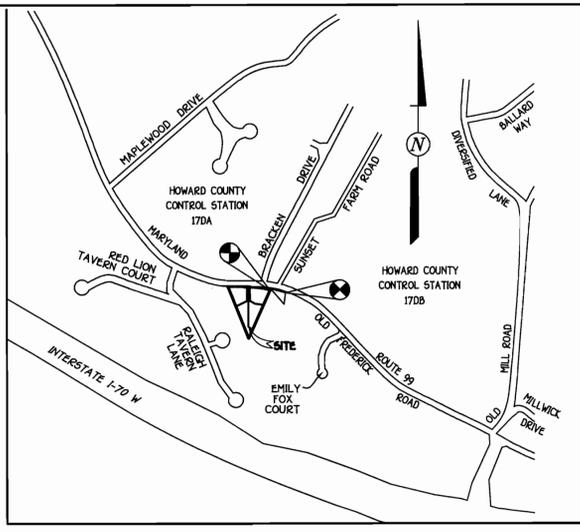
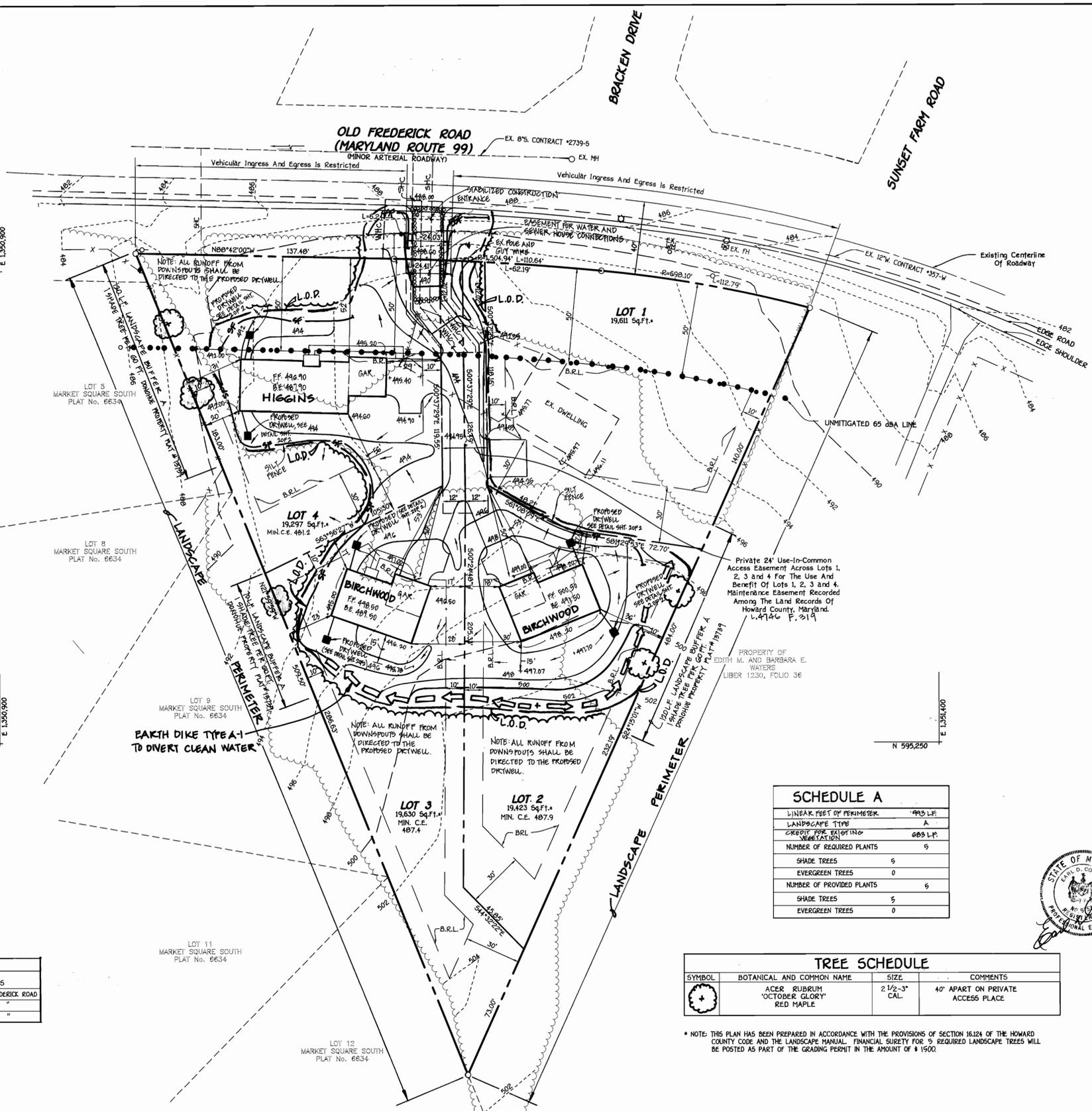




N 595,500  
E 1,350,900  
N 595,250  
E 1,351,400



VICINITY MAP  
SCALE: 1"=1200'

- GENERAL NOTES:
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1860 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
  - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
  - THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: F 99-95.
  - BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY: FISHER COLLINS AND CARTER INC. ON OR ABOUT AUGUST, 1999.
  - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:  
HOWARD COUNTY MONUMENT 170A N 180481.5805 (METERS)  
E 411981.0454 (METERS)  
HOWARD COUNTY MONUMENT 170B N 181212.9710 (METERS)  
E 412310.6899 (METERS)
  - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
  - THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY.
  - CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT RIGHT-OF-WAY LINE PRIOR TO CONSTRUCTION.
  - SITE ANALYSIS DATA:  
A. TOTAL PROJECT AREA: 1.34 AC.  
B. AREA OF PLAN SUBMISSION: 1.34 AC.  
C. LIMIT OF DISTURBED AREA: 1.06 AC.  
D. PRESENT ZONING: R-20  
E. PROPOSED USE FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED D.U.
  - A WAIVER TO THE DESIGN MANUAL AND FEE-IN-LIEU OF PROVIDING STORMWATER MANAGEMENT WAS APPROVED ON 1/27/99 UNDER F-99-95.
  - FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION HAVE BEEN MET BY PAYMENT OF \$4810.00 UNDER F-99-95, as a fee-in-lieu.
  - A FEE-IN-LIEU OF OPEN SPACE HAS BEEN PROVIDED IN THE AMOUNT OF \$4500.00 UNDER F-99-95.
  - NO WETLANDS EXIST ON SITE PER F99-95.

MINIMUM LOT SIZE CHART

| LOT No. | GROSS AREA    | PIPESTEM AREA | REMAINING AREA | MINIMUM LOT SIZE |
|---------|---------------|---------------|----------------|------------------|
| 2       | 19,423 Sq.Ft. | 1,429 Sq.Ft.  | 18,000 Sq.Ft.  | 18,000 Sq.Ft.    |
| 3       | 19,630 Sq.Ft. | 1,431 Sq.Ft.  | 18,199 Sq.Ft.  | 18,199 Sq.Ft.    |

LEGEND

| Symbol       | Description                   |
|--------------|-------------------------------|
| --- (dashed) | Existing Contour 2' Interval  |
| --- (dashed) | Existing Contour 10' Interval |
| --- (dashed) | Proposed Contour 2' Interval  |
| --- (dashed) | Proposed Contour 10' Interval |
| + 624        | Spot Elevation                |
| -SF-SF-      | Silt Fence                    |
| FF           | First Floor Elevation         |
| BE           | Basement Elevation            |
| ⊙            | Proposed Walkout              |
| —X—X—        | Earth Dike                    |
| —X—X—        | Tree Protection               |
| —X—X—        | Existing Tree Line            |
| L.O.D.       | Limit Of Disturbance          |
| ⊕            | Existing Street Tree          |
| —SF—         | Super Silt Fence              |

LOT INFORMATION

| LOT NUMBER | STREET ADDRESS                          |
|------------|---|
| 2          | 10121 MD. ROUTE 99 - OLD FREDERICK ROAD |
| 3          | 10125 " " "                             |
| 4          | 10124 " " "                             |

SCHEDULE A

|                                |        |
|--------------------------------|--------|
| LINEAR FEET OF PERIMETER       | 993 LF |
| LANDSCAPE TYPE                 | A      |
| CREDIT FOR EXISTING VEGETATION | 683 LF |
| NUMBER OF REQUIRED PLANTS      | 9      |
| SHADE TREES                    | 5      |
| EVERGREEN TREES                | 0      |
| NUMBER OF PROVIDED PLANTS      | 9      |
| SHADE TREES                    | 5      |
| EVERGREEN TREES                | 0      |

TREE SCHEDULE

| SYMBOL | BOTANICAL AND COMMON NAME                   | SIZE              | COMMENTS                          |
|--------|---|-------------------|-----------------------------------|
| ⊕      | ACER RUBRUM<br>"OCTOBER GLORY"<br>RED MAPLE | 2 1/2"-3"<br>CAL. | 40' APART ON PRIVATE ACCESS PLACE |

\* NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR 9 REQUIRED LANDSCAPE TREES WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$ 1500.



REVISIONS

| DATE | DESCRIPTION |
|------|-------------|
|      |             |
|      |             |

SHEET INDEX

| Sheet No. | Description           |
|-----------|-----------------------|
| 1         | Site Development Plan |
| 2         | Detail Sheet          |

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21042  
410.461.2900

ENGINEER'S CERTIFICATE  
"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."  
Signature of Engineer (Print name below signature) Earl D. Collins Date 10-11-99  
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 inspection by the Howard Soil Conservation District."  
Signature of Developer (Print name below signature) Christopher L. Brown Date 1/13/00

Reviewed for HOWARD SCD and meets Technical Requirements.  
Chris Simmons 1/19/00 Date  
USDA-Natural Resources Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
John R. Roberts 1/19/00 Date  
Howard SCD

OWNER/DEVELOPER  
HARMONY BUILDERS  
4228 COLUMBIA ROAD  
ELLCOTT CITY, MD. 21042

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Val Shewmaker for 1/24/00 Date  
Chief, Division of Land Development  
John Simmons 1/24/00 Date  
Chief, Development Engineering Division  
John R. Roberts 1/25/00 Date  
Director, Department of Planning and Zoning

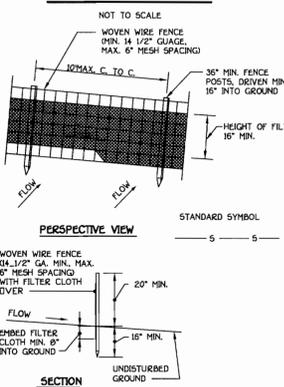
PROJECT: DONOHUE PROPERTY SECTION/AREA: LOT NO. 2, 3 AND 4

| PLAT  | BLOCK NO. | ZONE | TAX/ZONE | ELEC. DIST. | CENSUS TR. |
|-------|-----------|------|----------|-------------|------------|
| 13739 | 7         | R-20 | 17       | 2ND         | 6021       |

WATER CODE: SEWER CODE:

SITE DEVELOPMENT PLAN  
DONOHUE PROPERTY  
LOTS 2, 3 AND 4  
ZONED: R-20  
TAX MAP No: 17 PARCEL: 51 GRID: 7  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1"=30' DATE: SEPTEMBER, 1999  
SHEET 1 OF 2

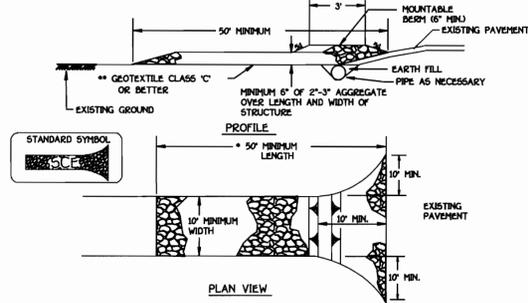
### SILT FENCE



**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

- Woven wire fence to be fastened securely to fence posts with wire ties of staples.
- Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
- When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
- Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

### STABILIZED CONSTRUCTION ENTRANCE



**Construction Specifications**

- Length - minimum of 50' (30' for single residence lot).
- Width - 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 placing stone. The plan approval authority may not require single family residences to use geotextile fabric.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equipment 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 piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable beam with 54 gages and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the S.C.E. 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 will 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.

### SEDIMENT CONTROL NOTES

- A minimum of 60 hours notice must be given to the HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (GS-8955).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-INSTALLATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS FOR ALL PERMITTED CONSTRUCTION STRUCTURES, DICES, PERMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1 BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEEDING/TRANSPLANTING MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1 CHAPTER 22 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 (GS-500), TEMPORARY SEEDING (GS-501), AND MULCHING (GS-502). 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 PERSSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7) SITE ANALYSIS:
  - TOTAL AREA OF SITE: 1.94 ACRES
  - AREA TO BE ROOFED OR PAVED: 1.06 ACRES
  - AREA TO BE VEGETATIVELY STABILIZED: 0.88 ACRES
  - TOTAL CULDS: 1900 CULDS
  - TOTAL FILL: 1900 CULDS
  - OFFSITE WASTE/BORROW AREA LOCATION: CULDS
- ANY SEDIMENT CONTROL PRACTICES WHICH IS DISTURBED BY CONSTRUCTION ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE DATE OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS 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 REQUIRED UPON COMPLETION OF INSTALLATION OF PERMETER SLOPES AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION CHECKS SHALL NOT BE AUTOMATICALLY CANCELLED UNTIL THE INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TECHNIQUES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

### PERMANENT SEEDING NOTES

- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
- SEEDING PREPARATION:**  
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS:**  
APPLY 100 LBS PER ACRE DELONIC LIMESTONE (92 LB/LBS/1000 SQFT) AND 600 LBS PER ACRE 0-20-20 FERTILIZER (OR 100 LBS/1000 SQFT) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 0-20-20 UREAFORM FERTILIZER (9 LBS/1000 SQFT) AND 500 LBS PER ACRE 0.15 LBS/1000 SQFT OF 10-20-20 FERTILIZER.
- SEEDING:**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 100 LBS PER ACRE (2.5 LBS/1000 SQFT) OF KENTUCKY 31 TALL FESCUE FOR PERIOD MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15. SEED WITH 60 LBS/ACRE (1.5 LBS/1000 SQFT) OF KENTUCKY 31 TALL FESCUE AND 2 LBS PER ACRE (0.02 LBS/1000 SQFT) OF WEEPING LOVEGRASS DURING THE PERIOD OF SEEDING IS THROUGH FEBRUARY 28 THROUGH APRIL 30. (2) TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OPTION (2) - USE 500 LBS OPTION (3) SEED WITH 100 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDING.
- MULCHING:**  
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQFT) OF UNIFORM SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 200 GALLONS PER ACRE (9 GALLON/SQFT) OF EMULSIFIED ASPHALT ON FLAT AREAS ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (9 GALLON/SQFT) FOR ANCHORING.
- MAINTENANCE:**  
INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
- \* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNCRACK AT 15 LBS/ACRE PER ACRE (0.15 LBS/1000 SQFT) OF CHEMUNG CROWNCRACK AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

### TEMPORARY SEEDING NOTES

- APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
- SEEDING PREPARATION:**  
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS:**  
APPLY 500 LBS PER ACRE 10-10-10 FERTILIZER (4 LBS/1000 SQFT).
- SEEDING:**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 1 BUSHES PER ACRE OF ANNUAL RYE (3.2 LBS/ACRE) OF WEEPING LOVEGRASS (0.7 LBS/1000 SQFT). FOR THE PERIOD NOVEMBER 15 THROUGH FEBRUARY 28, PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS/ACRE (1.5 LBS/1000 SQFT) OF KENTUCKY 31 TALL FESCUE AND 2 LBS PER ACRE (0.02 LBS/1000 SQFT) OF WEEPING LOVEGRASS DURING THE PERIOD OF SEEDING IS THROUGH FEBRUARY 28 THROUGH APRIL 30. (2) TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OPTION (2) - USE 500 LBS OPTION (3) SEED WITH 100 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDING.
- MULCHING:**  
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQFT) OF UNIFORM SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 200 GALLONS PER ACRE (9 GALLON/SQFT) OF EMULSIFIED ASPHALT ON FLAT AREAS ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (9 GALLON/SQFT) FOR ANCHORING.
- REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

### STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

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

DEFINITION  
Vegetative stabilization practices 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 runoff to downstream areas.

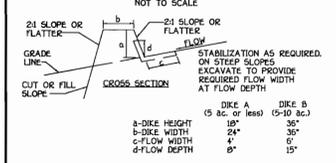
CONDITIONS WHERE PRACTICE APPLIES  
This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary soil stockpiles, cleared areas, and areas where erosion control devices have been left in place between construction phases, etc. and for Permanent Seeding are stream, dam, cut and fill slopes and other areas at final grade, former stockpiles and staging areas, etc.

PURPOSE  
The purpose of this specification is to establish minimum standards for the use of vegetation to stabilize exposed soil, reduce sediment loads, and improve the water holding capacity of the soil and subsequent runoff. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

SEEDING CONTROL DEVICES  
Sediment control devices must be installed and maintained in place during seeding and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

- SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS**
- Site Preparation
    - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization berms, waterways, or sediment control basins.
    - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
    - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
  - Soil Amendment (Fertilizer and Lime Specifications)
    - 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 analysis.
    - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer may be substituted for fertilizer with prior approval from the appropriate authority. Fertilizers shall be delivered to the site in bags or bulk according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
    - Lime materials shall be ground limestone (hydrated or burnt lime) which contains at least 50% total oxide calcium oxide plus magnesium oxide. Limestone shall be ground to such fineness that at least 50% will pass through a 400 mesh sieve and 90-100% will pass through a 20 mesh sieve.

### EARTH DIKE



**CONSTRUCTION SPECIFICATIONS**

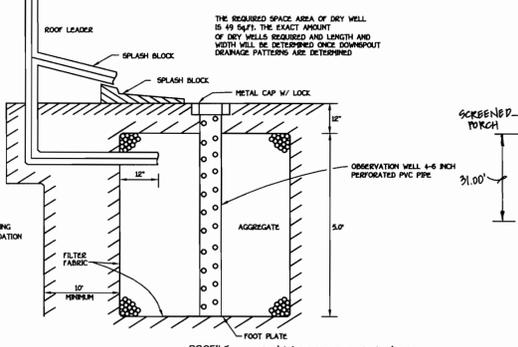
- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT BASIN WHERE EITHER THE DICE CHANNEL OR THE DRAINAGE AREA ABOVE THE DICE ARE NOT ADEQUATELY STABILIZED.
- STABILIZATION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON; OR FLOW CHANNEL AS PER THE CHART BELOW.

| TYPE OF DRAINAGE | CHANNEL WIDTH | DICE A                  | DICE B                                       |
|------------------|---------------|-------------------------|--|
| 1                | 5'-30"        | SEED AND STRAW MULCH    | SEED AND STRAW MULCH                         |
| 2                | 3'-15"        | SEED AND STRAW MULCH    | SEED INSIDE JUTE, OR EXCESSIVE 500. 2" STONE |
| 3                | 5'-30"        | SEED WITH JUTE, OR SOIL | LINED RIP-RAP 4"-8"                          |
| 4                | 8'-10"        | LINED RIP-RAP 4"-8"     | LINED RIP-RAP 4"-8"                          |

NOTE: USE IN-COMMON DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES FOR THIS FOLLOWING (MINIMUM) REQUIREMENTS:

- WIDTH - 12 FEET (FIRST SERVICES MORE THAN ONE RESIDENCES)
- SURFACE - SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TACK AND CHIP COATING (1 1/2" MIN);
- GRANITE - MAXIMUM 1 1/2" GRADE, MAXIMUM 10% GRADE CHANGE AND 48" FOOT TURNING RADIUS;
- STRUCTURES (CURBS/BERMS) - CAPABLE OF SUPPORTING 200 TONS (AS - LOADINGS);
- PERMANENT ELEMENTS - CAPABLE OF SUPPORTING 100 TONS FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER SURFACE;
- STRUCTURE CLEARANCES - MINIMUM 12 FEET;
- MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE, NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN WITHIN 10' OR STRAW BUFFERS, UNLESS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY, MARYLAND.

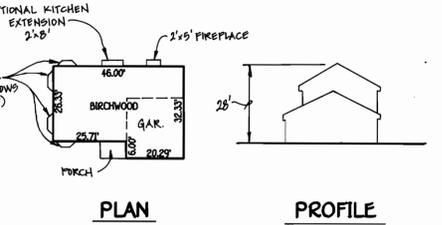
### TYPICAL DRY WELL CROSS SECTION INFILTRATION MANUAL



THE REQUIRED SPACE AREA OF DRY WELL IS 49 SQFT. THE EXACT AMOUNT OF DRY WELLS REQUIRED AND LENGTH AND WIDTH WILL BE DETERMINED ONCE DRAINAGE PATTERNS ARE DETERMINED.

NOTE: BOTTOM OF DRYWELL MUST BE PLACED ON THE IN-SITU SOIL.

PHOTOS RECTANGULAR DRY WELL AREA FOR RECTANGULAR DRY WELL BE 7'X7' SQFT. 4' X 4' X 48 SQ. FT.



**CONSTRUCTION SPECIFICATIONS**

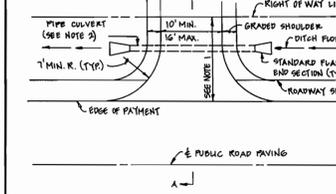
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6" fence shall be used, substituting 42" fabric and 6" length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties.
- 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 buildup 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 wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

| Property             | Value                 | Test Method    |
|----------------------|-----------------------|----------------|
| Tensile Strength     | 50 lb/in (min)        | Test: MSMT 509 |
| Tensile Modulus      | 20 lb/in (min)        | Test: MSMT 509 |
| Flow Rate            | 0.3 gal/ft (min)(max) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min)             | Test: MSMT 322 |

**Design Criteria**

| Slope Steepness | Slope    | Slope Length (Maximum) | Silt Fence Length (Maximum) |
|-----------------|----------|------------------------|-----------------------------|
| 0 - 10%         | 0 - 101  | Unlimited              | Unlimited                   |
| 10 - 20%        | 101 - 51 | 200 feet               | 1500 feet                   |
| 20 - 33%        | 51 - 31  | 100 feet               | 1000 feet                   |
| 33 - 50%        | 31 - 21  | 100 feet               | 500 feet                    |
| 50 +            | 21 +     | 50 feet                | 250 feet                    |

### TYPICAL PAVING SECTION USE-IN-COMMON DRIVEWAY



**CONSTRUCTION SPECIFICATIONS**

- RIGHT OF WAY LINE
- 10" MIN. CURB
- 10" MIN. SHOULDER
- STANDARD FLARE RIP-SIDE (C/S)
- ROADWAY SHOULDER
- EDGE OF PAVEMENT
- PUBLIC ROAD PAVING
- PRIVATE DRIVEWAY GRADE VARIES (RECOMMENDED MAX. GRADE 18%)
- SEE NOTE 1
- SEE NOTE 2
- SEE NOTE 3

### RESIDENTIAL DRIVEWAY ENTRANCE DETAIL

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 1872 BALDORNE NATIONAL PIKE  
ELLCICOTT CITY, MARYLAND 21042  
(410) 461-2055

**LEGEND**

| Symbol      | Description                   |
|-------------|-------------------------------|
| ---         | Existing Contour 2' Interval  |
| ---         | Existing Contour 10' Interval |
| ---         | Proposed Contour 2' Interval  |
| ---         | Proposed Contour 10' Interval |
| + 62.4      | Spot Elevation                |
| - 99 - 99 - | Silt Fence                    |
| FF          | First Floor Elevation         |
| BE          | Basement Elevation            |
| ---         | Proposed Walkout              |
| ---         | Barth Dike                    |
| - X - X -   | Tree Protection               |
| ---         | Existing Tree Line            |
| L.O.D.      | Limit of Disturbance          |
| ---         | Existing Street Tree          |
| - 55 -      | Super Silt Fence              |

**ENGINEER'S CERTIFICATE**

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.

*Paul R. Carter*  
Signature of Engineer (Print name below signature) Date: 10/4/93

**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 inspection by the Howard Soil Conservation District.

*Christopher L. Brown*  
Signature of Developer (Print name below signature) Date: 1/13/00

Reviewed for HOWARD SCD and meets Technical Requirements.

*Keith Summers*  
S.D.A.-Natural Resources Conservation Service Date: 1/19/00

This development plan is approved for soil erosion and sediment control by the HOWARD COUNTY CONSERVATION DISTRICT.

*John K. Robinson*  
Signature of District Engineer Date: 1/19/00

**OWNER/DEVELOPER**  
HARMONY BUILDERS  
4228 COLUMBIA ROAD  
ELLCICOTT CITY, MD 21042

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Kat Blum*  
Chief, Division of Land Development Date: 1/24/2000

*John K. Robinson*  
Chief, Development Engineering Division Date: 1/24/00

*John K. Robinson*  
Director - Department of Planning and Zoning Date: 1/24/00

PROJECT: DONOHUE PROPERTY SECTION/AREA: 2,3 AND 4 LOT NO.: 6021

PLAT: 13739 BLOCK NO.: 7 ZONE: R-20 TAX: 17 ELEC. DIST.: 2ND CENSUS TR.: G021

WATER CODE: SEWER CODE:

**NOTES AND DETAILS**

**DONOHUE PROPERTY**

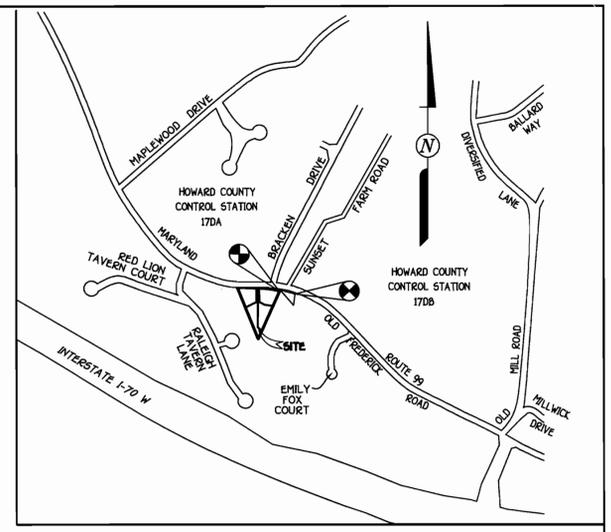
LOTS 2,3 AND 4

ZONED: R-20

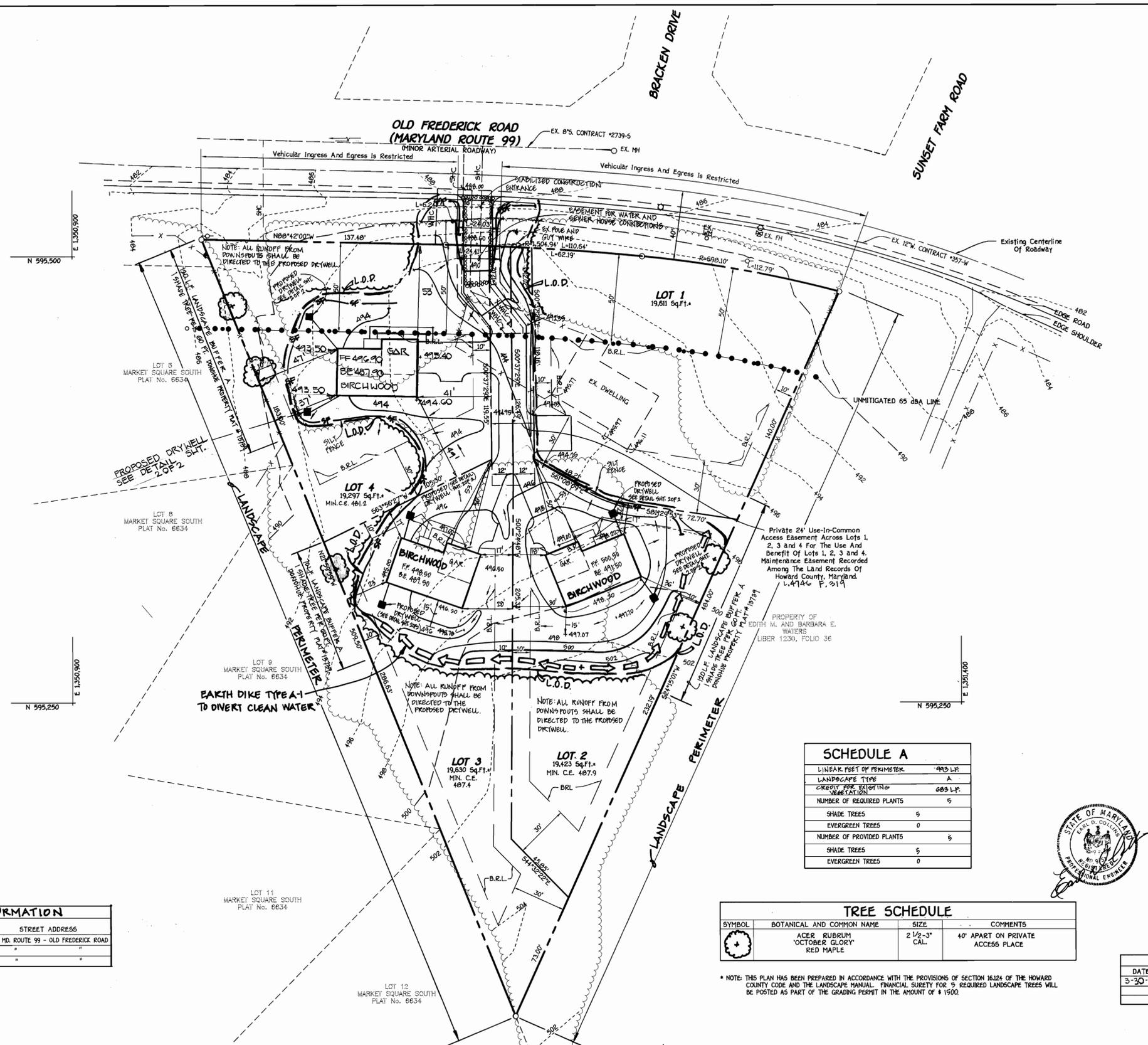
TAX MAP No: 17 PARCEL: 51 GRID: 7

SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE: 1"=30' DATE: SEPTEMBER, 1999 SHEET 2 OF 2



VICINITY MAP  
SCALE 1"=1200'



**MINIMUM LOT SIZE CHART**

| LOT No. | GROSS AREA    | PIPESTEM AREA | REMAINING AREA | MINIMUM LOT SIZE |
|---------|---------------|---------------|----------------|------------------|
| 2       | 19,423 Sq.Ft. | 1,423 Sq.Ft.  | 18,000 Sq.Ft.  | 18,000 Sq.Ft.    |
| 3       | 19,630 Sq.Ft. | 1,431 Sq.Ft.  | 18,199 Sq.Ft.  | 18,199 Sq.Ft.    |

**LEGEND**

| Symbol       | Description                   |
|--------------|-------------------------------|
| --- (dashed) | Existing Contour 2' Interval  |
| --- (dotted) | Existing Contour 10' Interval |
| --- (solid)  | Proposed Contour 2' Interval  |
| --- (dotted) | Proposed Contour 10' Interval |
| + 624        | Spot Elevation                |
| -SF -SF-     | Silt Fence                    |
| FF           | First Floor Elevation         |
| BE           | Basement Elevation            |
| ⊙            | Proposed Walkout              |
| ---          | Earth Dike                    |
| -X -X-       | Tree Protection               |
| ---          | Existing Tree Line            |
| L.O.D.       | Limit of Disturbance          |
| ⊕            | Existing Street Tree          |
| ---          | Super Silt Fence              |

**LOT INFORMATION**

| LOT NUMBER | STREET ADDRESS                          |
|------------|---|
| 2          | 10121 MD. ROUTE 99 - OLD FREDERICK ROAD |
| 3          | 10125 "                                 |
| 4          | 10129 "                                 |

**SCHEDULE A**

| LINEAR FEET OF PERIMETER       | NO. OF TREES |
|--------------------------------|--------------|
| LANDSCAPE TYPE                 | A            |
| CREDIT FOR EXISTING VEGETATION | 689 L.P.     |
| NUMBER OF REQUIRED PLANTS      | 5            |
| SHADE TREES                    | 5            |
| EVERGREEN TREES                | 0            |
| NUMBER OF PROVIDED PLANTS      | 5            |
| SHADE TREES                    | 5            |
| EVERGREEN TREES                | 0            |

**TREE SCHEDULE**

| SYMBOL | BOTANICAL AND COMMON NAME                   | SIZE              | COMMENTS                          |
|--------|---|-------------------|-----------------------------------|
| ⊕      | ACER RUBRUM<br>"OCTOBER GLODY"<br>RED MAPLE | 2 1/2"-3"<br>CAL. | 40' APART ON PRIVATE ACCESS PLACE |

- GENERAL NOTES:**
- THE CONTRACTOR SHALL NOTIFY THE THE CONSTRUCTION INSPECTION DIVISION AT (410) 315-1800 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
  - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
  - THIS PROJECT IS SUBJECT TO HOWARD COUNTY FLEES F-99-95.
  - BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY: FISHER COLLINS AND CARTER INC. ON OR ABOUT AUGUST, 1999.
  - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:  
HOWARD COUNTY MONUMENT 17DA N 180481.5885 (METERS)  
E 411981.0454 (METERS)  
HOWARD COUNTY MONUMENT 17DB N 181212.9710 (METERS)  
E 412310.6689 (METERS)
  - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
  - THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY.
  - CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT RIGHT-OF-WAY LINE PRIOR TO CONSTRUCTION.
  - SITE ANALYSIS DATA:  
A. TOTAL PROJECT AREA: 1.34 AC.  
B. AREA OF PLAN SUBMISSION: 1.34 AC.  
C. LIMIT OF DISTURBED AREA: 1.06 AC.  
D. PRESENT ZONING: R-20  
E. PROPOSED USE FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED D.U.
  - A WAIVER TO THE DESIGN MANUAL AND FEE-IN-LIEU OF PROVIDING STORMWATER MANAGEMENT WAS APPROVED ON 1/27/99 UNDER F-99-95.
  - FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION HAVE BEEN MET BY PAYMENT OF \$4810.00 UNDER F-99-95, as a Fee-in-lieu.
  - A FEE-IN-LIEU OF OPEN SPACE HAS BEEN PROVIDED IN THE AMOUNT OF \$4500.00 UNDER F-99-95.
  - NO WETLANDS EXIST ON SITE PER F99-95.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN THE REQUIRED GRADING PERMIT. (1 WEEK)
- INSTALL SEDIMENT AND EROSION CONTROL DEVICES (1 WEEK)
- CLEAR AND GRUB SITE TO LIMITS OF DISTURBANCE. (1 DAY PER DWELLING)
- EXCAVATE FOR FOUNDATION AND ROUGH GRADE LOT. (1 DAY PER DWELLING)
- FINE GRADE AND INSTALL DRIVEWAYS AND SIDEWALKS. (2 DAYS PER DWELLING)
- INSTALL PERMANENT SEEDING AND LANDSCAPING. (2 DAYS PER DWELLING)
- REMOVE SEDIMENT CONTROL DEVICES AS PERMISSION IS GRANTED BY SEDIMENT CONTROL INSPECTOR AND UPLAND AREAS HAVE BEEN INSTALLED.

**REVISIONS**

| DATE    | DESCRIPTION            |
|---------|------------------------|
| 3-30-00 | REV. HOUSE MODEL LOT 4 |

**SHEET INDEX**

| Sheet No. | Description           |
|-----------|-----------------------|
| 1         | Site Development Plan |
| 2         | Detail Sheet          |



\* NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR 5% REQUIRED LANDSCAPE TREES WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$ 1500.

**ENGINEER'S CERTIFICATE**

"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."

*Earl D. Collins* EARL D. COLLINS 10-14-99  
Signature of Engineer (Print name below signature) Date

**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 inspection by the Howard Soil Conservation District."

*Christopher L. Brown* 11/3/00  
Signature of Developer (Print name below signature) Date  
CHRISTOPHER L. BROWN

Reviewed for HOWARD SCD and meets Technical Requirements.  
*Chris Simmons* 1/19/00  
U.S.D.A.-Natural Resources Conservation Service Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John P. Robinson* 1/19/00  
Howard SCD Date

**OWNER/DEVELOPER**

HARMONY BUILDERS  
4228 COLUMBIA ROAD  
ELLICOTT CITY, MD. 21042

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Vanita Sheleff* 1/24/00  
Chief, Division of Land Development Date

*Christopher L. Brown* 1/24/00  
Chief, Development Engineering Division Date  
*Christopher L. Brown* 1/25/00  
Director, Department of Planning and Zoning Date

| PLAT  | BLOCK NO. | ZONE | TAX/ZONE | ELEC. DIST. | CENSUS TR. |
|-------|-----------|------|----------|-------------|------------|
| 13739 | 7         | R-20 | 17       | 2ND         | 6021       |

PROJECT: DONOHUE PROPERTY SECTION/AREA: 66 LOT NO.: 2, 3 AND 4  
WATER CODE: SEWER CODE:

**SITE DEVELOPMENT PLAN**

**DONOHUE PROPERTY**  
LOTS 2, 3 AND 4

ZONED: R-20  
TAX MAP No: 17 PARCEL: 51 GRID: 7  
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: 1"=30' DATE: SEPTEMBER, 1999  
SHEET 1 OF 2

