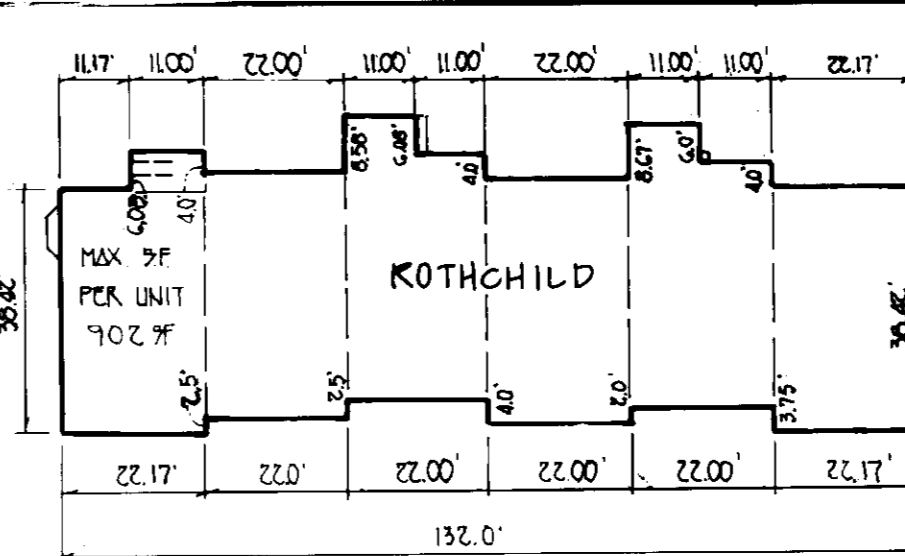
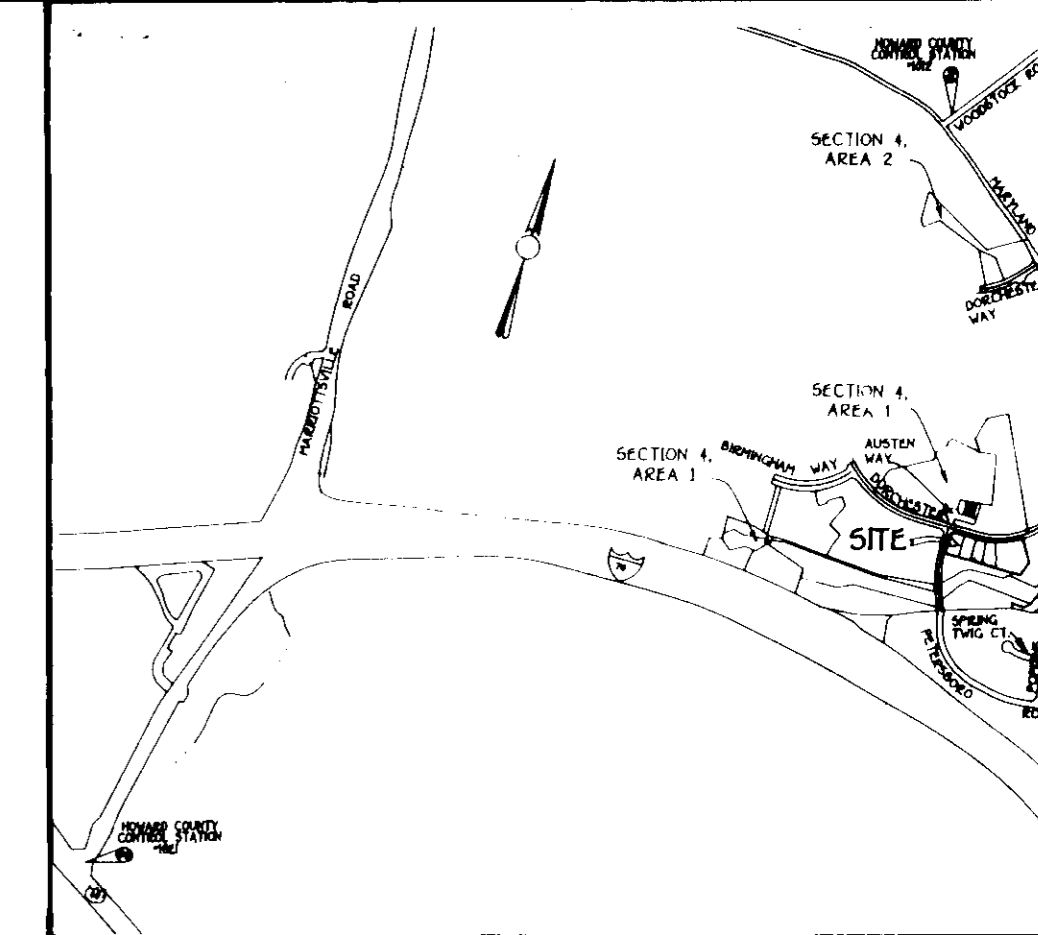


S.H.C. SCHEDULE		
LOT #	SHC INV @ E	MIN. CEILAR BL.
12	482.40	486.00
13	482.55	486.10
14	482.70	486.20
15	482.90	486.30
16	483.00	486.40
17	483.25	486.60

NOTE:  
CONTRACTOR TO OBTAIN SEPARATE  
BUILDING PERMIT FOR CONSTRUCTION  
OF RETAINING WALL.



TYPICAL FOOTPRINT  
LOT 12-17  
NOT TO SCALE



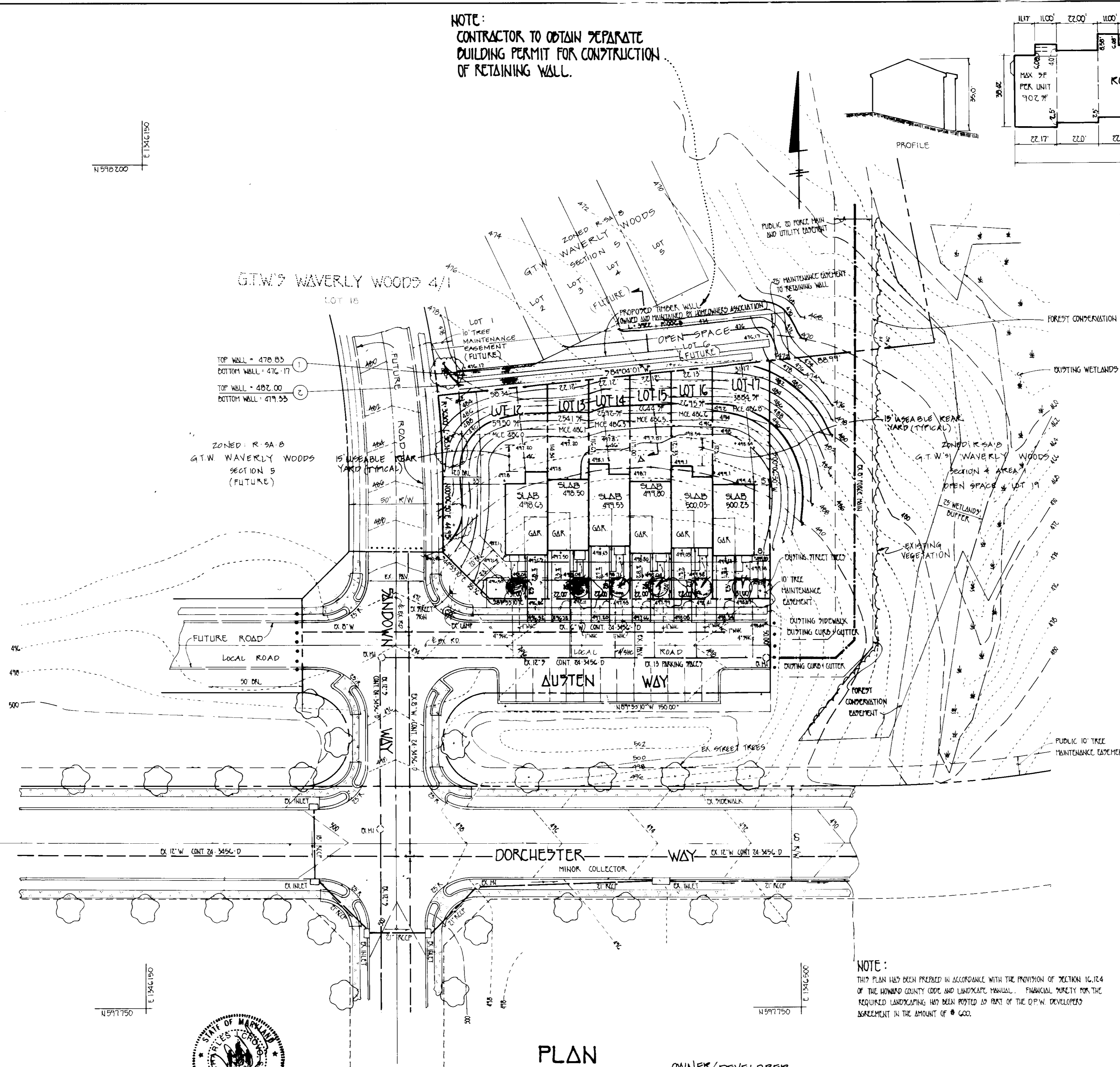
VICINITY MAP  
SCALE: 1" = 3000'

LEGEND

- EXISTING 2' INTERVAL CONTOUR
- EXISTING 10' INTERVAL CONTOUR
- PROPOSED 2' INTERVAL CONTOUR
- PROPOSED 10' INTERVAL CONTOUR
- + G24.0 SPOT ELEVATION
- PROPOSED WALKOUT
- FF FIRST FLOOR ELEVATION
- DE BASEMENT ELEVATION
- SILT FENCE
- EARTH DIKE
- TREE PROTECTION FENCE
- EX TREE LINE
- EX STREET TREE
- L.O.D. LIMITS OF DISTURBANCE

STREET ADDRESS CHART

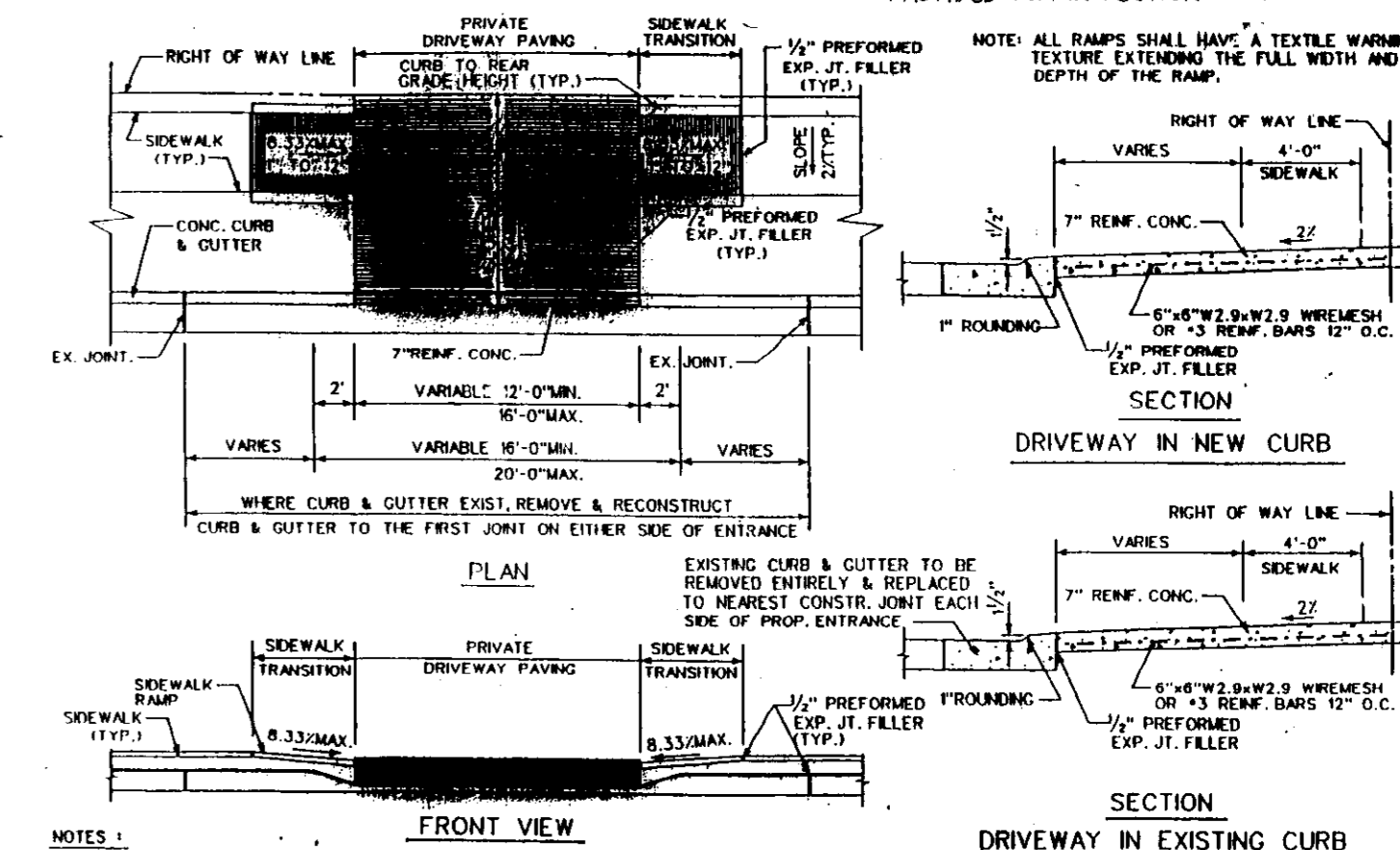
NO.	STREET ADDRESS
12	2201 AUSTEN WAY
13	2203 AUSTEN WAY
14	2205 AUSTEN WAY
15	2207 AUSTEN WAY
16	2209 AUSTEN WAY
17	2211 AUSTEN WAY



PLAN  
SCALE: 1" = 30'

OWNER/DEVELOPER  
WAVERLY WOODS DEVELOPMENT CORP  
LAND DESIGN AND DEVELOPMENT  
10805 HICKORY RIDGE ROAD  
COLUMBIA, MD 21044

NOTE:  
THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.12.4 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE D.P.W. DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$ 600.



RESIDENTIAL DRIVEWAY ENTRANCE  
NOT TO SCALE

- GENERAL NOTES
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) 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: G.T.W.'S WAVERLY WOODS - SECTION 4/AREA 1 - F95-173, S94-07, P95-07, P94-04, W95-23, F94-125, F95-27.
  - TOPOGRAPHIC SURVEY PERFORMED BY PHOTO SCIENCE, INC. ON OR ABOUT FEBRUARY, 1989.
  - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:  
STA. 1012 N 601060.177 EL 445.58  
E 1345336.758  
STA. 1681 N 593250.932 EL 509.92  
E 1340192.711
  - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
  - SITE ANALYSIS:  
A. THIS PROJECT IS ZONED: R-SA-8  
B. TOTAL AREA OF BUILDING LOT: 0.466 AC.  
C. LIMITS OF SUBDIVISION AREA: 0.466 AC.  
D. TOTAL NUMBER OF BUILDABLE LOTS: 6
  - PROJECT BACKGROUND:  
LOCATION: TAK MAP 16 PARCEL: P/O PARCEL 21  
ELECTION DISTRICT: THIRD
  - THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHT-OF-WAYS ON THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION, SEE APPROVED ROAD CONSTRUCTION PLANS F95-173 AND/OR WATER SEWER PLANS CONTRACT NO. 24-3456-D.
  - CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT PROPERTY LINE PRIOR TO CONSTRUCTION.
  - THIS PLAN IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT AUGUST, 1990 BY FISHER, COLLINS & CARTER, INC.
  - THIS PLAN IS SUBJECT TO WAIVER PETITION NO. WP-95-23 FROM SECTION 16.116.a.1 AND SECTION 16.116.a.2 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, WHICH RESTRICTS GRADING AND REMOVAL OF VEGETATIVE COVER FROM WETLANDS AND STREAM BUFFER AND FROM SECTION 16.116.b, WHICH RESTRICTS GRADING OF STEEP SLOPES OF 25% OR GREATER AND SECTION 16.115.a, WHICH RESTRICTS DEVELOPMENT WITHIN THE 100 YEAR FLOODPLAIN.
  - MAXIMUM ALLOWABLE LOT COVERAGE IS 60% (EXCLUDING OPEN DECKS & PROVIDED FOR IN SECTION 12B.A.2 OF THE ZONING REGULATIONS).



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) Donald E. Reuter Date 2/13/97

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 by 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) Donald E. Reuter Date 2.12.97

Reviewed for HOWARD SCD and meets Technical Requirements.  
Carol Simmon Date 2/22/97  
U.S.D.A. Natural Resources Conservation Service  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
John R. Robertson Date 2/22/97  
Howard SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Richard Blood Date 2/19/97  
Chief, Division of Land Development  
Chief, Development Engineering Division  
Frank J. ... Date 2/19/97  
DATE

SITE DEVELOPMENT PLAN  
G.T.W.'S WAVERLY WOODS  
SECTION 4 AREA 1  
LOTS 12 THROUGH 17  
ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: DEPT. 30, 1996  
SHEET 1 OF 3

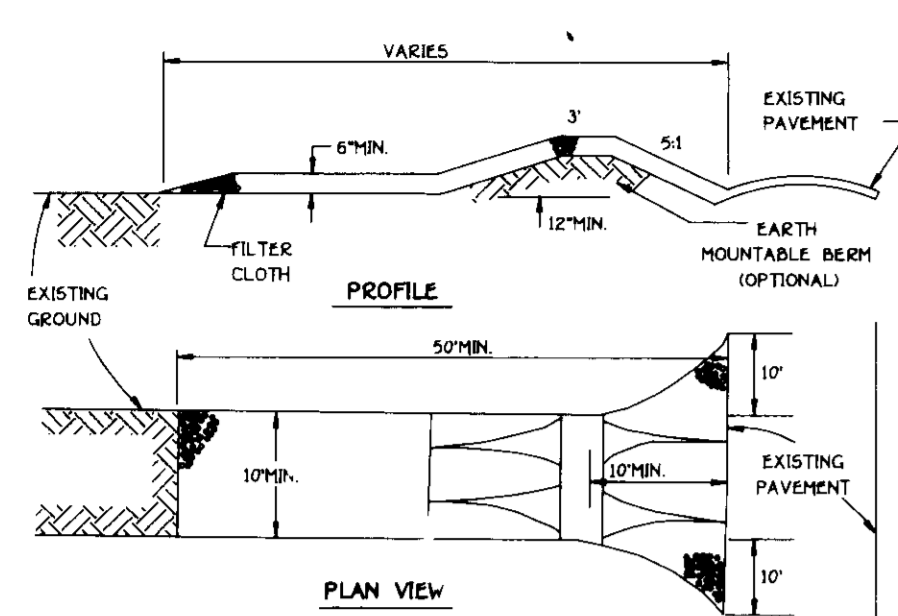
FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10775 BALDWIN NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
410-461-1899

DATE	DESCRIPTION
0-16-97	REVISED BUILDING FOOTPRINT.

BUILDER  
N.V. HOMES  
2200 DEFENSE HIGHWAY  
SUITE 301, GAITHERSBURG, MD 20878

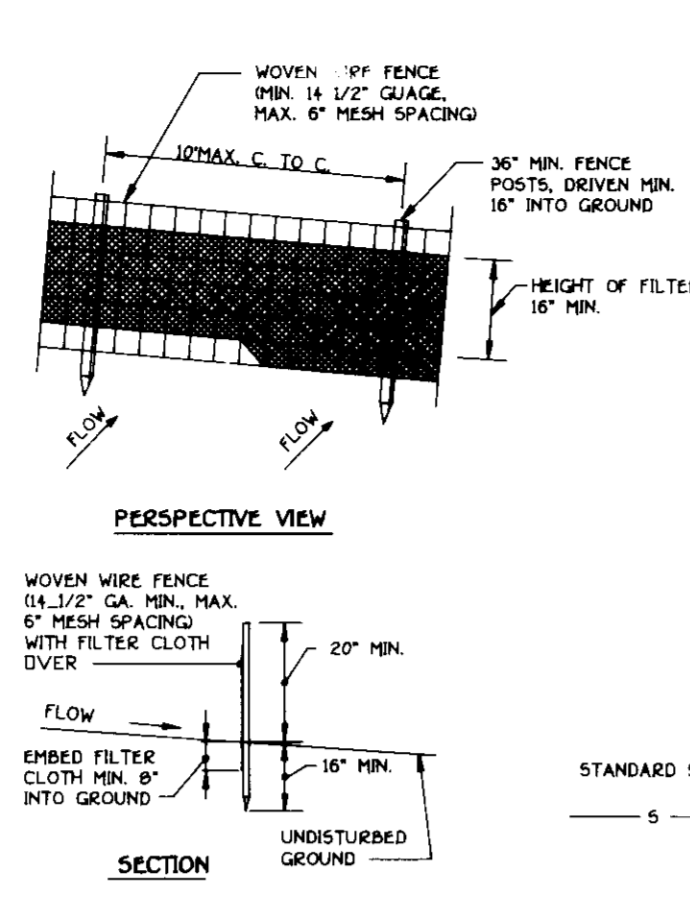
SUBDIVISION		SECTION/AREA	LOT NO.		
G.T.W.'S WAVERLY WOODS		4 / 1	12 THRU 17		
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
12250	23	R-SA-8	16	3RD	6030
WATER CODE		SEWER CODE			

**STABILIZED CONSTRUCTION ENTRANCE - 2**  
NOT TO SCALE



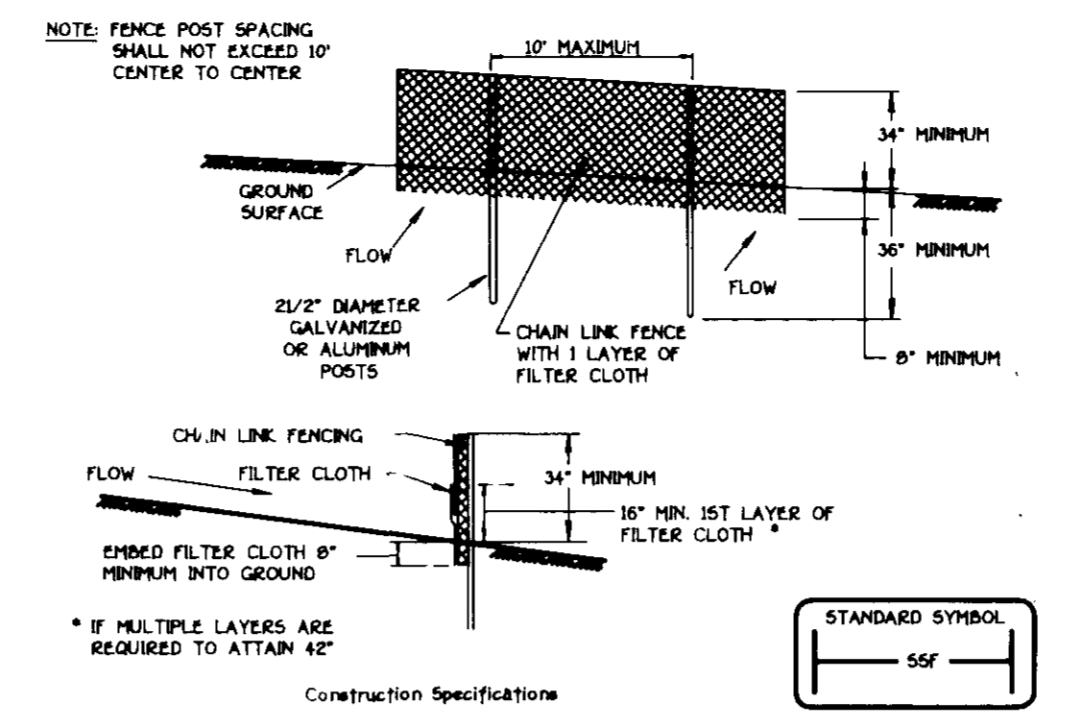
- CONSTRUCTION SPECIFICATIONS**
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
  - THICKNESS - NOT LESS THAN SIX (6) INCHES.
  - WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
  - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BEAM WITH 5:1 SLOPES WILL BE PERMITTED.
  - 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 JOE CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SKIPPED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
  - 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 DEVICE.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**SILT FENCE**  
NOT TO SCALE



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX (6) INCHES AND FOLDED.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

**DETAIL 33 - SUPER SILT FENCE**



- 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. The lower tension wire, brace and tie 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 buildup removed when "bulges" develop in the silt fence, or when it 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:

**SUPER SILT FENCE**

**Design Criteria**

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

**SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 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 (33-1055).
- 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 THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7-14 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERMANENT SLOPES AND ALL SLOPES STEEPER THAN 3:1 IN 14 DAYS AS TO 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. 501.500 (SEC. 54)) TEMPORARY SEEDING (SEC. 501 AND MULCHING (SEC. 502). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECORDED 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: 0.466 ACRES
  - AREA TO BE GRADED OR PAVED: 0.466 ACRES
  - AREA TO BE VEGETATIVELY STABILIZED: 0.536 ACRES
  - TOTAL CUT: 1,000 CUBIC YARDS
  - TOTAL FILL: 1,000 CUBIC YARDS
  - OFFSITE WASTE/BORROW AREA LOCATION: NONE
  - ANY SEDIMENT CONTROL PRACTICES WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY 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 EXISTENCE AT THE TIME OF APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER SOIL 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.
  - TERMINES 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.

**STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION**

- DEFINITION**  
Vegetative stabilization is the use of plants to stabilize 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, and improving wildlife habitat and visual resources.
- CONDITIONS WHERE PRACTICE APPLIES**  
This practice shall be used on denuded areas as specified on the plan and may be used on highly erodible or critically eroding areas. This specification is 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 being left idle between construction phases, earth slopes, etc. and for Permanent Seeding are: lawns, ditches, and former stockpiles 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 and evaporation, 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 amount 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. Sediment control devices must remain in place during grading, 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**
- Site Preparation**
    - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, 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)**
    - 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 the approved equipment. Fertilizers shall be delivered to the site fully abated according to the applicable state and local laws and shall bear the name of the manufacturer and the name of the producer.
    - Lime materials shall be ground limestone (hydrated or burnt lime) may be substituted 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 #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
  - Temporary Seeding**
    - Seeding 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. The surface should be smoothed, but left in the roughened condition. Seeding shall be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
    - Apply fertilizer and lime as prescribed on the plan.
    - Apply seed and fertilizer into the top 3-5" of soil by diking or other suitable means.
  - Permanent Seeding**
    - Seeding conditions required for permanent vegetative establishment:
      - Soil pH shall be between 6.0 and 7.0.
      - Soil moisture shall be less than 50% (parts per million ppm).
      - The soil shall contain less than 40% silt, but enough fine grained material (300 mesh plus size) to provide the capacity to hold a moderate amount of moisture. An exception is if loesslike or siltstone like soils are to be planted, then a sandy soil (300 mesh plus size) is acceptable.
      - Soil must contain 1.5% minimum organic matter by weight.
      - Soil must contain sufficient pore space to permit adequate root penetration.
      - Soil must contain sufficient pore space to permit adequate root penetration. In accordance with Section 21 Standard and Specification for Topsoil, to roughen the surface, the surface shall be tracked by a dower leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3-5" of soil should be loose and friable. Seeding loosening may not be necessary on newly disturbed areas.
    - Apply soil amendments as per soil test or as included on the plan.
    - Mix soil amendments into the top 3-5" of topsoil by diking 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 seeded preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Seeding areas (except Detail 33) should be tracked by a dower leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3-5" of soil should be loose and friable. Seeding loosening may not be necessary on newly disturbed areas.

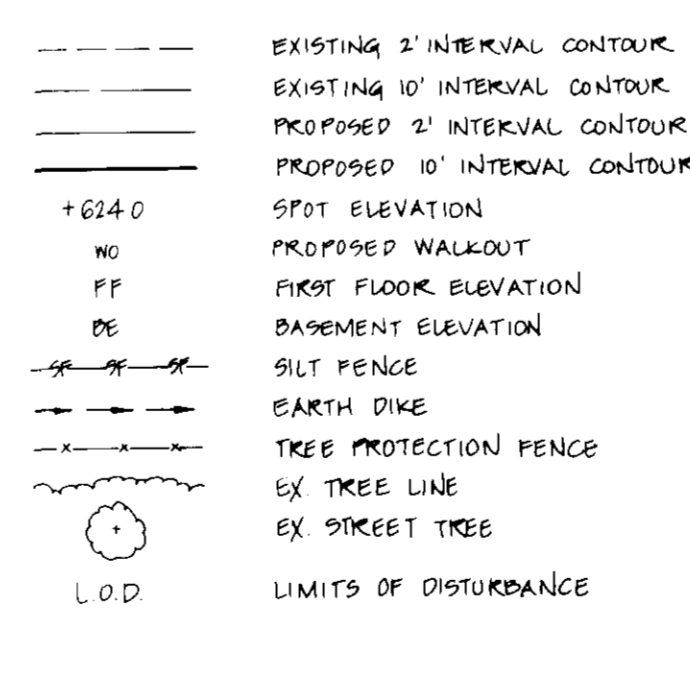
**PERMANENT SEEDING NOTES**

- 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.
- SOIL AMENDMENTS**  
APPLY TWO TONS PER ACRE DOLOMITE LIMESTONE (92 LBS./1,000 SQ.FT.) AND 400 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT THE END OF THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.20 LBS./1,000 SQ.FT.) OF WEEPING LOVERGASS DURING THE PERIOD OF OCTOBER 15 THROUGH FEBRUARY 28. PROJECT SITE BY OPTION (I) - 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 HYDROSEEDING.
- MULCHING**  
APPLY 1 TO 2 TONS PER ACRE (60 TO 90 LBS./1,000 SQ.FT.) OF UNMULCHED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (15 GALLONS/1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS ON SLOPES 8 FEET OR HIGHER USE 340 GALLONS PER ACRE (18 GALLONS/1,000 SQ.FT.) FOR ANCHORING.
- MAINTENANCE**  
INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.  
\* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNWEED AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING REQUIREMENT. OPTIMAL 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./1,000 SQ.FT.)
- SEEDING**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUShel PER ACRE OF ANNUAL RYE (1.5 LBS./ACRE OF WEEPING LOVERGASS (0.7 LBS./1,000 SQ.FT.) FOR THE PERIOD NOVEMBER 15 THROUGH FEBRUARY 28. PROJECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE 500.
- MULCHING**  
APPLY 17 TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.) OF UNMULCHED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 210 GALLONS PER ACRE (15 GALLONS/1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS ON SLOPES 8 FEET OR HIGHER USE 340 GALLONS PER ACRE (18 GALLONS/1,000 SQ.FT.) FOR ANCHORING.
- REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.
- BUILDER**  
N.V. HOMES  
2200 DEFENSE HIGHWAY  
SUITE 301, CROFTON, MD 21114

**LEGEND**

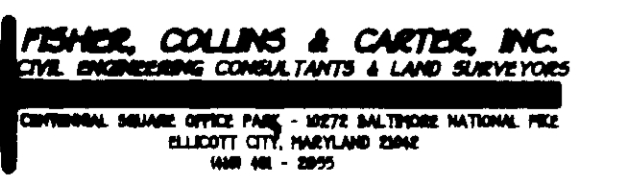


**SCHEDULE 'C' RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING**

NUMBER OF DWELLING UNITS	6
NUMBER OF TREES REQUIRED (1 D.U. SPA: 1.3 D.U. APTS.)	6
NUMBER OF TREES PROVIDED	6
SHADE TREES	6
OTHER TREES (2:1 SUBSTITUTION)	0

**TREE LEGEND**

- SYMBOL DESCRIPTION**
- 6 SHADE TREES/ACER RUBRUM OCTOBER GLORY/ OCTOBER GLORY RED MAPLE
- NOTE: LANDSCAPE TREES ARE ONLY A RECOMMENDATION THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIVALENT.



**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]* 2/13/97  
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."

*[Signature]* DONALD B. DELIVER 2/12/96  
Date

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

Reviewed for HOWARD SCD and meets Technical Requirements.  
*[Signature]* 2/20/97  
Date  
*[Signature]* 2/20/97  
Date

**OWNER/DEVELOPER**

WAWERLY WOODS DEVELOPMENT CORP.  
LAND DESIGN AND DEVELOPMENT  
10805 HICKORY RIDGE ROAD  
COLUMBIA, MD 21044

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

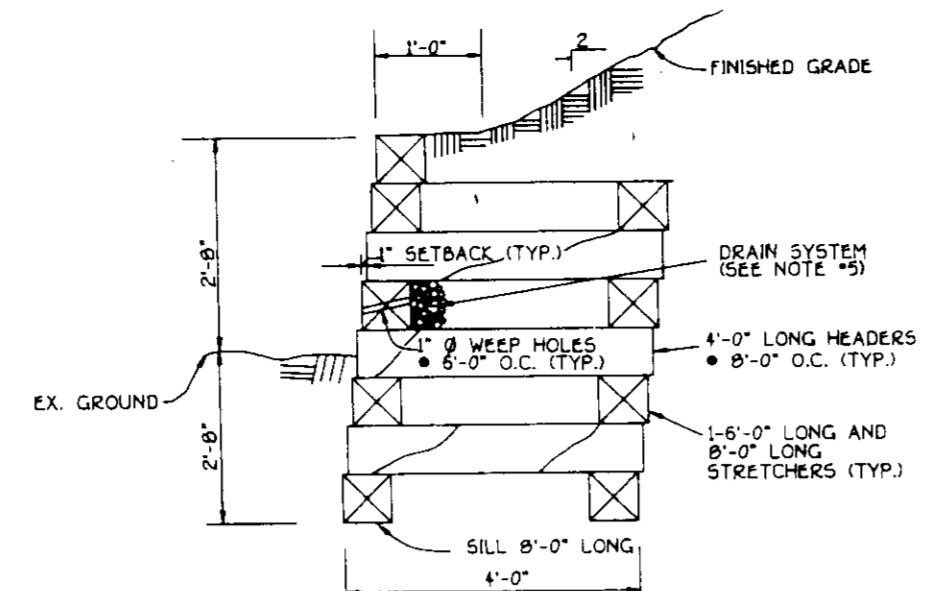
*[Signature]* 2/2/97  
Date  
*[Signature]* 2/2/97  
Date

**SECTION 4/ AREA 1**

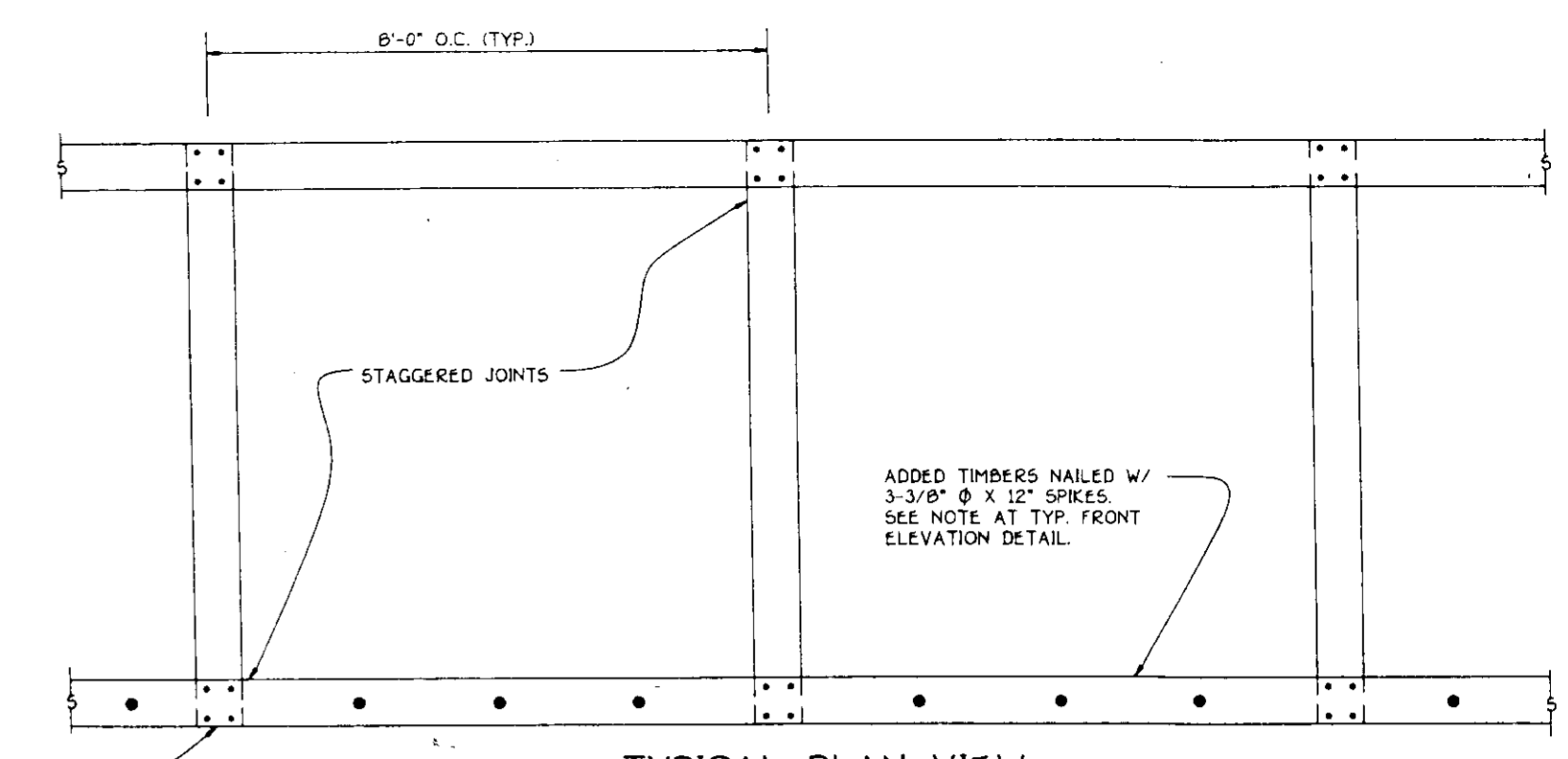
SUBDIVISION	G.T.W.'S WAWERLY WOODS	SECTION/ARCA	4/1	LOT NO.	12 THRU 17
PLAT NO.	23	BLOCK NO.	R-SA-B	TAX-ZONE	16
WATER CODE		SEWER CODE		ELEC. DIST.	THIRD

**SITE DEVELOPMENT PLAN NOTES AND DETAILS**

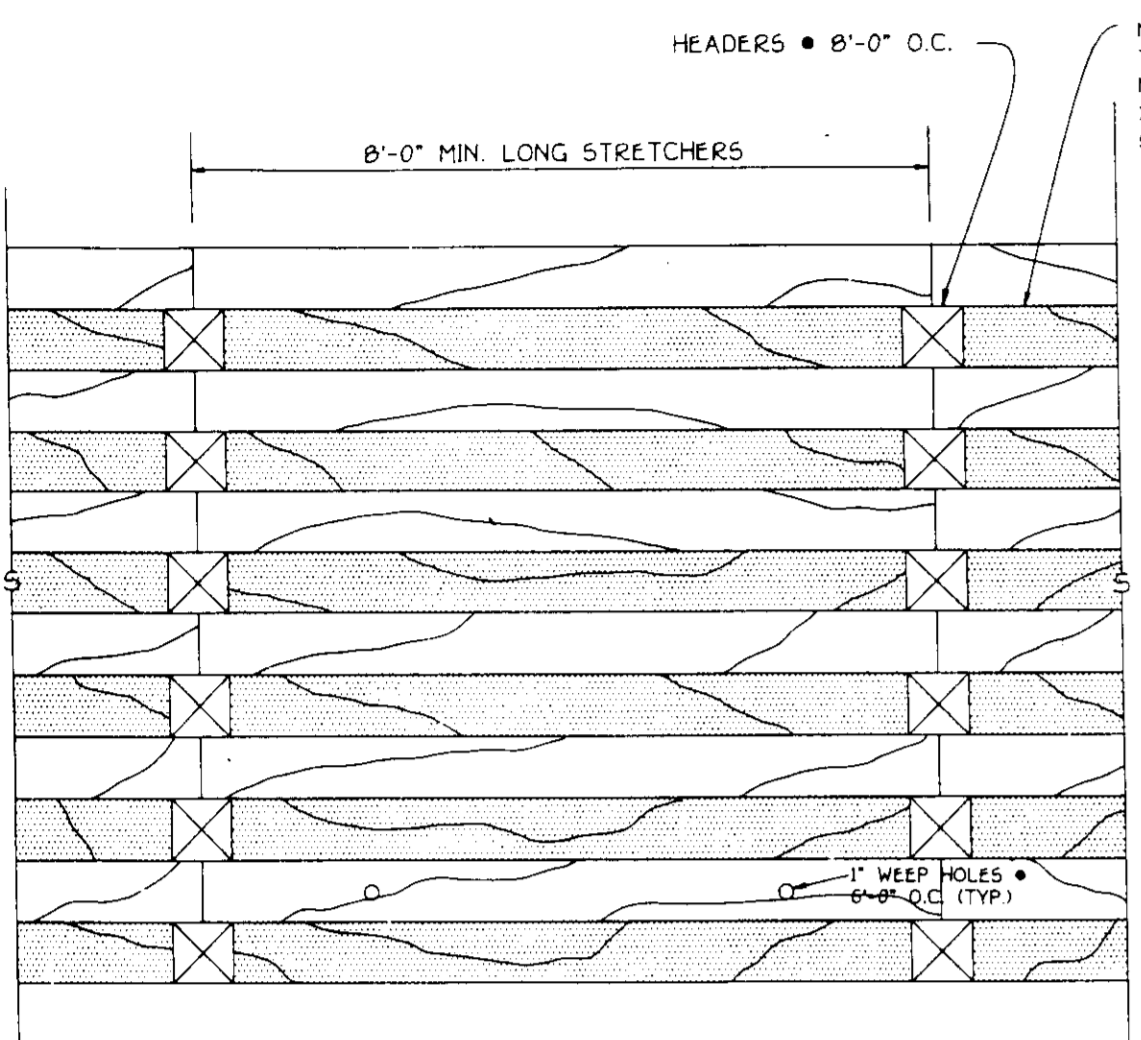
G.T.W.'S WAWERLY WOODS  
SECTION 4/ AREA 1  
LOTS 12 THROUGH 17  
ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: 2/20/97  
SHEET 2 OF 3



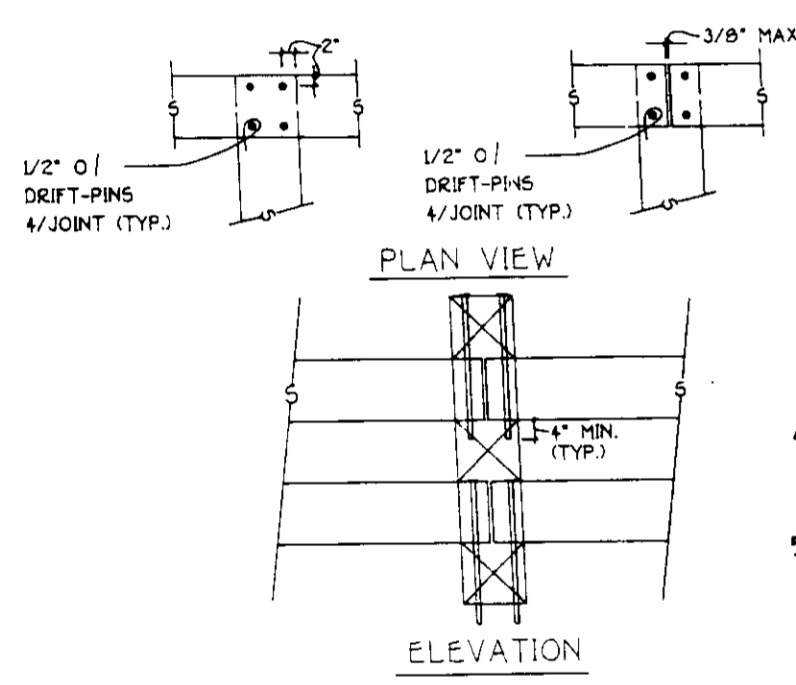
NOTE: THIS PROJECT IS TO UTILIZE TRAP IG FOR SEDIMENT AND EROSION CONTROL AS SHOWN ON S.D.P. 96-115.



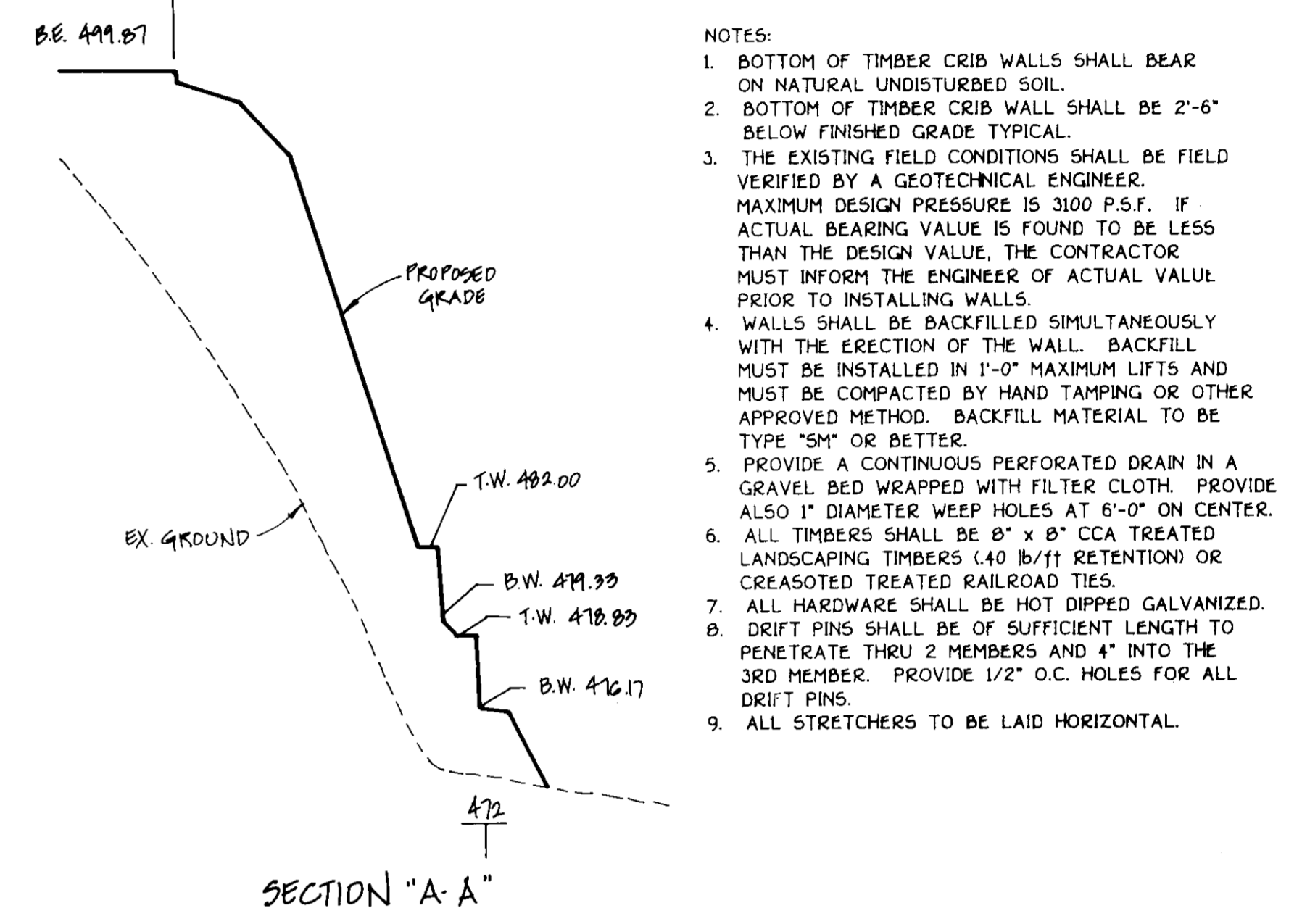
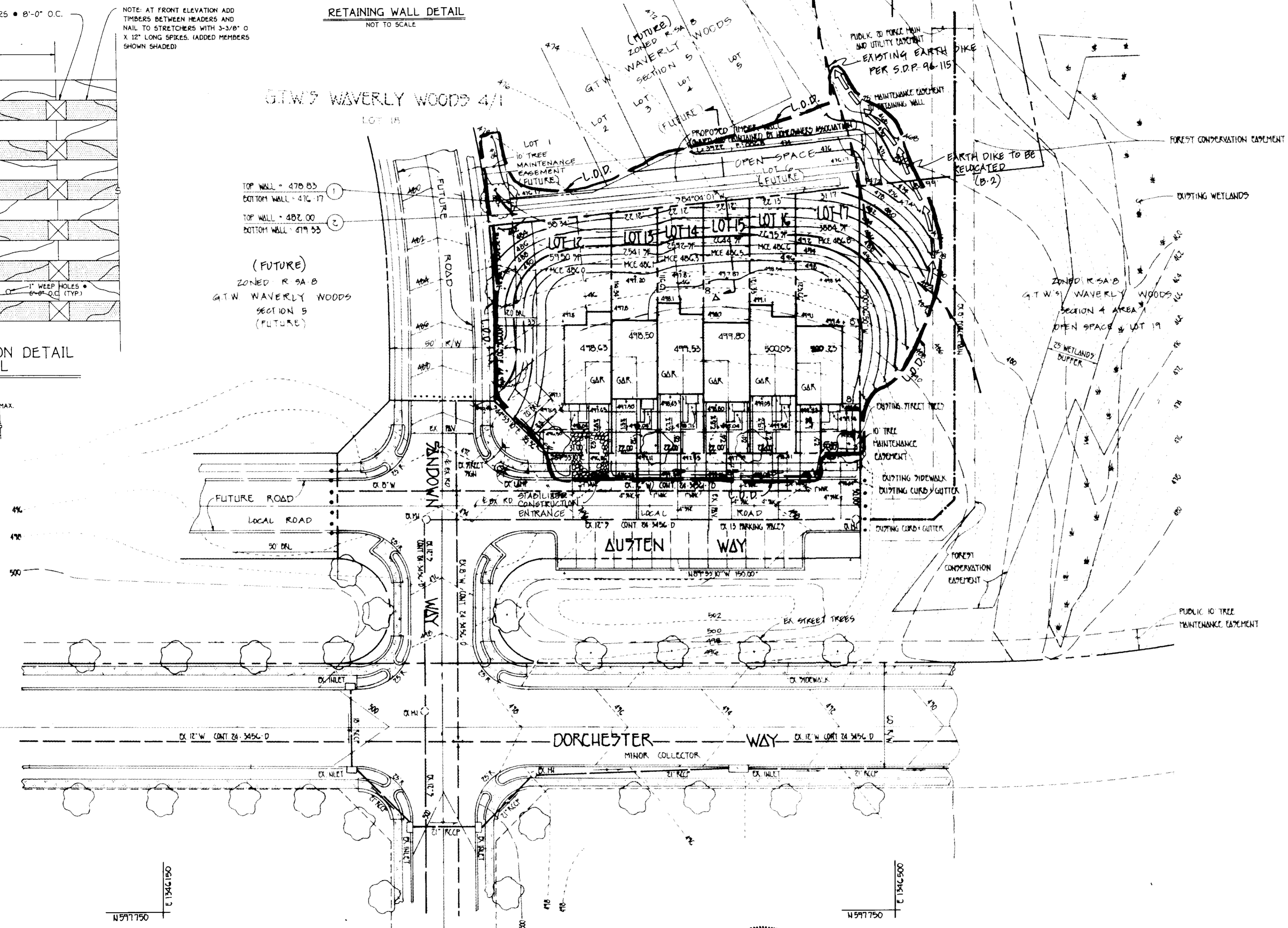
TYPICAL PLAN VIEW OF RETAINING WALL  
NOT TO SCALE



TYPICAL FRONT ELEVATION DETAIL OF RETAINING WALL  
NOT TO SCALE



TYPICAL END CONDITIONS OF RETAINING WALL  
NOT TO SCALE



- NOTES:
- BOTTOM OF TIMBER CRIB WALLS SHALL BEAR ON NATURAL UNDISTURBED SOIL.
  - BOTTOM OF TIMBER CRIB WALL SHALL BE 2'-6" BELOW FINISHED GRADE TYPICAL.
  - THE EXISTING FIELD CONDITIONS SHALL BE FIELD VERIFIED BY A GEOTECHNICAL ENGINEER. MAXIMUM DESIGN PRESSURE IS 3100 P.S.F. IF ACTUAL BEARING VALUE IS FOUND TO BE LESS THAN THE DESIGN VALUE, THE CONTRACTOR MUST INFORM THE ENGINEER OF ACTUAL VALUE PRIOR TO INSTALLING WALLS.
  - WALLS SHALL BE BACKFILLED SIMULTANEOUSLY WITH THE ERECTION OF THE WALL. BACKFILL MUST BE INSTALLED IN 1'-0" MAXIMUM LIFTS AND MUST BE COMPACTED BY HAND TAMPING OR OTHER APPROVED METHOD. BACKFILL MATERIAL TO BE TYPE "SM" OR BETTER.
  - PROVIDE A CONTINUOUS PERFORATED DRAIN IN A GRAVEL BED WRAPPED WITH FILTER CLOTH. PROVIDE ALSO 1" DIAMETER WEEP HOLES AT 6'-0" ON CENTER.
  - ALL TIMBERS SHALL BE 8" x 8" CCA TREATED LANDSCAPING TIMBERS (40 lb/ft RETENTION) OR CREASOTED TREATED RAILROAD TIES.
  - ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED.
  - DRIFT PINS SHALL BE OF SUFFICIENT LENGTH TO PENETRATE THRU 2 MEMBERS AND 4" INTO THE 3RD MEMBER. PROVIDE 1/2" O.C. HOLES FOR ALL DRIFT PINS.
  - ALL STRETCHERS TO BE LAID HORIZONTAL.

PLAN  
SCALE: 1" = 30'



OWNER/DEVELOPER  
WAVERTY WOODS DEVELOPMENT CO.  
LAND DESIGN AND DEVELOPMENT  
10805 HICKORY FLORE ROAD  
COLUMBIA, MD 21044

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT (1 DAY).
- NOTIFY "MISS UTILITY" 48 HOURS BEFORE BEGINNING ANY WORK AT (800) 257-7777. NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION AT (410) 313-1880, 24 HOURS BEFORE STARTING WORK (1 DAY).
- CLEAR AND GRUB SITE FOR AREAS WHERE SEDIMENT CONTROL IS TO BE INSTALLED. INSTALL SEDIMENT CONTROL AND INSTALL TEMPORARY SEEDING.
- CLEAR AND GRUB REMAINING SITE.
- MASS GRADE SITE UP TO SEDIMENT CONTROL MEASURES AND INSTALL TEMPORARY SEEDING.
- CLEAR AND GRUB REMAINING SITE.
- MASS GRADE SITE UP TO SEDIMENT CONTROL MEASURES AND INSTALL TEMPORARY SEEDING.
- INSTALL UTILITIES AND STRUCTURES.
- INSTALL CURB AND GUTTER AND SIDEWALKS.
- FINE GRADE SITE, INSTALL SUB-BASE PAVING.
- INSTALL PERMANENT SEEDING, TOPSOIL TO BE INSTALLED PER SCS SPEC. G-21.
- REMOVE SEDIMENT CONTROL DEVICES AS PERMISSION IS GRANTED BY E/S INSPECTOR.
- INSTALL TACK COAT AND FINISHED PAVING.

FISHER, COLLINS & CARTER, INC.  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL HEADQUARTERS OFFICE: 10725 BALTIMORE NATIONAL PKWY  
ELICOTT CITY, MARYLAND 21117  
1988 08 - 2025

**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) Clare Date 2/13/97

**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) Donald R. Reuniger Date 2/12/97

Reviewed for HOWARD SCD and meets Technical Requirements.  
Chief, Natural Resources John R. Reuniger Date 2/20/97  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
John R. Reuniger Date 2/20/97  
HOWARD SCD

**BUILDER**  
N.V. HOME'S  
2200 DEFENSE HIGHWAY  
707C 301, GAITHERSBURG, MD 21114

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Richard Blodgett Date 3/1/97  
Chief, Division of Land Development and Research  
Chief, Development Engineering Division  
Date 2/13/97

SUBDIVISION GTW'S WAVERTY WOODS		SECTION/AREA 4 / 1	LOT NO. 12 THRU 17
PLAT NO. 12250	BLOCK NO. 23	TAX/ZONE F-SA-D 16	ELEC. DIST. 3 <sup>RD</sup>
WATER CODE		SEWER CODE	

**SITE DEVELOPMENT PLAN**  
GTW'S WAVERTY WOODS  
SECTION 4 AREA 1  
LOTS 12 THROUGH 17  
ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: 7EPT. 30, 1996  
SHEET 3 OF 3