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3	7,824 751	1,154 75 1	८,८ 90 % ±	4,490 7F ±
4	8,472 98 2	1,604 752	ሪ,868 ንF±	ር,868 ንF±
		<u> </u>	,	

LAND5CAPE 5CHEDULE								
RIMAND	JOSMYE	BOTANICAL HAME	ЗМДИ ИОММОЗ	91ZE				
10	Ø	ACER RUBRUM' OCTOBER GLORY	OCTOBER GLORY MAPLE	Z ½" - 3"				

TCHEDULE 'A' - PERIMETER LANDTCAPE EDGE							
PERIMETER	1	3	3	4			
CATEGORY	ADJACCNT TO ROLDWAYS	ADJUCTAT TO PENHICIELA CHILANON	ADJACENT TO PERIMETER PROPERTIES	ADLICENT TO PERIMETER PROPERTIES			
LANDKAPE TYPE	, Y.	. 'A'	,Ψ,	,Υ,			
UNIELA PRET OF ROUTHLY FRANTISSE PERSHETEA	P-1 115 L.F.	P र आ प.	P-3 45 tf.	P-4 37C ሆ.			
CHEPT FOR CUSTING VEGETATION (YET, NO, LINEAR) DEXENSE BELON IT NULLED	NO	ሃ ሪ ን ዓ4 ሆ.	ю	140			
CREAT FOR NOLL, FERKE ON OUR M (YCZ, NO, LINEAR) DOCKNISE BELON OF INTEDED	ко	w	ИО	ИО			
HUNDER OF PLANT? REQUIRED THADE TREE? EVERGREEN TREE? THRES?	N/A You're front'y The road	225÷C0:4 4	95÷c0•1	ХС÷СО• 5ТКСЭ Б			
NUMBER OF PLANTS PROMOTO MAJOR TREES EXERCELY TREES OTHER TREES (2:1 MOST) MAJOS (10:1 MOST) DESCRIPE PLANT MUSTITUTION CREDITS BELON IF NEEDED	0	4	1	5			

PERIMETER 1: CREDIT FOR EXITTING TREES ON LOT 1.

TWO GOOGWOOD, ONE 15" MAPLE AND EXIPTING ROW OF HEYLOCK.

See note 13 for landscape surety

LEGEND

FILL FENCE

TUPER FILT FENCE

FIRTT FLOOR ELEVATION

BATEMENT ELEVATION

TREE PROTECTION FENCE

exitting tree like EXITING TINEET TREE

LIMIT OF DIFTURBLING

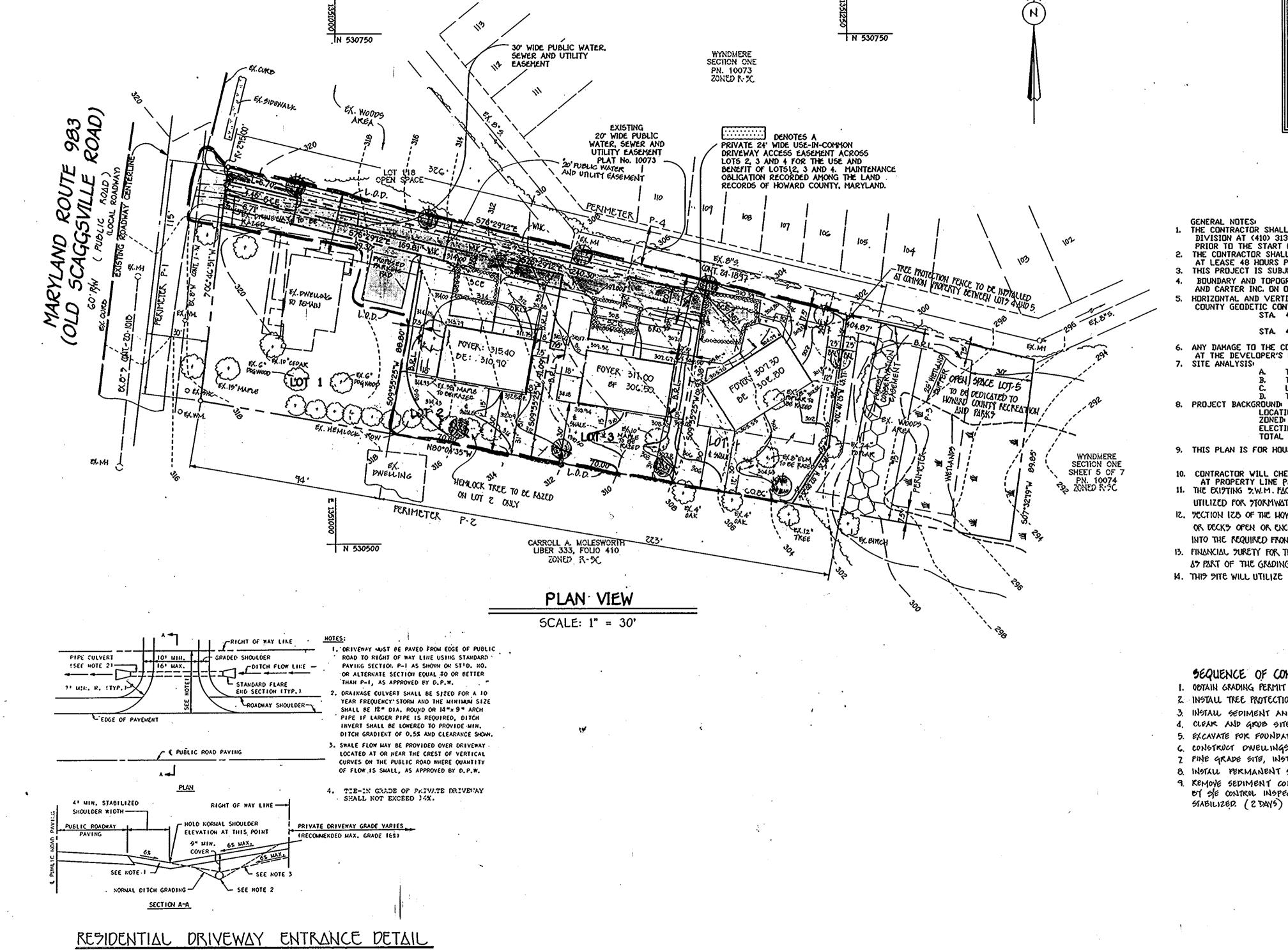
PROPOSED WALKOUT

—->f —->f-

-x-x-x-

JUNEAND S PROTING CONTOUR S. INTERVAL

PROPOSED CONTOUR 2. INTERVAL PROPOSED CONTOUR 10' INTURVAL



ENGINEER'S CERTIFICATE

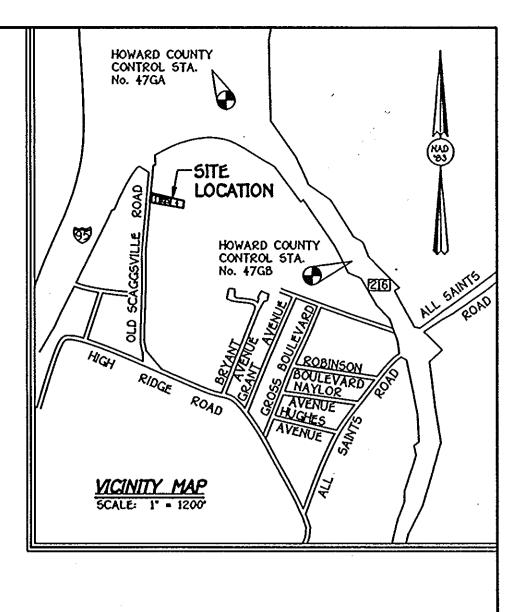
DEVELOPER'S CERTIFICATE

"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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site Aspection by the Howard Soil Conservation District."

1-8-97

signature of Engineer (Print name below signature)

"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."



THE CONTRACTOR SHALL NOTIFY THE THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEASE (5) FIVE WORKING DAYS

PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7777 AT LEASE 48 HOURS PRIOR TO ANY EXCAVATION WORK.

THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: LILLY PROPERTY II F97-72 BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY: FISHER COLLINS AND CARTER INC. ON OR ABOUT JULY , 1996

HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS

STA. 47GA N 162277.182 (FEET) E 411976.8443 (FEET) STA. 47GB N 161519.0889 (FEET)

E 412555.7648 (FEET) 6. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

THIS PROJECT IS ZONED R-5C TOTAL AREA OF BUILDING LOT: 0.54 AC.:

LIMIT OF SUBMISSION AREA 0.54 AC. TOTAL NUMBER OF BUILDABLE LOTS 3 LOCATION: TAX MAP 47 PARCEL: 153

ELECTION DISTRICT: SIXTH TOTAL TRACT AREA: 1.0Z AC.

9. THIS PLAN IS FOR HOUSE SITING, LOT GRADING AND LANDSCAPING ONLY.

10. CONTRACTOR WILL CHECK SEVER HOUSE CONNECTION ELEVATION AT PROPERTY LINE PRIOR TO CONSTRUCTION. THE EXIPTING 7.W.M. FACILITY ON WYNDEMERE SECTION ONE F 90-41 SHALL BE

UTILIZED FOR TORMYLLTER MANAGEMENT FOR THIS SITE. SECTION IZB OF THE HOWARD COUNTY ZONING REGULATIONS SCLOWS PORCHES

OR DECKY OPEN OR EXCLOSED NOT TO PROJECT MORE THAN (10") TEN FEET

INTO THE REQUIRED FRONT OR REAR YARD BUILDING REFTRICTION LINES. 13. FINANCIAL PURETY FOR THE REQUIRED II LANDYCAPE TREES MUST BE POSTED

AT PART OF THE GRADING PERMIT IN THE AMOUNT OF \$1100.00.

4. THIS SITE WILL UTILIZE PUBLIC WATER AND SEWER, CONTRACTS I'W AND 24-1897.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT

LOT NO.

Z THRU 4

6069.03

SECTION/AREA

SIXTH

BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR.

7172000

SEWER CODE

REV. HSE. LOC : GROS : Driveways

APPROVED: DEPARTMENT OF PLANNING AND ZONING

ector Department of Planning and Zoning

REVISION

Chief, Division of Land Development SAS

LILLY PROPERTY II

R5C

SUBDIVISION

WATER CODE

DESCRIPTION

NO. DATE

OWNER AND DEVELOPER

EARL - LEE ENTERPRISES, LLC BY: MR FLOYD LILLY

304 MONTGOMERY STREET LAUREL, MARYLAND 20707

Z. INSTAUL TREE PROTECTION FENCE (2 DAYS)

3. INSTALL SEDIMENT AND EROSION CONTROL DEVICES PER PLAN. (37245)

4. CLEAR AND GRUB SITE. (7 DAYS)

5. EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE. (4 DAYS)

C. CONSTRUCT OWELLINGS. (90 DAYS)

7. FINE GRADE SITE, INSTAU DRIVEWAYS. (3 DAYS)

8. INSTAU PERMANENT SEEDING (2 DAYS) 9. KEMOVE SEDIMENT CONTROL DEVICES AS PERMISSION IS GRANTED by se control inspector and upland areas have been

SHEET INDEX

THEET NO. DESCRIPTION WIV HAJY STOT TESTIR

PHEET OUR 23TON S TOS TOTALLS

GENERIC

SITE DEVELOPMENT PLAN AND LANDSCAPE PLAN

LILLY PROPERTY II

LOTS 2 THRU 4 ZONED: RSC

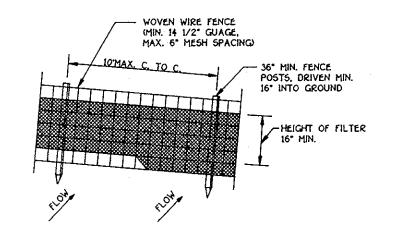
TAX MAP No: 47 PARCEL: 153 GRID 19 6TH ELECTION DISTRICT, HOWARD COUNTY. MARYLAND SCALE: AS SHOWN DATE: DECEMBER 16, 1996

SHEET 1 OF 2

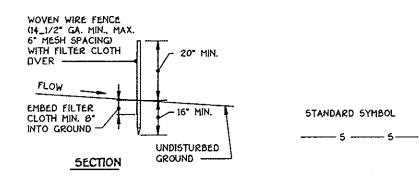
WO# 30565

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

70P 97 - 68



PERSPECTIVE VIEW



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OF STAPLES.
- POSTS: STEEL EITHER T OR U

FENCE: WOVEN WIRE, 14. GA.

6" MAX. MESH OPENING

100X, STABILINKA TI4 OF

ENVIROFENCE, OR APPROVED

PLAN

OR APPROVED EQUAL

FILTER CLOTH: FILTER X, MIRAFI

PREFABRICATED UNIT: GEOFAB,

EQUAL.

- 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY
- 24° AT TOP AND MID SECTION 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN
- SIX INCHES AND FOLDED. 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED
- AND MATERIAL REMOVED WHEN "BULGES" DEVELOP
- EACH OTHER THEY SHALL BE OVERLAPPED BY
- IN THE SILT FENCE.
 - SILT FENCE

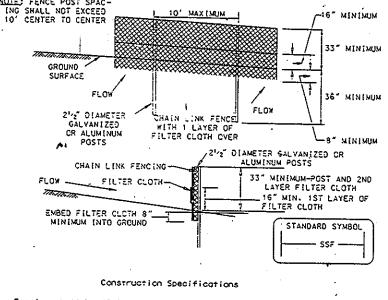
PROFILE

NOT TO SCALE

- **EXISTING** PAVEMENT EARTH -filter MOUNTABLE BERM CLOTH (OPTIONAL) PROFILE EXISTING GROUND EXISTING PAVEMENT CONSTRUCTION SPECIFICATIONS
- 1. STONE SIZE USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. 2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE
- LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY). 3. THICKNESS - NOT LESS THE SIX (6) INCHES.
- 4. WIDTH TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT
- POINTS WHERE INGRESS OR EGRESS OCCURS. 5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE
- FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT. 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL.
- A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED. 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND YOR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL
- SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. 8. WASHING - WHEELS 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 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

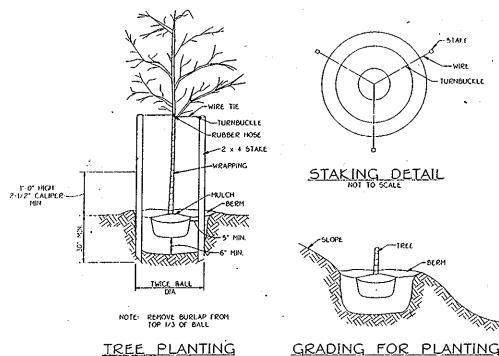
STABILIZED CONSTRUCTION ENTRANCE - 2

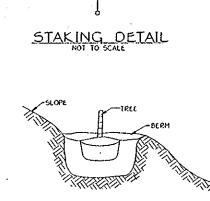
NOT TO SCALE



Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used. substituting 42 inch febric and 6 foot length posts.

- 1. The poles do not need to set in concrete. 2. Chain link fence snall be fastened securely to the fence
- posts with wire ties or staples. 3. Filter cloth shall be fastened securely to the chain link
- 4. Filter cloth shall be embedded a minimum of of into the 5. When two sections of filter cloth adjoin each other, they
- shall be overlapped by 6" and folded. 6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence.





TREE PLANTING

TREE PLANTING DETAIL

NOT TO TOSUE

- 1) A MINIMUM OF 40 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). 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 MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

 3) 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 STEEPER THAN 3:1. b) 14 DAYS DIRES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, D) 14 DAYS
 AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

 4) 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.

 5) 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. 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. 5) 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 AREA DISTURBED AREA TO BE ROOFED OR PAVED ACRES AREA TO BE VEGETATIVELY STABILIZED 0.27
- CU.YDS. OFFSITE WASTE/BORROW AREA LOCATION --8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE
- 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY 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 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) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SEDIMENT CONTROL NOTES

1-8-97

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:

SEEDBED PREPARATION:

LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

- SOIL AMENDMENTS:

 APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER 4 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC. INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING APPLY 400 LBS. PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.
- FOR THE PRERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS/ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOYEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28. PROJECT SITE BY: OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OPTION (2) - USE 500; OPTION (3) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.
- MULCHING:

 APPLY 1 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.FT.)

 OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES. ON SLOPES & FEET OR HIGHER USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING
- MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS. * FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS/ACRE AS THE SEEDING REQUIRMENT. OPTIMUM SEEDING DATE FOR THIS

PERMANENT 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, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY
- APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./
- FOR THE PERIODS MARCH I THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE OF WEEPING LOVEGRASS (.07 LBS./ 1,000 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
- MULCHING: APPLY 17 TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALL,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES & FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR
- REFER TO THE 1900 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT

TEMPORARY SEEDING NOTES

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

PURPOSE

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Oup to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plant will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

- SECTION 1 VEGETATIVE STABILIZATION METHODS AND MATERIALS 1. Install erosion and sediment control structures (either temporary of permanent) such as diversions, arade stabilization structures, berms, waterways, or sediment control basins. ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually
- necessary for temporary seeding.

 ili. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.

 B. Soil Amendments (Fertilizer and Lime Specifications)

 i. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the
 - University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses. ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee
- iii. Lime materials shall be ground limestone thydrated or burnt lime may be substituted which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a *100 mesh sieve and 90-100% will pass through a *20 mesh sieve. Incorporate time and fertilizer into the top 3-5" of soil by disking or other suitable means.
- Seedbed Preparation
 i. Temporary Seeding Seedbed preparation shall consist of loosening soil to a depth of 3° to 5° by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- running parallel to the confour of the slope.

 b. Apply fertilizer and lime as prescribed on the plans.
 c. In corporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

 ii. Permanent Seeding
 a. Minimum soil conditions required for permanent vegetative establishment:
 1. Soil ph shall be between 6.0 and 7.0.
 2. Soluble salts shall be less than 500 parts per million (ppm).
 3. The soil shall contain less than 40% clay, but enough fine grained material 030% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is it beyencess or
- moderate amount of moisture. An exception is if lovegrass or serecia lespedezas is to be planted, then a sandy soil (30% sitt plus ctay) would be acceptable.
 Soil shall contain 1.5% minimum organic matter by weight. 50il shall contain 1.0x minimum organic matter by weight.
 50il must contain sufficient pore space to permit adequate root penetration.
 If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
 Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5° to permit bonding of
- Apply soil amendments as per soil test or as included on the plans.

 Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on

the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from

- D. Seed Specifications i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.

 Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
- ii. Inoculant The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° f. can weaken bacteria and make the inoculant less effective
- Methods of Seeding
 i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.
- or drop seeded, or a cultipacker seeder.

 a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen; maximum of 100 bs. per acre total of soluble nitrogen; P205 (phosphorous): 200 bs/ac; K20 (potassium): 200 bs/ac.

 b. Lime use only ground agricultural limestone, Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.

 c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and
- without interruption.

 ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

 a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the
- Jeed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.

 b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

 iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

 Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.

 b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Mulch Specifications (In order of preference) Straw shall consist of thoroughly threshed wheat, ree or oat straw, reasonable bright in color, and shall not be musty, moldy, caked decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- Wood Cellulose Fiber Mulch (WCFM)

 a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- MCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread shurry. WCFM, including dye, shall contain no germination or growth inhibiting factors. WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous sturry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed
- in contact with the soil without inhibiting the growth of the grass seedlings. WCFM material shall contain no elements or compounds at concentration levels that will be phytol-toxic.
- will be phytol-toxic.

 f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.

 Note: Only sterile straw mulch should be used in areas where one species of grass is desired. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately after seeding.

 i. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
- accordance with these specifications.
- ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1° and 2°. Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

 Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
- i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safety. If used on sloping land, this practice should be used on the comfour if possible.

 ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- of water.

 iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.

 iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

ENGINEER'S CERTIFICATE

certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer (Print name below signature) DEVELOPER'S CERTIFICATE

gnature of Developer (Print name below signature)

'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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site Anspection by the Howard Soil Conservation District." MONNA L. Silly

OWNER AND DEVELOPER EARL - LEE ENTERPRISES, LLC BY: MR FLOYD LILLY 304 MONTGOMERY STREET LAUREL, MARYLAND 20707

APPROVED: DEPARTMENT OF PLANNING AND ZONING 9/12/97 Hamilla 9/3/77 SECTION/AREA LOT NO. SUBDIVISION LILLY PROPERTY II 1 THRU 4 PLAT NO. | BLOCK NO. | ZONE | TAX/ZONE | ELEC. DIST. | CENSUS TR. 12890 6069.03 SIXTH R5C 19 WATER CODE SEWER CODE E19 7172000

NOTES AND DETAILS

LILLY PROPERTY II

LOTS 2 THRU 4 ZONED: RSC

TAX MAP No: 47 PARCEL: 153 GRID 19 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: DECEMBER 16, 1996

SHEET 2 OF 2

WO# 30565

FISHER, COLLINS & CARTER, INC.

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