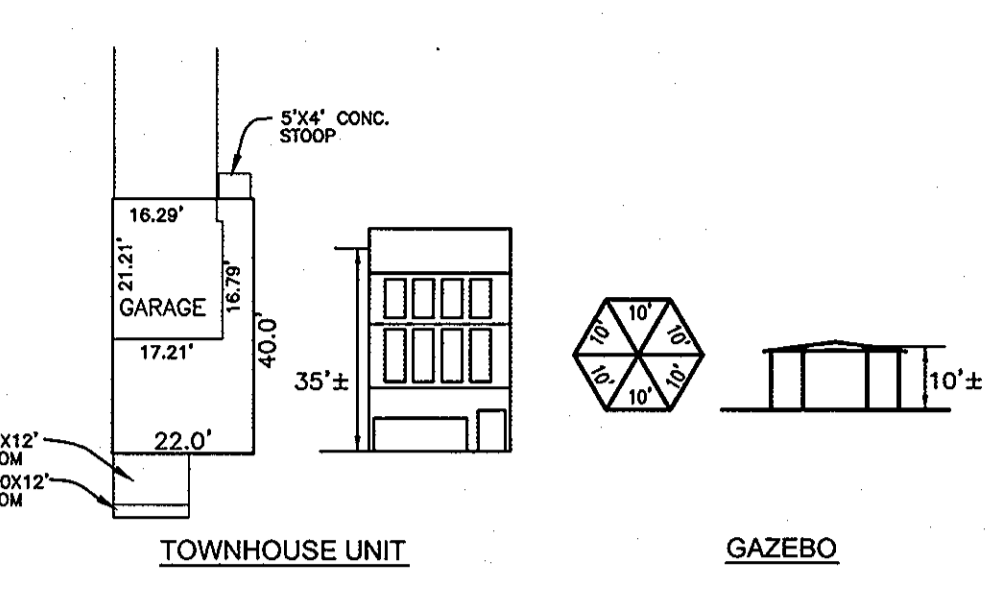
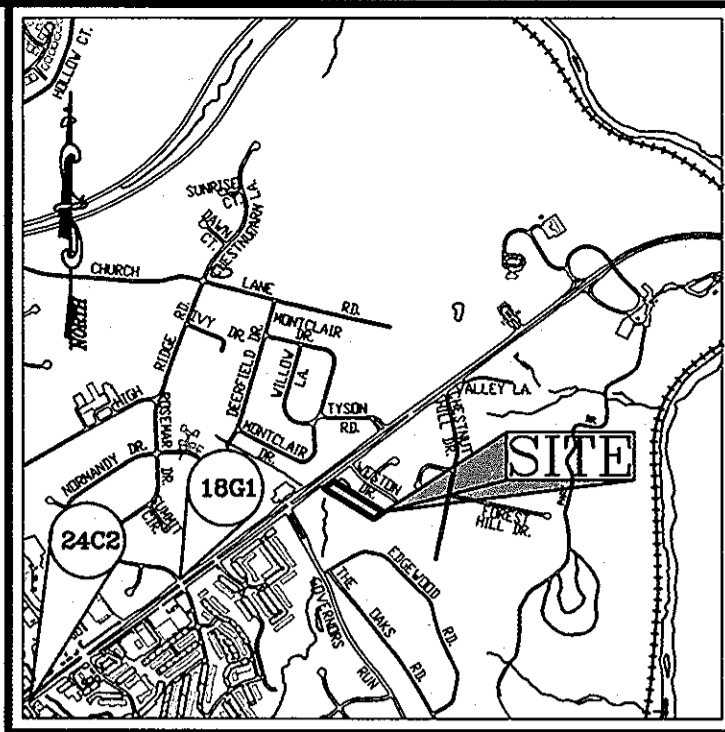


GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 MISS UTILITY 1-800-257-7777
 VERIZON 725-9976
 HOWARD COUNTY BUREAU OF UTILITIES: 313-2386
 AT&T CABLE LOCATION DIVISION: 393-3553
 B.G.&E. CO. CONTRACTOR SERVICES: 850-4620
 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 787-4820
 STATE HIGHWAY ADMINISTRATION: 531-5333
- THE SUBJECT PROPERTY IS ZONED R-A-15AS PER THE 2/2/04 COMPREHENSIVE ZONING PLAN.
- SITE ANALYSIS:
 TOTAL PROJECT AREA: 1.48 AC
 AREA OF RIGHT-OF-WAY DEDICATION: 0.00
 NET PROJECT AREA: 1.48 AC
 PRESENT ZONING: R-A-15
 TOTAL NUMBER OF REQUIRED PARKING SPACES: 2 SPACES PER DWELLING UNIT X 14 UNITS = 28 + 5 GUEST = 33
 TOTAL NUMBER OF PROVIDED PARKING SPACES: 28-2 GAR GARAGES + 8 ADDITIONAL SPACES = 36
 AREA OF REQUIRED OPEN SPACE: 0.57 AC. (25% X 1.48 AC.)
 AREA OF PROVIDED OPEN SPACE: 0.57 AC. OR 38%
 AREA OF REQUIRED RECREATIONAL OPEN SPACE: 14 UNITS X 300 SF PER UNIT = 4200 SF
 AREA OF PROVIDED RECREATIONAL OPEN SPACE: 4200 SF
 AREA OF PROPOSED BUILDING COVERAGE: 0.46 AC.
 LIMIT OF DISTURBANCE: 1.19 AC.±
 PROPOSED USE OF SITE: RESIDENTIAL TOWNHOUSES
 TOTAL UNITS RESIDENTIAL UNITS ALLOWED: 15 UNITS (15 UNITS PER NET ACRE X 1.48 AC.)
 TOTAL RESIDENTIAL UNITS PROPOSED: 14 UNITS
 TOTAL MODERATE INCOME HOUSING UNITS REQUIRED: 14 UNITS X 10% = 1.4 UNITS
 TOTAL MODERATE INCOME HOUSING UNITS PROVIDED: 2 UNITS (14%)
- PROJECT BACKGROUND:
 LOCATION: TAX MAP: 18 PARCEL: '61' BLOCK: 20
 ZONING: R-A-15
 DEED REFERENCE: LIBER 1208/FOLIO 539
 DPZ REFERENCE: WP-05-040, BA-04-036-V
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- REDEVELOPMENT OF THIS PROJECT RESULTS IN A REDUCTION OF IMPERVIOUS SURFACES. THIS SITE IS EXEMPT FROM C_{PM}, W_{QV} AND REV SINCE THE IMPERVIOUS SURFACES HAVE BEEN REDUCED BY 20%
 EX. IMPERVIOUS SURFACE: 1.00 AC.±
 PROP. IMPERVIOUS SURFACE: 0.80 AC.±
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
- COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENT NO'S. 47C4 AND 47R1.
- EXISTING TOPOGRAPHY IS BASED ON TOPOGRAPHICAL SURVEY PREPARED BY FREDERICK WARD ASSOCIATES, DATED JANUARY, 2004.
- THE BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PREPARED BY FREDERICK WARD ASSOCIATES DATED JANUARY, 2004.
- ACCESS TO WATER HAS BEEN PROVIDED UNDER CONTRACT NO. 14-1983-D FOR WATER, AND CONTRACT NO. 509-S FOR SEWER. PROPOSED WATER AND SEWER FOR THIS PROJECT WILL BE PUBLIC.
- DRIVEWAYS SHALL BE PROVIDED TO MEET OCCUPANCY PERMIT FOR THE FOLLOWING MINIMUM REQUIREMENTS:
 • WIDTH-12' (14' SERVING MORE THAN ONE RESIDENCE)
 • SURFACE-OF COMPACTED CRUSHER RUN BASE W/AR CHIP COATING (1-1/2" MIN.)
 • GEOMETRY-MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
 • STRUCTURES (CULVERTS/BRIDGES)-CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
 • DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1' DEPTH OVER DRIVEWAY SURFACE
 • MAINTENANCE-SUFFICIENT TO INSURE ALL WEATHER USE
- NO BURIAL GROUNDS OR CEMETERIES ARE LOCATED ON THIS PROPERTY.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK OR PROJECT BOUNDARY SETBACK.
- PERIMETER LANDSCAPING SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED IN THE AMOUNT OF \$20,430.00 FOR THE 35 SHADE TREES, 39 EVERGREEN TREES AND 408 LF OF FENCE.
- FOREST CONSERVATION OBLIGATIONS AS REQUIRED IN SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION TO BE FULFILLED BY A FEE-IN-LIEU OF 0.22AC. IN THE AMOUNT OF \$4,792.00.
- GARAGES SHALL BE USED FOR PARKING PURPOSES ONLY AND ARE NOT PERMITTED TO BE CONVERTED TO OTHER USES PER THE HOWARD COUNTY ZONING REGULATIONS, UNLESS THE 2 OFF-STREET PARKING SPACES ARE PROVIDED WITHIN THE RESIDENTIAL UNIT DRIVEWAY.
- REFUSE COLLECTION FOR THIS SITE WILL BE PRIVATE. THERE WILL BE NO COMMUNITY TRASH DUMPSTERS FOR THIS PROJECT.
- STREAMS AND WETLANDS SHOWN ON-SITE ARE BASED ON A FIELD INVESTIGATION PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED MARCH 2004.
- THE ARTICLES OF INCORPORATION FOR THE HOMEOWNER'S ASSOCIATION HAS BEEN FILED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION, DATED JANUARY 6, 2004.
- THIS SITE DEVELOPMENT PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45-2003 AND THE AMENDED ZONING REGULATIONS PER COUNCIL BILL NO. 75-2003.
- ALL OUTDOOR LIGHTING FOR THIS SUBDIVISION SHALL BE IN ACCORDANCE WITH SECTION 134 OF THE ZONING REGULATIONS.
- ANY WELLS ENCOUNTERED DURING SITE GRADING WILL REQUIRED PROPER ABANDONMENT TO BE SUPERVISED BY THE HEALTH DEPARTMENT.
- THIS PLAN IS SUBJECT TO WP-05-040 APPROVED FEBRUARY 9, 2005 TO WAIVE SECTION 16.116(A) WHICH PROHIBITS GRADING, REMOVAL OF VEGETATIVE COVER AND TREES, PAVING AND NEW STRUCTURES WITHIN 25' OF WETLANDS AND WITHIN 75' OF A PERENNIAL STREAMBANK, WETLANDS, STREAMS AND THEIR BUFFERS SHALL BE LOCATED IN OPEN SPACE OR NON-BUILDABLE PRESERVATION PARCELS RATHER THAN ON RESIDENTIAL LOT. SECTION 16.120(B)(10)(C) WHICH REQUIRES THAT THE PROTECTED ENVIRONMENTAL FEATURES BE LOCATED IN OPEN SPACE WITH UNITS NO CLOSER THAN 15' FROM THE PROTECTED FEATURE. SECTION 16.121(A)(4) WHICH REQUIRES THAT A PORTION OF THE OPEN SPACE BE ACCESSIBLE AND USABLE FOR RECREATION OPEN SPACE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 1. COMPLIANCE WITH ALL CONDITIONS OF APPROVAL FOR BA-04-036V.
 2. THE PROPOSED RAISED WOODEN WALKWAY AND PROPOSED SITTING AREAS MUST BE REVISED IN ACCORDANCE WITH THE ATTACHED DRAWING PROVIDED WITH THE APPROVED WAIVER. A TYPE C LANDSCAPE BUFFER MUST BE PROVIDED ALONG THE NORTHERN PROPERTY BOUNDARY, ADJACENT TO THE CURTIN AND SEEN PROPERTIES (LOTS 14 AND 15 OF CHESTNUT RIDGE).
 3. THE IMPACT TO THE WETLAND, STREAM AND THEIR BUFFERS DO NOT EXCEED THOSE SHOWN ON THE WAIVER PETITION EXHIBIT.
 4. COMPLIANCE WITH SECTION 16.127(C) OF THE SUBDIVISION REGULATIONS, DESIGN OF INFILL DEVELOPMENT.
 5. COMPLIANCE WITH SECTION 16.120(B)(10) OF THE SUBDIVISION REGULATIONS, FIRE ACCESS.
 6. COMPLIANCE WITH ALL SUBDIVISION REVIEW COMMITTEE COMMENTS(MSHA, DEED).
 7. PROVIDE A RESTABILIZATION PLAN WITH THE SITE DEVELOPMENT PLAN.
- NOISE STUDY FOR THIS PROJECT WAS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. DATED AUGUST, 2005 AND WAS APPROVED NOVEMBER 16, 2005.
- THE EXTERIOR LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 134.C OF THE ZONING REGULATIONS.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAMS OR THEIR BUFFERS EXCEPT WHERE APPROVED UNDER WP-05-040.
- THIS PLAN IS SUBJECT TO BA-04-036V APPROVED FEBRUARY 18, 2005 FOR A VARIANCE TO REDUCE THE 100' BUILDING SETBACK FROM AN R-20 DISTRICT TO 45', REDUCE THE 50' USE SET BACK FROM A R-20 DISTRICT TO 26' FOR PARKING AND A DRIVEWAY, INCREASE THE MAXIMUM NUMBER OF UNITS PER STRUCTURE FROM 8 TO 15 UNITS AND INCREASE THE MAXIMUM BUILDING LENGTH FROM 120' TO 310'. FOR A PROPOSED TOWNHOUSE DEVELOPMENT TO BE LOCATED IN AN R-A-15(RESIDENTIAL) ZONING DISTRICT THE DECISION AND ORDER SHALL BECOME VOID UNLESS A BUILDING PERMIT IS OBTAINED WITHIN 2 YEARS AND SUBSTANTIAL CONSTRUCTIONS COMPLETED WITHIN 3 YEARS OF THE DECISION AND ORDER APPROVAL DATE.
- AN AFFD STUDY WAS PREPARED BY THE TRAFFIC GROUP, INC. DATED OCTOBER 2005, AND WAS APPROVED NOVEMBER 15, 2005.
- NOISE WALL AND LANDSCAPING FENCE WILL BE CONSTRUCTED AT LEAST 3' FROM THE PROPERTY LINE TO ALLOW FOR MAINTENANCE. 38. THE MIHU REQUIREMENT FOR THIS PROJECT IS FULFILLED BY ONE CERTIFICATE. APPROVED BY OFFICE OF HOUSING AND COMMUNITY DEVELOPMENT.

SITE DEVELOPMENT PLAN FEDERLINE PROPERTY A TOWNHOUSE CONDOMINIUM COMMUNITY HOWARD COUNTY, MARYLAND

BENCHMARKS				
NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM#1-18G1	589984.958	1,367,750.248	124.511	CONC. MON. AT SURFACE
BM#2-24C2	588,648.312	1,366,038.195	108.131	CONC. MON. AT SURFACE



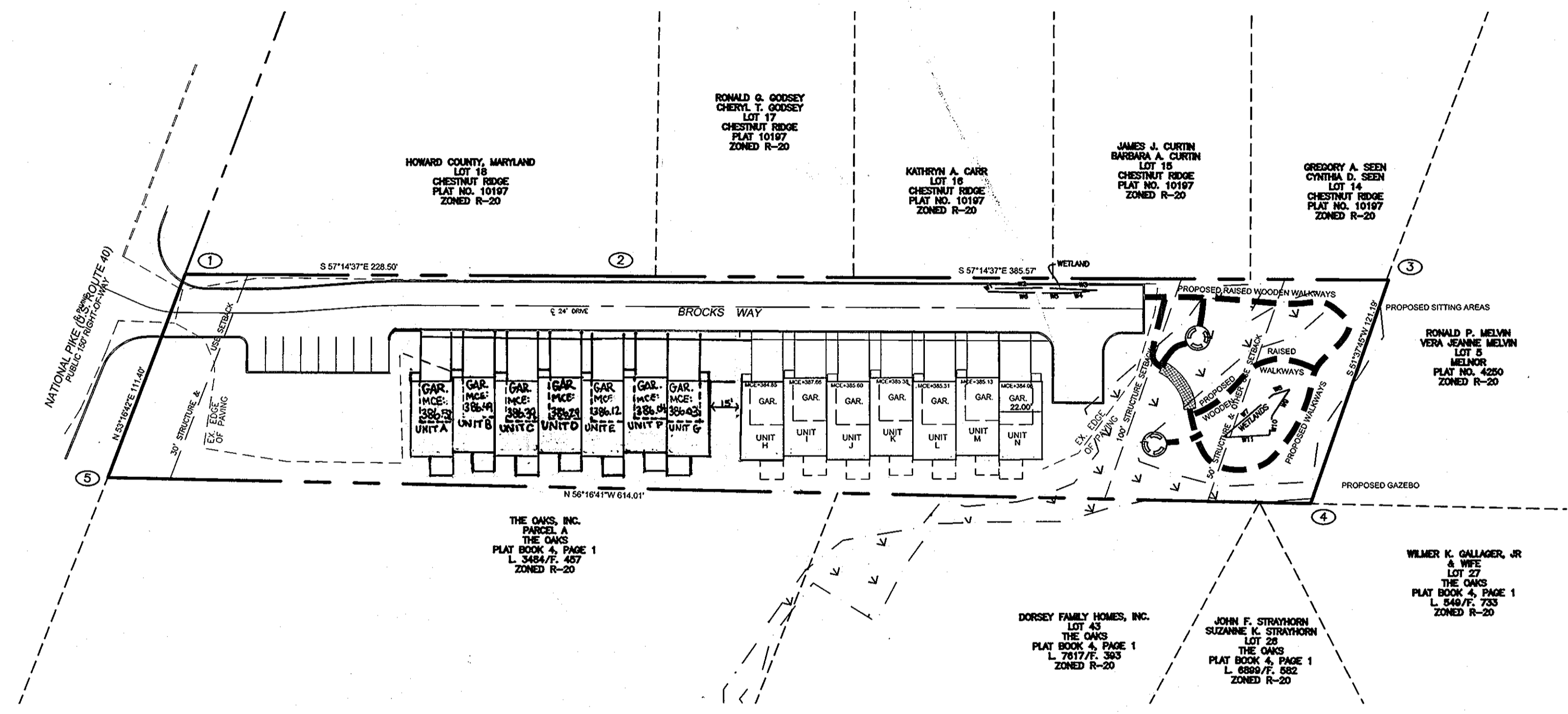
SCHEMATIC PROFILES
SCALE: 1"=30'

WETLANDS CHART	
LINE	BEARING AND DISTANCE
W1	N 86°35'12" W 2.98'
W2	S 58°31'04" E 25.46'
W3	N 54°49'45" W 27.74'
W4	S 63°24'22" E 14.12'
W5	S 56°57'02" E 18.73'
W6	N 55°50'27" W 23.08'
W7	N 81°56'44" E 33.26'
W8	S 74°52'56" E 8.93'
W9	S 65°54'00" W 16.32'
W10	N 40°26'33" E 9.83'
W11	N 60°31'14" W 22.52'

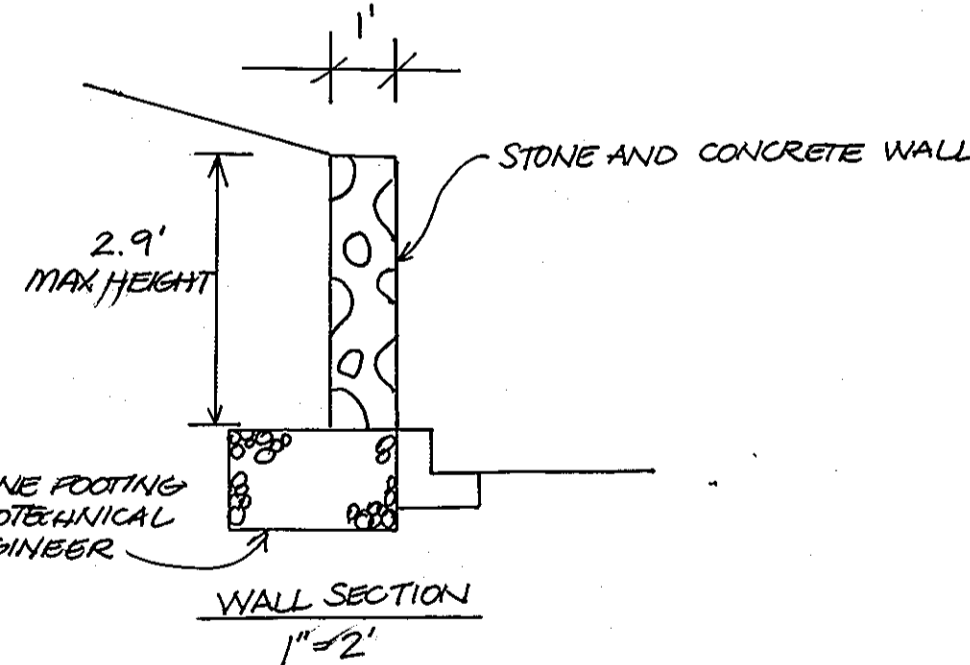
ADDRESS CHART	
UNIT	STREET ADDRESS
A	2910 BROCKS WAY
B	2912 BROCKS WAY
C	2914 BROCKS WAY
D	2916 BROCKS WAY
E	2918 BROCKS WAY
F	2920 BROCKS WAY
G	2922 BROCKS WAY
H	2924 BROCKS WAY
I	2926 BROCKS WAY
J	2928 BROCKS WAY
K	2930 BROCKS WAY
L	2932 BROCKS WAY
M	2934 BROCKS WAY
N	2936 BROCKS WAY
GAZEBO	2948 BROCKS WAY

PERMIT INFORMATION CHART					
PROJECT NAME	SECTION/AREA	PARCEL NUMBER			
FEDERLINE PROPERTY		P - 61			
DEED REF. 8070/193	BLOCK NO. 20	ZONE R-A-15	TAX MAP 18	ELECT. DIST. 2ND	CENSUS TR. 6029.00
WATER CODE: P-01			SEWER CODE: 1451500		

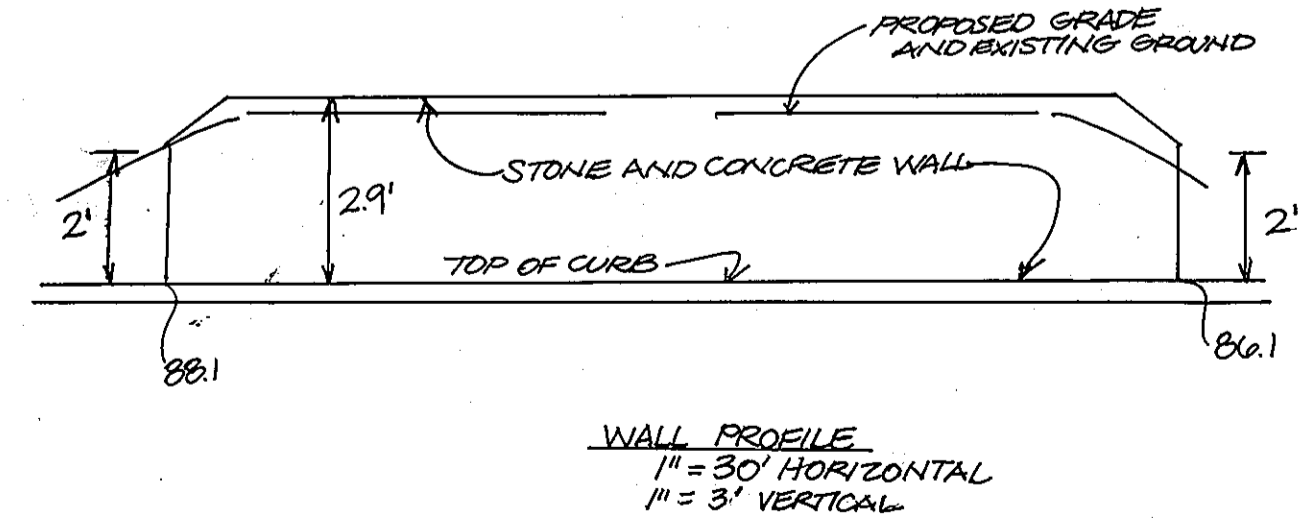
SHEET INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 6
DEMOLITION PLAN	2 OF 6
LAYOUT, GRADING AND SEDIMENT AND EROSION CONTROL PLAN	3 OF 6
SEDIMENT AND EROSION CONTROL DETAILS	4 OF 6
STORM DRAIN DRAINAGE AREA MAP AND PROFILES	5 OF 6
LANDSCAPE AND FOREST CONSERVATION PLAN AND DETAILS	6 OF 6



PLAN VIEW
SCALE: 1"=50'



COORDINATE TABLE (NAD 83)		
NO.	NORTHING	EASTING
1	591223.8523	1369637.4920
2	591100.2183	1369829.6557
3	590891.5987	1370153.9119
4	590816.3709	1370058.8983
5	591157.2458	1369548.2030



39. THIS MODERATE INCOME HOUSING UNIT AGREEMENT WAS RECORDED IN THE HOWARD COUNTY LAND RECORDS ON OCTOBER 23, 2006 BY LIBER 10829 AND FOLIO 287.
 40. THE MODERATE INCOME COVENANTS WERE RECORDED IN THE HOWARD COUNTY LAND RECORDS ON 11/2/06 BY LIBER 10333 AND FOLIO 489-500.
 41. THE 2 REQUIRED MODERATE INCOME HOUSING UNITS ARE PROVIDED OFF-SITE ON THE ELLICOTT GARDENS PROJECT (SDP-07-036) AT A 2:1 RATIO (4 MIHU PROVIDED). THE MODERATE INCOME HOUSING UNIT AGREEMENT HAS BEEN AMENDED AND RECORDED APRIL 27, 2009 AS LIBER 11685 FOLIO 311. THE MODERATE INCOME DECLARATION OF COVENANTS AND RESTRICTIONS HAS BEEN AMENDED AND RECORDED APRIL 27, 2009 AS LIBER 11085 FOLIO 33.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development Date: 9/14/06
 Chief, Development Engineering Division Date: 9/15/06
 Director Date: 9/15/06

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer Date: _____
 Howard County Health Department

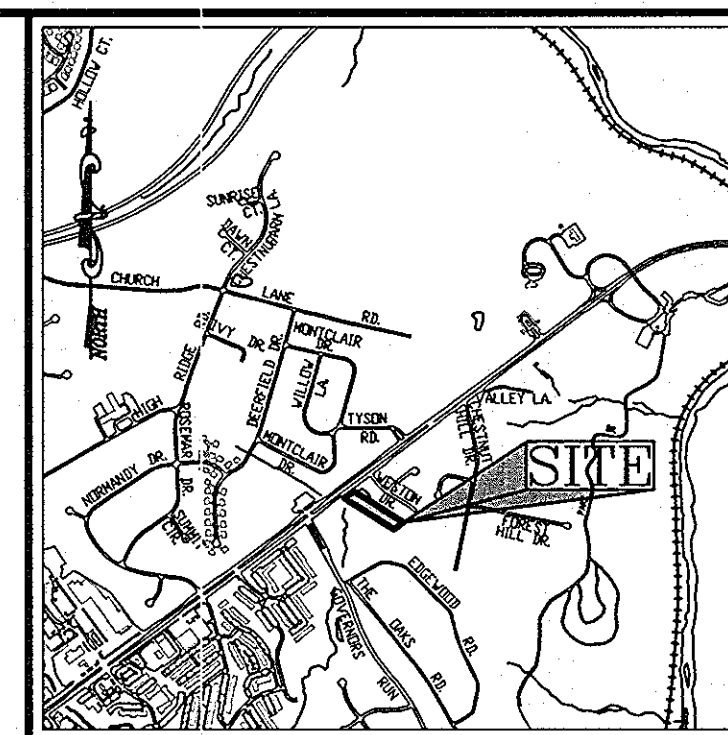
NO.	REVISION	DATE
2	ADD 2.9' WALL, SUBSTITUTE PATHWAYS FOR RAISED WALKWAYS 5/24/07	
1	ADD OFF-SITE MIHU LOCATION	
1	PROVIDING 15' BETWEEN UNIT H & UNIT G AND AFFECTED CHANGES TO U.S. OF	

COVER SHEET
FEDERLINE PROPERTY
 8261 BALTIMORE NATIONAL PIKE
 TOWNHOUSE CONDOMINIUM
 TAX MAP 18 BLOCK 20 L.8070 F.193 PARCEL '61'
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

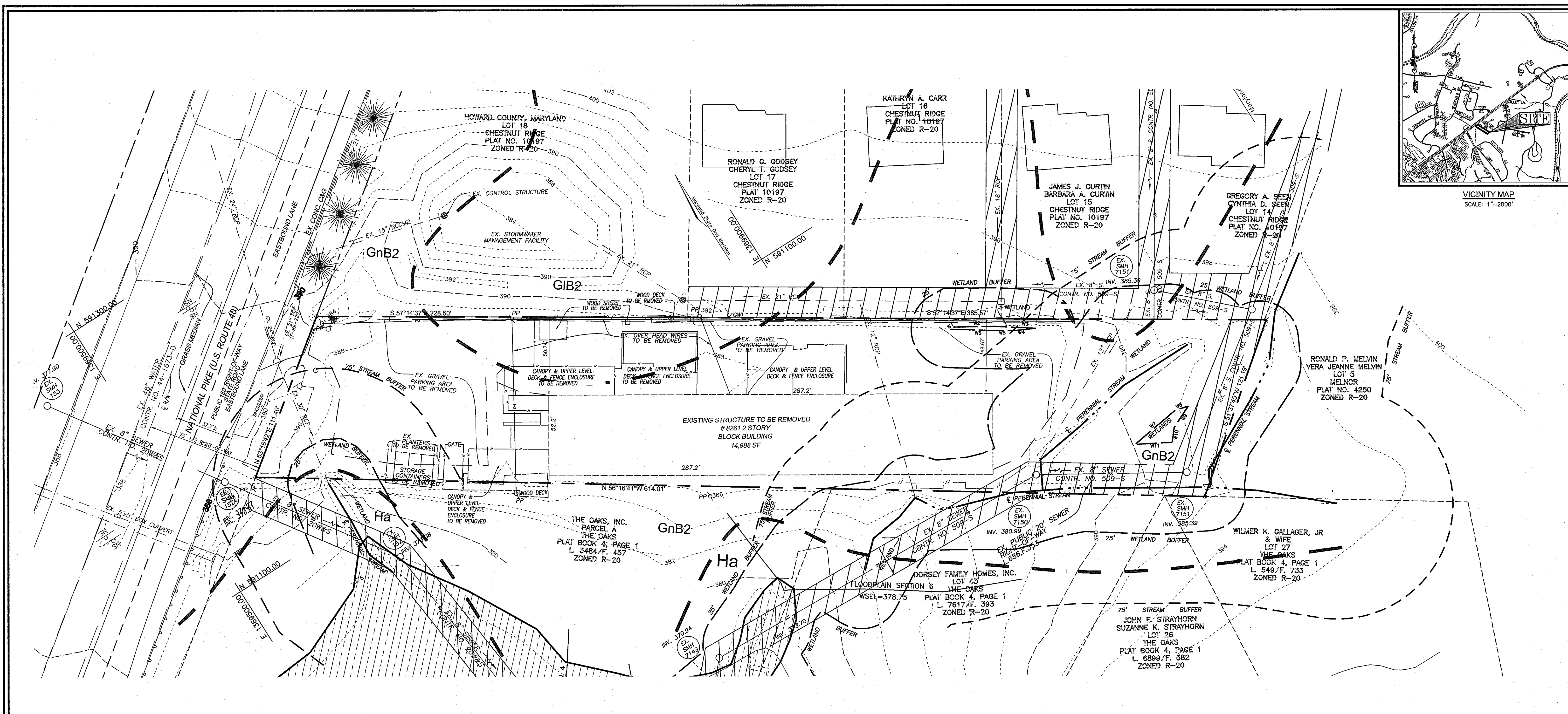
ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: RHV
 DRAWN BY: CMH
 CHECKED BY: RHV
 DATE: SEPT. 2006
 SCALE: AS SHOWN
 W.D. NO.: 04-35.00

1 SHEET OF 6



VICINITY MAP
SCALE: 1"=2000'



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

[Signature] _____ Date _____
County Health Officer
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] _____ Date 9/19/06
Chief, Division of Land Development

[Signature] _____ Date 9/15/06
Chief, Development Engineering Division

[Signature] _____ Date 9/19/06
Director

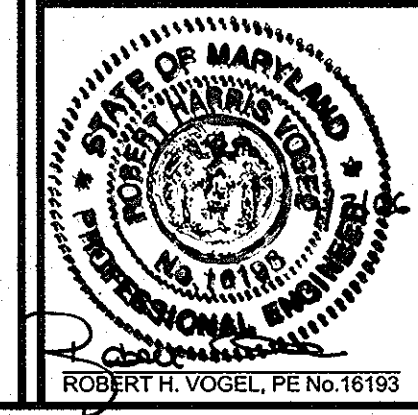
1	PROVIDING 15' BETWEEN UNIT H 1 UNIT G AND AFFECTED CHANGES	11.16.06
NO.	REVISION	DATE

DEMOLITION PLAN
FEDERLINE PROPERTY
8261 BALTIMORE NATIONAL PIKE
TOWNHOUSE CONDOMINIUM

TAX MAP 18 BLOCK 20
2ND ELECTION DISTRICT

L.8070 F.193 PARCEL '61'
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELlicott CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

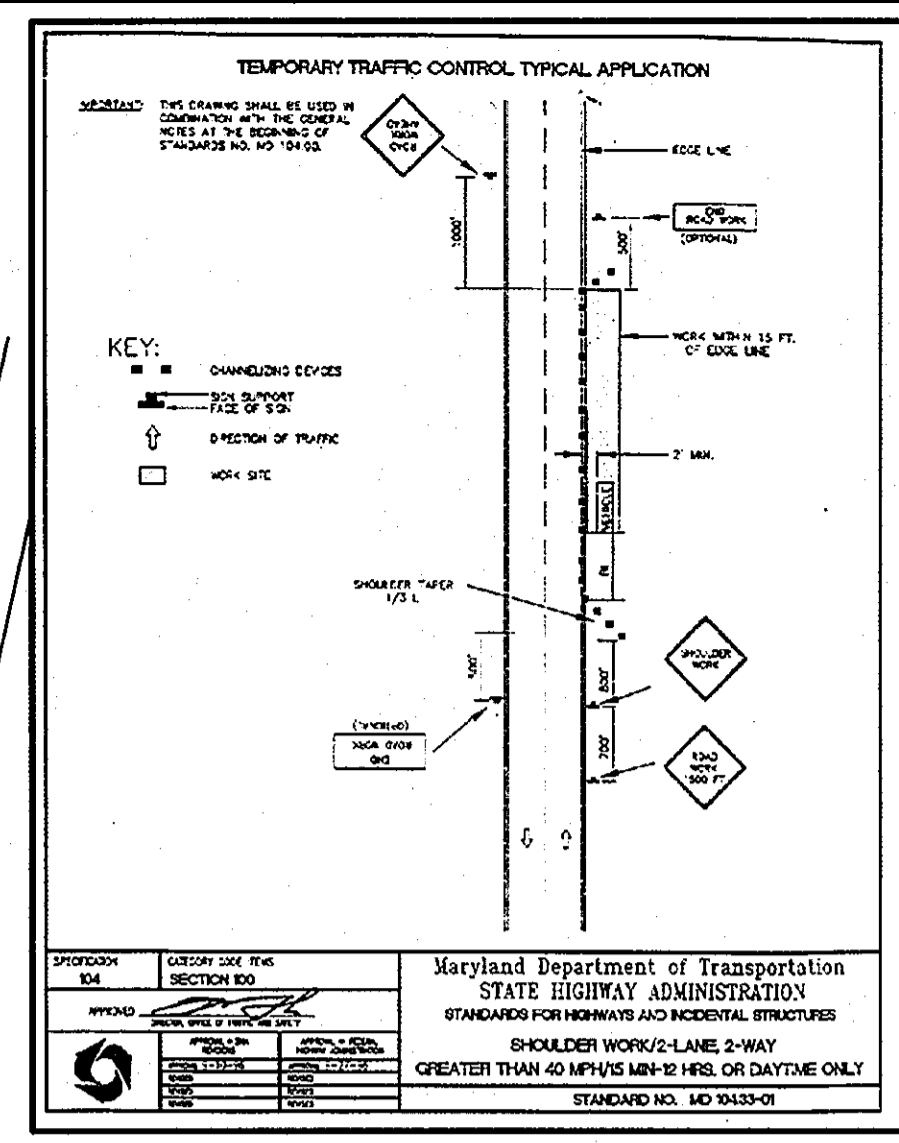
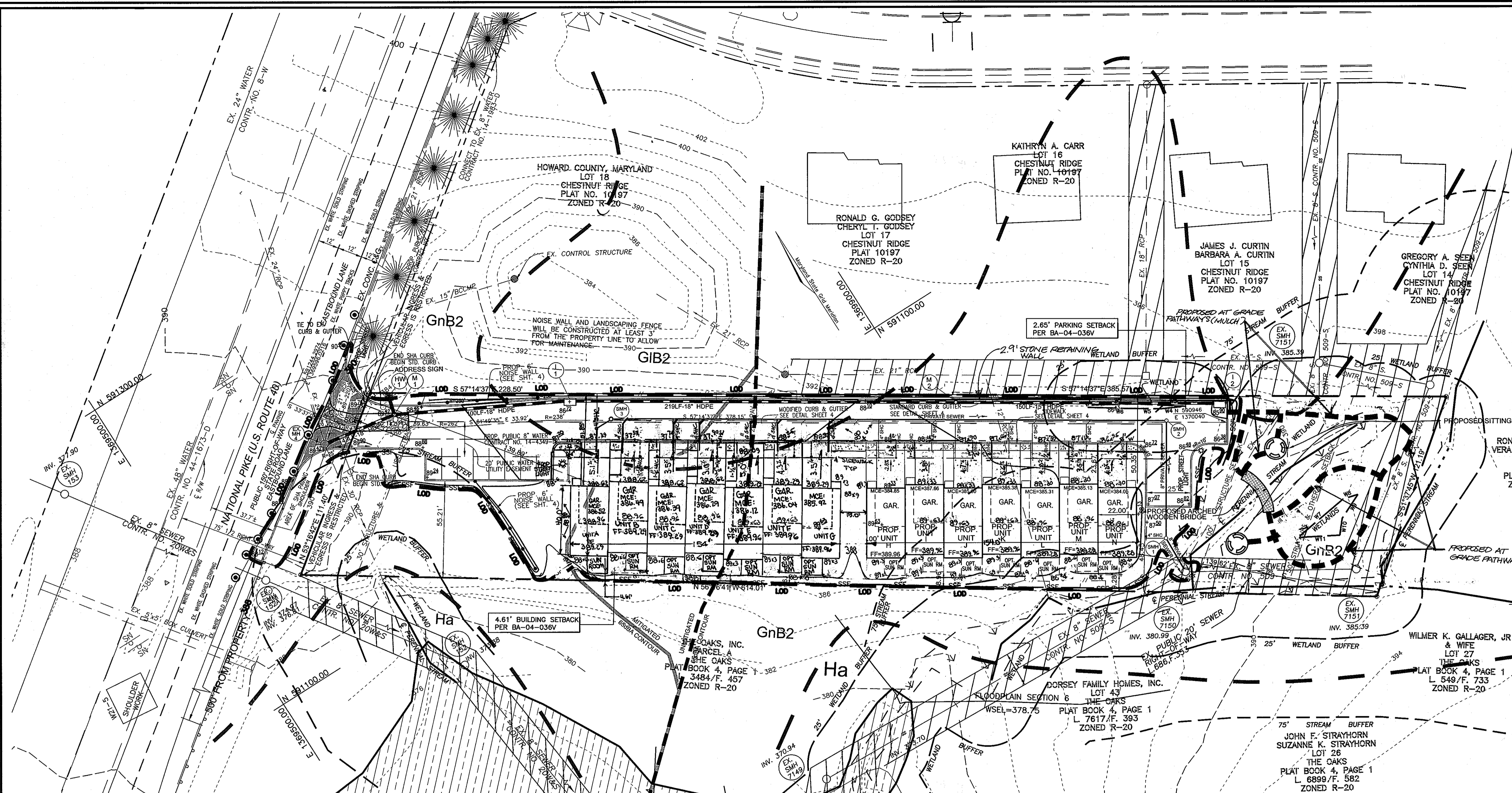


DESIGN BY: RHV
DRAWN BY: JCO
CHECKED BY: RHV
DATE: SEPT., 2006
SCALE: 1"=30'
W.O. NO.: 04-35.00
2044021.0

2 SHEET OF 6

OWNER
R & T FEDERLINE LLC
5100 DORSEY HALL DRIVE
ELlicott CITY, MARYLAND 21042

DEVELOPER
LAND DESIGN & DEVELOPMENT, INC.
5300 DORSEY HALL DRIVE
ELlicott CITY, MARYLAND 21042
(443) 637-0422



STREET LIGHT CHART	
SYMBOL	FIXTURE/POLE TYPE
⊙	250 WATT HPS VAPOR PENDENT FIXTURE (SAG) MOUNTED ON A 30' BRONZE FIBERGLASS POLE USING A 12' ARM
⊙	150 WATT HPS VAPOR PREMIER POST-TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE

NOTE: TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOA. A SEPARATE PRIVATE MAINTENANCE AGREEMENT SHALL BE REQUIRED WITH BGE.

NOTE: FOR SITE DETAILS SEE SHEET 4 OF 7.

LEGEND	
---202---	EXISTING 2 FT CONTOUR
---200---	EXISTING 10 FT CONTOUR
---	SOIL TYPE DIVISION LINE
---	EXISTING TREELINE
---	WETLANDS
⊙	STREET LIGHT

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
GIB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
Ha	HARBORO SILT LOAM	D

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

County Health Officer _____ Date _____
 Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development _____ Date 9/19/06
 Chief, Development Engineering Division _____ Date 9/15/06
 Director _____ Date 9/15/06

ENGINEER'S CERTIFICATE

"I hereby certify that this plan for sediment and erosion 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 _____ Date 9/15/06
 Robert H. Vogel

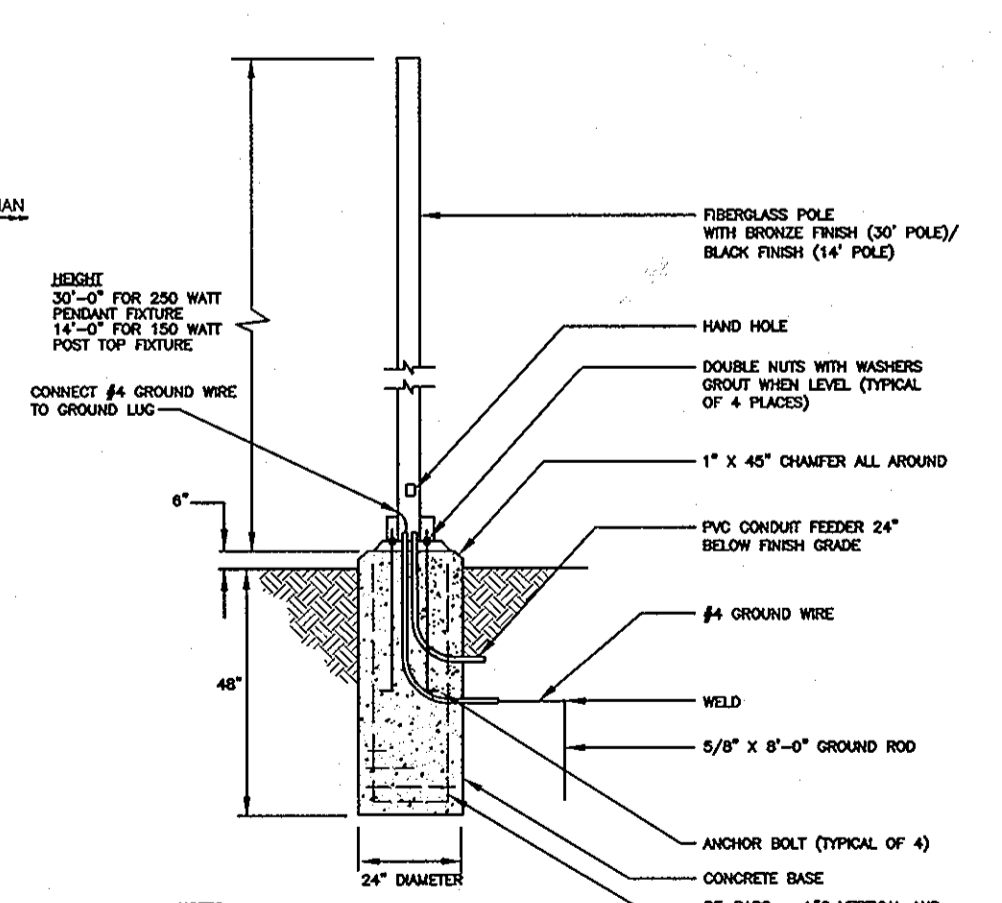
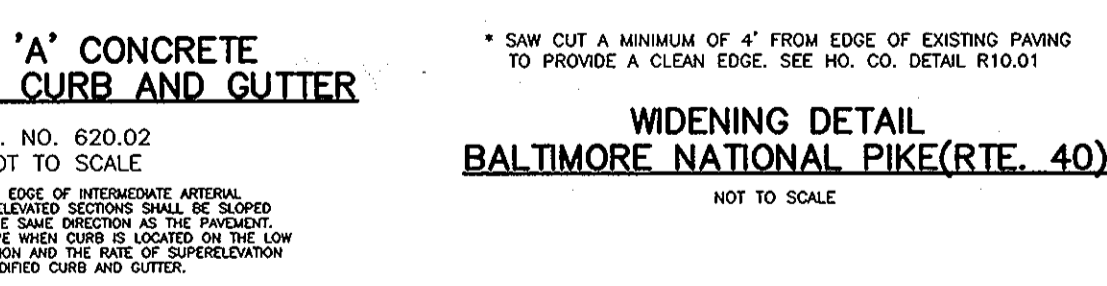
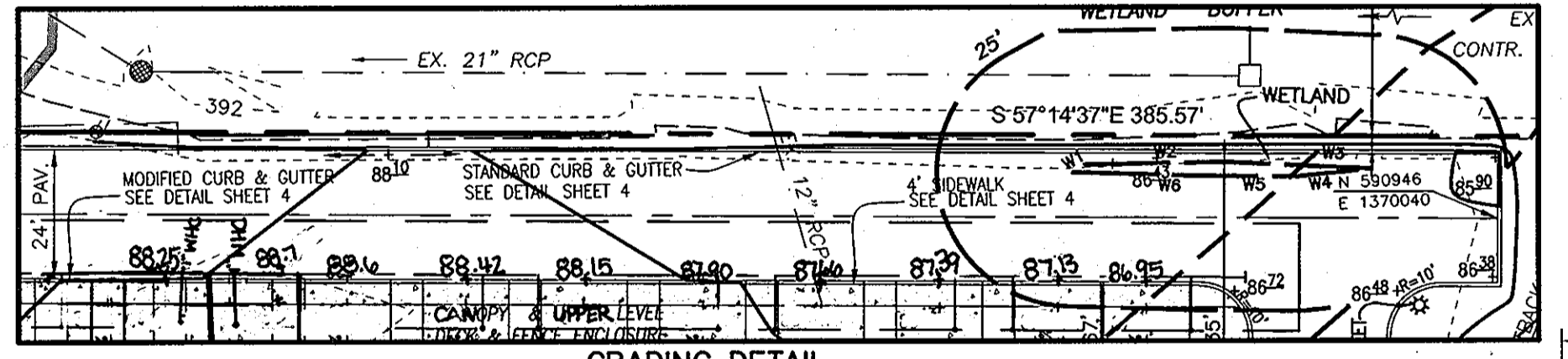
DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Signature of Developer (print name below signature) _____ Date 9/15/06

These plans have been reviewed for HOWARD SOIL CONSERVATION DISTRICT and meets technical requirements for soil erosion and sediment control.

Signature of Reviewer _____ Date 9/18/06
 Signature of Reviewer _____ Date 9/19/06



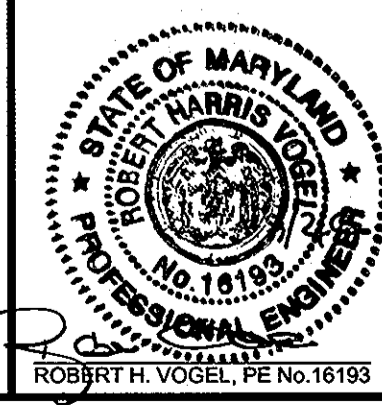
NO.	REVISION	DATE
2	ADD 2.9' WALL, SUBSTITUTE PATHWAYS FOR RAISED WALKWAYS AND ADD CURBSIDE MULCH LOCATION	9/20/06
1	PROVIDING 15' BETWEEN UNIT H & UNIT G AND AFFECTED CHANGES	11.16.06

LAYOUT, GRADING AND SEDIMENT CONTROL PLAN

FEDERLINE PROPERTY
 8261 BALTIMORE NATIONAL PIKE
 TOWNHOUSE CONDOMINIUM

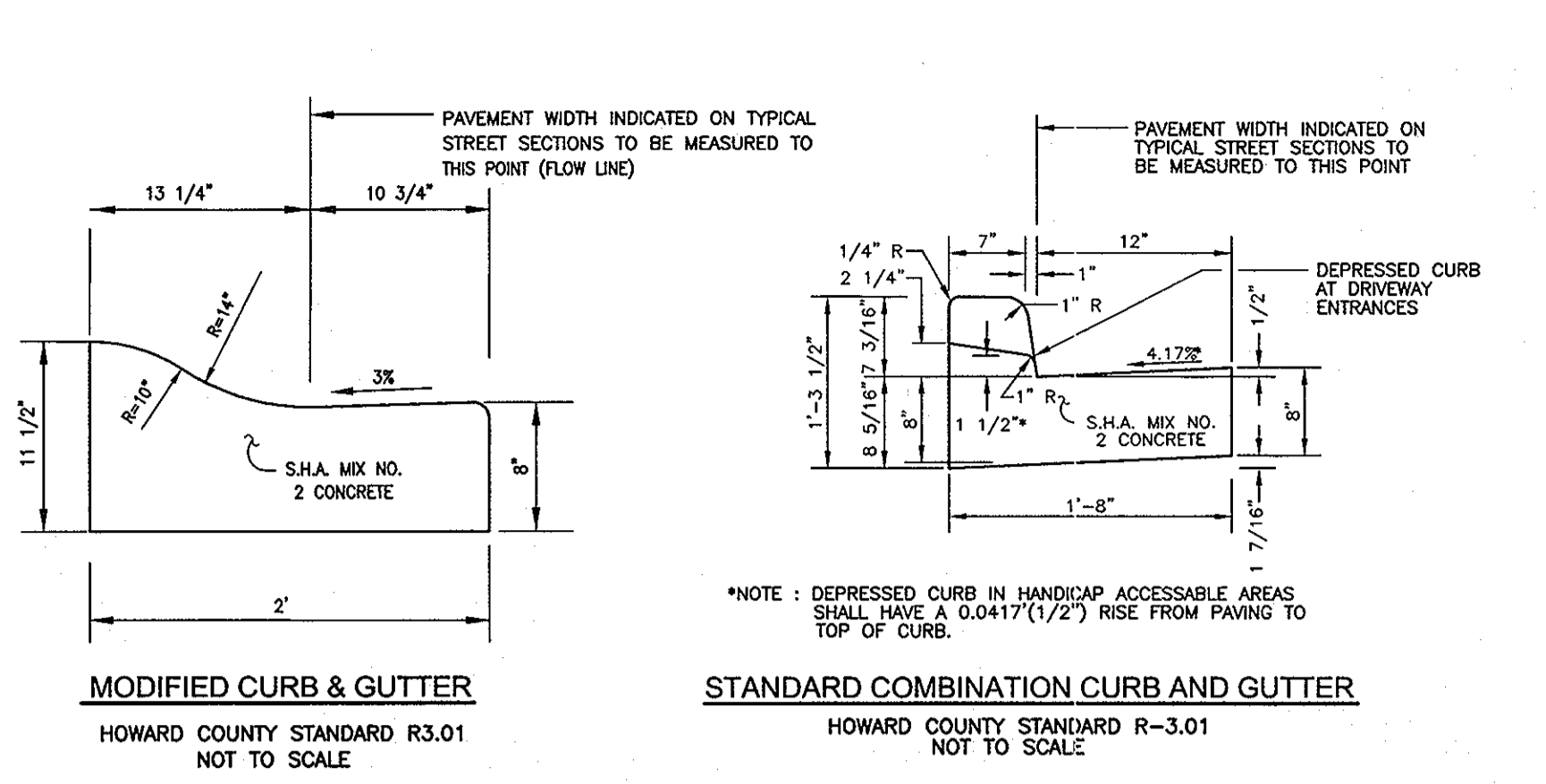
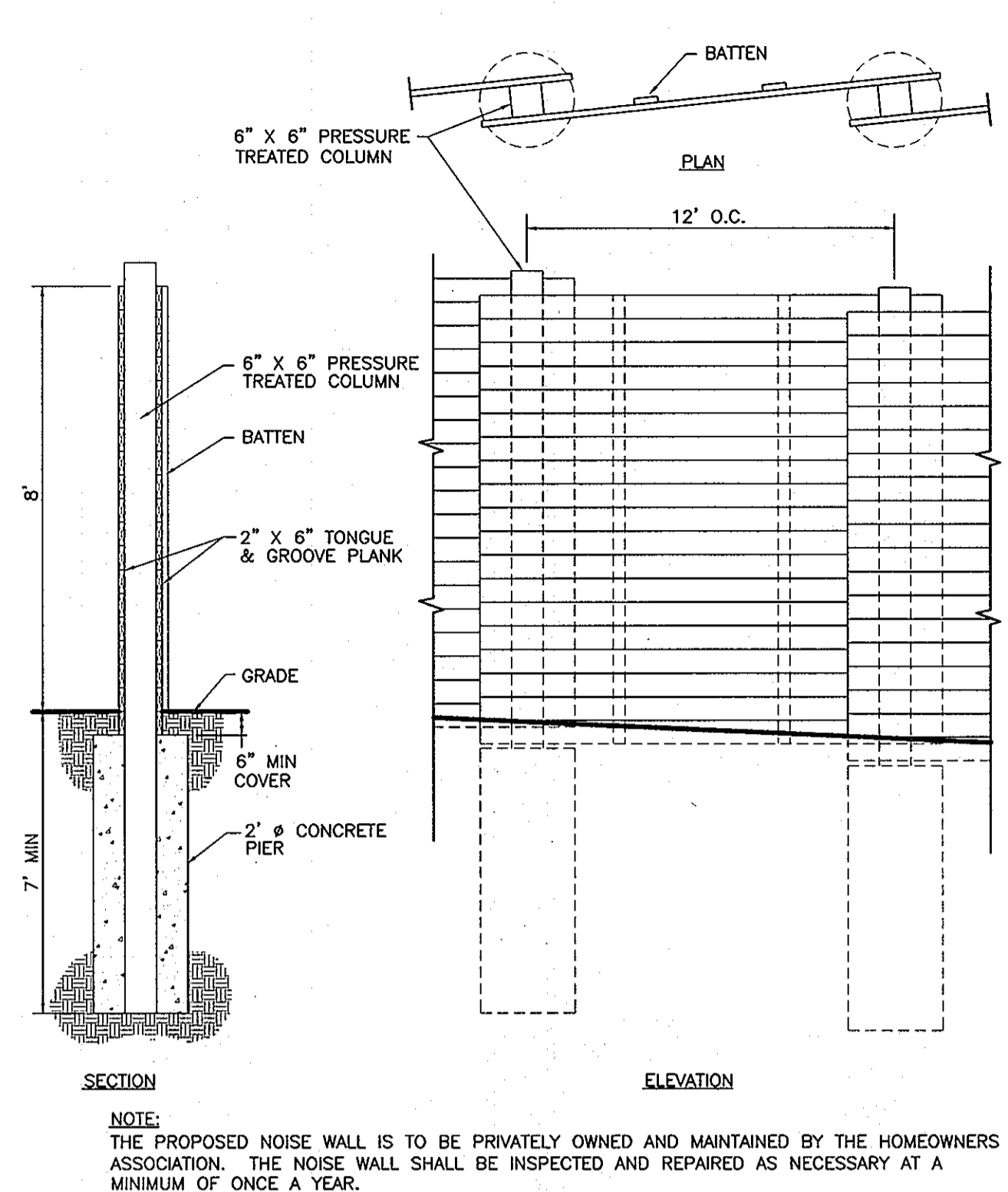
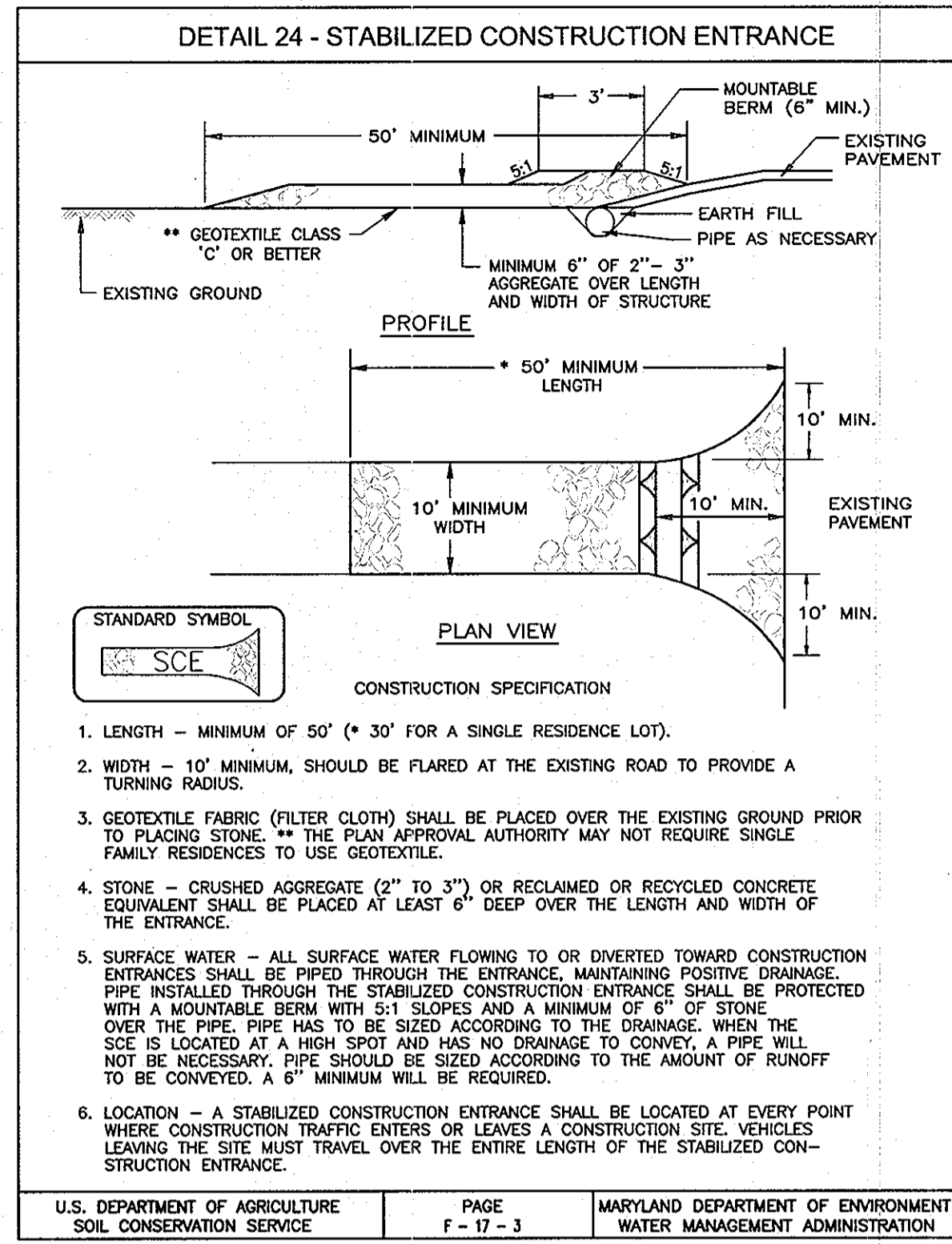
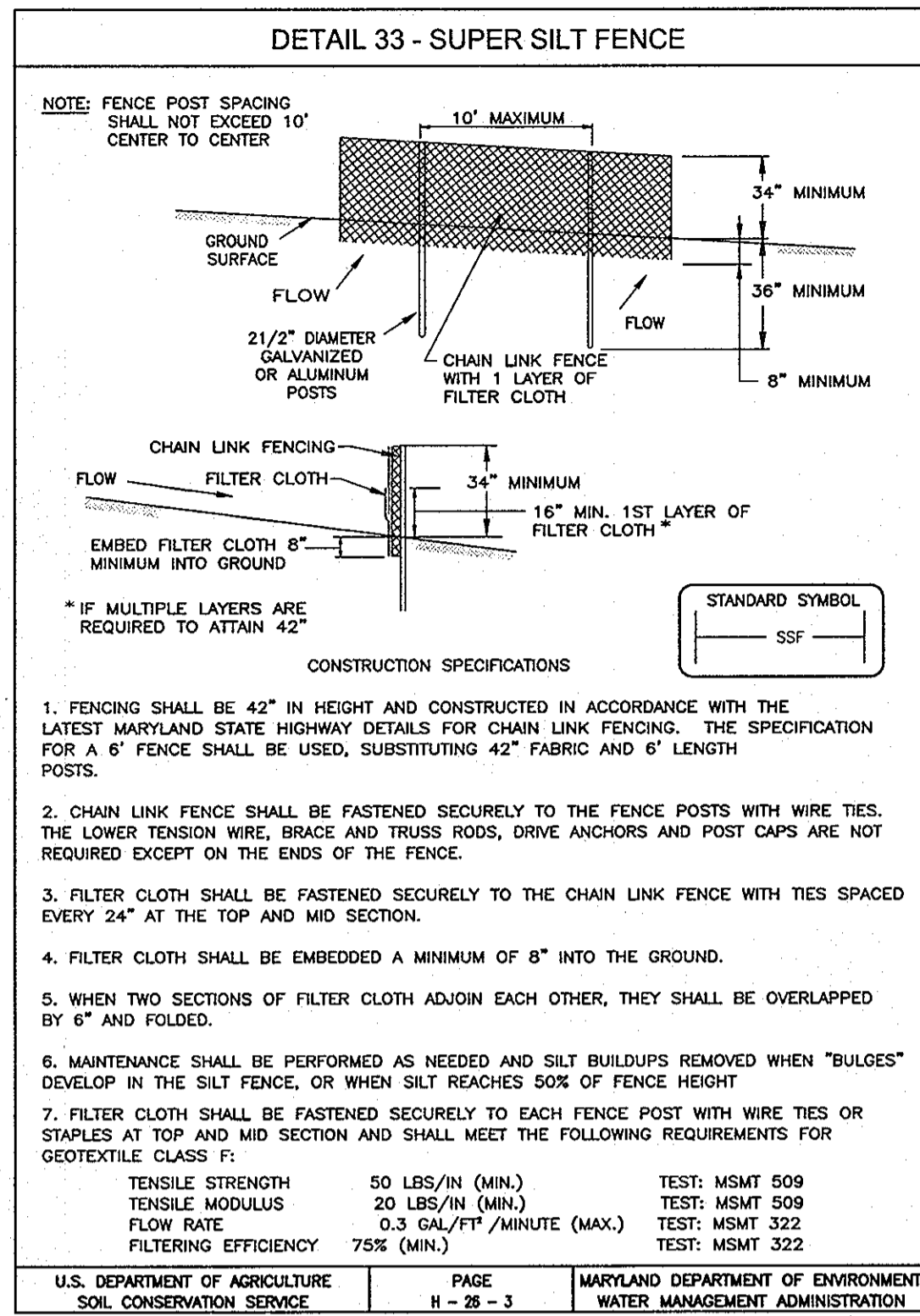
TAX MAP 18 B200N L.8070 F.193 PARCEL '61'
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961



DESIGN BY: RHV
 DRAWN BY: JCO
 CHECKED BY: RHV
 DATE: SEPT., 2006
 SCALE: 1"=30'
 W.O. NO.: 04-35.00

3 SHEET OF 6



21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

DEFINITION
PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETABLE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
 - TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILTY LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY A SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 AND 1/2" IN DIAMETER.
 - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
 - FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
 - FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
 - ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
 - PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
 - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
 - NO SOIL OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PERSISTENT MATERIALS.
 - NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
 - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION-SECTION 1-VEGETATIVE STABILIZATION METHODS AND MATERIALS.
 - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALTHOUGH 4" - 8" HIGHER IN ELEVATION.
 - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" - 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

PERMANENT SEEDING NOTES

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

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

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED-APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL AT THE TIME OF SEEDING. APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.).
- ACCEPTABLE-APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND APPLY 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

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

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

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

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

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

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

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

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSE AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3:1, (B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN SHALL BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, 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, SOO, TEMPORARY SEEDING, AND MULCHING (SEC. C). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA	1.48 AC.
AREA DISTURBED	1.15 AC.
AREA TO BE ROOFED OR PAVED	0.80 AC.
AREA TO BE VEGETATIVELY STABILIZED	0.35 AC.
TOTAL CUT	4500 CY
TOTAL FILL	4500 CY
OFFSITE WASTE/BORROW AREA LOCATION	*
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT 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 REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT

SEQUENCE OF CONSTRUCTION

SEQUENCE OF CONSTRUCTION	DURATION
1. OBTAIN GRADING PERMIT.	
2. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (313-1850) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.	
3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE	1 DAY
4. INSTALL SUPER SILT FENCE	1 DAY
7. AFTER OBTAINING PERMISSION FROM SEDIMENT CONTROL INSPECTOR TO PROCEED, REMOVE EXISTING FEATURES AS SHOWN ON SHEET 2.	
8. BEGIN CONSTRUCTION OF SEWER, WATER & STORM DRAIN SYSTEMS.	3 WEEKS
9. CONSTRUCT BUILDINGS	3 MONTHS
10. GRADE ROAD TO SUB-BASE	5 DAYS
11. WITH ROAD GRADED TO SUB-BASE AND INLETS ARE IN PLACE, BEGIN INSTALLATION OF CURB AND GUTTER	1 WEEK
12. WITH CURB AND GUTTER IN PLACE PAVE ROAD AND INSTALL SIDEWALK	1 WEEK
15. FINALIZE SITE GRADING IN CONFORMANCE WITH THIS PLAN	2 DAYS
16. WITH INSPECTOR APPROVAL AND FINAL ROAD PAVING COMPLETE STABILIZE ANY REMAINING DISTURBED AREAS	3 DAYS
17. INSTALL STREET TREES AND ALL LANDSCAPING	1 WEEK

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

County Health Officer
Howard County Health Department

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development
Date: 9/19/06

Chief, Development Engineering Division
Date: 9/15/06

Director
Date: 7/15/06

ENGINEER'S CERTIFICATE

I hereby certify that this plan for sediment and erosion 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
Robert H. Vogel
Date: 9/15/06

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Signature of Developer (print name below signature)
Date: 9-5-06

These plans have been reviewed for HOWARD SOIL CONSERVATION DISTRICT and meets technical requirements for soil erosion and sediment control

Signature of Howard SCD
Date: 9/14/06

Signature of Howard SCD
Date: 9/14/06

OWNER
R & T FEDERAL LLC
5100 DORSEY HALL DRIVE
ELLCOTT CITY, MARYLAND 21042

DEVELOPER
LAND DESIGN & DEVELOPMENT, INC.
5300 DORSEY HALL DRIVE
ELLCOTT CITY, MARYLAND 21042
(443) 637-0422

DESIGN BY: RHV
DRAWN BY: JCO
CHECKED BY: RHV
DATE: SEPT., 2006
SCALE: 1"=30'
W.O. NO.: 04-35.00

4 SHEET OF 6

SEDIMENT AND EROSION CONTROL DETAILS

FEDERLINE PROPERTY

8261 BALTIMORE NATIONAL PIKE
TOWNHOUSE CONDOMINIUM

TAX MAP 18 BLOCK 20
2ND ELECTION DISTRICT

L.8070 F.193 PARCEL 61
HOWARD COUNTY, MARYLAND

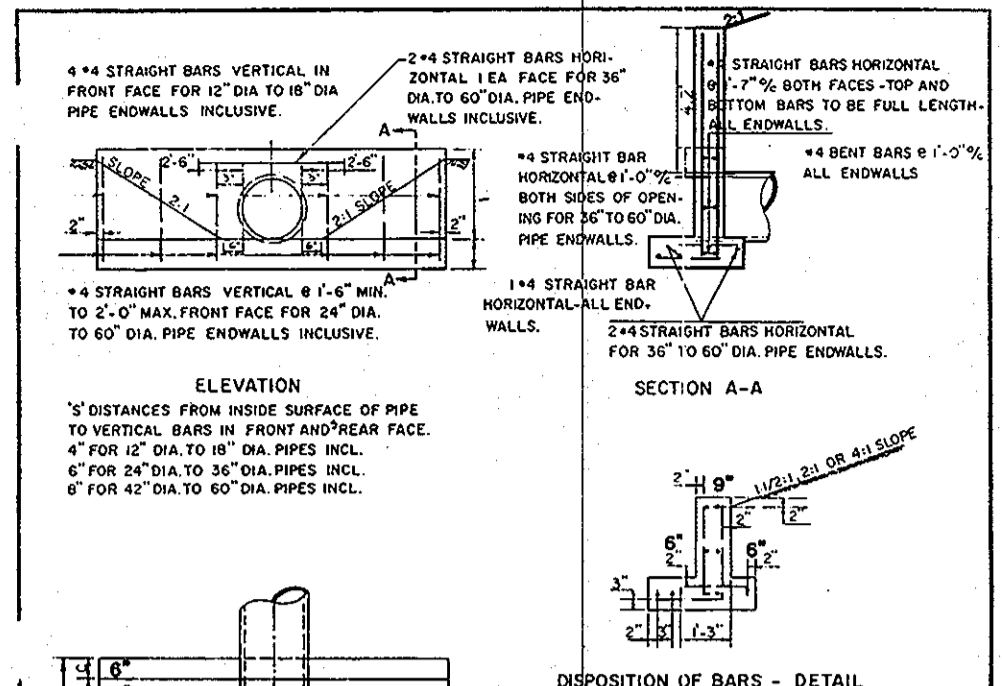
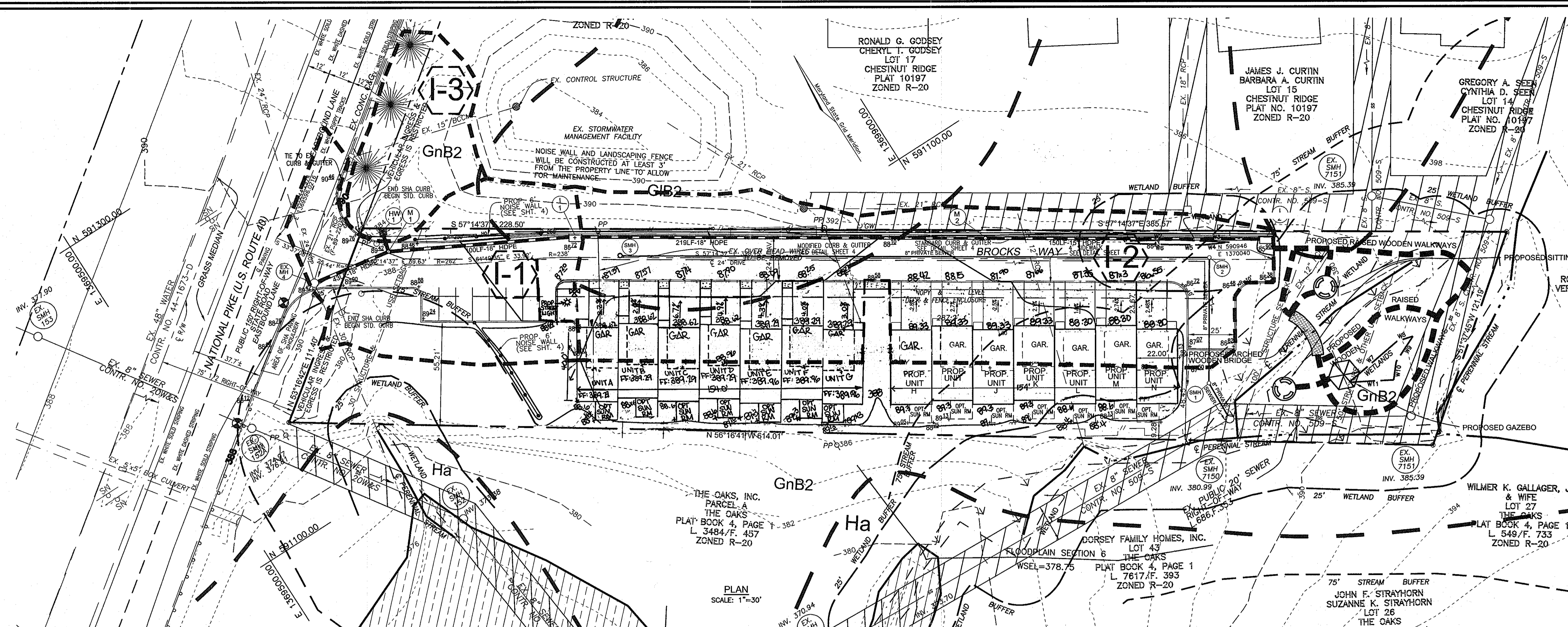
ROBERT H. VOGEL

ENGINEERS • SURVEYORS • PLANNERS

8407 MAIN STREET
ELLCOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.5961

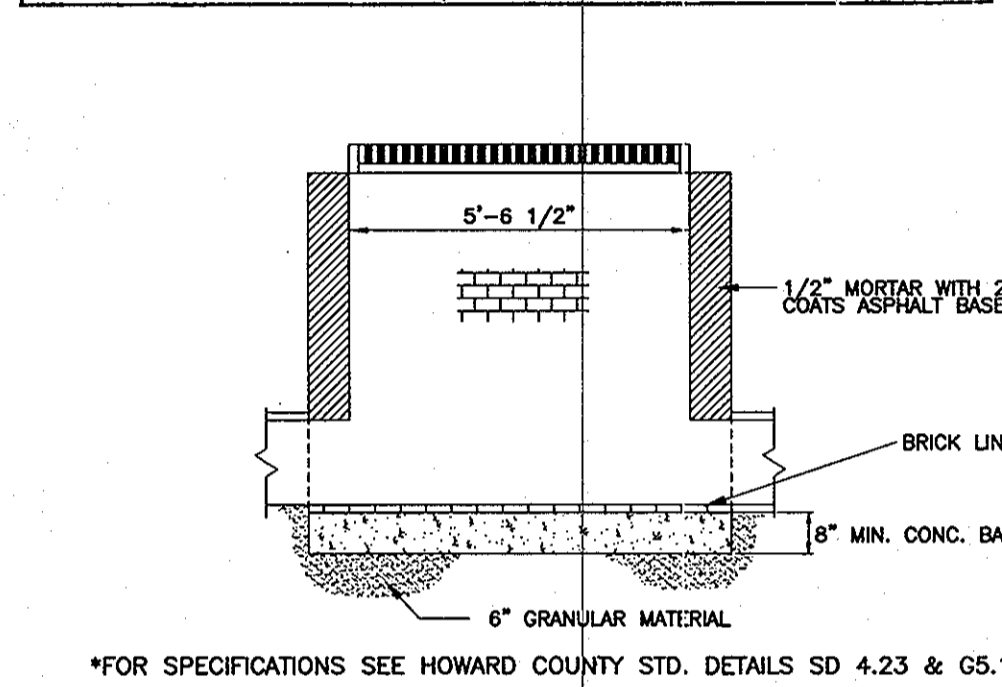
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4 SHEET OF 6

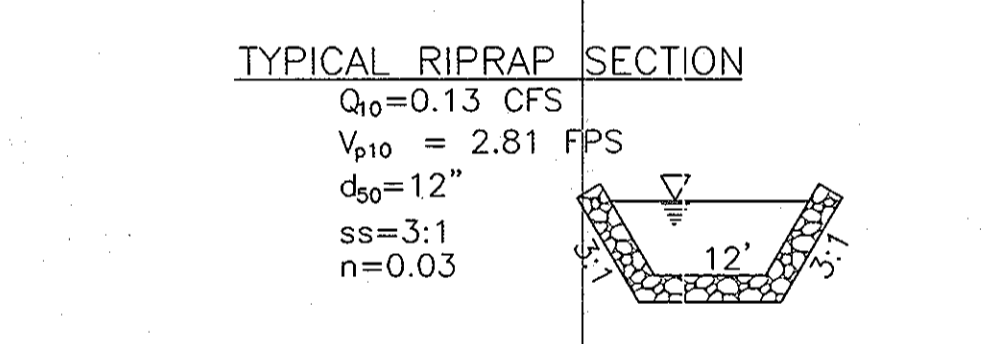


OPENING	AREA	PERIMETER	VOLUME	WEIGHT
12" DIA. INLET	0.000	3.770	0.000	0.000
12" DIA. INLET	0.000	3.770	0.000	0.000
12" DIA. INLET	0.000	3.770	0.000	0.000
12" DIA. INLET	0.000	3.770	0.000	0.000
12" DIA. INLET	0.000	3.770	0.000	0.000
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12" DIA. INLET	0.000	3.770	0.000	0.000
12" DIA. INLET	0.000	3.770	0.000	0.000
12" DIA. INLET	0.000	3.770	0.000	0.000

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved: [Signature]
Chief, Bureau of Engineering



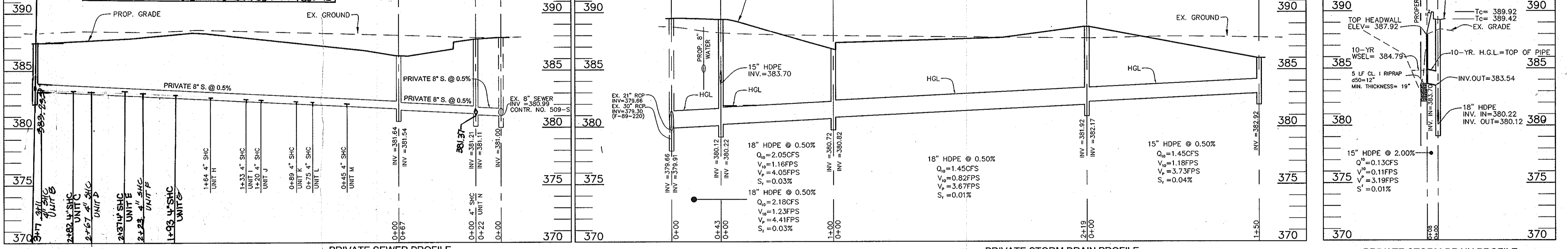
*FOR SPECIFICATIONS SEE HOWARD COUNTY STD. DETAILS SD 4.23 & GS.14
MODIFIED NON-TERMINAL DOUBLE 'S' TYPE INLET
NOT TO SCALE



NO.	AREA	% IMP.	SOIL TYPES	ZONE
1-1	0.29 AC.	0.32	65	B & C R-A-15
1-2	0.53 AC.	0.30	65	B & C R-A-15

SYMBOL	NAME / DESCRIPTION	GROUP
OH	GLENNVILLE SILT LOAM, 3 TO 8 PERCENT SILTS, MODERATELY ERODED	C
CH	GLENNVILLE LOAM, 3 TO 8 PERCENT SILTS, MODERATELY ERODED	E
H	HARBORO SILT LOAM	D

LOT NO.	TYPE	INVERT	UNIT	M.C.E.
A	4\"/>			

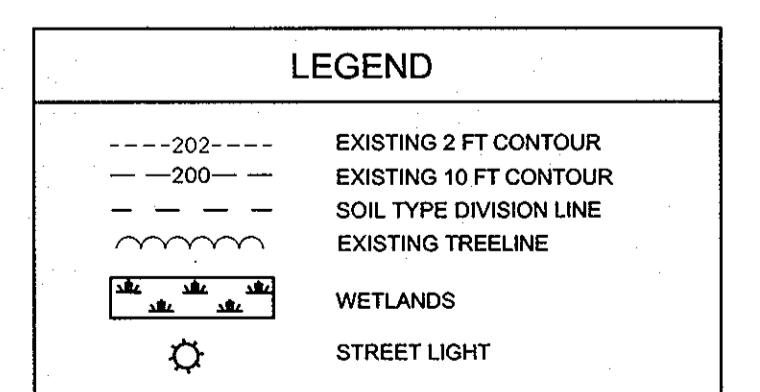


APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
County Health Officer
Howard County Health Department

PIPE SIZE	TYPE	TOTAL LENGTH
15"	HDPE	160 LF
18"	HDPE	362 LF

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
I-1	DOUBLE TYPE 'S' COMB.	N 591159.27 E 1369731.73	386.50	-	382.92	SD 4.34
I-2	DOUBLE TYPE 'S' COMB.	N 590958.67 E 1370043.53	387.32	380.82	380.72	SD 4.34
M-1	STANDARD 4' MANHOLE	N 591205.77 E 1369642.54	389.36	380.22	380.12	G 5.12
M-2	STANDARD 4' MANHOLE	N 591039.23 E 1369916.32	387.49	382.17	381.92	G 5.12
HW-1	TYPE 'C' HEADWALL	N 591216.66 E 1369645.54	388.90	-	383.90	SD 5.21

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
SMH-1	STANDARD 4' PRECAST MANHOLE	N 590909.07 E 1369975.55	387.80	381.21	381.11	S-1.31
SMH-2	STANDARD 4' PRECAST MANHOLE	N 590965.76 E 1370012.62	386.32	381.64	381.54	S-1.31
SMH-3	STANDARD 4' PRECAST MANHOLE	N 591130.37 E 1369756.18	387.50	-	383.16	S-1.31



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development
Chief, Development Engineering Division
Director

OWNER: R & T FEDERALINE LLC
DEVELOPER: LAND DESIGN & DEVELOPMENT, INC.

1 PROVIDING 15' BETWEEN UNIT H & UNIT G AND AFFECTED CHANGES 11.16.06

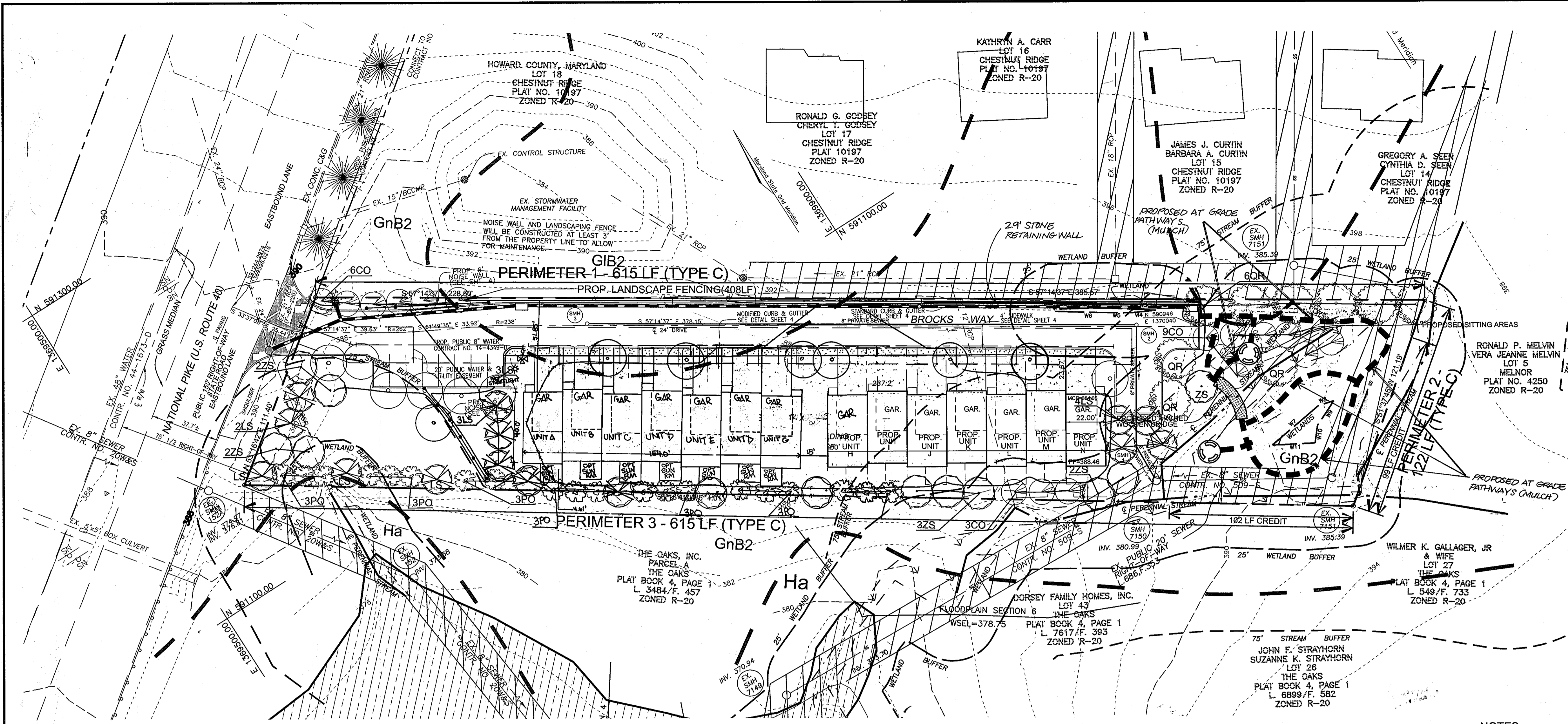
STORM DRAIN DRAINAGE AREA MAP AND PROFILES
FEDERLINE PROPERTY
8261 BALTIMORE NATIONAL PIKE
TOWNHOUSE CONDOMINIUM

TAX MAP 18 BLOCK 20
2ND ELECTION DISTRICT
L.8070 F.193 PARCEL '61'
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
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8407 MAIN STREET
ELLICOTT CITY, MD 21043
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DESIGN BY: RHV
DRAWN BY: JCO
CHECKED BY: RHV
DATE: SEPT. 2006
SCALE: 1"=30'
W.O. NO.: 04-35.00



LEGEND

---	EXISTING 2 FT CONTOUR
- - -	EXISTING 10 FT CONTOUR
---	SOIL TYPE DIVISION LINE
---	EXISTING TREELINE
---	WETLANDS
○	STREET LIGHT

LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
LS	14	LIQUIDAMBAR STYRACIFLUA AMERICAN SWEETGUM	2 1/2"-3" Cal.	B & B
QR	9	QUERCUS ROBUR 'FASTIGIATA' COLUMNAR ENGLISH OAK	2 1/2"-3" Cal.	B & B
ZS	12	ZELKOVA SERRATA 'VILLAGE GREEN' VILLAGE GREEN ZELKOVA	2 1/2"-3" Cal.	B & B
CO	18	CYPRESS OCYPARIS LEYLANDI LEYLAND CYPRESS	5' - 6' Ht.	B & B
PO	21	PICEA OMORICA SERPIAN SPRUCE	6' - 8' Ht.	B & B

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LANDSCAPE SCHEDULE SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	PERIMETER PROPERTIES
Perimeter/Frontage Designation Landscape Type	1 2 3 C C C
Linear Feet of Roadway Frontage/Perimeter	615' 122' 615'
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	YES** YES** YES** 99' 102'
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	YES*** No No 405'
Number of Plants Required	
Shade Trees	1:40 6 1:40 1 1:40 13
Evergreen Trees	1:20 11 1:20 2 1:20 28
Number of Plants Provided	
Shade Trees	6 1 13
Evergreen Trees	11 2 28
Other Trees (2:1 Substitution)	- - -
Shrubs (10:1 Substitution)	- - -
Describe Plant Substitution Credits (Below if needed)	- - -

*CREDIT FOR 6' PRIVACY FENCE
**CREDIT FOR EXISTING TREES

STREET TREE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
○	14	ASER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.	B & B

Forest Conservation Worksheet 2.2

Net Tract Area	A	B	C
A. Total Tract Area	A = 1.48		
B. Deductions	B = 0.00		
C. Net Tract Area	C = 1.48		

Land Use Category

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	1	0	0

Existing Forest Cover

F	G
F = 0.00	G = 0.00

Break Even Point

H	I
H = 0.00	I = 0.00

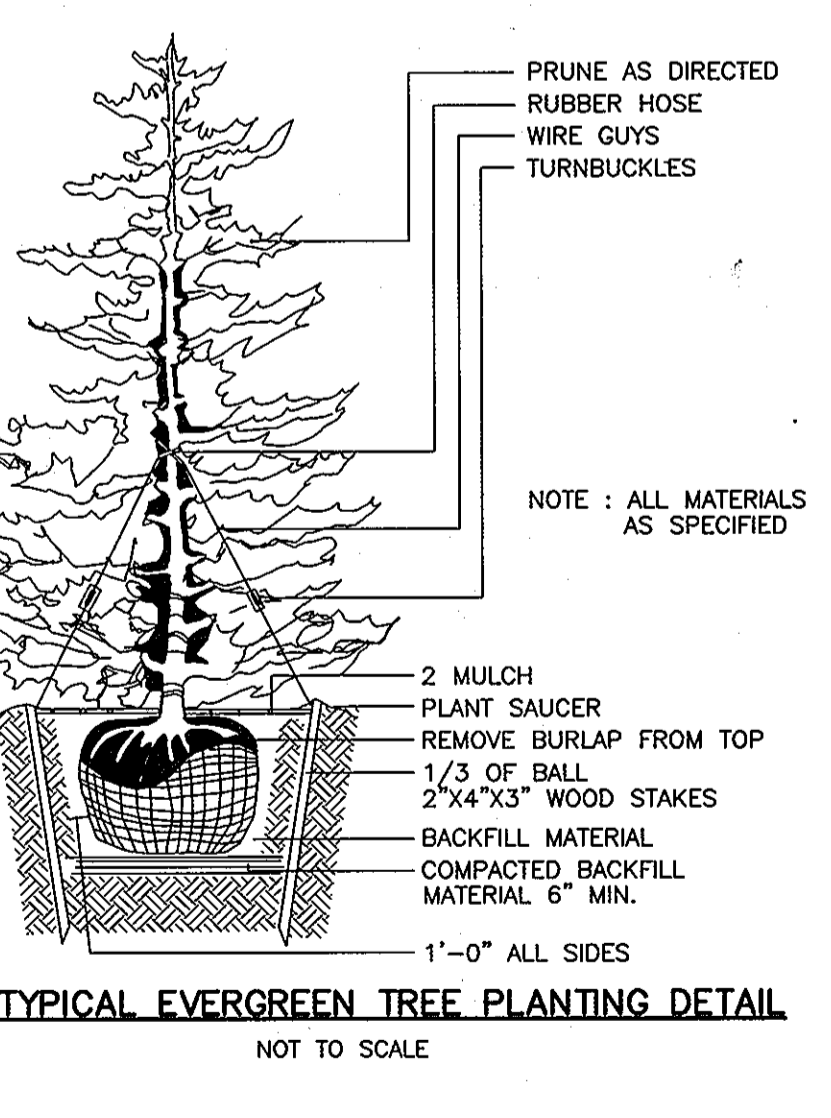
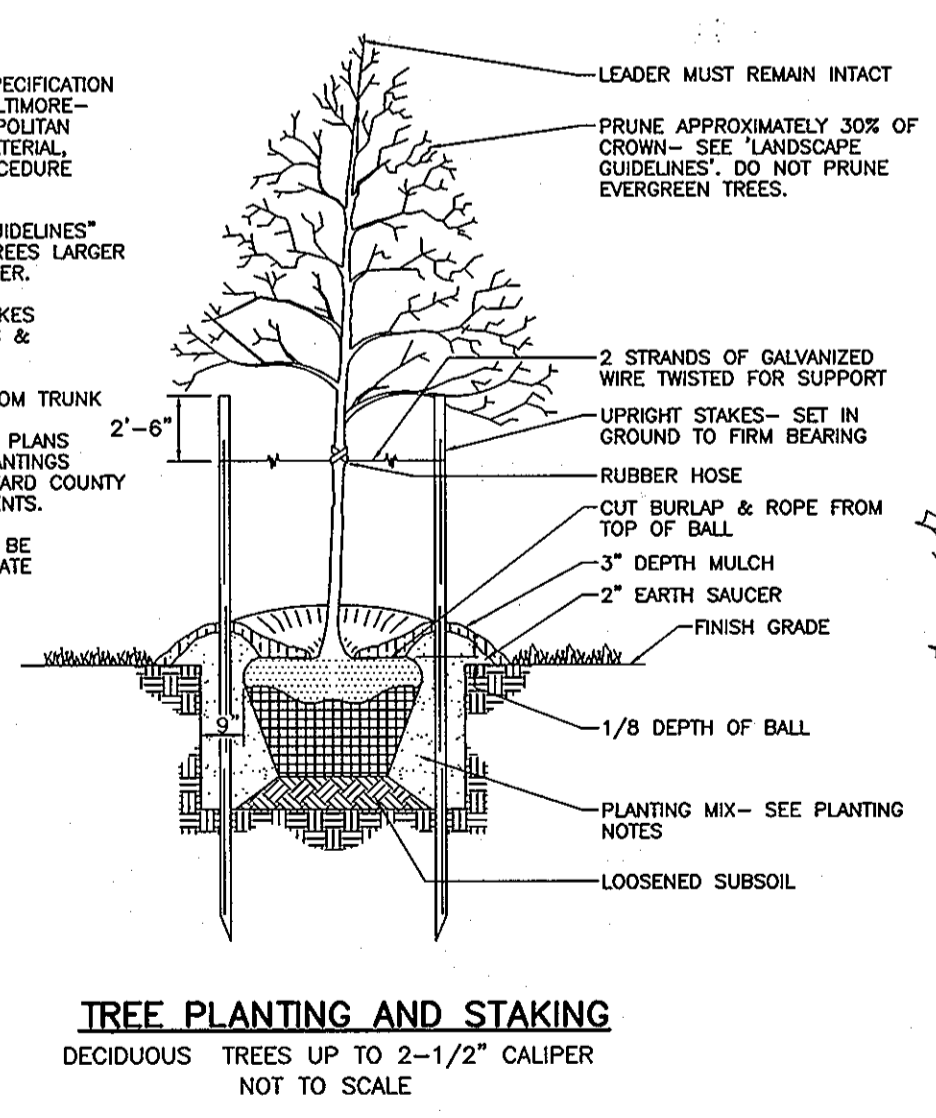
Proposed Forest Clearing

J	K
J = 0.00	K = 0.00

Planting Requirements

L	M	N	P	Q	R
L = 0.00	M = 0.00	N = 0.00	P = 0.00	Q = 0.22	R = 0.22

- NOTES**
- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL PRODUCT, AND PROCEDURE SPECIFICATIONS.
 - SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
 - PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
 - KEEP MULCH 1" FROM TRUNK
 - SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
 - TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASMENT.



- NOTES**
- FOREST CONSERVATION REQUIREMENTS FOR THIS PROJECT SHALL BE FULFILLED BY A FEE-IN-LIEU OF 0.22 ACRES.
 - PERIMETER LANDSCAPING SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL 3. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED IN THE AMOUNT OF \$20,430.00 FOR THE 35 SHADE TREES, 39 EVERGREEN TREES AND 408 LF OF FENCE.

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	9
NUMBER OF TREES AND ISLANDS REQUIRED	1
NUMBER OF TREES AND ISLANDS PROVIDED	
SHADE TREES	1
OTHER TREES (2:1 SUBSTITUTION)	-

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

NUMBER OF DWELLING UNITS	14
NUMBER OF TREES REQUIRED (1:1 DU SFA; 1:3 DU APTS)	14
NUMBER OF TREES PROVIDED	
SHADE TREES	14
OTHER TREES (2:1 SUBSTITUTION)	-
SHRUBS (10:1 SUBSTITUTION)	-

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development Date 9/19/06
 Chief, Development Engineering Division Date 9/15/06
 Director Date 9/16/06

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer Date
 Howard County Health Department

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLLPOES, MODERATELY ERODED	C
GnB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
Ha	HATBORO SILT LOAM	D

OWNER: R & T FEDERLINE LLC
 5100 DORSEY HALL DRIVE
 ELLICOTT CITY, MARYLAND 21042

DEVELOPER: LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DRIVE
 ELLICOTT CITY, MARYLAND 21042
 (443) 637-0422

DESIGNED BY: RHY/LJT
 DRAWN BY: JCO/LJT
 CHECKED BY: RHY
 DATE: SEPT., 2006
 SCALE: 1"=30'
 W.O. NO.: 04-35.00

NO.	REVISION	DATE
2	ADD 2.9' WALL, SUBSTITUTE PATHWAYS FOR RAISED WALKWAYS AND ADD DEBRIS MULCH LOCATION	5/29/09
1	PROVIDING 15' BETWEEN UNIT H & UNIT G AND AFFECTED CHANGES W/O BY	

LANDSCAPE AND FOREST CONSERVATION PLAN
FEDERLINE PROPERTY
 8261 BALTIMORE NATIONAL PIKE
 TOWNHOUSE CONDOMINIUM

TAX MAP 18 BLOCK 20 L.8070 F.193 PARCEL '61'
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.361.8961

STATE OF MARYLAND
 ROBERT H. VOGEL, PE No. 16183

DESIGN BY: RHY/LJT
 DRAWN BY: JCO/LJT
 CHECKED BY: RHY
 DATE: SEPT., 2006
 SCALE: 1"=30'
 W.O. NO.: 04-35.00

6 SHEET OF 6