUM OF 50' (50' FOR SINGLE RESIDENCE LOT).
- DEPTH - 10" MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO FLAGGING STONE. "TYPE" PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
- STONE - CRUSHED AGGREGATE (3" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
- SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE FILTERED THROUGH THE ENTRANCE MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SGE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM SHALL BE REQUIRED.
- LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

DETAIL 23 - SUPER SILT FENCE



- NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER.
- CONSTRUCTION SPECIFICATIONS
- FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6" FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6" LENGTH POSTS.
- THE POLES DO NOT NEED TO SET IN CONCRETE.
 - CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH NINE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
 - FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
 - FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 6" INTO THE GROUND.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDUPS REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT.
 - FILTER CLOTH SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH NINE TIES OR STAPLES AT TOP AND MID SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS P:
TENSILE STRENGTH 50 LBS./IN (MIN) TEST HEIGHT 504
TENSILE MODULUS 20 LBS./IN (MIN) TEST HEIGHT 504
FLOW RATE 0.5 GAL/FT²/MINUTE (MAX) TEST HEIGHT 3.22
FILTERING EFFICIENCY 75% (MIN) TEST HEIGHT 3.22

DESIGN CRITERIA

SLOPE	SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM)	SILT FENCE LENGTH (MAXIMUM)
0 - 10%	0 - 1:1	UNLIMITED	UNLIMITED
10 - 20%	1:1 - 5:1	200 FEET	1,500 FEET
20 - 33%	5:1 - 8:1	100 FEET	1,000 FEET
33 - 50%	8:1 - 2:1	100 FEET	500 FEET
50% +	2:1 +	50 FEET	250 FEET

CAD Drawing File Name: G:\88\88254\DSN\PL01PLAN\SH2LOT22.DGN

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. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Alfred L. Hansard 6/14/07
ALFRED L. HANSARD 6/14/07
PROFESSIONAL ENGINEER REG. NO. 23446 DATE

DEVELOPERS CERTIFICATE
I 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERSONS ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.





Jim M. Jones 6/15/07
JIM M. JONES 6/15/07
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SCD

John R. Robertson 6/15/07
JOHN R. ROBERTSON 6/15/07
HOWARD SOIL CONSERVATION DISTRICT DATE

		PREVIOUS HOWARD COUNTY FILES	SITE DEVELOPMENT PLAN SINGLE FAMILY RESIDENTIAL KINGS GIFT LOT 22 SEDIMENT CONTROL NOTES & DETAILS
		WATER CONTRACT NO. 44-3471	
Date: JUNE 2007 Drawing No.: 88254D County File No.:	Surveyed By: CLSI Computed By:	OWNER/ DEVELOPER	KASHIF KHAN 14608 AYLESFORD CIRCLE LAUREL, MD. 20707
Frederick Office: 8445 Progress Drive, Suite 88 Frederick, MD 21701-4879 (301) 662-1799 FAX (301) 662-8004	Westminster Office: 433 East Main Street Westminster, MD 21157-5539 (410) 848-1790 FAX (410) 848-1791	TAx MAP: 16 , BLOCK: 08 , PARCEL: 339 3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DEED REFERENCE: 10676/306 SCALE: N/A DATE: MAY 2007 SHEET: 2 / 3

County File No. SDP--

- NOTES:
-  DESIGNATES APPROVED SEPTIC AREA
 Woods line
 Designates limit of disturbance
 Designates Proposed Silt Fench
 - Gravity sewer service is not provided.
A Pump is required.

SEPTIC SYSTEM DATA

INV. AT HOUSE

SEPTIC TANK #1

EX. GRADE
FIN. GRADE
INV. IN
INV. OUT

DISTRIBUTION BOX

EX. GRADE
FIN. GRADE
INV. IN
INV. OUT

PUMP PIT

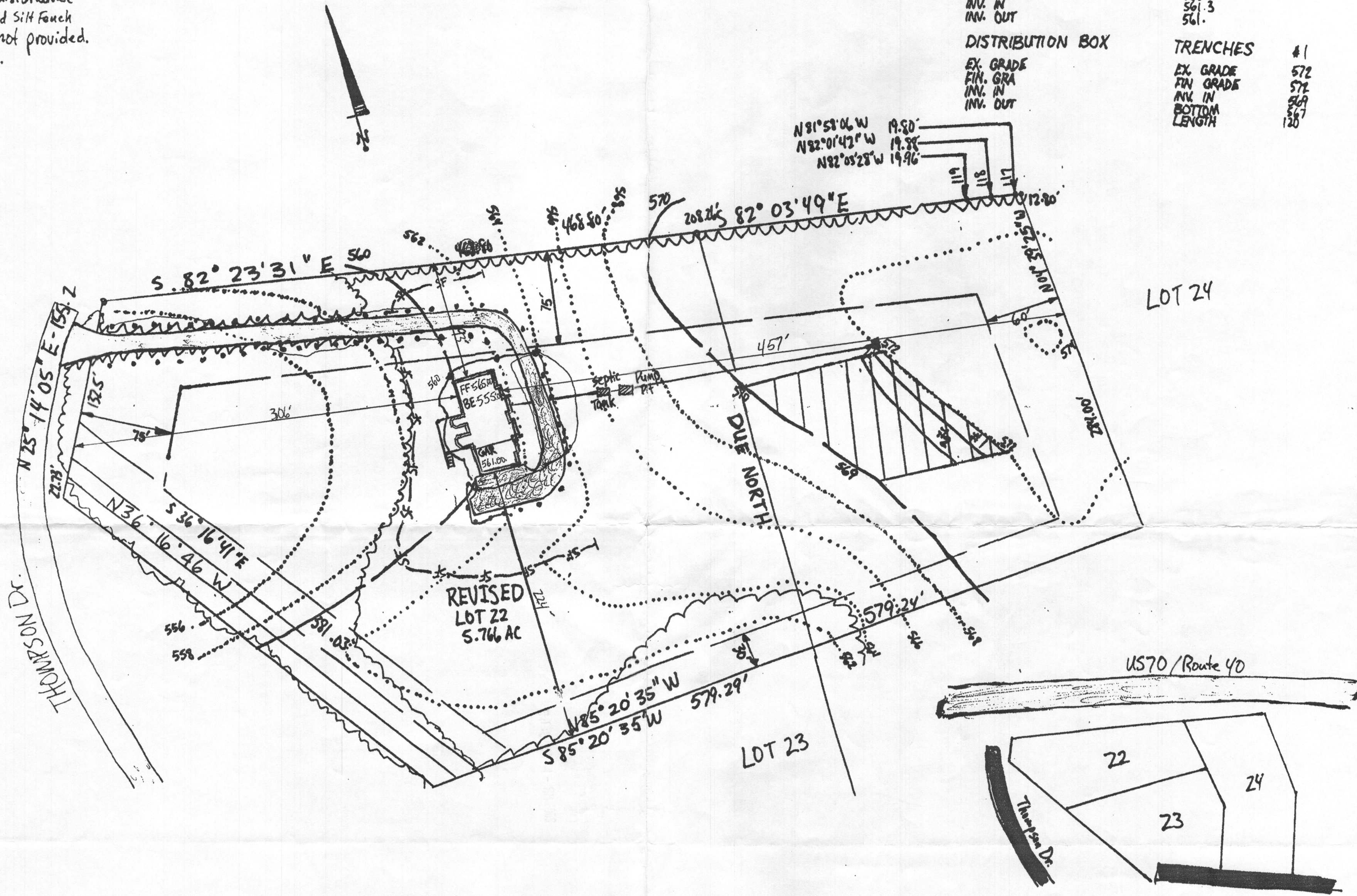
566
566
561.3
561.

TRENCHES

EX. GRADE
FIN. GRADE
INV. IN
BOTTOM
LENGTH

#1
572
572
569
567
130

#2
571.4
571.4
568.4
566.4
120'



PLOT/SITE PLAN
KINGS GIFT
LOT 22

3RD Election District, Howard County, MD
Scale: 1" = 60'
ADDRESS: 2415 Thompson Dr., Ellicott City, MD
21042